

Wilshire



Wilshire Advisors

City of Grand Rapids Police & Fire Retirement System
Executive Summary of Investment Performance

As of June 30, 2022

Quarterly Market Review

Asset Class Performance

Asset Class Returns - Best to Worst

2017	2018	2019	2020	2021	2022 YTD	Annualized 5-Year as of 6/22
Emrg Mrkts 37.7%	T-Bills 1.9%	U.S. Equity 31.0%	U.S. Equity 20.8%	REITs 46.2%	Commodities 18.4%	U.S. Equity 10.8%
Developed 25.6%	Core Bond 0.0%	REITs 25.8%	Emrg Mrkts 18.7%	Commodities 27.1%	T-Bills 0.0%	Commodities 8.4%
U.S. Equity 21.0%	U.S. TIPS -1.3%	Developed 22.7%	U.S. TIPS 11.0%	U.S. Equity 26.7%	U.S. TIPS -8.9%	REITs 5.3%
High Yield 7.5%	High Yield -2.1%	Emrg Mrkts 18.9%	Developed 8.3%	Developed 11.8%	Core Bond -10.3%	U.S. TIPS 3.2%
REITs 4.2%	REITs -4.8%	High Yield 14.3%	Core Bond 7.5%	U.S. TIPS 6.0%	High Yield -14.2%	Developed 2.7%
Core Bond 3.6%	U.S. Equity -5.3%	Core Bond 8.7%	High Yield 7.1%	High Yield 5.3%	Emrg Mrkts -17.5%	Emrg Mrkts 2.5%
U.S. TIPS 3.0%	Commodities -11.2%	U.S. TIPS 8.4%	T-Bills 0.7%	T-Bills 0.0%	Developed -19.3%	High Yield 2.1%
Commodities 1.7%	Developed -13.4%	Commodities 7.7%	Commodities -3.1%	Core Bond -1.5%	U.S. Equity -20.9%	T-Bills 1.1%
T-Bills 0.8%	Emrg Mrkts -14.2%	T-Bills 2.3%	REITs -7.9%	Emrg Mrkts -2.2%	REITs -21.6%	Core Bond 0.9%

Data Sources: Bloomberg

Note: Developed asset class is developed equity markets ex-U.S., ex-Canada

Market Commentary

U.S. Equity

The U.S. stock market down -16.8% for the second quarter, the largest quarterly drop since the global COVID shutdown in early 2020. Every sector was in negative territory, with Consumer Discretionary (-26.3%), Information Technology (-21.1%) and Communication Services (-21.0%) representing the worst performing sectors. Large and small-cap performed similarly while growth stocks underperformed value.

Rising inflation, which began in late 2020-early 2021, continues to accelerate this year, reaching levels not seen in four decades. While energy is far and away the leading expenditure category in terms of price increases (up 35% for the 12-months ending May), surging prices can be found in nearly every segment of the overall CPI. The largest component of the index, shelter, is up 5.5% with the next largest segment, food, up 10% during the past year. Finally, transportation costs have accelerated with new and used vehicles up in the double-digits and transportation services up 8%. With such widespread inflationary pressures, the ability for the Federal Reserve to achieve a “soft landing” is quickly dissipating.

Non-U.S. Equity

High inflation has become a global issue with rates in Europe approaching U.S. levels. In Germany, economic growth is slowing on both inflation and falling exports. While economic indicators in the U.K. are still in the expansion range, measures of new orders have fallen while business confidence levels have slumped. In China, new COVID controls were imposed in some areas but have since been lifted – although early economic indicators are not yet registering a strong return of growth.

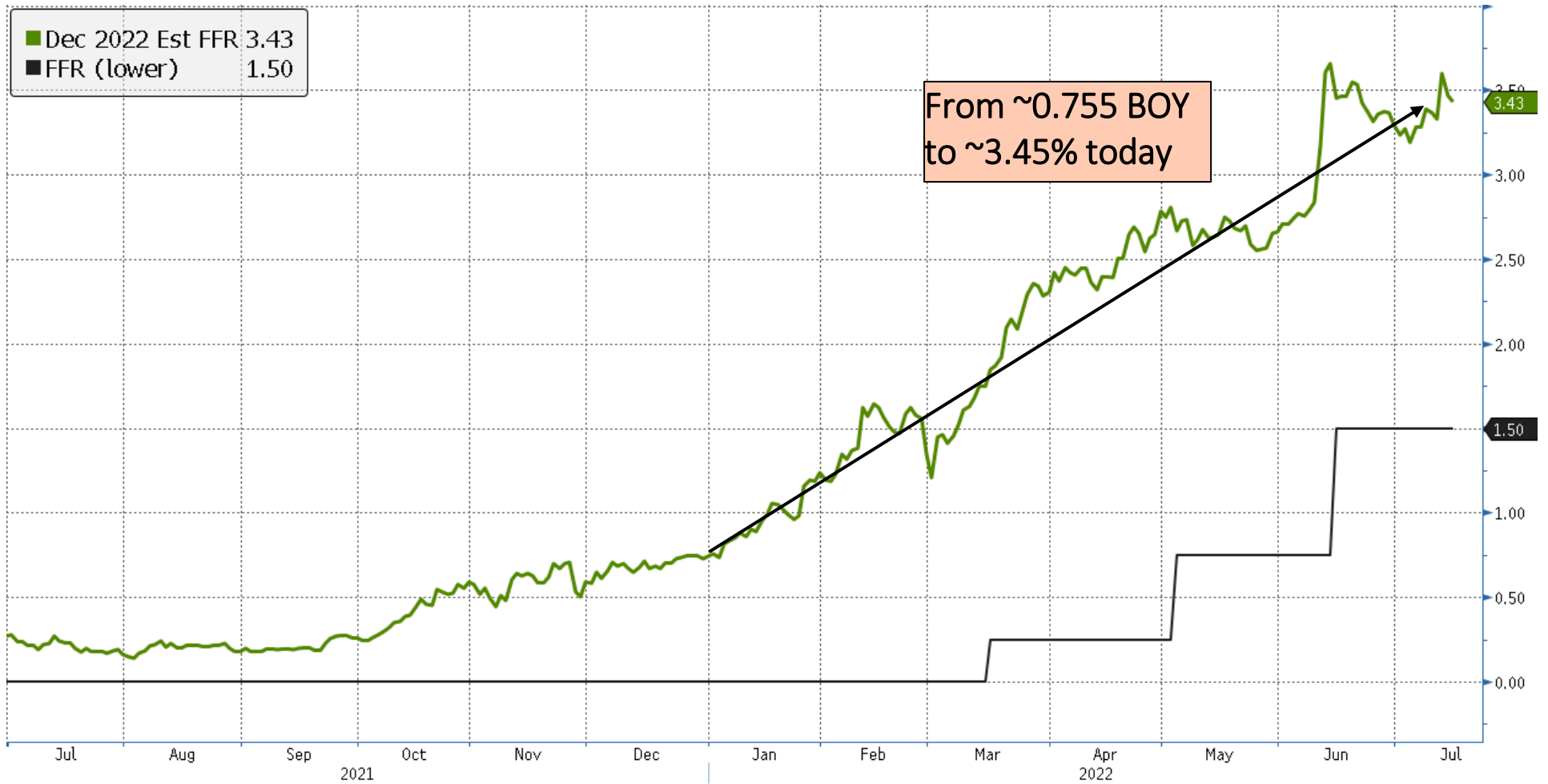
Fixed Income

The U.S. Treasury yield curve was up across all maturities with the 10-year at 3.02%, up 68 basis points from March. The FOMC increased their overnight rate by 0.50% in May and 0.75% in June; targeting a range of 1.50% to 1.75%. Public statements from the Federal Reserve grew more pessimistic during the quarter as Fed chair Jerome Powell stated after the June meeting that controlling inflation at their 2% target, in exchange for a higher unemployment rate, would be a “successful outcome.”

June 2022 Asset Class Assumptions

	Equity						Fixed Income					Real Assets						
	US Stock	Dev ex-US Stock	Emg Stock	Global ex-US Stock	Global Stock	Private Equity	Cash	Core Bond	LT Core Bond	TIPS	High Yield	Dev ex-US Bond (Hdg)	US RES	Global RES	Private RE	Cmdty	Real Assets	US CPI
Compound Return (%)	6.00	7.00	7.00	7.25	6.60	10.05	3.15	4.05	4.30	3.15	6.25	2.20	5.20	5.35	6.50	5.50	6.75	2.35
Expected Risk (%)	17.00	18.00	26.00	19.10	17.10	28.00	0.75	4.25	8.90	6.00	10.00	4.25	17.50	16.45	14.00	16.00	10.35	1.75
Cash Yield (%)	1.65	3.30	2.60	3.10	2.20	0.00	3.15	4.55	4.60	3.80	9.10	2.95	3.45	3.45	2.30	3.15	2.50	0.00
Growth Exposure	8.00	8.00	8.00	8.00	8.00	13.50	0.00	-0.85	-2.25	-3.00	4.00	-1.00	6.00	6.00	3.50	0.00	1.80	0.00
Inflation Exposure	-3.00	0.00	5.00	1.50	-1.25	-3.80	0.00	-2.50	-6.70	2.50	-1.00	-3.00	1.00	1.80	1.00	12.00	4.85	1.00
Correlations																		
US Stock	1.00																	
Dev ex-US Stock (USD)	0.81	1.00																
Emerging Mkt Stock	0.74	0.74	1.00															
Global ex-US Stock	0.83	0.96	0.87	1.00														
Global Stock	0.95	0.92	0.83	0.94	1.00													
Private Equity	0.74	0.64	0.62	0.67	0.74	1.00												
Cash Equivalents	-0.05	-0.09	-0.05	-0.08	-0.07	0.00	1.00											
Core Bond	0.28	0.13	0.00	0.09	0.20	0.31	0.19	1.00										
LT Core Bond	0.31	0.16	0.01	0.12	0.23	0.32	0.11	0.92	1.00									
TIPS	-0.05	0.00	0.15	0.05	0.00	-0.03	0.20	0.59	0.47	1.00								
High Yield Bond	0.54	0.39	0.49	0.45	0.51	0.34	-0.10	0.25	0.32	0.05	1.00							
Dev ex-US Bond (Hdg)	0.16	0.25	-0.01	0.17	0.18	0.26	0.10	0.66	0.65	0.39	0.26	1.00						
US RE Securities	0.58	0.47	0.44	0.49	0.56	0.50	-0.05	0.17	0.23	0.10	0.56	0.05	1.00					
Global RE Securities	0.64	0.58	0.56	0.61	0.65	0.58	-0.05	0.17	0.22	0.11	0.61	0.03	0.96	1.00				
Private Real Estate	0.54	0.44	0.44	0.47	0.52	0.51	-0.05	0.19	0.25	0.09	0.57	0.05	0.77	0.75	1.00			
Commodities	0.25	0.34	0.39	0.38	0.32	0.27	0.00	-0.02	-0.02	0.25	0.29	-0.10	0.25	0.28	0.25	1.00		
Real Assets	0.48	0.51	0.58	0.57	0.54	0.47	-0.02	0.23	0.25	0.39	0.56	0.05	0.70	0.75	0.70	0.65	1.00	
Inflation (CPI)	-0.10	-0.15	-0.13	-0.15	-0.13	-0.10	0.10	-0.12	-0.12	0.15	-0.08	-0.08	0.05	0.03	0.05	0.44	0.26	1.00

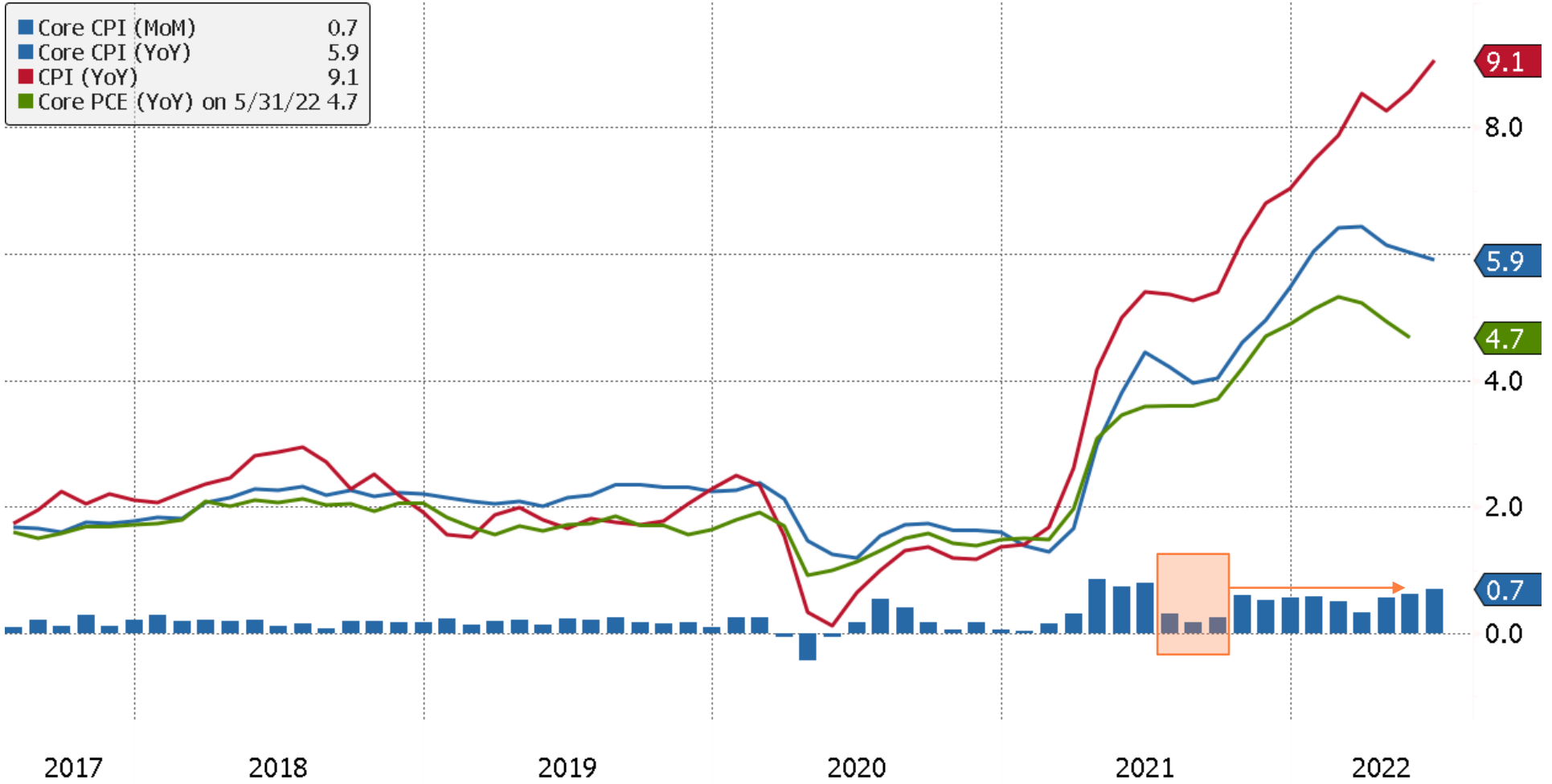
How Quickly Discounting Can Change...



Data Source: Bloomberg

Any Signs of Inflation Slowing?

Core CPI (MoM)	0.7
Core CPI (YoY)	5.9
CPI (YoY)	9.1
Core PCE (YoY) on 5/31/22	4.7



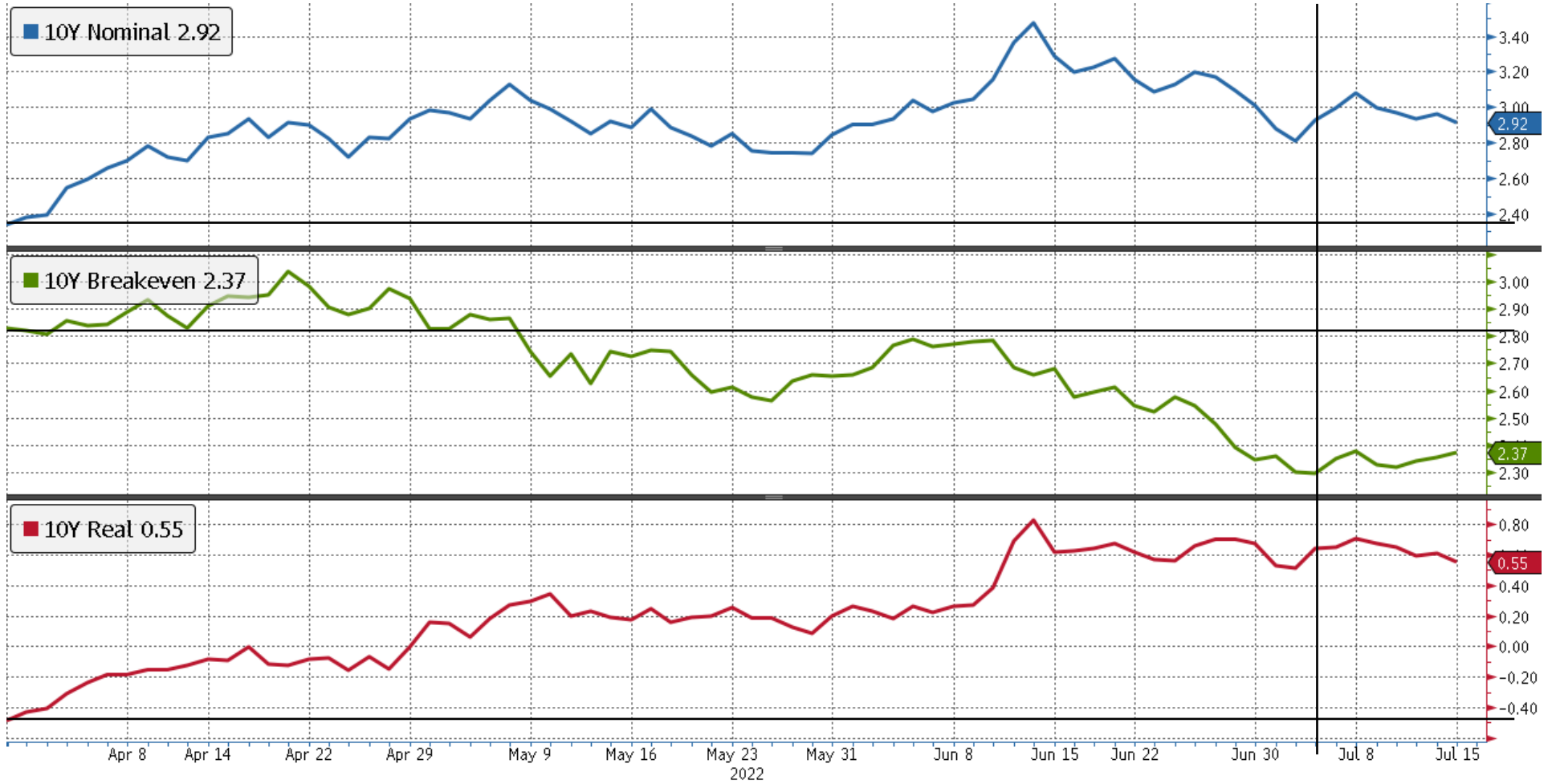
CPUPXCHG Index (US CPI Urban Consumers Less Food & Energy MoM SA) CPI & PCE Monthly 18JUL2017-17JUL2022

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Data Source: Bloomberg

Quarterly Rate Moves (10Y Nominal, Real & BEI)

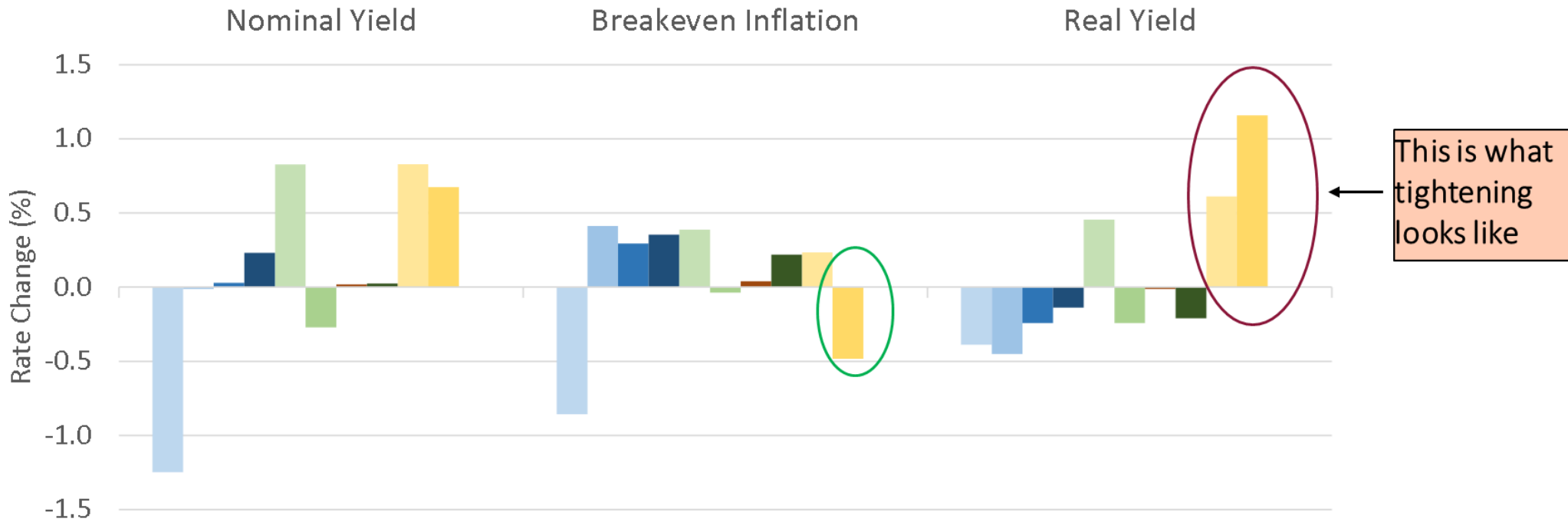


Data Source: Bloomberg

Rate Changes (2020 – YTD 2022)

Quarterly Rate Changes

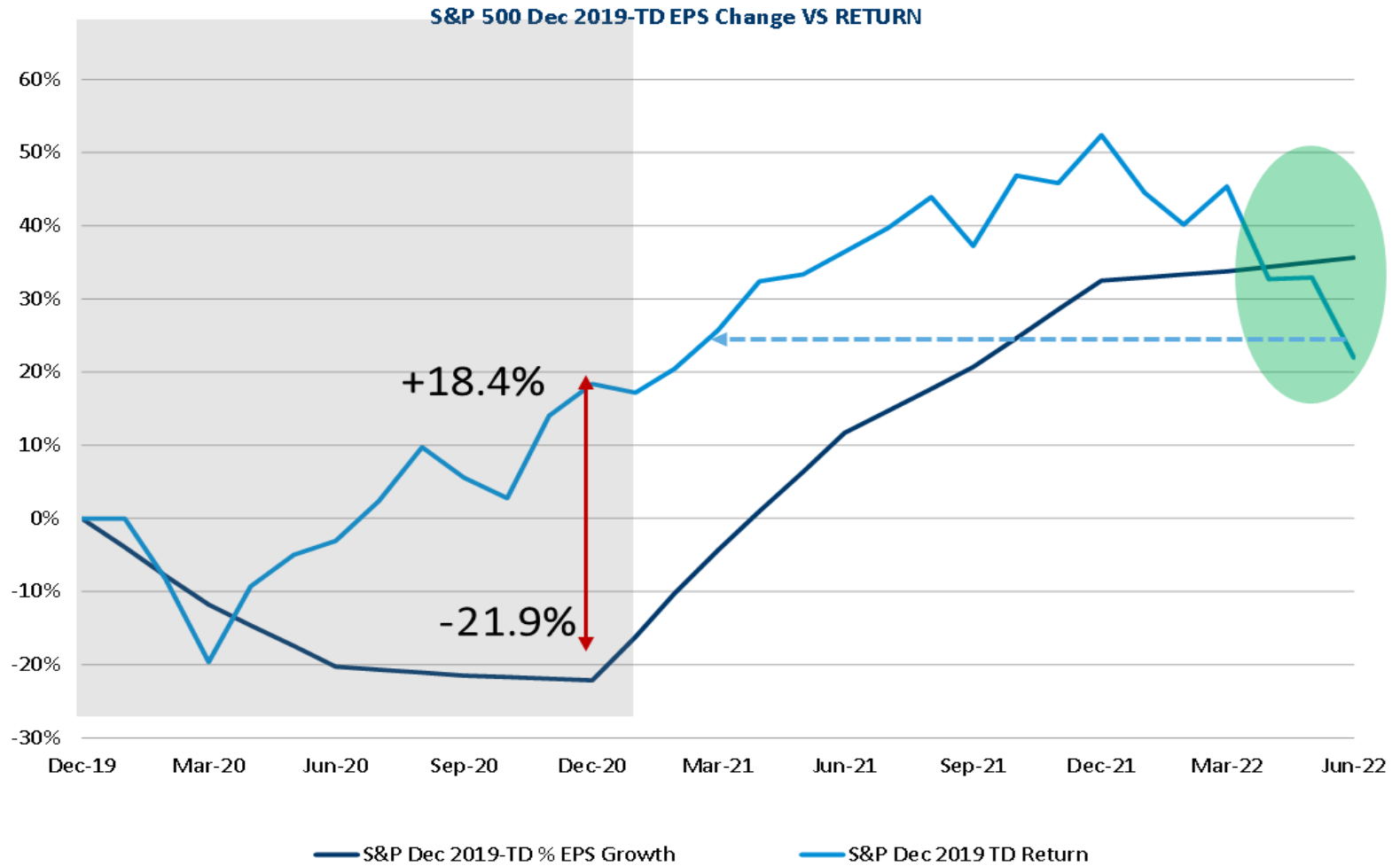
- Q1 2020
- Q2 2020
- Q3 2020
- Q4 2020
- Q1 2021
- Q2 2021
- Q3 2021
- Q4 2021
- Q1 2022
- Q2 2022
- QTD (7/17)



This is what tightening looks like

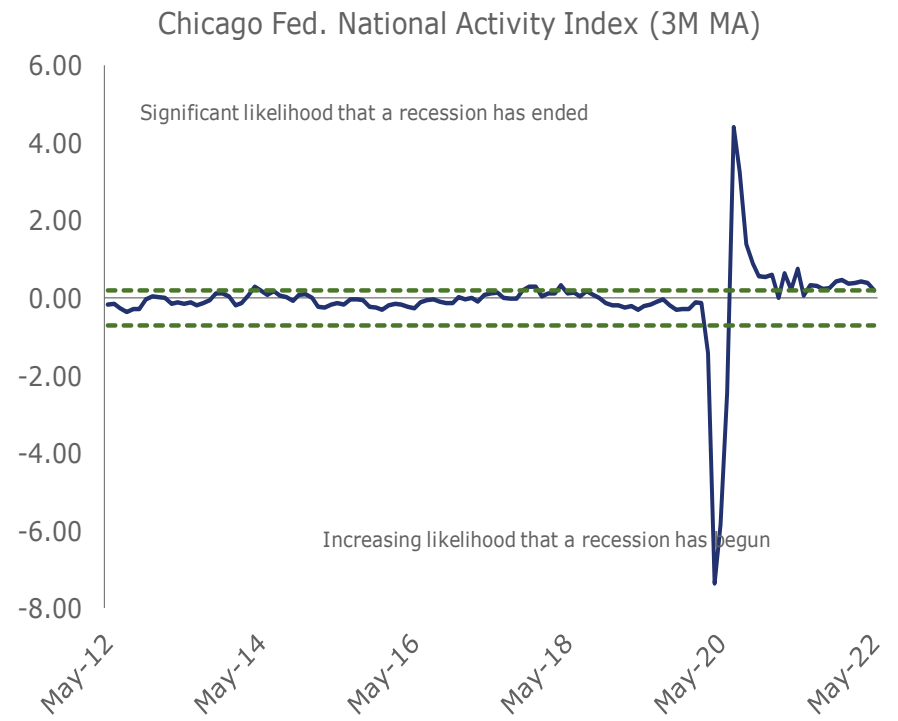
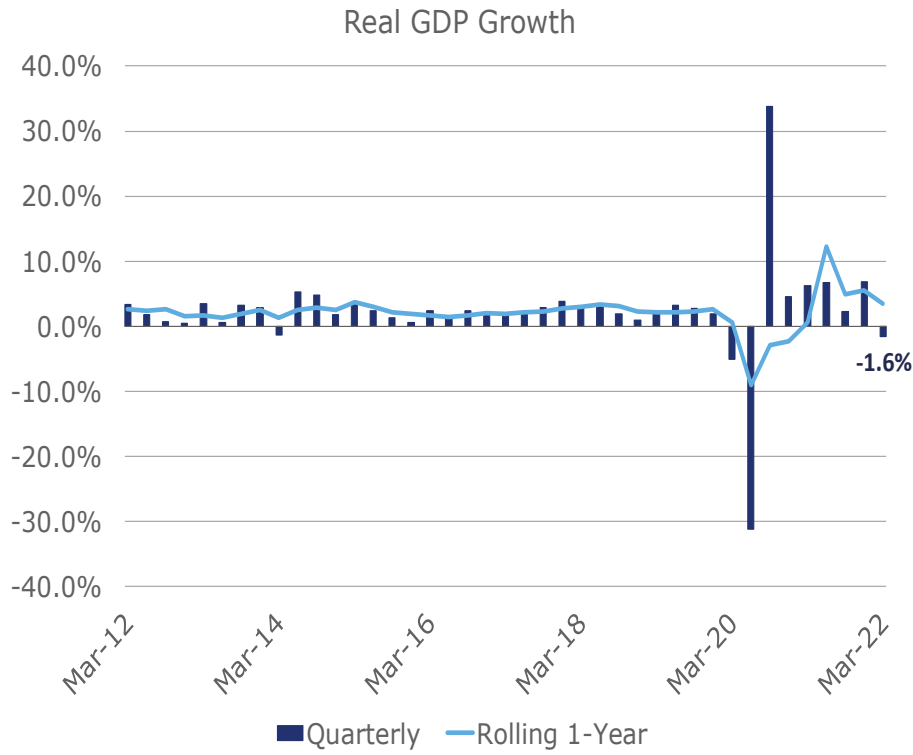
Data Source: Bloomberg

Another call back (this time from Jan 2021): EPS say...

