



**PERSPECTIVES  
THAT DRIVE  
ENTERPRISE  
SUCCESS**



**PERIOD ENDING: MARCH 31, 2022**

Investment Performance Review for

**Western States Office and Professional Employees' International Union Pension Plan**

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Capital Markets Update **TAB I**

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April Update **TAB III**





**PERSPECTIVES  
THAT DRIVE  
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SUCCESS**

APRIL 2022  
Capital Markets Update



# Market commentary

## U.S. ECONOMICS

- U.S. GDP contracted at an annualized rate of -1.4% in the first quarter, well short of consensus expectations (+1.0%). The print was largely pulled down by a sharp increase in the U.S. trade deficit and a decline in inventory investment. Strength from the U.S. consumers helped soften the decline in GDP with a 2.7% increase in consumer spending.
- U.S. non-farm payrolls rose by 428,000, the print exceeded expectations and marked the 12<sup>th</sup> consecutive month of increases greater than 400,000. While payrolls continued to advance, the labor force participation rate fell -0.2% – the first contraction since March 2021 as the labor force fell by 363,000.
- Average hourly earnings rose +0.3% month-over-month and brought year-over-year wage growth to +5.5% from +5.6% in the month prior. Tight labor markets and continued wage growth has caused concern for some investors that rising wages could exacerbate inflation.

## U.S. EQUITIES

- Large-cap equities fell precipitously (S&P 500 -8.7%) and brought the year-to-date return for the index to -12.9% as markets digested quarterly earnings and an increasingly hawkish tone from the Federal Reserve.
- Within the S&P 500, 87% of companies have reported earnings, of those who have reported 79% have had positive earnings surprises. Earnings surprises have generally been more moderate than in recent quarters with an average surprise of 4.9% above analyst estimates, compared to the 5-year average of 8.9% above estimates per FactSet.
- As equity markets have sold off, valuation metrics have fallen from historically high levels. The price to earnings ratio of the S&P 500 has declined 20% year-to-date to 18.2.

## U.S. FIXED INCOME

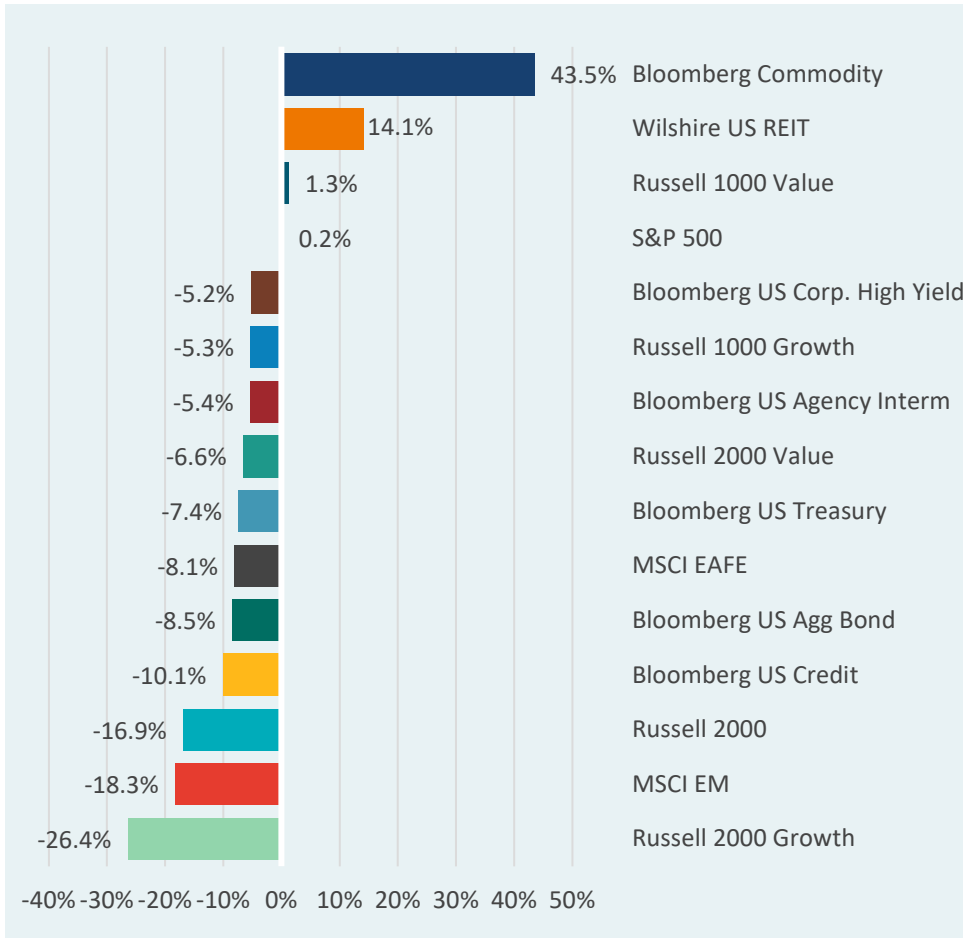
- The Fed raised rates 50 basis points in the most recent meeting. Fed officials voiced that more aggressive rate action may be necessary to combat inflation. The market now expects the Fed to tighten monetary policy to a greater extent than previously thought. Markets priced in two additional quarter-point hikes and now expect a total of 10 hikes by year end.
- U.S. Treasury yields climbed across the curve as investors priced in an increasingly hawkish fed. The 10-year yield was 57 basis points higher from the month before and ended the month at 2.89%. The 10-year yield reached its highest-level more than three years.
- The Bloomberg U.S. Aggregate Index declined -3.8% as yields climbed in the worst month for the Index in more than 40 years.

## INTERNATIONAL MARKETS

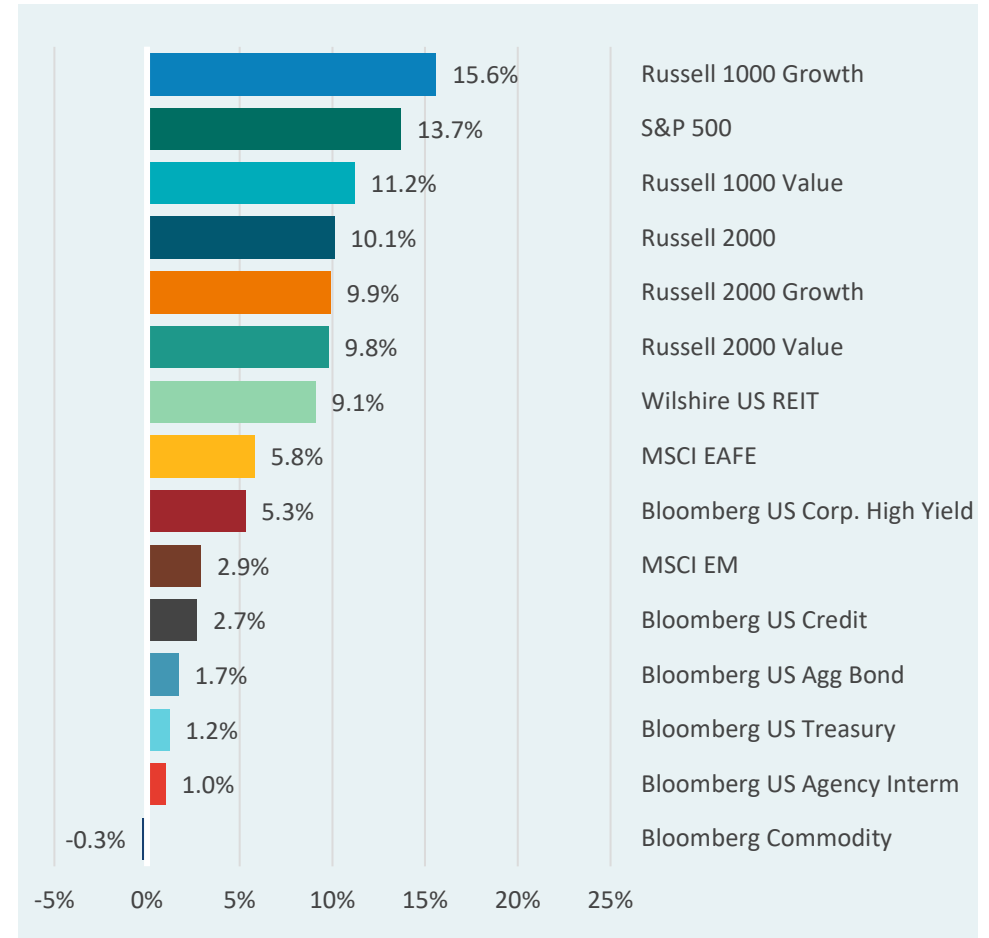
- The Russian Ruble (+16.3%) has now more than recovered from initial weakness in the wake of Russia's invasion of Ukraine and reached a two-year high against the U.S. Dollar to end the month. Russia's ability to avoid defaulting on debt, even without access to most hard dollar reserves, has helped support the currency.
- The MSCI China Index (-4.1%) fell for the sixth consecutive month and has receded -17.7% year-to-date. The index has now drawn down -46.2% from highs seen in February of 2021. Regulatory crackdowns and continued enforcement of a strict zero-covid policy has likely weighed on the index.
- The Japanese Yen (-6.3%) fell to multi-decade lows as the spread between 10-year US Treasury and Japanese yields widened by 0.6%. While U.S. and other developed sovereign bond yields have climbed, Japanese yields remain capped by central bank action.

# Major asset class returns

ONE YEAR ENDING APRIL



TEN YEARS ENDING APRIL



\*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.

Source: Morningstar, as of 4/30/22

Source: Morningstar, as of 4/30/22

# U.S. large cap equities

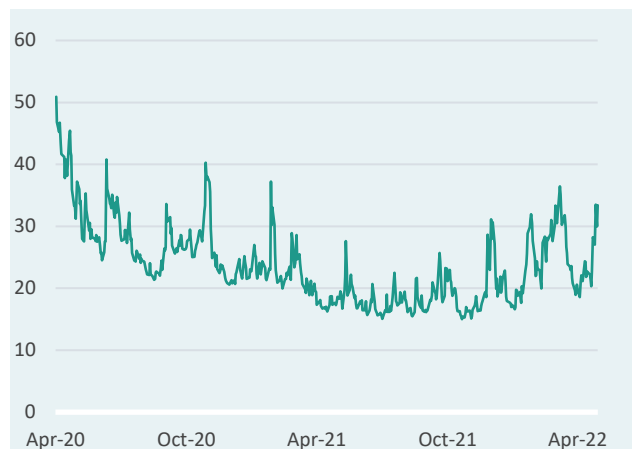
- The S&P 500 declined -8.7% and marked the worst monthly return for the index in more than two years. Declines in the S&P 500 Index were concentrated within a small number of names. Amazon (-23.8%), Apple (-9.7%) and Microsoft (-10.0%), are included in the list of only nine names which were responsible for more than half of the index's decline.
- The Cboe VIX Index of implied volatility climbed to 33.4 to end the month and remains at elevated levels relative to the 200-day moving average of 21.5. An erosion in future projections from large companies likely sent equity volatility higher.
- The Consumer Staples sector (+2.6%) was the only sector of the 11 S&P 500 (-8.7%) GICS sectors to post a positive return. The broad index was led lower by the Communications Services (-15.6%), Consumer Discretionary (-13.0%) and Information Technology (-11.3%) sectors.
- The Communication Services sector sold off -15.6% and has declined -25.7% year-to-date. Google (-18.0%) saw a repricing after quarterly results showed slowing revenue growth. Netflix (-49.2%) also sold off after results showed a substantial decline in subscribers and pointed towards poor future subscriber growth.

**S&P 500 PRICE INDEX**



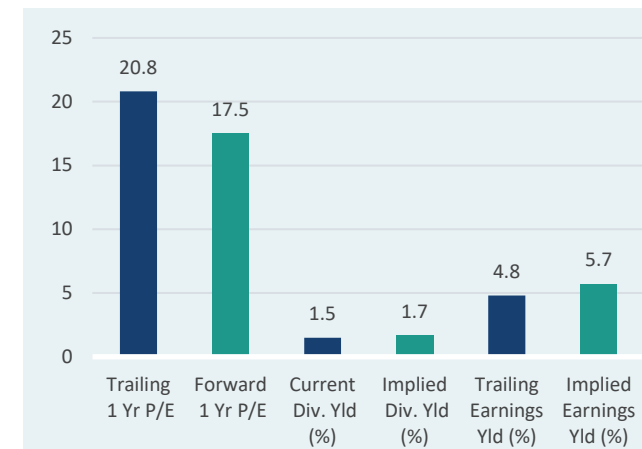
Source: Bloomberg, as of 4/30/22

**IMPLIED VOLATILITY (VIX INDEX)**



Source: Cboe, as of 4/30/22

**S&P 500 VALUATION SNAPSHOT**



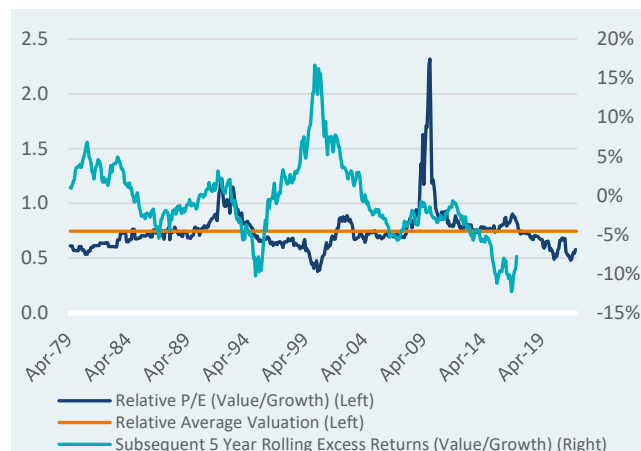
Source: Bloomberg, as of 4/30/22

# Domestic equity size and style

- The Russell 3000 Value Index (-5.8%) was down less than the Russell 3000 Growth Index (-12.1%). Value focused sectors such as Healthcare, Consumer Staples, Industrials and Financials held up better within the value space, these sectors also hold a greater weight within the value style index.
- The MSCI USA Cyclical - Defensives Total Return Spread Index fell -8.9% over the month as defensive style stocks outperformed. Defensive style stocks tend to be less affected by economic data than cyclical stocks. Defensive stocks historically outperform the market when economic growth slows.

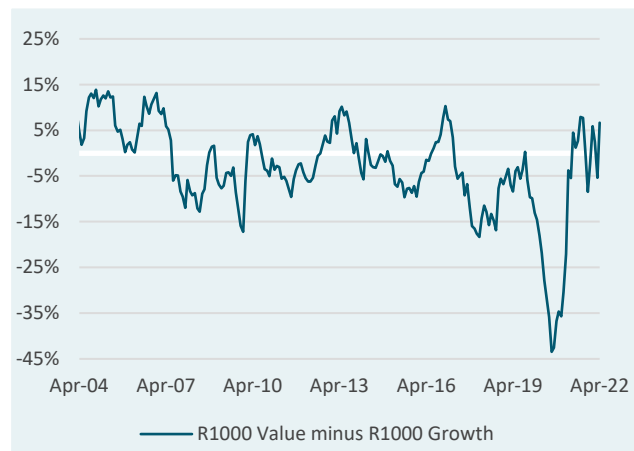
- Large-cap equities (Russell 1000 -8.9%) sold off to a lesser extent than their small-cap peers (Russell 2000 -9.9%). Within the healthcare sector the larger companies in the Russell 1000 fell by 11.8% less than small-cap counterparts in the Russell 2000. The Consumer Staples sector also helped relative large-cap performance; large-caps posted a +3.1% return and small-caps posted a -1.9% return.
- The S&P 500 High Dividend Index (-2.8%) – an equal-weighted index of 80 companies within the S&P 500 that have a high dividend yield – outperformed the broader S&P 500 Index by 5.9%.

**VALUE VS. GROWTH RELATIVE VALUATIONS**



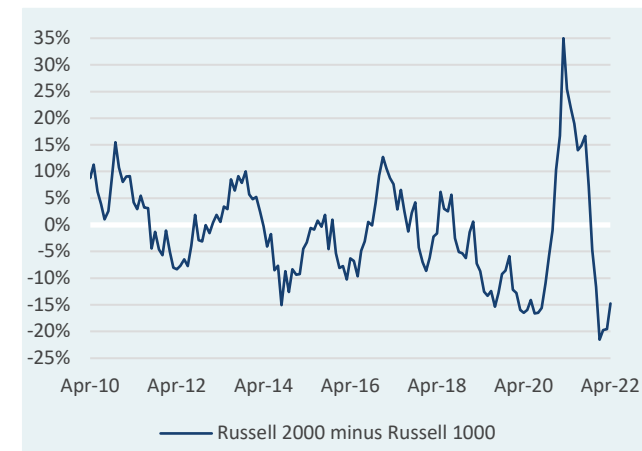
Source: FTSE, Bloomberg, as of 4/30/22

**VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE**



Source: FTSE, Bloomberg, as of 4/30/22

**SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE**

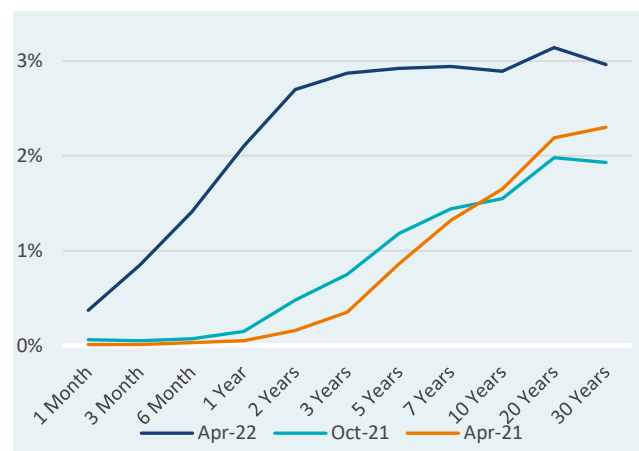


Source: FTSE, Bloomberg, as of 4/30/22

# Fixed income

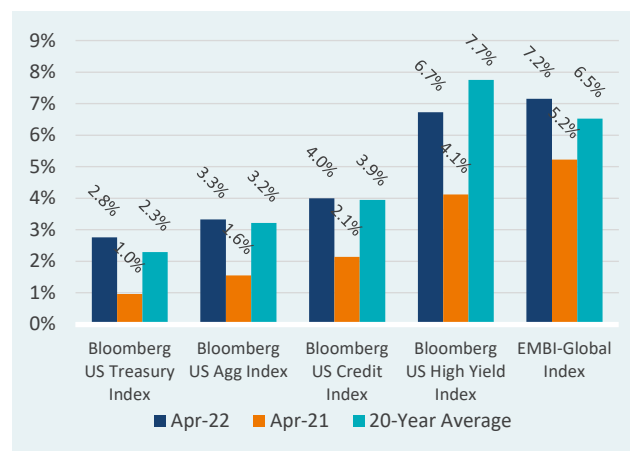
- The U.S. Dollar reached its strongest level in nearly a decade as investors fled riskier global currencies. While USD strength was broad, pain was felt by those holding USD counterparts that are tied closely to the slowing growth in China, such as the New Zealand Dollar (-6.7%) and the Australian Dollar (-5.4%).
- In April, the spread between 2- and 10-year U.S. Treasury yields widened to 19 basis points from just 4 basis points the month before. While the 2-10 spread widened in April, the spread has declined 60 basis points year-to-date as expectations built for continued Fed rate hikes.
- The S&P/LSTA Leveraged Loan Index continued to outperform and gained +0.2% in what was generally a poor month for fixed income. Leveraged loans benefited from a floating rate structure that leaves the index less exposed to rising rate environments.
- Central banks in emerging markets have tightened monetary policy more proactively than many developed market central banks. Global sovereign debt declined over the month and hard currency debt (JPM EMBI -5.6%) outpaced local currency denominated emerging market debt (JPM GBI-EM -6.0%).

