

# San Jose Federated Retiree Health Care 115 Trust

As of September 30, 2022

Quarterly Review

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## **Economic and Market Update**

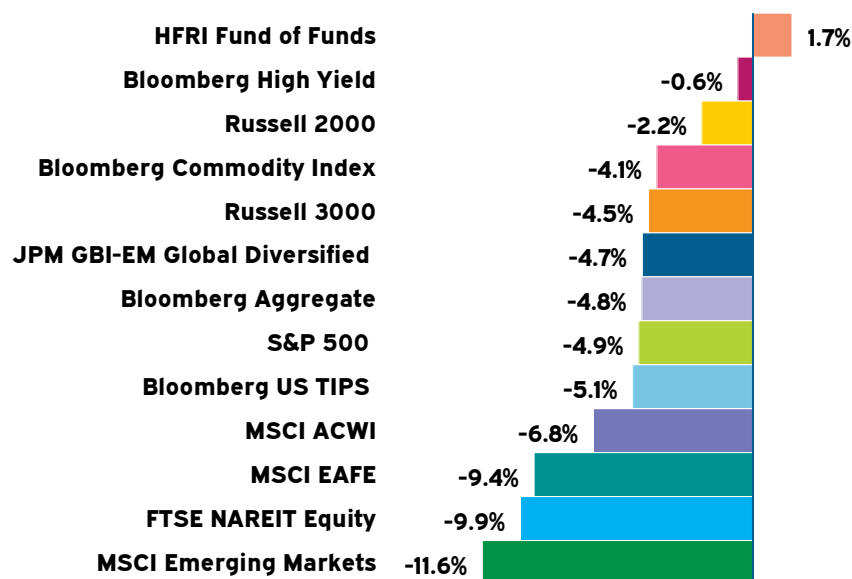
Data as of October 31, 2022

### Commentary

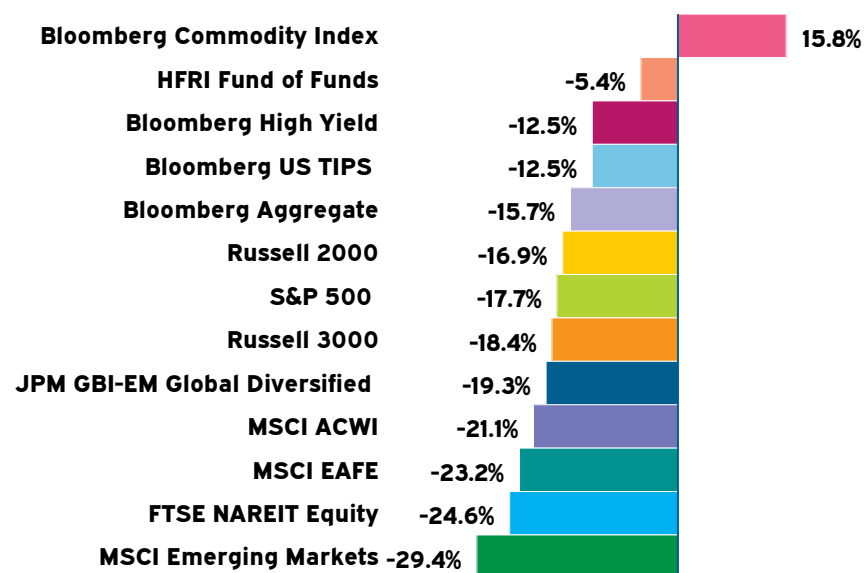
- Investor sentiment improved in October as markets repriced for continued easing of inflation risks, a potential slowing in monetary policy tightening efforts, and hopes for a soft-landing in 2023.
- After month-end, the Federal Reserve continued its aggressive tightening campaign with its fourth consecutive 75 basis point rate hike. Future hikes are expected into next year as US inflation remains high and labor markets tight.
  - In Europe, inflation hit a multi-decade high on energy prices, but manufacturing and service data in some countries surprised to the upside, lifting investor sentiment.
  - In the UK, the appointment of Rishi Sunak as the new prime minister calmed investors nerves to some extent.
  - US and developed equity markets rallied for the month, while emerging markets declined on significant China weakness (-16.8%) driven in part by political developments and continued strict COVID-19 policies.
  - Interest rates further increased across the US yield curve during October, and the curve remained inverted (ten- year yield minus the two-year yield) by 43 basis points. This year has witnessed by far the worst start to a calendar year for bond investors.
- Persistently high inflation and tightening of monetary policy, the war in Ukraine, lingering COVID-19 issues, and lockdowns in China and recent political developments will all continue to have considerable consequences for the global economy.

### Index Returns<sup>1</sup>

#### Third Quarter



#### YTD through October



→ After broad declines in Q3 driven by expectations for further policy tightening, October produced mixed results with developed market equities posting notable gains.

→ Outside of commodities, all other public market asset classes remain significantly negative year-to-date.

<sup>1</sup> Source: Bloomberg and FactSet. Data is as of October 31, 2022.

### Domestic Equity Returns<sup>1</sup>

Domestic Equity	October (%)	Q3 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	8.1	-4.9	-17.7	-14.6	10.2	10.4	12.8
Russell 3000	8.2	-4.5	-18.4	-16.5	9.8	9.9	12.5
Russell 1000	8.0	-4.6	-18.5	-16.4	10.0	10.2	12.7
Russell 1000 Growth	5.8	-3.6	-26.6	-24.6	11.7	12.6	14.7
Russell 1000 Value	10.3	-5.6	-9.3	-7.0	7.3	7.2	10.3
Russell MidCap	8.9	-3.4	-17.5	-17.2	7.8	7.9	11.3
Russell MidCap Growth	7.9	-0.7	-26.1	-28.9	6.3	8.7	11.9
Russell MidCap Value	9.4	-4.9	-12.8	-10.2	7.5	6.5	10.4
Russell 2000	11.0	-2.2	-16.9	-18.5	7.0	5.6	9.9
Russell 2000 Growth	9.5	0.2	-22.6	-26.0	5.1	5.2	10.1
Russell 2000 Value	12.6	-4.6	-11.2	-10.7	8.1	5.3	9.4

### US Equities: Russell 3000 Index rose 8.2% for October.

- US stocks rallied, posting strong monthly returns across all indices, rebounding from a sharp drop in September. Investors demonstrated optimism across the style and market capitalization spectrum as earnings remained resilient despite economic pressures.
- Most sectors rose in October, but there was wide dispersion. Energy's 24.8% gain led all sectors, driven by strong earnings, while consumer discretionary experienced a slightly positive gain (0.2%) given the impact of inflationary pressures on consumers.
- Value stocks continued to outperform growth stocks across the market capitalization spectrum. The rally in energy stocks and the relative underperformance of technology and consumer discretionary stocks has driven this dynamic.

<sup>1</sup> Source: Bloomberg. Data is as of October 31, 2022.

### Foreign Equity Returns<sup>1</sup>

Foreign Equity	October (%)	Q3 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	3.0	-9.9	-24.3	-24.7	-1.7	-0.6	3.3
MSCI EAFE	5.4	-9.4	-23.2	-23.0	-1.3	-0.1	4.1
MSCI EAFE (Local Currency)	5.3	-3.6	-9.9	-8.4	3.7	3.3	7.9
MSCI EAFE Small Cap	4.2	-9.8	-29.2	-30.3	-2.3	-1.3	5.6
MSCI Emerging Markets	-3.1	-11.6	-29.4	-31.0	-4.4	-3.1	0.8
MSCI Emerging Markets (Local Currency)	-2.6	-8.2	-22.8	-24.2	-0.8	-0.2	4.2
MSCI China	-16.8	-22.5	-42.8	-47.9	-13.8	-9.7	-0.1

Developed International equities (MSCI EAFE) rose 5.4%, while emerging markets (MSCI EM) returned -3.1% in October, driven largely by declines in China.

- Developed markets outside of the US had a strong month in October, posting gains in Europe, the UK, and Japan. Energy and industrials led broad-sectoral gains in the Eurozone, while the UK markets reacted positively to the appointment of the new prime minister, Rishi Sunak. The Bank of Japan's continued dovish policy stance and early signs of resilient Q3 earnings supported Japanese equities.
- China dominated headlines this month across the non-US landscape. Rising geopolitical tensions, particularly after events from the 20<sup>th</sup> Communist Party Congress, on top of the continuation of the zero COVID-19 policies, drove sharp declines for the month.

<sup>1</sup> Source: Bloomberg. Data is as of October 31, 2022.

### Fixed Income Returns<sup>1</sup>

Fixed Income	October (%)	Q3 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	-1.1	-4.5	-15.8	-15.8	-3.6	-0.4	1.0	5.5	6.1
Bloomberg Aggregate	-1.3	-4.8	-15.7	-15.7	-3.8	-0.5	0.7	5.0	6.3
Bloomberg US TIPS	1.2	-5.1	-12.5	-11.5	1.1	2.2	1.0	4.6	6.9
Bloomberg High Yield	2.6	-0.6	-12.5	-11.8	0.3	2.0	4.1	9.1	4.5
JPM GBI-EM Global Diversified (USD)	-0.9	-5.8	-19.3	-20.3	-8.2	-3.5	-2.6	7.7	4.8

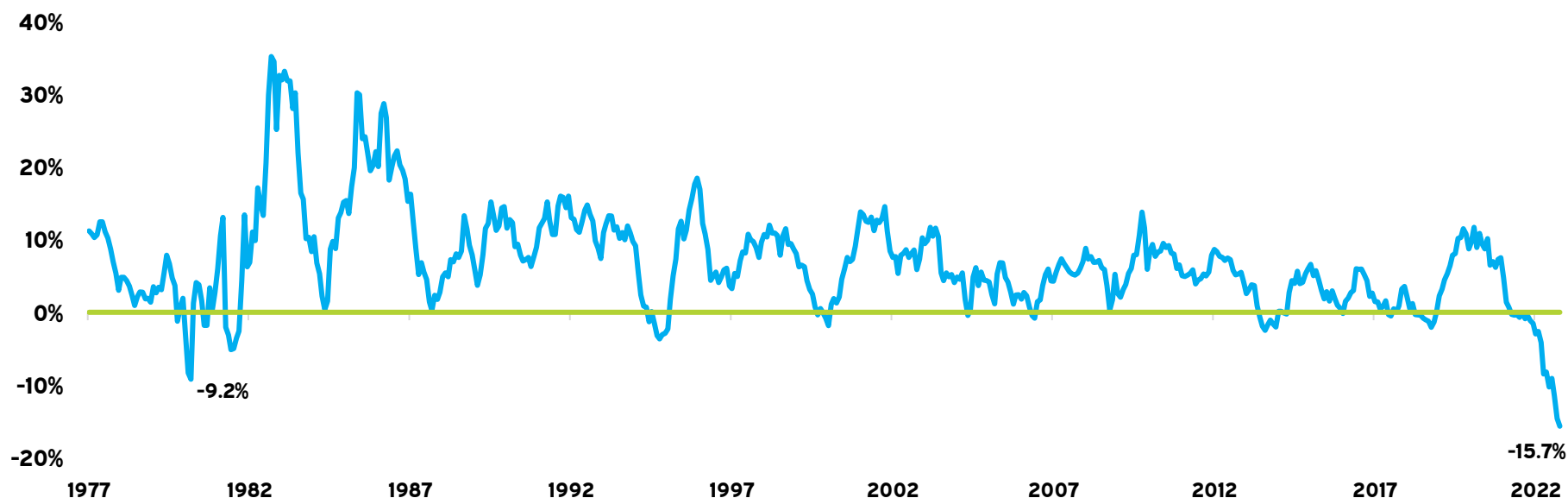
### Fixed Income: The Bloomberg Universal declined 1.1% in October.

- A continued rise in bond yields in the US driven by the Fed reinforcing its commitment to fight inflation weighed on fixed income markets for the month. Year-to-date, the US bond market (Bloomberg Aggregate) performance is the worst on record.
- TIPS appreciated for the month but remain down double-digits for the year as real rates have experienced a steep increase too. The inflation adjustment has led to a 320 basis points smaller decline than the broad US bond market though.
- Riskier US bonds, as represented by the high yield index, produced the best fixed income results for the month (+2.6%) in the risk-on environment. Emerging market bonds finished down 0.9% in October adding to the significant declines year-to-date.

<sup>1</sup> Source: Bloomberg. JPM GBI-EM is from InvestorForce. Data is as of October 31, 2022.



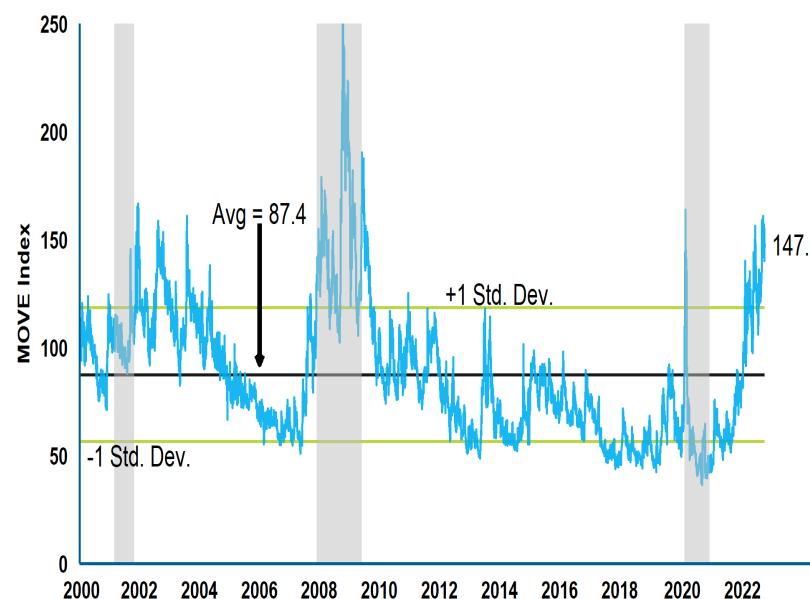
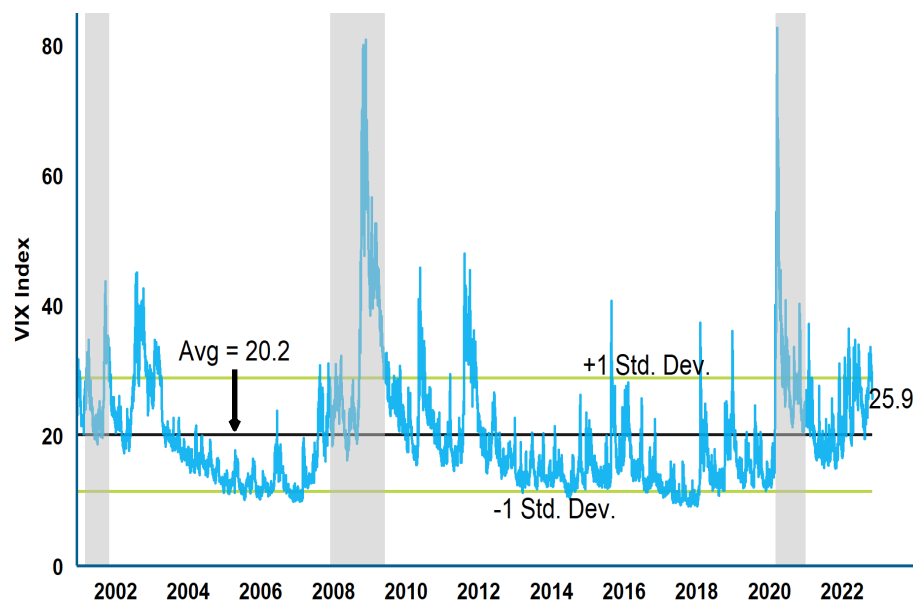
### Bloomberg US Aggregate Rolling One-year Returns<sup>1</sup>



- This has been the worst rolling one-year return period for the US bond market given the historic inflation levels and the corresponding rapid rise in interest rates.
- Through October the trailing year return was -15.7% well ahead of the number two spot (-9.2%) from the early 1980s.