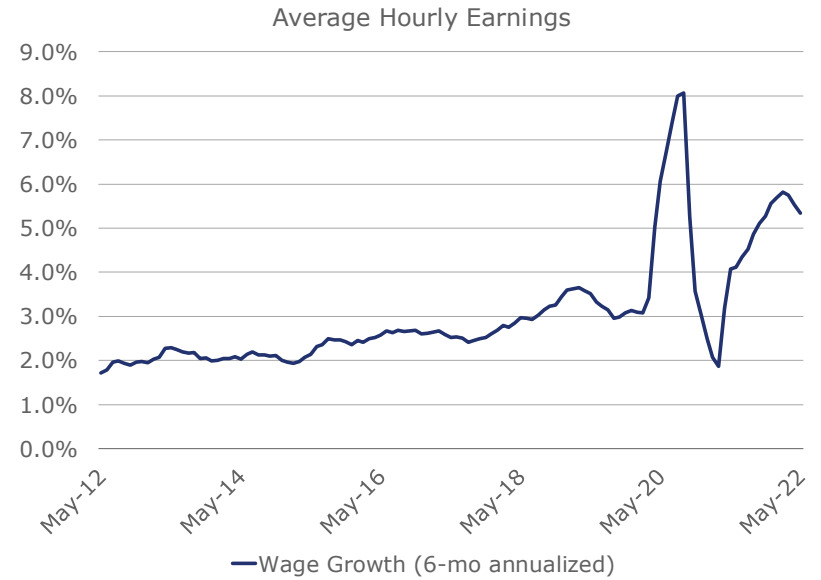
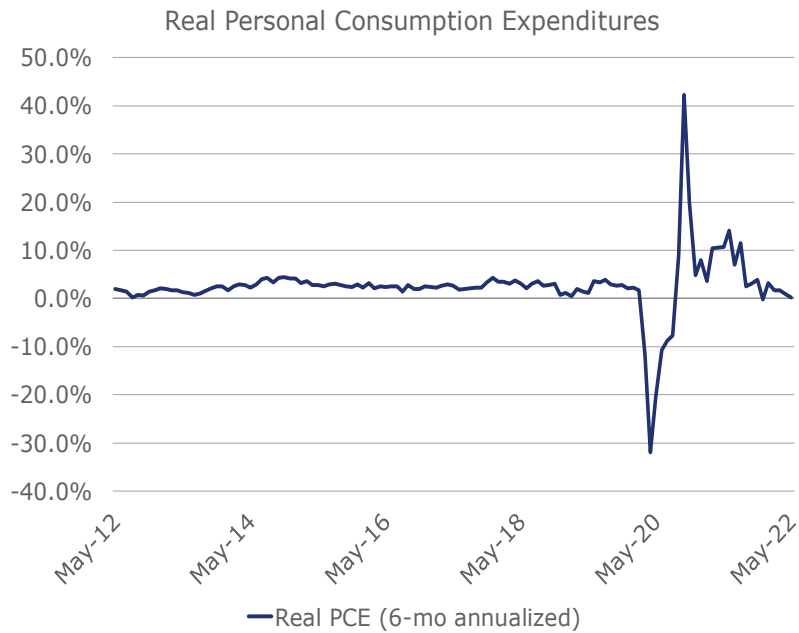
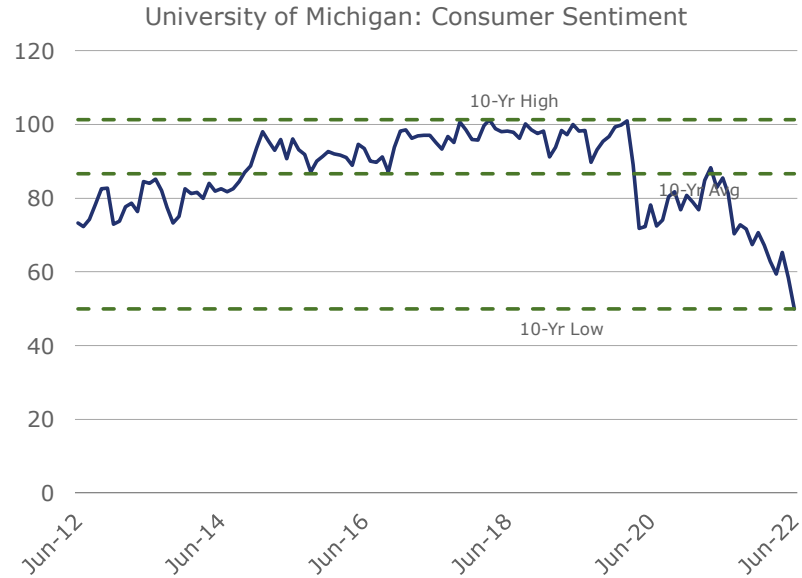


Data Source: S&P, Bloomberg

Economic Growth

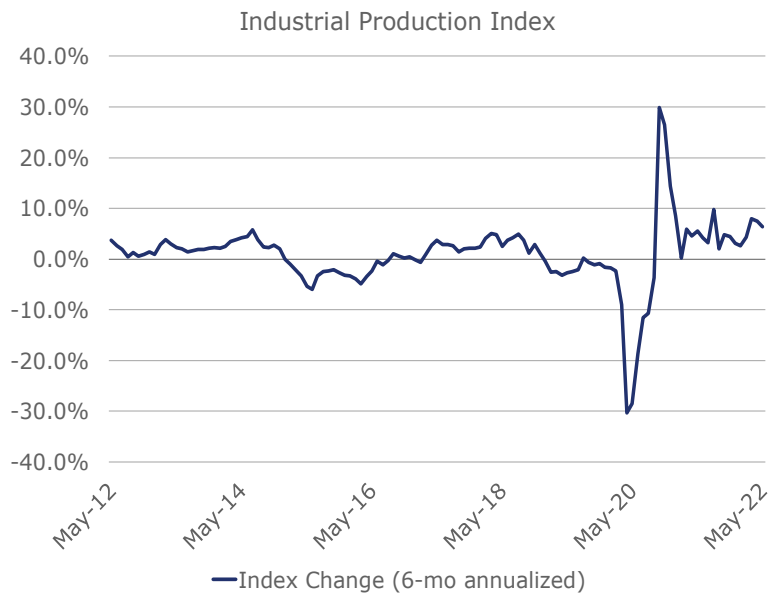
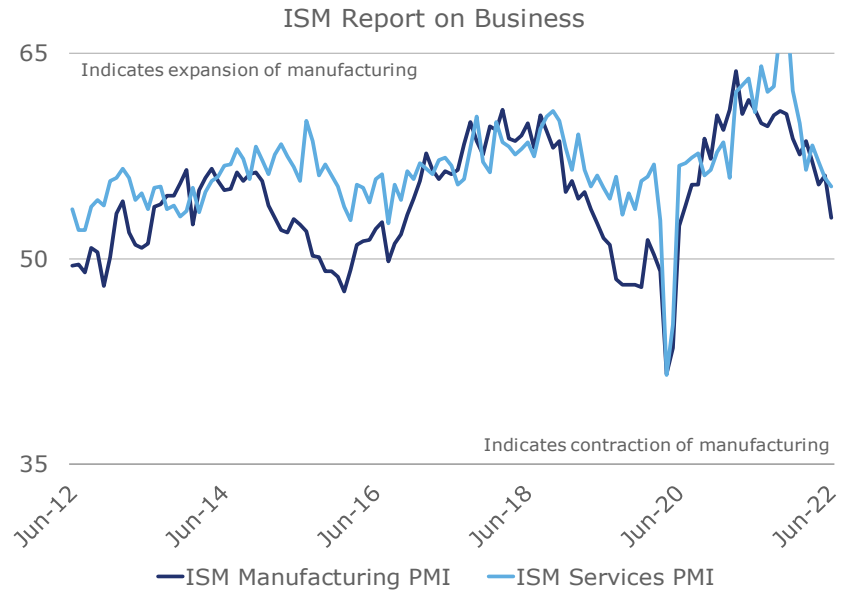


Consumer Activity

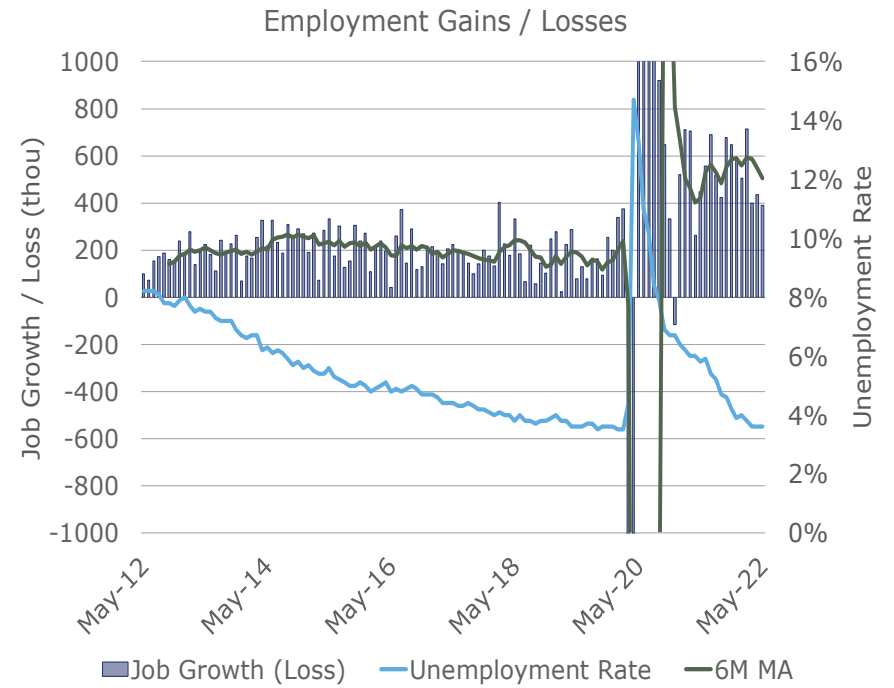
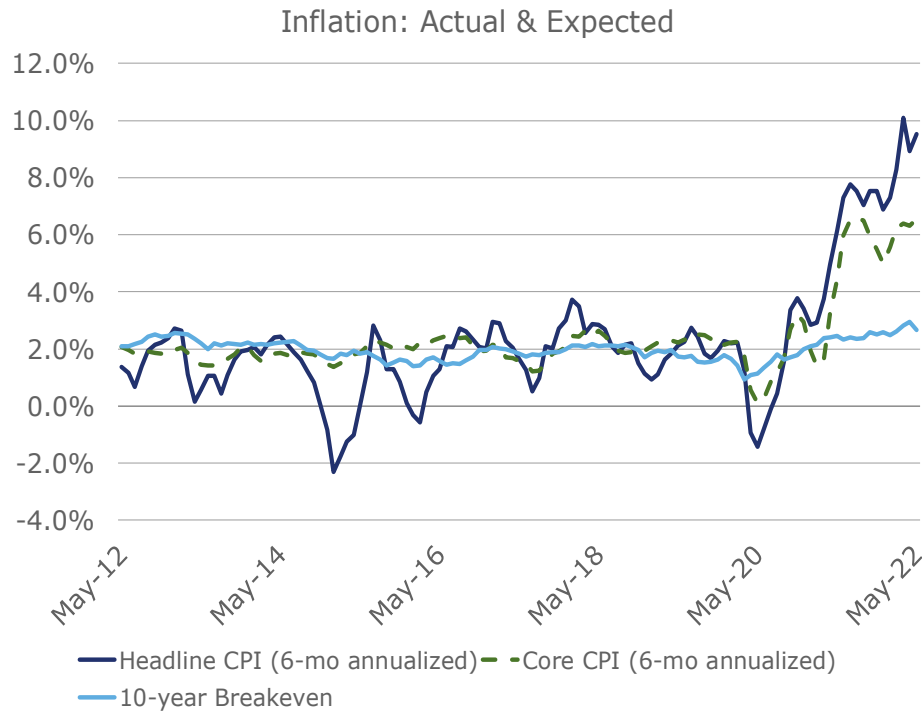


Data Sources: Bloomberg

Business Activity



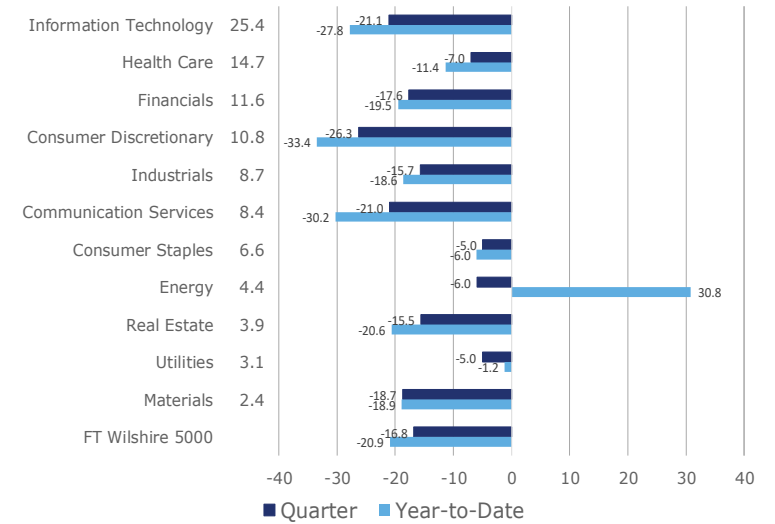
Inflation and Employment



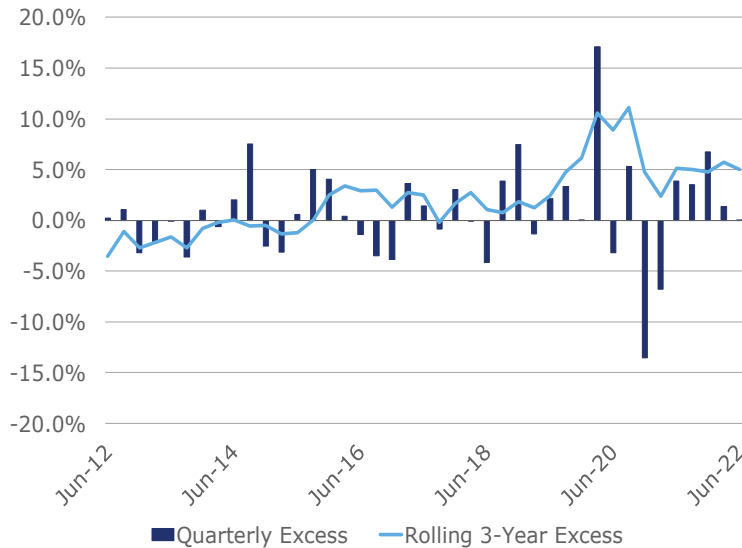
U.S. Equity Market

As of 6/30/2022	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
FT Wilshire 5000	-16.8	-20.9	-13.2	10.2	10.8	12.7
Wilshire U.S. Large Cap	-16.8	-20.8	-12.3	10.7	11.3	13.0
Wilshire U.S. Small Cap	-16.8	-21.8	-21.7	5.4	6.1	10.1
Wilshire U.S. Large Growth	-21.4	-27.7	-18.3	12.2	13.2	14.5
Wilshire U.S. Large Value	-11.2	-11.8	-4.8	8.9	9.3	11.5
Wilshire U.S. Small Growth	-18.2	-26.7	-28.2	3.9	6.3	10.1
Wilshire U.S. Small Value	-15.5	-17.0	-14.6	6.8	5.7	10.0
Wilshire REIT Index	-18.5	-21.6	-6.7	4.0	5.3	7.3
MSCI USA Min. Vol. Index	-9.1	-12.6	-3.2	6.3	9.6	11.7
FTSE RAFI U.S. 1000 Index	-12.7	-12.7	-5.6	11.0	10.1	12.4

U.S. Sector Weight and Return (%)



Large Cap vs Small Cap



Large Growth vs Large Value

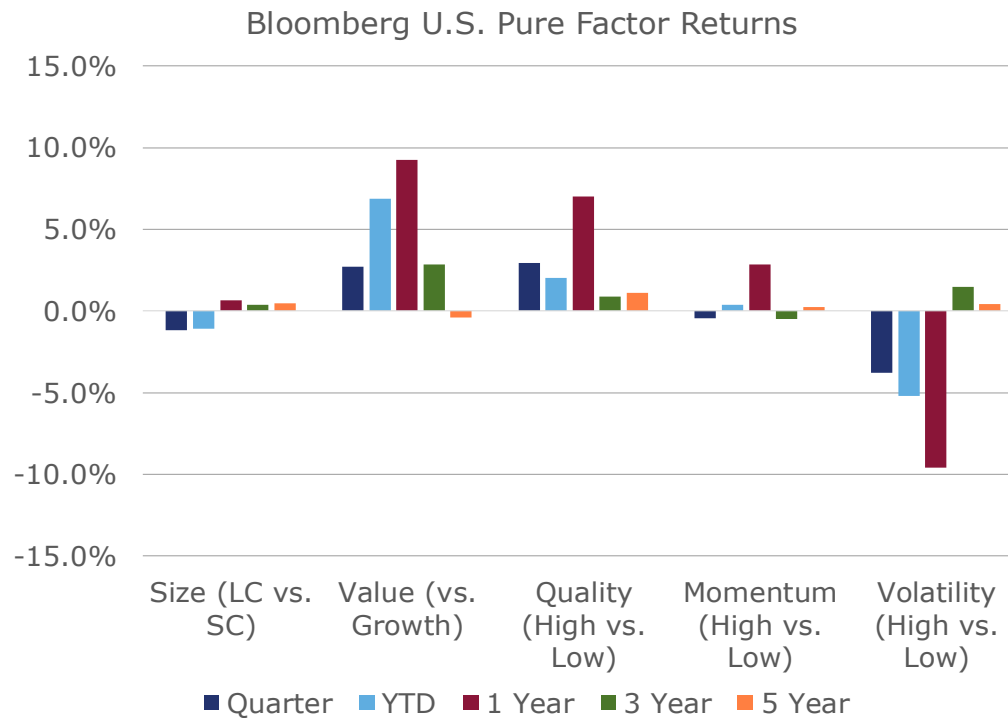


Data Sources: Bloomberg, Wilshire Atlas

U.S. Factor Returns

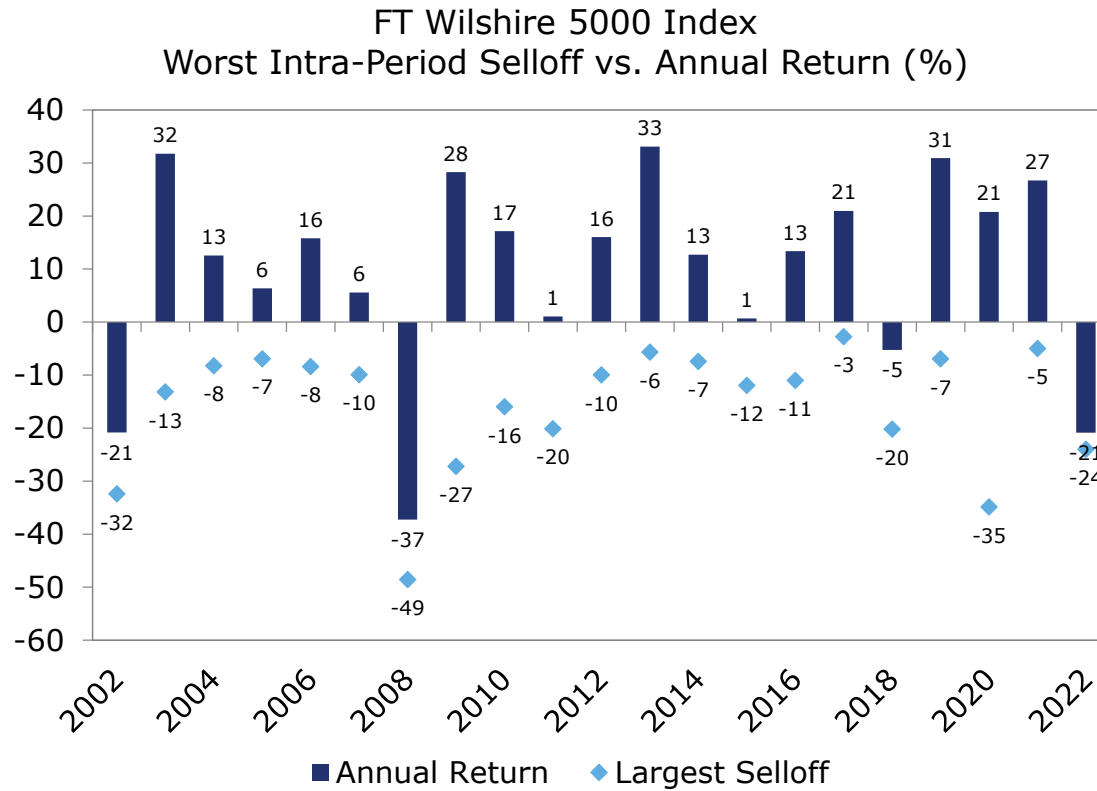
Factor returns represent the contribution from large cap, value, etc. stocks within Bloomberg's Portfolio & Risk Analytics module

Value stocks have rebounded during the past year



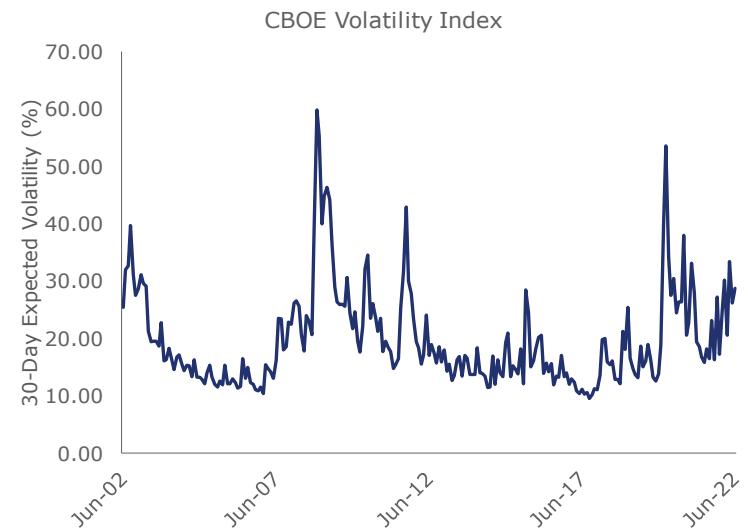
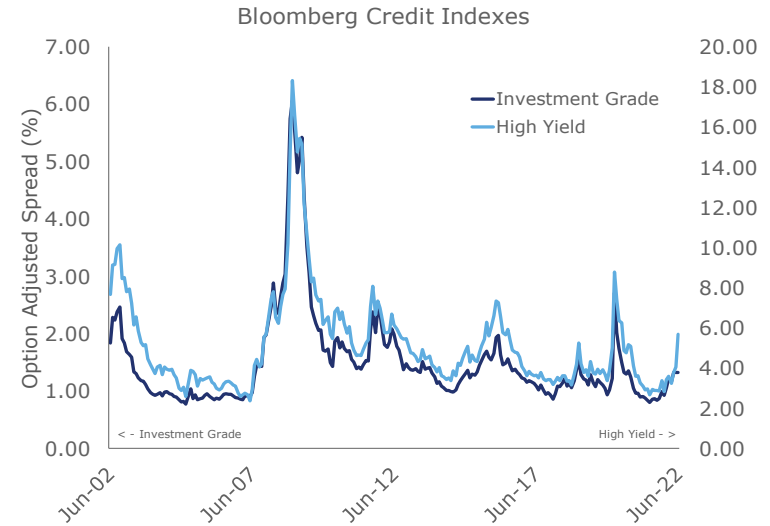
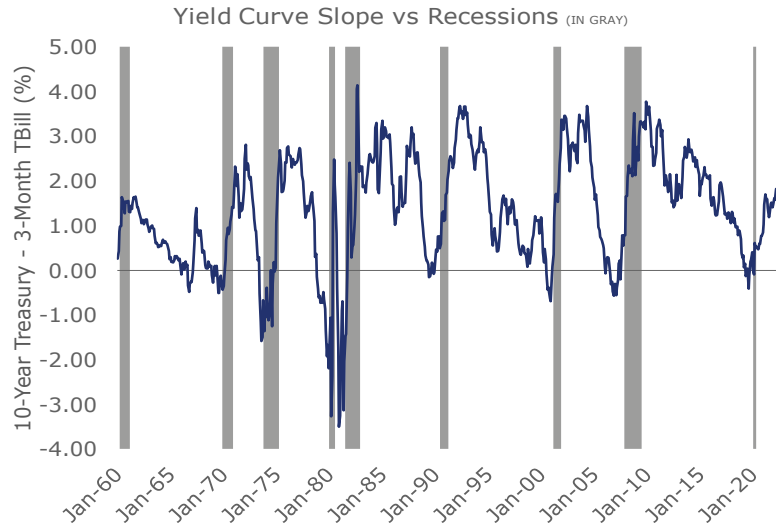
Annual Equity Market Selloffs

U.S. equity has been selling-off all year, hitting its last market high on January 3rd

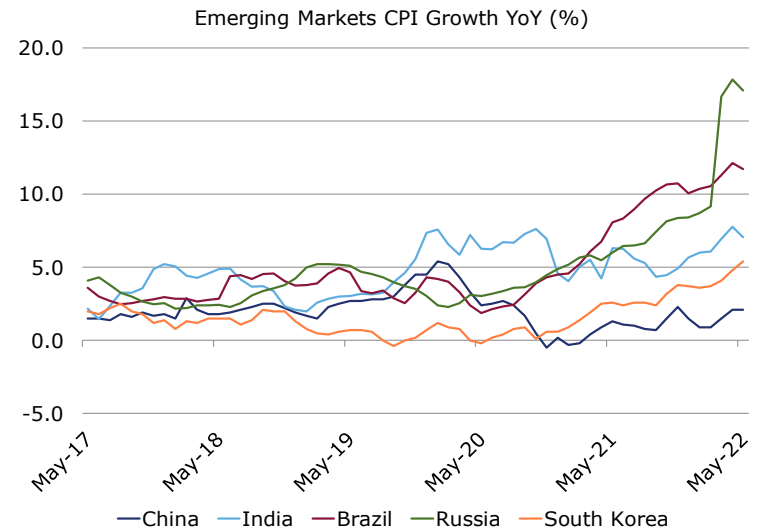
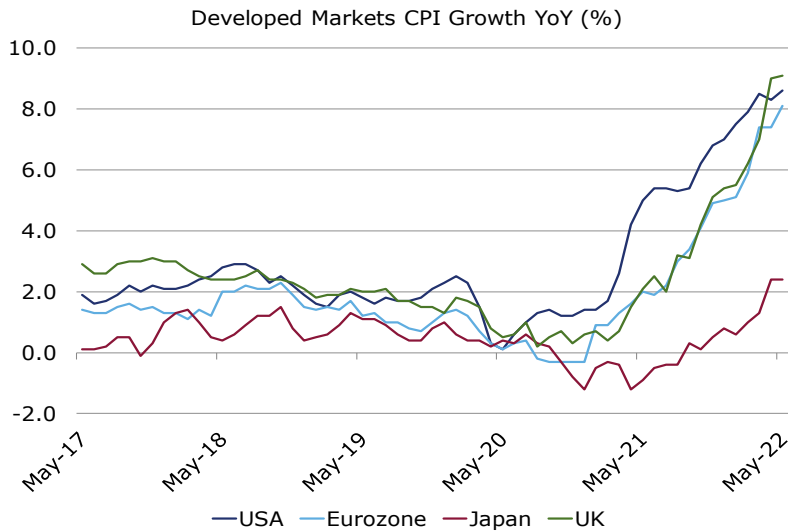
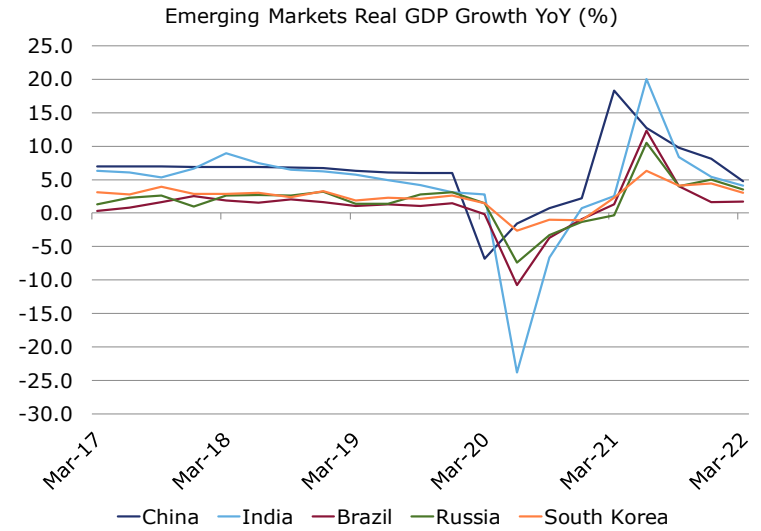
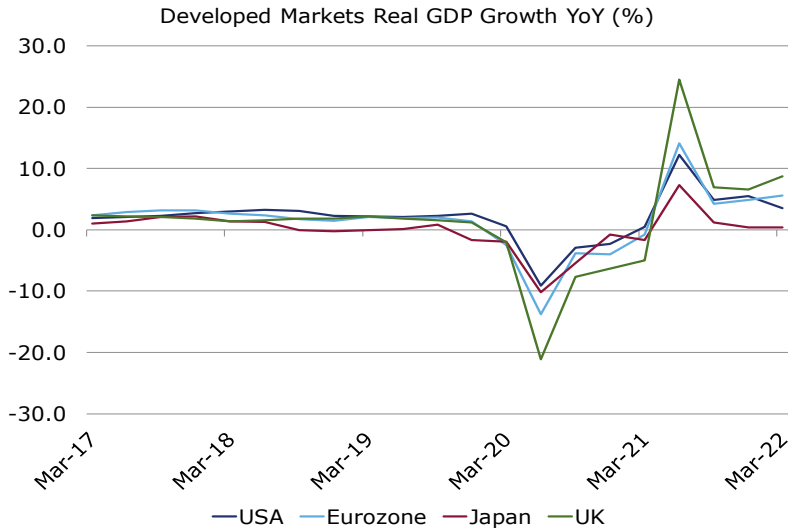


Data Sources: Wilshire Web, Bloomberg

Risk Monitor



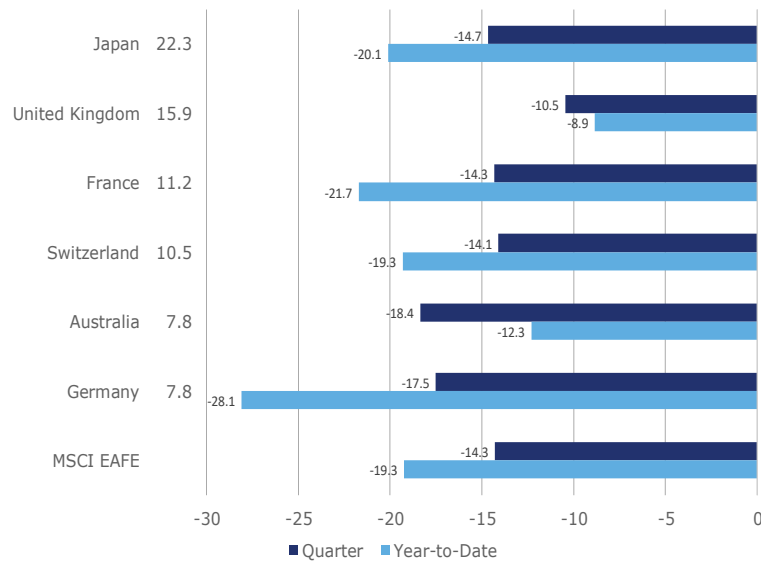
Non-U.S. Growth and Inflation



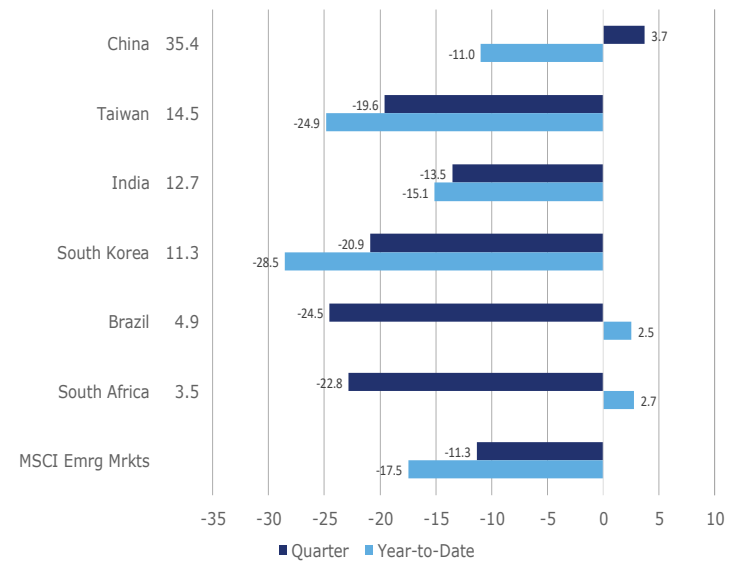
Non-U.S. Equity Market

As of 6/30/2022	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
MSCI ACWI ex-US (\$G)	-13.5	-18.2	-19.0	1.8	3.0	5.3
MSCI EAFE (\$G)	-14.3	-19.3	-17.3	1.5	2.7	5.9
MSCI Emerging Markets (\$G)	-11.3	-17.5	-25.0	0.9	2.5	3.4
MSCI Frontier Markets (\$G)	-18.2	-17.7	-14.7	-5.7	-1.7	1.3
MSCI ACWI ex-US Growth (\$G)	-15.6	-24.6	-25.6	1.9	3.8	6.1
MSCI ACWI ex-US Value (\$G)	-12.2	-12.3	-12.9	1.4	1.9	4.6
MSCI ACWI ex-US Small (\$G)	-17.4	-22.7	-22.1	3.4	3.0	6.6
MSCI ACWI Minimum Volatility	-9.1	-11.8	-5.9	3.5	6.3	8.6
MSCI EAFE Minimum Volatility	-11.6	-16.3	-14.0	-1.5	1.4	5.7
FTSE RAFI Developed ex-US	-13.4	-14.5	-13.2	2.8	2.6	5.8
MSCI EAFE LC (G)	-7.6	-10.9	-6.1	4.9	4.8	8.8
MSCI Emerging Markets LC (G)	-8.0	-13.5	-19.9	3.6	4.7	6.3

