

As of December 31, 2022

# Quarterly Review

BOSTON CHICAGO LONDON MIAMI NEW YORK PORTLAND SAN DIEGO

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- 2. Executive Summary
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# **Economic and Market Update**

Data as of December 31, 2022



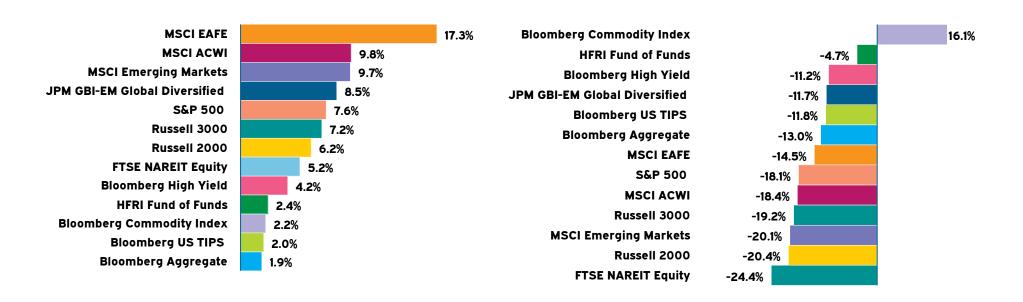
## Commentary

- → Ending a very tough year, most asset classes posted gains in the fourth quarter on signs that policy tightening would slow given cooling inflation.
  - Chairman Powell's testimony in November reiterated previous messaging on persistent and high inflation and the need for an extended period of monetary tightening weighing on assets in December. Markets remained focused though on signs that inflation is falling and that the size of future Fed rate hikes could be lower.
  - US equity markets sold off (-5.9%) in December but returned 7.2% in the fourth quarter as investors balanced the Fed's caution with improving inflation data.
  - In developed equity markets outside the US, sentiment deteriorated somewhat in December, but they posted a strong fourth quarter return of 17.3% driven by a falling US dollar and results in Europe where inflation started to slow.
  - Emerging market equities declined in December too (-1.4%) but less than the US and also had a strong fourth quarter (+9.7%). A weaker US dollar, declining inflation globally, and signs of China reopening its economy all contributed to the results.
  - Bonds experienced one of the worst years on record given inflation levels and the rapid rise in interest rates. Optimism over declining inflation and a slower pace of policy tightening benefited bonds overall in the fourth quarter though.
- → Looking to 2023, the path of inflation and monetary policy, slowing growth globally, China reopening its economy, and the war in Ukraine will all be key.

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Fourth Quarter

2022



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

- → After broad declines in Q3 driven by expectations for further policy tightening, most major asset classes were up in the fourth quarter on hopes of inflation and policy tightening peaking.
- → Outside of commodities, all other public market asset classes declined in 2022. It was the first time since the 1960s that both stocks and bonds declined together in a calendar year.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg and FactSet. Data is as of December 31, 2022.



	December	Q4	1 YR	3 YR	5 YR	10 YR
Domestic Equity	(%)	(%)	(%)	(%)	(%)	(%)
S&P 500	-5.8	7.6	-18.1	7.7	9.4	12.6
Russell 3000	-5.9	7.2	-19.2	7.1	8.8	12.1
Russell 1000	-5.8	7.2	-19.1	7.3	9.1	12.4
Russell 1000 Growth	-7.7	2.2	-29.1	7.8	11.0	14.1
Russell 1000 Value	-4.0	12.4	-7.5	6.0	6.7	10.3
Russell MidCap	-5.4	9.2	-17.3	5.9	7.1	11.0
Russell MidCap Growth	-6.0	6.9	-26.7	3.9	7.6	11.4
Russell MidCap Value	-5.1	10.5	-12.0	5.8	5.7	10.1
Russell 2000	-6.5	6.2	-20.4	3.1	4.1	9.0
Russell 2000 Growth	-6.4	4.1	-26.4	0.6	3.5	9.2
Russell 2000 Value	-6.6	8.4	-14.5	4.7	4.1	8.5

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

US Equities: Russell 3000 Index declined 5.9% for December but gained 7.2% for the quarter. Historic inflation and rapidly rising interest rates led to significant declines (-19.2%) for the full year.

- → US stocks fell broadly in December on the Federal Reserve signaling its continued resolve to raise rates but gained overall for the quarter on hopes that interest rates could be peaking soon given slowing inflation.
- → All sectors declined during December, led by consumer discretionary and technology with defensive sectors declining less. For the quarter though, most sectors were up led by energy and industrials.
- $\rightarrow$  In a continuation on the overall trend in 2022 value stocks outperformed growth stocks in the fourth quarter given higher interest rates and slowing growth.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of December 31, 2022.

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Foreign Equity	December (%)	<b>Q4</b> (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	-0.7	14.3	-16.0	0.1	0.9	3.8
MSCI EAFE	0.1	17.3	-14.5	0.9	1.5	4.7
MSCI EAFE (Local Currency)	-3.0	8.7	-7.0	3.6	3.8	7.6
MSCI EAFE Small Cap	1.1	15.8	-21.4	-0.9	0.0	6.2
MSCI Emerging Markets	-1.4	9.7	-20.1	-2.7	-1.4	1.4
MSCI Emerging Markets (Local Currency)	-2.0	6.6	-15.5	0.1	1.3	4.6
MSCI China	5.2	13.5	-21.9	-7.5	-4.5	2.4

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

Developed international equities (MSCI EAFE) rose 0.1% in December and an impressive 17.3% in the fourth quarter. Emerging markets (MSCI EM) fell -1.4% in December but gained 9.7% for the quarter. Inflation and rising rates also weighed on international equities last year, as well as a strong US dollar for most of the year.

- → International developed market equities, specifically Europe, held up better relative to the rest of the world in December with the MSCI EAFE up 0.1%. In the fourth quarter, they returned a significant 17.3% due in part to the recent weakness in the US dollar (they returned only 8.7% in local terms) leading to lower declines for the year.
- → In December emerging markets outperformed the US but trailed developed market equities as China's rally was not enough to offset weakness elsewhere (e.g., India -5.5%). For the quarter, a weakening US dollar and China reopening led to strong results (+9.7%), but emerging markets remained the weakest for 2022 due to China.
- $\rightarrow$  Like the US, value outpaced growth globally in 2022.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of December 31, 2022.

							Current	
Fixed Income	December (%)	<b>Q4</b> (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Yield (%)	Duration (Years)
Bloomberg Universal	-0.3	2.2	-13.0	-2.5	0.2	1.3	5.1	6.2
Bloomberg Aggregate	-0.5	1.9	-13.0	-2.7	0.0	1.1	4.7	6.4
Bloomberg US TIPS	-1.0	2.0	-11.8	1.2	2.1	1.1	4.4	6.7
Bloomberg High Yield	-0.6	4.2	-11.2	0.0	2.3	4.0	9.0	4.4
JPM GBI-EM Global Diversified (USD)	2.2	8.5	-11.7	-6.1	-2.5	-2.0	5.8	4.9

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

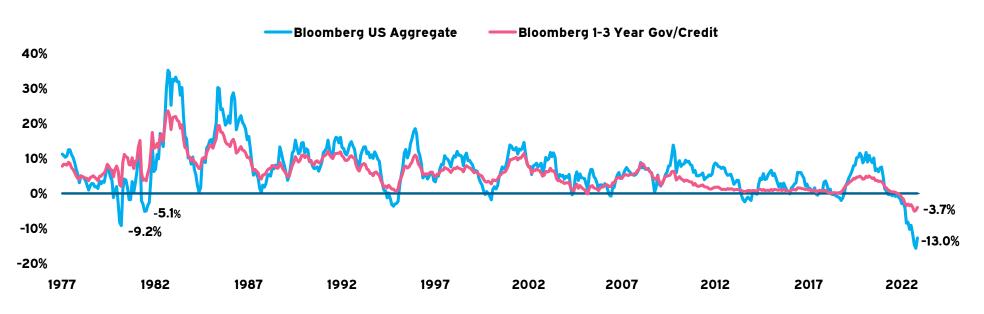
# Fixed Income: The Bloomberg Universal fell -0.3% in December but rose 2.2% for the fourth quarter. Last year was one of the worst on record, with the broad bond market declining 13%.