<sup>1</sup> Source: Bloomberg. Data is as of 10/31/2022.

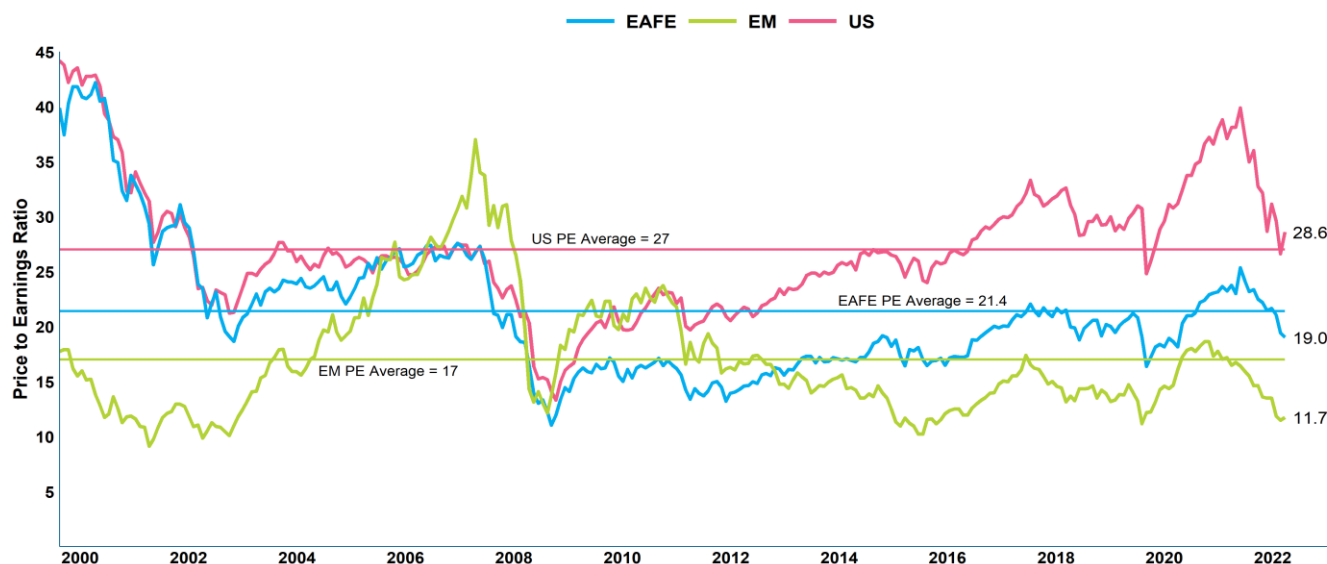
### Equity and Fixed Income Volatility<sup>1</sup>



- Volatility in equities (VIX) and fixed income (MOVE) remained above their long-run averages in October.
- Fixed income volatility was particularly high due to the uncertain path of US interest rates as the Federal Reserve continued its hawkish stance on inflation.

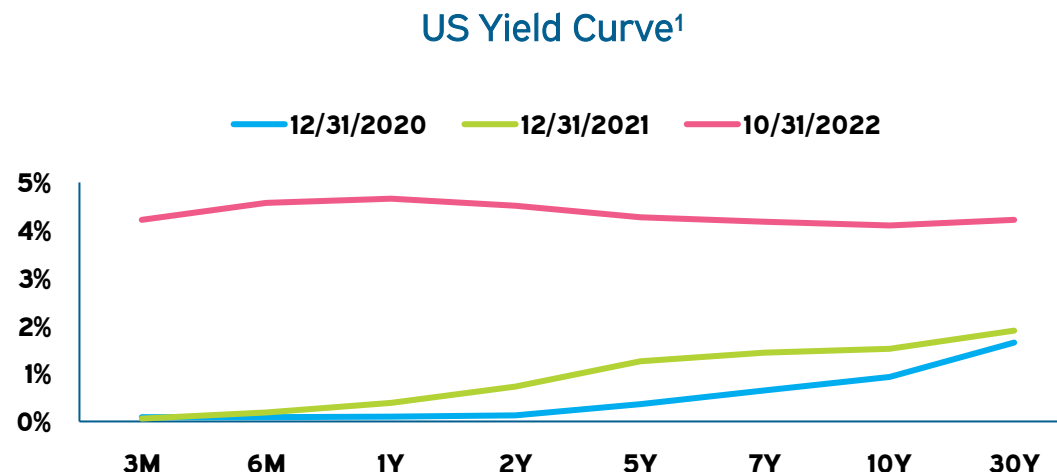
<sup>1</sup> Equity and Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of October 2022. The average line indicated is the average of the VIX and MOVE values between January 2000 and the recent month-end respectively.

### Equity Cyclically Adjusted P/E Ratios<sup>1</sup>



- October's US equity rally brought the market's price-to-earnings ratio to slightly above the long-term (21<sup>st</sup> century) average.
- International developed market valuations remain below the US and are below their own long-term average, with those for emerging markets the lowest and well under the long-term average.
- Price declines have been the main driver of recent multiple compression as earnings have remained resilient. Concerns remain over whether earnings strength will continue in the face of slowing growth.

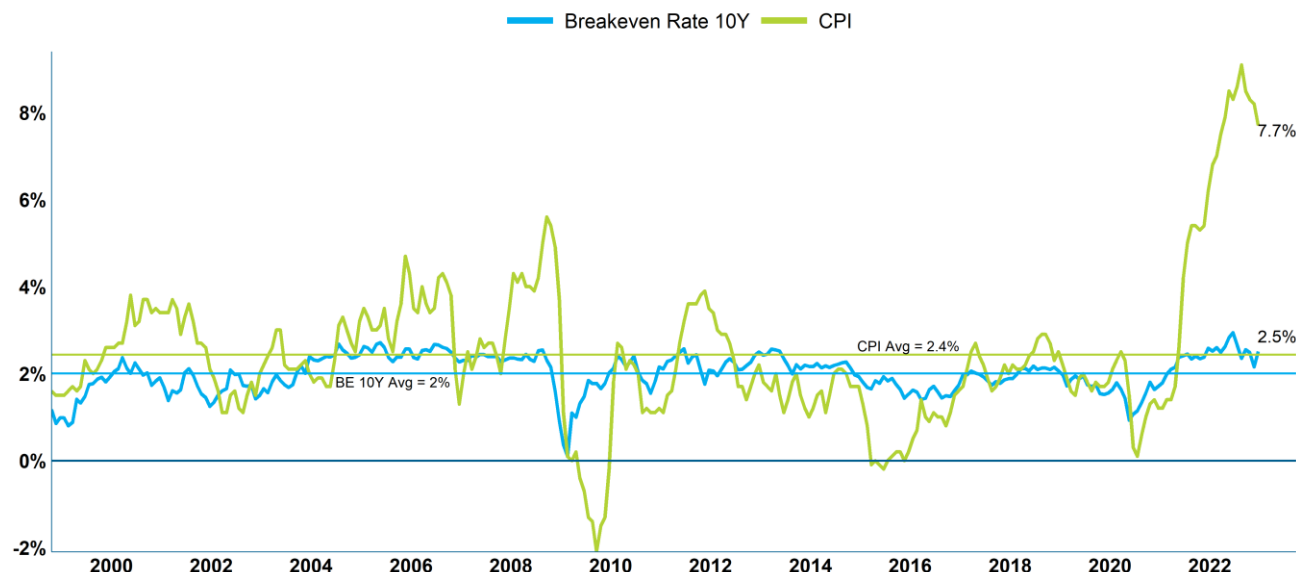
<sup>1</sup> US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is as of October 2022. The average line is the long-term average of the US, EM, and EAFE PE values from December 1999 to the recent month-end respectively.



- Rates across the yield curve remain far higher than at the start of the year.
- In October, interest rates continued to increase across the yield curve, particularly at the front-end where there is more sensitivity to policy changes. Two-year Treasury yields rose from 4.3% to 4.5% for the month, while ten-year Treasury yields climbed from 3.8% to 4.1%.
- The Fed remains strongly committed to fighting inflation, as it increased rates another 75 basis points to a range of 3.75% to 4.0% at its November meeting. This was the sixth increase this year and the fourth consecutive increase of this amount.
- The yield spread between two-year and ten-year Treasuries remained negative, finishing September at -0.41%. The more closely watched measure by the Fed of three-month and ten-year Treasuries also inverted. Historically, inversions in the yield curve have often preceded recessions.

<sup>1</sup> Source: Bloomberg. Data is as of October 31, 2022.

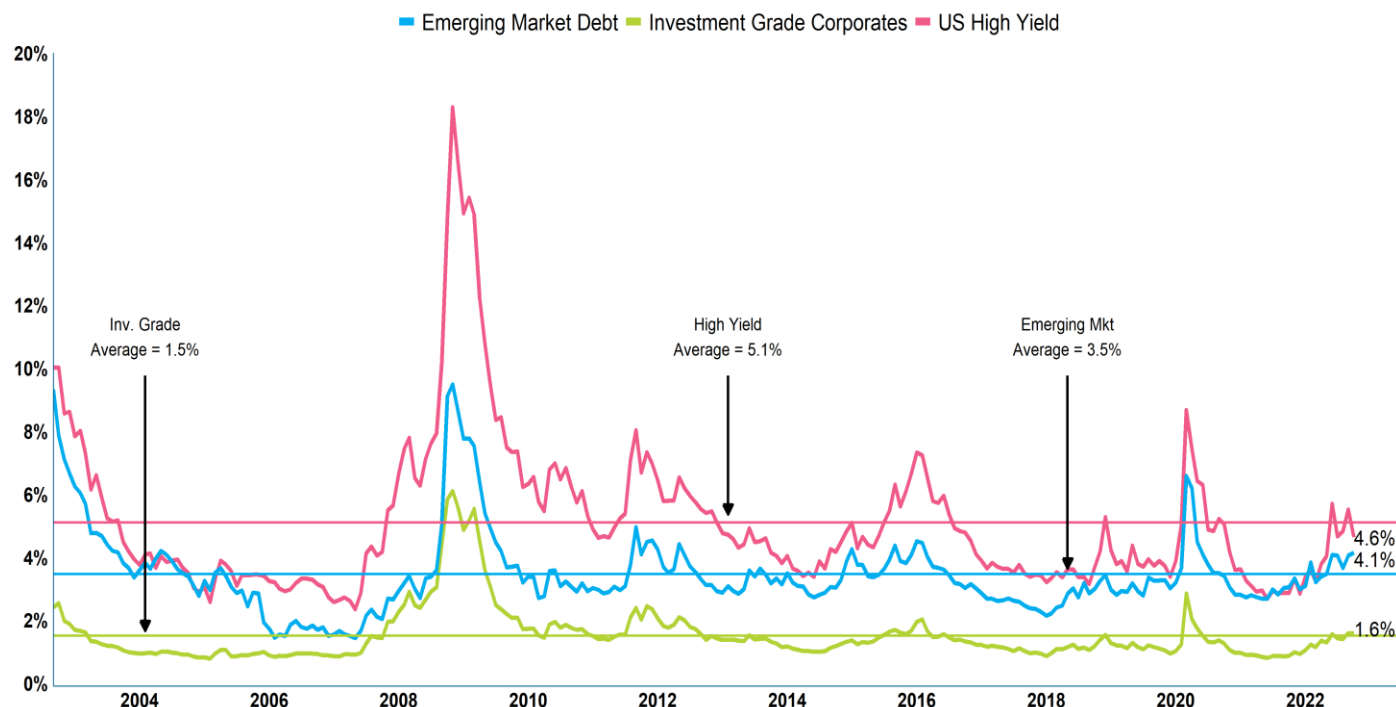
### Ten-Year Breakeven Inflation and CPI<sup>1</sup>



- Inflation expectations (breakevens) rose slightly in October, remaining above the long-run average.
- Trailing twelve-month CPI declined in October (7.7% versus 8.2%) coming in below expectations of 7.9%. Core inflation (excluding food and energy prices) declined from its recent 40-year peak of 6.6% to 6.3% over the same period.
- Over the last year, rising prices for energy (particularly oil), food, housing, and for new and used cars remain key drivers of inflation.

<sup>1</sup> Source: Bloomberg. Data is as of October 31, 2022. The CPI and 10 Year Breakeven average lines denote the average values from August 1998 to the present month-end respectively. Breakeven values represent month-end values for comparative purposes.

### Credit Spreads vs. US Treasury Bonds<sup>1</sup>



- High yield spreads (the added yield above a comparable maturity Treasury) fell in October to below their long-run average as below investment grade credit largely outperformed Treasuries in the risk-on environment.
- Investment grade spreads stayed the same in the US (1.6%), near the long-run average, while emerging market spreads increased slightly (4.1% versus 4.0%) staying above their average.

<sup>1</sup> Sources: Bloomberg. Data is as of October 31, 2022. Average lines denote the average of the investment grade, high yield, and emerging market spread values from August 2000 to the recent month-end respectively.