Developed Markets Weight and Return (%)



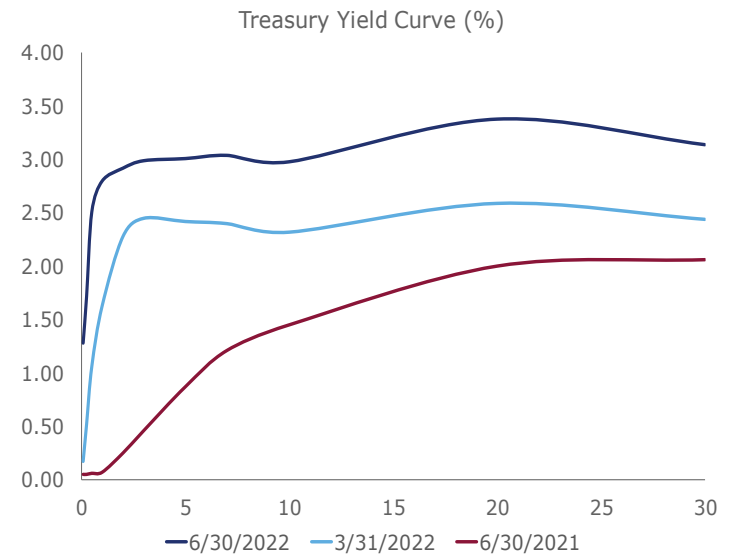
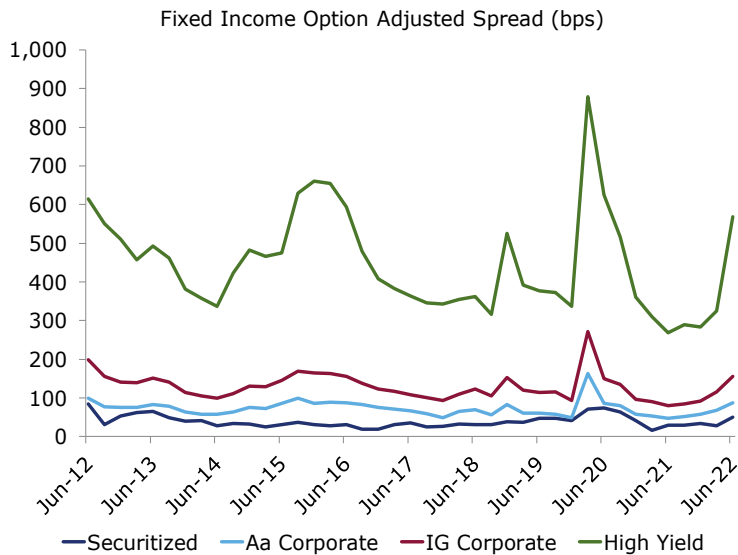
Emerging Markets Weight and Return (%)



U.S. Fixed Income

As of 6/30/2022	YTW	DUR.	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg Aggregate	3.7	6.4	-4.7	-10.3	-10.3	-0.9	0.9	1.5
Bloomberg Treasury	3.1	6.4	-3.8	-9.1	-8.9	-0.9	0.7	1.0
Bloomberg Gov't-Rel.	3.7	5.4	-4.0	-9.2	-9.3	-0.8	1.0	1.6
Bloomberg Securitized	3.8	5.8	-3.9	-8.7	-9.0	-1.3	0.5	1.3
Bloomberg Corporate	4.7	7.6	-7.3	-14.4	-14.2	-1.0	1.3	2.6
Bloomberg LT Gov't/Credit	4.3	15.1	-12.3	-21.9	-20.1	-2.3	1.0	2.6
Bloomberg LT Treasury	3.3	17.2	-11.9	-21.3	-18.5	-2.9	0.5	1.6
Bloomberg LT Gov't-Rel.	4.8	12.2	-10.7	-19.4	-18.3	-2.8	1.0	2.6
Bloomberg LT Corporate	5.1	13.5	-12.8	-22.7	-21.7	-2.3	1.1	3.3
Bloomberg U.S. TIPS *	3.0	8.0	-6.1	-8.9	-5.1	3.0	3.2	1.7
Bloomberg High Yield	8.9	4.3	-9.8	-14.2	-12.8	0.2	2.1	4.5
S&P/LSTA Leveraged Loan	6.9	0.3	-4.5	-4.6	-2.8	2.1	2.9	3.7
Treasury Bills	1.8	0.3	0.1	0.0	0.0	0.6	1.1	0.6

* Yield and Duration statistics are for a proxy index based on similar maturity, the Bloomberg Barclays U.S. Treasury 7-10 Year Index

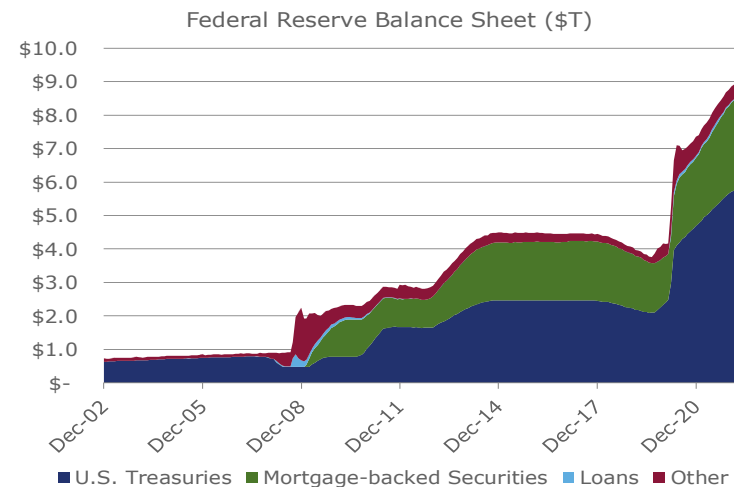
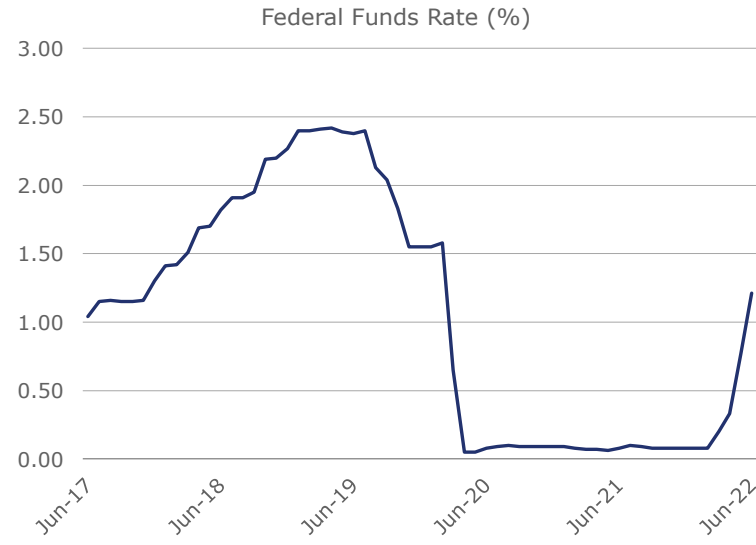


Federal Reserve

After 150 basis point increase in the Fed-funds rate since the start of the year, current FOMC expectation is for another 175 basis point increase by the end of 2022

Federal Reserve has added more than \$4.5 trillion in assets to their balance sheet during the past two years

QE4 is now larger than the 3 phases of quantitative easing – combined – following the global financial crisis

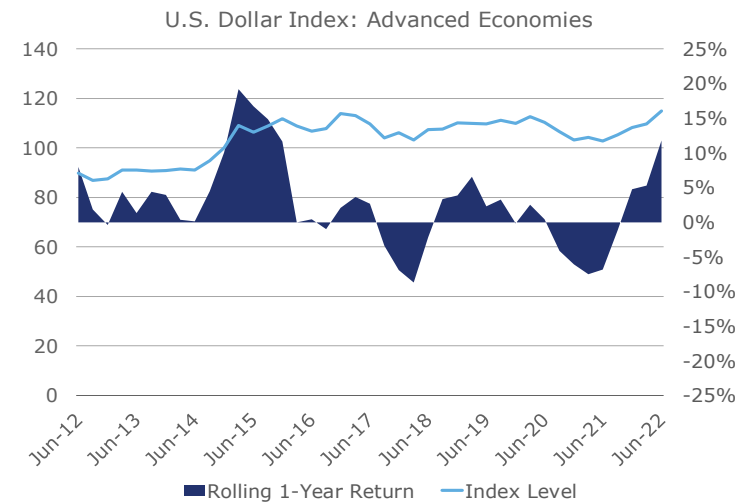
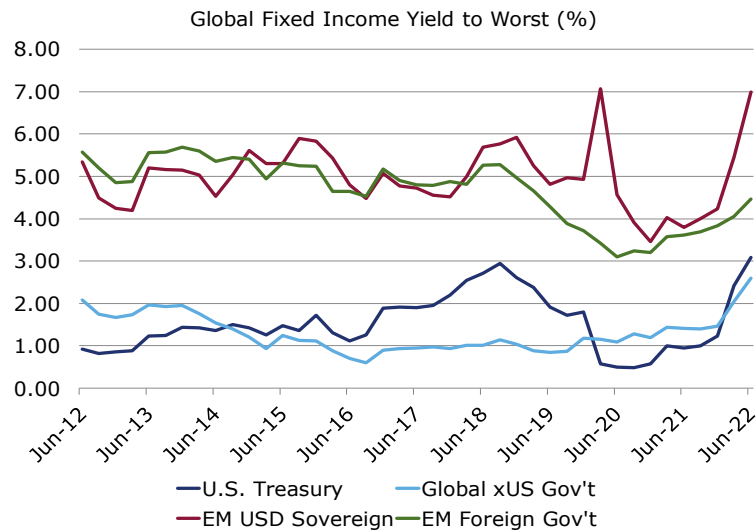


	Announced	Closed	Amount (bil)
QE1	11/25/2008	3/31/2010	\$1,403
QE2	11/3/2010	6/29/2012	\$568
QE3	9/13/2012	10/29/2014	\$1,674
QE4	3/23/2020	3/15/2022	\$4,779

Non-U.S. Fixed Income

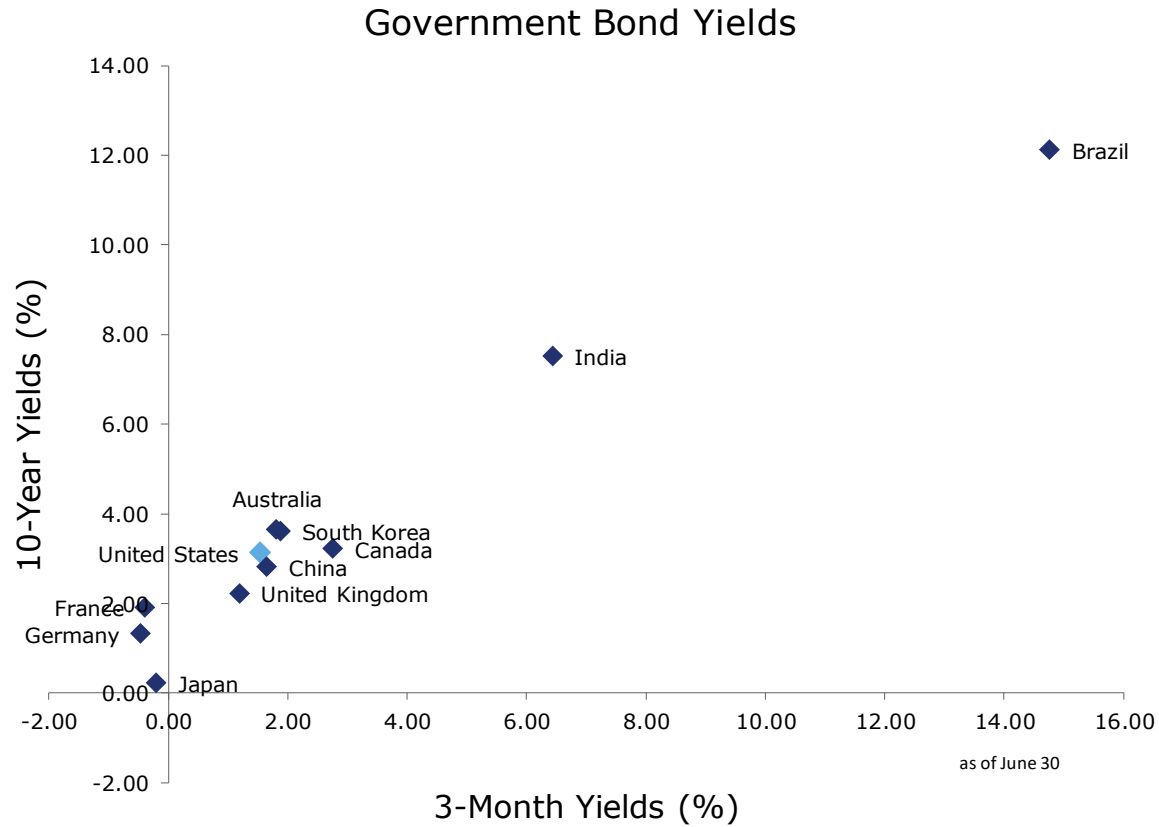
As of 6/30/2022	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
Developed Markets						
Bloomberg Global Aggregate xUS	-11.0	-16.5	-18.8	-5.1	-1.8	-1.1
Bloomberg Global Aggregate xUS *	-4.0	-7.9	-7.7	-1.4	1.3	2.7
Bloomberg Global Inflation Linked xUS	-18.9	-23.2	-21.0	-3.8	-0.9	0.8
Bloomberg Global Inflation Linked xUS *	-12.2	-14.7	-9.6	-0.8	1.9	4.0
Emerging Markets (Hard Currency)						
Bloomberg EM USD Aggregate	-8.7	-17.1	-18.0	-3.5	-0.3	2.5
Emerging Markets (Foreign Currency)						
Bloomberg EM Local Currency Gov't	-7.0	-9.0	-9.6	-0.8	0.9	1.0
Bloomberg EM Local Currency Gov't *	-1.6	-5.1	-5.2	-0.1	1.7	2.0
Euro vs. Dollar	-5.3	-7.8	-11.6	-2.7	-1.7	-1.9
Yen vs. Dollar	-10.3	-15.2	-18.1	-7.4	-3.7	-5.2
Pound vs. Dollar	-7.3	-10.0	-12.0	-1.4	-1.3	-2.5

* Returns are reported in terms of local market investors, which removes currency effects.



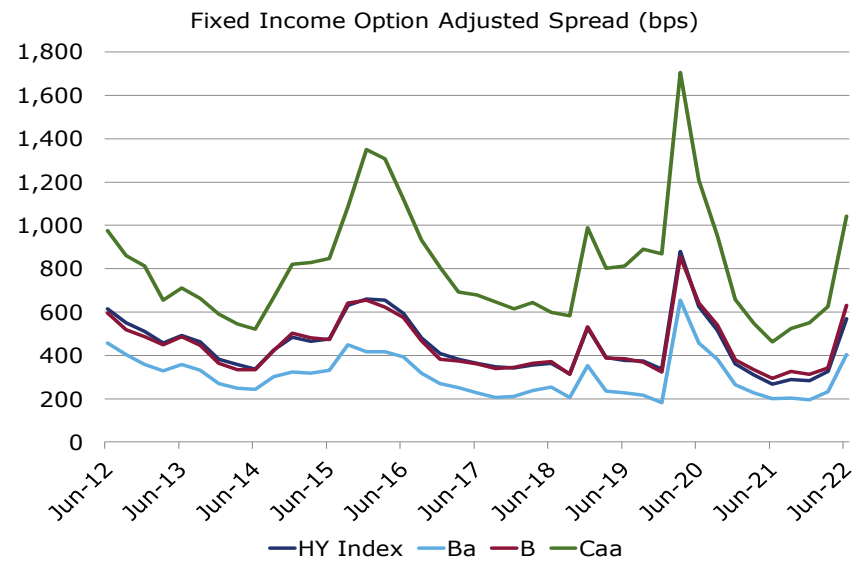
Global Interest Rates

Negative rates found in Germany and France; higher rates, and at similar levels, in the U.S., Australia and in the U.K.



High Yield Bond Market

As of 6/30/2022		YTW	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg High Yield		8.9	-9.8	-14.2	-12.8	0.2	2.1	4.5
S&P LSTA Leveraged Loan		4.4	-5.3	-5.5	-4.2	1.4	2.4	3.3
High Yield Quality Distribution	Weight							
Ba U.S. High Yield	52.3%	7.2	-8.4	-13.9	-12.3	1.2	2.8	4.8
B U.S. High Yield	36.1%	9.5	-10.8	-13.9	-12.7	-0.5	1.8	4.0
Caa U.S. High Yield	11.4%	13.6	-13.0	-16.4	-15.3	-1.8	0.3	4.3
Ca to D U.S. High Yield	0.3%	42.3	-15.7	-18.9	-29.2	-6.8	-1.2	-4.5



Total Fund

Asset Allocation Compliance

Total Fund

Periods Ended As of June 30, 2022

Executive Summary

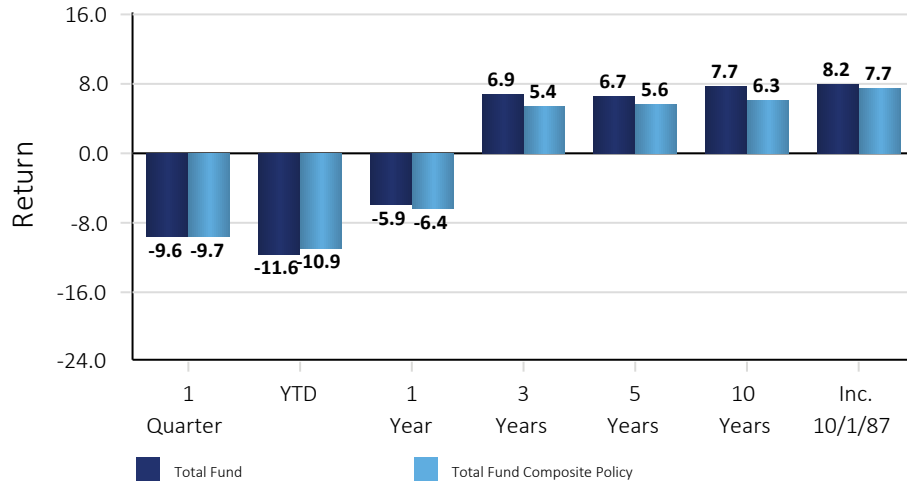
Asset Class	Current Allocation		Policy	Difference to Target	
	(\$000)	(%)	(%)	(\$000)	(%)
Domestic Equity	75,980	16.3	17.8	(6,894)	(1.5)
International Equity	70,217	15.0	17.8	(12,658)	(2.7)
Private Equity	41,522	8.9	5.0	18,177	3.9
Total Growth Assets	187,719	40.2	40.5	(1,375)	(0.3)
Global Low Volatility Equity	44,921	9.6	10.0	(1,769)	(0.4)
Private Credit	21,921	4.7	5.0	(1,424)	(0.3)
Total Defensive Growth Assets	66,842	14.3	15.0	(3,193)	(0.7)
Core Fixed Income	112,127	24.0	24.5	(2,263)	(0.5)
Cash & Equivalents	3,050	0.7	0.0	3,050	0.7
Total Defensive Assets	115,177	24.7	24.5	787	0.2
U.S. TIPS	21,816	4.7	5.0	(1,529)	(0.3)
U.S. REITs	22,916	4.9	5.0	(429)	(0.1)
Commodities	26,421	5.7	5.0	3,076	0.7
Midstream Energy Infrastructure	26,008	5.6	5.0	2,663	0.6
Total Inflation Oriented Assets	97,160	20.8	20.0	3,781	0.8
Total Fund Assets	466,898	100.0	100.0	-	0.0

Composite Performance Summary

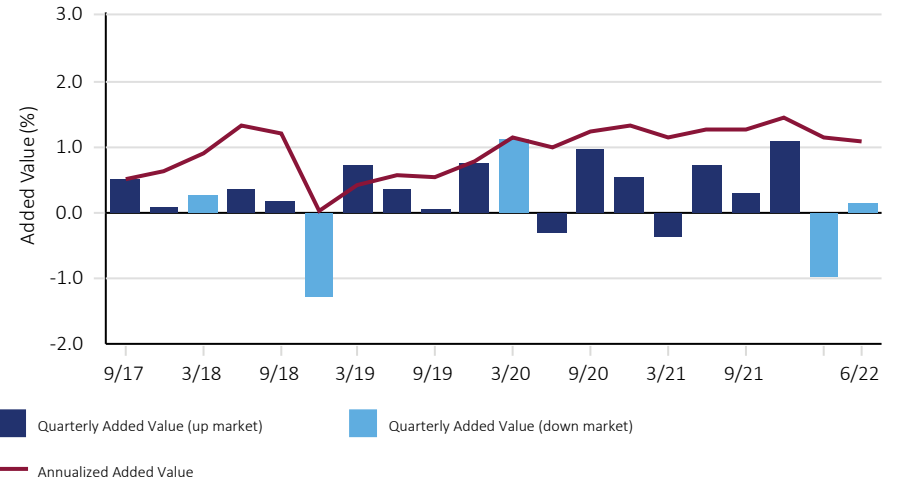
Total Fund

Periods Ended June 30, 2022

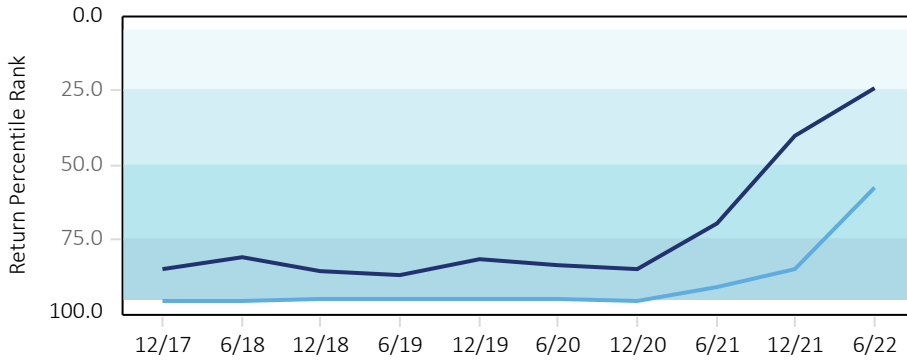
Comparative Performance



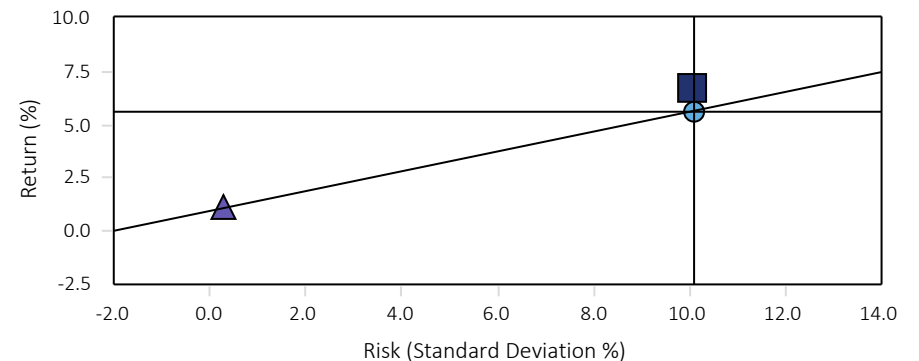
Added Value History



Rolling Percentile Rank: All Public Plans-Total Fund



Risk and Return 07/1/17 - 06/30/22



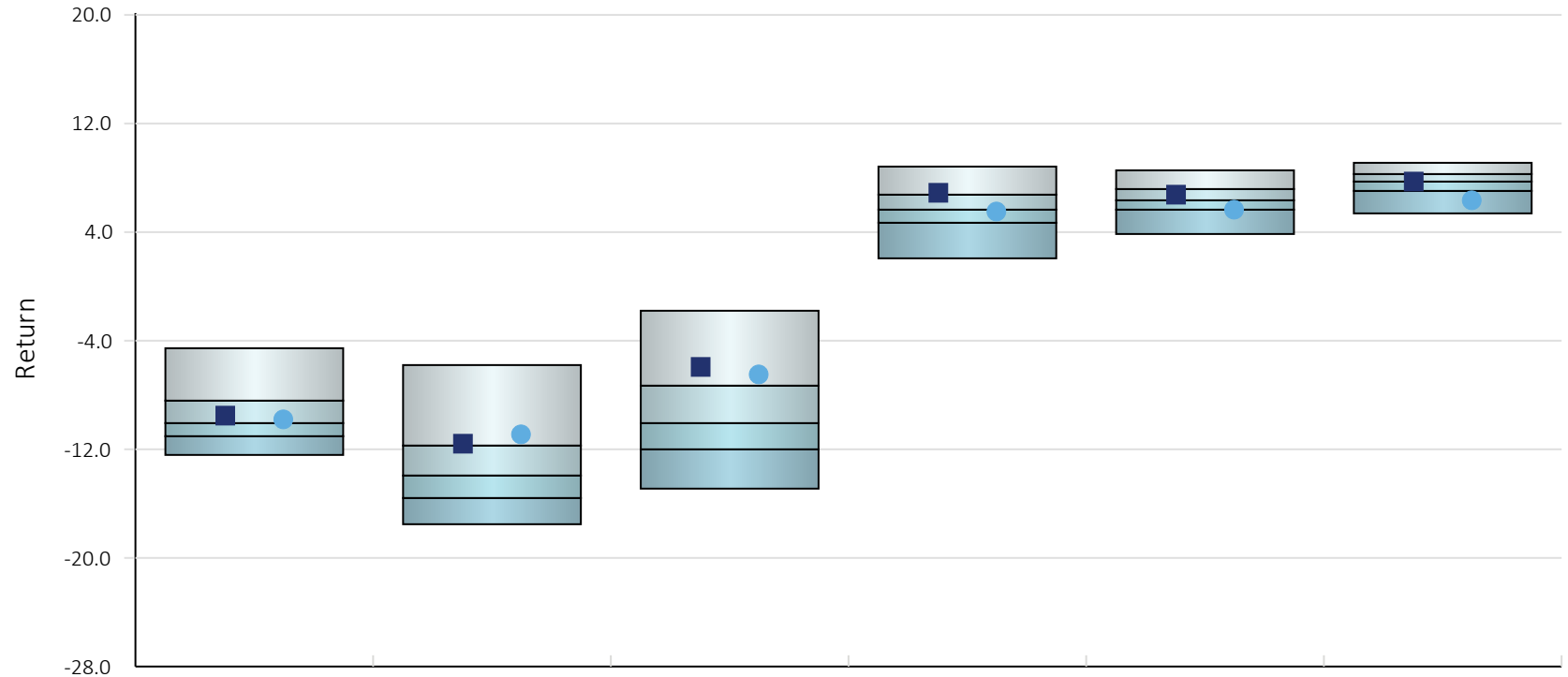
	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
— Total Fund	10	1 (10%)	1 (10%)	1 (10%)	7 (70%)
— Benchmark	10	0 (0%)	0 (0%)	1 (10%)	9 (90%)

Instrument	Risk (Standard Deviation %)	Return (%)
Total Fund	10.0	6.5
Total Fund Composite Policy	10.0	5.5
90 Day US Treasury Bill	0.5	1.0