- → The Federal Reserve reconfirming its commitment to tighten policy in the face of high inflation weighed on US fixed income in December. For the quarter though the broad US bond market (Bloomberg Aggregate) was up 1.9% on hopes that inflation would continue to decline and corresponding expectations for the slowing of policy rate hikes.
- → TIPS produced similar results to the broad US bond market for the quarter but outperformed for the year given their inflation adjustment.
- → Riskier bonds outperformed for the quarter due to improving risk sentiment with emerging market bonds performing particularly well.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. JPM GBI-EM data is from InvestorForce. Data is as of December 31, 2022. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration respectively.



# Fixed Income Rolling One-year Returns<sup>1</sup>

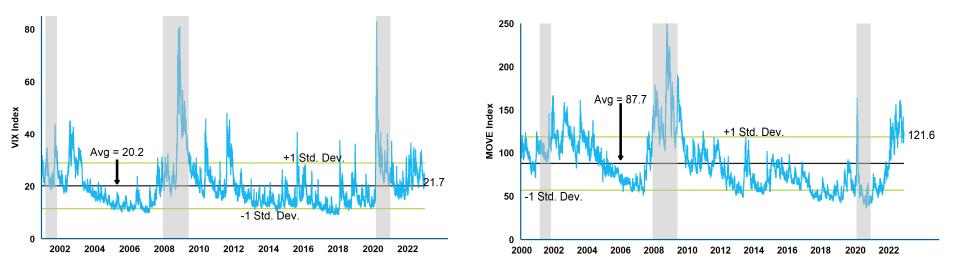


- → Last year was one of the worst return periods for the US bond market given the historic inflation levels and the corresponding rapid rise in interest rates.
- → The broad bond market (Bloomberg US Aggregate) declined 13% in 2022 making it one of the worst periods on record.
- $\rightarrow$  Short-term bond declines were far smaller (-3.7%) last year, but also were one of the worst on record.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of December 31, 2022.

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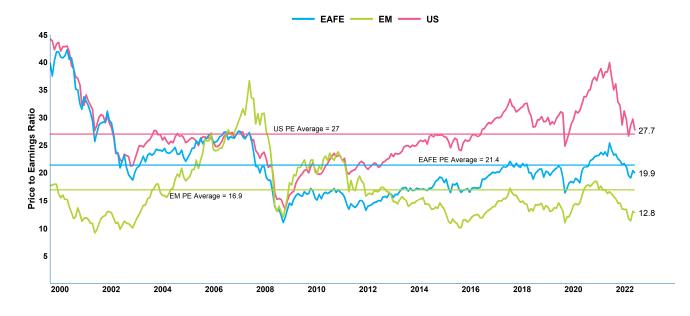


### Equity and Fixed Income Volatility<sup>1</sup>

- $\rightarrow$  Volatility in equities (VIX) finished the year down from its highs and near its long run average as investors anticipated the potential end of Fed rate hikes this year.
- → Fixed income (MOVE) remained elevated and well above its long-run average at year-end due to the uncertain path of US interest rates as the Federal Reserve continues its hawkish stance on inflation.

<sup>&</sup>lt;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 December 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>

- → After December's sell-off, US equity price-to-earnings ratio finished the year near its long-term (21st century) average.
- → International developed market valuations rose but remain 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>&</sup>lt;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 December 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.



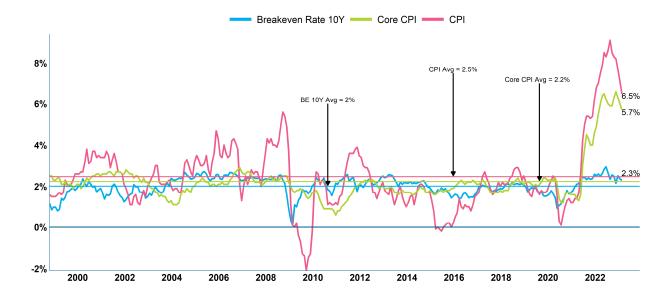


# US Yield Curve<sup>1</sup>

- → In December, policy-sensitive interest rates at the front-end of the curve continued to rise with the two-year Treasury yield increasing from 4.3% to 4.4%. Longer dated ten-year Treasury yields also increased (3.6% to 3.9%).
   For the year, the yield curve rose dramatically across maturities and moved from steep to inverted.
- → The Fed remains strongly committed to fighting inflation, as it increased rates another 50 basis points to a range of 4.0% to 4.5% at its December meeting. This brought the total number of increases for 2022 to seven.
- → The yield spread between two-year and ten-year Treasuries narrowed somewhat to -0.54% after finishing November at -0.70%. The more closely watched measure by the Fed of three-month and ten-year Treasuries also remained inverted. Historically, inversions in the yield curve have often preceded recessions.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of December 31, 2022.

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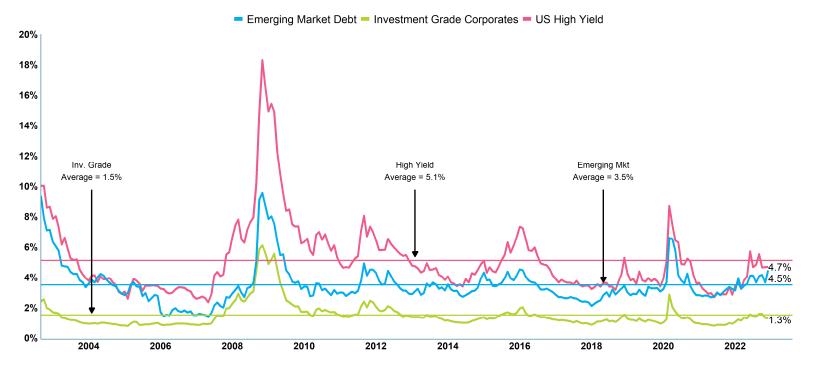
### Ten-Year Breakeven Inflation and CPI<sup>1</sup>

- → In December inflation continued to decline (6.5% versus 7.1%) matching expectations and providing support for the Fed to slow the pace of policy tightening. Energy prices fell again for the month but remain up 7.3% from a year prior, while food prices fell slightly, and stickier service prices continued to increase.
- → Core inflation excluding food and energy also continued to decline in December (5.7% versus 6.0%) and matched estimates.
- → Inflation expectations (breakevens) declined slightly for the month (2.3% versus 2.4%) and remain well below current inflation levels as investors anticipate a significant moderation in inflation.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of December 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.



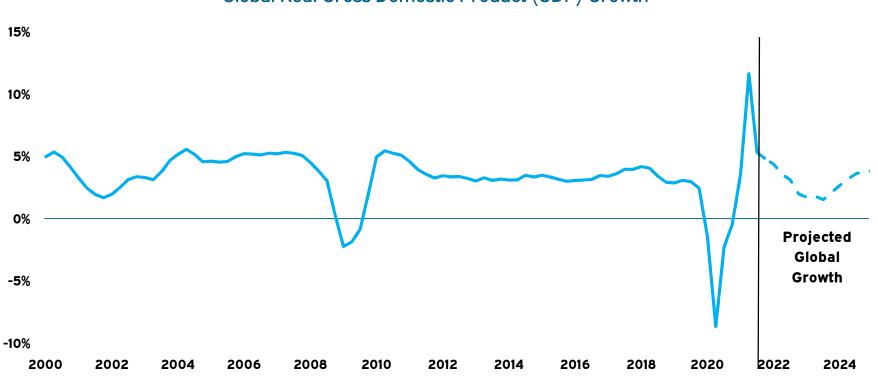
# Credit Spreads vs. US Treasury Bonds<sup>1</sup>



- → High yield spreads (the added yield above a comparable maturity Treasury) finished December at 4.7% (the same as the end of November) remaining below their long-run average.
- $\rightarrow$  Investment grade spreads also held steady at 1.3% as attractive yields and strong balance sheets continued to attract investors, while emerging market spreads rose (4.5% versus 3.6%) due to concerns regarding slower growth and lower commodity prices.