### Global Economic Outlook

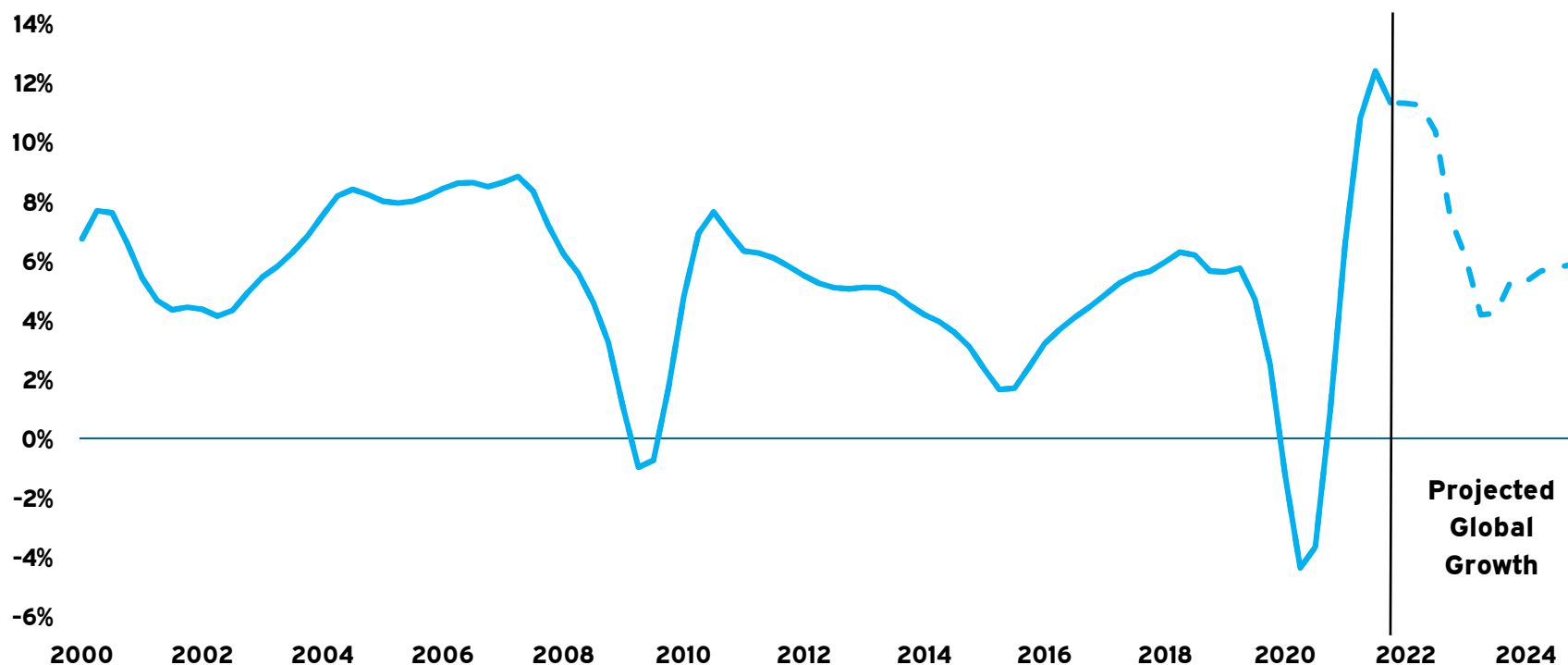
In their October update, the IMF maintained lowered global growth forecasts, driven by the economic impacts of persistent inflation and corresponding tighter policy, as well as issues related to the war in Ukraine and the lingering pandemic.

- The IMF forecasts global GDP growth to come in at 3.2% in 2022 (like the July estimate) and 2.7% in 2023 (0.2% below the prior estimate).
- In advanced economies, GDP is projected to grow 2.4% in 2022 and 1.1% in 2023. The US saw another downgrade in the 2022 (1.6% versus 2.3%) forecast largely due to accelerated policy tightening, given persistently high inflation. The euro area saw an upgrade in expected growth (3.1% versus 2.6%) on substantial fiscal stimulus in 2022 but a downgrade in 2023 (0.5% versus 1.2%) as rising energy prices weigh on the region that is a net importer of energy. The Japanese economy is expected to grow 1.7% this year and 1.6% in 2023.
- Growth projections for emerging markets are higher than developed markets, at 3.7% in 2022 and 2023. China's growth was downgraded for 2022 (3.2% versus 3.3%) and 2023 (4.4% versus 4.6%) given tight COVID-19 restrictions and continued property sector problems.
- The global inflation forecast was significantly increased for 2022 (8.8% versus 7.4%).

	Real GDP (%) <sup>1</sup>			Inflation (%) <sup>1</sup>		
	IMF 2022 Forecast	IMF 2023 Forecast	Actual 10 Year Average	IMF 2022 Forecast	IMF 2023 Forecast	Actual 10 Year Average
World	3.2	2.7	3.2	8.8	6.5	3.6
Advanced Economies	2.4	1.1	1.6	7.2	4.3	1.6
US	1.6	1.0	2.1	8.1	3.5	2.0
Euro Area	3.1	0.5	1.0	8.3	5.7	1.3
Japan	1.7	1.6	0.8	2.0	1.4	0.4
Emerging Economies	3.7	3.7	4.4	9.9	8.1	5.3
China	3.2	4.4	7.3	2.2	2.2	2.4

<sup>1</sup> Source: IMF World Economic Outlook. Real GDP and Inflation forecasts from October 2022 Update. "Actual 10 Year Average" represents data from 2012 to 2021.

### Global Nominal Gross Domestic Product (GDP) Growth<sup>1</sup>



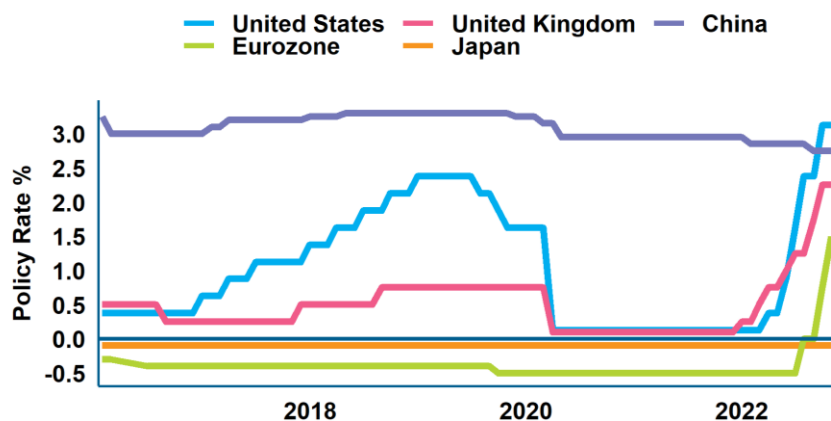
- Global economies are expected to slow in 2022 compared to 2021, with risks of recession increasing given persistently high inflation and related tighter monetary policy.
- The delicate balancing act of central banks trying to reduce inflation without dramatically impacting growth will remain key.

<sup>1</sup> Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, nominal, % change YoY). Updated October 2022. Nominal expectations for GDP remain much higher than real GDP expectations given the elevated inflation levels.

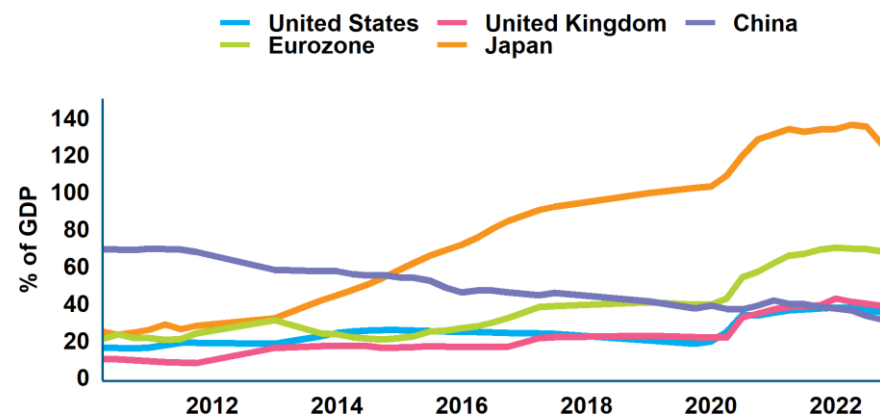


### Central Bank Response<sup>1</sup>

#### Policy Rates



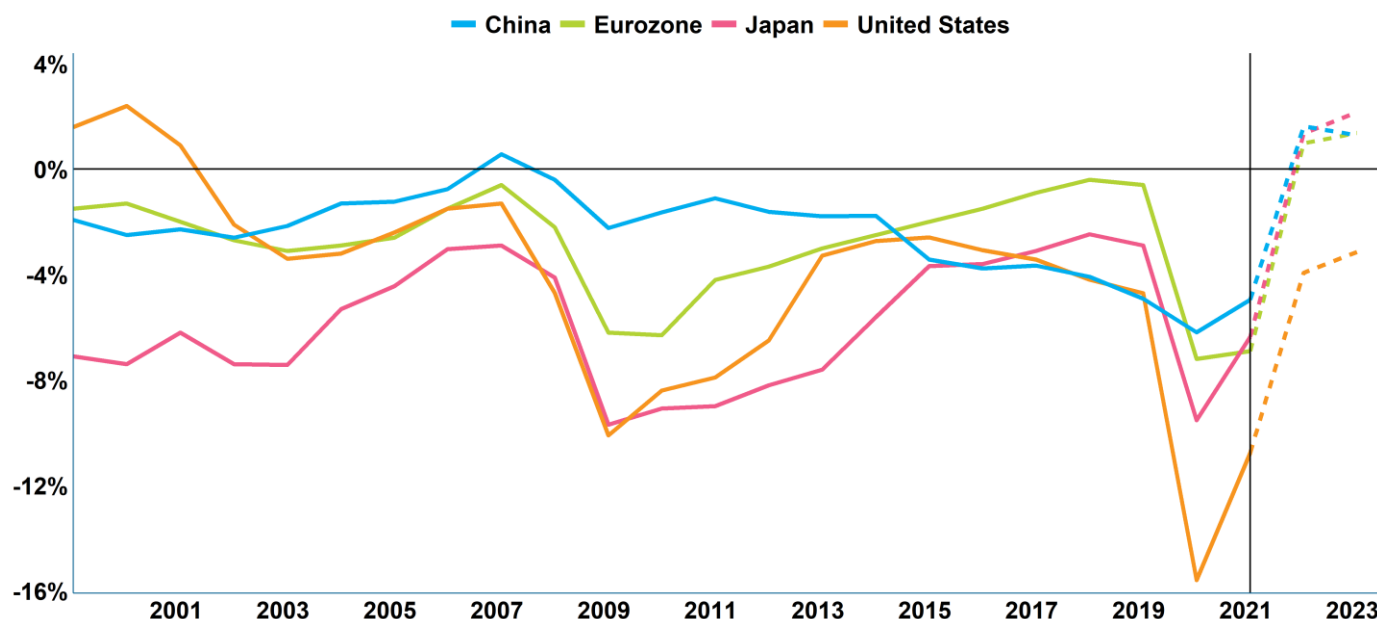
#### Balance Sheet as % of GDP



- After global central banks took extraordinary action to support economies during the pandemic, including policy rate cuts and emergency stimulus through quantitative easing (QE), many are now aggressively reducing support in the face of high inflation.
- The pace of withdrawing support varies across central banks with the US taking a more aggressive approach.
- The one notable central bank outlier is China, where the central bank has lowered rates and reserve requirements in response to slowing growth.
- The risk remains for a policy error, particularly overtightening, as record inflation, the war in Ukraine, and a tough COVID-19 policy in China could suppress global growth.

<sup>1</sup> Source: Bloomberg. Policy rate data is as of October 31, 2022. China policy rate is defined as the medium-term lending facility 1 year interest rate. Balance sheet as % of GDP is based on quarterly data and is as of September 30, 2022.

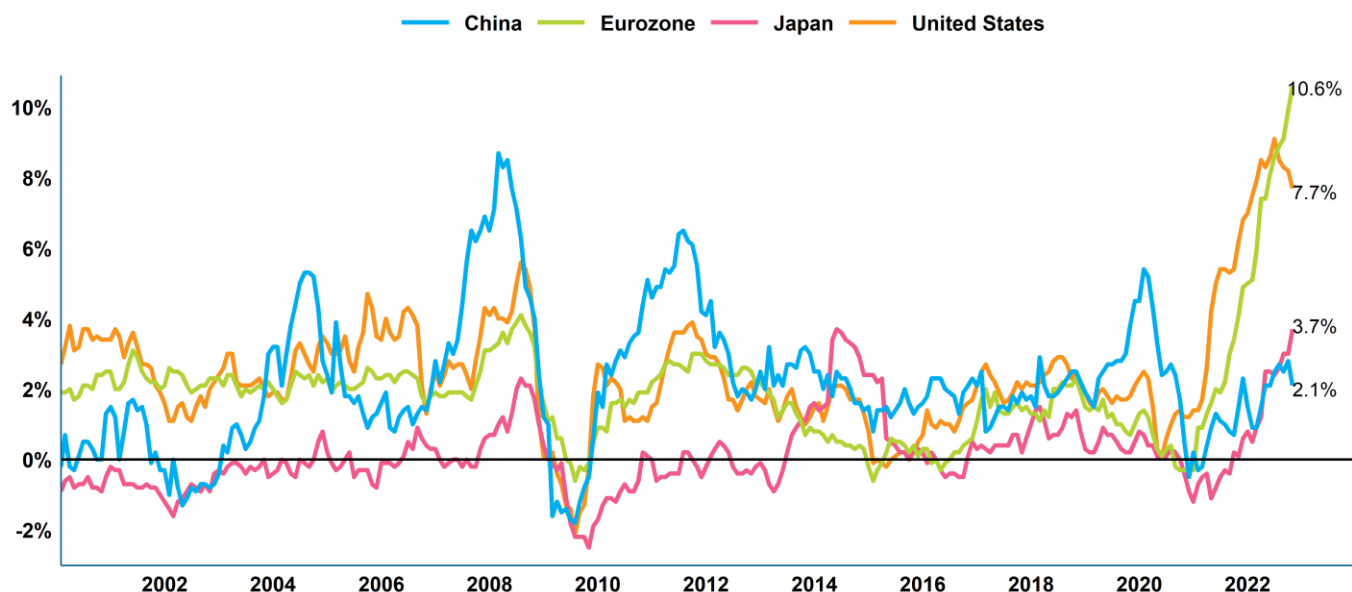
### Budget Surplus / Deficit as a Percentage of GDP<sup>1</sup>



- Budget deficits as a percentage of GDP drastically increased for major world economies, particularly the US, due to massive fiscal support and the severe economic contraction's effect on tax revenue in 2020 and 2021.
- As fiscal stimulus programs end, and economic recoveries continue, deficits should improve.
- Questions remain about how some countries will respond fiscally as inflation, particularly energy prices, weigh on consumers. Policies that undermine central banks' efforts to fight inflation could lead to additional market volatility like was seen recently in the UK.

<sup>1</sup> Source: Bloomberg. Data is as of October 31, 2022. Projections via IMF Forecasts from October 2022 Report. Dotted lines represent 2022 and 2023 forecasts.