Plan Sponsor Peer Group Analysis

Total Fund vs All Public Plans-Total Fund

Periods Ended June 30, 2022



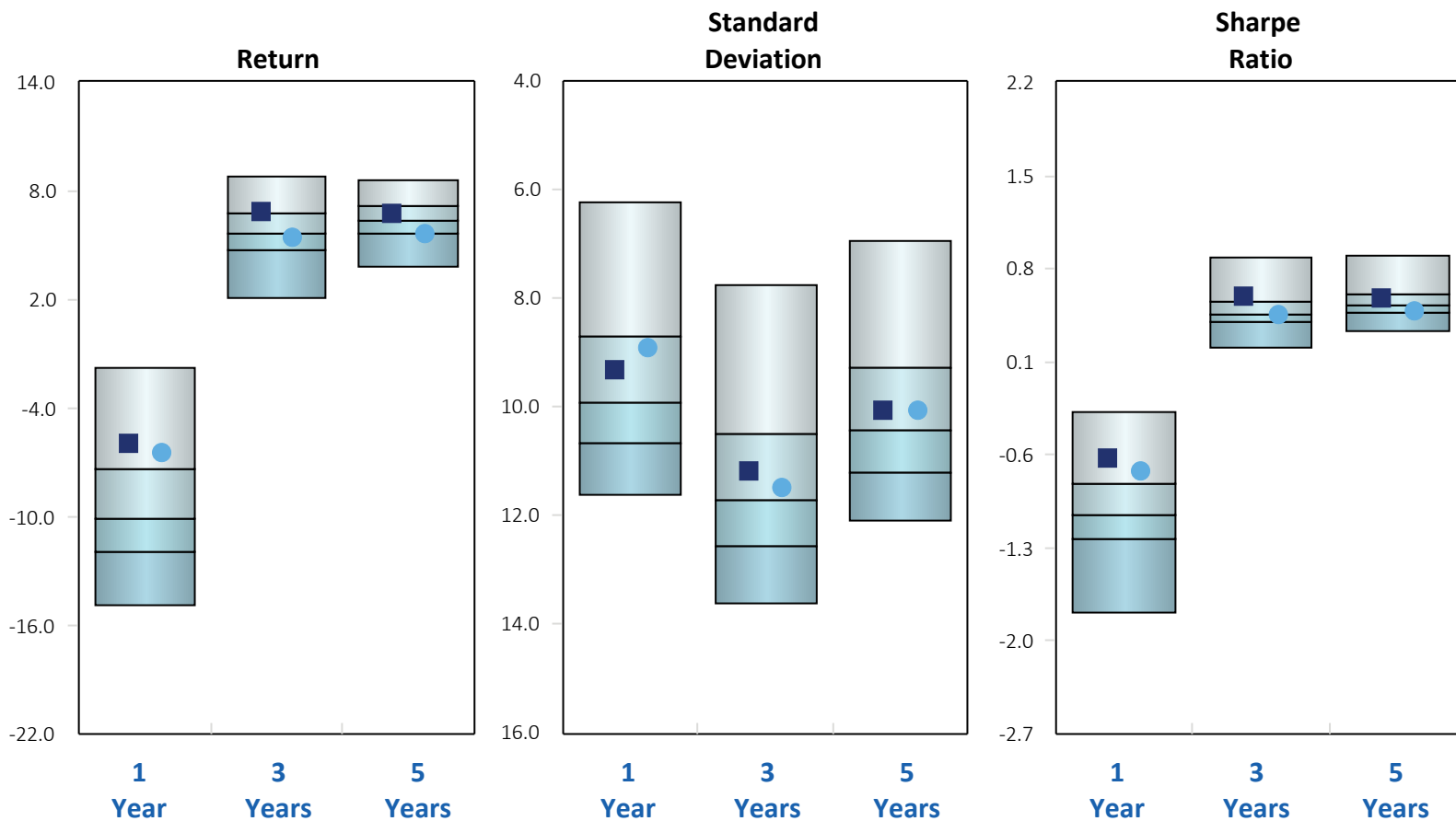
	QTD	YTD	1 Year	3 Years	5 Years	10 Years
■ Total Fund	-9.56 (43)	-11.64 (24)	-5.92 (19)	6.90 (24)	6.74 (38)	7.74 (49)
● Total Fund Composite Policy	-9.73 (45)	-10.93 (21)	-6.43 (21)	5.45 (58)	5.64 (76)	6.31 (90)
5th Percentile	-4.62	-5.77	-1.76	8.84	8.59	9.11
1st Quartile	-8.47	-11.71	-7.38	6.79	7.16	8.32
Median	-10.01	-13.95	-10.09	5.64	6.38	7.72
3rd Quartile	-11.06	-15.59	-11.96	4.70	5.65	6.99
95th Percentile	-12.43	-17.56	-14.83	2.05	3.81	5.41
Population	386	385	381	366	350	311

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

Plan Sponsor Peer Group Analysis - Multi Statistics

Total Fund vs All Public Plans-Total Fund

Periods Ended June 30, 2022



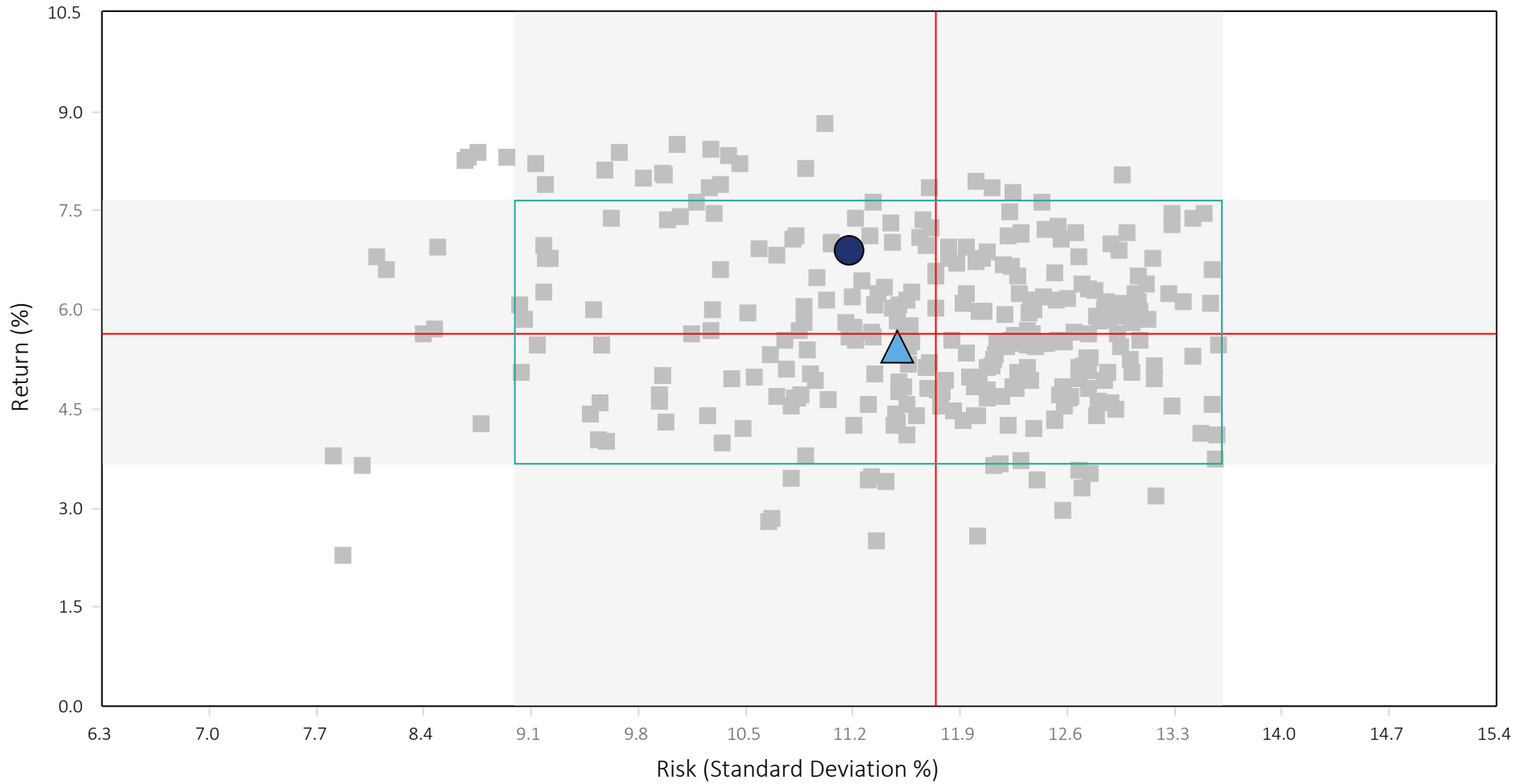
	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years
■ Total Fund	-5.92 (19)	6.90 (24)	6.74 (38)	9.31 (36)	11.18 (35)	10.07 (37)	-0.62 (15)	0.59 (22)	0.59 (32)
● Total Fund Composite Policy	-6.43 (21)	5.45 (58)	5.64 (76)	8.93 (28)	11.49 (43)	10.08 (37)	-0.72 (19)	0.46 (49)	0.48 (70)
5th Percentile	-1.76	8.84	8.59	6.22	7.77	6.96	-0.28	0.88	0.89
1st Quartile	-7.38	6.79	7.16	8.71	10.49	9.30	-0.81	0.56	0.61
Median	-10.09	5.64	6.38	9.94	11.74	10.44	-1.05	0.46	0.53
3rd Quartile	-11.96	4.70	5.65	10.69	12.57	11.22	-1.23	0.39	0.47
95th Percentile	-14.83	2.05	3.81	11.64	13.61	12.12	-1.78	0.21	0.33

Parenteses contain percentile rankings.
Calculation based on monthly periodicity.

Plan Sponsor Scattergram

Total Fund vs All Public Plans-Total Fund

Periods Ended July 1, 2019 To June 30, 2022



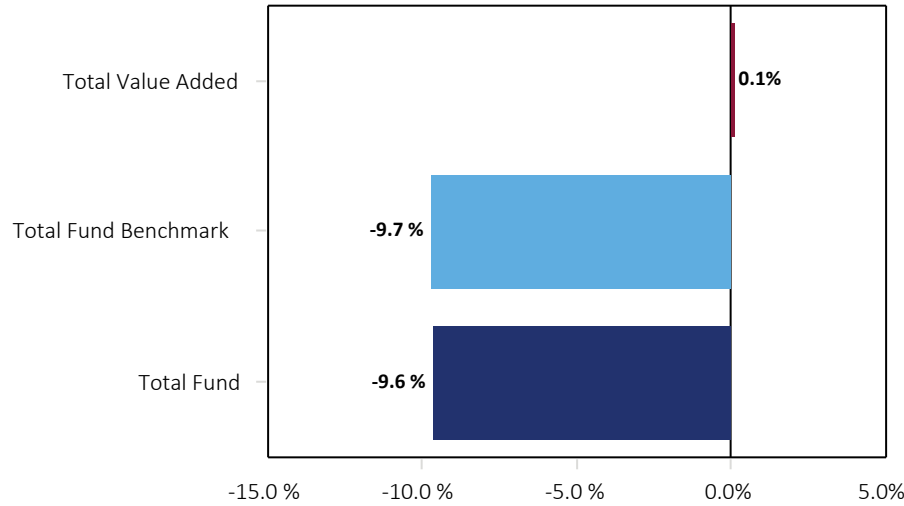
	Return	Standard Deviation
● Total Fund	6.90	11.18
▲ Total Fund Composite Policy	5.45	11.49
— Median	5.64	11.74

Total Fund Attribution

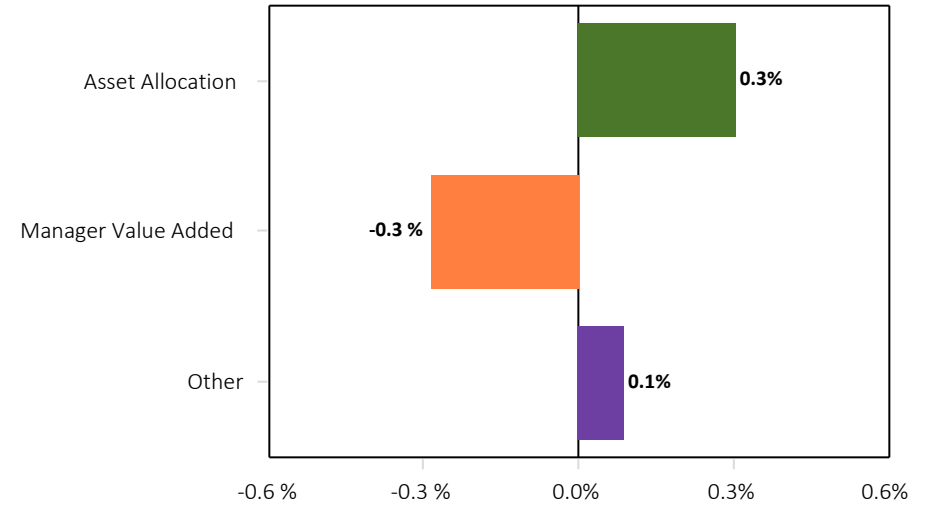
Total Fund

Periods Ended 1 Quarter Ending June 30, 2022

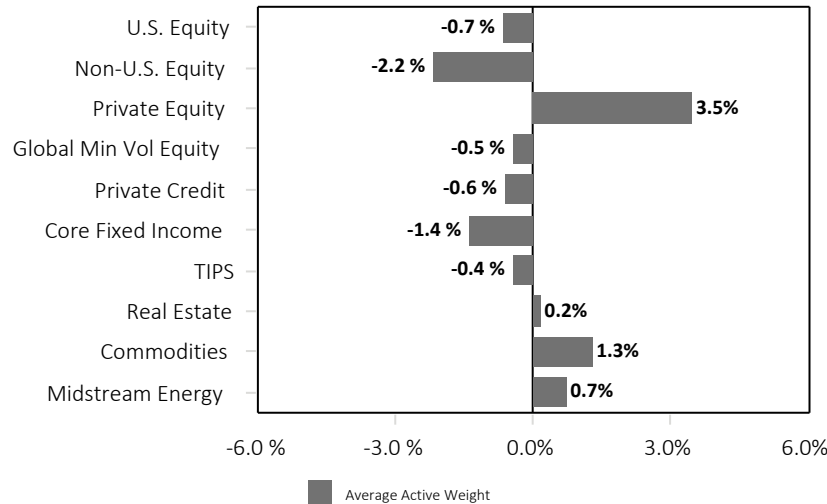
Total Fund Performance



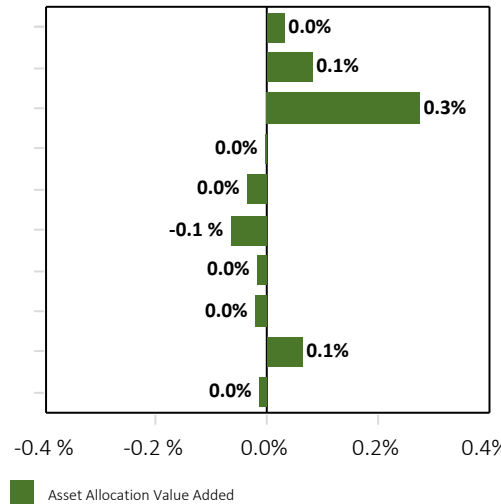
Total Value Added:0.1%



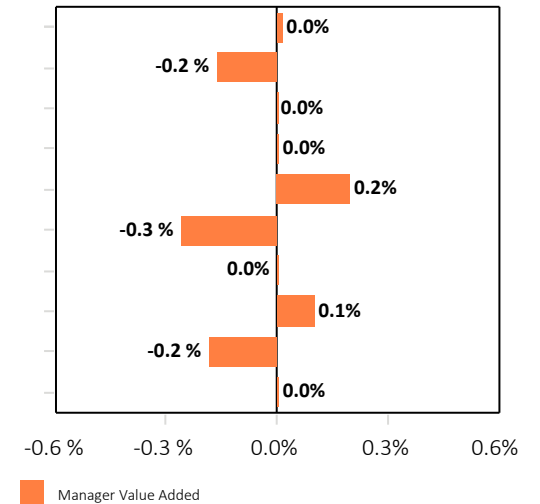
Total Asset Allocation:0.3%



Asset Allocation Value Added:0.3%



Total Manager Value Added:-0.3%

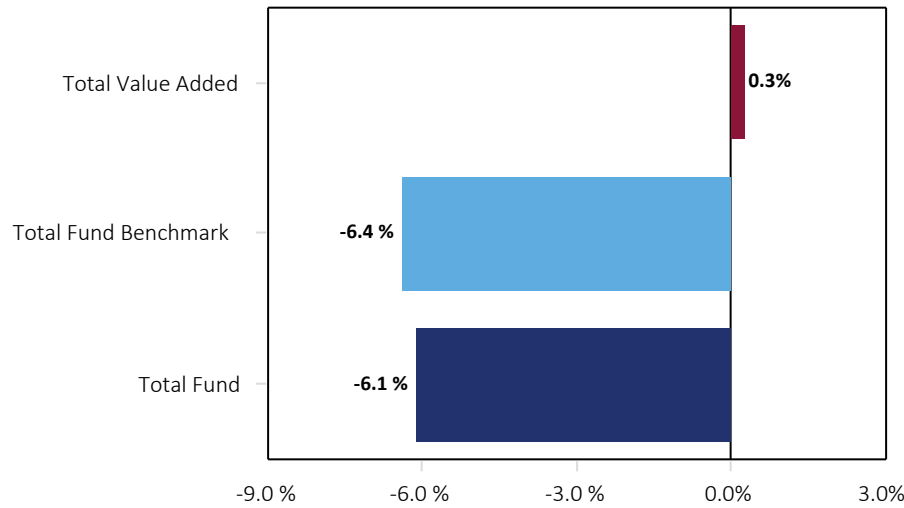


Total Fund Attribution

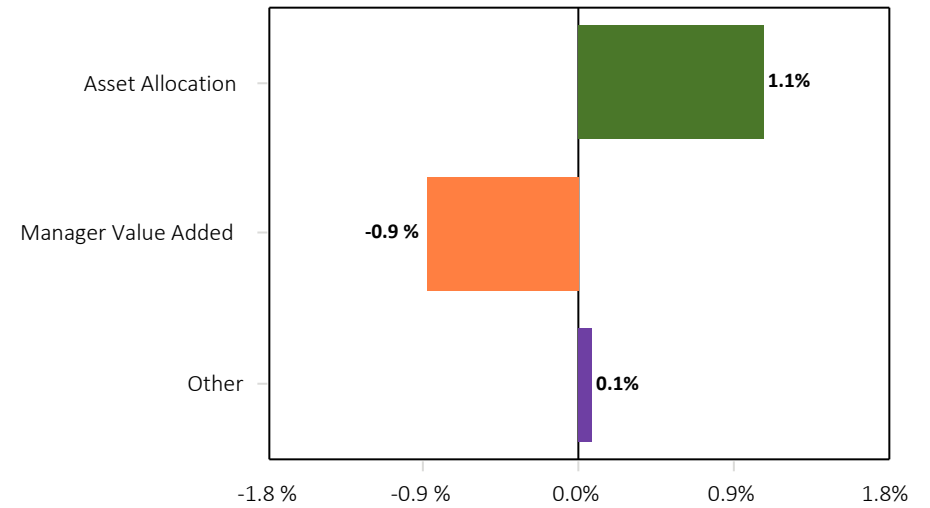
Total Fund

Periods Ended 1 Year Ending June 30, 2022

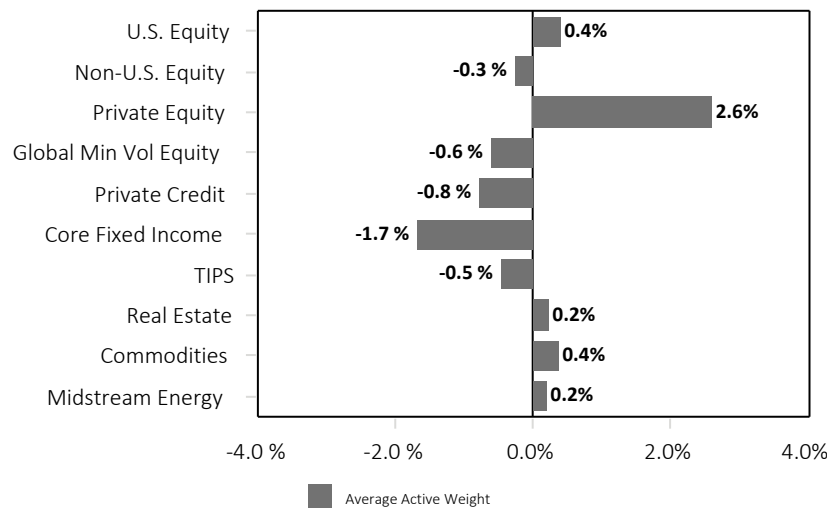
Total Fund Performance



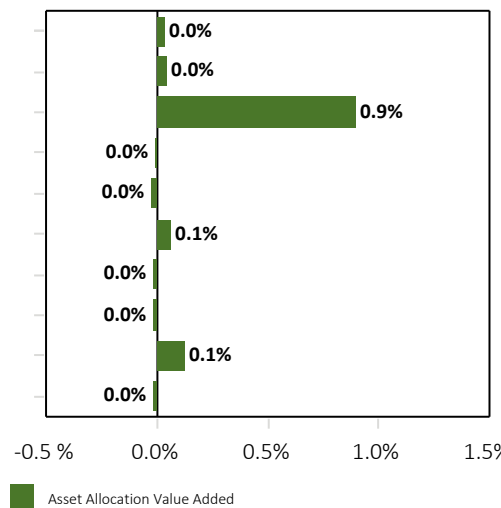
Total Value Added:0.3%



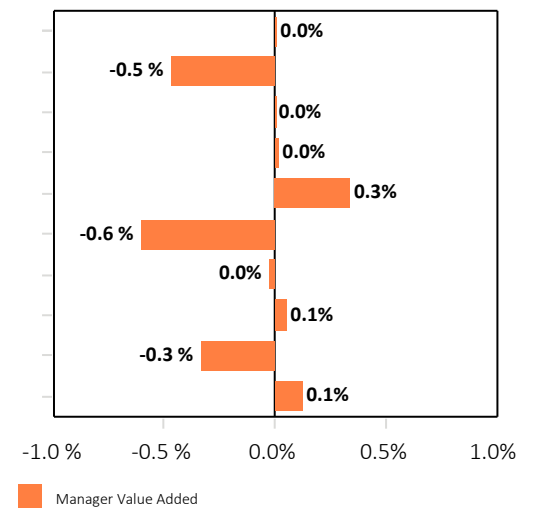
Total Asset Allocation:1.1%



Asset Allocation Value Added:1.1%



Total Manager Value Added:-0.9 %

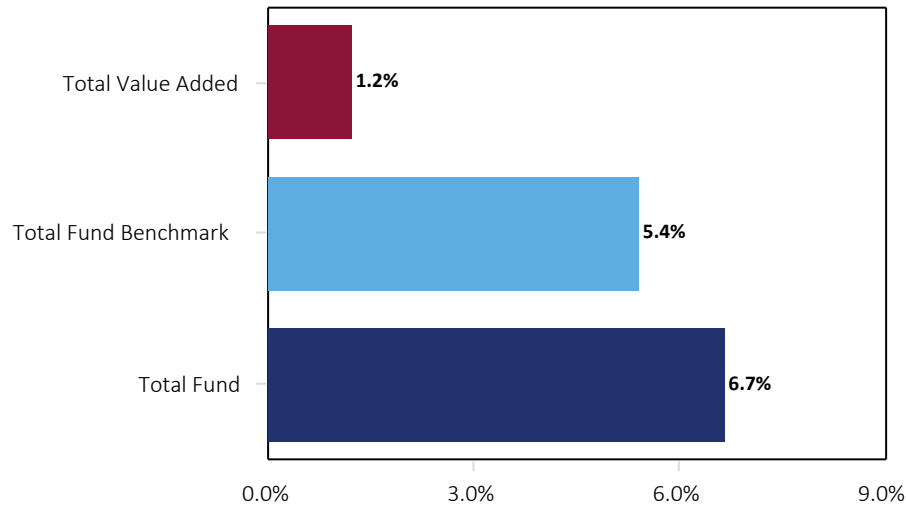


Total Fund Attribution

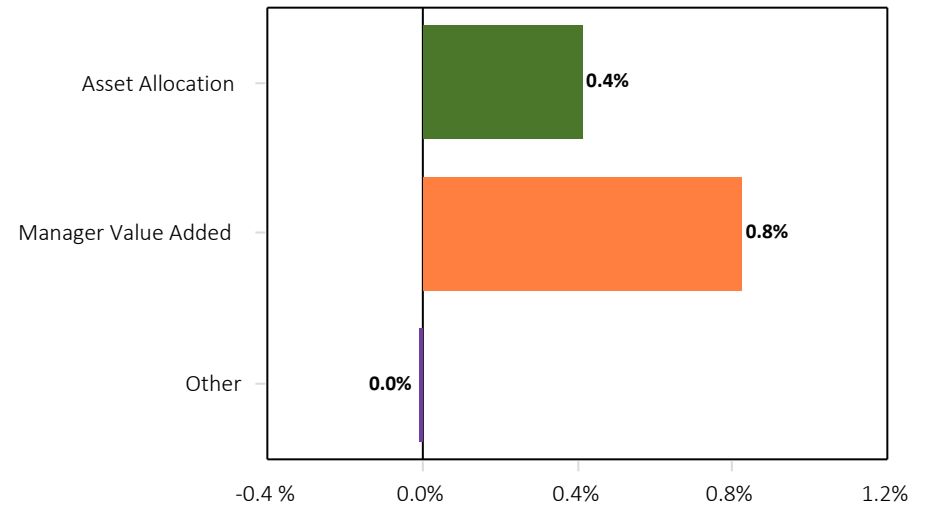
Total Fund

Periods Ended 3 Years Ending June 30, 2022

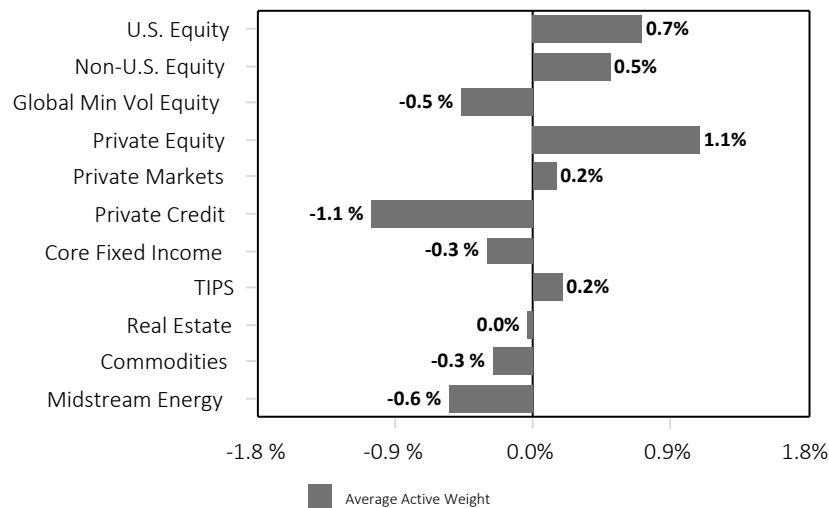
Total Fund Performance



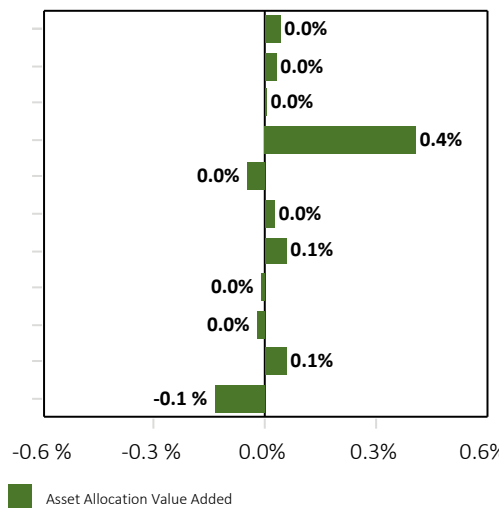
Total Value Added: 1.2%



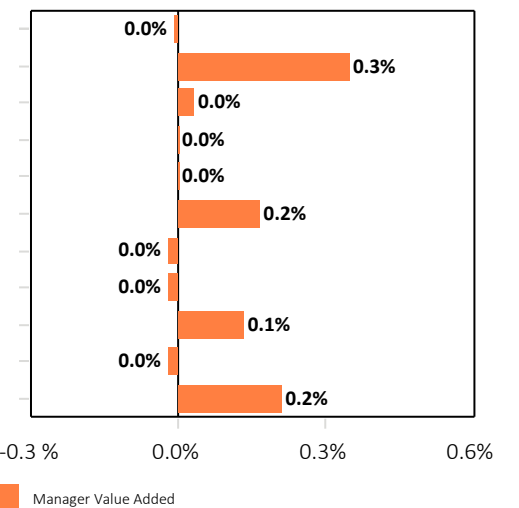
Total Asset Allocation: 0.4%



Asset Allocation Value Added: 0.4%



Total Manager Value Added: 0.8%



Asset Allocation & Performance

Total Fund

Periods Ended June 30, 2022

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Total Fund	466,898,015	100.00	-9.62	-11.75	-11.75	-6.14	6.66	6.49	6.07	7.48	7.95	10/1/1987
Total Fund Composite Policy			-9.73	-10.93	-10.93	-6.43	5.45	5.64	5.13	6.31	7.70	
Value Added			0.11	-0.82	-0.82	0.29	1.21	0.85	0.94	1.17	0.25	
U.S. Equity	75,980,228	16.27	-16.69	-21.14	-21.14	-13.13	10.05	10.74	10.72	12.92	9.65	10/1/1987
FT Wilshire 5000 Total Market TR Index			-16.77	-20.89	-20.89	-13.19	10.17	10.83	10.73	12.71	9.66	
Value Added			0.08	-0.25	-0.25	0.06	-0.12	-0.09	-0.01	0.21	-0.01	
Non-U.S. Equity	70,216,681	15.04	-14.69	-23.88	-23.88	-22.29	2.96	3.41	3.97	6.09	7.45	1/1/1990
International Equity Composite Policy			-13.73	-18.42	-18.42	-19.42	1.35	2.50	2.92	4.83	4.21	
Value Added			-0.96	-5.46	-5.46	-2.87	1.61	0.91	1.05	1.26	3.24	
Private Equity	41,521,788	8.89	-1.44	5.06	5.06	37.02	34.20	27.06	22.32	17.07	14.99	5/1/2010
Private Equity Policy Index			-1.44	5.06	5.06	37.02	34.20	27.06	22.32	17.07	14.99	
Value Added			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Global Low Volatility Equity	44,920,564	9.62	-9.23	-11.89	-11.89	-6.20	3.21				4.55	6/1/2019
MSCI ACWI Minimum Volatility Index (Net)			-9.27	-12.01	-12.01	-6.40	2.89				4.22	
Value Added			0.04	0.12	0.12	0.20	0.32				0.33	
Private Credit	21,921,132	4.70	0.29	1.13	1.13	5.57	5.95				4.97	10/1/2018
S&P/LSTA Leverage Loan Index			-4.45	-4.55	-4.55	-2.77	2.09				2.23	
Value Added			4.74	5.68	5.68	8.34	3.86				2.74	
Core Fixed Income	112,127,032	24.02	-5.85	-12.72	-12.72	-12.70	-0.95	1.09	1.96	2.39	6.13	10/1/1987
Blmbg. U.S. Aggregate			-4.69	-10.35	-10.35	-10.29	-0.94	0.88	1.42	1.54	5.74	
Value Added			-1.16	-2.37	-2.37	-2.41	-0.01	0.21	0.54	0.85	0.39	

Asset Allocation & Performance

Total Fund

Periods Ended June 30, 2022

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Total Real Assets Composite	97,160,382	20.81	-9.85	-0.83	-0.83	5.69	7.38	5.72	3.67		3.19	4/1/2015
Real Assets Composite Policy			-9.20	-0.96	-0.96	4.65	6.96	5.43	3.41		3.02	
Value Added			-0.65	0.13	0.13	1.04	0.42	0.29	0.26		0.17	
TIPS	21,816,150	4.67	-6.14	-9.17	-9.17	-5.76	2.67	2.91	2.61		2.32	5/1/2015
Blmbg. U.S. TIPS			-6.08	-8.92	-8.92	-5.14	3.04	3.21	2.82		2.49	
Value Added			-0.06	-0.25	-0.25	-0.62	-0.37	-0.30	-0.21		-0.17	
Real Estate	22,915,562	4.91	-16.22	-18.78	-18.78	-5.21	4.69	5.33	4.81	5.77	8.29	6/1/2009
Real Estate Policy Index			-18.10	-21.14	-21.14	-6.41	1.83	3.73	4.30	5.60	8.43	
Value Added			1.88	2.36	2.36	1.20	2.86	1.60	0.51	0.17	-0.14	
Commodities	26,420,709	5.66	-8.34	12.30	12.30	17.45	15.20	10.45	4.71		-0.29	2/1/2013
Bloomberg Commodity Index Total Return			-5.66	18.44	18.44	24.27	14.34	8.39	2.79		-1.40	
Value Added			-2.68	-6.14	-6.14	-6.82	0.86	2.06	1.92		1.11	
Midstream Energy Composite	26,007,961	5.57	-8.51	13.74	13.74	14.80	3.69	2.33	-0.87		-1.33	3/1/2015
Midstream Energy Policy Index			-8.64	13.24	13.24	11.42	-2.61	-2.81	-6.50		-7.56	
Value Added			0.13	0.50	0.50	3.38	6.30	5.14	5.63		6.23	