<sup>&</sup>lt;sup>1</sup> Sources: Bloomberg. Data is as of December 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.



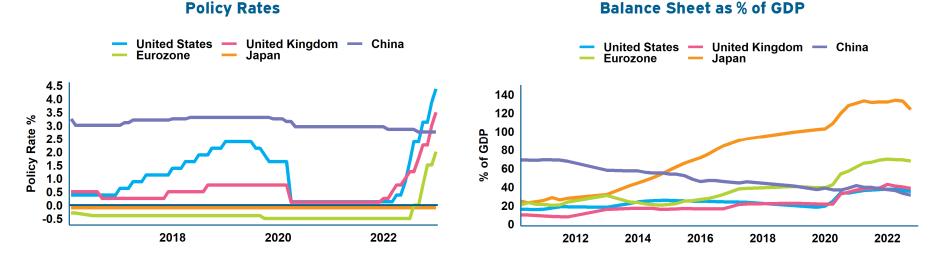


### Global Real Gross Domestic Product (GDP) Growth<sup>1</sup>

- → Global economies are expected to slow in 2023 compared to 2022, with risks of recession increasing given persistently high inflation and related tighter monetary policy.
- $\rightarrow$  The delicate balancing act of central banks trying to reduce inflation without dramatically impacting growth will remain key.

<sup>&</sup>lt;sup>1</sup> Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, real, % change YoY). Updated December 2022.



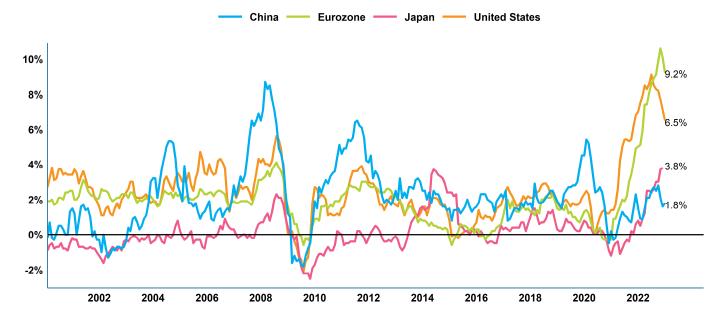


#### Central Bank Response<sup>1</sup>

- → In 2022 many central banks aggressively reduced pandemic-era policy support in the face of high inflation with the US taking a more aggressive approach.
- → In December, the Bank of Japan relaxed its target yield for the 10-year bond which may mark an incremental step toward policy normalization after eight years of quantitative easing.
- → 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 and aggressive tightening to date could heavily weigh on global growth. The Federal Reserve's policy rate path could diverge from others this year given their strong early start to tightening.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Policy rate data is as of December 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 December 31, 2022.

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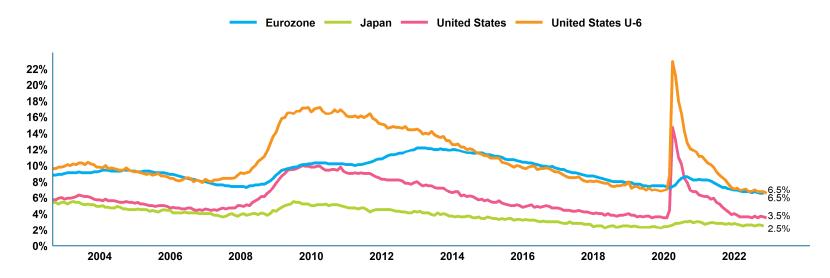


# Inflation (CPI Trailing Twelve Months)<sup>1</sup>

- → 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 are slowly declining in the US, but they remain elevated, while in Europe they have reached 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>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of December 2022. The most recent Japanese inflation data is as of November 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 strong labor market and higher wages, although beneficial for workers, motivates the Fed's efforts to fight inflation, likely leading to higher unemployment.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as December 31, 2022, for the US. The most recent data for Eurozone and Japanese unemployment is as of November 30, 2022.





#### US Dollar versus Broad Currencies<sup>1</sup>

- → Overall, the US dollar continued to weaken from its recent peak in December as declining inflation supported the case for the Federal Reserve to slow its tightening.
- → The dollar finished the year much higher than it started though due to the increased pace of policy tightening, stronger relative growth, and safe-haven flows.
- → As we look to 2023, the track of inflation across economies and the corresponding monetary policy will likely be key drivers of currency moves.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data as of December 31, 2022.



#### Summary

# Key Trends:

- $\rightarrow$  The impacts of record high inflation will remain key, with market volatility likely to stay high.
- $\rightarrow$  Monetary policy could diverge in 2023 with the Fed pausing and others continuing to tighten. The risk of policy errors in both directions remains.
- $\rightarrow$  Growth will continue to slow globally next year, with many economies likely falling into recessions. 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 could weigh on consumer spending.
- → Valuations have significantly declined in the US to around 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 risks remain, including potential continued strength in the US dollar, higher inflation particularly weighing on Europe, and China's rushed exit from COVID-19 restrictions and on-going weakness in the real estate sector.

Executive Summary As of December 31, 2022



#### Aggregate Plan Overview

The value of the San Jose Federated Retiree Health Care Trust's assets was \$361.4 million on December 31, 2022, compared to \$342.0 million at the end of the prior quarter. The Trust had \$3.9 million of net cash outflows for the quarter, and \$23.3 million of investment gains during the three-month period.

- → The Health Care Trust's net of fees performance was +6.8% for the quarter, compared to the Policy Benchmark return of +6.4%. Over the trailing one-year period, the Trust and the Policy Benchmark both returned -11.0%. The Trust ranked in or near the top third of the peer group for the 3-year, 5-year, and since-inception periods.
  - Growth returned +10.8% for the quarter and -18.6% over the trailing one-year period. The Public Equity Benchmark returned +10.2% for the quarter and -18.2% over the trailing one-year period.
  - Low Beta returned +0.9% for the quarter and +1.6% 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 +2.0% for the quarter and -0.1% over the trailing one-year period. The Other Benchmark returned +1.1% for the quarter and -1.1% for the one-year period.
- $\rightarrow$  The Health Care Trust didn't have any manager changes during the quarter.



#### Fourth 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			

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



#### Watch List

# 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

#### Artisan

→ Over the three-year period, Artisan (+2.3%) has underperformed the MSCI ACWI Value by 100 basis points. Since inception in June 2015, Artisan has outperformed the benchmark by 40 basis points per year, on average, and ranked in the 73rd percentile compared to peers.

#### Cove Street

→ Over the three-year period, Cove Street (+2.6%) has underperformed the Russell 2000 Value by 210 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 80th percentile compared to peers.

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

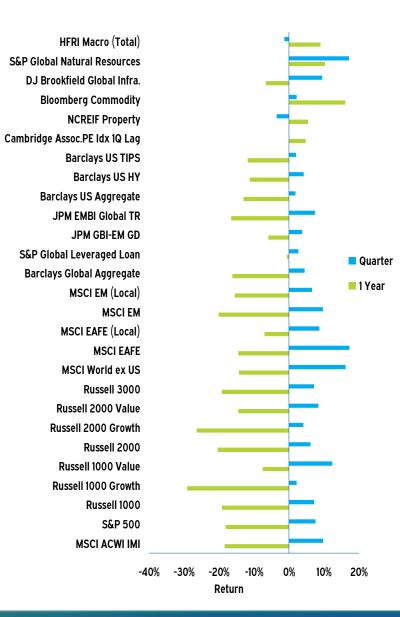
<sup>&</sup>lt;sup>2</sup> Placement on the Watch List includes qualitative reasons and manager underperformance versus the appropriate benchmark over a three and or five year period as outlined in the Investment Policy Statement.