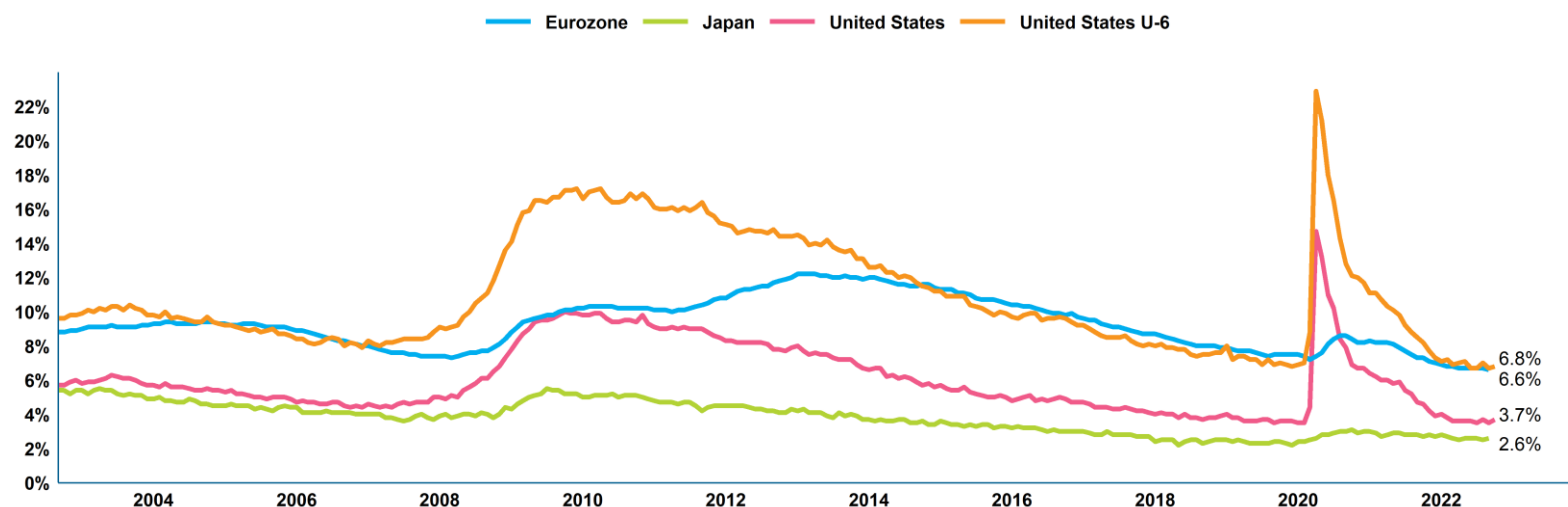
### Inflation (CPI Trailing Twelve Months)<sup>1</sup>



- Inflation increased dramatically from the lows of the pandemic, particularly in the US and Eurozone where it has reached levels not seen in many decades.
- Inflation pressures continue to grow in Europe, reaching historic levels due to skyrocketing energy prices and a weak euro.
- Supply issues related to the pandemic, record monetary and fiscal stimulus, strict COVID-19 restrictions in China, and higher commodity prices driven by the war in Ukraine have been key global drivers of inflation.

<sup>1</sup> Source: Bloomberg. Data is as of October 2022.

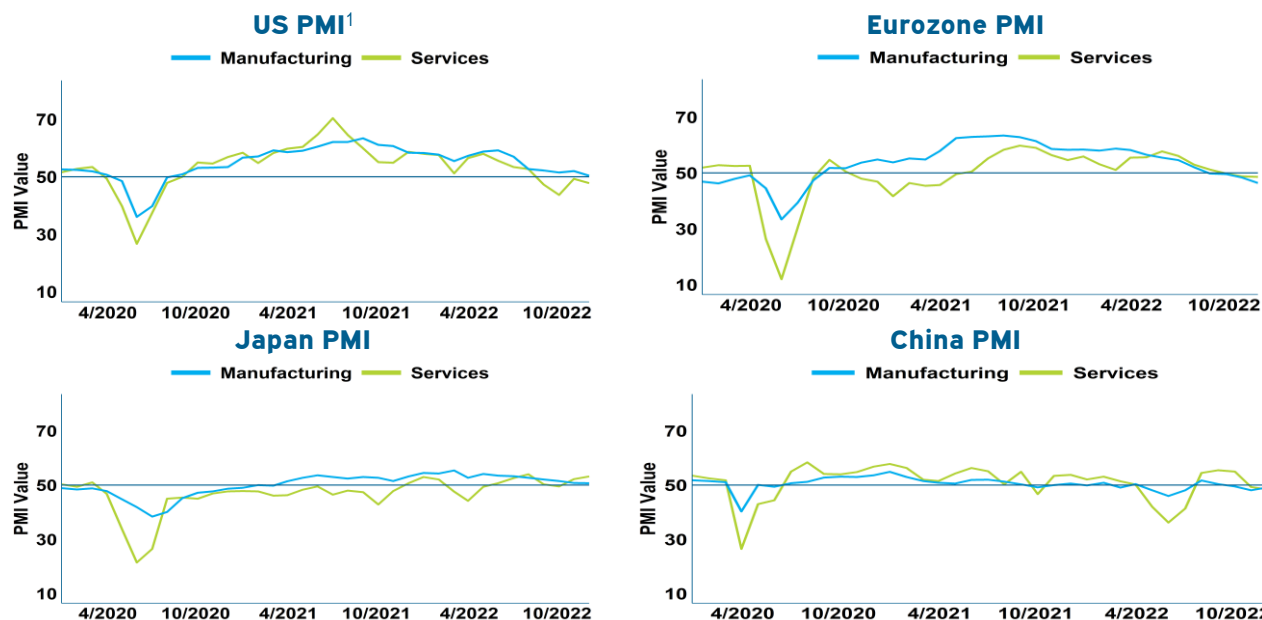
### Unemployment<sup>1</sup>



- As economies have largely reopened, helped by vaccines for the virus, improvements have been seen in the labor market.
- Despite slowing growth and high inflation the US labor market remains a bright spot. Unemployment in the US, which experienced the steepest rise from the pandemic, has remained in a tight 3.5%-3.7% range for most of the year. The broader measure (U-6) that includes discouraged and underemployed workers remains much higher at 6.8%.
- The strong labor market and higher wages, although beneficial for workers, motivates the Fed's efforts to fight inflation, likely leading to eventually higher unemployment.

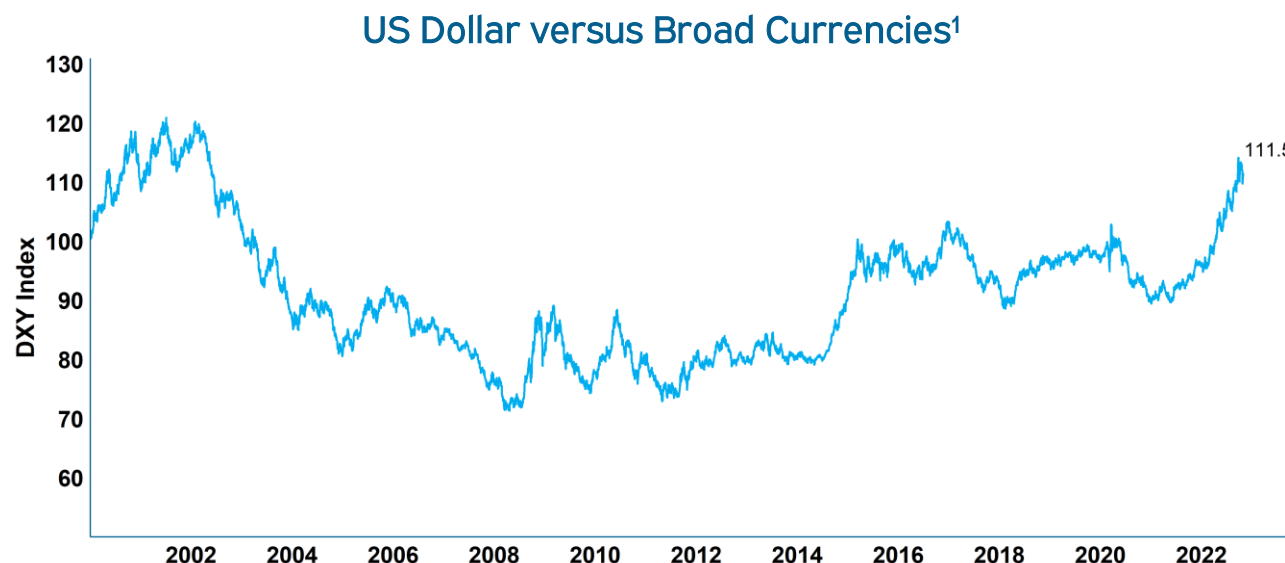
<sup>1</sup> Source: Bloomberg. Data is as October 2022, for the US. The most recent data for Eurozone and Japanese unemployment is as of September 30, 2022.

### Global PMIs



- After improvements from the lows of the pandemic, Purchasing Managers Indices (PMI), based on surveys of private sector companies, have largely experienced downward pressure recently.
- Service sector PMIs, except Japan (lifting COVID-19 restrictions and travel incentives have been helpful here), are all in contraction territory. The US service sector declined, remaining in negative territory, due to weak demand both domestically and abroad and softening employment.
- Manufacturing PMIs are also slowing across China and developed markets given declines in demand and inflationary pressures with the Eurozone, and China in contraction territory.

<sup>1</sup> Source: Bloomberg. US Markit Services and Manufacturing PMI, Caixin Services and Manufacturing PMI, Eurozone Markit Services and Manufacturing PMI, Jibun Bank Services and Manufacturing PMI. Data is as of October 2022. Readings below 50 represent economic contractions.



- Overall, the US dollar remained elevated in October but showed some signs of weakening. After month-end, the dollar weakened further.
- The increased pace of policy tightening, stronger relative growth, and safe-haven flows all contributed to the dollar's strength this year.
- The euro, yen, pound, and yuan have all experienced significant declines versus the dollar this year, adding to inflationary pressures in those countries.

<sup>1</sup> Source: Bloomberg. Data as of October 31, 2022.

## Summary

### Key Trends in 2022:

- The impacts of record high inflation will remain key, with market volatility likely to stay high.
- The pace of monetary tightening globally will be faster than previously expected, with the risk of overtightening.
- Expect growth to slow globally for the rest of 2022 and into 2023 to the long-term trend or below. Inflation, monetary policy, and the war will all be key.
- In the US the end of many fiscal programs is expected to put the burden of continued growth on consumers. Higher energy and food prices will depress consumers' spending in other areas.
- Valuations have significantly declined in the US to below long-term averages, largely driven by price declines. The key going forward will be whether earnings can remain resilient if growth continues to slow.
- Outside the US, equity valuations remain lower in both emerging and developed markets, but major risks remain, including continued strength in the US dollar, higher inflation particularly weighing on Europe, and China maintaining its restrictive COVID-19 policies.

## **Executive Summary**

### **As of September 30, 2022**



The value of the San Jose Federated Retiree Health Care Trust's assets was \$342.0 million on September 30, 2022, compared to \$345.8 million at the end of the prior quarter. The Trust had \$14.3 million of net cash inflows for the quarter, and \$18.0 million of investment losses during the three-month period.

→ The Health Care Trust's net of fees performance was -5.0% for the quarter, compared to the Policy Benchmark return of -4.8%. Over the trailing one-year period, the Trust returned -13.7%, compared to -13.2% for the Policy Benchmark. The Trust ranked in or near the top half of the peer group for the 3-year, 5-year, and since-inception periods.

- Growth returned -7.7% for the quarter and -23.0% over the trailing one-year period. The Public Equity Benchmark returned -7.1% for the quarter and -22.0% over the trailing one-year period.
- Low Beta returned 0.5% for the quarter and +0.7% over the trailing one-year period, in line with the ICE Bank of America Merrill Lynch 91 Days T-Bill TR benchmark over the quarter and the trailing one-year period.
- Other assets returned -1.7% for the quarter and +0.3% over the trailing one-year period. The Other Benchmark returned -2.2% for the quarter and +0.2% for the one-year period.

→ The Health Care Trust didn't have any manager changes during the quarter.

## Third Quarter Manager Summary

Investment Manager	Asset Class	Changes/ Announcements	Meketa Recommendation <sup>1</sup>	Comments
Artisan Global Value	Global Equity	---	Hold	Watch List
Artisan Global Opportunities	Global Equity	---	---	---
Cove Street Small Cap Value	US Equity	---	Hold	Watch List
BlackRock Core Property	Core Real Estate	---	---	---
Clarion Lion Properties	Core Real Estate	---	---	---
Clarion Lion Industrial Trust	Core Real Estate	---	---	---
TA Realty Core Property	Core Real Estate	---	---	---
Credit Suisse Risk Parity	Commodities	---	Hold	Watch List

<sup>1</sup> The Meketa Investment Group recommendations are based on organizational or resource changes at each manager.

### Watch List<sup>1,2</sup>

Investment Manager	Asset Class	Watch List Status	Comments
Artisan Global Value	Global Equity	Monitoring	Underperformance
Cove Street Small Cap Value	US Equity	Monitoring	Underperformance
Credit Suisse Risk Parity	Commodities	Monitoring	Underperformance

#### Artisan

→ Over the three-year period, Artisan (+0.5%) has underperformed the MSCI ACWI Value by 80 basis points. Since inception in June 2015, Artisan has outperformed the benchmark by 40 basis points per year, on average, and ranked in the 77th percentile compared to peers.

#### Cove Street

→ Over the three-year period, Cove Street (+2.5%) has underperformed the Russell 2000 Value by 220 basis points. Since inception in June 2015, Cove Street has underperformed the benchmark by 120 basis points per year, on average, and ranked in the 78th percentile compared to peers.

#### Credit Suisse

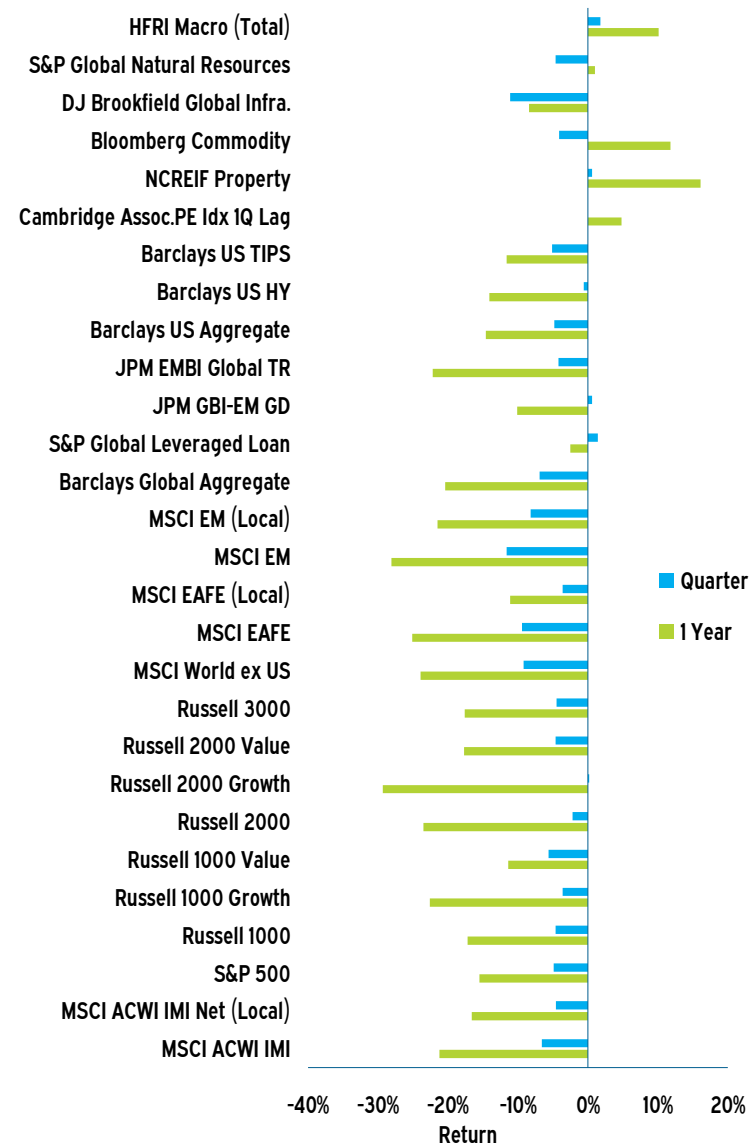
→ Over the three-year period, Credit Suisse (+11.5%) has underperformed the Bloomberg Commodity Index by 200 basis points. Since inception in August 2011, Credit Suisse has outperformed the benchmark by 220 basis points per year, on average.