Historical Hybrid Composition

Grand Rapids General Retirement System

Periods Ended June 30, 2022

Policy Index	Weight (%)
Jan-1976	
FT Wilshire 5000 Total Market TR Index	55.00
Blmbg. U.S. Aggregate	40.00
MSCI EAFE Index (Net)	5.00
Jul-1998	
FT Wilshire 5000 Total Market TR Index	50.00
Blmbg. U.S. Aggregate	40.00
MSCI EAFE Index (Net)	10.00
Oct-2002	
FT Wilshire 5000 Total Market TR Index	50.00
Blmbg. U.S. Aggregate	35.00
MSCI EAFE Index (Net)	15.00
Apr-2006	
FT Wilshire 5000 Total Market TR Index	55.00
Blmbg. U.S. Aggregate	30.00
MSCI EAFE Index (Net)	15.00
Jul-2006	
FT Wilshire 5000 Total Market TR Index	55.00
Blmbg. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
Jul-2009	
FT Wilshire 5000 Total Market TR Index	50.00
Blmbg. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00

Policy Index	Weight (%)
Apr-2010	
FT Wilshire 5000 Total Market TR Index	50.00
Blmbg. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00
May-2010	
FT Wilshire 5000 Total Market TR Index	45.00
Blmbg. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Equity	5.00
Jul-2010	
FT Wilshire 5000 Total Market TR Index	45.00
Blmbg. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Equity Policy Index	5.00
Jan-2013	
FT Wilshire 5000 Total Market TR Index	40.00
Blmbg. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Equity Policy Index	5.00
Bloomberg Commodity Index Total Return	5.00

Historical Hybrid Composition

Grand Rapids General Retirement System

Periods Ended June 30, 2022

Policy Index	Weight (%)
Apr-2015	
FT Wilshire 5000 Total Market TR Index	22.50
Blmbg. U.S. Aggregate	25.00
MSCI AC World ex USA (Net)	22.50
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Equity Policy Index	5.00
Bloomberg Commodity Index Total Return	5.00
S&P MLP Index	5.00
Blmbg. U.S. TIPS	10.00
Dec-2018	
FT Wilshire 5000 Total Market TR Index	22.50
Blmbg. U.S. Aggregate	25.00
MSCI AC World ex USA (Net)	22.50
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Equity Policy Index	5.00
Bloomberg Commodity Index Total Return	5.00
S&P MLP Index	5.00
Blmbg. U.S. TIPS	10.00

Policy Index	Weight (%)
Jul-2019	
FT Wilshire 5000 Total Market TR Index	17.75
Blmbg. U.S. Aggregate	24.50
MSCI AC World ex USA (Net)	17.75
FTSE EPRA/NAREIT Developed Index (Net)	5.00
Private Equity Policy Index	5.00
Bloomberg Commodity Index Total Return	5.00
Alerian MLP Index	5.00
Blmbg. U.S. TIPS	5.00
S&P LSTA Leverage Loan Index	5.00
MSCI ACWI Minimum Volatility Index (Net)	10.00
Oct-2019	
FT Wilshire 5000 Total Market TR Index	17.75
MSCI AC World ex USA (Net)	17.75
MSCI ACWI Minimum Volatility Index (Net)	10.00
Private Equity Policy Index	5.00
S&P LSTA Leverage Loan Index	5.00
Blmbg. U.S. Aggregate	24.50
Blmbg. U.S. TIPS	5.00
Dow Jones U.S. Select REIT	5.00
Bloomberg Commodity Index Total Return	5.00
Alerian MLP Index	5.00

Historical Hybrid Composition

Grand Rapids General Retirement System

Periods Ended June 30, 2022

Policy Index	Weight (%)
Oct-2020	
FT Wilshire 5000 Total Market TR Index	17.75
MSCI AC World ex USA (Net)	17.75
Private Equity Policy Index	5.00
MSCI ACWI Minimum Volatility Index (Net)	10.00
S&P LSTA Leverage Loan Index	5.00
Blmbg. U.S. Aggregate	24.50
Blmbg. U.S. TIPS	5.00
Dow Jones U.S. Select REIT	5.00
Bloomberg Commodity Index Total Return	5.00
Alerian Midstream Energy Index	5.00

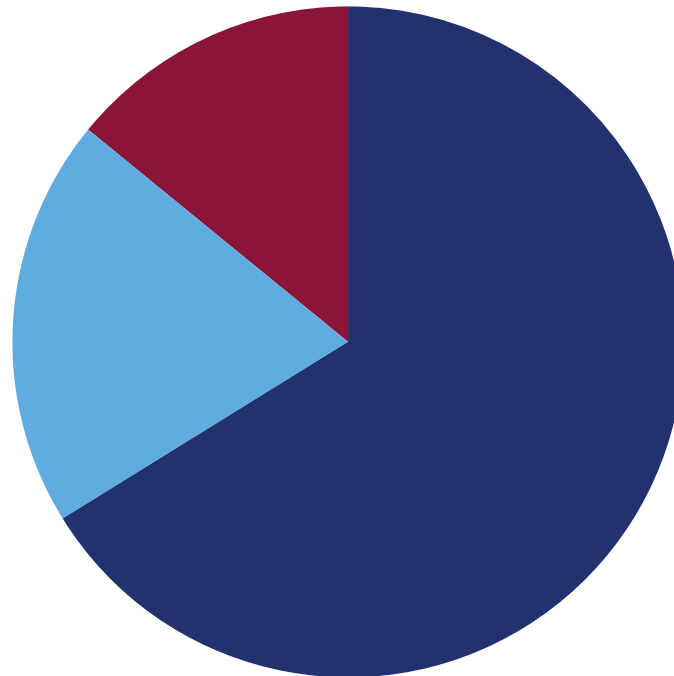
U.S. Equity

Asset Allocation By Manager

U.S. Equity

Periods Ended June 30, 2022

Jun-2022 : 75,980,228



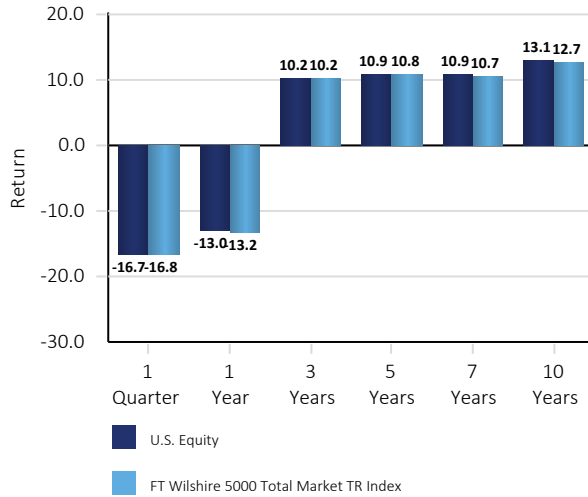
	Market Value \$	Allocation (%)
■ NTAM S&P 500	50,278,664	66.2
■ PIMCO Stock Plus	14,992,158	19.7
■ Wellington Small Cap	10,709,405	14.1

Performance Summary

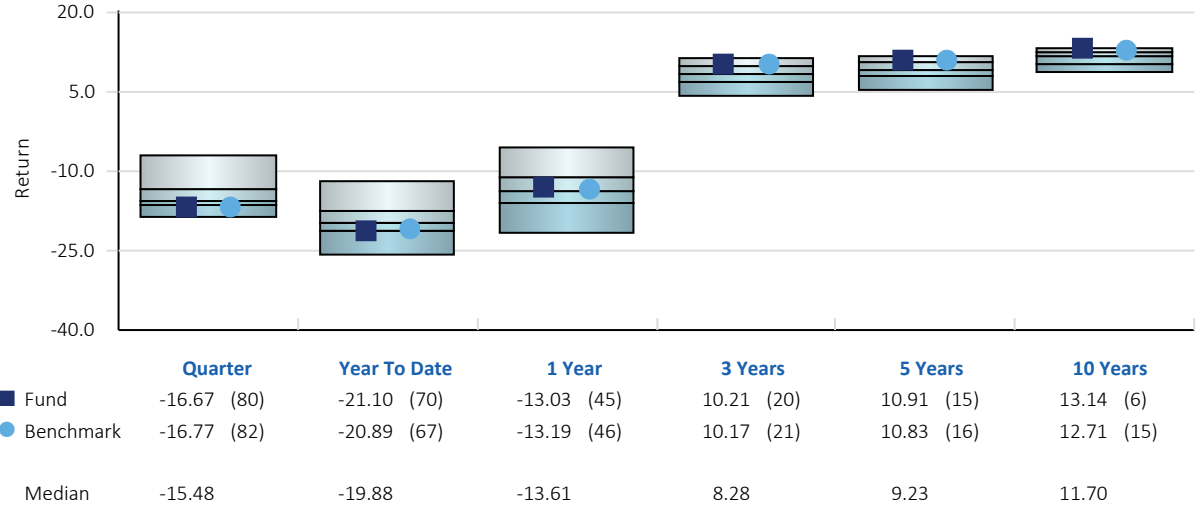
U.S. Equity

Periods Ended June 30, 2022

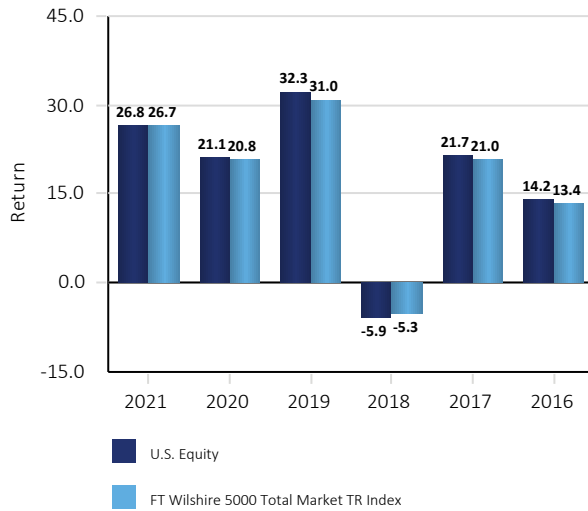
Comparative Performance



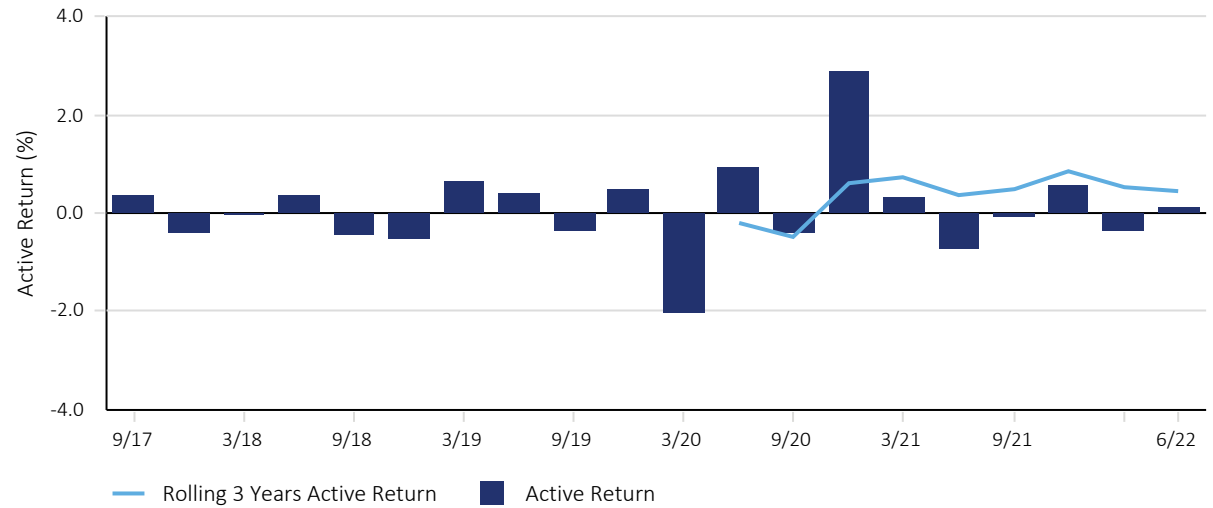
Peer Group Analysis: All Master Trust-US Equity Segment



Comparative Performance



Rolling 3 Years Performance

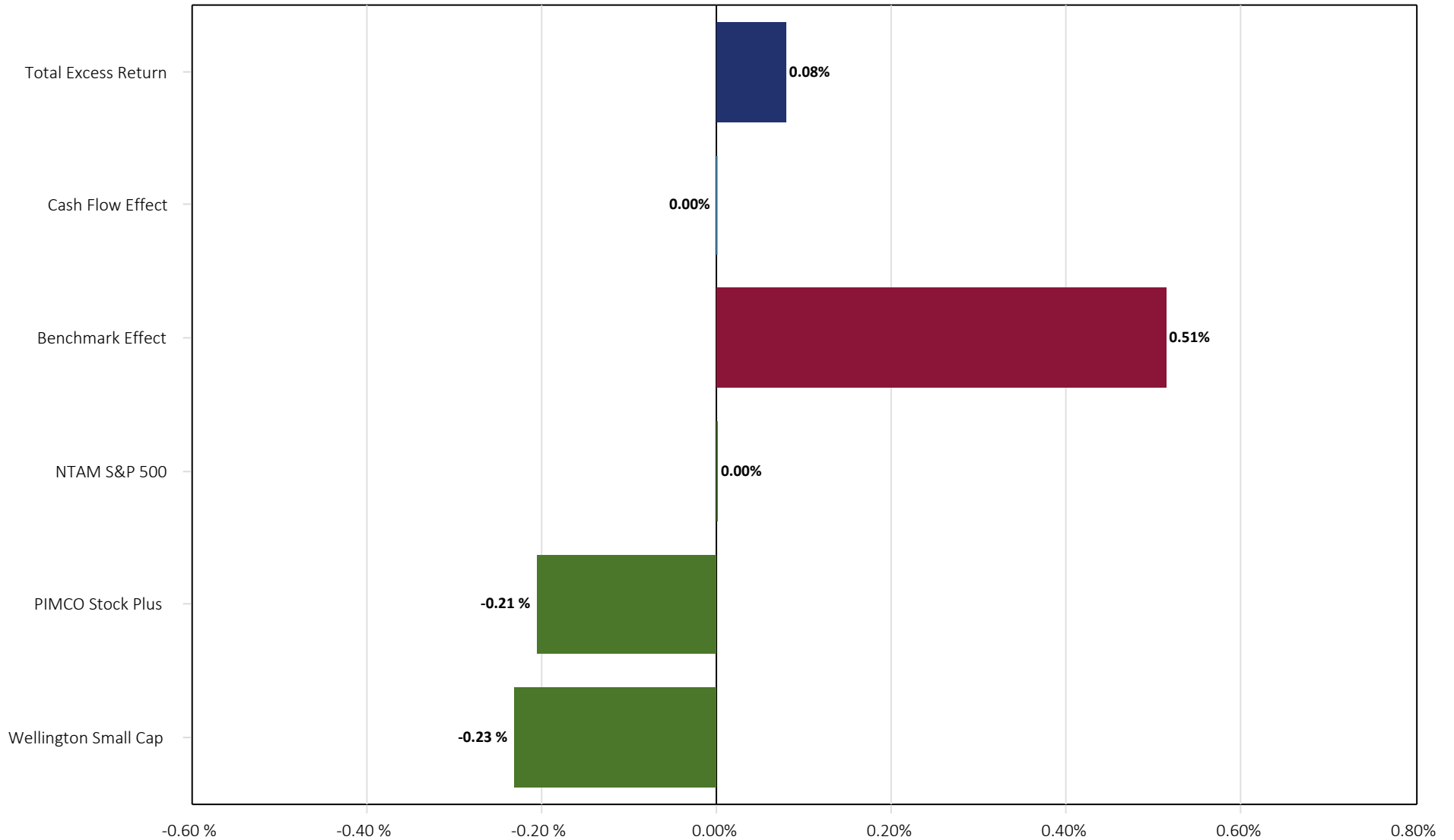


Asset Class Attribution

U.S. Equity

Periods Ended 1 Quarter Ending June 30, 2022

1 Quarter



Asset Allocation & Performance

U.S. Equity

Periods Ended June 30, 2022

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
U.S. Equity	75,980,228	100.00	-16.69	-21.14	-21.14	-13.13	10.05	10.74	10.72	12.92	9.65	10/1/1987
FT Wilshire 5000 Total Market TR Index			-16.77	-20.89	-20.89	-13.19	10.17	10.83	10.73	12.71	9.66	
Value Added			0.08	-0.25	-0.25	0.06	-0.12	-0.09	-0.01	0.21	-0.01	
NTAM S&P 500	50,278,664	66.17	-16.10	-19.95	-19.95	-10.62	10.59	11.31	11.14	12.97	8.32	4/1/1998
NTAM Policy			-16.10	-19.96	-19.96	-10.62	10.60	11.31	11.14	12.96	7.34	
Value Added			0.00	0.01	0.01	0.00	-0.01	0.00	0.00	0.01	0.98	
PIMCO Stock Plus	14,992,158	19.73	-17.14	-21.75	-21.75	-12.77	10.01	11.01	10.87	13.11	6.62	6/1/2000
S&P 500			-16.10	-19.96	-19.96	-10.62	10.60	11.31	11.14	12.96	6.56	
Value Added			-1.04	-1.79	-1.79	-2.15	-0.59	-0.30	-0.27	0.15	0.06	
Wellington Small Cap	10,709,405	14.09	-18.80	-25.56	-25.56	-23.50	6.45	7.86	8.64	12.10	10.65	9/1/1999
Russell 2000 Index			-17.20	-23.43	-23.43	-25.20	4.21	5.17	5.91	9.35	7.66	
Value Added			-1.60	-2.13	-2.13	1.70	2.24	2.69	2.73	2.75	2.99	

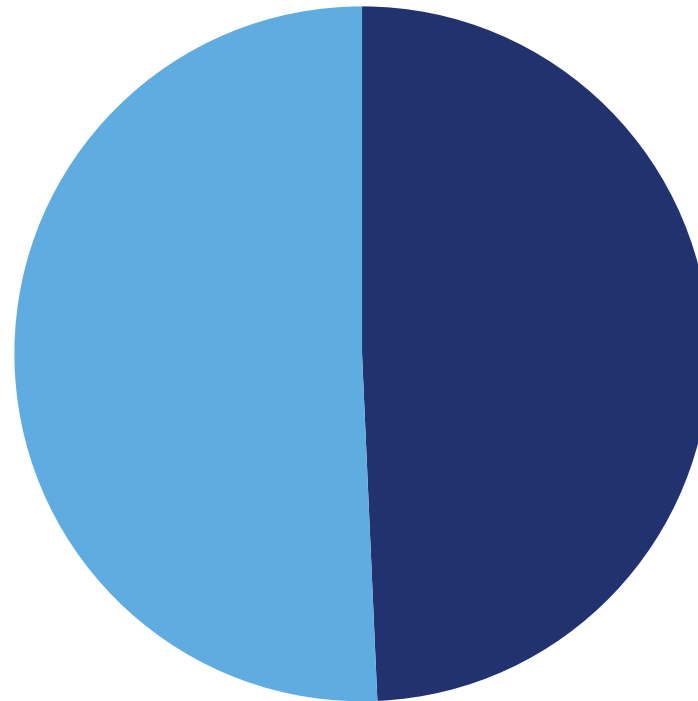
Non-U.S. Equity

Asset Allocation By Manager

Non-U.S. Equity

Periods Ended June 30, 2022

Jun-2022 : 70,216,681



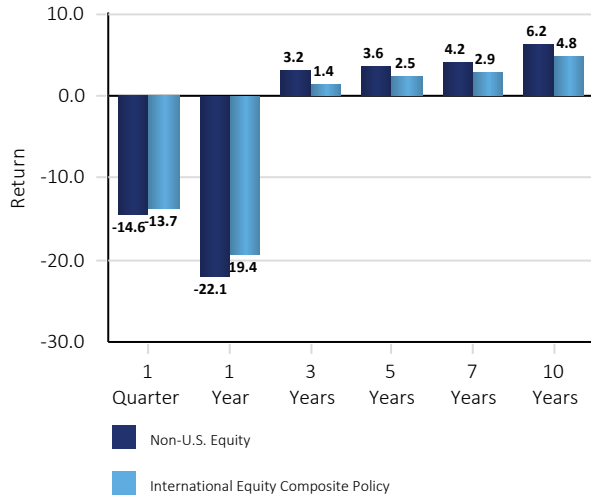
	Market Value \$	Allocation (%)
■ Harding Loevner	34,614,389	49.3
■ Neuberger Berman CIT	35,602,292	50.7

Performance Summary

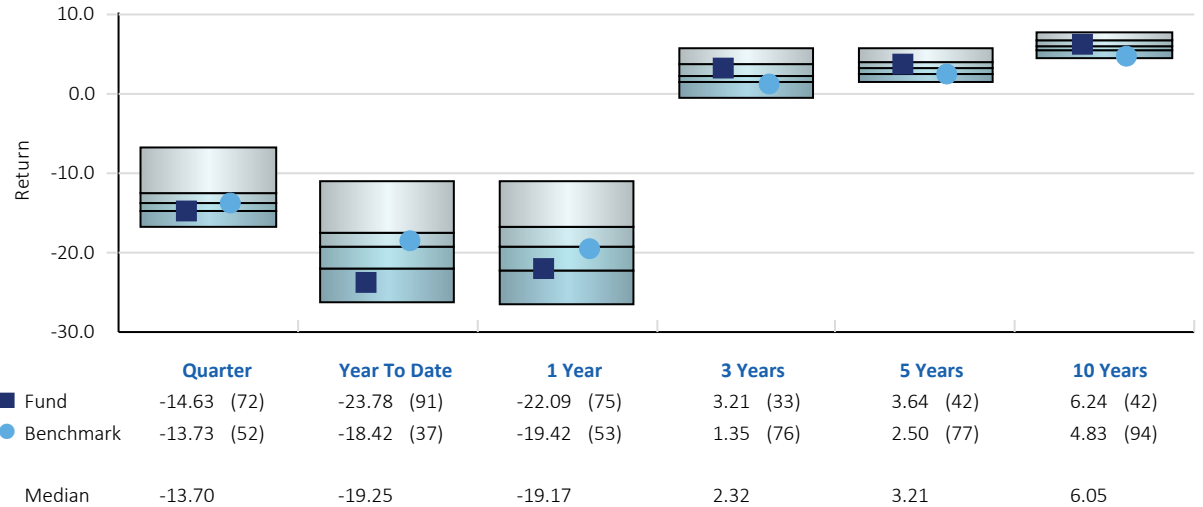
Non-U.S. Equity

Periods Ended June 30, 2022

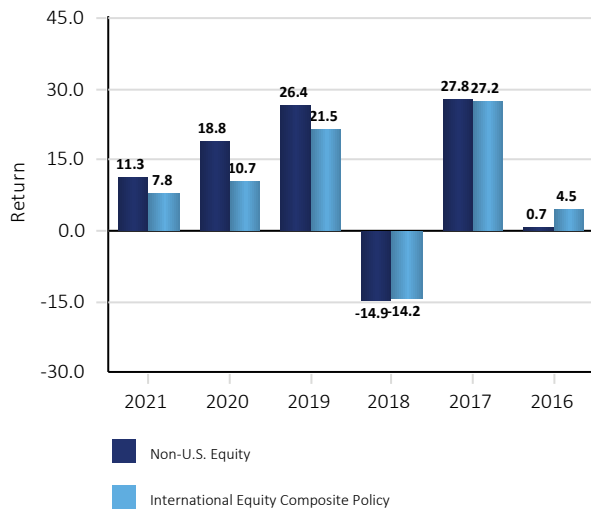
Comparative Performance



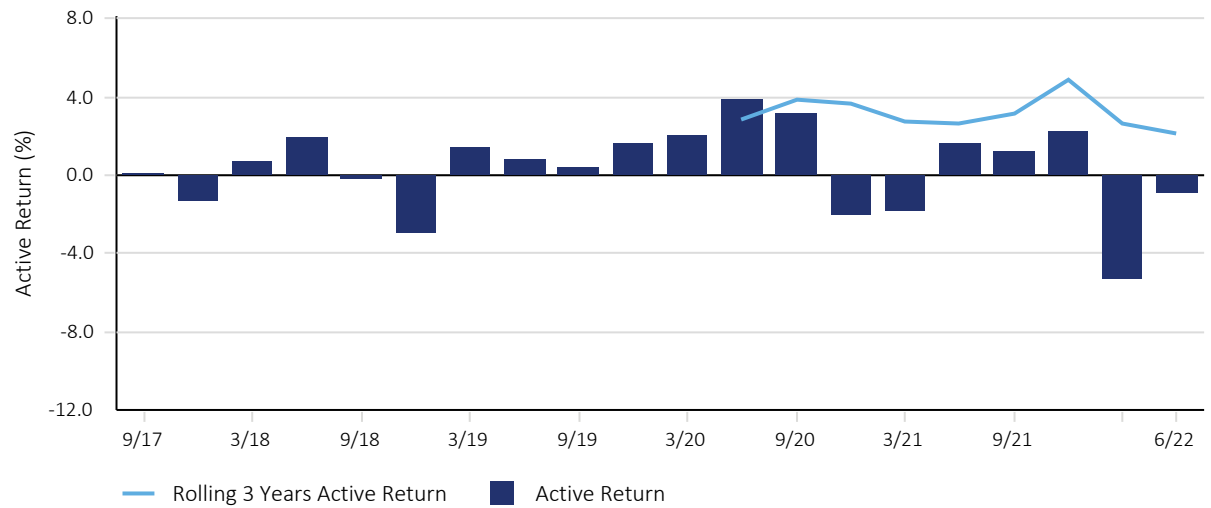
Peer Group Analysis: All Master Trust-Intl. Equity Segment



Comparative Performance



Rolling 3 Years Performance

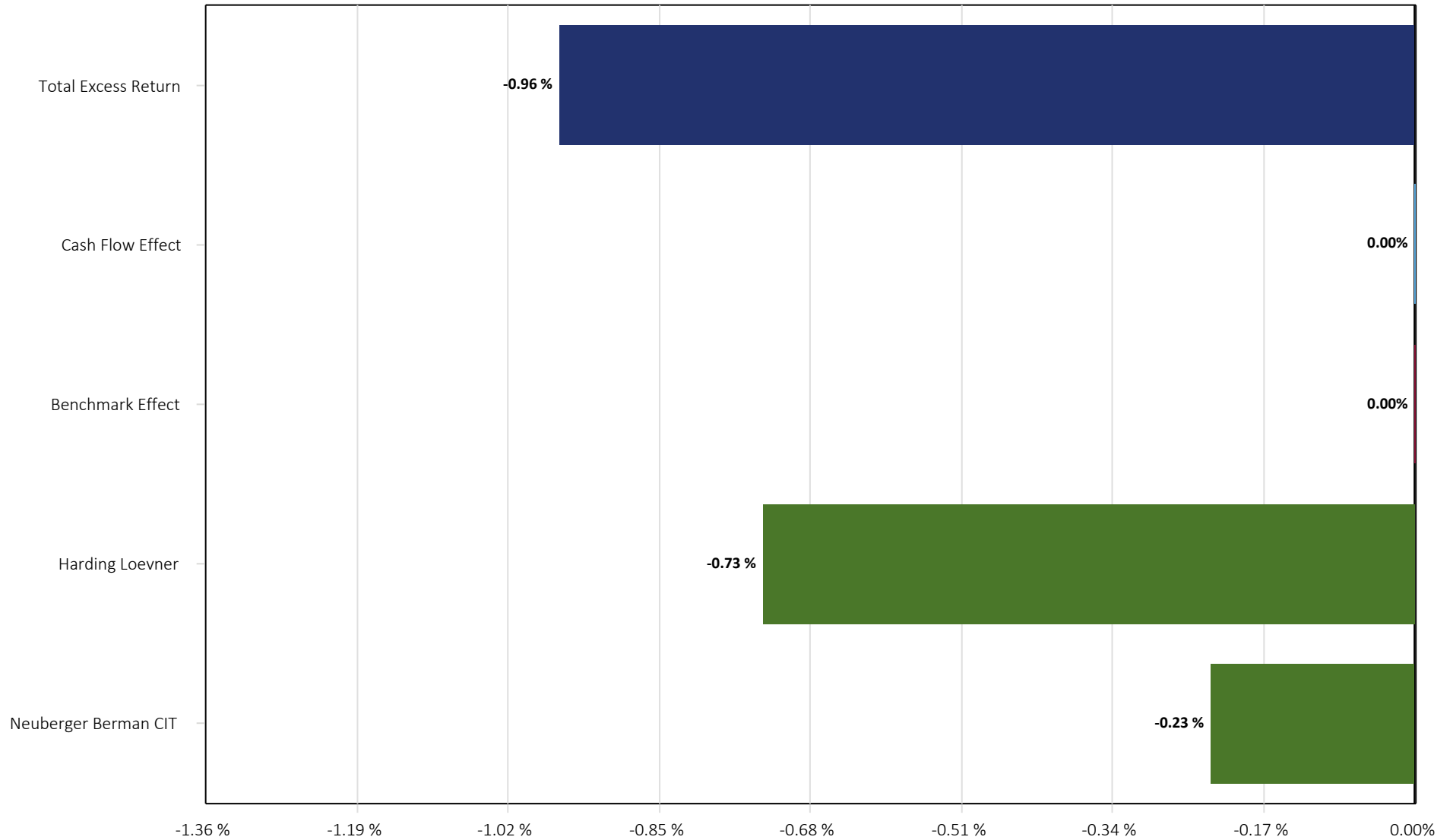


Asset Class Attribution

Non-U.S. Equity

Periods Ended 1 Quarter Ending June 30, 2022

1 Quarter



Asset Allocation & Performance

Non-U.S. Equity

Periods Ended June 30, 2022

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Non-U.S. Equity	70,216,681	100.00	-14.69	-23.88	-23.88	-22.29	2.96	3.41	3.97	6.09	7.45	1/1/1990
International Equity Composite Policy			-13.73	-18.42	-18.42	-19.42	1.35	2.50	2.92	4.83	4.21	
Value Added			-0.96	-5.46	-5.46	-2.87	1.61	0.91	1.05	1.26	3.24	
Harding Loevner	34,614,389	49.30	-15.20	-23.74	-23.74	-21.88	2.48	3.16	4.14		4.06	4/1/2015
MSCI AC World ex USA (Net)			-13.73	-18.42	-18.42	-19.42	1.35	2.50	2.92		2.89	
Value Added			-1.47	-5.32	-5.32	-2.46	1.13	0.66	1.22		1.17	
Neuberger Berman CIT	35,602,292	50.70	-14.18	-24.01	-24.01	-22.68	3.31				2.30	7/1/2018
MSCI AC World ex USA (Net)			-13.73	-18.42	-18.42	-19.42	1.35				1.34	
Value Added			-0.45	-5.59	-5.59	-3.26	1.96				0.96	