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### San Jose Federated Retiree Health Care 115 Trust

#### Market Environment – 4Q22 Overview

		4022	1 YR	3 YR	5 YR	10 YR
Benchmark	Scope	(%)	(%)	(%)	(%)	(%)
Global Equity						
MSCI ACWI IMI	World	9.8	-18.4	3.9	5.0	7.9
Domestic Equity						
S&P 500	Large Core	7.6	-18.1	7.7	9.4	12.6
Russell 1000	Large Core	7.2	-19.1	7.3	9.1	12.4
Russell 1000 Growth	Large Growth	2.2	-29.1	7.8	11.0	14.1
Russell 1000 Value	Large Value	12.4	-7.5	6.0	6.7	10.3
Russell 2000	Small Core	6.2	-20.4	3.1	4.1	9.0
Russell 2000 Growth	Small Growth	4.1	-26.4	0.6	3.5	9.2
Russell 2000 Value	Small Value	8.4	-14.5	4.7	4.1	8.5
Russell 3000	All Cap Core	7.2	-19.2	7.1	8.8	12.1
International Equity						
MSCI World ex US	World ex-US	16.2	-14.3	1.3	1.8	4.6
MSCI EAFE	International Developed	17.3	-14.5	0.9	1.5	4.7
MSCI EAFE (Local)	International Developed (Local Currency)	8.7	-7.0	3.6	3.8	7.6
MSCI EM	Emerging Markets	9.7	-20.1	-2.7	-1.4	1.4
MSCI EM (Local)	Emerging Markets (Local Currency)	6.6	-15.5	0.1	1.3	4.6
Global Fixed Income						
Barclays Global Aggregate	Global Core Bonds	4.5	-16.2	-4.5	-1.7	-0.4
S&P Global Leveraged Loan	Bank Loans	2.7	-0.6	2.5	2.8	3.4
JPM GBI-EM GD	Emerging Markets Bonds (Local Currency)	3.8	-5.9	-0.3	2.9	4.4
JPM EMBI Global TR	Emerging Market Bonds	7.4	-16.5	-4.5	-1.0	1.3
Domestic Fixed Income						
Barclays US Aggregate	Core Bonds	1.9	-13.0	-2.7	0.0	1.1
Barclays US HY	High Yield	4.2	-11.2	0.0	2.3	4.0
Barclays US TIPS	Inflation	2.0	-11.8	1.2	2.1	1.1
Other						
Cambridge AssociatesPE Index 1Qtr Lag	Private Equity	0.0	4.8	24.8	22.1	18.1
NCREIF Property	Real Estate	-3.5	5.5	8.1	7.5	8.8
Bloomberg Commodity	Commodities	2.2	16.1	12.7	6.4	-1.3
DJ Brookfield Global Infrastructure	Infrastructure	9.5	-6.6	1.4	4.3	6.4
S&P Global Natural Resources	Natural Resources	17.2	10.3	11.6	7.3	4.9
HFRI Macro	Hedge Funds	-1.3	9.0	7.3	4.8	3.1
	-					



# 4Q22 Review







#### Total Fund | As of December 31, 2022

Asset Class Net Performance Summary										
	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date	
Total Fund Aggregate	361,394,883	100.0	6.8	1.5	-11.0	2.6	3.4	4.3	Jul-11	
Policy Benchmark			6.4	1.3	-11.0	3.1	3.7	4.8	Jul-11	
InvMetrics Health & Welfare Net Median			3.1	0.1	-10.8	1.3	2.7	3.9	Jul-11	
InvMetrics Health & Welfare Net Rank			4	10	52	17	30	34	Jul-11	
Growth	210,918,167	58.4	10.8	2.2	-18.6	2.0	3.8	8.1	Dec-11	
Public Equity Benchmark			10.2	2.5	-18.2	3.3	4.8	8.5	Dec-11	
Public Equity	210,918,167	58.4	10.8	2.2	-18.6	2.0	3.8	8.1	Dec-11	
Public Equity Benchmark			10.2	2.5	-18.2	3.3	4.8	8.5	Dec-11	
Global Equity	34,156,087	9.5	10.2	2.0	-21.7	-1.8	0.5	3.8	Jul-15	
MSCI ACWI IMI Net USD			9.8	2.6	-18.4	3.9	5.0	6.7	Jul-15	
U.S. Equity	88,505,855	24.5	7.3	2.5	-19.0	7.0	8.6	9.7	Jul-15	
Russell 3000			7.2	2.4	-19.2	7.1	8.8	10.1	Jul-15	
International Equity	49,672,439	13.7	18.5	6.5	-13.8	1.2	1.9	3.7	Jul-15	
MSCI EAFE			17.3	6.4	-14.5	0.9	1.5	3.4	Jul-15	
Emerging Markets Equity	38,583,786	10.7	10.2	-3.2	-20.5	-3.1	-2.0	1.6	Jul-15	
MSCI Emerging Markets			9.7	-3.0	-20.1	-2.7	-1.4	2.2	Jul-15	

Fiscal Year begins July 1. Please see the Appendix for composition of the Policy Benchmark and Public Equity Benchmark.



	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
Low Beta	10,113,640	2.8	0.9	1.4	1.6	0.7	1.3	0.7	Jul-11
ICE BofA 91 Days T-Bills TR			0.8	1.3	1.5	0.7	1.3	0.7	Jul-11
Cash	3,653,648	1.0	0.8	1.3	1.4	0.5	1.1	0.6	Jul-11
ICE BofA 91 Days T-Bills TR			0.8	1.3	1.5	0.7	1.3	0.7	Jul-11
Short-Term IG Bonds	6,459,991	1.8	1.0	1.5	1.8	0.7		1.3	Oct-18
ICE BofA 91 Days T-Bills TR			0.8	1.3	1.5	0.7		1.2	Oct-18
Other	140,363,077	38.8	2.0	0.2	-0.1	5.2	4.3	3.6	Jul-15
Other Benchmark			1.1	-1.1	-1.1	4.1	3.0	3.4	Jul-15
Core Real Estate	54,682,602	15.1	1.2	8.1	26.8	13.6	10.7	9.3	Jul-15
Core Real Estate Benchmark			0.3	4.9	21.0	10.9	8.9	8.7	Jul-15
Commodities	17,432,434	4.8	7.8	3.7	11.0	12.8	7.7	2.8	Jan-15
Bloomberg Commodity Index TR USD			2.2	-2.0	16.1	12.7	6.4	2.0	Jan-15
Investment Grade Bonds	51,436,511	14.2	1.9	-3.0	-13.1	-4.4	-2.8	-8.1	Jun-21
Bloomberg US Aggregate TR			1.9	-3.0	-13.0	-2.7	0.0	-8.0	Jun-21
Long-Term Government Bonds	16,811,530	4.7	-1.0	-10.5	-29.3			-16.1	Jun-21
Bloomberg US Treasury Long TR			-0.6	-10.2	-29.3			-16.0	Jun-21