**U.S. TREASURY YIELD CURVE**



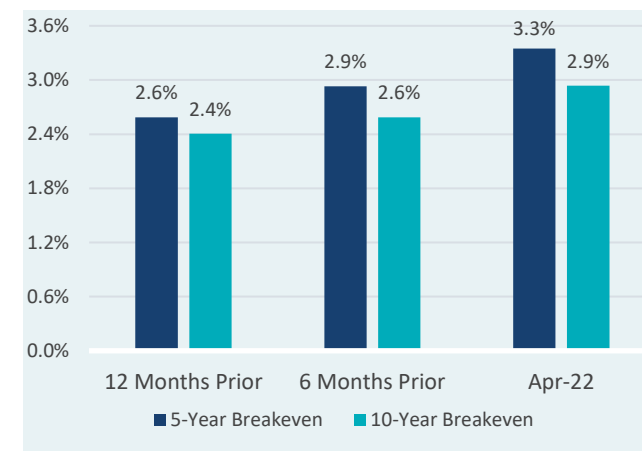
Source: Bloomberg, as of 4/30/22

**NOMINAL YIELDS**



Source: Morningstar, as of 4/30/22

**BREAKEVEN INFLATION RATES**



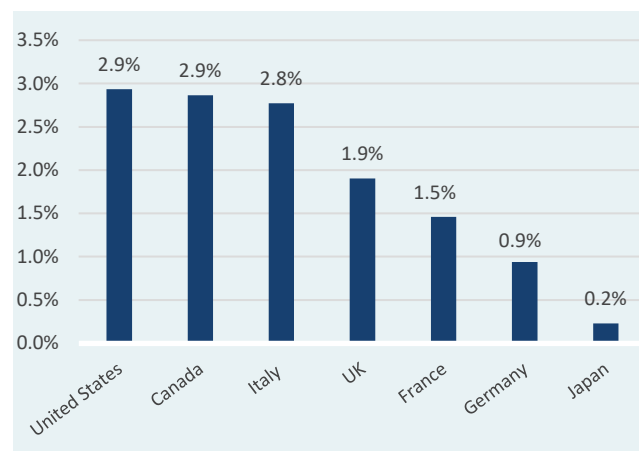
Source: Bloomberg, as of 4/30/22



# Global markets

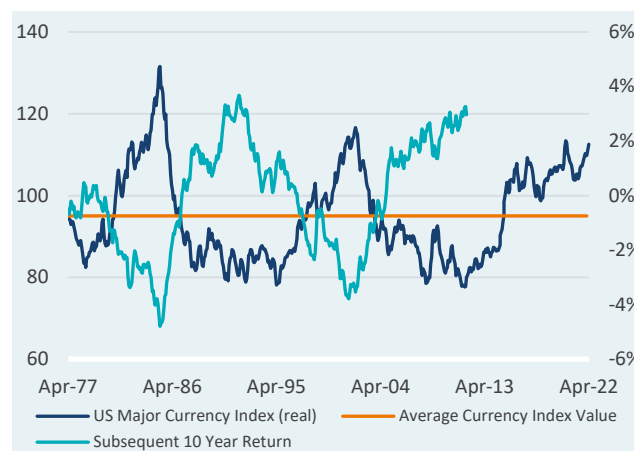
- Losses were broad across regions within the MSCI ACWI ex US Index (-6.3%). Emerging market equities (MSCI EM -5.6%) fared better than those in developed markets (MSCI EAFE -6.5%). Developed markets were led lower by European (MSCI Euro -7.3%) and Japanese equities (MSCI Japan -8.8%).
- The Bank of Japan reiterated its commitment to maintain low interest rates and signaled that it would continue with unlimited government bond purchases through May. Japan's easy monetary policy has weighed on the Yen (-6.3%) and has materially detracted from returns in U.S. Dollar terms.
- MSCI EM Latin America (-13.0%) retraced prior month gains and weighed on the broader MSCI EM Index (-5.6%). Net exporters of industrial metals including Peru (-17.1%) and Brazil (-9.5%) were negatively impacted by declines in industrial metal prices as Chinese demand outlook weakened.
- Equities in the United Kingdom (MSCI UK -3.7%) were down less than other developed markets in USD terms. A weakening Pound (-7.3%) has weighed on U.S. Dollar returns, many UK companies have a high degree of USD denominated revenue and likely have seen positive tailwinds.

## GLOBAL SOVEREIGN 10-YEAR YIELDS



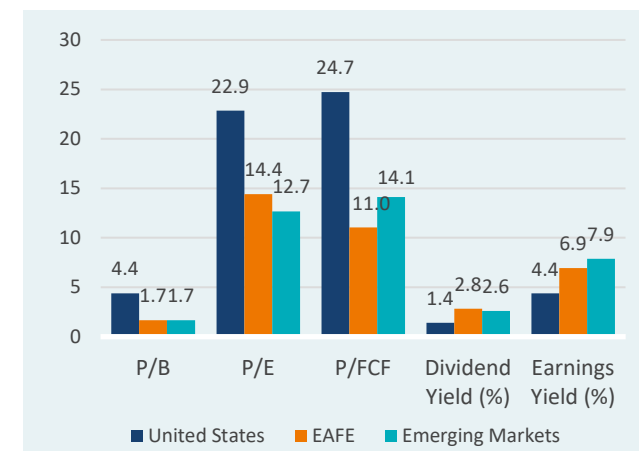
Source: Bloomberg, as of 4/30/22

## U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Federal Reserve, as of 4/30/22

## MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 4/30/22

# Commodities

- The Bloomberg Commodity Index climbed +4.1% in April and has now rallied +30.7% year-to-date. Continued increases in the Energy (+13.5%), Grains (+6.7%), and Agriculture (+5.7%) Sub-Indices helped to lift the overall index higher. The Industrial Metals (-6.3%) and Livestock (-6.8%) Sub-Indices reversed course over the month.
- Natural gas prices rallied +26.2% as supply disruptions related to the Russian invasion of Ukraine persisted and helped drive the Energy Sub-Index (+13.5%) higher. Concerns of increased supply disruptions were amplified as Russia halted exports to both Poland and Bulgaria due to the countries' refusal to pay for gas flows in Rubles.

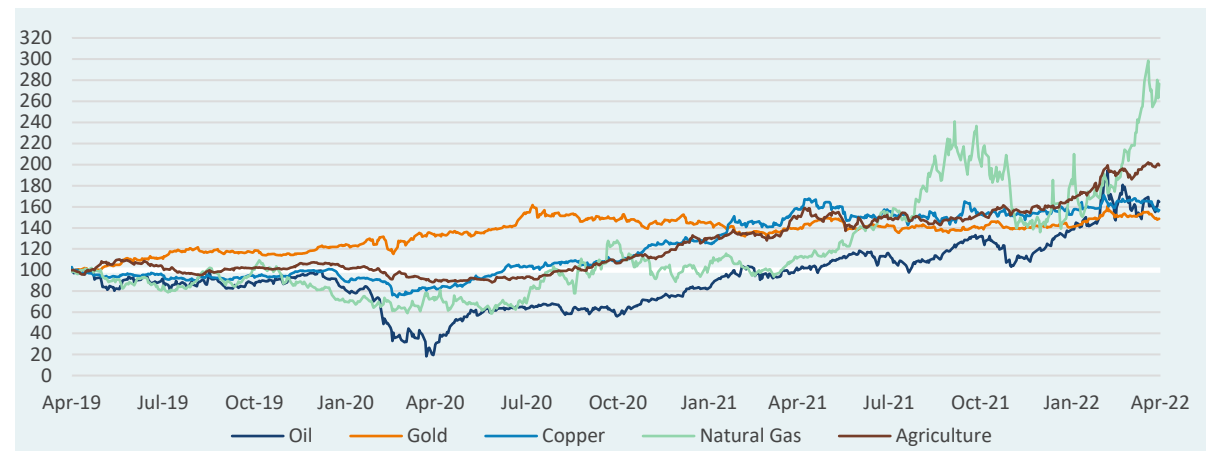
- The Bloomberg Industrial Metals Sub-Index sold off -6.3% and lagged the broader commodity basket (+4.1%). China accounts for more than half of global demand for iron ore and copper. Continued zero-covid policies in China have reduced demand for industrial metals and weighed on prices globally.
- The price of Brent Crude Oil (+2.9%) remained elevated in April, closing below \$100 per barrel only two times, and ended the month relatively flat. Supply concerns surrounding a potential EU ban on Russian oil – which currently makes up nearly a third of EU's supply – could send the price of the commodity even higher.

## INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	4.1	4.1	30.7	43.5	17.9	10.2	(0.3)
Bloomberg Agriculture	5.7	5.7	26.7	31.8	26.7	9.5	0.2
Bloomberg Energy	13.5	13.5	67.9	103.3	10.6	9.7	(5.0)
Bloomberg Grains	6.7	6.7	33.4	28.5	28.1	10.3	(0.0)
Bloomberg Industrial Metals	(6.3)	(6.3)	15.0	28.1	19.6	13.3	2.7
Bloomberg Livestock	(6.8)	(6.8)	(1.4)	(1.5)	(9.0)	(5.6)	(3.5)
Bloomberg Petroleum	7.5	7.5	54.6	91.7	14.3	15.5	(3.5)
Bloomberg Precious Metals	(3.7)	(3.7)	3.0	2.9	12.7	6.6	(0.7)
Bloomberg Softs	0.9	0.9	8.8	41.5	19.8	3.9	(3.2)

Source: Morningstar, as of 4/30/22

## COMMODITY PERFORMANCE

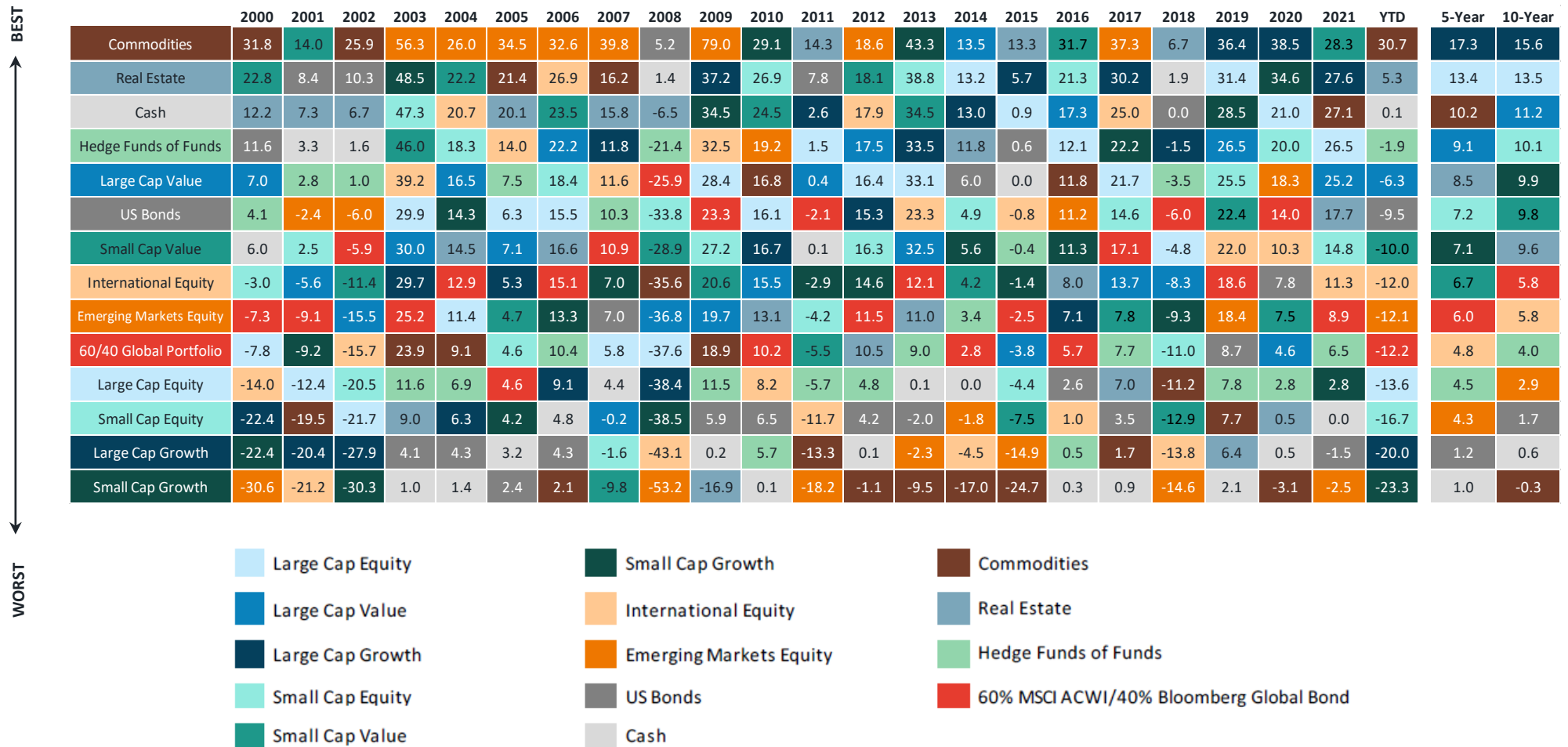


Source: Bloomberg, as of 4/30/22

# Appendix



# Periodic table of returns



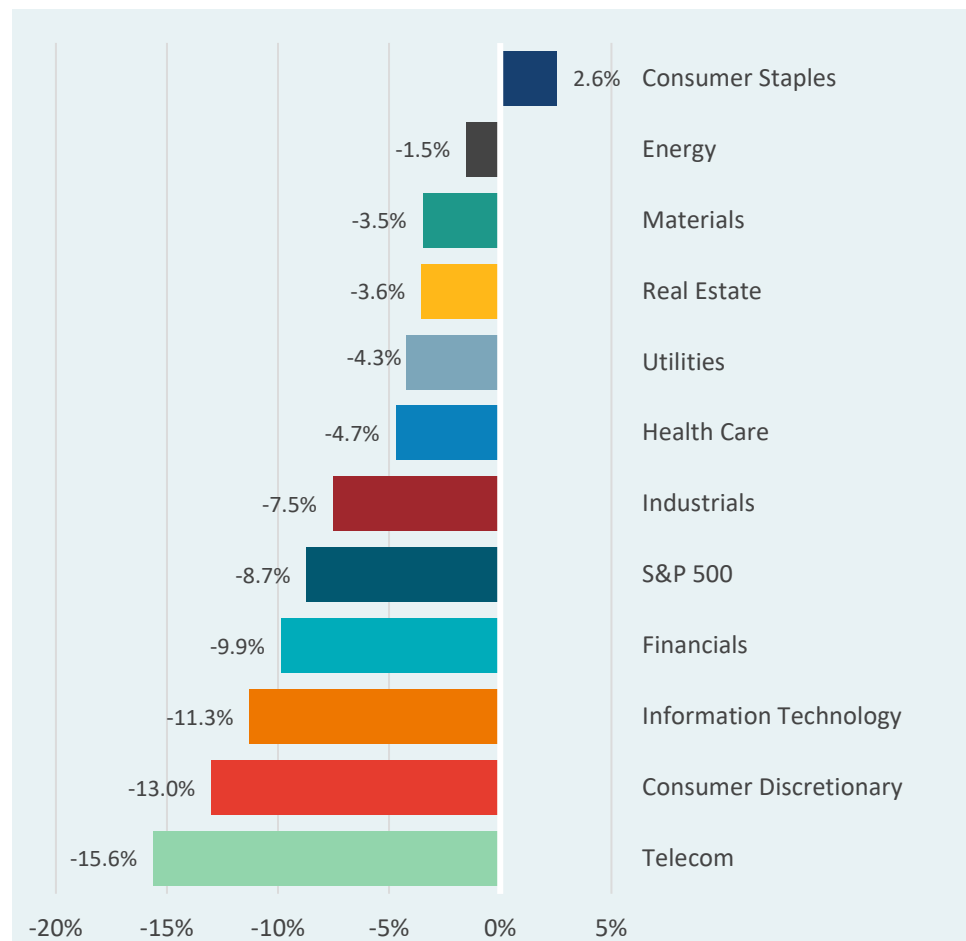
BEST  
↑  
↓  
WORST



Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 3/31/22.