Private Equity

Private Equity Composite Overview

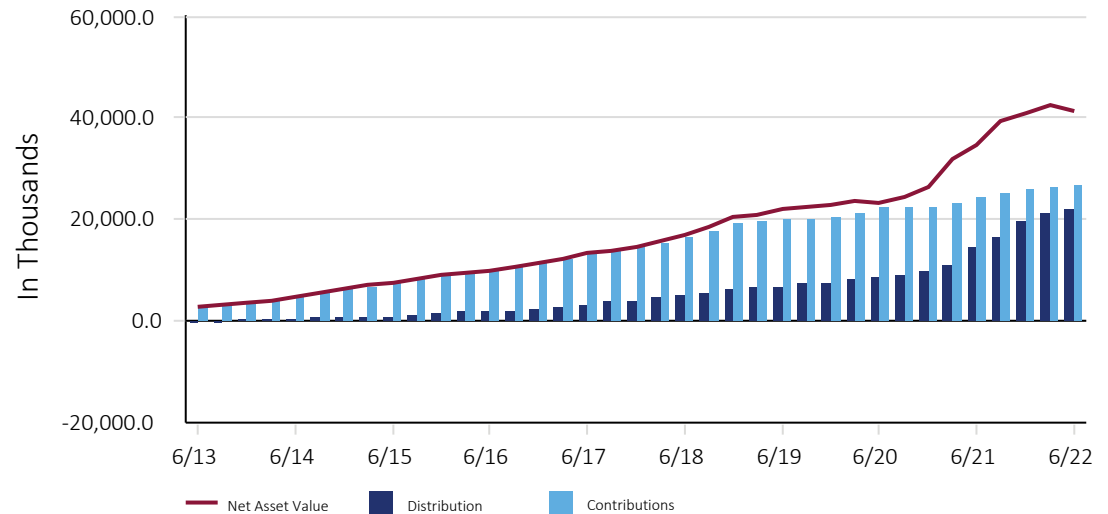
Private Equity

Periods Ended As of June 30, 2022

Cash Flow Summary

Capital Committed:	34,500,000
Capital Invested:	7,810,600
Total Contributions:	26,994,424
Remaining Capital Commitment:	7,874,331
Total Distributions:	22,107,347
Market Value:	41,521,788
Inception Date:	5/1/2010
Inception IRR:	20.2
TVPI:	2.4

Cash Flow Analysis



Private Equity Portfolio

Partnerships	Capital Committed \$	Total Contribution \$	Total Distribution \$	Market Value \$	IRR (%)	TVPI Multiple (%)
Adams Street 2010 Direct Fund	500,000	480,500	655,508	294,303	12.7	2.0
Adams Street 2010 EM Fund	500,000	449,000	423,670	530,380	11.8	2.1
Adams Street 2010 Non-US Fund	1,500,000	1,350,750	1,737,189	853,201	13.2	1.9
Adams Street 2010 US Fund	2,500,000	2,202,500	3,829,068	2,021,268	17.6	2.7
Adams Street 2013 Global Fund	5,000,000	4,467,500	3,704,920	6,821,622	17.1	2.4
Adams Street 2015 Global	6,500,000	5,453,500	3,389,066	10,248,575	29.2	2.5
Adams Street 2017 Global Fund	6,000,000	4,326,150	1,135,620	8,236,076	30.9	2.2
Aberdeen Global	5,000,000	4,950,000	6,861,250	6,928,029	18.4	2.8
Adams Street 2019 Global	7,000,000	3,314,524	371,056	5,588,334	77.4	1.8

Private Equity Composite Overview

Private Equity

Periods Ended As of June 30, 2022

Partnerships	Capital Committed \$	Total Contribution \$	Total Distribution \$	Market Value \$	IRR (%)	TVPI Multiple (%)
Private Equity	34,500,000	26,994,424	22,107,347	41,521,788	20.2	2.4

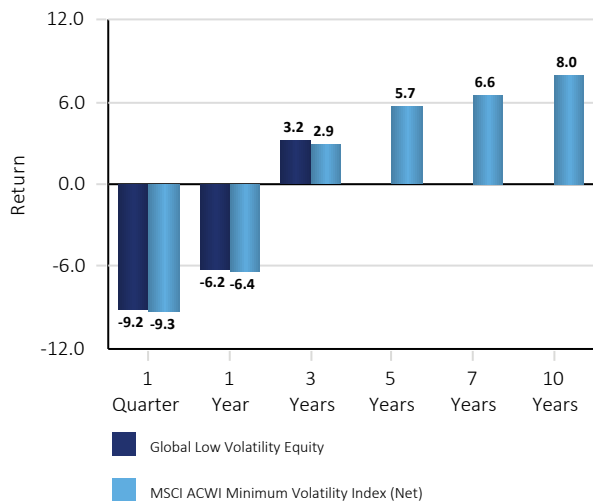
Global Low Volatility Equity

Performance Summary

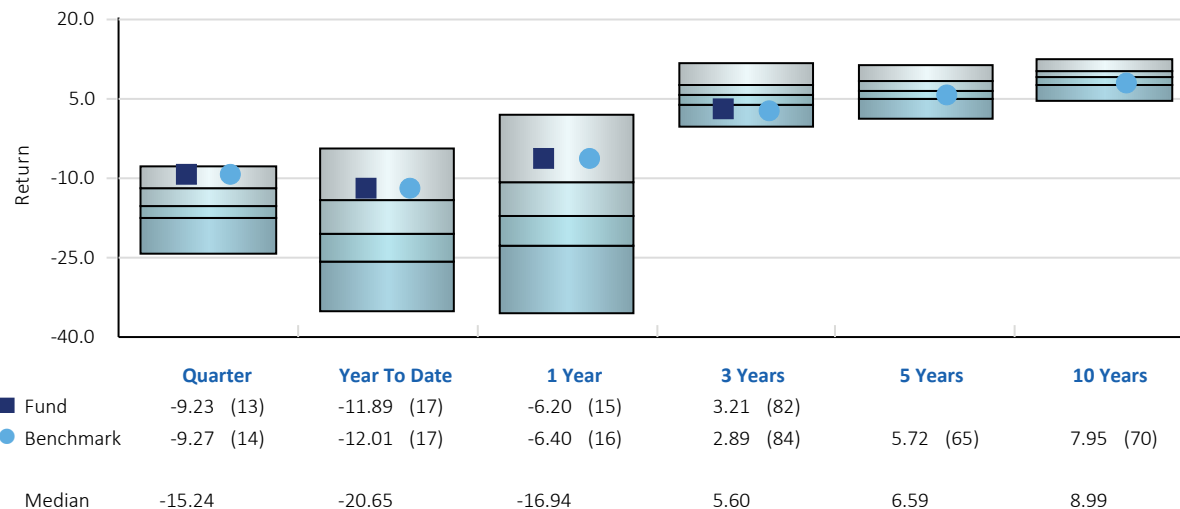
Global Low Volatility Equity

Periods Ended June 30, 2022

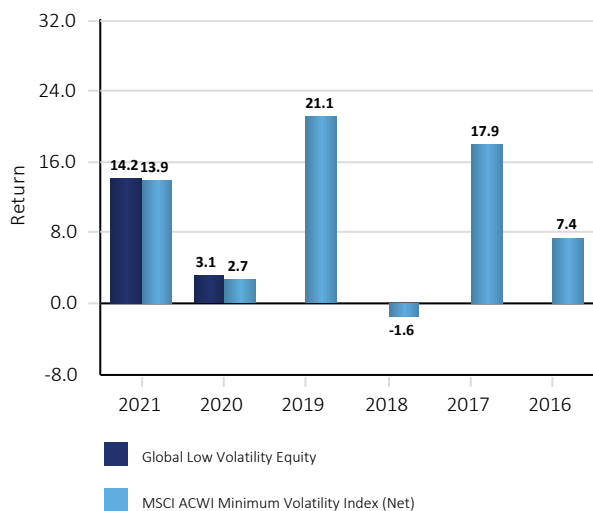
Comparative Performance



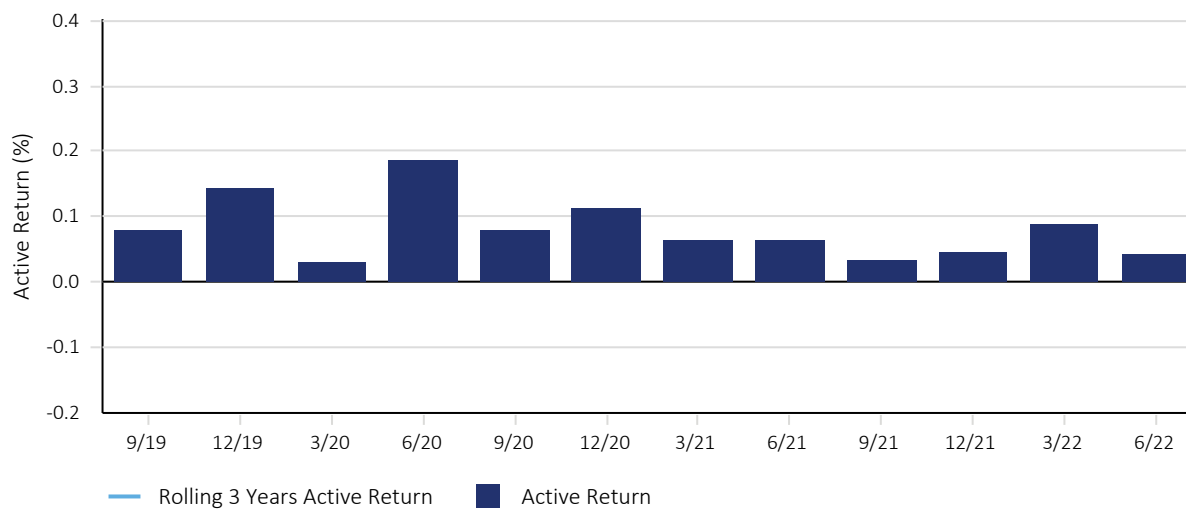
Peer Group Analysis: IM Global Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance



Asset Allocation & Performance

Global Low Volatility Equity

Periods Ended June 30, 2022

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Global Low Volatility Equity	44,920,564	100.00	-9.23	-11.89	-11.89	-6.20	3.21				4.55	6/1/2019
MSCI ACWI Minimum Volatility Index (Net)			-9.27	-12.01	-12.01	-6.40	2.89				4.22	
Value Added			0.04	0.12	0.12	0.20	0.32				0.33	
BlackRock MSCI ACWI Min Vol	44,920,564	100.00	-9.23	-11.89	-11.89	-6.20	3.21				4.55	6/1/2019
MSCI ACWI Minimum Volatility Index (Net)			-9.27	-12.01	-12.01	-6.40	2.89				4.22	
Value Added			0.04	0.12	0.12	0.20	0.32				0.33	

Private Credit

Private Credit Composite Overview

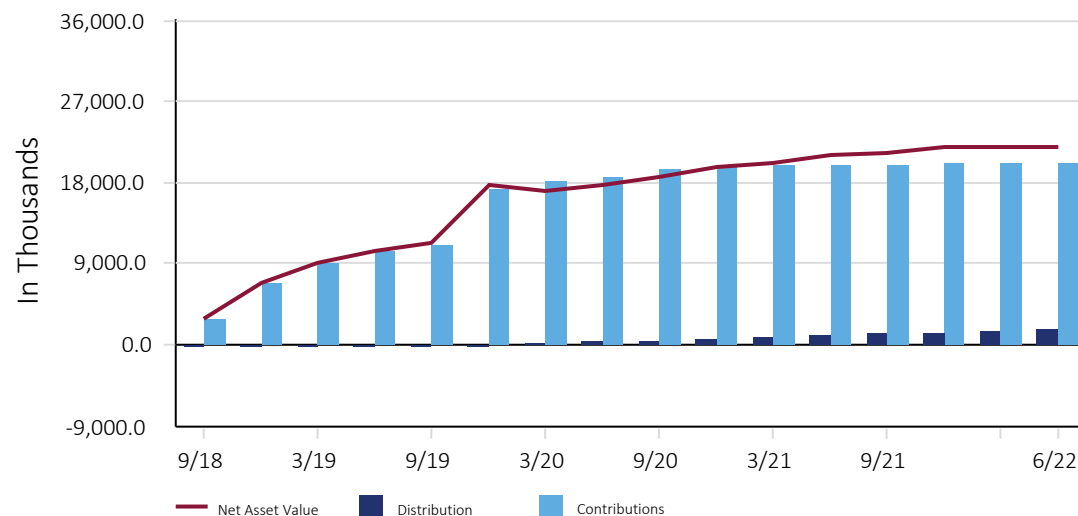
Private Credit

Periods Ended As of June 30, 2022

Cash Flow Summary

Capital Committed:	21,000,000
Capital Invested:	2,570,919
Total Contributions:	20,191,428
Remaining Capital Commitment:	808,572
Total Distributions:	1,744,033
Market Value:	21,921,132
Inception Date:	10/1/2018
Inception IRR:	5.7
TVPI:	1.2

Cash Flow Analysis



Private Equity Portfolio

Partnerships	Capital Committed \$	Total Contribution \$	Total Distribution \$	Market Value \$	IRR (%)	TVPI Multiple (%)
50 South Capital Private Credit	7,000,000	6,191,428	1,744,033	5,774,319	8.8	1.2
Grosvenor PC	14,000,000	14,000,000		16,146,813	4.7	1.2
Private Credit	21,000,000	20,191,428	1,744,033	21,921,132	5.7	1.2

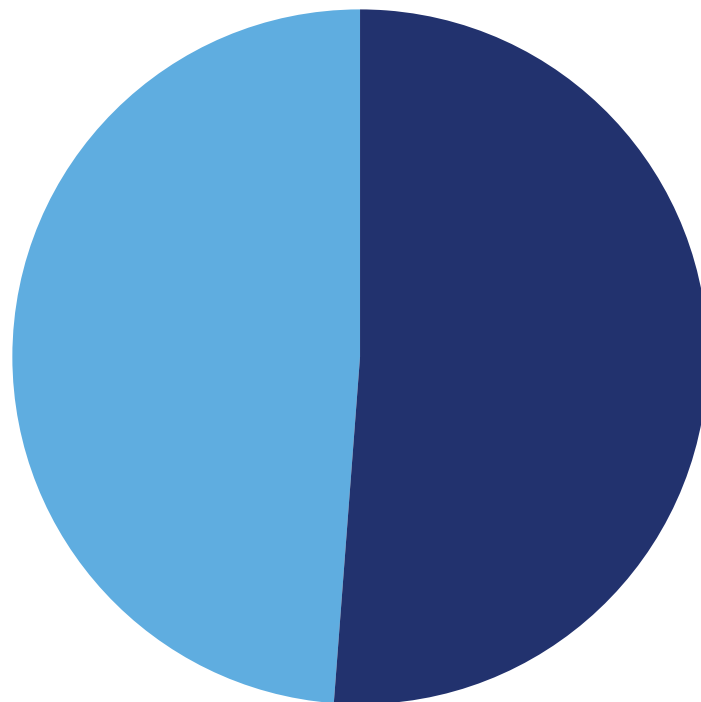
Core Fixed Income

Asset Allocation By Manager

Core Fixed Income

Periods Ended June 30, 2022

Jun-2022 : 112,127,032



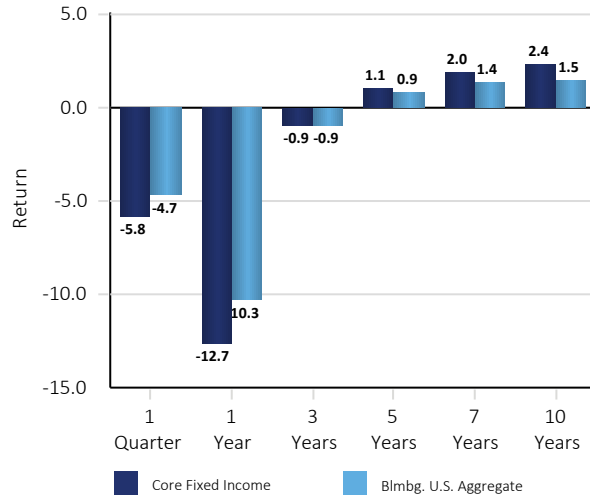
	Market Value \$	Allocation (%)
■ Baird Advisors	57,417,131	51.2
■ Western Asset Management	54,709,901	48.8

Performance Summary

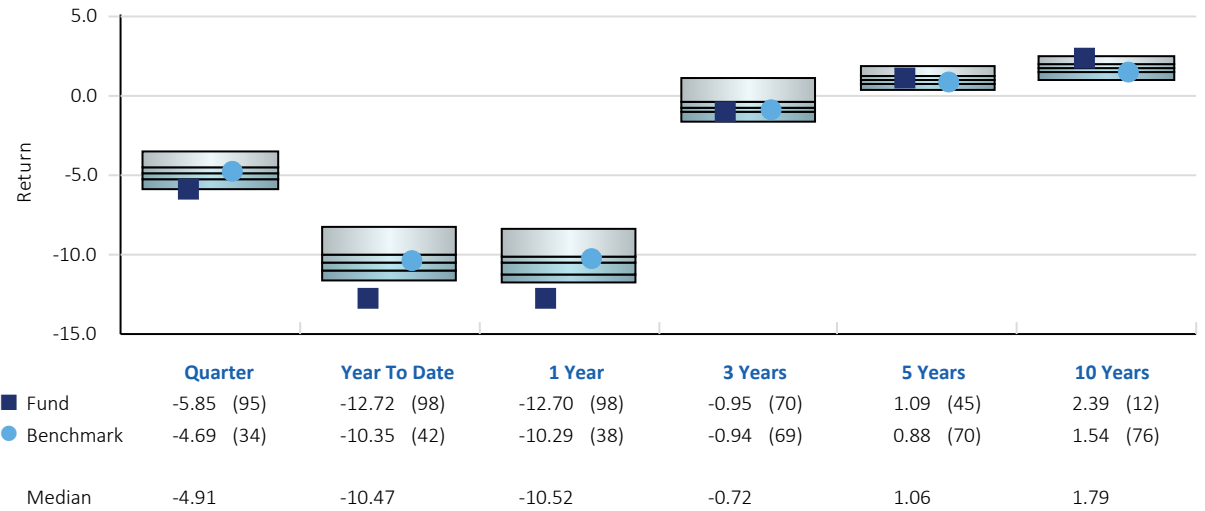
Core Fixed Income

Periods Ended June 30, 2022

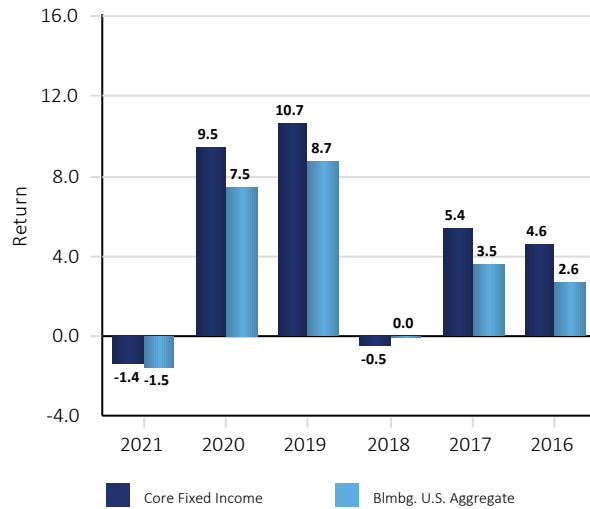
Comparative Performance



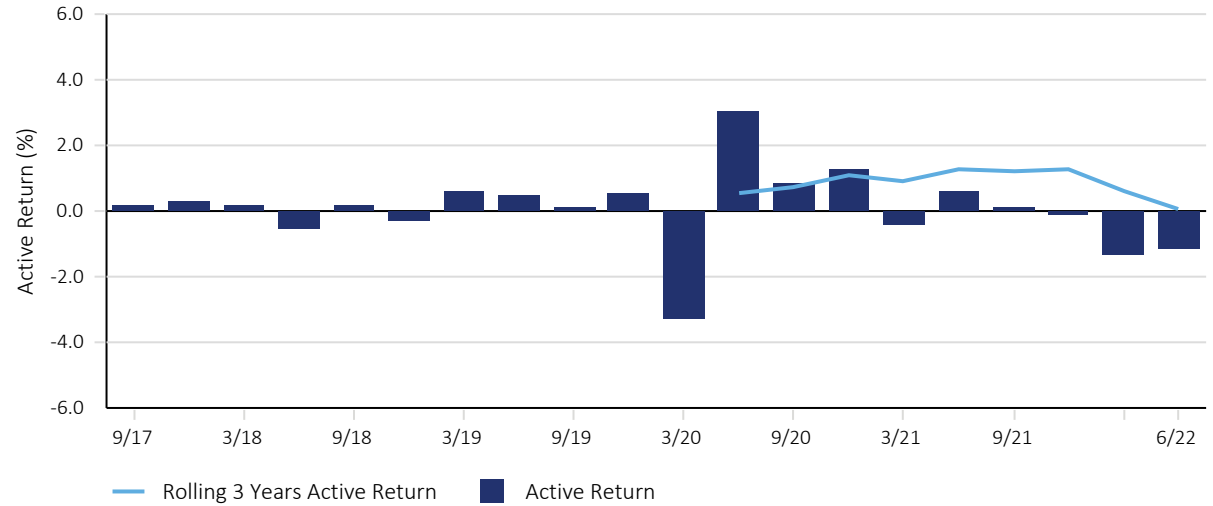
Peer Group Analysis: IM U.S. Broad Market Core Fixed Income (SA+CF)



Comparative Performance



Rolling 3 Years Performance

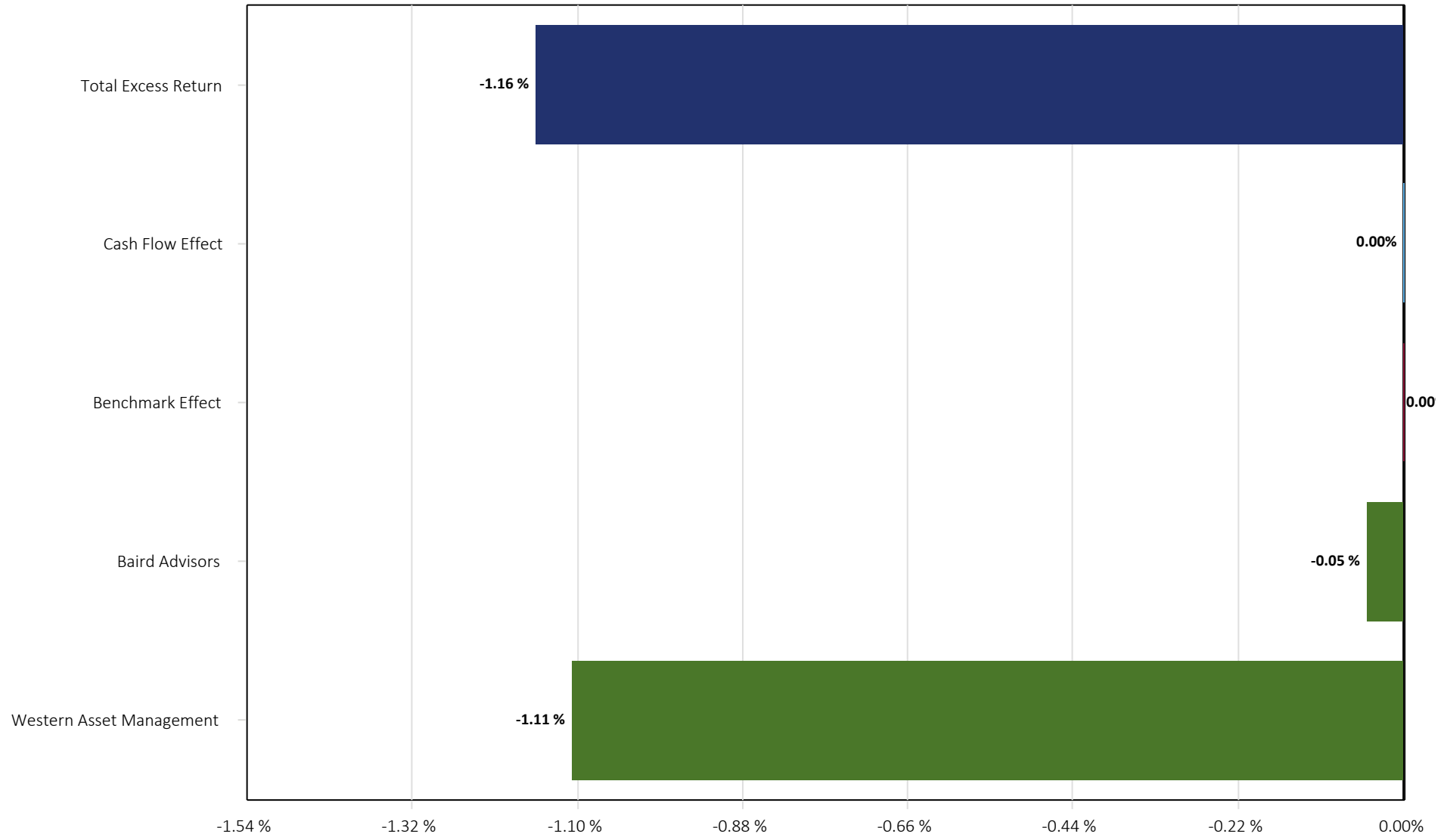


Asset Class Attribution

Core Fixed Income

Periods Ended 1 Quarter Ending June 30, 2022

1 Quarter



Asset Allocation & Performance

Core Fixed Income

Periods Ended June 30, 2022

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Core Fixed Income	112,127,032	100.00	-5.85	-12.72	-12.72	-12.70	-0.95	1.09	1.96	2.39	6.13	10/1/1987
Blmbg. U.S. Aggregate			-4.69	-10.35	-10.35	-10.29	-0.94	0.88	1.42	1.54	5.74	
Value Added			-1.16	-2.37	-2.37	-2.41	-0.01	0.21	0.54	0.85	0.39	
Baird Advisors	57,417,131	51.21	-4.79	-10.59	-10.59	-10.59	-0.64	1.20	1.86	2.13	3.65	12/1/2002
Blmbg. U.S. Aggregate			-4.69	-10.35	-10.35	-10.29	-0.94	0.88	1.42	1.54	3.43	
Value Added			-0.10	-0.24	-0.24	-0.30	0.30	0.32	0.44	0.59	0.22	
Western Asset Management	54,709,901	48.79	-6.94	-14.86	-14.86	-14.82	-1.29	0.93	2.02	2.61	4.13	1/1/2004
Blmbg. U.S. Aggregate			-4.69	-10.35	-10.35	-10.29	-0.94	0.88	1.42	1.54	3.30	
Value Added			-2.25	-4.51	-4.51	-4.53	-0.35	0.05	0.60	1.07	0.83	

TIPS

Asset Allocation & Performance

TIPS

Periods Ended June 30, 2022

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
TIPS	21,816,150	100.00	-6.14	-9.17	-9.17	-5.76	2.67	2.91	2.61		2.32	5/1/2015
Blmbg. U.S. TIPS			-6.08	-8.92	-8.92	-5.14	3.04	3.21	2.82		2.49	
Value Added			-0.06	-0.25	-0.25	-0.62	-0.37	-0.30	-0.21		-0.17	
Brown Brothers Harriman	21,816,150	100.00	-6.14	-9.17	-9.17	-5.76	2.67	2.91	2.61		2.32	5/1/2015
Blmbg. U.S. TIPS			-6.08	-8.92	-8.92	-5.14	3.04	3.21	2.82		2.49	
Value Added			-0.06	-0.25	-0.25	-0.62	-0.37	-0.30	-0.21		-0.17	

Real Estate

Asset Allocation & Performance

Real Estate

Periods Ended June 30, 2022

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Real Estate	22,915,562	100.00	-16.22	-18.78	-18.78	-5.21	4.69	5.33	4.81	5.77	8.29	6/1/2009
Real Estate Policy Index			-18.10	-21.14	-21.14	-6.41	1.83	3.73	4.30	5.60	8.43	
Value Added			1.88	2.36	2.36	1.20	2.86	1.60	0.51	0.17	-0.14	
Centersquare	22,915,562	100.00	-16.22	-18.78	-18.78	-5.21					3.70	10/1/2019
Dow Jones U.S. Select REIT			-18.10	-21.14	-21.14	-6.41					0.33	
Value Added			1.88	2.36	2.36	1.20					3.37	

Commodities

Asset Allocation & Performance

Commodities

Periods Ended June 30, 2022

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Commodities	26,420,709	100.00	-8.34	12.30	12.30	17.45	15.20	10.45	4.71		-0.29	2/1/2013
Bloomberg Commodity Index Total Return			-5.66	18.44	18.44	24.27	14.34	8.39	2.79		-1.40	
Value Added			-2.68	-6.14	-6.14	-6.82	0.86	2.06	1.92		1.11	
Wellington Commodities	26,420,709	100.00	-8.34	12.30	12.30	17.45	15.20	10.45	4.71		-0.29	2/1/2013
Bloomberg Commodity Index Total Return			-5.66	18.44	18.44	24.27	14.34	8.39	2.79		-1.40	
Value Added			-2.68	-6.14	-6.14	-6.82	0.86	2.06	1.92		1.11	

Midstream Energy

Asset Allocation & Performance

Midstream Energy Composite

Periods Ended June 30, 2022

	Allocation		Performance (%) net of fees									
	Market Value \$	%	1 Quarter	YTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
Midstream Energy Composite	26,007,961	100.00	-8.51	13.74	13.74	14.80	3.69	2.33	-0.87		-1.33	3/1/2015
Midstream Energy Policy Index			-8.64	13.24	13.24	11.42	-2.61	-2.81	-6.50		-7.56	
Value Added			0.13	0.50	0.50	3.38	6.30	5.14	5.63		6.23	
Harvest MLP	26,007,961	100.00	-8.51	13.74	13.74	14.80	3.69	2.33	-0.87		-1.33	3/1/2015
Midstream Energy Policy Index			-8.64	13.24	13.24	11.42	-2.61	-2.81	-6.50		-7.56	
Value Added			0.13	0.50	0.50	3.38	6.30	5.14	5.63		6.23	