	Trailing Net P	Performanc	:e						
	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
Total Fund Aggregate	361,394,883	100.0	6.8	1.5	-11.0	2.6	3.4	4.3	Jul-11
Policy Benchmark			6.4	1.3	-11.0	3.1	3.7	4.8	Jul-11
InvMetrics Health & Welfare Net Median			3.1	0.1	-10.8	1.3	2.7	3.9	Jul-11
InvMetrics Health & Welfare Net Rank			4	10	52	17	30	34	Jul-11
Growth	210,918,167	58.4	10.8	2.2	-18.6	2.0	3.8	8.1	Dec-11
Public Equity Benchmark			10.2	2.5	-18.2	3.3	4.8	8.5	Dec-11
Public Equity	210,918,167	58.4	10.8	2.2	-18.6	2.0	3.8	8.1	Dec-11
Public Equity Benchmark			10.2	2.5	-18.2	3.3	4.8	8.5	Dec-11
Global Equity	34,156,087	9.5	10.2	2.0	-21.7	-1.8	0.5	3.8	Jul-15
MSCI ACWI IMI Net USD			9.8	2.6	-18.4	3.9	5.0	6.7	Jul-15
Artisan Global Value	18,980,712	5.3	13.9	2.3	-13.2	2.3	3.0	5.2	Jun-15
MSCI ACWI Value NR USD			14.2	5.5	-7.5	3.3	3.5	4.8	Jun-15
eV All Global Equity Net Median			10.7	3.3	-18.3	4.4	5.5	6.4	Jun-15
eV All Global Equity Net Rank			20	64	30	76	82	73	Jun-15
Artisan Global Opportunities	15,175,375	4.2	5.9	1.6	-30.2			0.1	Jul-20
MSCI ACWI Growth NR USD			5.3	-1.0	-28.6			2.3	Jul-20
eV All Global Equity Net Median			10.7	3.3	-18.3	4.4	5.5	7.8	Jul-20
eV All Global Equity Net Rank			90	72	89		-	91	Jul-20



	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
U.S. Equity	88,505,855	24.5	7.3	2.5	-19.0	7.0	8.6	9.7	Jul-15
Russell 3000			7.2	2.4	-19.2	7.1	8.8	10.1	Jul-15
Northern Trust Russell 3000	86,187,803	23.8	7.2	2.4	-19.2	7.1	8.8	9.7	Jun-15
Russell 3000			7.2	2.4	-19.2	7.1	8.8	9.7	Jun-15
Cove Street Small Cap Value	2,318,052	0.6	9.3	4.1	-11.1	2.6	4.2	5.2	Jun-15
Russell 2000 Value			8.4	3.4	-14.5	4.7	4.1	6.4	Jun-15
eV US Small Cap Value Equity Net Median			10.8	5.2	-11.7	6.3	4.6	6.6	Jun-15
eV US Small Cap Value Equity Net Rank			70	63	44	88	64	80	Jun-15
International Equity	49,672,439	13.7	18.5	6.5	-13.8	1.2	1.9	3.7	Jul-15
MSCI EAFE			17.3	6.4	-14.5	0.9	1.5	3.4	Jul-15
Northern Trust EAFE Index	49,672,439	13.7	18.5	6.5	-13.8	1.2	1.9		Jul-15
MSCI EAFE			17.3	6.4	-14.5	0.9	1.5		Jul-15
Emerging Markets Equity	38,583,786	10.7	10.2	-3.2	-20.5	-3.1	-2.0	1.6	Jul-15
MSCI Emerging Markets			9.7	-3.0	-20.1	-2.7	-1.4	2.2	Jul-15
Northern Trust MSCI EM	38,583,786	10.7	10.2	-3.2	-20.5	-3.1		-0.1	Aug-18
MSCI Emerging Markets			9.7	-3.0	-20.1	-2.7		0.1	Aug-18



	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
Low Beta	10,113,640	2.8	0.9	1.4	1.6	0.7	1.3	0.7	Jul-11
ICE BofA 91 Days T-Bills TR			0.8	1.3	1.5	0.7	1.3	0.7	Jul-11
Cash	3,653,648	1.0	0.8	1.3	1.4	0.5	1.1	0.6	Jul-11
ICE BofA 91 Days T-Bills TR			0.8	1.3	1.5	0.7	1.3	0.7	Jul-11
Short-Term IG Bonds	6,459,991	1.8	1.0	1.5	1.8	0.7		1.3	Oct-18
ICE BofA 91 Days T-Bills TR			0.8	1.3	1.5	0.7	-	1.2	Oct-18
BlackRock 3-Month T-Bill	6,459,991	1.8	1.0	1.5	1.8	0.7		1.3	Oct-18
ICE BofA 91 Days T-Bills TR			0.8	1.3	1.5	0.7		1.2	Oct-18
Other	140,363,077	38.8	2.0	0.2	-0.1	5.2	4.3	3.6	Jul-15
Other Benchmark			1.1	-1.1	-1.1	4.1	3.0	3.4	Jul-15
Core Real Estate	54,682,602	15.1	1.2	8.1	26.8	13.6	10.7	9.3	Jul-15
Core Real Estate Benchmark			0.3	4.9	21.0	10.9	8.9	8.7	Jul-15
BlackRock Core Property Fund	10,582,095	2.9	1.4	9.9	30.1	14.3		11.8	Feb-19
Core Real Estate Benchmark 2			0.3	4.9	21.0	10.9	-	9.3	Feb-19
Clarion Lion Properties Fund	16,212,679	4.5	0.6	7.8	24.0	13.3		11.6	May-19
Core Real Estate Benchmark			0.3	4.9	21.0	10.9		9.8	May-19
Clarion Lion Industrial Trust	4,937,032	1.4	4.6	11.3	36.5			28.3	Oct-21
Core Real Estate Benchmark 3			0.3	4.9	21.0			16.4	Oct-21



	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
TA Realty Core Property Fund	22,950,796	6.4	0.8	6.0	24.7			19.3	Oct-21
Core Real Estate Benchmark 3			0.3	4.9	21.0			16.4	Oct-21
Commodities	17,432,434	4.8	7.8	3.7	11.0	12.8	7.7	2.8	Jan-15
Bloomberg Commodity Index TR USD			2.2	<i>-2.0</i>	16.1	12.7	6.4	2.0	Jan-15
Credit Suisse Risk Parity Commodity Fund	17,432,434	4.8	7.8	3.7	11.0	12.8	7.2	0.1	Aug-11
Bloomberg Commodity Index TR USD			2.2	<i>-2.0</i>	16.1	12.7	6.4	-2.5	Aug-11
Investment Grade Bonds	51,436,511	14.2	1.9	-3.0	-13.1	-4.4	-2.8	-8.1	Jun-21
Bloomberg US Aggregate TR			1.9	-3.0	-13.0	-2.7	0.0	-8.0	Jun-21
Northern Trust Core Bonds	51,436,511	14.2	1.9	-3.0	-13.1			-8.1	Jun-21
Bloomberg US Aggregate TR			1.9	-3.0	-13.0		-	-8.0	Jun-21
Long-Term Government Bonds	16,811,530	4.7	-1.0	-10.5	-29.3			-16.1	Jun-21
Bloomberg US Treasury Long TR			-0.6	-10.2	-29.3		-	-16.0	Jun-21
BlackRock Long Treasury	16,811,530	4.7	-1.0	-10.5	-29.3			-18.9	Jun-21
Bloomberg US Treasury Long TR			-0.6	-10.2	-29.3			-18.7	Jun-21