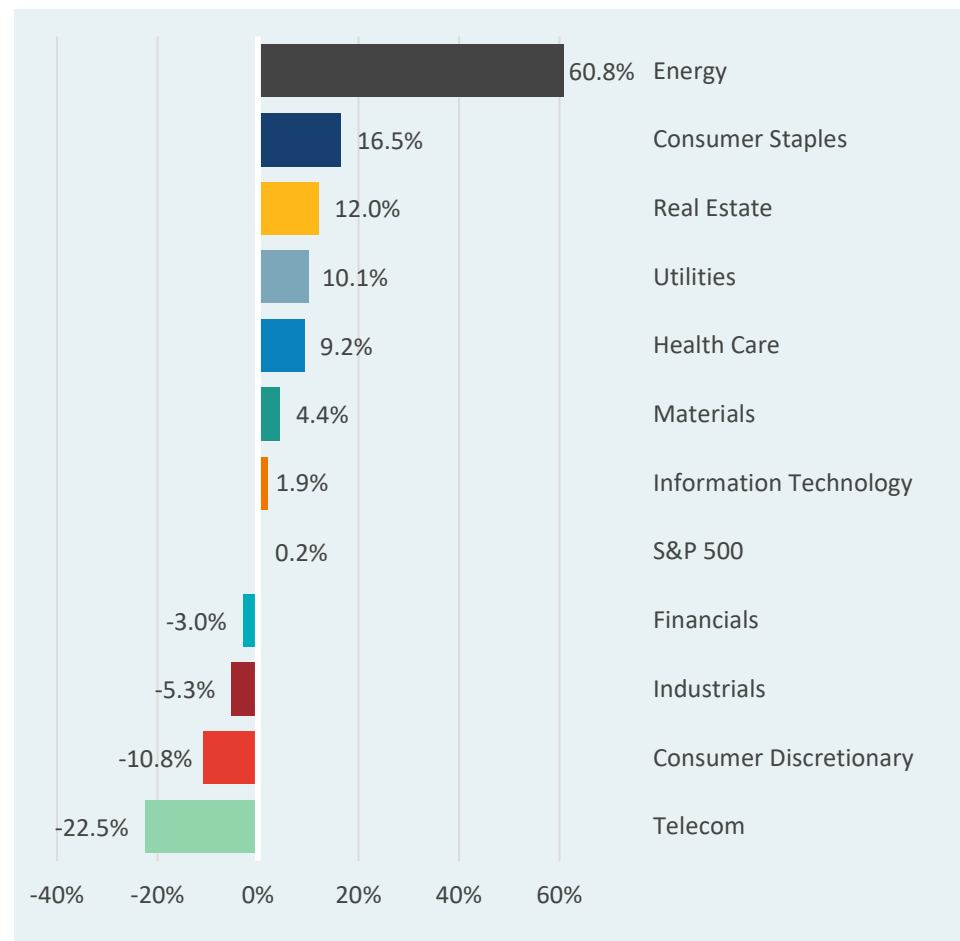
# S&P 500 sector returns

QTD



Source: Morningstar, as of 4/30/22

ONE YEAR ENDING APRIL



Source: Morningstar, as of 4/30/22

# Detailed index returns

## DOMESTIC EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Core Index</b>							
S&P 500	(8.7)	(8.7)	(12.9)	0.2	13.8	13.7	13.7
S&P 500 Equal Weighted	(6.4)	(6.4)	(8.9)	1.1	13.1	12.2	13.3
DJ Industrial Average	(4.8)	(4.8)	(8.7)	(0.8)	9.8	12.0	12.2
Russell Top 200	(9.3)	(9.3)	(13.8)	(0.6)	14.7	14.5	14.1
Russell 1000	(8.9)	(8.9)	(13.6)	(2.1)	13.6	13.4	13.5
Russell 2000	(9.9)	(9.9)	(16.7)	(16.9)	6.7	7.2	10.1
Russell 3000	(9.0)	(9.0)	(13.8)	(3.1)	13.1	13.0	13.3
Russell Mid Cap	(7.7)	(7.7)	(12.9)	(6.1)	10.5	10.7	12.0
<b>Style Index</b>							
Russell 1000 Growth	(12.1)	(12.1)	(20.0)	(5.3)	16.7	17.3	15.6
Russell 1000 Value	(5.6)	(5.6)	(6.3)	1.3	9.6	9.1	11.2
Russell 2000 Growth	(12.3)	(12.3)	(23.3)	(26.4)	4.1	7.1	9.9
Russell 2000 Value	(7.8)	(7.8)	(10.0)	(6.6)	8.4	6.7	9.8

## INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
MSCI ACWI	(8.0)	(8.0)	(12.9)	(5.4)	9.4	9.5	9.2
MSCI ACWI ex US	(6.3)	(6.3)	(11.4)	(10.3)	4.3	4.9	5.0
MSCI EAFE	(6.5)	(6.5)	(12.0)	(8.1)	4.4	4.8	5.8
MSCI EM	(5.6)	(5.6)	(12.1)	(18.3)	2.2	4.3	2.9
MSCI EAFE Small Cap	(6.9)	(6.9)	(14.8)	(13.7)	4.9	5.0	7.6
<b>Style Index</b>							
MSCI EAFE Growth	(8.0)	(8.0)	(19.0)	(13.0)	5.6	6.5	6.7
MSCI EAFE Value	(5.1)	(5.1)	(4.7)	(3.5)	2.6	2.7	4.7
<b>Regional Index</b>							
MSCI UK	(3.7)	(3.7)	(1.9)	4.8	3.3	4.3	4.0
MSCI Japan	(8.8)	(8.8)	(14.8)	(13.4)	3.1	3.9	5.8
MSCI Euro	(7.3)	(7.3)	(17.6)	(14.4)	2.4	3.1	5.8
MSCI EM Asia	(5.1)	(5.1)	(13.3)	(21.4)	3.6	5.6	5.2
MSCI EM Latin American	(13.0)	(13.0)	10.7	3.7	(1.6)	1.2	(2.1)

## FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Broad Index</b>							
Bloomberg US TIPS	(2.0)	(2.0)	(5.0)	0.7	5.4	3.9	2.3
Bloomberg US Treasury Bills	0.0	0.0	(0.0)	(0.0)	0.7	1.1	0.6
Bloomberg US Agg Bond	(3.8)	(3.8)	(9.5)	(8.5)	0.4	1.2	1.7
Bloomberg US Universal	(3.7)	(3.7)	(9.6)	(8.6)	0.5	1.4	2.1
<b>Duration</b>							
Bloomberg US Treasury 1-3 Yr	(0.5)	(0.5)	(3.0)	(3.5)	0.6	0.9	0.8
Bloomberg US Treasury Long	(8.9)	(8.9)	(18.5)	(12.2)	0.7	1.7	2.6
Bloomberg US Treasury	(3.1)	(3.1)	(8.5)	(7.4)	0.4	1.0	1.2
<b>Issuer</b>							
Bloomberg US MBS	(3.5)	(3.5)	(8.3)	(8.8)	(0.6)	0.5	1.3
Bloomberg US Corp. High Yield	(3.6)	(3.6)	(8.2)	(5.2)	2.8	3.7	5.3
Bloomberg US Agency Interm	(1.2)	(1.2)	(4.9)	(5.4)	0.2	0.8	1.0
Bloomberg US Credit	(5.2)	(5.2)	(12.3)	(10.1)	0.8	1.9	2.7

## OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
<b>Index</b>							
Bloomberg Commodity	4.1	4.1	30.7	43.5	17.9	10.2	(0.3)
Wilshire US REIT	(4.5)	(4.5)	(8.2)	14.1	10.3	9.0	9.1
CS Leveraged Loans	0.2	0.2	0.1	2.9	3.6	4.0	4.4
S&P Global Infrastructure	(3.3)	(3.3)	4.0	9.1	6.4	6.6	7.4
Alerian MLP	(0.1)	(0.1)	18.8	27.8	1.8	(0.8)	1.0
<b>Regional Index</b>							
JPM EMBI Global Div	(5.6)	(5.6)	(15.1)	(14.5)	(2.0)	0.2	3.0
JPM GBI-EM Global Div	(6.0)	(6.0)	(12.1)	(15.9)	(3.1)	(1.3)	(1.4)
<b>Hedge Funds</b>							
HFRI Composite	0.1	0.1	(2.6)	(0.8)	5.6	4.5	4.0
HFRI FOF Composite	(0.9)	(0.9)	(1.9)	0.0	7.7	6.0	5.1
<b>Currency (Spot)</b>							
Euro	(5.2)	(5.2)	(7.2)	(12.4)	(2.0)	(0.6)	(2.2)
Pound Sterling	(4.6)	(4.6)	(7.3)	(9.3)	(1.2)	(0.6)	(2.5)
Yen	(6.3)	(6.3)	(11.1)	(15.6)	(4.9)	(3.0)	(4.7)

Source: Morningstar, HFRI, as of 4/30/22.



# Detailed private market returns

## Comparison to public market index returns

Private Equity Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Private Equity FoFs & Secondary Funds	58.6	23.9	19.8	14.2
Global Private Equity Direct Funds *	52.3	26.6	22.7	17.4
U.S. Private Equity Direct Funds *	58.4	29.2	24.2	18.9
Europe Private Equity Direct Funds *	52.1	26.2	23.7	15.4
Asia Private Equity Direct Funds *	31.4	19.0	17.6	15.5

Public Index Time-weighted Returns				
MSCI World	28.8	13.1	13.7	12.7
S&P 500	30.0	16.0	16.9	16.6
MSCI Europe	27.3	7.8	8.8	8.2
MSCI AC Asia Pacific	18.3	8.5	9.6	8.3

Private Real Estate Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Real Estate	25.3	10.7	10.6	12.6

Public Index Time-weighted Returns				
FTSE NAREIT Equity REIT	37.4	10.0	6.8	11.3

Private Credit Pooled IRRs	1 Year	3 Year	5 Year	10 Year
U.S. All Private Debt **	33.5	13.7	13.0	12.6

Public Index Time-weighted Returns				
S&P / LSTA U.S. Leveraged Loan 100 Index	6.7	3.9	4.3	4.7

Private Real Assets Pooled IRRs	1 Year	3 Year	5 Year	10 Year
Global Nature Resources ***	30.6	(2.4)	2.7	2.1
Global Infrastructure	14.8	10.4	11.2	10.4

Public Index Time-weighted Returns				
S&P Global Natural Resources	42.2	4.6	9.5	4.6
S&P Global Infrastructure	23.0	6.7	6.0	7.8

Source: Pooled IRRs are from Thompson Reuters C/A and Time-weighted Returns are from Investment Metrics, as of September 30<sup>th</sup>, 2021. All returns in U.S. dollars.

\* Includes Buyout, Growth Equity and Venture Capital.

\*\* Includes Control-Oriented Distressed, Credit Opportunities, Senior Debt and Subordinated Capital.

\*\*\* Includes Private Equity Energy, Timber and Upstream Energy & Royalties.

# Notices & disclosures

**Past performance is no guarantee of future results.** This document is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and is not intended for retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. This document may include or imply estimates, outlooks, projections and other “forward-looking statements.” No assurance can be given that future results described or implied by any forward looking information will be achieved. Investing entails risks, including possible loss of principal. Additional information about Verus Advisory, Inc. is available on the SEC’s website at [www.adviserinfo.sec.gov](http://www.adviserinfo.sec.gov).

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# Western States Office & Professional Employees Pension Fund

Investment Performance Review  
Period Ending: March 31, 2022

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# 1<sup>st</sup> quarter summary

## THE ECONOMIC CLIMATE

- Real GDP grew at a 5.5% rate year-over-year in Q4 (+6.9% quarterly annualized rate). Strong expenditures into new inventory boosted growth, as many businesses have struggled to replenish inventory levels in the face of global supply chain issues. Business investment and rising exports also contributed to the strong pace of growth.
- The rate of unemployment in the U.S. has continued to fall, improving from 3.9% to 3.6% during the quarter. The labor force participation rate has gradually increased, rising from 61.6% to 62.4%. A historic shortage of workers may remain a sticky issue, as 11.3 million job openings are posted, but only 6.0 million Americans are seeking work.

## PORTFOLIO IMPACTS

- High yield credit spreads expanded from 2.8% to 3.3%, although default activity is expected to remain historically low. It appears spread movement has been more of an effect of broader risk-off market moves, rather than a specific reflection of changing credit conditions.
- U.S. core CPI, excluding food & energy, rose by 6.5% year-over-year in March. Headline inflation, which is being closely watched at the moment as this includes energy & food prices, reached 8.5%. Prices in some other areas have stabilized. Many investors believe inflation peaked in March, though there remains much uncertainty around the path from here.

## THE INVESTMENT CLIMATE

- In late February, Russian forces invaded Ukraine—a move which was anticipated by major Western intelligence communities. Ukraine has put together a remarkable defense thus far, as many citizens have taken up arms to defend their country.
- Multi-year underinvestment in energy, and now the Russia/Ukraine war, has created a shock to energy markets and crisis-level prices in many European countries. Government officials have been hesitant to vocally support increased local energy production, primarily due to climate concerns. In the U.S., many shale firms have opted to increase production on existing land, but have been slow to pursue new projects—partly due to supply chain issues (shortages in labor, truck drivers, and frack sand) and also due to prioritization of profits over growth.

## ASSET ALLOCATION ISSUES

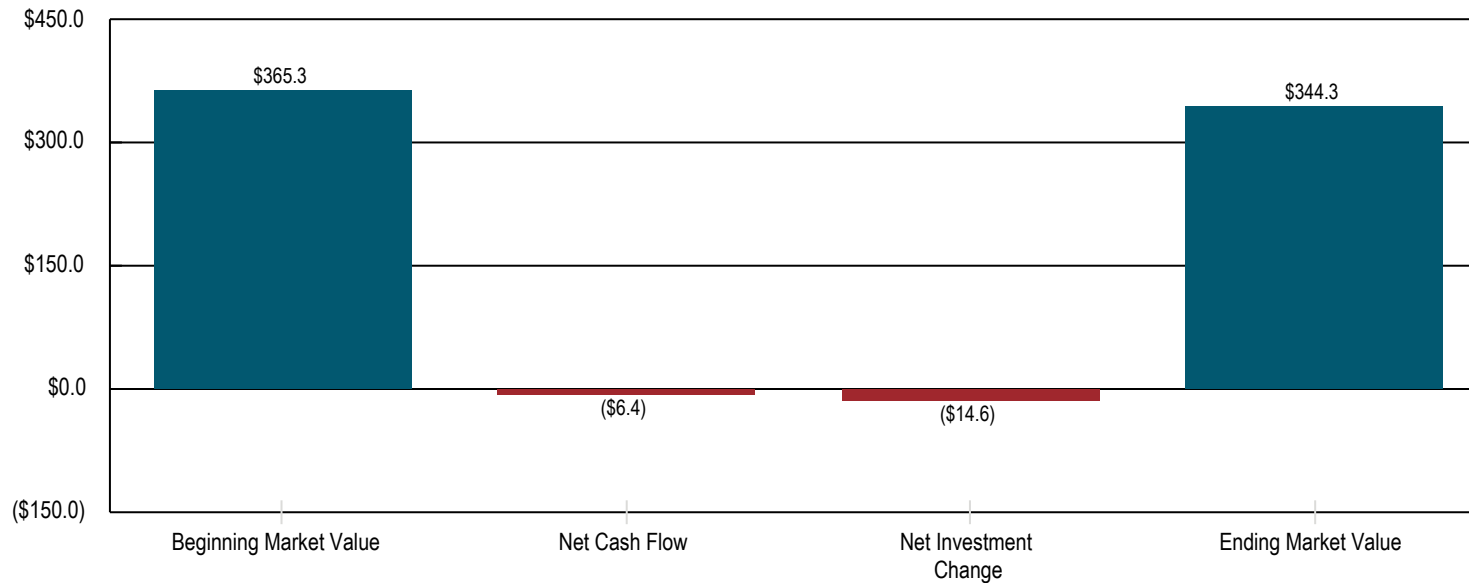
- Nearly every asset class delivered negative performance in Q1. Equity markets pulled back, credit spreads widened, and interest rates headed higher. Certain real assets including commodities were the exception.
- Value stocks outperformed Growth stocks by a substantial margin during Q1, as the Energy sector outpaced the index by 43.6% (Energy 39.0%, S&P 500 -4.6%). Large capitalization stocks outperformed small capitalization stocks (Russell 1000 +9.8%, Russell 2000 +2.1%).

Nearly every asset class delivered losses during Q1, as risk assets sold off, credit spreads widened, and interest rates moved higher

Portfolio Reconciliation

Last Three  
Months

Beginning Market Value	365,296,061
Net Cash Flow	-6,383,208
Net Investment Change	-14,600,225
<b>Ending Market Value</b>	<b>344,251,588</b>



Contributions and withdrawals may include intra-account transfers between managers/funds.

Total Fund  
Cash Flow by Manager - Last Three Months

Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

	Beginning Market Value	Contributions	Distributions	Net Transfers	Net Cash Flows	Net Investment Change	Ending Market Value
BlackRock Equity Index NL	38,623,743	\$0	\$0	-1,700,000	-1,700,000	-1,837,209	35,086,534
INTECH US Adaptive Volatility	39,846,785	\$0	\$0	-2,200,000	-2,200,000	-1,910,547	35,736,238
Vanguard Small Cap Index Ins	17,586,663	\$0	\$0	\$0	\$0	-1,009,891	16,576,773
WCM Focused International Growth Fund, L.P.	45,973,064	\$0	\$0	\$0	\$0	-7,664,110	38,308,954
Causeway International Value Ins	28,481,944	\$0	\$0	\$0	\$0	-1,523,172	26,958,772
Loomis Sayles Core Plus	62,779,226	\$0	\$0	\$0	\$0	-3,276,357	59,502,869
ASB Allegiance Real Estate	24,917,249	\$0	\$0	\$0	\$0	1,963,482	26,819,691
JPMorgan Special Situation Property	18,802,234	\$0	-67,841	\$0	-67,841	1,319,925	20,054,317
IFM Global Infrastructure (US) LP	11,598,166	\$0	\$0	\$0	\$0	141,110	11,739,276
JPMorgan IIF ERISA LP	7,358,892	\$0	-125,691	\$0	-125,691	24,557	7,257,757
Invesco Balanced-Risk Allocation	63,013,891	\$0	\$0	\$0	\$0	-828,013	62,185,878
US Bank Checking Account	3,751,117	2,652,278	-8,835,289	3,900,000	-2,283,011	\$0	1,468,106
US Bank Clearing Account	2,563,087	7,632,069	-7,638,732	\$0	-6,664	\$0	2,556,424
<b>Total Fund</b>	<b>365,296,061</b>	<b>10,284,347</b>	<b>-16,667,554</b>	<b>\$0</b>	<b>-6,383,208</b>	<b>-14,600,225</b>	<b>344,251,588</b>

Loomis Sayles Full Discretion liquidated 3/21/2017. Loomis Sayles Core Plus funded 3/21/2017. Parametric liquidated 4/21/2017. Mellon Dynamic liquidated 5/5/2017. Grosvenor Institutional liquidated 4/30/2018. Brandes International Small Cap Equity liquidated 8/31/2019. Invesco Real Estate II liquidated 9/1/2019. Vanguard Small Cap Index Ins replaced PanAgora US Small Cap Core Stock Selector on 4/14/2021.