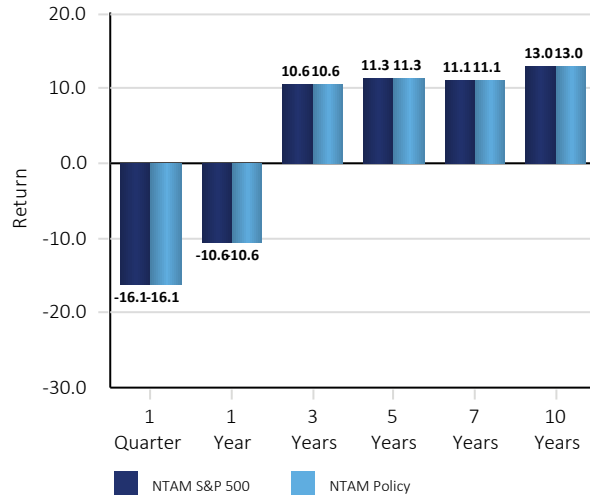
Appendix

Performance Summary

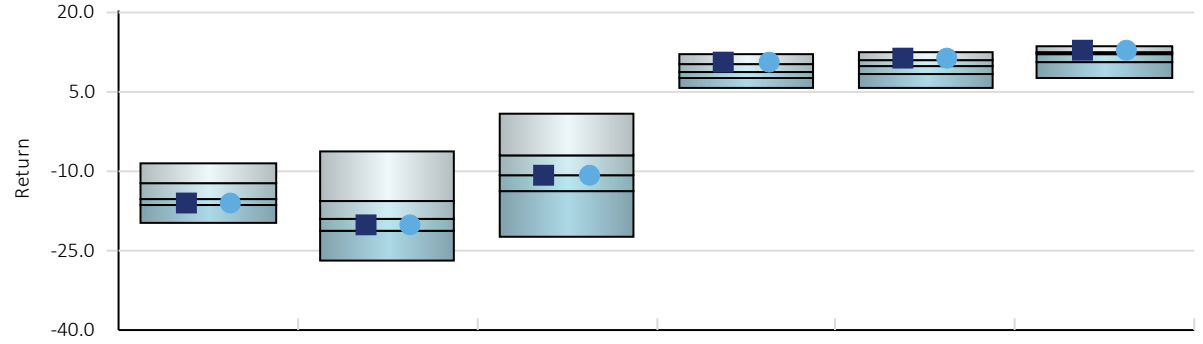
NTAM S&P 500

Periods Ended June 30, 2022

Comparative Performance

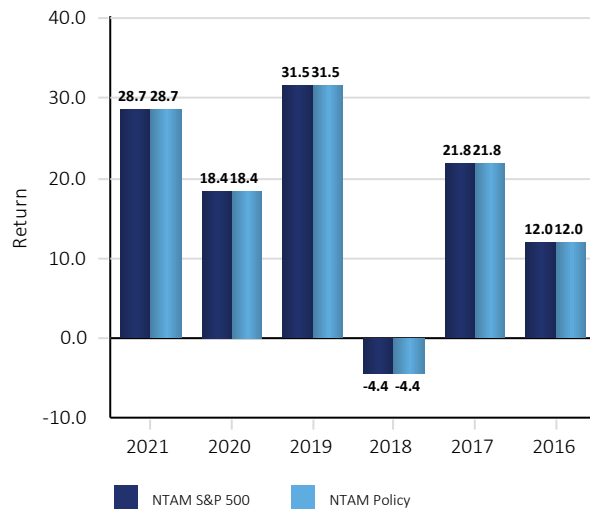


Peer Group Analysis: IM U.S. Large Cap Core Equity (SA+CF)

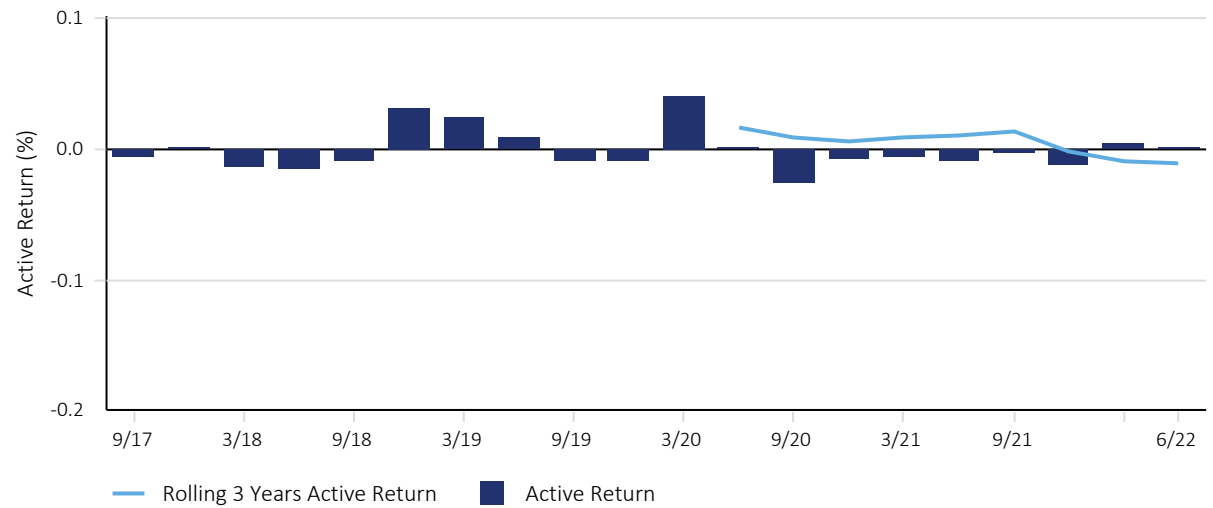


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
■ Fund	-16.10 (71)	-19.95 (60)	-10.62 (48)	10.59 (19)	11.31 (21)	12.97 (12)
● Benchmark	-16.10 (71)	-19.96 (61)	-10.62 (48)	10.60 (19)	11.31 (21)	12.96 (12)
Median	-15.09	-19.18	-10.91	8.78	9.72	12.01

Comparative Performance



Rolling 3 Years Performance

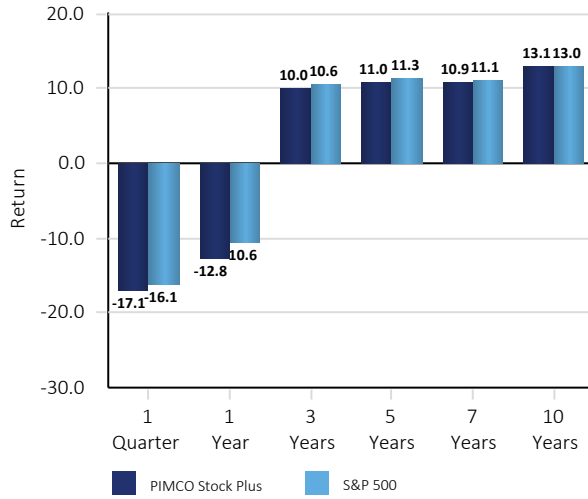


Performance Summary

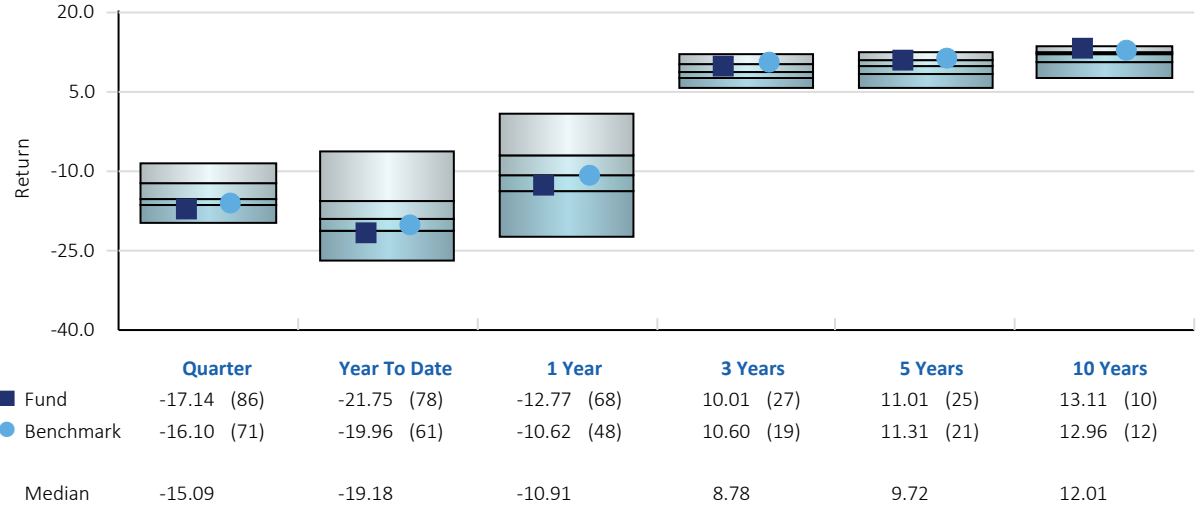
PIMCO Stock Plus

Periods Ended June 30, 2022

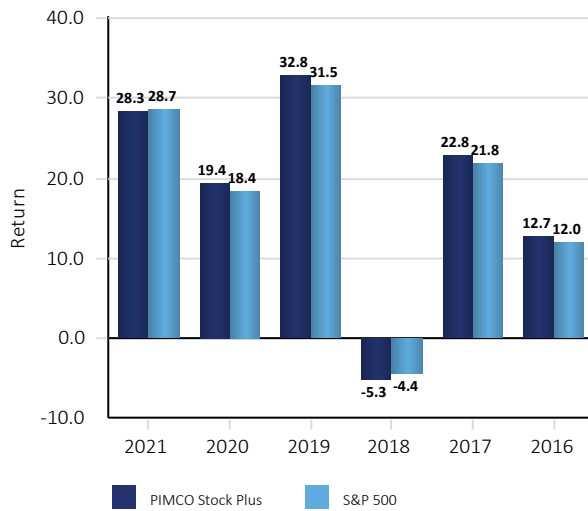
Comparative Performance



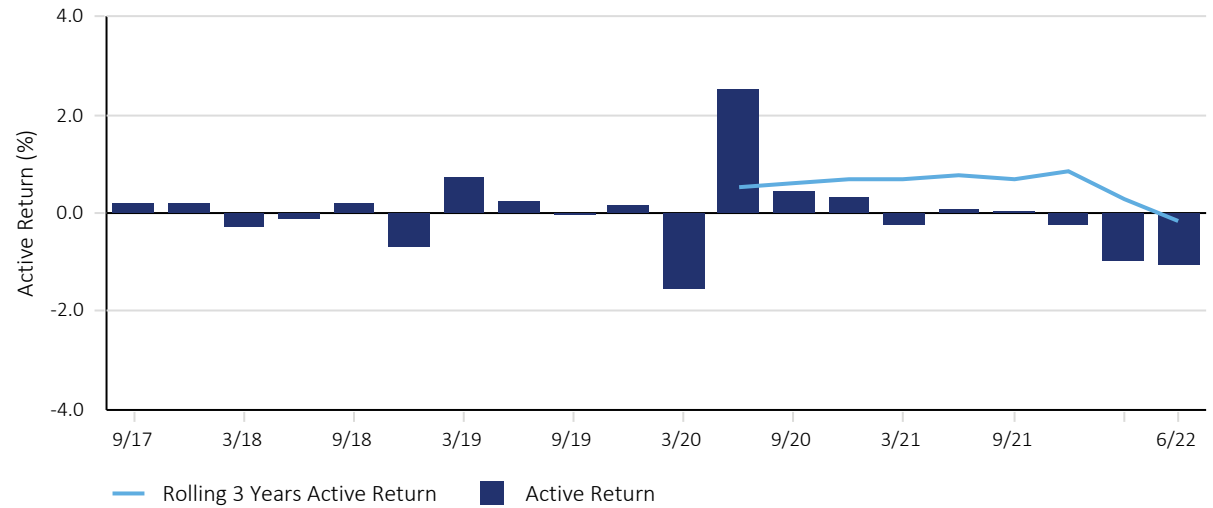
Peer Group Analysis: IM U.S. Large Cap Core Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance

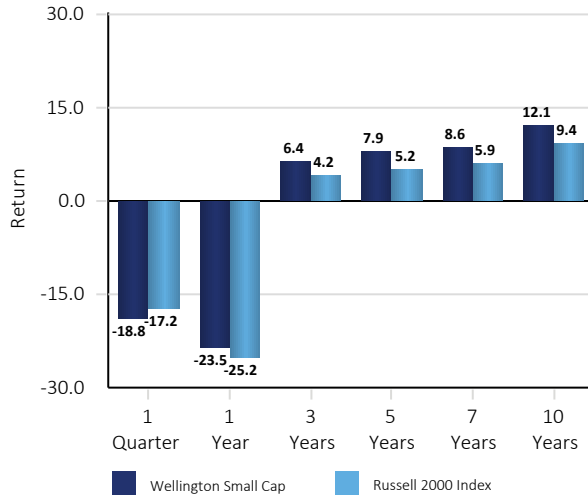


Performance Summary

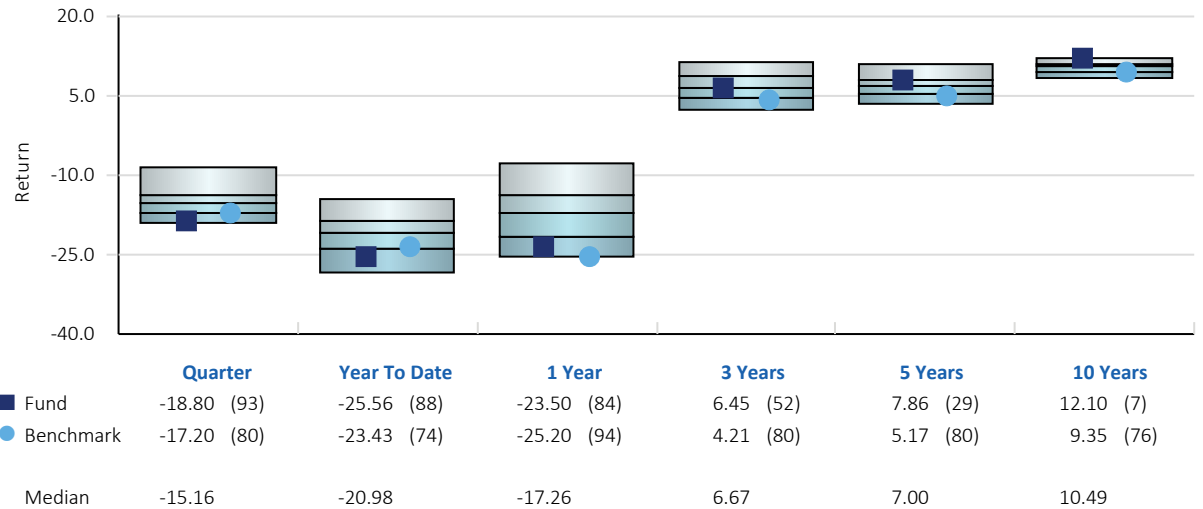
Wellington Small Cap

Periods Ended June 30, 2022

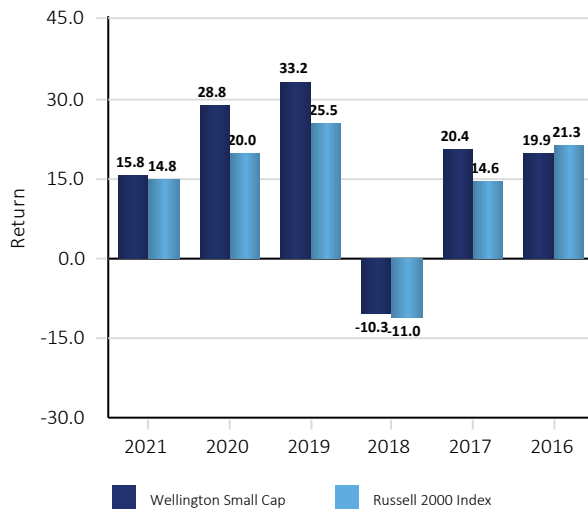
Comparative Performance



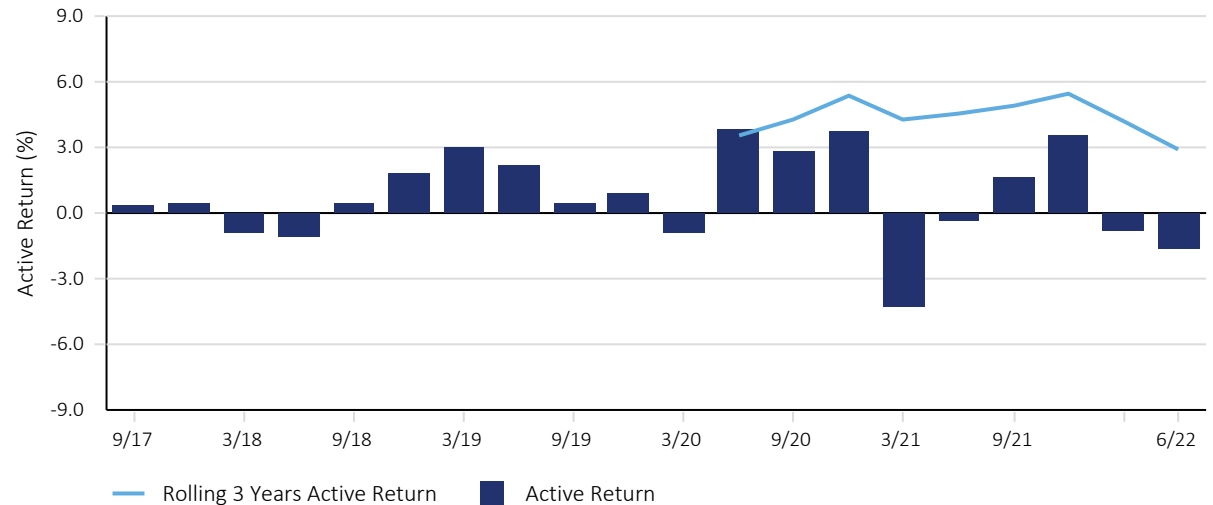
Peer Group Analysis: IM U.S. Small Cap Core Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance

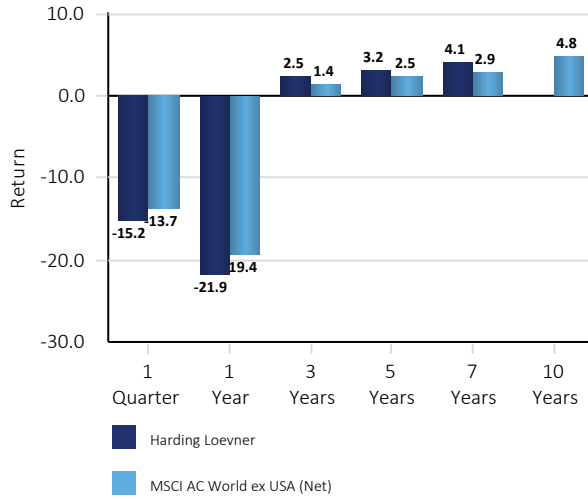


Performance Summary

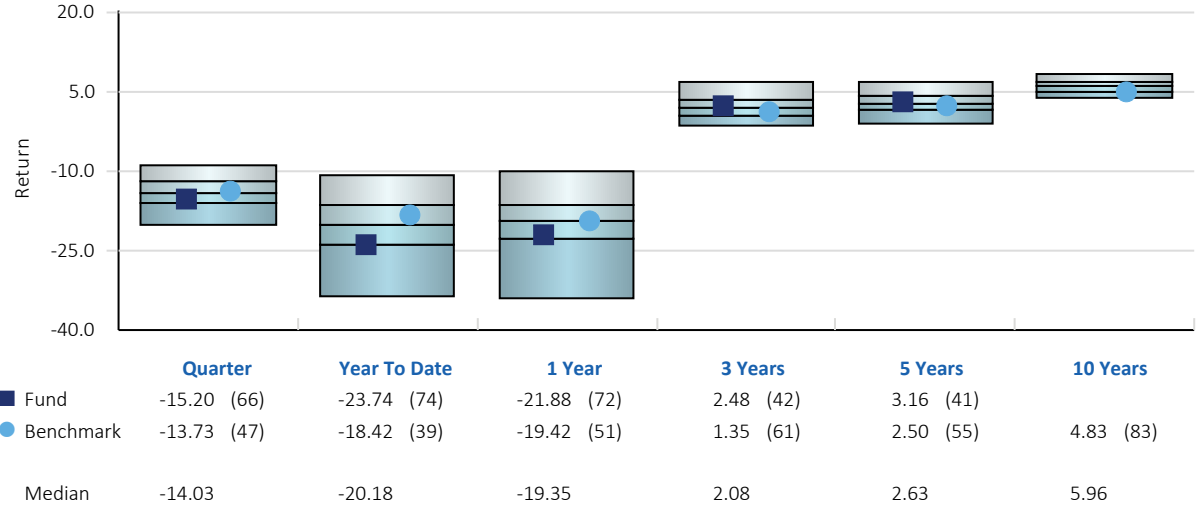
Harding Loevner

Periods Ended June 30, 2022

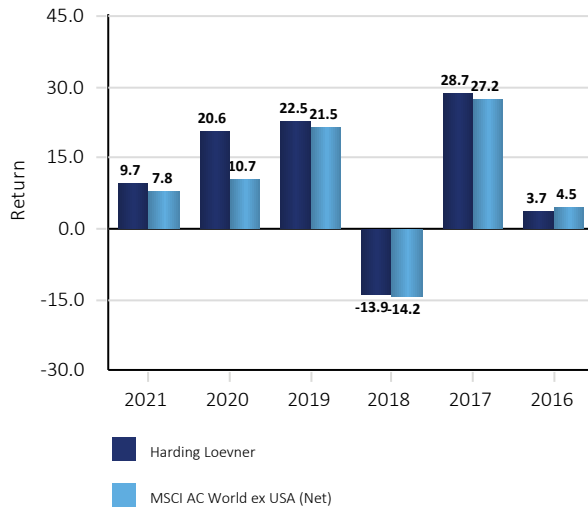
Comparative Performance



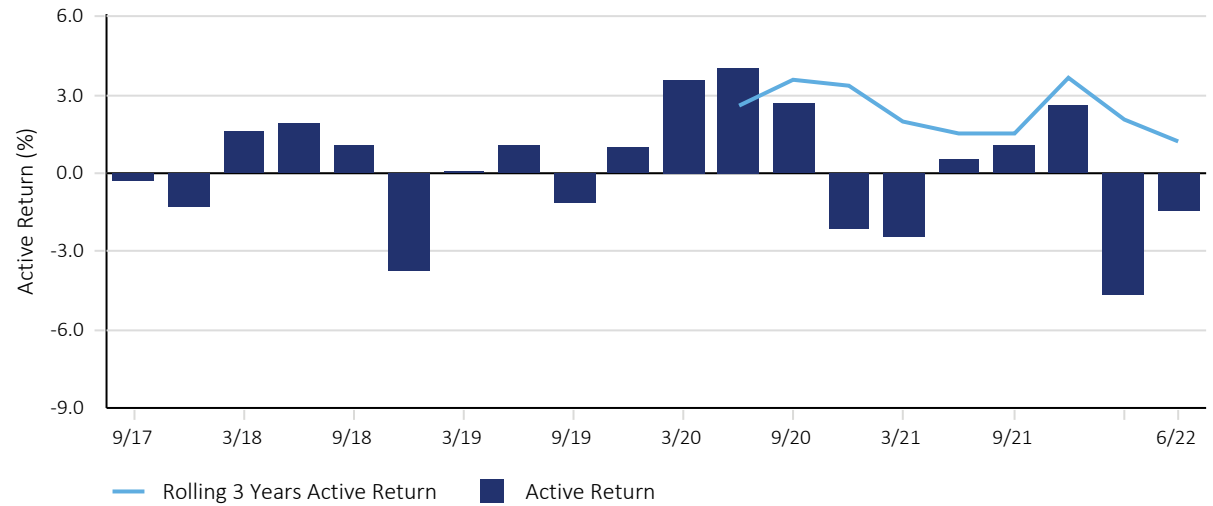
Peer Group Analysis: IM International Large Cap Equity (SA+CF)



Comparative Performance



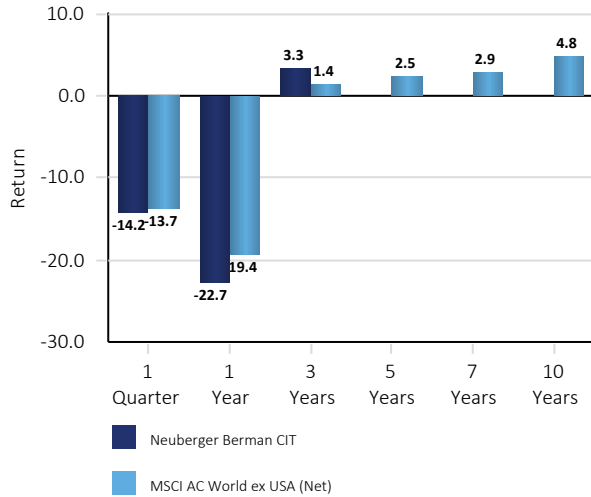
Rolling 3 Years Performance



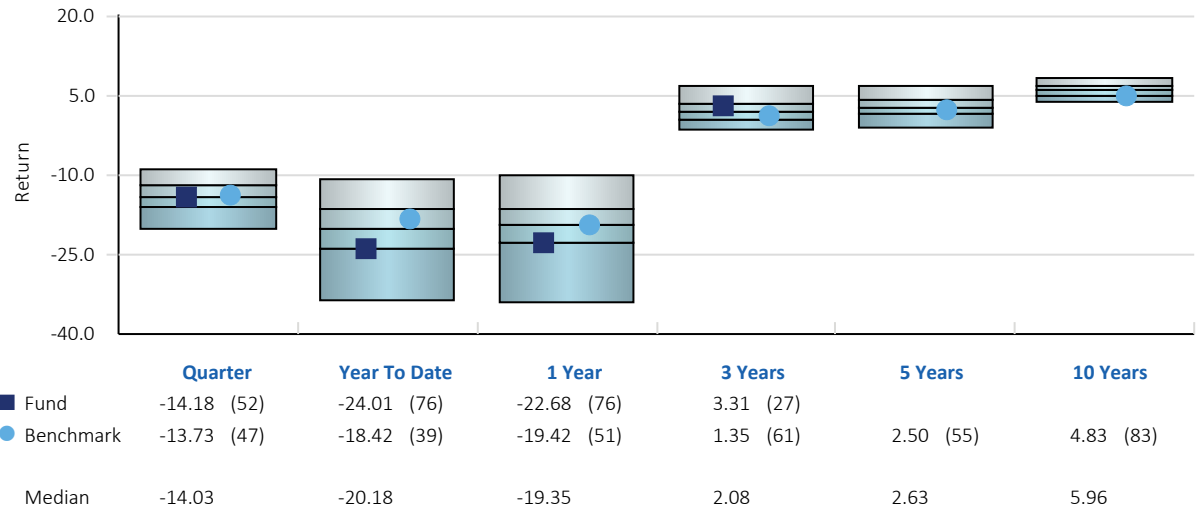
Performance Summary

Neuberger Berman CIT
Periods Ended June 30, 2022

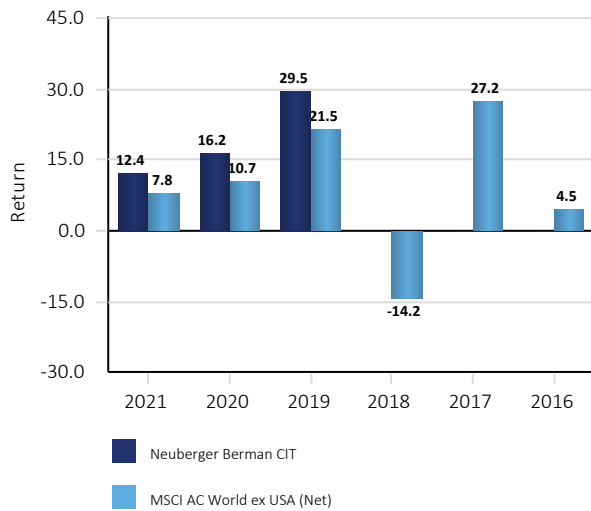
Comparative Performance



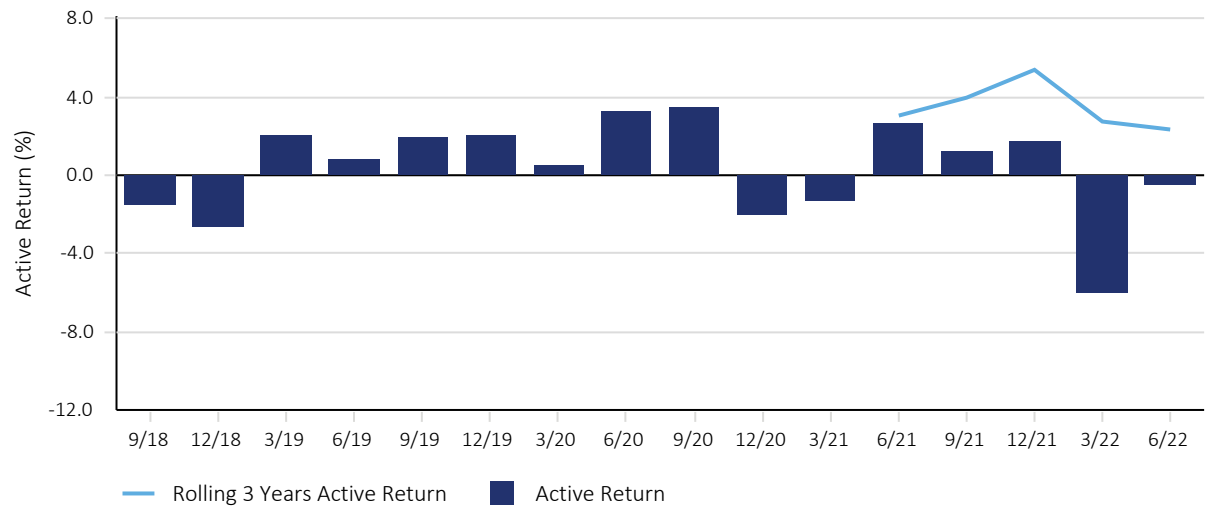
Peer Group Analysis: IM International Large Cap Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance