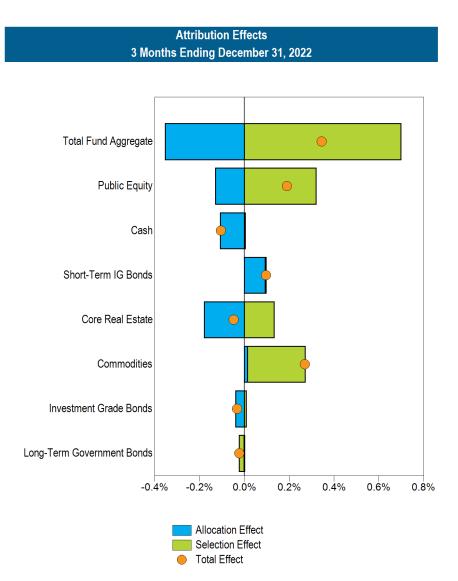
Cash Flow Summary QTD Ending December 31, 2022								
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value		
Artisan Global Value	\$16,666,030	\$0	\$0	\$0	\$2,314,682	\$18,980,712		
Artisan Global Opportunities	\$14,324,956	\$0	\$0	\$0	\$850,419	\$15,175,375		
Northern Trust Russell 3000	\$80,403,835	\$0	-\$5,025	-\$5,025	\$5,788,993	\$86,187,803		
Cove Street Small Cap Value	\$2,120,359	\$0	\$0	\$0	\$197,693	\$2,318,052		
Northern Trust EAFE Index	\$41,918,476	\$0	-\$3,144	-\$3,144	\$7,757,107	\$49,672,439		
Northern Trust MSCI EM	\$35,008,270	\$0	-\$8,314	-\$8,314	\$3,583,831	\$38,583,786		
Internal Cash Account	\$13,142,401	\$7,013,884	-\$16,544,635	-\$9,530,751	\$41,998	\$3,653,648		
BlackRock 3-Month T-Bill	\$9,885,620	\$0	-\$3,500,000	-\$3,500,000	\$74,371	\$6,459,991		
BlackRock Core Property Fund	\$10,923,403	\$0	-\$482,294	-\$482,294	\$140,986	\$10,582,095		
Clarion Lion Properties Fund	\$16,247,634	\$0	-\$99,883	-\$99,883	\$64,928	\$16,212,679		
Clarion Lion Industrial Trust	\$4,721,320	\$0	\$0	\$0	\$215,712	\$4,937,032		
TA Realty Core Property Fund	\$13,020,515	\$10,000,000	-\$249,503	\$9,750,497	\$179,785	\$22,950,796		
Credit Suisse Risk Parity Commodity Fund	\$16,168,343	\$0	\$0	\$0	\$1,264,091	\$17,432,434		
Northern Trust Core Bonds	\$50,472,577	\$0	\$0	\$0	\$963,934	\$51,436,511		
BlackRock Long Treasury	\$16,983,452	\$0	\$0	\$0	-\$171,923	\$16,811,530		
Total	\$342,007,191	\$17,013,884	-\$20,892,799	-\$3,878,914	\$23,266,607	\$361,394,883		

# MEKETA

## San Jose Federated Retiree Health Care 115 Trust

#### Total Fund | As of December 31, 2022

Attribution Summary 3 Months Ending December 31, 2022							
	Wtd. Actual Return	Wtd. Wtd. Index Return		Selection Effect	Allocation Effect	Total Effects	
Public Equity	10.8%	10.2%	0.5%	0.3%	-0.1%	0.2%	
Cash	0.8%	0.8%	0.0%	0.0%	-0.1%	-0.1%	
Short-Term IG Bonds	1.0%	0.8%	0.2%	0.0%	0.1%	0.1%	
Core Real Estate	1.2%	0.3%	0.9%	0.1%	-0.2%	0.0%	
Commodities	7.8%	2.2%	5.6%	0.3%	0.0%	0.3%	
Investment Grade Bonds	1.9%	1.9%	0.0%	0.0%	0.0%	0.0%	
Long-Term Government Bonds	-1.0%	-0.6%	-0.4%	0.0%	0.0%	0.0%	
Total	<b>6.8</b> %	6.5%	0.3%	0.7%	-0.4%	0.3%	

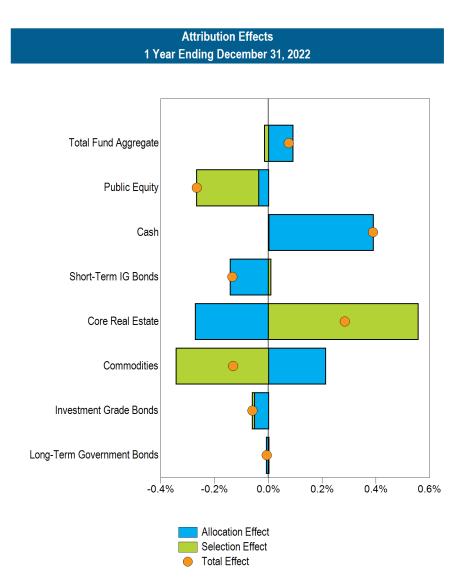


Difference in attribution returns and returns in the performance summary may occur as a result of the different calculation methodologies that are applied by InvestorForce.

# MEKETA

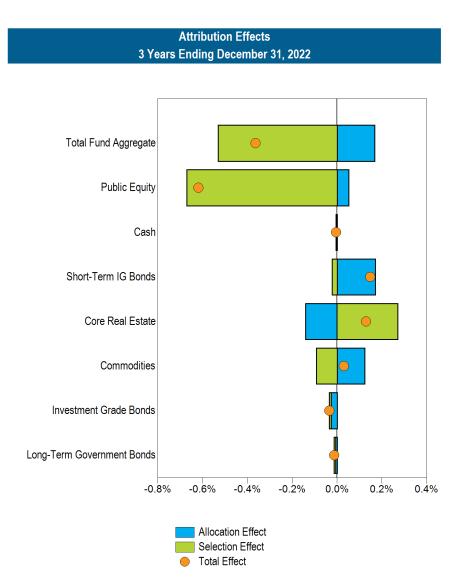
### San Jose Federated Retiree Health Care 115 Trust

Attribution Summary							
1 Year Ending December 31, 2022							
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects	
Public Equity	-18.6%	-18.2%	-0.5%	-0.2%	0.0%	-0.3%	
Cash	1.4%	1.5%	-0.1%	0.0%	0.4%	0.4%	
Short-Term IG Bonds	1.8%	1.5%	0.3%	0.0%	-0.1%	-0.1%	
Core Real Estate	26.8%	21.0%	5.9%	0.6%	-0.3%	0.3%	
Commodities	11.0%	16.1%	-5.1%	-0.3%	0.2%	-0.1%	
Investment Grade Bonds	-13.1%	-13.0%	0.0%	0.0%	-0.1%	-0.1%	
Long-Term Government Bonds	-29.3%	-29.3%	0.0%	0.0%	0.0%	0.0%	
Total	-11.0%	-11.1%	0.1%	0.0%	0.1%	0.1%	



### San Jose Federated Retiree Health Care 115 Trust

	Att	ribution	Summar	У		
	3 Years E	nding De	cember	31, 2022		
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	2.0%	3.3%	-1.3%	-0.7%	0.1%	-0.6%
Cash	0.5%	0.7%	-0.2%	0.0%	0.0%	0.0%
Short-Term IG Bonds	0.7%	0.7%	0.0%	0.0%	0.2%	0.1%
Core Real Estate	13.6%	10.9%	2.6%	0.3%	-0.1%	0.1%
Commodities	12.8%	12.7%	0.1%	-0.1%	0.1%	0.0%
Investment Grade Bonds	-4.4%	-2.7%	-1.7%	0.0%	0.0%	0.0%
Long-Term Government Bonds	-8.8%	-7.4%	-1.4%	0.0%	0.0%	0.0%
Total	2.5%	2.9%	-0.4%	-0.5%	0.2%	-0.4%