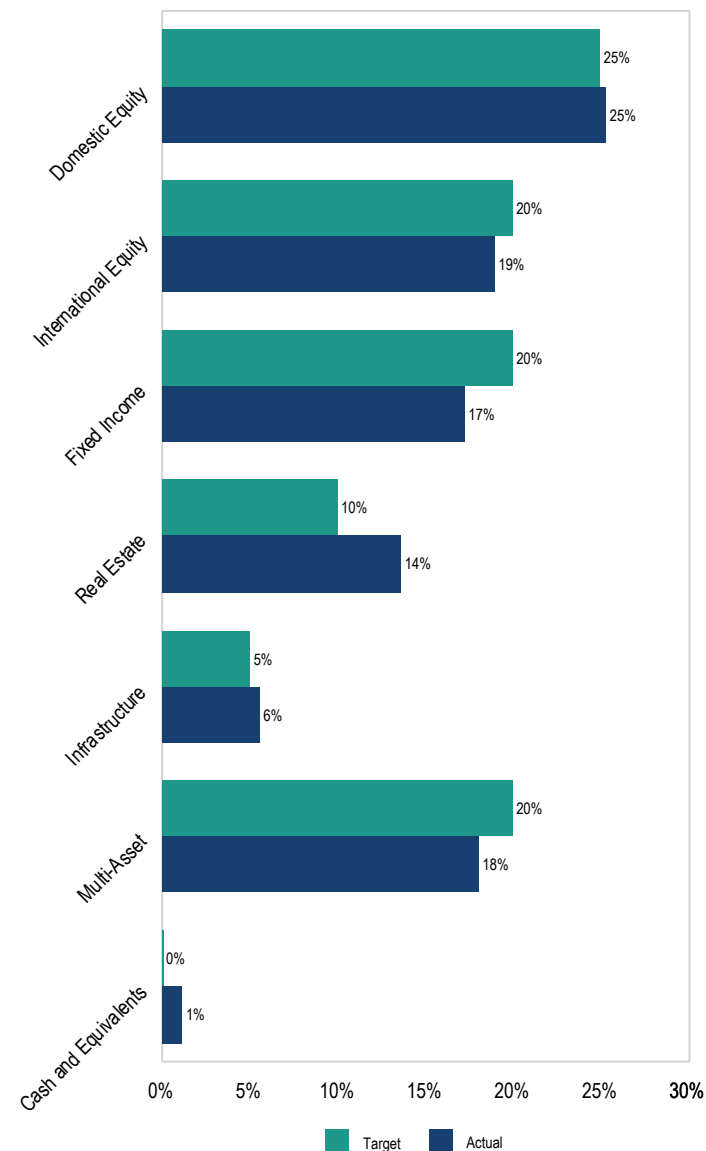


Total Fund  
Executive Summary (Net of Fees)

Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs
<b>Total Fund</b>	<b>344,251,588</b>	<b>100.0</b>	<b>-4.0</b>	<b>6.4</b>	<b>10.3</b>	<b>8.7</b>	<b>7.9</b>
<i>Total Fund Policy Index</i>			-4.2	6.3	10.1	8.5	7.8
<i>Target Asset Allocation Policy Index</i>			-3.8	7.0	11.1	9.5	8.5
<b>Total Domestic Equity</b>	<b>87,399,544</b>	<b>25.4</b>	<b>-4.7</b>	<b>10.4</b>	<b>15.2</b>	<b>13.1</b>	<b>13.1</b>
<i>Dow Jones U.S. Total Stock Market Index</i>			-5.4	11.7	18.1	15.3	14.2
<b>Total International Equity</b>	<b>65,267,726</b>	<b>19.0</b>	<b>-12.3</b>	<b>-2.0</b>	<b>12.1</b>	<b>9.6</b>	<b>6.9</b>
<i>Total Public Int'l Equity Benchmark (MSCI ACWI ex US IMI)</i>			-5.6	-1.3	7.9	6.9	5.8
<b>Total Fixed Income</b>	<b>59,502,869</b>	<b>17.3</b>	<b>-5.3</b>	<b>-3.4</b>	<b>3.3</b>	<b>3.3</b>	<b>3.7</b>
<i>Total Fixed Income Benchmark (Bloomberg Aggregate)</i>			-5.9	-4.2	1.7	2.1	2.2
<b>Total Real Estate</b>	<b>46,874,008</b>	<b>13.6</b>	<b>7.2</b>	<b>23.5</b>	<b>9.3</b>	<b>8.0</b>	<b>9.8</b>
<i>NCREIF ODCE Net</i>			7.1	27.3	10.3	8.9	9.9
<b>Total Infrastructure</b>	<b>18,997,033</b>	<b>5.5</b>	<b>0.9</b>	<b>11.4</b>	<b>9.1</b>	<b>10.5</b>	<b>7.8</b>
<i>CPI + 5%</i>			4.4	14.0	9.4	8.5	7.4
<b>Total Multi-Asset</b>	<b>62,185,878</b>	<b>18.1</b>	<b>-1.4</b>	<b>7.4</b>	<b>8.9</b>	<b>7.3</b>	<b>6.5</b>
<i>60% MSCI ACWI Net/40% FTSE WGBI</i>			-5.8	1.2	8.4	7.7	6.3
<b>Total Cash</b>	<b>4,024,530</b>	<b>1.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.2</b>	<b>-1.2</b>

Actual vs. Target Allocation (%)



Policy Index: 45% MSCI World, 25% Bloomberg Aggregate, 10% NCREIF-ODCE net, 20%(60% MSCI ACWI Net/40% CITI WGBI). Target Asset Allocation Policy Index: 25% Dow Jones US Total Stock, 20% MSCI ACWI ex US IMI, 20% Bloomberg Aggregate, 10% NCREIF-ODCE, 5% CPI + 5%, and 20% (60% MSCI ACWI Net/40% CITI WGBI). Data prior to 3Q 2015 is from previous consultant.

Total Fund  
Risk Analysis - 3 & 5 Year (Net of Fees)

Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

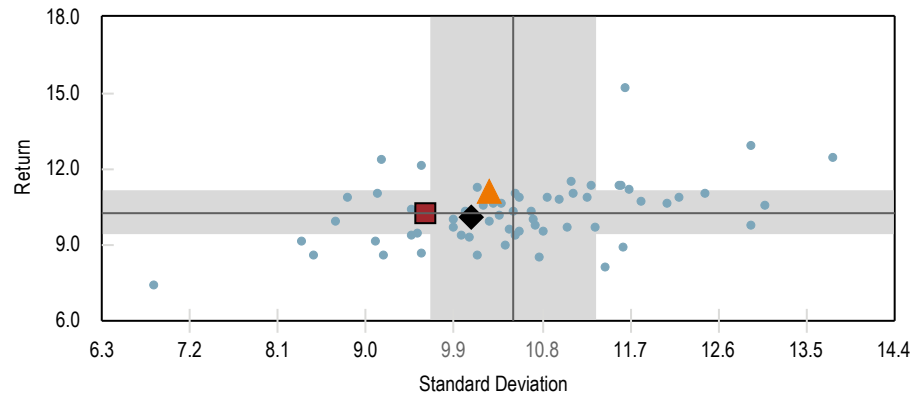
3 Year

	Anlzd Standard Deviation	Ann Excess BM Return	Anlzd Alpha	Beta	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	Information Ratio	Tracking Error	Sharpe Ratio
Total Fund	9.6	9.5	0.7	0.9	1.0	95.0	88.5	0.1	1.7	1.0
Total Fund Policy Index	10.1	9.4	0.0	1.0	1.0	100.0	100.0	-	0.0	0.9
Target Asset Allocation Policy Index	10.3	10.3	0.8	1.0	1.0	103.8	98.1	1.4	0.7	1.0

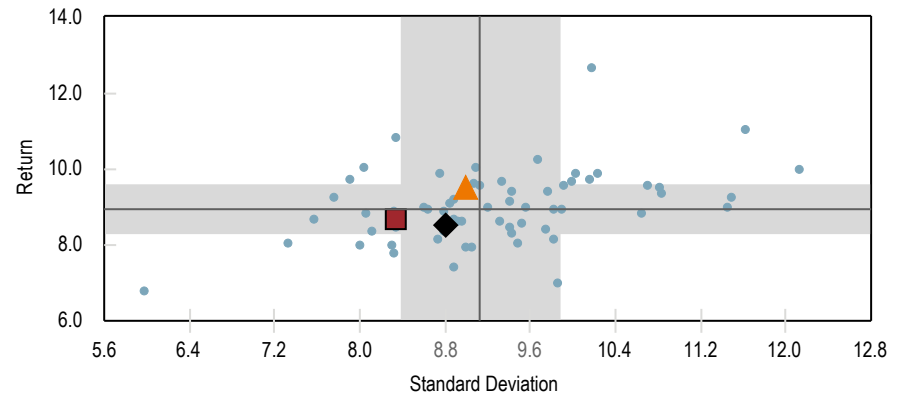
5 Year

	Anlzd Standard Deviation	Ann Excess BM Return	Anlzd Alpha	Beta	R-Squared	Up Mkt Capture Ratio	Down Mkt Capture Ratio	Information Ratio	Tracking Error	Sharpe Ratio
Total Fund	8.3	7.6	0.7	0.9	1.0	94.4	86.7	0.1	1.6	0.9
Total Fund Policy Index	8.8	7.5	0.0	1.0	1.0	100.0	100.0	-	0.0	0.8
Target Asset Allocation Policy Index	9.0	8.4	0.8	1.0	1.0	105.0	98.5	1.3	0.7	0.9

3 Year



5 Year



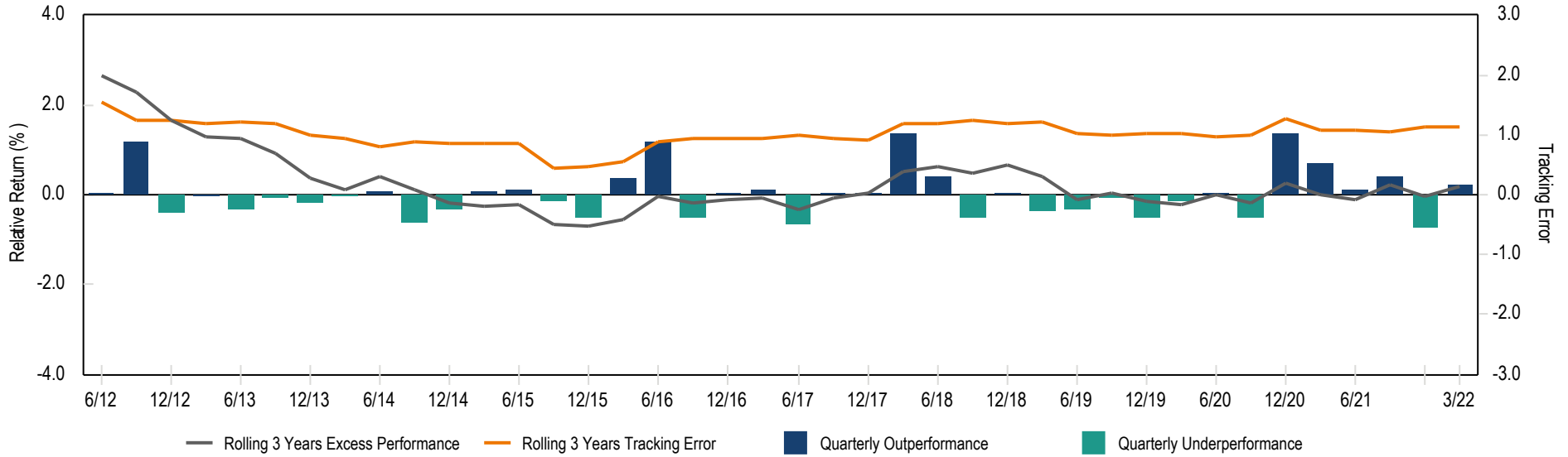
InvMetrics Taft Hartley DB \$250mm- \$1B Net

	Return	Standard Deviation
■ Total Fund	10.27	9.61
◆ Total Fund Policy Index	10.11	10.08
▲ Target Asset Allocation Policy Index	11.10	10.26
— Median	10.29	10.51
Population	63	63

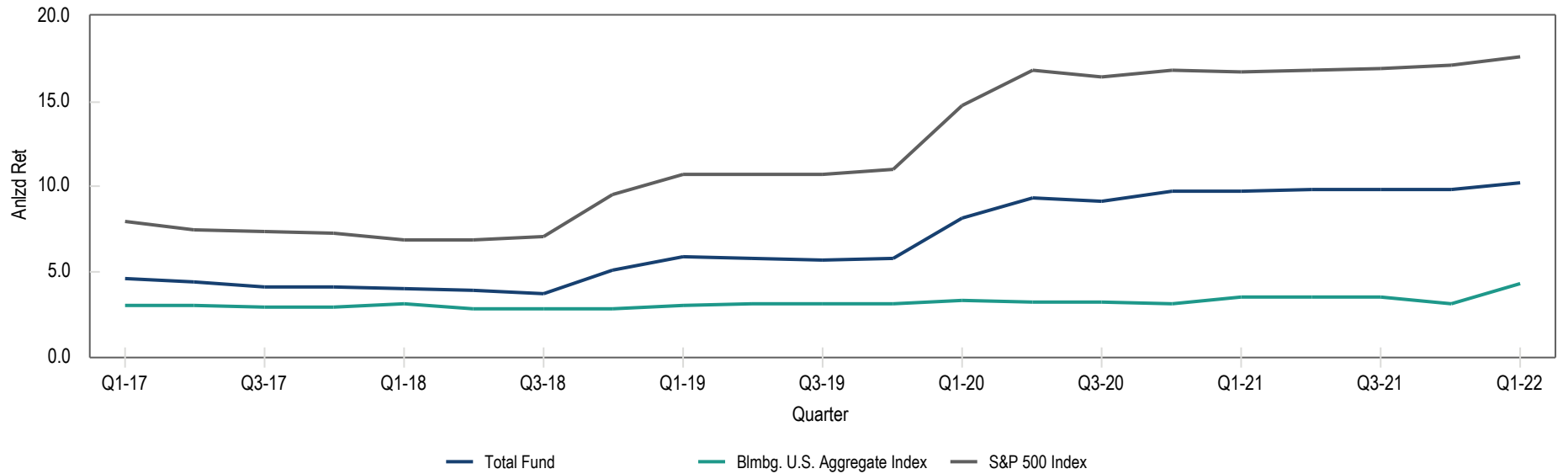
InvMetrics Taft Hartley DB \$250mm- \$1B Net

	Return	Standard Deviation
■ Total Fund	8.70	8.33
◆ Total Fund Policy Index	8.52	8.81
▲ Target Asset Allocation Policy Index	9.52	9.00
— Median	8.96	9.13
Population	63	63

Rolling Annualized Excess Performance and Tracking Error



Rolling 5 Year Annualized Standard Deviation



Total Fund  
Executive Summary (Net of Fees)

Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017	Inception	Inception Date
<b>Total Fund</b>	<b>344,251,588</b>	<b>100.0</b>	<b>-4.0</b>	<b>6.4</b>	<b>10.3</b>	<b>8.7</b>	<b>7.9</b>	<b>13.4</b>	<b>13.3</b>	<b>17.1</b>	<b>-3.3</b>	<b>12.9</b>	<b>7.7</b>	<b>Jan-90</b>
<i>Total Fund Policy Index</i>			-4.2	6.3	10.1	8.5	7.8	12.8	12.6	18.6	-4.5	13.5	7.0	
<i>Target Asset Allocation Policy Index</i>			-3.8	7.0	11.1	9.5	8.5	13.9	13.9	19.1	-3.2	13.7	-	
<b>Domestic Equity</b>	<b>87,399,544</b>	<b>25.4</b>												
BlackRock Equity Index NL	35,086,534	10.2	-4.6	15.6	18.9	16.0	14.6	28.7	18.4	31.5	-4.4	21.8	14.1	May-10
<i>S&amp;P 500 Index</i>			-4.6	15.6	18.9	16.0	14.6	28.7	18.4	31.5	-4.4	21.8	14.1	
<i>eV US Large Cap Core Equity Rank</i>			45	18	18	19	10	29	36	29	39	44	11	
INTECH US Adaptive Volatility	35,736,238	10.4	-4.4	11.4	12.4	11.4	-	19.4	14.0	23.4	-5.8	21.4	9.8	Sep-18
<i>Russell 1000</i>			-5.1	13.3	18.7	15.8	14.5	26.5	21.0	31.4	-4.8	21.7	15.0	
<i>eV US Large Cap Core Equity Rank</i>			39	62	92	90	-	90	58	90	56	50	92	
Vanguard Small Cap Index Ins	16,576,773	4.8	-5.7	0.7	13.2	11.3	12.1	17.7	19.1	27.4	-9.3	16.2	-3.2	May-21
<i>Vanguard Spliced Small Cap Index</i>			-5.7	0.7	13.1	11.3	12.1	17.7	19.1	27.3	-9.3	16.2	-3.2	
<i>eV US Small Cap Core Equity Rank</i>			25	59	58	40	35	85	34	27	31	31	67	
<b>International Equity</b>	<b>65,267,726</b>	<b>19.0</b>												
WCM Focused International Growth Fund, L.P.	38,308,954	11.1	-16.7	-2.1	16.1	14.2	-	17.6	33.1	35.7	-7.4	31.1	13.7	Jul-16
<i>MSCI AC World ex USA (Net)</i>			-5.4	-1.5	7.5	6.8	5.6	7.8	10.7	21.5	-14.2	27.2	8.3	
<i>eV ACWI ex-US All Cap Growth Eq Rank</i>			81	11	13	12	-	3	36	12	1	66	12	
Causeway International Value Ins	26,958,772	7.8	-5.3	-3.4	5.8	4.6	-	9.1	5.4	20.1	-18.6	27.2	6.0	Jul-16
<i>MSCI EAFE (Net)</i>			-5.9	1.2	7.8	6.7	6.3	11.3	7.8	22.0	-13.8	25.0	8.1	
<i>Foreign Large Value Rank</i>			78	87	72	61	-	87	25	30	91	17	77	
<b>Fixed Income</b>	<b>59,502,869</b>	<b>17.3</b>												
Loomis Sayles Core Plus	59,502,869	17.3	-5.3	-3.4	3.3	3.3	-	-1.1	11.3	9.4	-0.4	-	3.3	Apr-17
<i>Bmbg. U.S. Aggregate Index</i>			-5.9	-4.2	1.7	2.1	2.2	-1.5	7.5	8.7	0.0	3.5	2.1	
<i>eV US Core Plus Fixed Inc Rank</i>			16	31	14	15	-	76	10	59	41	-	15	

Policy Index: 45% MSCI World, 25% Bloomberg Aggregate, 10% NCREIF-ODCE net, 20%(60% MSCI ACWI Net/40% CITI WGBI). Target Asset Allocation Policy Index: 25% Dow Jones US Total Stock, 20% MSCI ACWI ex US IMI, 20% Bloomberg Aggregate, 10% NCREIF-ODCE, 5% CPI + 5%, and 20% (60% MSCI ACWI Net/40% CITI WGBI). August 2018 INTECH moved from managed to adaptive volatility product. Vanguard Small Cap Index Ins replaced PanAgora US Small Cap Core Stock Selector on 4/14/2021. Data prior to 3Q 2015 is from previous consultant.