<sup>1</sup> Watch List excludes Private Markets and Passive Funds.

<sup>2</sup> Placement on the Watch List includes qualitative reasons and manager underperformance versus the appropriate benchmark over a three and or five year period as outlined in the Investment Policy Statement.

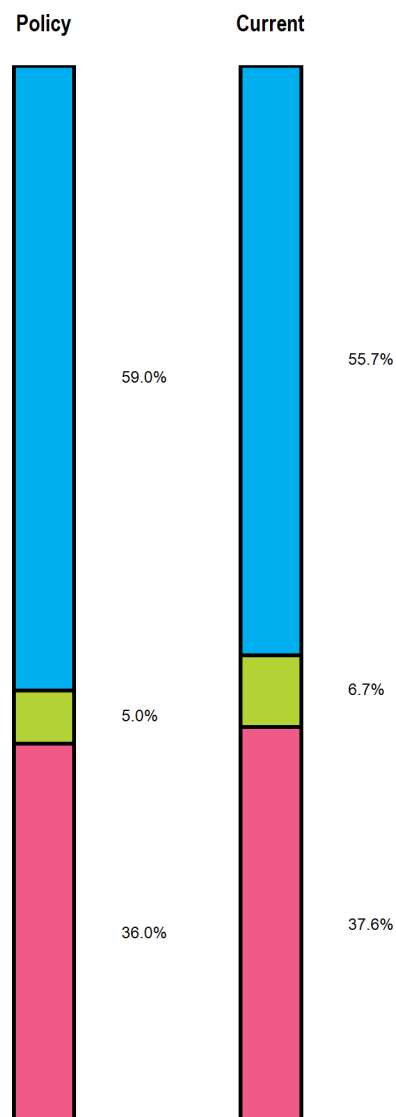
### Market Environment – 3Q22 Overview

Benchmark	Scope	3Q22 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
<b>Global Equity</b>						
MSCI ACWI IMI	World	-6.6	-21.2	3.6	4.2	7.2
MSCI ACWI IMI Net (Local)	World (Local Currency)	-4.6	-16.6	5.2	5.6	9.0
<b>Domestic Equity</b>						
S&P 500	Large Core	-4.9	-15.5	8.2	9.2	11.7
Russell 1000	Large Core	-4.6	-17.2	7.9	9.0	11.6
Russell 1000 Growth	Large Growth	-3.6	-22.6	10.7	12.2	13.7
Russell 1000 Value	Large Value	-5.6	-11.4	4.4	5.3	9.2
Russell 2000	Small Core	-2.2	-23.5	4.3	3.6	8.6
Russell 2000 Growth	Small Growth	0.2	-29.3	2.9	3.6	8.8
Russell 2000 Value	Small Value	-4.6	-17.7	4.7	2.9	7.9
Russell 3000	All Cap Core	-4.5	-17.6	7.7	8.6	11.4
<b>International Equity</b>						
MSCI World ex US	World ex-US	-9.2	-23.9	-1.2	-0.4	3.6
MSCI EAFE	International Developed	-9.4	-25.1	-1.8	-0.8	3.7
MSCI EAFE (Local)	International Developed (Local Currency)	-3.6	-11.1	2.5	2.8	7.4
MSCI EM	Emerging Markets	-11.6	-28.1	-2.1	-1.8	1.0
MSCI EM (Local)	Emerging Markets (Local Currency)	-8.2	-21.5	1.1	1.1	4.5
<b>Global Fixed Income</b>						
Barclays Global Aggregate	Global Core Bonds	-6.9	-20.4	-5.7	-2.3	-0.9
S&P Global Leveraged Loan	Bank Loans	1.4	-2.5	2.4	2.5	3.3
JPM GBI-EM GD	Emerging Markets Bonds (Local Currency)	0.6	-10.1	-1.0	2.3	4.4
JPM EMBI Global TR	Emerging Market Bonds	-4.2	-22.2	-6.1	-2.3	1.0
<b>Domestic Fixed Income</b>						
Barclays US Aggregate	Core Bonds	-4.8	-14.6	-3.3	-0.3	0.9
Barclays US HY	High Yield	-0.6	-14.1	-0.5	1.6	3.9
Barclays US TIPS	Inflation	-5.1	-11.6	0.8	2.0	1.0
<b>Other</b>						
Cambridge AssociatesPE Index 1Qtr Lag	Private Equity	0.0	4.8	24.8	22.1	18.1
NCREIF Property	Real Estate	0.6	16.1	9.9	8.6	9.5
Bloomberg Commodity	Commodities	-4.1	11.8	13.5	7.0	-2.1
DJ Brookfield Global Infrastructure	Infrastructure	-11.1	-8.4	-0.4	2.5	5.7
S&P Global Natural Resources	Natural Resources	-4.6	1.0	9.1	5.7	3.4
HFRI Macro	Hedge Funds	1.8	10.1	7.8	5.6	3.1



## **3Q22 Review**

Total Fund | As of September 30, 2022



Allocation vs. Targets and Policy			
	Current Balance	Current Allocation	Policy
<b>Growth</b>	<b>\$190,441,926</b>	<b>55.7%</b>	<b>59.0%</b>
Public Equity	\$190,441,926	55.7%	59.0%
<b>Low Beta</b>	<b>\$23,028,021</b>	<b>6.7%</b>	<b>5.0%</b>
Short-Term IG Bonds	\$9,885,620	2.9%	5.0%
Cash	\$13,142,401	3.8%	0.0%
<b>Other</b>	<b>\$128,537,244</b>	<b>37.6%</b>	<b>36.0%</b>
Core Real Estate	\$44,912,872	13.1%	12.0%
Commodities	\$16,168,343	4.7%	5.0%
Investment Grade Bonds	\$50,472,577	14.8%	14.0%
Long-Term Government Bonds	\$16,983,452	5.0%	5.0%
<b>Total</b>	<b>\$342,007,191</b>	<b>100.0%</b>	<b>100.0%</b>

### Asset Class Net Performance Summary

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
<b>Total Fund Aggregate</b>	<b>342,007,191</b>	<b>100.0</b>	<b>-5.0</b>	<b>-16.7</b>	<b>-13.7</b>	<b>2.2</b>	<b>2.5</b>	<b>3.8</b>	<b>Jul-11</b>
<i>Policy Benchmark</i>			-4.8	-16.4	-13.2	2.9	3.2	4.3	Jul-11
<i>InvMetrics Health &amp; Welfare Net Median</i>			-3.2	-13.4	-11.1	1.3	2.5	3.8	Jul-11
<i>InvMetrics Health &amp; Welfare Net Rank</i>			90	76	71	26	51	46	Jul-11
<b>Growth</b>	<b>190,441,926</b>	<b>55.7</b>	<b>-7.7</b>	<b>-26.5</b>	<b>-23.0</b>	<b>1.6</b>	<b>2.6</b>	<b>7.3</b>	<b>Dec-11</b>
<i>Public Equity Benchmark</i>			-7.1	-25.8	-22.0	3.1	3.9	7.7	Dec-11
<b>Public Equity</b>	<b>190,441,926</b>	<b>55.7</b>	<b>-7.7</b>	<b>-26.5</b>	<b>-23.0</b>	<b>1.6</b>	<b>2.6</b>	<b>7.3</b>	<b>Dec-11</b>
<i>Public Equity Benchmark</i>			-7.1	-25.8	-22.0	3.1	3.9	7.7	Dec-11
<b>Global Equity</b>	<b>30,990,986</b>	<b>9.1</b>	<b>-7.4</b>	<b>-28.9</b>	<b>-25.9</b>	<b>-2.5</b>	<b>-0.7</b>	<b>2.6</b>	<b>Jul-15</b>
<i>MSCI ACWI IMI Net USD</i>			-6.6	-25.7	-21.2	3.6	4.2	5.5	Jul-15
<b>U.S. Equity</b>	<b>82,524,194</b>	<b>24.1</b>	<b>-4.5</b>	<b>-24.4</b>	<b>-17.5</b>	<b>7.6</b>	<b>8.3</b>	<b>9.0</b>	<b>Jul-15</b>
<i>Russell 3000</i>			-4.5	-24.6	-17.6	7.7	8.6	9.4	Jul-15
<b>International Equity</b>	<b>41,918,476</b>	<b>12.3</b>	<b>-10.1</b>	<b>-27.3</b>	<b>-25.0</b>	<b>-1.9</b>	<b>-0.7</b>	<b>1.4</b>	<b>Jul-15</b>
<i>MSCI EAFE</i>			-9.4	-27.1	-25.1	-1.8	-0.8	1.2	Jul-15
<b>Emerging Markets Equity</b>	<b>35,008,270</b>	<b>10.2</b>	<b>-12.2</b>	<b>-27.9</b>	<b>-28.5</b>	<b>-2.7</b>	<b>-2.8</b>	<b>0.3</b>	<b>Jul-15</b>
<i>MSCI Emerging Markets</i>			-11.6	-27.2	-28.1	-2.1	-1.8	1.0	Jul-15

Fiscal Year begins July 1.

Please see the Appendix for composition of the Policy Benchmark and Public Equity Benchmark.

Total Fund | As of September 30, 2022

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
<b>Low Beta</b>	<b>23,028,021</b>	<b>6.7</b>	<b>0.5</b>	<b>0.7</b>	<b>0.7</b>	<b>0.6</b>	<b>1.2</b>	<b>0.6</b>	<b>Jul-11</b>
ICE BofA 91 Days T-Bills TR			0.5	0.6	0.6	0.6	1.1	0.6	Jul-11
<b>Cash</b>	<b>13,142,401</b>	<b>3.8</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>1.0</b>	<b>0.5</b>	<b>Jul-11</b>
ICE BofA 91 Days T-Bills TR			0.5	0.6	0.6	0.6	1.1	0.6	Jul-11
<b>Short-Term IG Bonds</b>	<b>9,885,620</b>	<b>2.9</b>	<b>0.5</b>	<b>0.8</b>	<b>0.8</b>	<b>0.7</b>	<b>--</b>	<b>1.1</b>	<b>Oct-18</b>
ICE BofA 91 Days T-Bills TR			0.5	0.6	0.6	0.6	--	1.0	Oct-18
<b>Other</b>	<b>128,537,244</b>	<b>37.6</b>	<b>-1.7</b>	<b>-2.0</b>	<b>0.3</b>	<b>5.2</b>	<b>4.2</b>	<b>3.4</b>	<b>Jul-15</b>
Other Benchmark			-2.2	-2.2	0.2	4.5	3.2	3.4	Jul-15
<b>Core Real Estate</b>	<b>44,912,872</b>	<b>13.1</b>	<b>6.8</b>	<b>25.4</b>	<b>31.6</b>	<b>13.4</b>	<b>10.8</b>	<b>9.5</b>	<b>Jul-15</b>
Core Real Estate Benchmark			4.5	20.6	28.3	11.3	9.2	9.0	Jul-15
<b>Commodities</b>	<b>16,168,343</b>	<b>4.7</b>	<b>-3.8</b>	<b>2.9</b>	<b>7.6</b>	<b>11.5</b>	<b>6.8</b>	<b>1.9</b>	<b>Jan-15</b>
Bloomberg Commodity Index TR USD			-4.1	13.6	11.8	13.5	7.0	1.8	Jan-15
<b>Investment Grade Bonds</b>	<b>50,472,577</b>	<b>14.8</b>	<b>-4.8</b>	<b>-14.7</b>	<b>-14.8</b>	<b>-5.0</b>	<b>-3.1</b>	<b>-10.9</b>	<b>Jun-21</b>
Bloomberg US Aggregate TR			-4.8	-14.6	-14.6	-3.3	-0.3	-10.7	Jun-21
<b>Long-Term Government Bonds</b>	<b>16,983,452</b>	<b>5.0</b>	<b>-9.6</b>	<b>-28.5</b>	<b>-26.6</b>	<b>--</b>	<b>--</b>	<b>-18.2</b>	<b>Jun-21</b>
Bloomberg US Treasury Long TR			-9.6	-28.8	-26.6	--	--	-18.3	Jun-21

Please see the Appendix for composition of the Other Benchmark.



Total Fund | As of September 30, 2022

Trailing Net Performance									
	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
<b>Total Fund Aggregate</b>	<b>342,007,191</b>	<b>100.0</b>	<b>-5.0</b>	<b>-16.7</b>	<b>-13.7</b>	<b>2.2</b>	<b>2.5</b>	<b>3.8</b>	<b>Jul-11</b>
Policy Benchmark			-4.8	-16.4	-13.2	2.9	3.2	4.3	Jul-11
InvMetrics Health & Welfare Net Median			-3.2	-13.4	-11.1	1.3	2.5	3.8	Jul-11
InvMetrics Health & Welfare Net Rank			90	76	71	26	51	46	Jul-11
<b>Growth</b>	<b>190,441,926</b>	<b>55.7</b>	<b>-7.7</b>	<b>-26.5</b>	<b>-23.0</b>	<b>1.6</b>	<b>2.6</b>	<b>7.3</b>	<b>Dec-11</b>
Public Equity Benchmark			-7.1	-25.8	-22.0	3.1	3.9	7.7	Dec-11
<b>Public Equity</b>	<b>190,441,926</b>	<b>55.7</b>	<b>-7.7</b>	<b>-26.5</b>	<b>-23.0</b>	<b>1.6</b>	<b>2.6</b>	<b>7.3</b>	<b>Dec-11</b>
Public Equity Benchmark			-7.1	-25.8	-22.0	3.1	3.9	7.7	Dec-11
<b>Global Equity</b>	<b>30,990,986</b>	<b>9.1</b>	<b>-7.4</b>	<b>-28.9</b>	<b>-25.9</b>	<b>-2.5</b>	<b>-0.7</b>	<b>2.6</b>	<b>Jul-15</b>
MSCI ACWI IMI Net USD			-6.6	-25.7	-21.2	3.6	4.2	5.5	Jul-15
Artisan Global Value	16,666,030	4.9	-10.1	-23.8	-20.9	0.5	1.1	3.5	Jun-15
MSCI ACWI Value NR USD			-7.7	-19.1	-14.0	1.3	1.7	3.1	Jun-15
eV All Global Equity Net Median			-6.9	-26.5	-21.7	3.4	4.3	5.1	Jun-15
eV All Global Equity Net Rank			89	34	45	80	87	77	Jun-15
Artisan Global Opportunities	14,324,956	4.2	-4.1	-34.1	-31.0	--	--	-2.4	Jul-20
MSCI ACWI Growth NR USD			-5.9	-32.2	-27.5	--	--	0.3	Jul-20
eV All Global Equity Net Median			-6.9	-26.5	-21.7	3.4	4.3	3.7	Jul-20
eV All Global Equity Net Rank			11	87	86	--	--	89	Jul-20