# San Jose Federated Retiree Health Care 115 Trust

#### Total Fund | One Year As of December 31, 2022

Annualized R vs. InvMetrics Heal		Annualized Stand vs. InvMetrics Healt		Sharpe R vs. InvMetrics Health		Sortino F vs. InvMetrics Healt	
0.0 -5.0 -10.0 -15.0 -15.0		2.0 4.0 6.0 8.0 10.0 12.0 14.0		-0.3 -0.8 -0.8 -1.3 -1.3 -1.3 -1.8 -2.3		0.8 0.6 0.4 0.2 0.0 0.0 -0.2 -0.4 -0.6 -0.8 -1.0 -1.2	
-20.0		16.0		-2.8		-1.4	
		16.0				-1.6	
-20.0 Total Fund Aggregate Value	-11.0		13.5	-2.8 Total Fund Aggregate Value	-0.9		-0.1
Total Fund Aggregate	-11.0 52	Total Fund Aggregate	13.5 91	<ul> <li>Total Fund Aggregate</li> </ul>	-0.9 2	-1.6	-0.1 20
Total Fund Aggregate Value Rank		Total Fund Aggregate Value		<ul> <li>Total Fund Aggregate Value</li> </ul>	2	-1.6 Total Fund Aggregate Value	20
Total Fund Aggregate Value Rank		Total Fund Aggregate Value Rank	91 13.5	<ul> <li>Total Fund Aggregate Value Rank</li> </ul>		<ul> <li>-1.6</li> <li>Total Fund Aggregate Value Rank</li> <li>▲ Policy Benchmark Value</li> </ul>	
Total Fund Aggregate Value Rank Policy Benchmark	52	<ul> <li>Total Fund Aggregate</li> <li>Value</li> <li>Rank</li> <li>Policy Benchmark</li> </ul>	91	<ul> <li>Total Fund Aggregate Value Rank</li> <li>Policy Benchmark</li> </ul>	2	-1.6 ● Total Fund Aggregate Value Rank ▲ Policy Benchmark	20
Total Fund Aggregate Value Rank Policy Benchmark Value	52 -11.0	<ul> <li>Total Fund Aggregate Value Rank</li> <li>Policy Benchmark Value</li> </ul>	91 13.5	<ul> <li>Total Fund Aggregate Value Rank</li> <li>Policy Benchmark Value</li> </ul>	2 -0.9	<ul> <li>-1.6</li> <li>Total Fund Aggregate Value Rank</li> <li>▲ Policy Benchmark Value</li> </ul>	20 -0.1
Total Fund Aggregate Value Rank Policy Benchmark Value Rank	52 -11.0 53 -2.5	<ul> <li>Total Fund Aggregate Value Rank</li> <li>Policy Benchmark Value Rank</li> </ul>	91 13.5	<ul> <li>Total Fund Aggregate Value Rank</li> <li>Policy Benchmark Value Rank</li> </ul>	2 -0.9 3 -1.0	<ul> <li>-1.6</li> <li>Total Fund Aggregate Value Rank</li> <li>▲ Policy Benchmark Value Rank</li> </ul>	20 -0.1 15 0.2
Total Fund Aggregate Value Rank Policy Benchmark Value Rank Universe	52 -11.0 53 -2.5 -7.1	<ul> <li>Total Fund Aggregate Value Rank</li> <li>Policy Benchmark Value Rank</li> <li>Universe</li> </ul>	91 13.5 91	<ul> <li>Total Fund Aggregate Value Rank</li> <li>Policy Benchmark Value Rank</li> <li>Universe</li> </ul>	2 -0.9 3 -1.0 -1.2	-1.6 ● Total Fund Aggregate Value Rank ▲ Policy Benchmark Value Rank Universe	20 -0.1 15
<ul> <li>Total Fund Aggregate</li> <li>Value</li> <li>Rank</li> <li>Policy Benchmark</li> <li>Value</li> <li>Rank</li> <li>Universe</li> <li>5th %tile</li> <li>25th %tile</li> <li>Median</li> </ul>	52 -11.0 53 -2.5 -7.1 -10.8	<ul> <li>Total Fund Aggregate Value Rank</li> <li>Policy Benchmark Value Rank</li> <li>Universe 5th %tile 25th %tile Median</li> </ul>	91 13.5 91 2.7	<ul> <li>Total Fund Aggregate Value Rank</li> <li>Policy Benchmark Value Rank</li> <li>Universe 5th %tile 25th %tile Median</li> </ul>	2 -0.9 3 -1.0 -1.2 -1.4	-1.6 ● Total Fund Aggregate Value Rank ▲ Policy Benchmark Value Rank Universe 5th %tile 25th %tile Median	20 -0.1 15 0.2
<ul> <li>Total Fund Aggregate Value Rank</li> <li>Policy Benchmark Value Rank</li> <li>Universe 5th %tile 25th %tile</li> </ul>	52 -11.0 53 -2.5 -7.1	<ul> <li>Total Fund Aggregate Value Rank</li> <li>Policy Benchmark Value Rank</li> <li>Universe 5th %tile 25th %tile</li> </ul>	91 13.5 91 2.7 6.1	<ul> <li>Total Fund Aggregate Value Rank</li> <li>Policy Benchmark Value Rank</li> <li>Universe 5th %tile 25th %tile</li> </ul>	2 -0.9 3 -1.0 -1.2	-1.6 ● Total Fund Aggregate Value Rank ▲ Policy Benchmark Value Rank Universe 5th %tile 25th %tile	20 -0.1 15 0.2 -0.2

# San Jose Federated Retiree Health Care 115 Trust

#### Total Fund | Three Years As of December 31, 2022

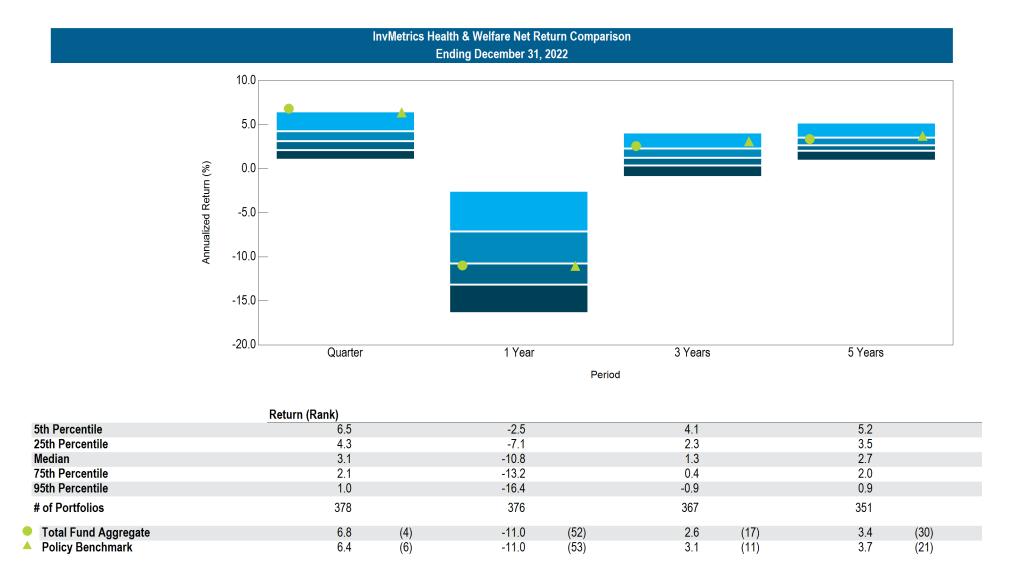
vs. InvMetrics Healt	Return (%) th & Welfare Net	Annualized Stand vs. InvMetrics Healt		Sharpe R vs. InvMetrics Healt		Sortino F vs. InvMetrics Healt	
5.0 4.0 3.0 2.0 1.0 -1.0		2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0		0.7 0.6 0.5 0.4 0.2 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		1.2 1.0 0.8 0.6 0.4 0.2 0.0 -0.2 -0.4 -0.6	
Total Fund Aggregate		Total Fund Aggregate		Total Fund Aggregate		Total Fund Aggregate	
Value	2.6	Value	12.6	Value	0.2	Value	0.3
Rank	17	Rank	88	Rank	34	Rank	37
Policy Benchmark		Policy Benchmark		Policy Benchmark		🔺 Policy Benchmark	
Policy Benchmark Value	3.1	Policy Benchmark Value	12.2	Policy Benchmark Value	0.2	Policy Benchmark Value	0.4
<ul> <li>Policy Benchmark</li> <li>Value</li> <li>Rank</li> </ul>	3.1 11	<ul> <li>Policy Benchmark</li> <li>Value</li> <li>Rank</li> </ul>	12.2 87	<ul> <li>Policy Benchmark</li> <li>Value</li> <li>Rank</li> </ul>	0.2 25	<ul> <li>Policy Benchmark</li> <li>Value</li> <li>Rank</li> </ul>	0.4 28
Value Rank Universe		Value Rank Universe	87	Value Rank Universe	25	Value Rank Universe	28
Value Rank Universe 5th %tile	11 4.1	Value Rank Universe 5th %tile	87 2.6	Value Rank Universe 5th %tile	25 0.4	Value Rank Universe 5th %tile	28 0.7
Value Rank Universe 5th %tile 25th %tile	11 4.1 2.3	Value Rank Universe 5th %tile 25th %tile	87 2.6 5.5	Value Rank Universe 5th %tile 25th %tile	25 0.4 0.2	Value Rank Universe 5th %tile 25th %tile	28 0.7 0.4
Value Rank Universe 5th %tile 25th %tile Median	11 4.1 2.3 1.3	Value Rank Universe 5th %tile 25th %tile Median	87 2.6 5.5 7.7	Value Rank Universe 5th %tile 25th %tile Median	25 0.4 0.2 0.1	Value Rank Universe 5th %tile 25th %tile Median	28 0.7 0.4 0.2
Value Rank Universe 5th %tile 25th %tile	11 4.1 2.3	Value Rank Universe 5th %tile 25th %tile	87 2.6 5.5	Value Rank Universe 5th %tile 25th %tile	25 0.4 0.2	Value Rank Universe 5th %tile 25th %tile	28 0.7 0.4