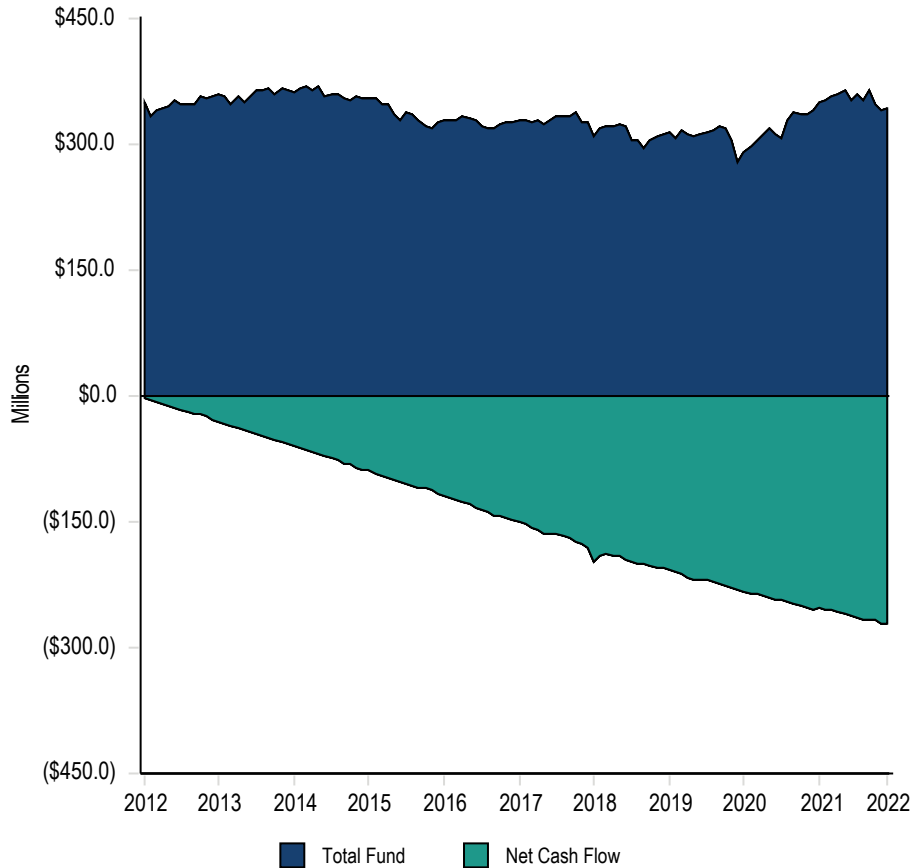
Total Fund  
Executive Summary (Net of Fees)

Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

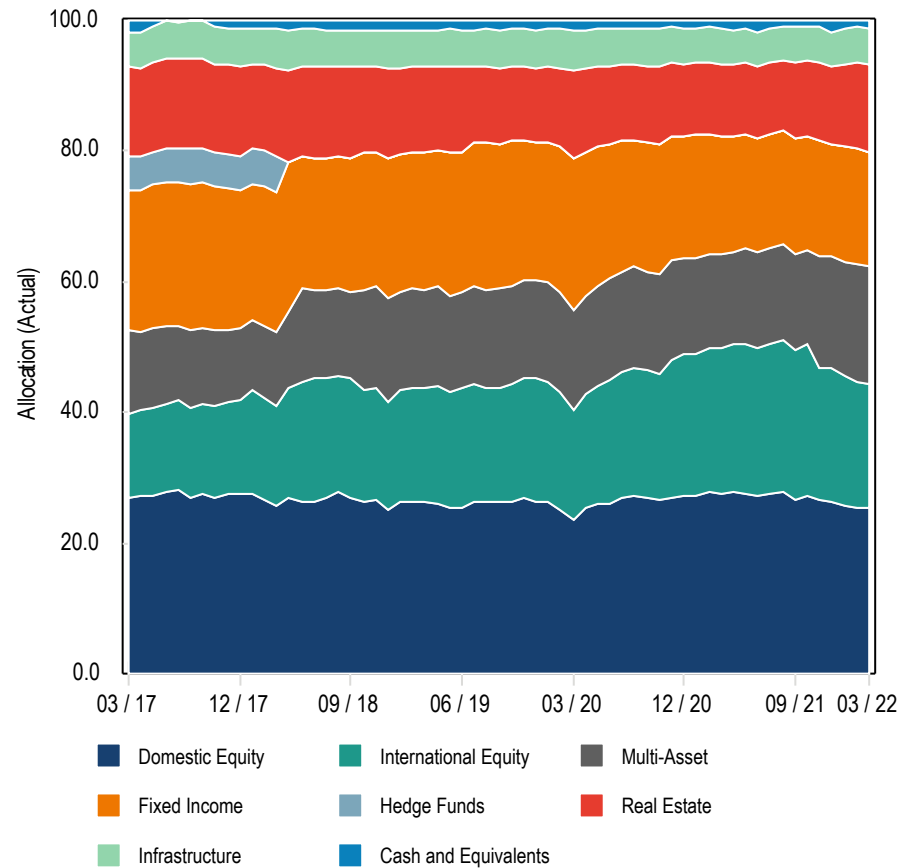
	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017	Inception	Inception Date
<b>Real Estate</b>	<b>46,874,008</b>	<b>13.6</b>												
ASB Allegiance Real Estate	26,819,691	7.8	7.6	19.9	8.0	6.7	-	13.8	1.4	3.1	6.0	2.9	7.5	Apr-15
<i>NCREIF ODCE Net</i>			7.1	27.3	10.3	8.9	9.9	21.0	0.3	4.4	7.4	6.7	9.2	
JPMorgan Special Situation Property	20,054,317	5.8	6.6	28.6	11.2	10.2	-	22.4	2.0	5.0	9.6	7.9	11.0	Jan-15
<i>NCREIF ODCE Net</i>			7.1	27.3	10.3	8.9	9.9	21.0	0.3	4.4	7.4	6.7	9.3	
<b>Infrastructure</b>	<b>18,997,033</b>	<b>5.5</b>												
IFM Global Infrastructure (US) LP	11,739,276	3.4	1.2	16.7	11.0	13.2	9.8	17.4	3.1	14.6	15.8	21.1	9.8	Feb-09
<i>CPI + 5%</i>			4.4	14.0	9.4	8.5	7.4	12.4	6.4	7.4	7.0	7.2	7.5	
JPMorgan IIF ERISA LP	7,257,757	2.1	0.3	4.2	6.5	7.3	5.5	4.0	8.4	8.0	4.2	14.2	5.6	Oct-10
<i>CPI + 5%</i>			4.4	14.0	9.4	8.5	7.4	12.4	6.4	7.4	7.0	7.2	7.5	
<b>Multi-Asset</b>	<b>62,185,878</b>	<b>18.1</b>												
Invesco Balanced-Risk Allocation	62,185,878	18.1	-1.4	7.4	8.9	7.3	6.1	10.9	10.8	15.7	-5.8	10.5	8.0	Feb-10
<i>60% MSCI ACWI Net/40% FTSE WGBI</i>			-5.8	1.2	8.4	7.7	6.3	7.8	14.5	18.2	-5.8	17.1	6.6	
<i>FTSE 3-Month T-bill +6%</i>			1.5	6.1	6.8	7.2	6.6	6.0	6.6	8.4	8.0	6.9	6.5	
<i>eV Global Balanced Rank</i>			13	19	42	39	27	43	51	71	32	85	12	
<b>Cash and Equivalents</b>	<b>4,024,530</b>	<b>1.2</b>												
US Bank Checking Account	1,468,106	0.4												
US Bank Clearing Account	2,556,424	0.7												

Policy Index: 45% MSCI World, 25% Bloomberg Aggregate, 10% NCREIF-ODCE net, 20%(60% MSCI ACWI Net/40% CITI WGBI). Target Asset Allocation Policy Index: 25% Dow Jones US Total Stock, 20% MSCI ACWI ex US IMI, 20% Bloomberg Aggregate, 10% NCREIF-ODCE, 5% CPI + 5%, and 20% (60% MSCI ACWI Net/40% CITI WGBI). August 2018 INTECH moved from managed to adaptive volatility product. Vanguard Small Cap Index Ins replaced PanAgora US Small Cap Core Stock Selector on 4/14/2021. Data prior to 3Q 2015 is from previous consultant.

Market Value History

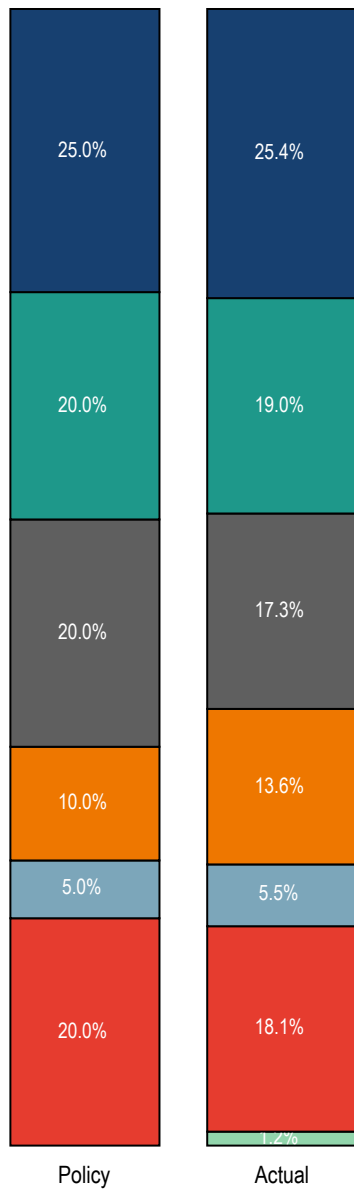


Asset Allocation History

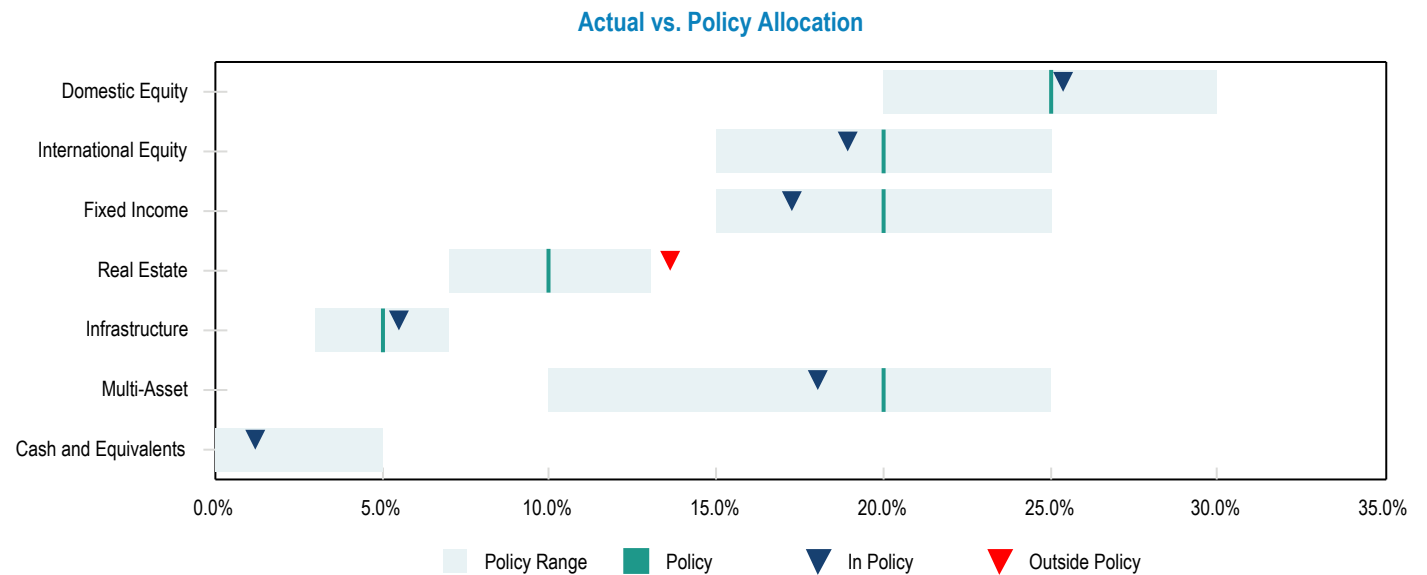


# Total Fund Asset Allocation vs. Policy

## Western States Office & Professional Employees Pension Fund Period Ending: March 31, 2022



	Current Balance (\$)	Current Allocation (%)	Policy Allocation (%)	Excess Allocation (%)	Policy Range (%)	Within IPS Range?
Domestic Equity	87,399,544	25.4	25.0	0.4	20.0 - 30.0	Yes
International Equity	65,267,726	19.0	20.0	-1.0	15.0 - 25.0	Yes
Fixed Income	59,502,869	17.3	20.0	-2.7	15.0 - 25.0	Yes
Real Estate	46,874,008	13.6	10.0	3.6	7.0 - 13.0	No
Infrastructure	18,997,033	5.5	5.0	0.5	3.0 - 7.0	Yes
Multi-Asset	62,185,878	18.1	20.0	-1.9	10.0 - 25.0	Yes
Cash and Equivalents	4,024,530	1.2	0.0	1.2	0.0 - 5.0	Yes
<b>Total</b>	<b>344,251,588</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>		



Total Fund  
Investment Fund Fee Analysis

Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

Name	Asset Class	Fee Schedule	Market Value	% of Portfolio	Estimated Fee Value	Estimated Fee (%)
BlackRock Equity Index NL	Domestic Equity	0.03 % of Assets	\$35,086,534	10.2	\$10,526	0.0
INTECH US Adaptive Volatility	Domestic Equity	0.40 % of Assets	\$35,736,238	10.38	\$142,945	0.40
Vanguard Small Cap Index Ins	Domestic Equity	0.04 % of Assets	\$16,576,773	4.8	\$6,631	0.0
WCM Focused International Growth Fund, L.P.	International Equity	0.75 % of Assets	\$38,308,954	11.13	\$287,317	0.75
Causeway International Value Ins	International Equity	0.85 % of Assets	\$26,958,772	7.83	\$229,150	0.85
Loomis Sayles Core Plus	Fixed Income	0.35 % of First \$20 M 0.25 % Thereafter	\$59,502,869	17.28	\$168,757	0.28
ASB Allegiance Real Estate	Real Estate	1.00 % of Assets	\$26,819,691	7.79	\$268,197	1.00
JPMorgan Special Situation Property	Real Estate	1.60 % of Assets	\$20,054,317	5.83	\$320,869	1.60
IFM Global Infrastructure (US) LP	Infrastructure	0.77 % of Assets	\$11,739,276	3.41	\$90,392	0.77
JPMorgan IIF ERISA LP	Infrastructure	1.25 % of First \$50 M 1.15 % of Next \$50 M 1.05 % Thereafter	\$7,257,757	2.11	\$90,722	1.25
Invesco Balanced-Risk Allocation	Multi-Asset	0.38 % of First \$250 M 0.35 % of Next \$500 M 0.33 % of Next \$250 M 0.30 % Thereafter	\$62,185,878	18.06	\$233,197	0.37
US Bank Checking Account	Cash and Equivalents		\$1,468,106	0.43	-	-
US Bank Clearing Account	Cash and Equivalents		\$2,556,424	0.74	-	-
<b>Total Fund</b>			<b>\$344,251,588</b>	<b>100.00</b>	<b>\$1,848,703</b>	<b>0.54</b>

Total Fund  
Watch List (Net of Fees)

Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

Fund Name	Asset Class	Overall Status	Outperformed Index (3yrs)	Outperformed Median Rank (3yrs)	Outperformed Index (5yrs)	Outperformed Median Rank (5 yrs)	Concern	Index Fund Tracking Error exceeds .25% of Benchmark (1 yr)
BlackRock Equity Index NL	Domestic Equity	■	-	-	-	-	-	✓
INTECH US Adaptive Volatility	Domestic Equity	■	R	R	R	R	-	-
Vanguard Small Cap Index Ins	Domestic Equity	■	-	-	-	-	-	✓
WCM Focused International Growth Fund, L.P.	International Equity	■	✓	✓	✓	✓	-	-
Causeway International Value Ins	International Equity	■	R	R	R	R	-	-
Loomis Sayles Core Plus	Fixed Income	■	✓	✓	✓	✓	-	-
ASB Allegiance Real Estate	Real Estate	■	R	-	R	-	-	-
JPMorgan Special Situation Property	Real Estate	■	✓	-	✓	-	-	-
IFM Global Infrastructure (US) LP	Infrastructure	■	✓	-	✓	-	-	-
JPMorgan IIF ERISA LP	Infrastructure	■	R	-	R	-	-	-
Invesco Balanced-Risk Allocation	Multi-Asset	■	✓	✓	R	✓	-	-