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
<b>U.S. Equity</b>	<b>82,524,194</b>	<b>24.1</b>	<b>-4.5</b>	<b>-24.4</b>	<b>-17.5</b>	<b>7.6</b>	<b>8.3</b>	<b>9.0</b>	<b>Jul-15</b>
<i>Russell 3000</i>			-4.5	-24.6	-17.6	7.7	8.6	9.4	Jul-15
Northern Trust Russell 3000	80,403,835	23.5	-4.5	-24.6	-17.6	7.7	8.6	9.0	Jun-15
<i>Russell 3000</i>			-4.5	-24.6	-17.6	7.7	8.6	9.0	Jun-15
Cove Street Small Cap Value	2,120,359	0.6	-4.7	-18.7	-18.1	2.5	2.5	4.2	Jun-15
<i>Russell 2000 Value</i>			-4.6	-21.1	-17.7	4.7	2.9	5.4	Jun-15
<i>eV US Small Cap Value Equity Net Median</i>			-4.9	-20.3	-14.9	5.1	3.3	5.4	Jun-15
<i>eV US Small Cap Value Equity Net Rank</i>			49	34	75	82	70	78	Jun-15
<b>International Equity</b>	<b>41,918,476</b>	<b>12.3</b>	<b>-10.1</b>	<b>-27.3</b>	<b>-25.0</b>	<b>-1.9</b>	<b>-0.7</b>	<b>1.4</b>	<b>Jul-15</b>
<i>MSCI EAFE</i>			-9.4	-27.1	-25.1	-1.8	-0.8	1.2	Jul-15
Northern Trust EAFE Index	41,918,476	12.3	-10.1	-27.3	-25.0	-1.9	-0.2	--	Jul-15
<i>MSCI EAFE</i>			-9.4	-27.1	-25.1	-1.8	-0.8	--	Jul-15
<b>Emerging Markets Equity</b>	<b>35,008,270</b>	<b>10.2</b>	<b>-12.2</b>	<b>-27.9</b>	<b>-28.5</b>	<b>-2.7</b>	<b>-2.8</b>	<b>0.3</b>	<b>Jul-15</b>
<i>MSCI Emerging Markets</i>			-11.6	-27.2	-28.1	-2.1	-1.8	1.0	Jul-15
Northern Trust MSCI EM	35,008,270	10.2	-12.2	-27.9	-28.5	-2.7	--	-2.5	Aug-18
<i>MSCI Emerging Markets</i>			-11.6	-27.2	-28.1	-2.1	--	-2.1	Aug-18

Total Fund | As of September 30, 2022

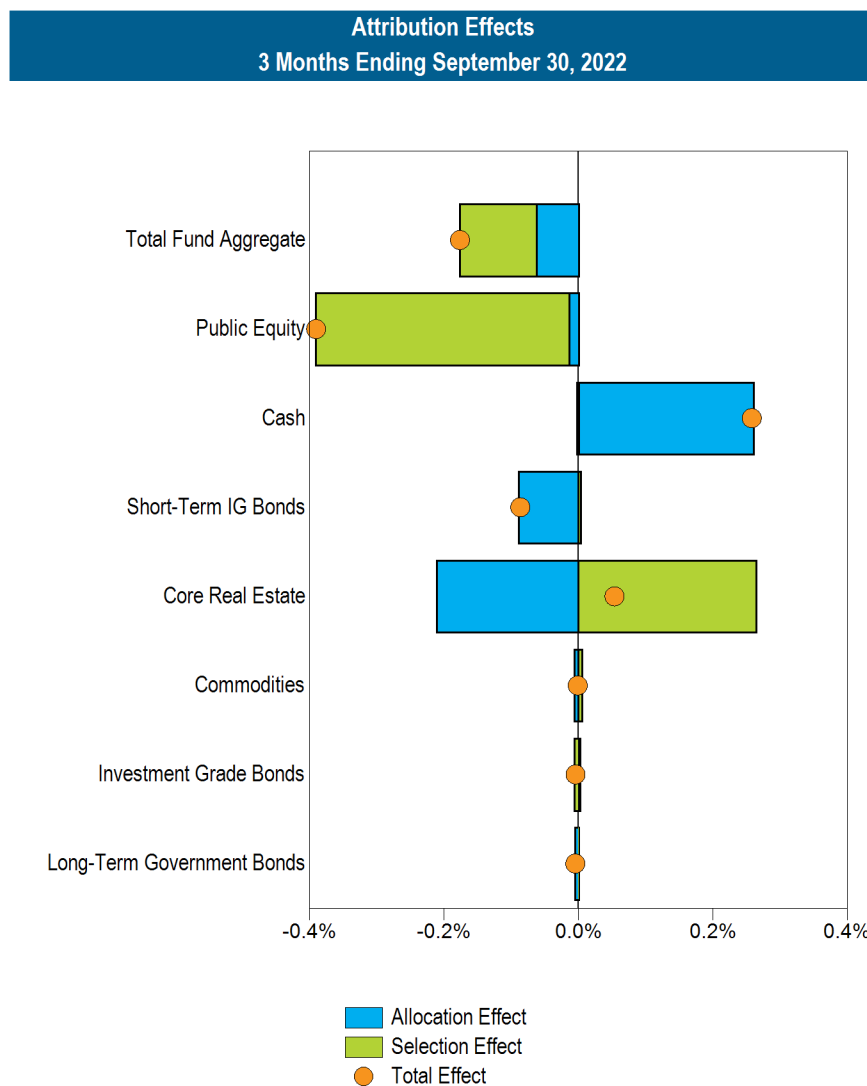
	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
<b>Low Beta</b>	<b>23,028,021</b>	<b>6.7</b>	<b>0.5</b>	<b>0.7</b>	<b>0.7</b>	<b>0.6</b>	<b>1.2</b>	<b>0.6</b>	<b>Jul-11</b>
ICE BofA 91 Days T-Bills TR			0.5	0.6	0.6	0.6	1.1	0.6	Jul-11
<b>Cash</b>	<b>13,142,401</b>	<b>3.8</b>	<b>0.4</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>1.0</b>	<b>0.5</b>	<b>Jul-11</b>
ICE BofA 91 Days T-Bills TR			0.5	0.6	0.6	0.6	1.1	0.6	Jul-11
<b>Short-Term IG Bonds</b>	<b>9,885,620</b>	<b>2.9</b>	<b>0.5</b>	<b>0.8</b>	<b>0.8</b>	<b>0.7</b>	<b>--</b>	<b>1.1</b>	<b>Oct-18</b>
ICE BofA 91 Days T-Bills TR			0.5	0.6	0.6	0.6	--	1.0	Oct-18
BlackRock 3-Month T-Bill	9,885,620	2.9	0.5	0.8	0.8	0.7	--	1.1	Oct-18
ICE BofA 91 Days T-Bills TR			0.5	0.6	0.6	0.6	--	1.0	Oct-18
<b>Other</b>	<b>128,537,244</b>	<b>37.6</b>	<b>-1.7</b>	<b>-2.0</b>	<b>0.3</b>	<b>5.2</b>	<b>4.2</b>	<b>3.4</b>	<b>Jul-15</b>
Other Benchmark			-2.2	-2.2	0.2	4.5	3.2	3.4	Jul-15
<b>Core Real Estate</b>	<b>44,912,872</b>	<b>13.1</b>	<b>6.8</b>	<b>25.4</b>	<b>31.6</b>	<b>13.4</b>	<b>10.8</b>	<b>9.5</b>	<b>Jul-15</b>
Core Real Estate Benchmark			4.5	20.6	28.3	11.3	9.2	9.0	Jul-15
BlackRock Core Property Fund	10,923,403	3.2	8.5	28.4	34.1	14.2	--	12.3	Feb-19
Core Real Estate Benchmark 2			4.5	20.6	28.3	11.3	--	9.9	Feb-19
Clarion Lion Properties Fund	16,247,634	4.8	7.2	23.3	30.6	13.1	--	12.3	May-19
Core Real Estate Benchmark			4.5	20.6	28.3	11.3	--	10.4	May-19
Clarion Lion Industrial Trust	4,721,320	1.4	6.5	30.6	30.6	--	--	30.6	Oct-21
Core Real Estate Benchmark 3			4.5	20.6	20.6	--	--	20.6	Oct-21
TA Realty Core Property Fund	13,020,515	3.8	5.1	23.7	23.7	--	--	23.7	Oct-21
Core Real Estate Benchmark 3			4.5	20.6	20.6	--	--	20.6	Oct-21

Total Fund | As of September 30, 2022

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
<b>Commodities</b>	<b>16,168,343</b>	<b>4.7</b>	<b>-3.8</b>	<b>2.9</b>	<b>7.6</b>	<b>11.5</b>	<b>6.8</b>	<b>1.9</b>	<b>Jan-15</b>
<i>Bloomberg Commodity Index TR USD</i>			-4.1	13.6	11.8	13.5	7.0	1.8	Jan-15
Credit Suisse Risk Parity Commodity Fund	16,168,343	4.7	-3.8	2.9	7.6	11.5	6.4	-0.5	Aug-11
<i>Bloomberg Commodity Index TR USD</i>			-4.1	13.6	11.8	13.5	7.0	-2.7	Aug-11
<b>Investment Grade Bonds</b>	<b>50,472,577</b>	<b>14.8</b>	<b>-4.8</b>	<b>-14.7</b>	<b>-14.8</b>	<b>-5.0</b>	<b>-3.1</b>	<b>-10.9</b>	<b>Jun-21</b>
<i>Bloomberg US Aggregate TR</i>			-4.8	-14.6	-14.6	-3.3	-0.3	-10.7	Jun-21
Northern Trust Core Bonds	50,472,577	14.8	-4.8	-14.7	-14.8	--	--	-10.9	Jun-21
<i>Bloomberg US Aggregate TR</i>			-4.8	-14.6	-14.6	--	--	-10.7	Jun-21
<b>Long-Term Government Bonds</b>	<b>16,983,452</b>	<b>5.0</b>	<b>-9.6</b>	<b>-28.5</b>	<b>-26.6</b>	<b>--</b>	<b>--</b>	<b>-18.2</b>	<b>Jun-21</b>
<i>Bloomberg US Treasury Long TR</i>			-9.6	-28.8	-26.6	--	--	-18.3	Jun-21
BlackRock Long Treasury	16,983,452	5.0	-9.6	-28.5	-26.6	--	--	-21.6	Jun-21
<i>Bloomberg US Treasury Long TR</i>			-9.6	-28.8	-26.6	--	--	-21.7	Jun-21

Cash Flow Summary						
QTD Ending September 30, 2022						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Artisan Global Value	\$18,546,300	\$0	\$0	\$0	-\$1,880,270	\$16,666,030
Artisan Global Opportunities	\$14,934,040	\$0	\$0	\$0	-\$609,084	\$14,324,956
Northern Trust Russell 3000	\$76,449,823	\$7,800,000	-\$4,778	\$7,795,222	-\$3,841,210	\$80,403,835
Cove Street Small Cap Value	\$2,225,758	\$0	\$0	\$0	-\$105,399	\$2,120,359
Northern Trust EAFE Index	\$43,551,708	\$3,100,000	-\$3,266	\$3,096,734	-\$4,729,965	\$41,918,476
Northern Trust MSCI EM	\$36,763,323	\$3,100,000	-\$8,731	\$3,091,269	-\$4,846,322	\$35,008,270
Internal Cash Account	\$3,333,481	\$35,227,413	-\$25,466,451	\$9,760,962	\$47,957	\$13,142,401
BlackRock 3-Month T-Bill	\$12,818,275	\$0	-\$3,000,000	-\$3,000,000	\$67,345	\$9,885,620
BlackRock Core Property Fund	\$21,088,459	\$0	-\$11,019,428	-\$11,019,428	\$854,372	\$10,923,403
Clarion Lion Properties Fund	\$15,264,061	\$0	-\$102,191	-\$102,191	\$1,085,764	\$16,247,634
Clarion Lion Industrial Trust	\$3,933,891	\$500,000	\$0	\$500,000	\$287,429	\$4,721,320
TA Realty Core Property Fund	\$12,514,424	\$0	-\$131,520	-\$131,520	\$637,611	\$13,020,515
Credit Suisse Risk Parity Commodity Fund	\$16,813,187	\$0	-\$1	-\$1	-\$644,842	\$16,168,343
Northern Trust Core Bonds	\$49,722,898	\$3,300,000	-\$1	\$3,299,999	-\$2,550,320	\$50,472,577
BlackRock Long Treasury	\$17,794,626	\$1,000,000	\$0	\$1,000,000	-\$1,811,174	\$16,983,452
<b>Total</b>	<b>\$345,754,254</b>	<b>\$54,027,413</b>	<b>-\$39,736,368</b>	<b>\$14,291,045</b>	<b>-\$18,038,109</b>	<b>\$342,007,191</b>

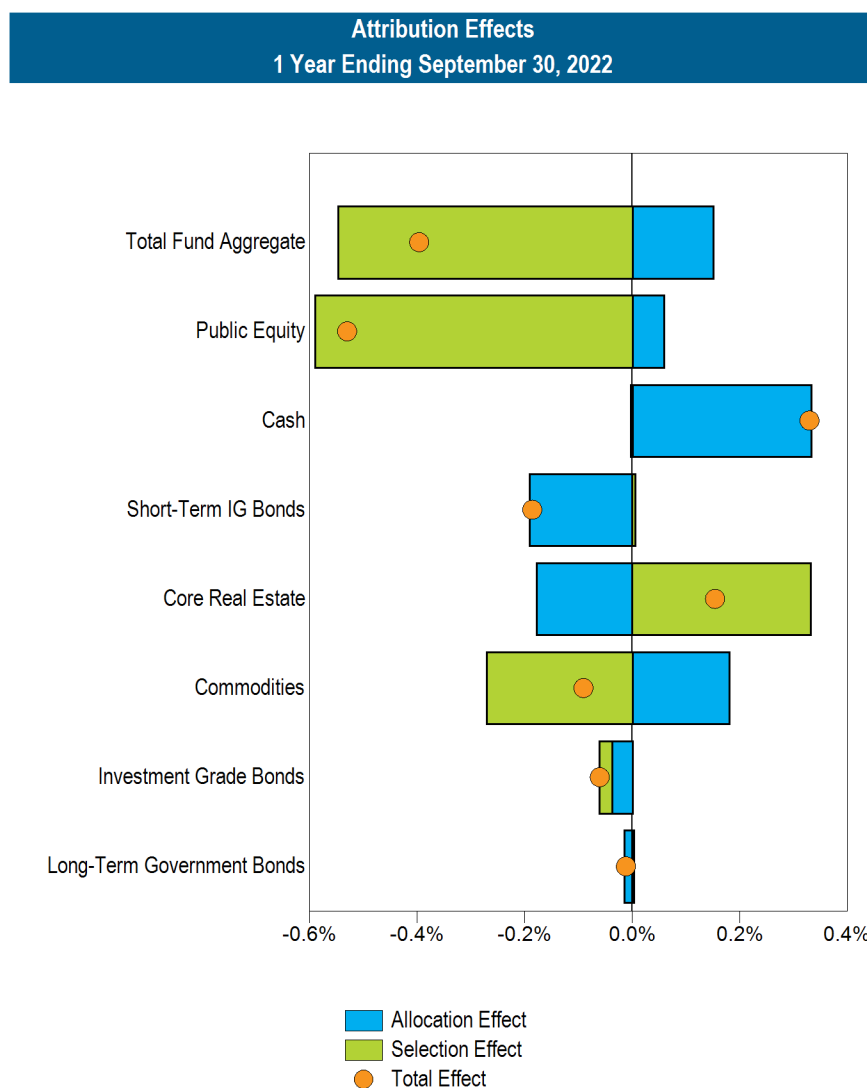
Attribution Summary 3 Months Ending September 30, 2022						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	-7.7%	-7.1%	-0.7%	-0.4%	0.0%	-0.4%
Cash	0.4%	0.5%	0.0%	0.0%	0.3%	0.3%
Short-Term IG Bonds	0.5%	0.5%	0.1%	0.0%	-0.1%	-0.1%
Core Real Estate	6.8%	4.5%	2.3%	0.3%	-0.2%	0.1%
Commodities	-3.8%	-4.1%	0.3%	0.0%	0.0%	0.0%
Investment Grade Bonds	-4.8%	-4.8%	0.0%	0.0%	0.0%	0.0%
Long-Term Government Bonds	-9.6%	-9.6%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>-5.0%</b>	<b>-4.9%</b>	<b>-0.2%</b>	<b>-0.1%</b>	<b>-0.1%</b>	<b>-0.2%</b>