# San Jose Federated Retiree Health Care 115 Trust

#### Total Fund | Five Years As of December 31, 2022

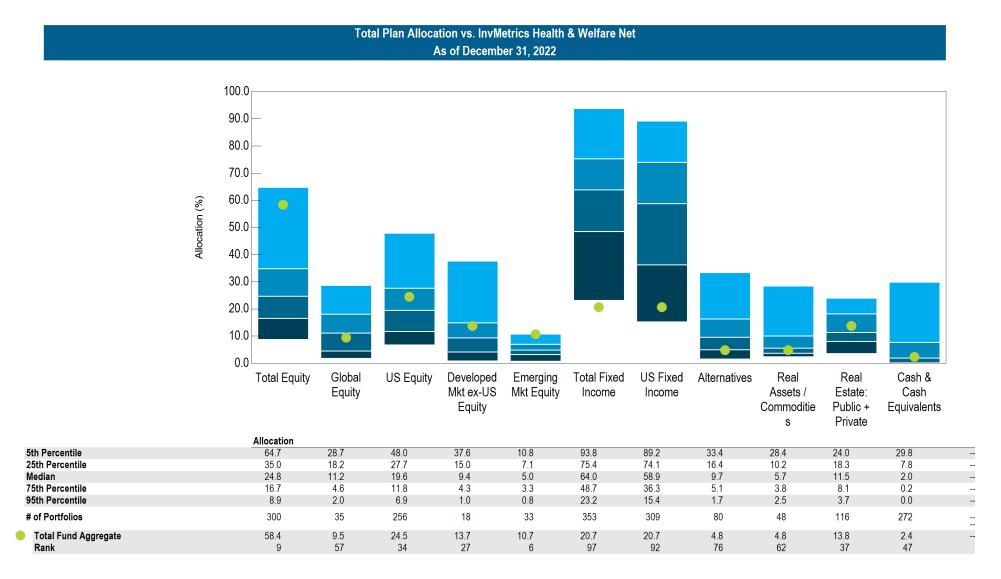
vs. InvMetrics Health	eturn (%) h & Welfare Net	Annualized Stand vs. InvMetrics Heal		Sharpe R vs. InvMetrics Healtl		Sortino R vs. InvMetrics Health	
6.0 5.0 4.0 3.0 2.0 1.0 0.0		2.0 4.0 6.0 8.0 10.0 12.0 14.0		0.8 0.7 0.6 0.5 0.4 0.2 0.1 0.0 0.1 0.0 -0.1 -0.2 -0.3		1.8 1.6 1.4 1.2 0.8 0.8 0.6 0.4 0.2 0.0 0.2 0.0 0.2	
Total Fund Addregate		Total Fund Addregate		Total Fund Aggregate		Total Fund Aggregate	
Total Fund Aggregate	3.4	<ul> <li>Total Fund Aggregate</li> <li>Value</li> </ul>	10.9	Total Fund Aggregate Value	0.2	<ul> <li>Total Fund Aggregate</li> <li>Value</li> </ul>	0.4
	3.4 30		10.9 88		0.2 63	<ul> <li>Total Fund Aggregate</li> <li>Value</li> <li>Rank</li> </ul>	0.4 71
Value Rank	3.4 30	Value Rank	10.9 88	Value Rank	0.2 63	Value Rank	0.4 71
Value	30	Value	88	Value	63	Value	71
Value Rank Policy Benchmark		Value Rank A Policy Benchmark		Value Rank A Policy Benchmark		Value Rank A Policy Benchmark	
Value Rank Policy Benchmark Value	30 3.7	Value Rank A Policy Benchmark Value	88 10.7	Value Rank A Policy Benchmark Value	63 0.2	Value Rank A Policy Benchmark Value	71 0.5
Value Rank Policy Benchmark Value Rank	30 3.7 21 5.2	Value Rank ▲ Policy Benchmark Value Rank	88 10.7 88 2.1	Value Rank Policy Benchmark Value Rank	63 0.2 51 0.5	Value Rank Policy Benchmark Value Rank	71 0.5 58 1.2
Value Rank Policy Benchmark Value Rank Universe	30 3.7 21	Value Rank Policy Benchmark Value Rank Universe	88 10.7 88	Value Rank Policy Benchmark Value Rank Universe	63 0.2 51	Value Rank Policy Benchmark Value Rank Universe	71 0.5 58
Value Rank Policy Benchmark Value Rank Universe 5th %tile	30 3.7 21 5.2	Value Rank ▲ Policy Benchmark Value Rank Universe 5th %tile	88 10.7 88 2.1	Value Rank Policy Benchmark Value Rank Universe 5th %tile	63 0.2 51 0.5	Value Rank Policy Benchmark Value Rank Universe 5th %tile	71 0.5 58 1.2
Value Rank Policy Benchmark Value Rank Universe 5th %tile 25th %tile	30 3.7 21 5.2 3.5	Value Rank ▲ Policy Benchmark Value Rank Universe 5th %tile 25th %tile	88 10.7 88 2.1 4.7	Value Rank Policy Benchmark Value Rank Universe 5th %tile 25th %tile	63 0.2 51 0.5 0.3	Value Rank Policy Benchmark Value Rank Universe 5th %tile 25th %tile	71 0.5 58 1.2 0.7







Total Fund | As of December 31, 2022



Alternatives group includes Real Assets.



		Benchmark History
		As of December 31 , 2022
Total Fund Agg	gregate	
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 Equ	ity	
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 E	quity	
7/1/2015	Present	MSCI ACWI IMI Net USD
U.S. Equi	ity	
7/1/2015	Present	Russell 3000
Internati	onal Equity	
7/1/2015	Present	MSCI EAFE
Emergin	g Markets Equit	ty
7/1/2015	Present	MSCI Emerging Markets
Low Beta		
7/1/2011	Present	ICE BofA 91 Days T-Bills TR



Cash		
7/1/2011	Present	ICE BofA 91 Days T-Bills TR
Short-Tern	n 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 I	Estate	
7/1/2015	Present	Core Real Estate Benchmark
Commoditi	es	
1/1/2015	Present	Bloomberg Commodity Index TR USD
Natural Res	sources	
6/1/2015	Present	S&P Global Natural Resources Index TR USD
Infrastructu	ure	
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 E	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. Portfolio Return- [Risk Free Rate+Beta\*(market return-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 is 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%.

5% (discount)=1% pro rata, plus=6.26% (yield to maturity)5 (yrs. to maturity)5.26% (current yield)=6.26% (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.