Legend For Overall Status

No Issues	■
Watch	■
Terminate	■

Legend for Standards

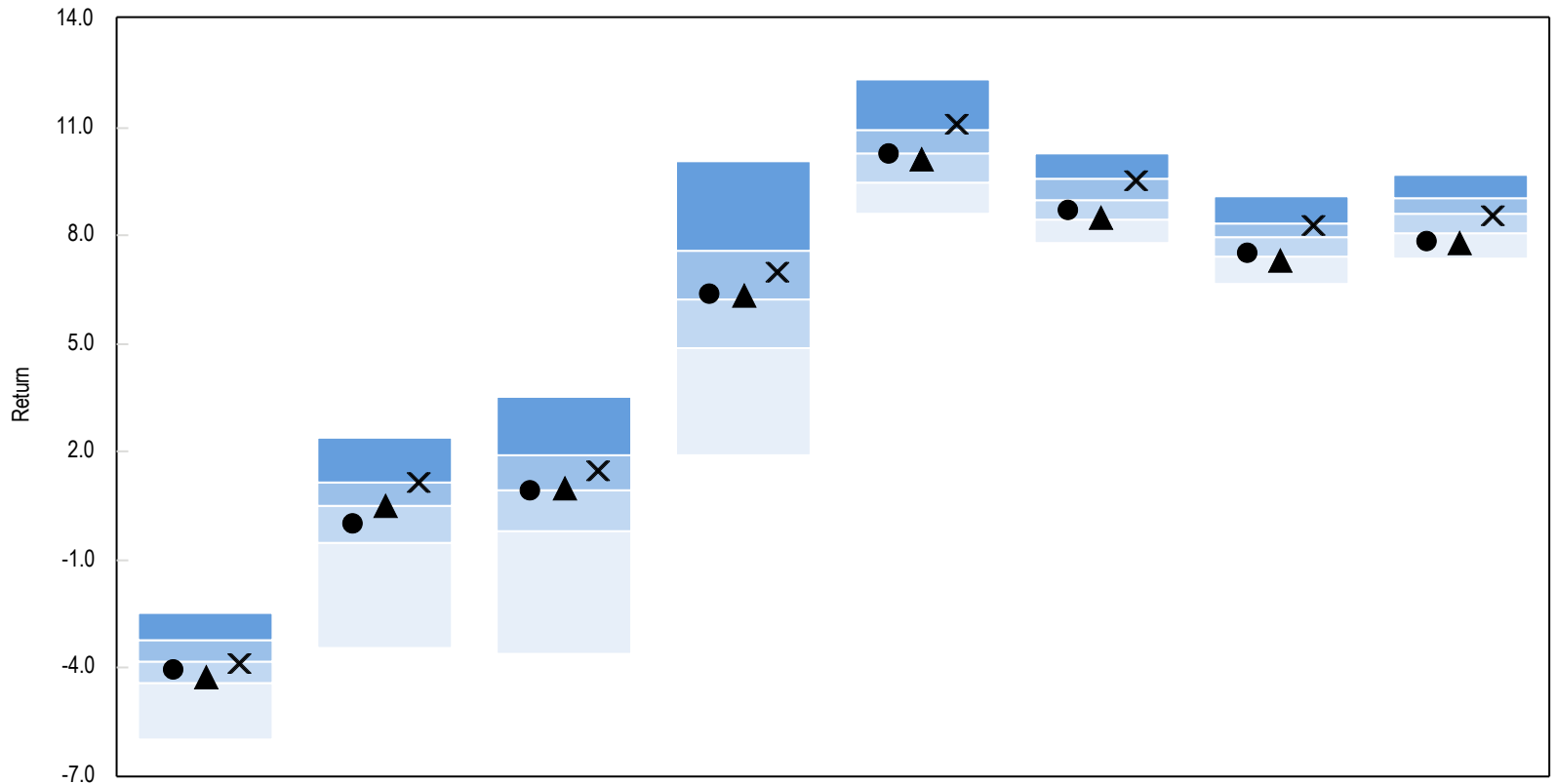
Pass	✓
Fail	R

Legend for Concern

Provisional	P
Restricted	R
No Issues	--

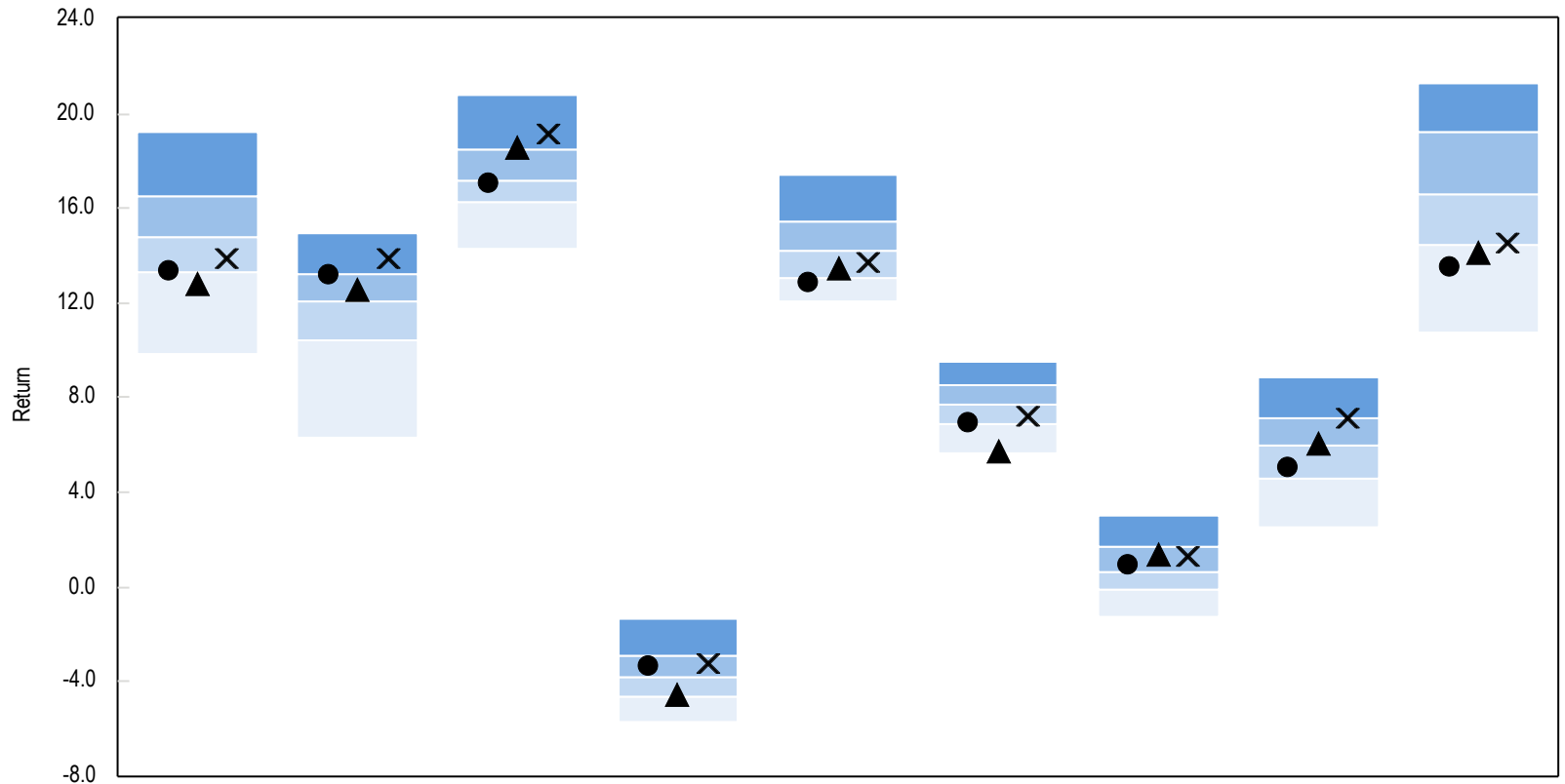


Total Fund vs. InvMetrics Taft Hartley DB \$250mm - \$1B Net



	Quarter	2 Quarters	3 Quarters	1 Year	3 Years	5 Years	7 Years	10 Years
● Total Fund	-4.03 (60)	0.04 (66)	0.93 (50)	6.37 (45)	10.27 (51)	8.70 (62)	7.54 (66)	7.87 (81)
▲ Total Fund Policy Index	-4.25 (69)	0.53 (49)	1.00 (48)	6.31 (47)	10.11 (54)	8.52 (71)	7.31 (81)	7.78 (82)
× Target Asset Allocation Policy Index	-3.85 (51)	1.13 (27)	1.48 (39)	6.98 (41)	11.10 (18)	9.52 (30)	8.28 (30)	8.53 (53)
5th Percentile	-2.49	2.38	3.54	10.04	12.34	10.26	9.10	9.67
1st Quartile	-3.21	1.16	1.88	7.56	10.91	9.60	8.35	9.05
Median	-3.83	0.49	0.91	6.24	10.29	8.96	7.94	8.59
3rd Quartile	-4.42	-0.50	-0.19	4.89	9.48	8.44	7.40	8.04
95th Percentile	-5.97	-3.42	-3.57	1.90	8.61	7.81	6.66	7.38
Population	64	64	64	64	63	63	60	56

Total Fund vs. InvMetrics Taft Hartley DB \$250mm - \$1B Net



	2021	2020	2019	2018	2017	2016	2015	2014	2013
● Total Fund	13.40 (73)	13.25 (25)	17.13 (52)	-3.28 (37)	12.93 (82)	6.93 (71)	0.94 (41)	5.06 (67)	13.53 (80)
▲ Total Fund Policy Index	12.82 (78)	12.57 (39)	18.58 (25)	-4.52 (66)	13.48 (68)	5.76 (95)	1.41 (30)	6.05 (47)	14.16 (77)
× Target Asset Allocation Policy Index	13.89 (68)	13.90 (12)	19.13 (19)	-3.20 (35)	13.71 (64)	7.20 (66)	1.32 (32)	7.11 (27)	14.58 (75)
5th Percentile	19.23	14.97	20.76	-1.37	17.39	9.51	3.02	8.83	21.28
1st Quartile	16.51	13.24	18.52	-2.88	15.42	8.56	1.71	7.12	19.23
Median	14.81	12.04	17.18	-3.81	14.24	7.72	0.62	5.98	16.59
3rd Quartile	13.27	10.39	16.23	-4.66	13.03	6.88	-0.13	4.61	14.47
95th Percentile	9.86	6.28	14.27	-5.68	12.09	5.66	-1.24	2.52	10.73
Population	108	125	111	95	105	98	101	98	87

## Total Domestic Equity

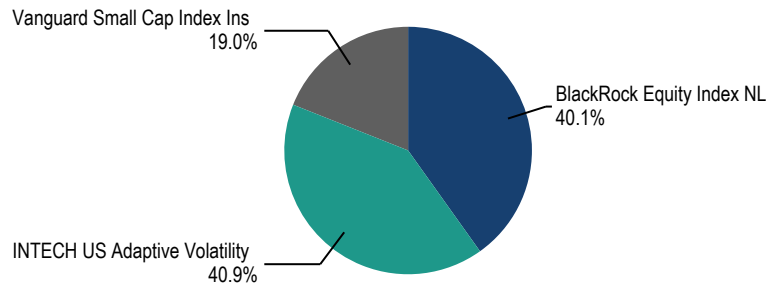
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Total Domestic Equity  
Performance Summary (Net of Fees)

Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
<b>Total Domestic Equity</b>	<b>87,399,544</b>	<b>100.0</b>	<b>-4.7</b>	<b>10.4</b>	<b>15.2</b>	<b>13.1</b>	<b>13.1</b>	<b>23.6</b>	<b>15.9</b>	<b>27.2</b>	<b>-5.9</b>	<b>19.4</b>
<i>Dow Jones U.S. Total Stock Market Index</i>			-5.4	11.7	18.1	15.3	14.2	25.7	20.8	30.9	-5.3	21.2
<b>Domestic Equity</b>	<b>87,399,544</b>	<b>100.0</b>										
BlackRock Equity Index NL	35,086,534	40.1	-4.6	15.6	18.9	16.0	14.6	28.7	18.4	31.5	-4.4	21.8
<i>S&amp;P 500 Index</i>			-4.6	15.6	18.9	16.0	14.6	28.7	18.4	31.5	-4.4	21.8
<i>eV US Large Cap Core Equity Rank</i>			45	18	18	19	10	29	36	29	39	44
INTECH US Adaptive Volatility	35,736,238	40.9	-4.4	11.4	12.4	11.4	-	19.4	14.0	23.4	-5.8	21.4
<i>Russell 1000</i>			-5.1	13.3	18.7	15.8	14.5	26.5	21.0	31.4	-4.8	21.7
<i>eV US Large Cap Core Equity Rank</i>			39	62	92	90	-	90	58	90	56	50
Vanguard Small Cap Index Ins	16,576,773	19.0	-5.7	-	13.2	11.3	12.1	17.7	19.1	27.4	-9.3	16.2
<i>Vanguard Spliced Small Cap Index</i>			-5.7	0.7	13.1	11.3	12.1	17.7	19.1	27.3	-9.3	16.2
<i>eV US Small Cap Core Equity Rank</i>			30	-	73	57	64	84	38	36	36	36

Total Domestic Equity  
Current Allocation

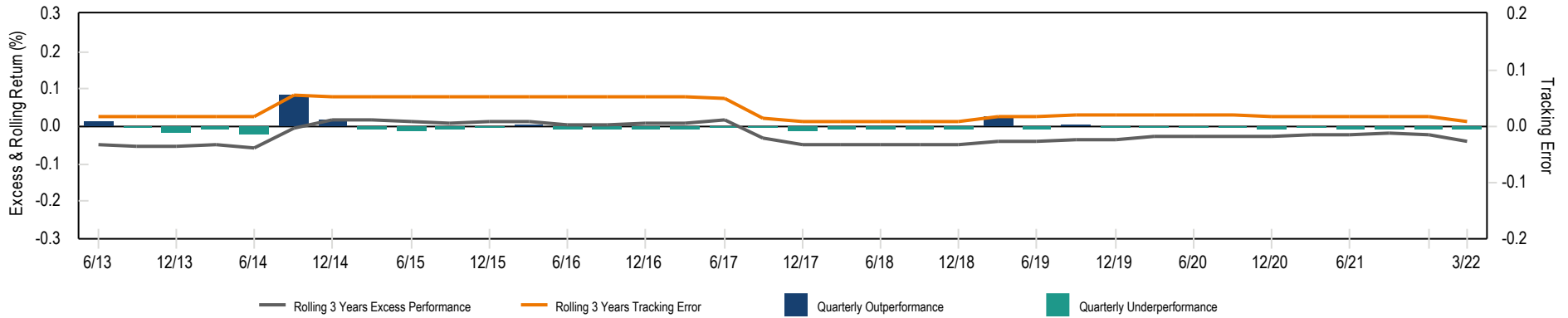


Domestic Effective Style Map  
3 Years

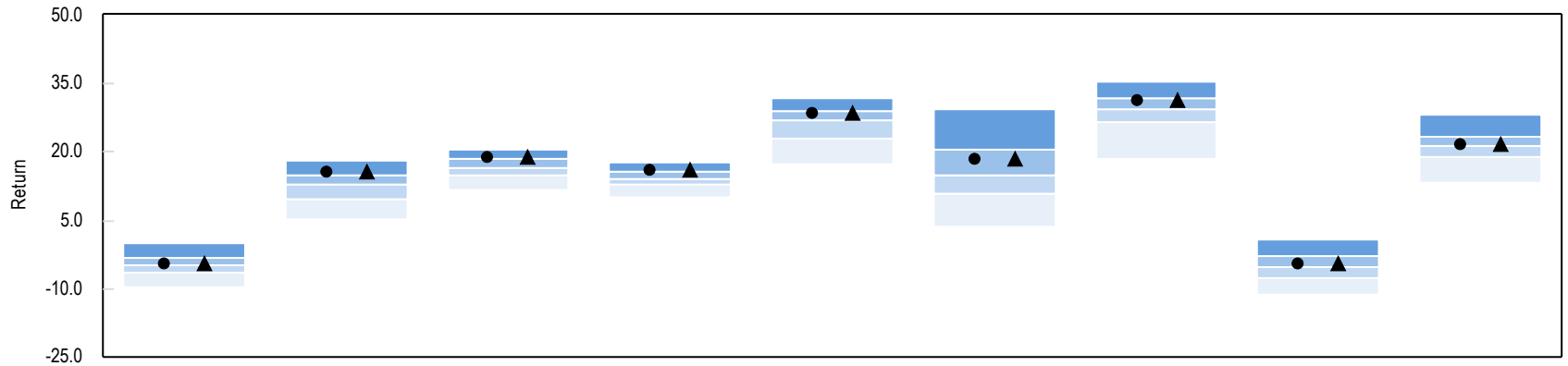


Managers need 3 years of history to be included in the style map.

3 Years Rolling Annualized Excess Performance and Tracking Error



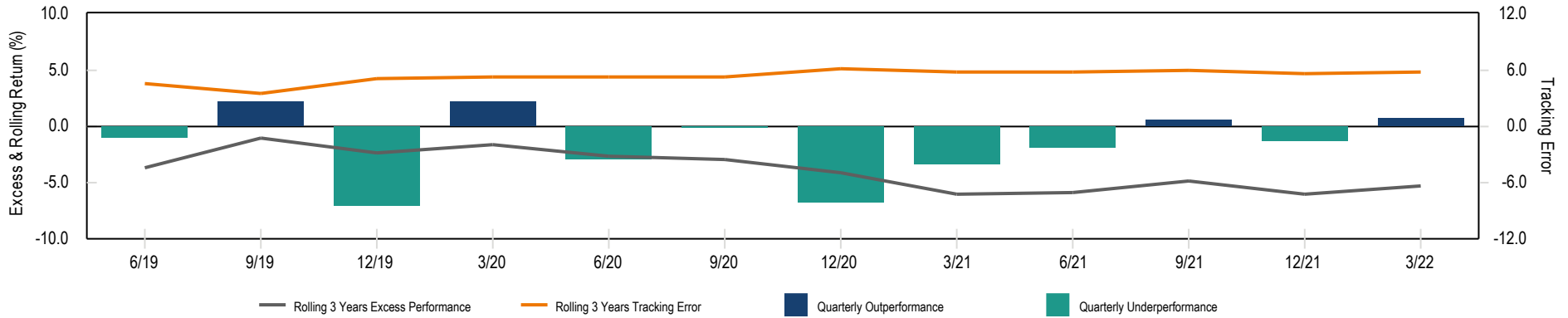
BlackRock Equity Index NL vs. eV US Large Cap Core Equity



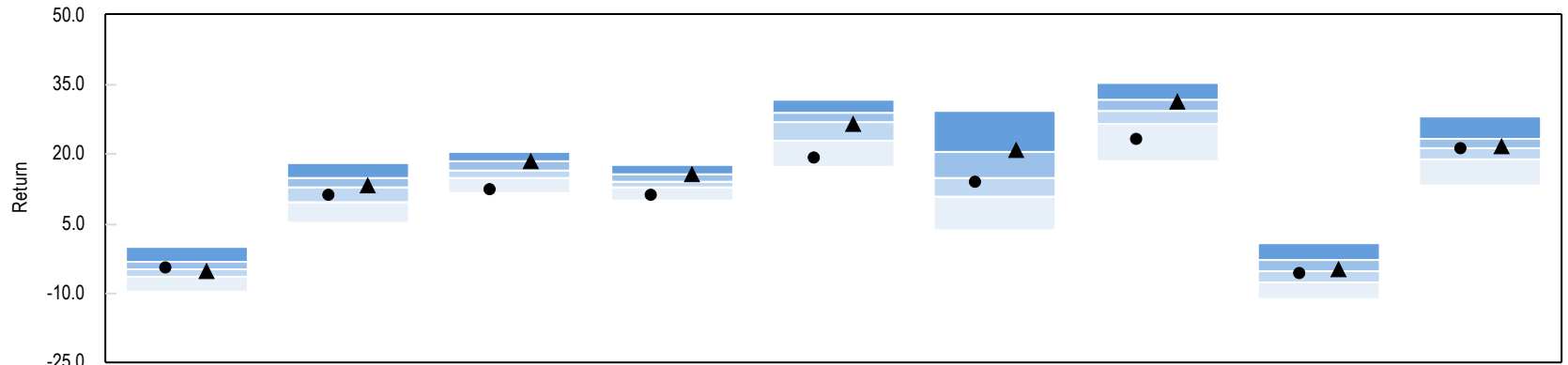
	3 Mo	1 Yr	3 Yrs	5 Yrs	2021	2020	2019	2018	2017
● BlackRock Equity Index NL	-4.61 (45)	15.61 (18)	18.90 (18)	15.97 (19)	28.67 (29)	18.38 (36)	31.50 (29)	-4.42 (39)	21.80 (44)
▲ S&P 500 Index	-4.60 (44)	15.65 (17)	18.92 (18)	15.99 (19)	28.71 (28)	18.40 (36)	31.49 (29)	-4.38 (38)	21.83 (44)
5th Percentile	0.18	17.96	20.39	17.66	31.98	29.49	35.68	0.70	28.10
1st Quartile	-3.42	14.92	18.39	15.64	28.98	20.63	31.82	-2.92	23.58
Median	-5.02	12.98	16.59	14.13	26.87	15.06	29.30	-5.38	21.38
3rd Quartile	-6.55	9.69	14.77	12.76	23.14	10.75	26.49	-7.51	18.90
95th Percentile	-9.65	5.27	11.66	9.97	17.15	3.51	18.60	-11.19	13.11
Population	264	264	253	234	276	302	315	320	329



3 Years Rolling Annualized Excess Performance and Tracking Error

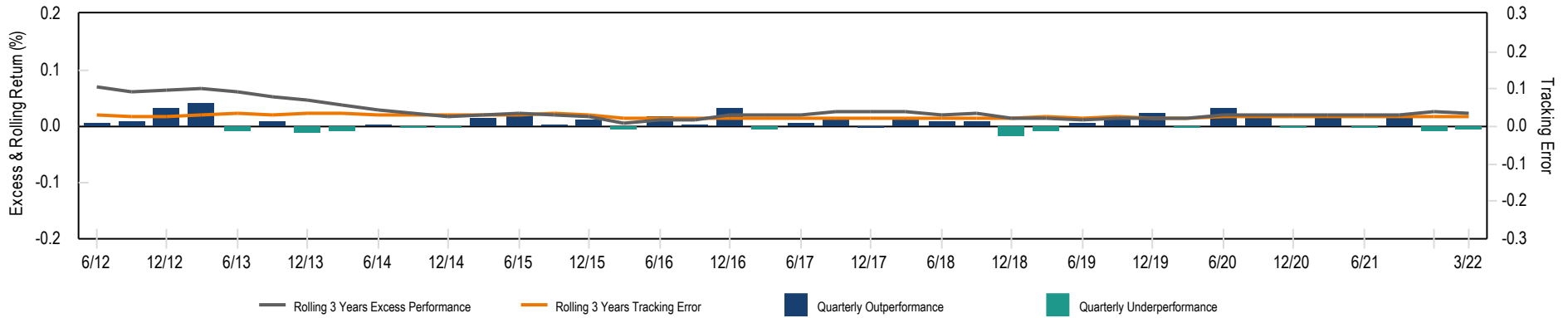


INTECH US Adaptive Volatility vs. eV US Large Cap Core Equity

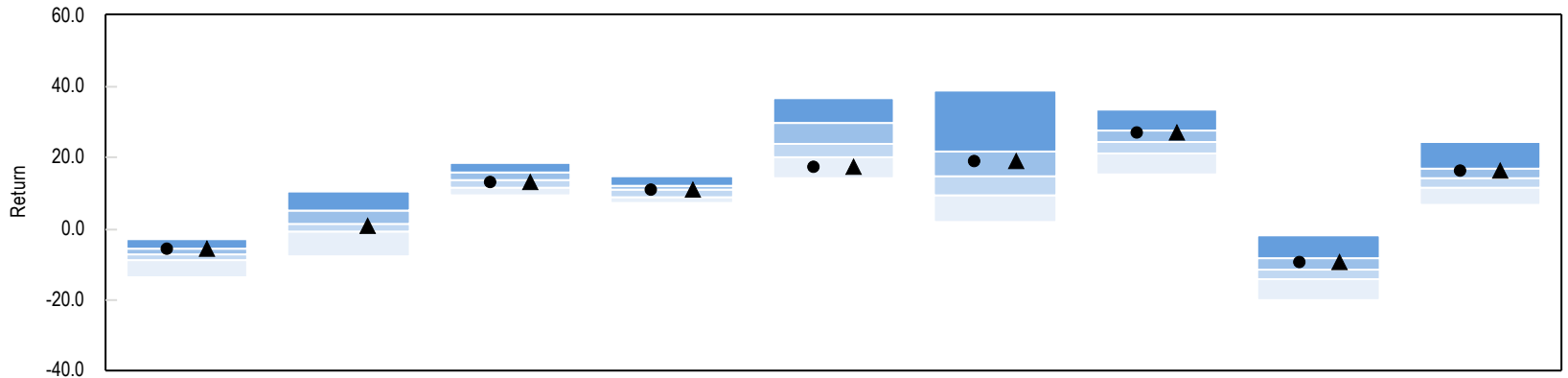


	3 Mo	1 Yr	3 Yrs	5 Yrs	2021	2020	2019	2018	2017
● INTECH US Adaptive Volatility	-4.38 (39)	11.41 (62)	12.38 (92)	11.42 (90)	19.45 (90)	13.97 (58)	23.45 (90)	-5.84 (56)	21.39 (50)
▲ Russell 1000	-5.13 (52)	13.27 (46)	18.71 (22)	15.82 (22)	26.45 (54)	20.96 (24)	31.43 (30)	-4.78 (44)	21.69 (45)
5th Percentile	0.18	17.96	20.39	17.66	31.98	29.49	35.68	0.70	28.10
1st Quartile	-3.42	14.92	18.39	15.64	28.98	20.63	31.82	-2.92	23.58
Median	-5.02	12.98	16.59	14.13	26.87	15.06	29.30	-5.38	21.38
3rd Quartile	-6.55	9.69	14.77	12.76	23.14	10.75	26.49	-7.51	18.90
95th Percentile	-9.65	5.27	11.66	9.97	17.15	3.51	18.60	-11.19	13.11
Population	264	264	253	234	276	302	315	320	329