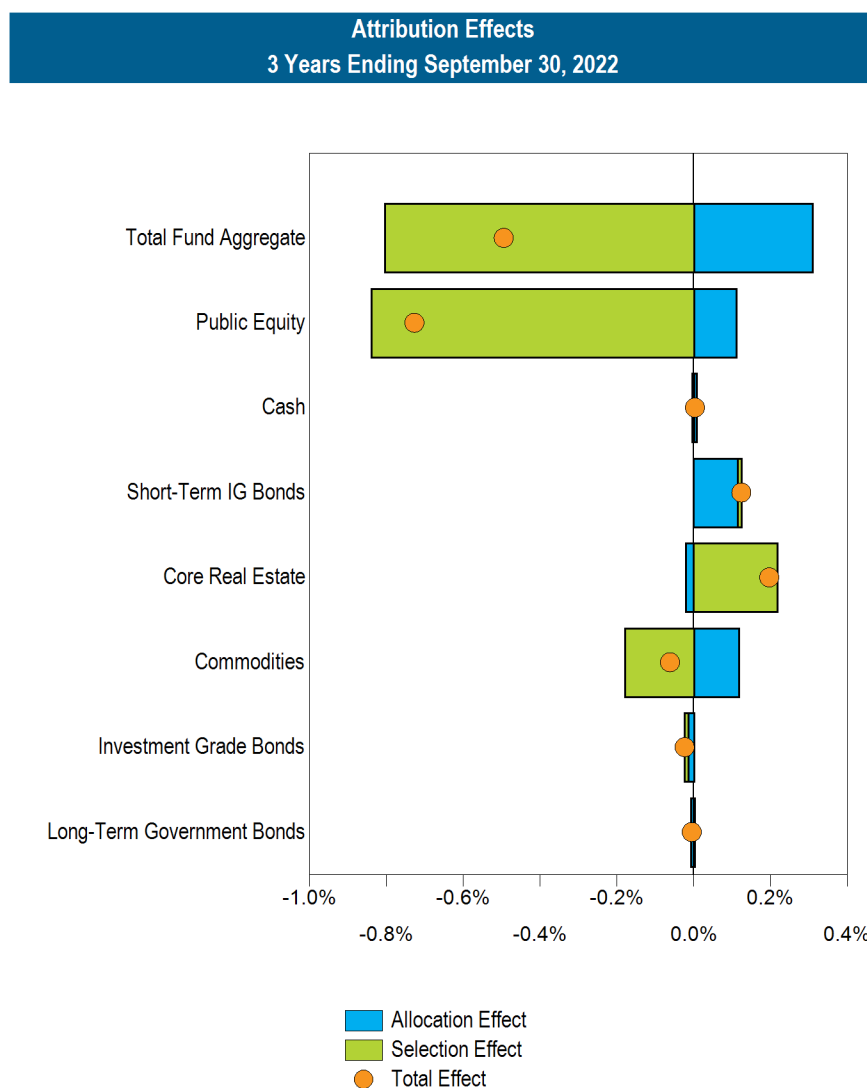
Difference in attribution returns and returns in the performance summary may occur as a result of the different calculation methodologies that are applied by InvestorForce.

Total Fund | As of September 30, 2022

Attribution Summary						
1 Year Ending September 30, 2022						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	-23.0%	-22.0%	-1.0%	-0.6%	0.1%	-0.5%
Cash	0.5%	0.6%	-0.1%	0.0%	0.3%	0.3%
Short-Term IG Bonds	0.8%	0.6%	0.2%	0.0%	-0.2%	-0.2%
Core Real Estate	31.6%	28.3%	3.3%	0.3%	-0.2%	0.2%
Commodities	7.6%	11.8%	-4.2%	-0.3%	0.2%	-0.1%
Investment Grade Bonds	-14.8%	-14.6%	-0.2%	0.0%	0.0%	-0.1%
Long-Term Government Bonds	-26.6%	-26.6%	0.1%	0.0%	0.0%	0.0%
<b>Total</b>	<b>-13.7%</b>	<b>-13.3%</b>	<b>-0.4%</b>	<b>-0.5%</b>	<b>0.1%</b>	<b>-0.4%</b>

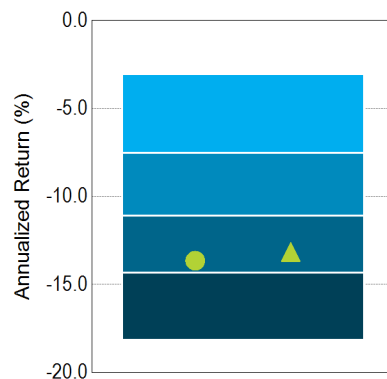


Attribution Summary						
3 Years Ending September 30, 2022						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	1.6%	3.1%	-1.6%	-0.8%	0.1%	-0.7%
Cash	0.4%	0.6%	-0.2%	0.0%	0.0%	0.0%
Short-Term IG Bonds	0.7%	0.6%	0.1%	0.0%	0.1%	0.1%
Core Real Estate	13.4%	11.3%	2.1%	0.2%	0.0%	0.2%
Commodities	11.5%	13.5%	-2.0%	-0.2%	0.1%	-0.1%
Investment Grade Bonds	-5.0%	-3.3%	-1.7%	0.0%	0.0%	0.0%
Long-Term Government Bonds	-8.5%	-8.5%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>2.2%</b>	<b>2.7%</b>	<b>-0.5%</b>	<b>-0.8%</b>	<b>0.3%</b>	<b>-0.5%</b>

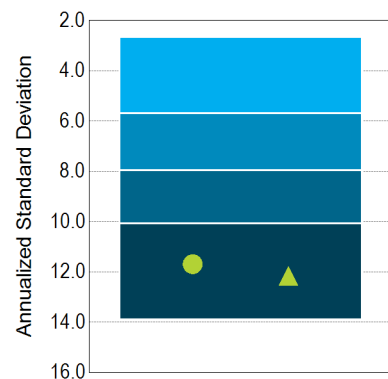




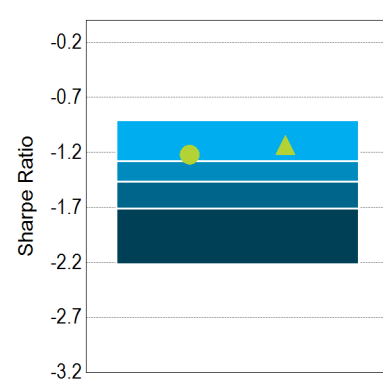
**Annualized Return (%)  
vs. InvMetrics Health & Welfare Net**



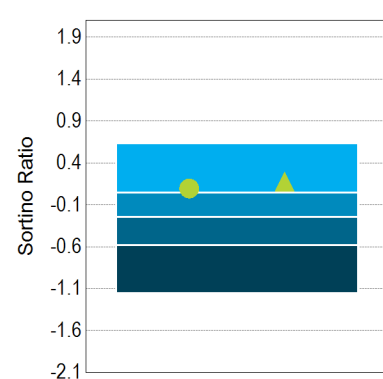
**Annualized Standard Deviation  
vs. InvMetrics Health & Welfare Net**



**Sharpe Ratio  
vs. InvMetrics Health & Welfare Net**



**Sortino Ratio  
vs. InvMetrics Health & Welfare Net**



● Total Fund Aggregate

Value -13.7  
Rank 71

▲ Policy Benchmark

Value -13.2  
Rank 66

Universe  
5th %tile -3.1  
25th %tile -7.5  
Median -11.1  
75th %tile -14.3  
95th %tile -18.1

● Total Fund Aggregate

Value 11.7  
Rank 85

▲ Policy Benchmark

Value 12.2  
Rank 87

Universe  
5th %tile 2.6  
25th %tile 5.7  
Median 7.9  
75th %tile 10.1  
95th %tile 13.9

● Total Fund Aggregate

Value -1.2  
Rank 20

▲ Policy Benchmark

Value -1.1  
Rank 14

Universe  
5th %tile -0.9  
25th %tile -1.3  
Median -1.5  
75th %tile -1.7  
95th %tile -2.2

● Total Fund Aggregate

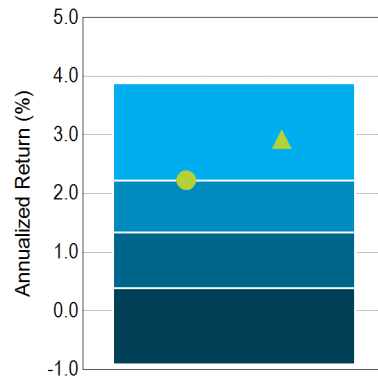
Value 0.1  
Rank 24

▲ Policy Benchmark

Value 0.2  
Rank 21

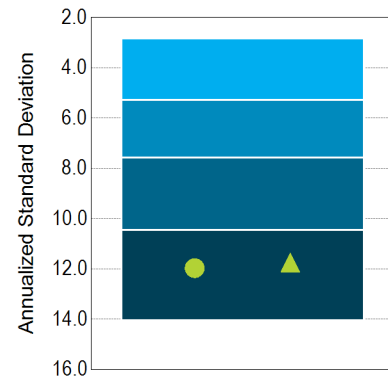
Universe  
5th %tile 0.6  
25th %tile 0.1  
Median -0.2  
75th %tile -0.6  
95th %tile -1.1

Annualized Return (%)  
vs. InvMetrics Health & Welfare Net



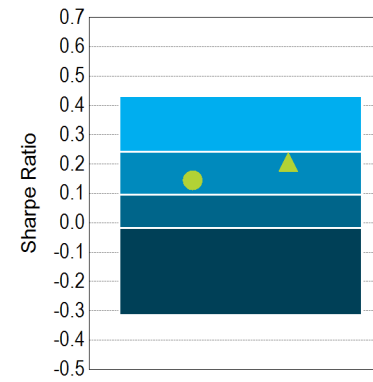
● Total Fund Aggregate	
Value	2.2
Rank	26
▲ Policy Benchmark	
Value	2.9
Rank	12
Universe	
5th %tile	3.9
25th %tile	2.2
Median	1.3
75th %tile	0.4
95th %tile	-0.9

Annualized Standard Deviation  
vs. InvMetrics Health & Welfare Net



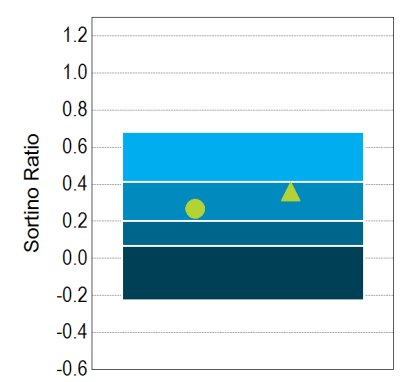
● Total Fund Aggregate	
Value	12.0
Rank	84
▲ Policy Benchmark	
Value	11.7
Rank	83
Universe	
5th %tile	2.8
25th %tile	5.3
Median	7.6
75th %tile	10.4
95th %tile	14.0

Sharpe Ratio  
vs. InvMetrics Health & Welfare Net



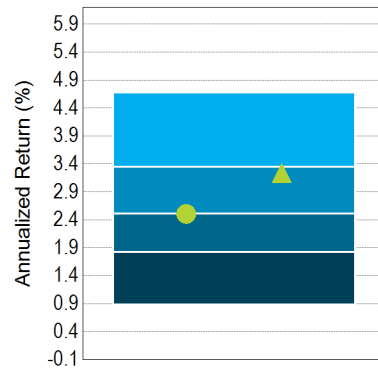
● Total Fund Aggregate	
Value	0.1
Rank	40
▲ Policy Benchmark	
Value	0.2
Rank	29
Universe	
5th %tile	0.4
25th %tile	0.2
Median	0.1
75th %tile	0.0
95th %tile	-0.3

Sortino Ratio  
vs. InvMetrics Health & Welfare Net

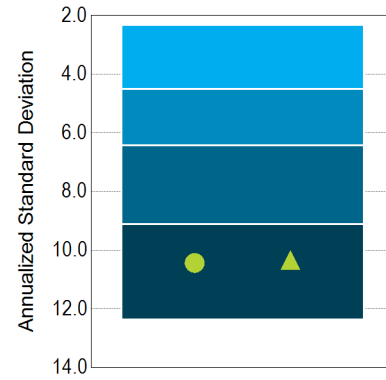


● Total Fund Aggregate	
Value	0.3
Rank	41
▲ Policy Benchmark	
Value	0.4
Rank	32
Universe	
5th %tile	0.7
25th %tile	0.4
Median	0.2
75th %tile	0.1
95th %tile	-0.2

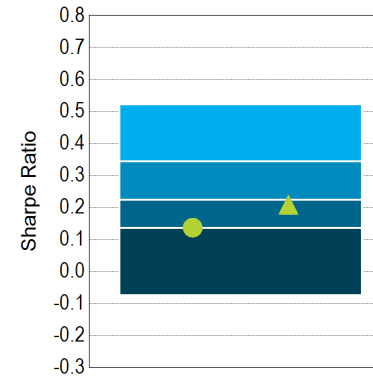
#### Annualized Return (%) vs. InvMetrics Health & Welfare Net



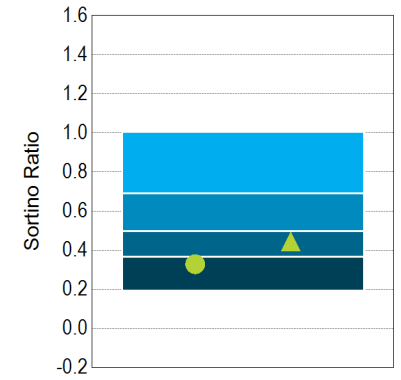
#### Annualized Standard Deviation vs. InvMetrics Health & Welfare Net