3 Years Rolling Annualized Excess Performance and Tracking Error



Vanguard Small Cap Index Ins vs. eV US Small Cap Core Equity



	3 Mo	1 Yr	3 Yrs	5 Yrs	2021	2020	2019	2018	2017
● Vanguard Small Cap Index Ins	-5.74 (25)	-	13.17 (58)	11.34 (40)	17.73 (85)	19.12 (34)	27.40 (27)	-9.32 (31)	16.25 (31)
▲ Vanguard Spliced Small Cap Index	-5.74 (25)	0.68 (59)	13.13 (58)	11.32 (40)	17.71 (85)	19.07 (34)	27.35 (27)	-9.33 (31)	16.24 (31)
5th Percentile	-2.72	10.57	18.55	14.79	36.83	38.79	33.82	-1.76	24.55
1st Quartile	-5.79	5.20	15.95	12.07	29.82	21.86	27.62	-8.49	17.15
Median	-7.15	1.41	13.89	10.94	24.06	14.82	24.53	-11.28	14.33
3rd Quartile	-8.88	-0.91	11.87	8.92	20.17	9.48	21.23	-14.21	11.49
95th Percentile	-13.72	-7.78	9.43	7.38	14.39	2.08	15.21	-20.13	6.72
Population	140	139	135	130	145	151	162	173	178

# International Equity

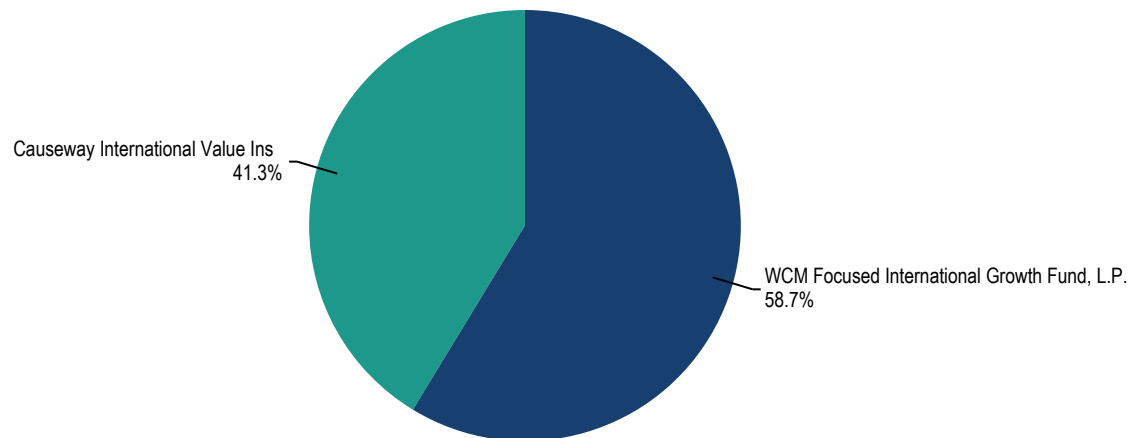
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Total International Equity  
Performance Summary (Net of Fees)

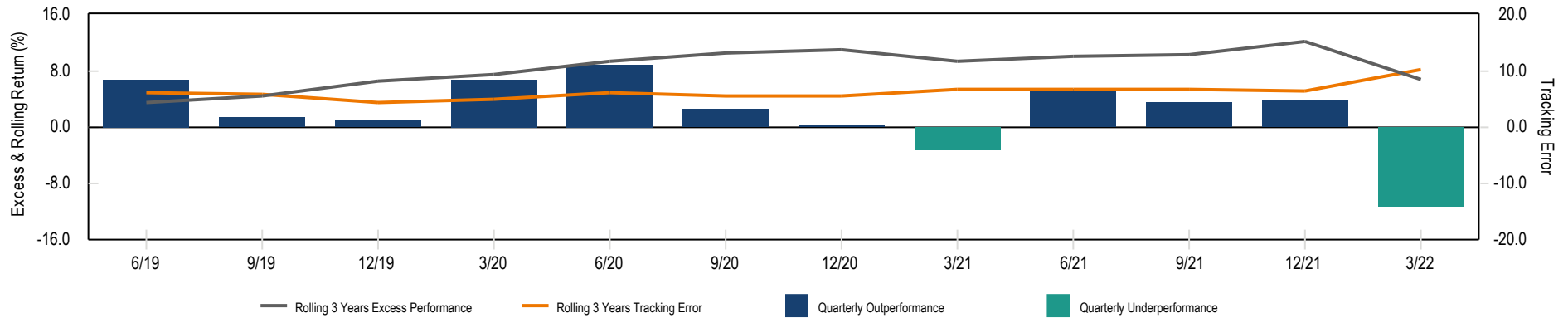
Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
<b>Total International Equity</b>	<b>65,267,726</b>	<b>100.0</b>	<b>-12.3</b>	<b>-2.0</b>	<b>12.1</b>	<b>9.6</b>	<b>6.9</b>	<b>14.6</b>	<b>21.7</b>	<b>27.8</b>	<b>-13.0</b>	<b>26.6</b>
<i>Total Public Int'l Equity Benchmark (MSCI ACWI ex US IMI)</i>			-5.6	-1.3	7.9	6.9	5.8	8.5	11.1	21.6	-14.8	27.8
<b>International Equity</b>	<b>65,267,726</b>	<b>100.0</b>										
WCM Focused International Growth Fund, L.P.	38,308,954	58.7	-16.7	-2.1	16.1	14.2	-	17.6	33.1	35.7	-7.4	31.1
<i>MSCI AC World ex USA (Net)</i>			-5.4	-1.5	7.5	6.8	5.6	7.8	10.7	21.5	-14.2	27.2
<i>eV ACWI ex-US All Cap Growth Eq Rank</i>			81	11	13	12	-	3	36	12	1	66
Causeway International Value Ins	26,958,772	41.3	-5.3	-3.4	5.8	4.6	-	9.1	5.4	20.1	-18.6	27.2
<i>MSCI EAFE (Net)</i>			-5.9	1.2	7.8	6.7	6.3	11.3	7.8	22.0	-13.8	25.0
<i>Foreign Large Value Rank</i>			78	87	72	61	-	87	25	30	91	17

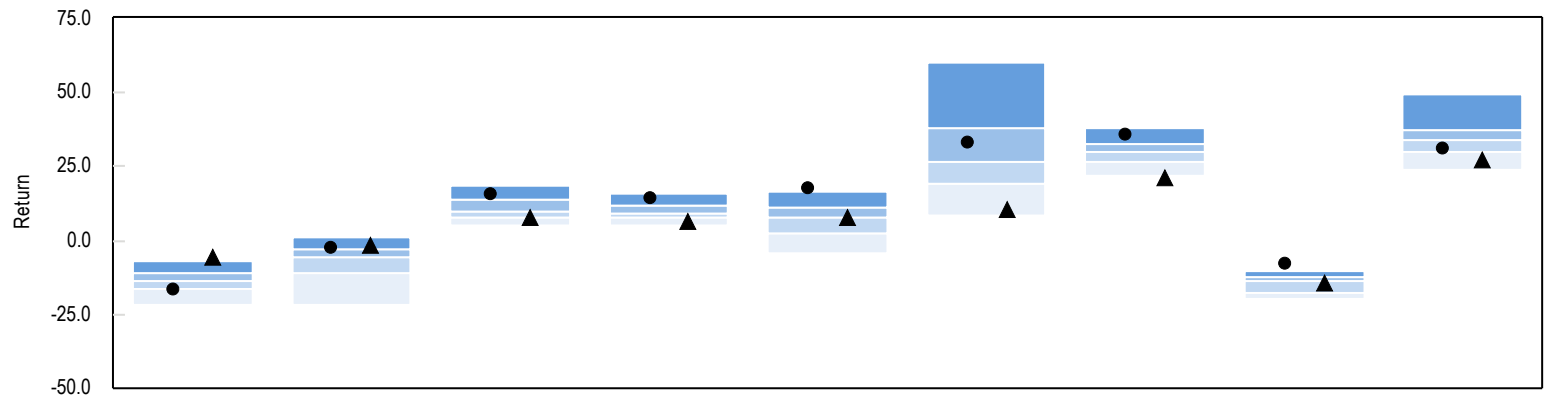
Total International Equity  
Current Allocation



3 Years Rolling Annualized Excess Performance and Tracking Error

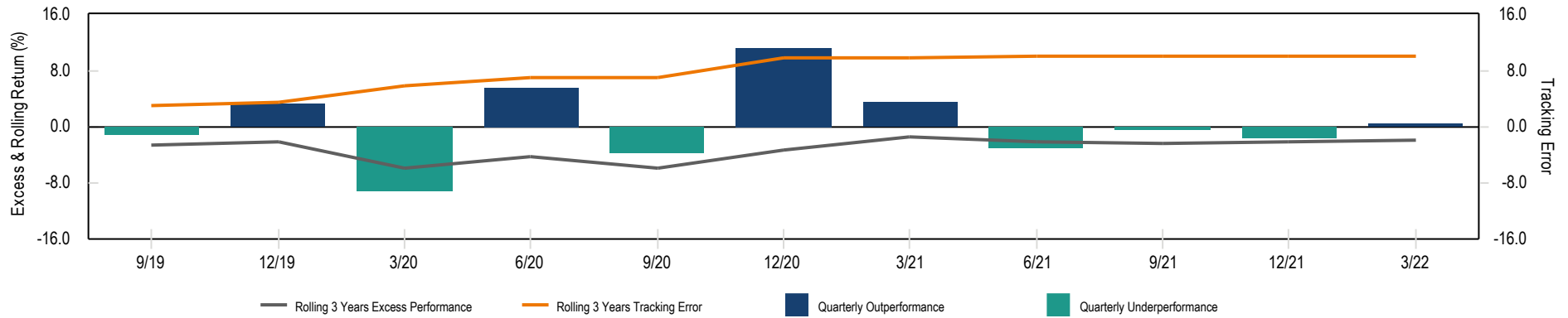


WCM Focused International Growth Fund, L.P. vs. eV ACWI ex-US All Cap Growth Eq

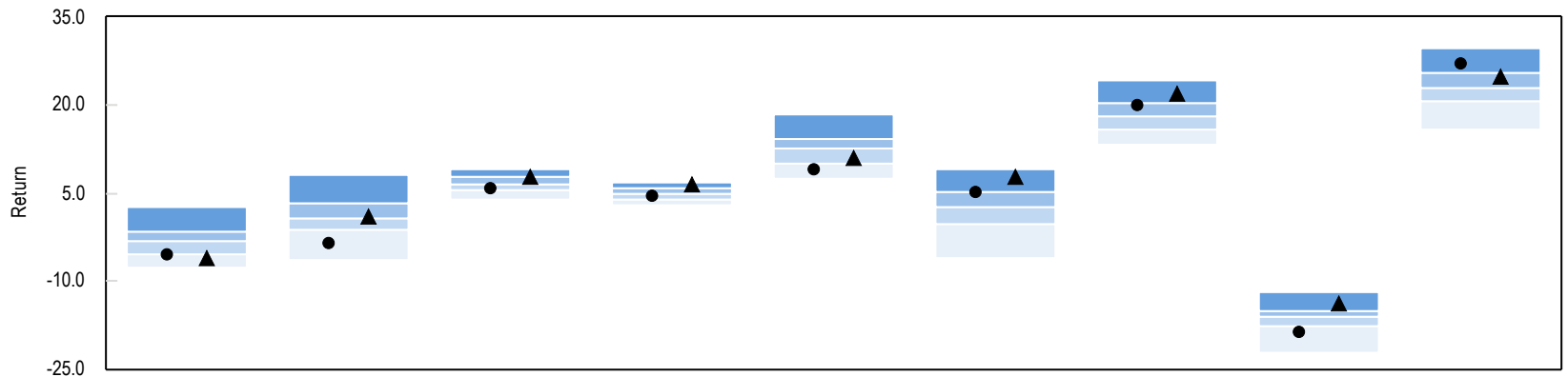


	3 Mo	1 Yr	3 Yrs	5 Yrs	2021	2020	2019	2018	2017
● WCM Focused International Growth Fund, L.P.	-16.67 (81)	-2.07 (11)	16.14 (13)	14.23 (12)	17.64 (3)	33.07 (36)	35.73 (12)	-7.40 (1)	31.15 (66)
▲ MSCI AC World ex USA (Net)	-5.44 (1)	-1.48 (10)	7.51 (80)	6.76 (90)	7.82 (51)	10.65 (94)	21.51 (96)	-14.20 (52)	27.19 (86)
5th Percentile	-7.32	1.15	18.79	15.94	16.34	60.30	38.30	-10.23	49.80
1st Quartile	-10.99	-3.21	13.91	11.51	10.91	37.77	32.70	-12.42	37.48
Median	-13.74	-5.91	9.79	9.14	7.90	26.90	29.72	-13.95	34.07
3rd Quartile	-16.48	-10.90	7.75	7.76	2.44	19.23	26.63	-17.58	30.14
95th Percentile	-21.78	-21.65	5.23	5.33	-4.21	8.15	21.94	-20.04	24.23
Population	37	37	35	33	38	38	40	38	37

3 Years Rolling Annualized Excess Performance and Tracking Error



Causeway International Value Ins vs. Foreign Large Value



	3 Mo	1 Yr	3 Yrs	5 Yrs	2021	2020	2019	2018	2017
● Causeway International Value Ins	-5.35 (78)	-3.42 (87)	5.82 (72)	4.65 (61)	9.07 (87)	5.40 (25)	20.10 (30)	-18.61 (91)	27.18 (17)
▲ MSCI EAFE (Net)	-5.91 (81)	1.16 (46)	7.78 (31)	6.72 (8)	11.26 (63)	7.82 (7)	22.01 (12)	-13.79 (18)	25.03 (34)
5th Percentile	2.86	8.28	9.30	6.86	18.47	9.28	24.47	-11.74	29.78
1st Quartile	-1.52	3.53	8.00	5.90	14.43	5.34	20.42	-14.91	25.74
Median	-3.04	0.94	6.72	5.00	12.79	2.86	18.26	-16.05	23.03
3rd Quartile	-5.24	-0.99	5.64	4.04	10.31	-0.05	15.94	-17.67	20.79
95th Percentile	-7.68	-6.28	4.10	3.06	7.45	-5.95	13.24	-22.12	15.81
Population	94	88	84	80	89	86	85	81	81



# Domestic Fixed Income

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Total Fixed Income  
Performance Summary (Net of Fees)

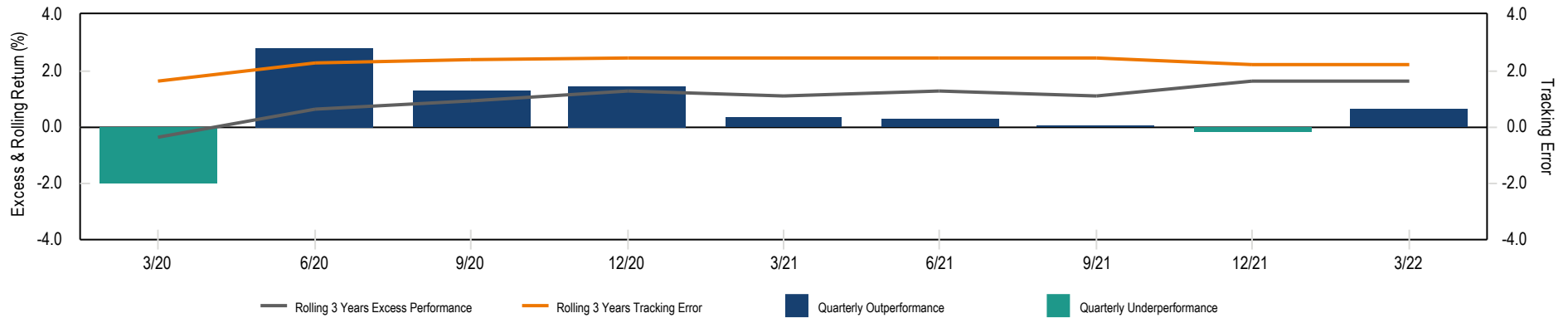
Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
<b>Total Fixed Income</b>	<b>59,502,869</b>	<b>100.0</b>	<b>-5.3</b>	<b>-3.4</b>	<b>3.3</b>	<b>3.3</b>	<b>3.7</b>	<b>-1.1</b>	<b>11.3</b>	<b>9.4</b>	<b>-0.4</b>	<b>5.6</b>
<i>Total Fixed Income Benchmark (BBgBarc Aggregate)</i>			-5.9	-4.2	1.7	2.1	2.2	-1.5	7.5	8.7	0.0	3.5
Loomis Sayles Core Plus	59,502,869	100.0	-5.3	-3.4	3.3	3.3	-	-1.1	11.3	9.4	-0.4	-
<i>Blmbg. U.S. Aggregate Index</i>			-5.9	-4.2	1.7	2.1	-	-1.5	7.5	8.7	0.0	-

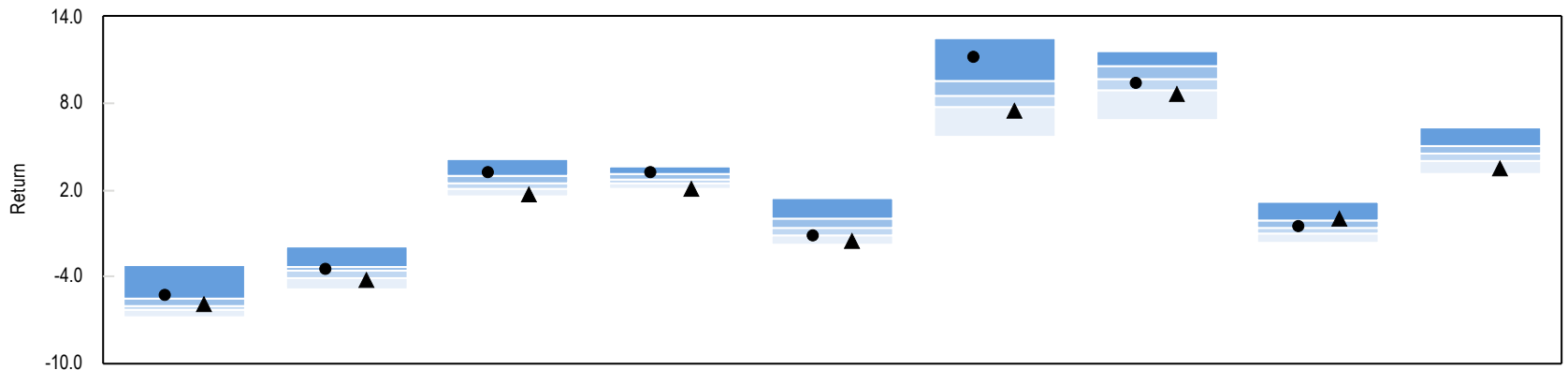
Fixed Income Effective Style Map



3 Years Rolling Annualized Excess Performance and Tracking Error



Loomis Sayles Core Plus vs. eV US Core Plus Fixed Inc



	3 Mo	1 Yr	3 Yrs	5 Yrs	2021	2020	2019	2018	2017
● Loomis Sayles Core Plus	-5.29 (16)	-3.37 (31)	3.32 (14)	3.29 (15)	-1.06 (76)	11.29 (10)	9.43 (59)	-0.42 (41)	-
▲ Blmbg. U.S. Aggregate Index	-5.93 (49)	-4.15 (77)	1.69 (94)	2.14 (93)	-1.55 (91)	7.51 (82)	8.72 (81)	0.01 (25)	3.54 (90)
5th Percentile	-3.15	-1.89	4.17	3.71	1.54	12.54	11.66	1.28	6.41
1st Quartile	-5.44	-3.26	3.00	3.11	0.11	9.62	10.59	-0.02	5.11
Median	-5.95	-3.59	2.46	2.76	-0.52	8.53	9.71	-0.61	4.58
3rd Quartile	-6.22	-4.11	2.09	2.50	-1.04	7.82	9.01	-1.02	4.10
95th Percentile	-6.79	-4.84	1.57	2.08	-1.76	5.68	6.85	-1.61	3.10
Population	112	112	108	100	114	118	119	119	122

# Alternatives

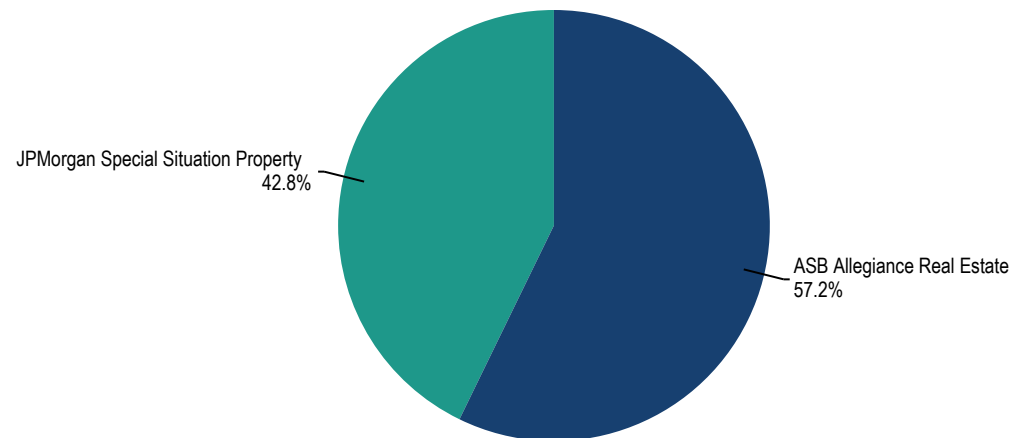
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Total Real Estate  
Performance Summary (Net of Fees)

Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
<b>Total Real Estate</b>	<b>46,874,008</b>	<b>100.0</b>	<b>7.2</b>	<b>23.5</b>	<b>9.3</b>	<b>8.0</b>	<b>9.8</b>	<b>17.3</b>	<b>1.7</b>	<b>4.0</b>	<b>7.1</b>	<b>4.2</b>
<i>NCREIF ODCE Net Monthly</i>			7.1	27.3	10.3	8.9	9.9	21.0	0.3	4.4	7.4	6.7
ASB Allegiance Real Estate	26,819,691	57.2	7.6	19.9	8.0	6.7	-	13.8	1.4	3.1	6.0	2.9
<i>NCREIF ODCE Net Monthly</i>			7.1	27.3	10.3	8.9	-	21.0	0.3	4.4	7.4	6.7
JPMorgan Special Situation Property	20,054,317	42.8	6.6	28.6	11.2	10.2	-	22.4	2.0	5.0	9.6	7.9
<i>NCREIF ODCE Net Monthly</i>			7.1	27.3	10.3	8.9	-	21.0	0.3	4.4	7.4	6.7

Total Domestic Equity  
Current Allocation

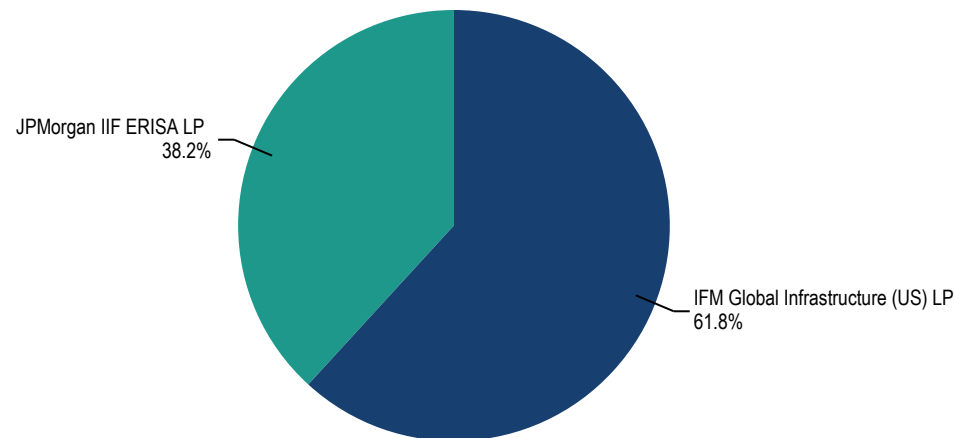


Total Infrastructure  
Performance Summary (Net of Fees)

Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
<b>Total Infrastructure</b>	<b>18,997,033</b>	<b>100.0</b>	<b>0.9</b>	<b>11.4</b>	<b>9.1</b>	<b>10.5</b>	<b>7.8</b>	<b>11.7</b>	<b>5.4</b>	<b>11.5</b>	<b>10.2</b>	<b>17.9</b>
<i>CPI + 5%</i>			4.4	14.0	9.4	8.5	7.4	12.4	6.4	7.4	7.0	7.2
IFM Global Infrastructure (US) LP	11,739,276	61.8	1.2	16.7	11.0	13.2	9.8	17.4	3.1	14.6	15.8	21.1
<i>CPI + 5%</i>			4.4	14.0	9.4	8.5	7.4	12.4	6.4	7.4	7.0	7.2
JPMorgan IIF ERISA LP	7,257,757	38.2	0.3	4.2	6.5	7.3	5.5	4.0	8.4	8.0	4.2	14.2
<i>CPI + 5%</i>			4.4	14.0	9.4	8.5	7.4	12.4	6.4	7.4	7.0	7.2

Total Domestic Equity  
Current Allocation



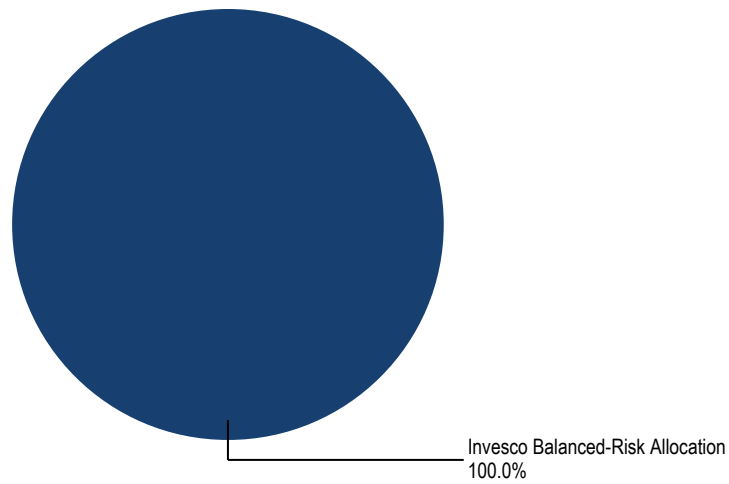


Total Multi-Asset  
Performance Summary (Net of Fees)

Western States Office & Professional Employees Pension Fund  
Period Ending: March 31, 2022

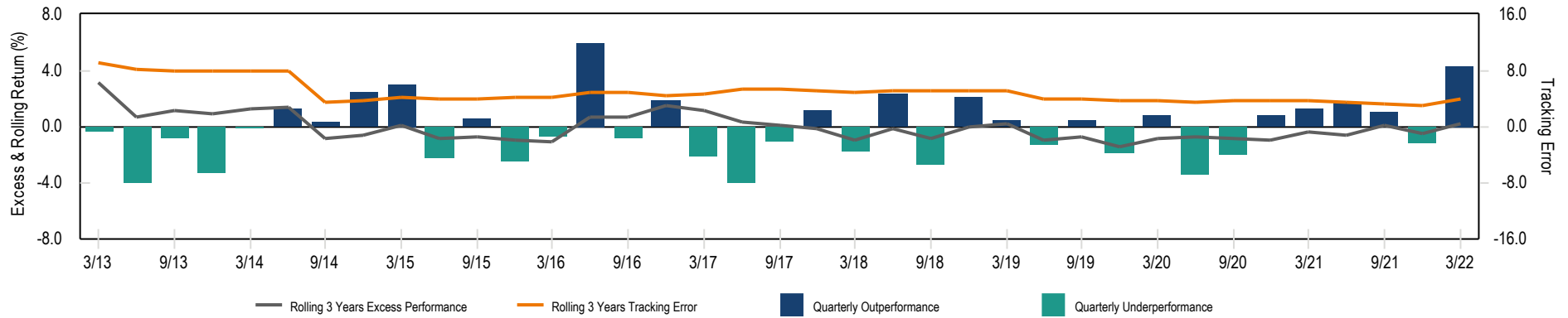
	Market Value	% of Portfolio	3 Mo	1 Yr	3 Yrs	5 Yrs	10 Yrs	2021	2020	2019	2018	2017
<b>Total Multi-Asset</b>	<b>62,185,878</b>	<b>100.0</b>	<b>-1.4</b>	<b>7.4</b>	<b>8.9</b>	<b>7.3</b>	<b>6.5</b>	<b>10.9</b>	<b>10.8</b>	<b>15.7</b>	<b>-5.8</b>	<b>10.6</b>
<i>60% MSCI ACWI Net/40% FTSE WGBI</i>			-5.8	1.2	8.4	7.7	6.3	7.8	14.5	18.2	-5.8	17.1
Invesco Balanced-Risk Allocation	62,185,878	100.0	-1.4	7.4	8.9	7.3	6.1	10.9	10.8	15.7	-5.8	10.5
<i>60% MSCI ACWI Net/40% FTSE WGBI</i>			-5.8	1.2	8.4	7.7	6.3	7.8	14.5	18.2	-5.8	17.1

Total Domestic Equity  
Current Allocation

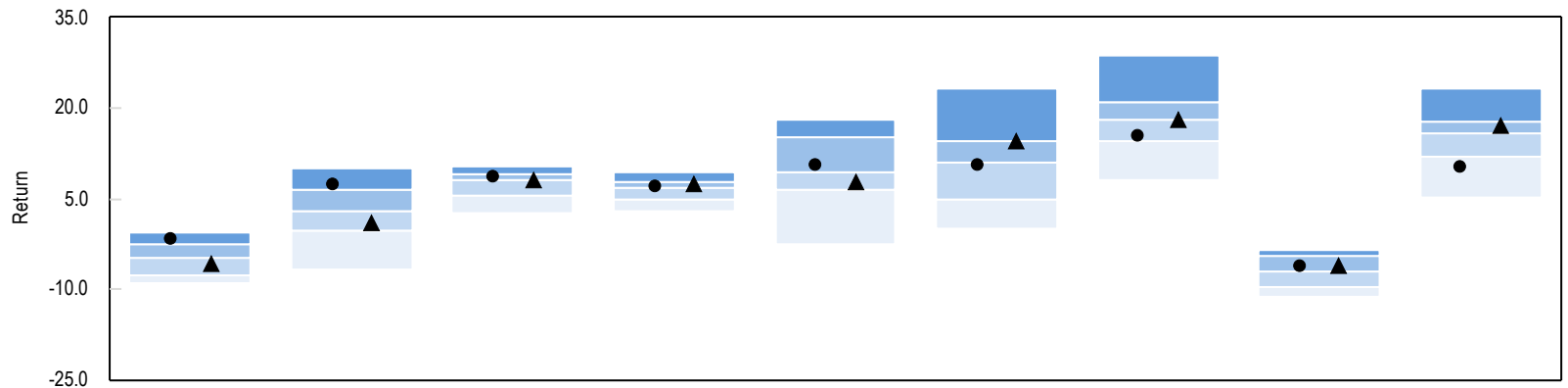


Managers need 3 years of history to be included in the style map.

3 Years Rolling Annualized Excess Performance and Tracking Error



Invesco Balanced-Risk Allocation vs. eV Global Balanced



	3 Mo	1 Yr	3 Yrs	5 Yrs	2021	2020	2019	2018	2017
● Invesco Balanced-Risk Allocation	-1.41 (13)	7.44 (19)	8.92 (42)	7.28 (39)	10.89 (43)	10.83 (51)	15.67 (71)	-5.82 (32)	10.48 (85)
▲ 60% MSCI ACWI Net/40% FTSE WGBI	-5.75 (60)	1.15 (70)	8.38 (49)	7.67 (33)	7.76 (73)	14.53 (28)	18.17 (52)	-5.85 (32)	17.14 (34)
5th Percentile	-0.52	10.32	10.63	9.40	18.13	23.46	28.98	-3.29	23.43
1st Quartile	-2.43	6.53	9.31	7.96	15.18	14.82	21.25	-4.32	18.05
Median	-4.78	2.96	8.34	6.95	9.67	11.22	18.27	-6.83	16.05
3rd Quartile	-7.58	-0.13	5.57	4.97	6.72	4.99	14.84	-9.49	11.98
95th Percentile	-8.77	-6.75	2.89	3.00	-2.56	0.07	8.27	-11.27	5.21
Population	23	23	22	20	26	31	35	39	39

#### Performance Return Calculations

Performance is calculated using Modified Dietz and for time periods with large cash flow (generally greater than 10% of portfolio value), Time Weighted Rates of Return (TWRR) methodologies. Monthly returns are geometrically linked and annualized for periods longer than one year.

#### Data Source

Verus is an independent third party consulting firm and calculates returns from best source book of record data. Returns calculated by Verus may deviate from those shown by the manager in part, but not limited to, differences in prices and market values reported by the custodian and manager, as well as significant cash flows into or out of an account. It is the responsibility of the manager and custodian to provide insight into the pricing methodologies and any difference in valuation.

#### Illiquid Alternatives

Due to the inability to receive final valuation prior to report production, closed end funds (including but are not limited to Real Estate, Hedge Funds, Private Equity, and Private Credit) performance is typically reported at a one-quarter lag. Valuation is reported at a one-quarter lag, adjusted for current quarter flow (cash flows are captured real time). Closed end fund performance is calculated using a time-weighted return methodology consistent with all portfolio and total fund performance calculations. For Private Markets, performance reports also include Verus-calculated multiples based on flows and valuations (e.g. DPI and TVPI) and manager-provided IRRs.

#### Manager Line Up

<u>Manager</u>	<u>Fund Incepted</u>	<u>Data Source</u>	<u>Manager</u>	<u>Fund Incepted</u>	<u>Data Source</u>
BlackRock Equity Index NL	4/30/2010	BlackRock	JPMorgan SSP	12/31/2014	JP Morgan
INTECH US Adaptive Volatility	8/3/2018	INTECH	IFM Global Infrastructure (US) LP	1/31/2009	IFM
Vanguard Small Cap Index Ins	4/14/2021	US Bank	JPMorgan IIF ERISA LP	9/30/2010	JP Morgan
WCM Focused International Growth	7/1/2016	WCM	Invesco Balanced-Risk Allocation	1/31/2010	Invesco
Causeway International Value	7/27/2016	US Bank	US Bank Checking Account	N/A	US Bank
Loomis Sayles Core Plus	3/21/2017	Loomis Sayles	US Bank Clearing Account	N/A	US Bank
ASB Allegiance Real Estate	3/31/2015	ASB			

#### Policy & Custom Index Composition

Policy Index:	45% MSCI World, 25% Bloomberg Aggregate, 10% NCREIF-ODCE Net, 20% (60%MSCI ACWI Net/40% CITI WGBI)
Target Asset Allocation Policy:	25% Dow Jones US Total Stock, 20% MSCI ACWI ex US IMI, 20% Bloomberg Aggregate, 10% NCREIF-ODCE, 5% CPI + 5%, and 20% (60%MSCI ACWI Net/40% CITI WGBI).

# Glossary

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**Allocation Effect:** An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

**Alpha:** The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: Portfolio Return - [Risk-free Rate + Portfolio Beta x (Market Return - Risk-free Rate)].

**Benchmark R-squared:** Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R-squared, the more appropriate the benchmark is for the manager.

**Beta:** A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

**Book-to-Market:** The ratio of book value per share to market price per share. Growth managers typically have low book-to-market ratios while value managers typically have high book-to-market ratios.

**Capture Ratio:** A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

**Correlation:** A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of -1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

**Excess Return:** A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

**Information Ratio:** A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

**Interaction Effect:** An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

**Portfolio Turnover:** The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

**Price-to-Earnings Ratio (P/E):** Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price-to-earnings ratios whereas value managers hold stocks with low price-to-earnings ratios.

**R-Squared:** Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

**Selection Effect:** An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

**Sharpe Ratio:** A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: Portfolio Excess Return / Portfolio Standard Deviation.

**Sortino Ratio:** Measures the risk-adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

**Standard Deviation:** A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two-thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

**Style Analysis:** A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

**Style Map:** A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two-dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from -1 to 1 on each axis and are dependent on the Style Indices comprising the Map.

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