#### Sharpe Ratio vs. InvMetrics Health & Welfare Net



#### Sortino Ratio vs. InvMetrics Health & Welfare Net



#### ● Total Fund Aggregate

Value	2.5
Rank	51
▲ Policy Benchmark	
Value	3.2
Rank	31

Universe	
5th %tile	4.7
25th %tile	3.4
Median	2.5
75th %tile	1.8
95th %tile	0.9

#### ● Total Fund Aggregate

Value	10.4
Rank	85
▲ Policy Benchmark	
Value	10.3
Rank	85

Universe	
5th %tile	2.3
25th %tile	4.5
Median	6.4
75th %tile	9.1
95th %tile	12.3

#### ● Total Fund Aggregate

Value	0.1
Rank	76
▲ Policy Benchmark	
Value	0.2
Rank	57

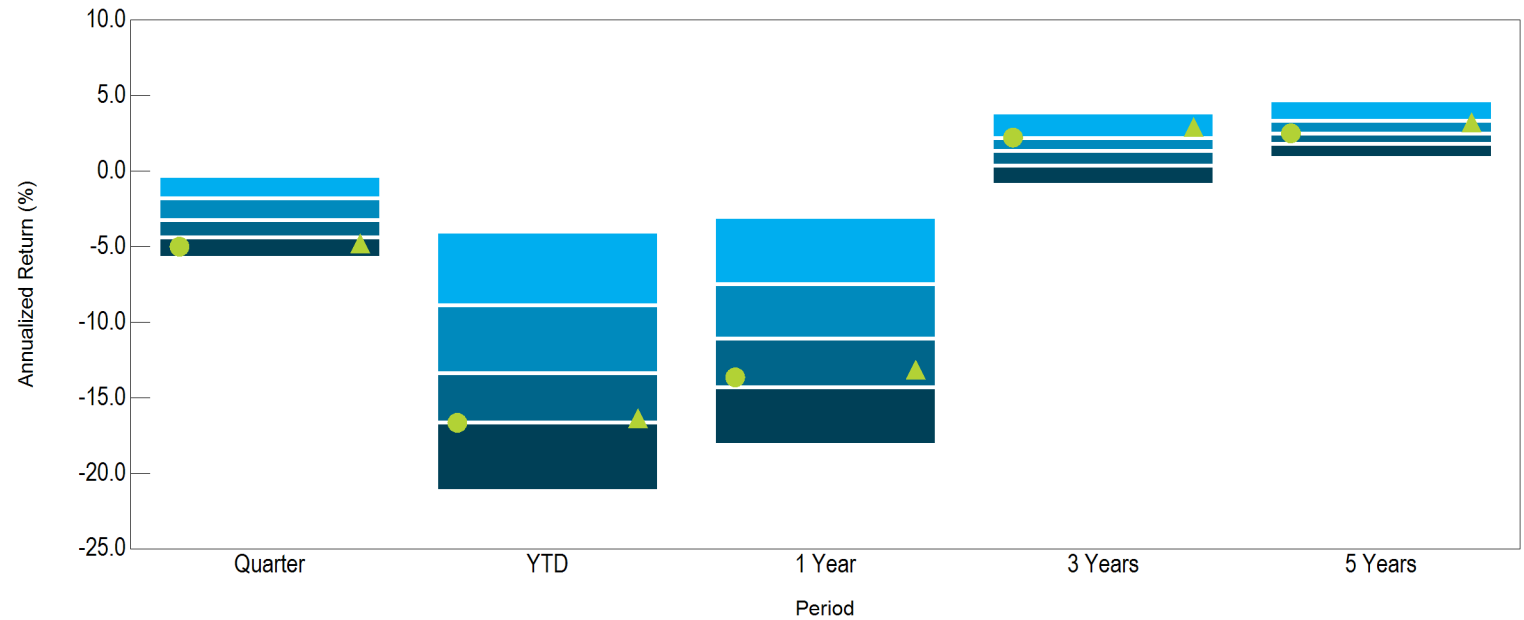
Universe	
5th %tile	0.5
25th %tile	0.3
Median	0.2
75th %tile	0.1
95th %tile	-0.1

#### ● Total Fund Aggregate

Value	0.3
Rank	80
▲ Policy Benchmark	
Value	0.4
Rank	61

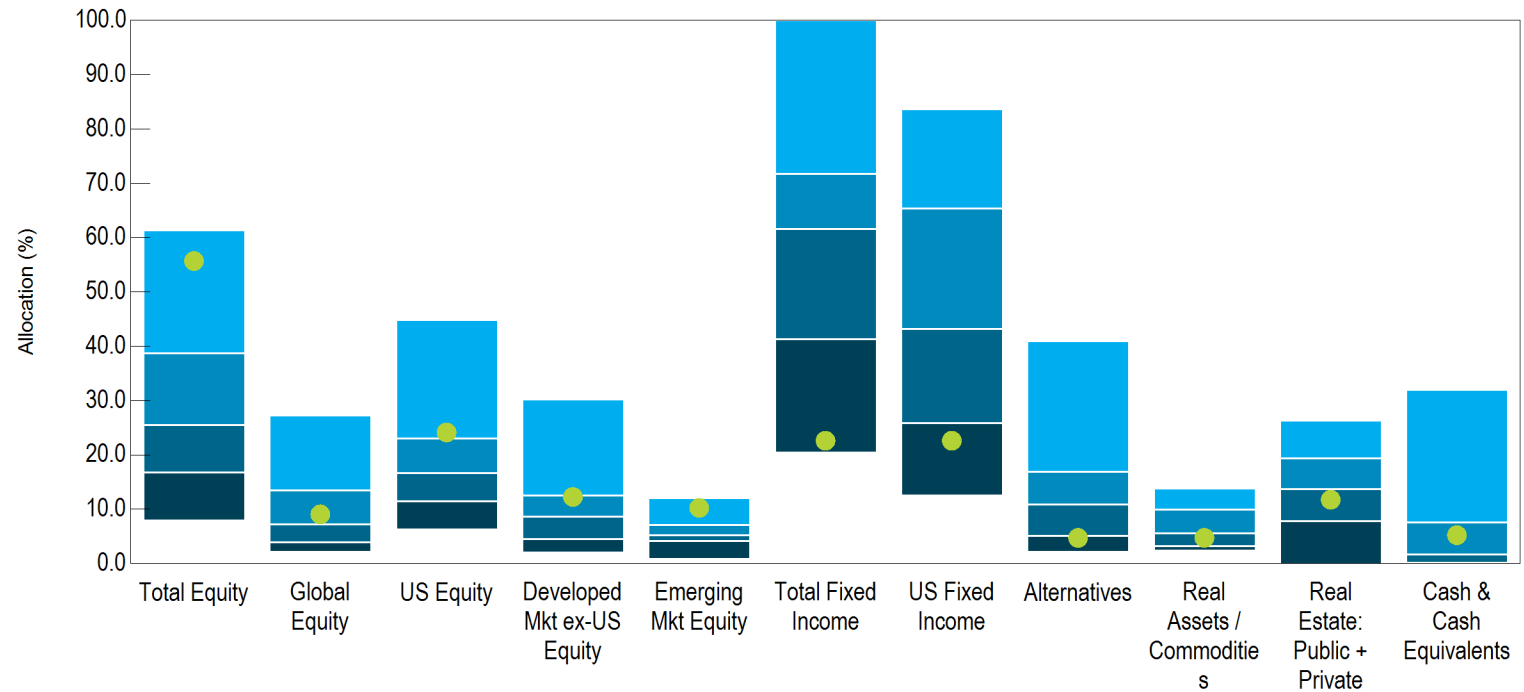
Universe	
5th %tile	1.0
25th %tile	0.7
Median	0.5
75th %tile	0.4
95th %tile	0.2

#### InvMetrics Health & Welfare Net Return Comparison Ending September 30, 2022



	Return (Rank)									
5th Percentile	-0.4	(90)	-4.0	(76)	-3.1	(71)	3.9	(26)	4.7	(51)
25th Percentile	-1.8	(87)	-8.9	(74)	-7.5	(66)	2.2	(12)	3.4	(31)
Median	-3.2		-13.4		-11.1		1.3		2.5	
75th Percentile	-4.4		-16.6		-14.3		0.4		1.8	
95th Percentile	-5.7		-21.2		-18.1		-0.9		0.9	
# of Portfolios	209		207		203		199		193	
● Total Fund Aggregate	-5.0	(90)	-16.7	(76)	-13.7	(71)	2.2	(26)	2.5	(51)
▲ Policy Benchmark	-4.8	(87)	-16.4	(74)	-13.2	(66)	2.9	(12)	3.2	(31)

Total Plan Allocation vs. InvMetrics Health & Welfare Net  
As of September 30, 2022



	Allocation											
5th Percentile	61.3	27.3	44.9	30.2	12.1	100.0	83.6	41.0	13.8	26.3	31.9	--
25th Percentile	38.9	13.6	23.2	12.7	7.3	71.8	65.5	17.0	10.1	19.5	7.6	--
Median	25.7	7.3	16.8	8.7	5.3	61.7	43.3	11.0	5.7	13.8	1.9	--
75th Percentile	16.8	4.1	11.6	4.6	4.3	41.5	26.0	5.2	3.3	7.9	0.2	--
95th Percentile	8.1	2.3	6.4	2.1	1.0	20.6	12.6	2.3	2.5	0.0	0.0	--
# of Portfolios	163	23	120	17	26	193	144	46	25	88	163	--
<div><div></div></div> Total Fund Aggregate	55.7	9.1	24.1	12.3	10.2	22.6	22.6	4.7	4.7	11.8	5.2	--
Rank	12	41	23	28	8	94	81	79	65	60	36	

Alternatives group includes Real Assets.

### Benchmark History As of September 30, 2022

#### Total Fund Aggregate

5/1/2022	Present	30% Russell 3000 / 16% MSCI EAFE / 12% MSCI Emerging Markets / 6% ICE BofA 91 Days T-Bills TR / 14% Bloomberg US Aggregate TR / 5% Bloomberg US Treasury Long TR / 12% Core Real Estate Benchmark / 5% Bloomberg Commodity Index TR USD
5/1/2021	4/30/2022	30% Russell 3000 / 14% MSCI EAFE / 15% MSCI Emerging Markets / 21% 91 Day T-Bills / 2.5% Bloomberg US Aggregate TR / 2.5% Bloomberg US Treasury Long TR / 10% Core Real Estate Benchmark / 5% Bloomberg Commodity Index TR USD
10/1/2018	4/30/2021	28% Russell 3000 / 13% MSCI EAFE / 15% MSCI Emerging Markets / 29% ICE BofA 91 Days T-Bills TR / 10% NCREIF ODCE Equal Weighted / 5% Bloomberg Commodity Index TR USD
5/1/2018	9/30/2018	55% MSCI ACWI IMI Net USD / 28% Bloomberg Global Aggregate TR / 5% Bloomberg Commodity Index TR USD / 4% S&P Global Natural Resources Index TR USD / 8% NCREIF ODCE Equal Weighted (Net)
7/1/2011	4/30/2018	46.7% MSCI ACWI IMI Net USD / 30.3% Bloomberg Global Aggregate TR / 6% Bloomberg Commodity Index TR USD / 5% S&P Global Natural Resources Index TR USD / 7% NCREIF ODCE Equal Weighted (Net) / 5% DJ Brookfield Global Infrastructure Net TR USD

#### Growth

5/1/2022	Present	51.7% Russell 3000 / 27.61% MSCI EAFE / 20.7% MSCI Emerging Markets
10/1/2018	4/30/2022	50% Russell 3000 / 23.21% MSCI EAFE / 26.79% MSCI Emerging Markets
12/1/2011	9/30/2018	MSCI ACWI IMI Net USD

#### Public Equity

5/1/2022	Present	51.7% Russell 3000 / 27.61% MSCI EAFE / 20.7% MSCI Emerging Markets
10/1/2018	4/30/2022	50% Russell 3000 / 23.21% MSCI EAFE / 26.79% MSCI Emerging Markets
12/1/2011	9/30/2018	MSCI ACWI IMI Net USD

#### Global Equity

7/1/2015	Present	MSCI ACWI IMI Net USD
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#### U.S. Equity

7/1/2015	Present	Russell 3000
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#### International Equity

7/1/2015	Present	MSCI EAFE
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#### Emerging Markets Equity

7/1/2015	Present	MSCI Emerging Markets
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#### Low Beta

7/1/2011	Present	ICE BofA 91 Days T-Bills TR
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Cash		
7/1/2011	Present	ICE BofA 91 Days T-Bills TR
Short-Term IG Bonds		
10/1/2018	Present	ICE BofA 91 Days T-Bills TR
Other		
5/1/2021	Present	12.5% Bloomberg US Aggregate TR / 12.5% Bloomberg US Treasury Long TR / 50% Core Real Estate Benchmark / 25% Bloomberg Commodity Index TR USD
10/1/2018	4/30/2021	66.67% NCREIF-ODCE / 33.33% Bloomberg Commodity Index TR USD
5/1/2018	9/30/2018	62.22% Bloomberg Global Aggregate TR / 17.78% NCREIF Property Index / 11.11% Bloomberg Commodity Index TR USD / 88.9% S&P Global Natural Resources Index TR USD
7/1/2015	4/30/2018	56.85% Bloomberg Global Aggregate TR / 13.13% NCREIF Property Index / 11.26% Bloomberg Commodity Index TR USD / 93.8% S&P Global Natural Resources Index TR USD / 93.8% DJ Brookfield Global Infrastructure Net TR USD
Core Real Estate		
7/1/2015	Present	Core Real Estate Benchmark
Commodities		
1/1/2015	Present	Bloomberg Commodity Index TR USD
Natural Resources		
6/1/2015	Present	S&P Global Natural Resources Index TR USD
Infrastructure		
6/1/2015	Present	DJ Brookfield Global Infrastructure Net TR USD
Investment Grade Bonds		
6/1/2021	Present	Bloomberg US Aggregate TR
TIPS		
3/1/2017	Present	100% Bloomberg US Treasury TIPS 0-5 Yr TR
Long-Term Government Bonds		
6/1/2021	Present	Bloomberg US Treasury Long TR

## **Glossary and Notes**



**Credit Risk:** Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

**Duration:** Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

**Information Ratio:** This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

**Jensen's Alpha:** A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk.  $\text{Portfolio Return} - [\text{Risk Free Rate} + \text{Beta} \times (\text{market return} - \text{Risk Free Rate})]$ .

**Market Capitalization:** For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

**Market Weighted:** Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

**Maturity:** The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

**Prepayment Risk:** The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

**Price-Book Value (P/B) Ratio:** The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

**Price-Earnings (P/E) Ratio:** A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

**Quality Rating:** The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

**Sharpe Ratio:** A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

**STIF Account:** Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

**Standard Deviation:** A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

**Style:** The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

**Tracking Error:** A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

**Yield to Maturity:** The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a “basis book.” For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

**Yield to Worst:** The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

**NCREIF Property Index (NPI):** Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

**NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE):** Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.

The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.