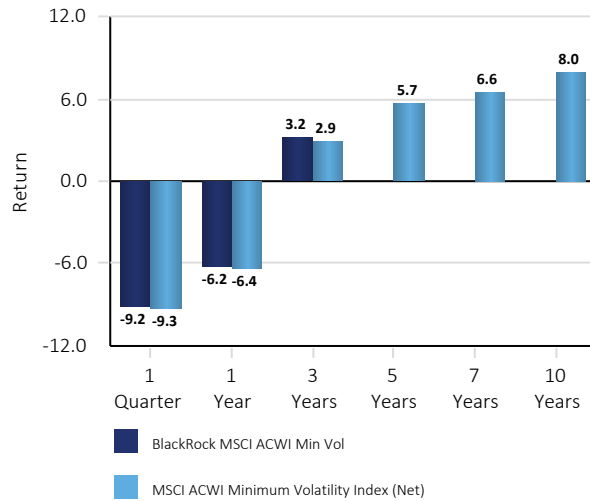


Performance Summary

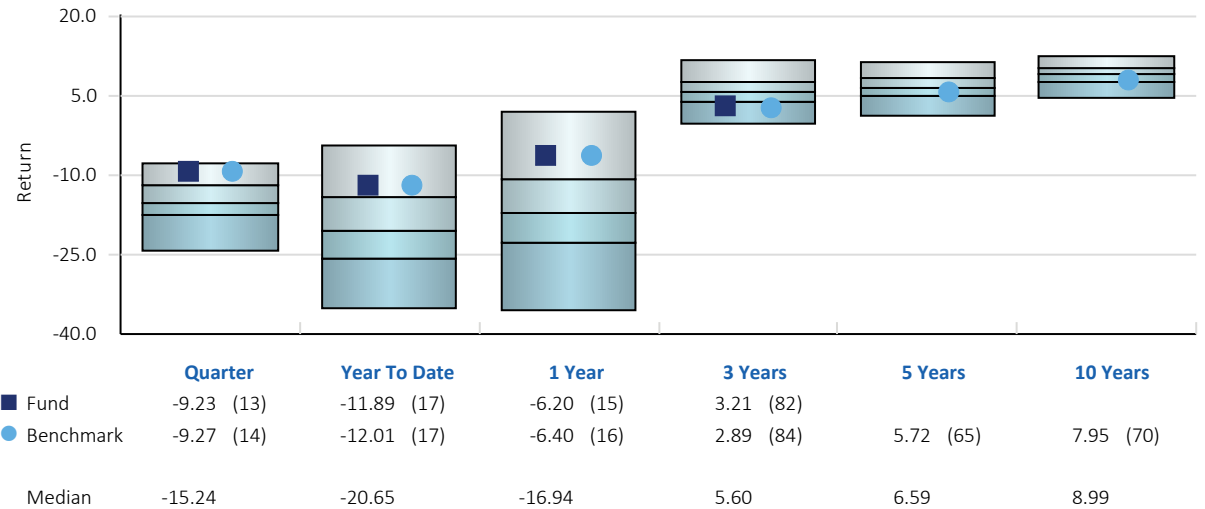
BlackRock MSCI ACWI Min Vol

Periods Ended June 30, 2022

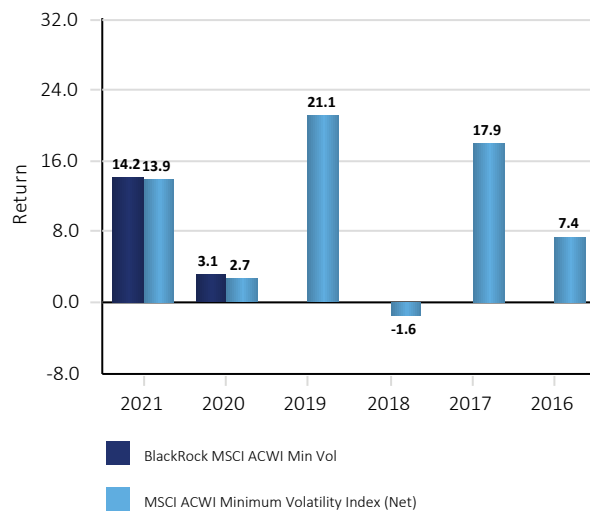
Comparative Performance



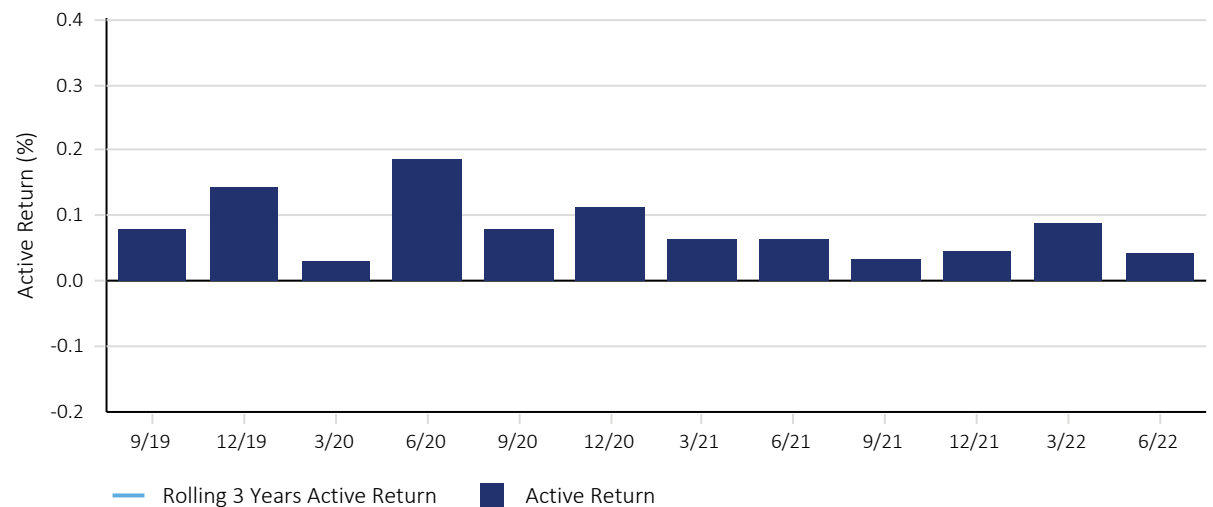
Peer Group Analysis: IM Global Equity (SA+CF)



Comparative Performance



Rolling 3 Years Performance

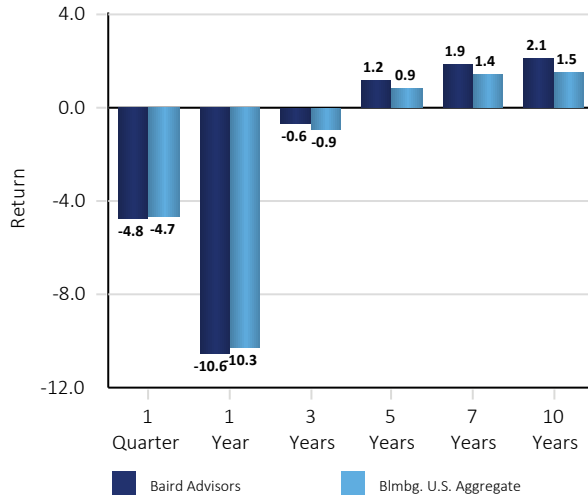


Performance Summary

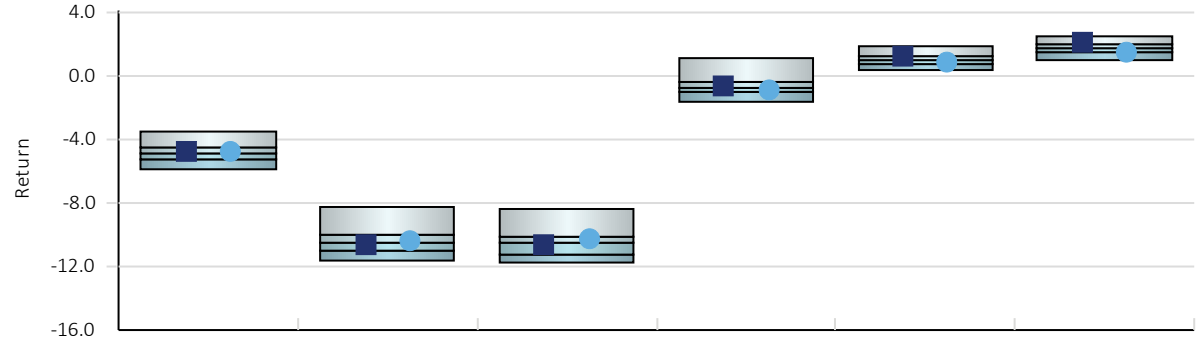
Baird Advisors

Periods Ended June 30, 2022

Comparative Performance

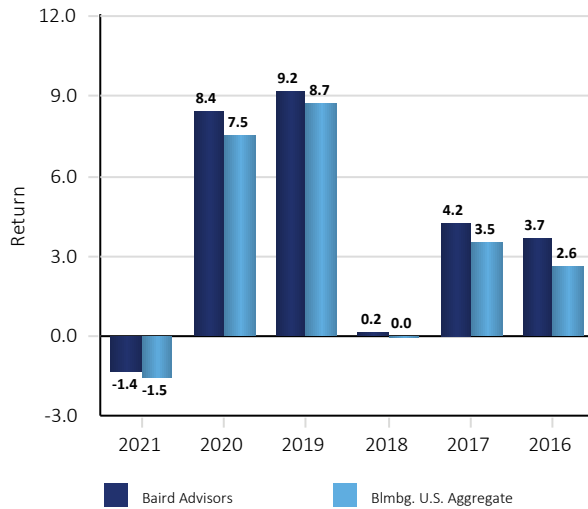


Peer Group Analysis: IM U.S. Broad Market Core Fixed Income (SA+CF)

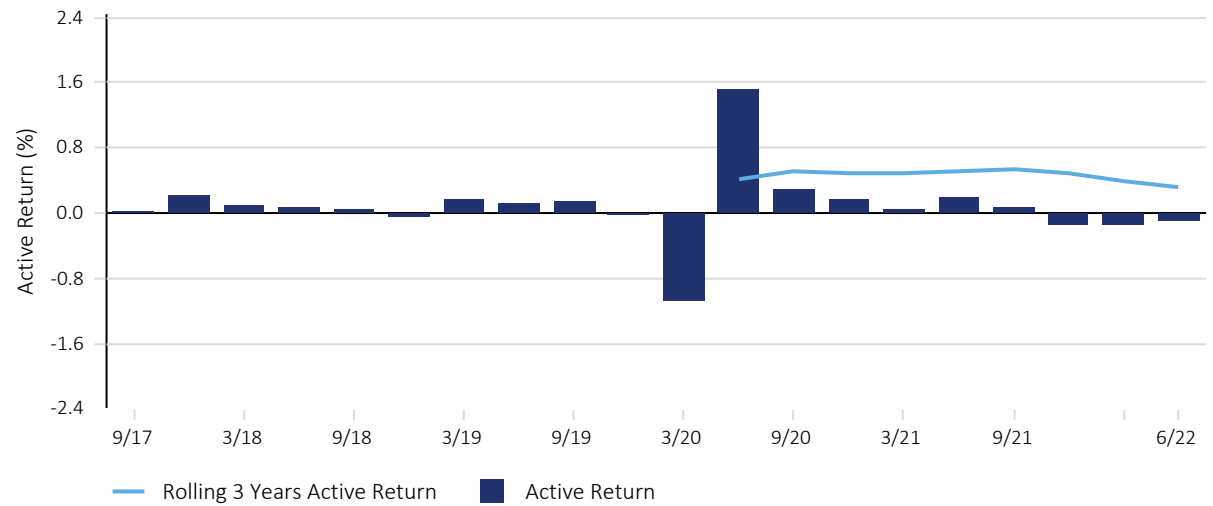


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
■ Fund	-4.79 (42)	-10.59 (56)	-10.59 (56)	-0.64 (46)	1.20 (34)	2.13 (18)
● Benchmark	-4.69 (34)	-10.35 (42)	-10.29 (38)	-0.94 (69)	0.88 (70)	1.54 (76)
Median	-4.91	-10.47	-10.52	-0.72	1.06	1.79

Comparative Performance



Rolling 3 Years Performance

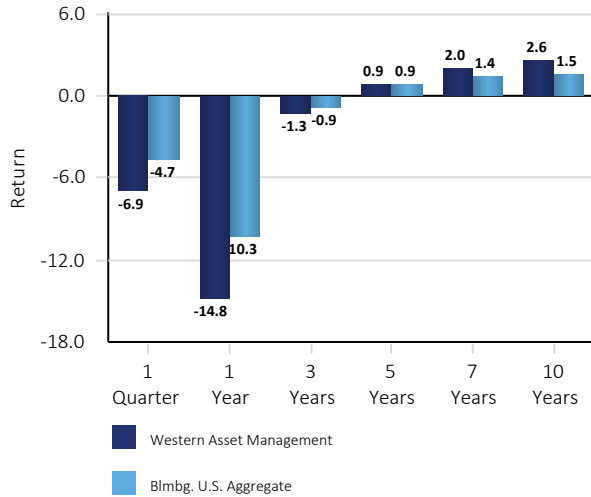


Performance Summary

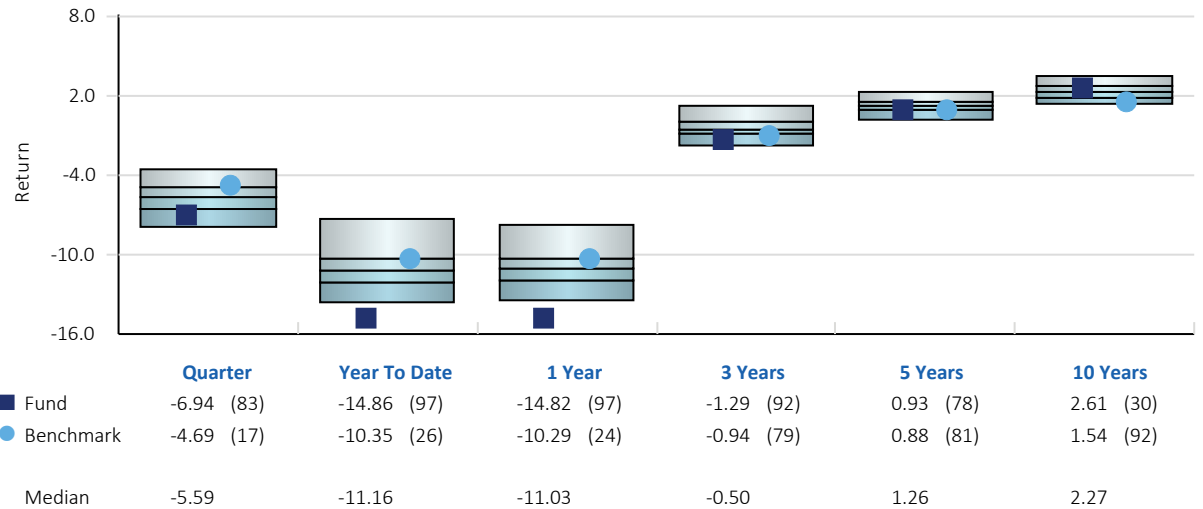
Western Asset Management

Periods Ended June 30, 2022

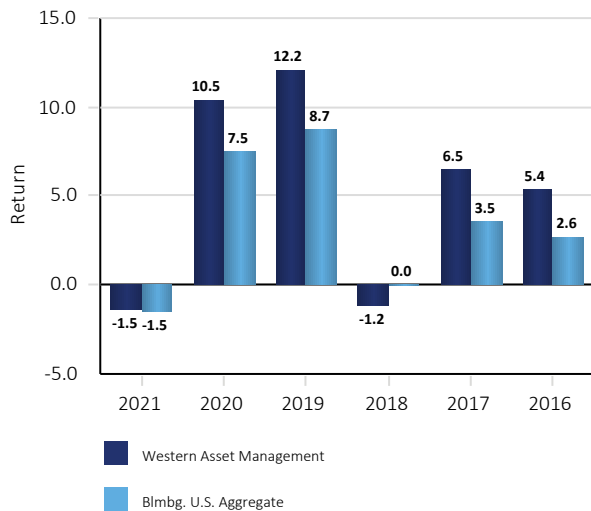
Comparative Performance



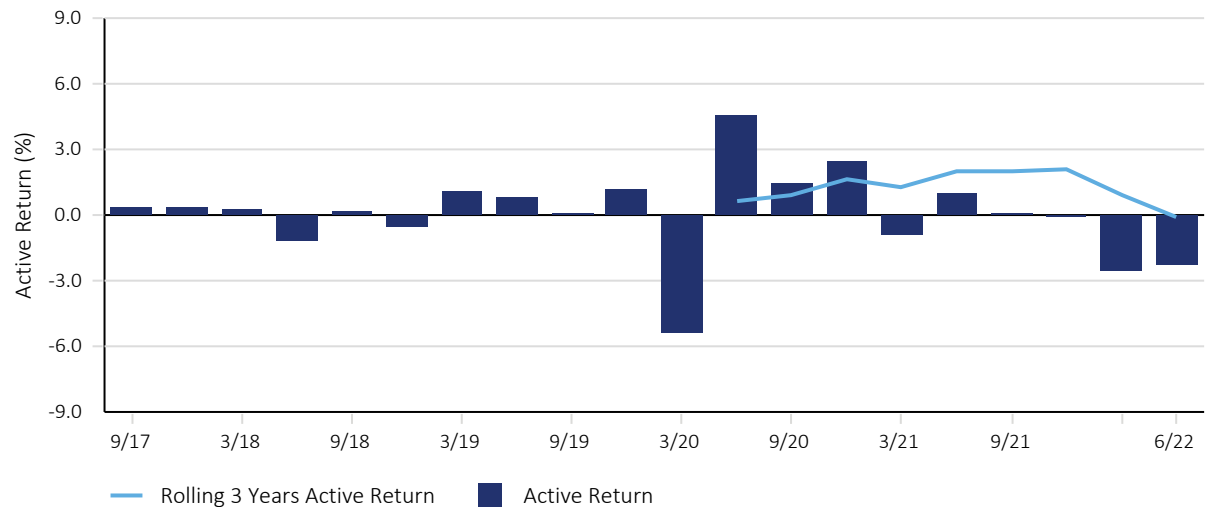
Peer Group Analysis: IM U.S. Broad Market Core+ Fixed Income (SA+CF)



Comparative Performance



Rolling 3 Years Performance

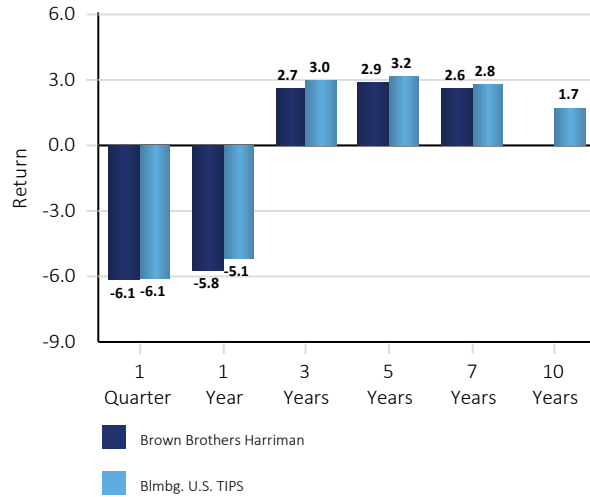


Performance Summary

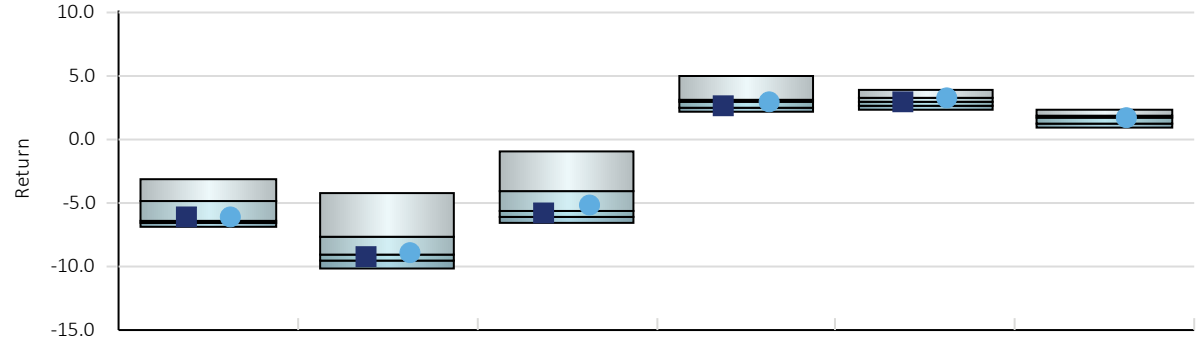
Brown Brothers Harriman

Periods Ended June 30, 2022

Comparative Performance

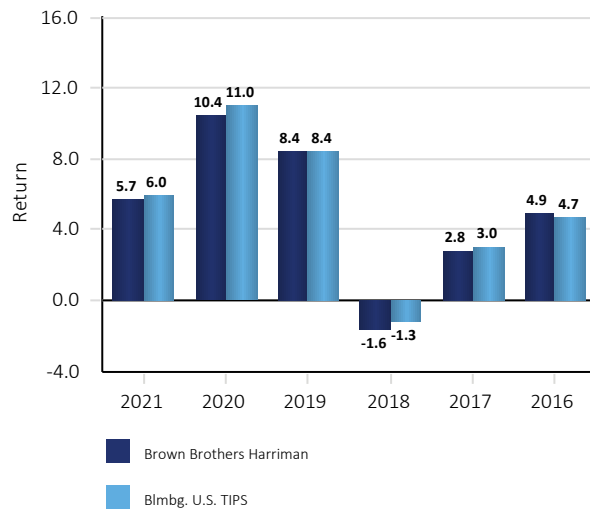


Peer Group Analysis: IM U.S. TIPS (SA+CF)

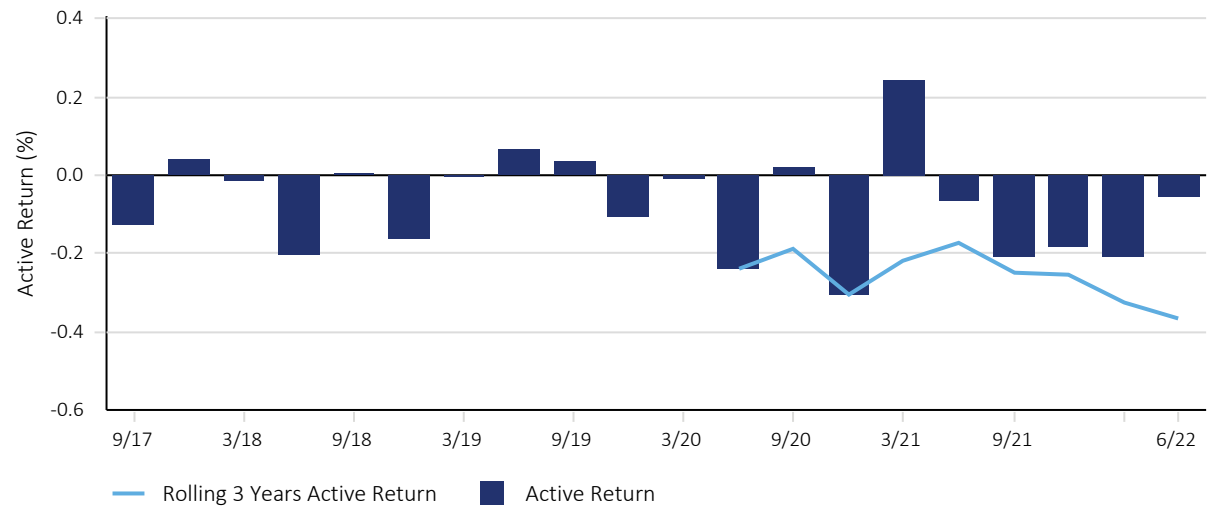


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
■ Fund	-6.14 (41)	-9.17 (63)	-5.76 (68)	2.67 (68)	2.91 (61)	
● Benchmark	-6.08 (38)	-8.92 (40)	-5.14 (41)	3.04 (41)	3.21 (28)	1.73 (39)
Median	-6.44	-9.00	-5.60	2.89	2.97	1.66

Comparative Performance



Rolling 3 Years Performance

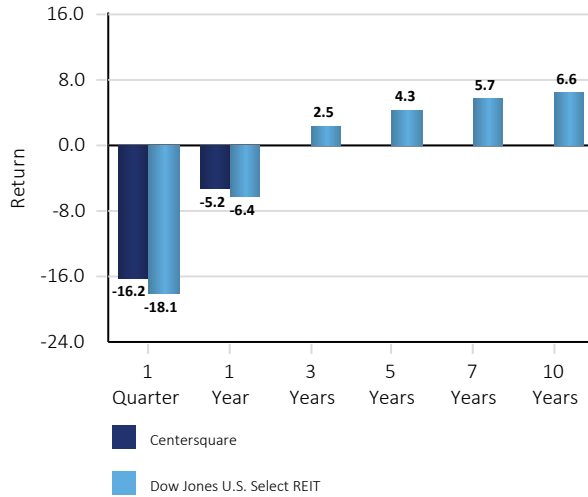


Performance Summary

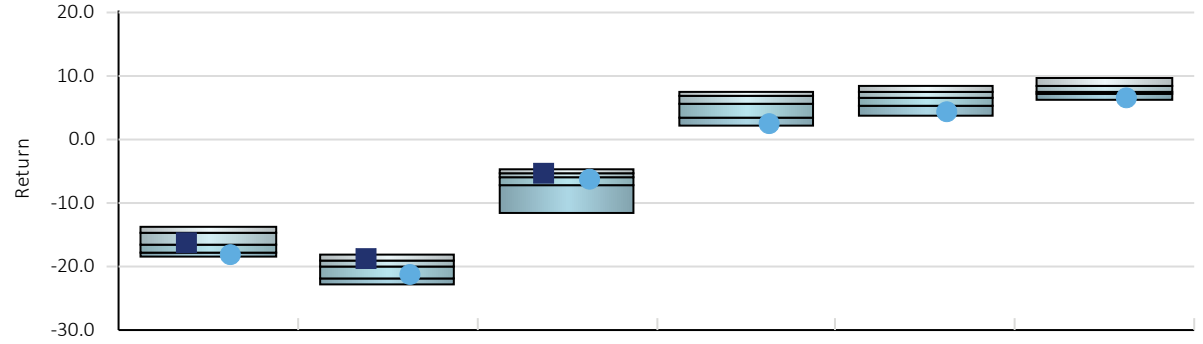
Centersquare

Periods Ended June 30, 2022

Comparative Performance

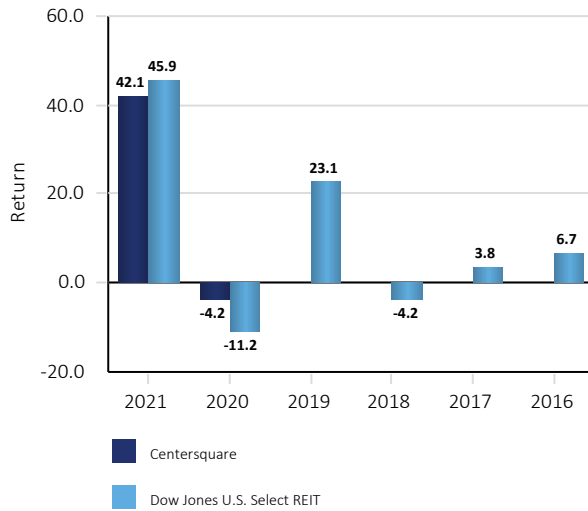


Peer Group Analysis: IM U.S. REIT (SA+CF)

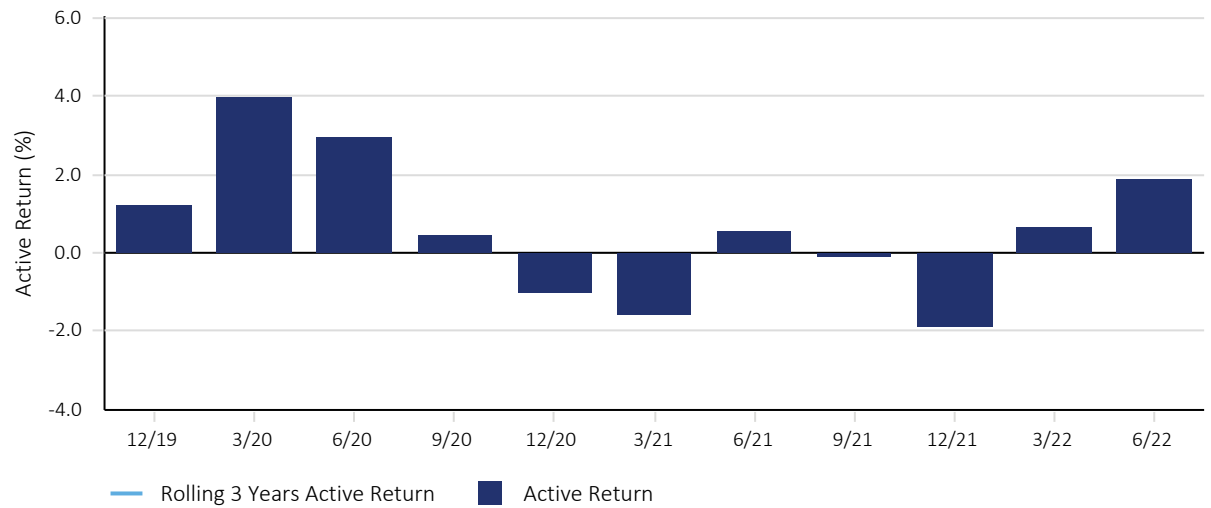


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
Fund	-16.22 (41)	-18.78 (14)	-5.21 (28)			
Benchmark	-18.10 (85)	-21.14 (71)	-6.41 (56)	2.54 (90)	4.28 (81)	6.61 (86)
Median	-16.51	-20.09	-5.95	5.62	6.63	7.55

Comparative Performance



Rolling 3 Years Performance

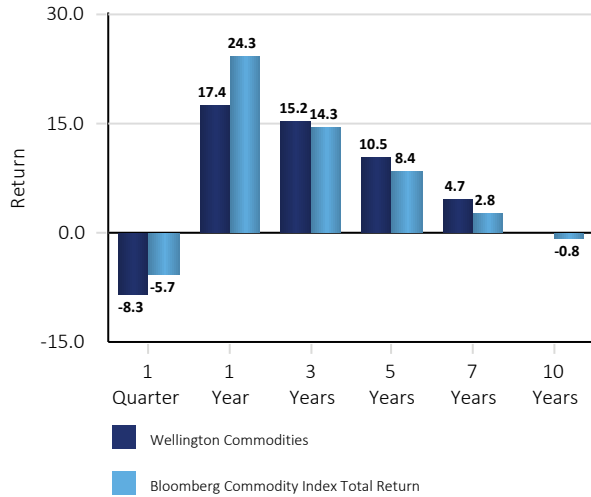


Performance Summary

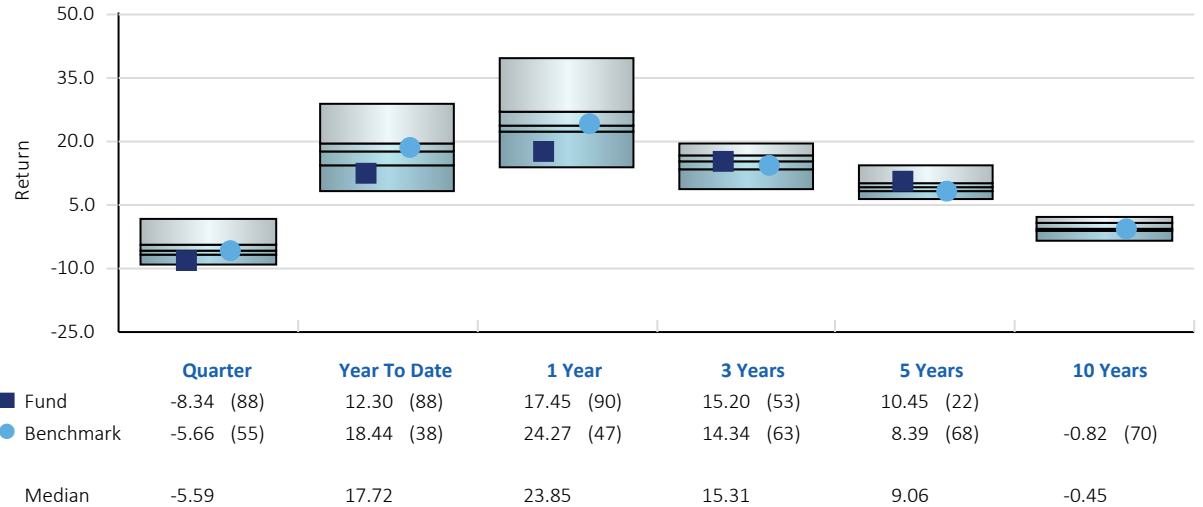
Wellington Commodities

Periods Ended June 30, 2022

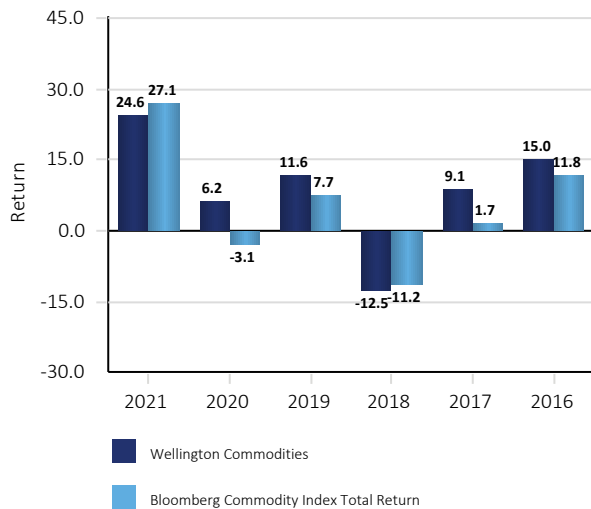
Comparative Performance



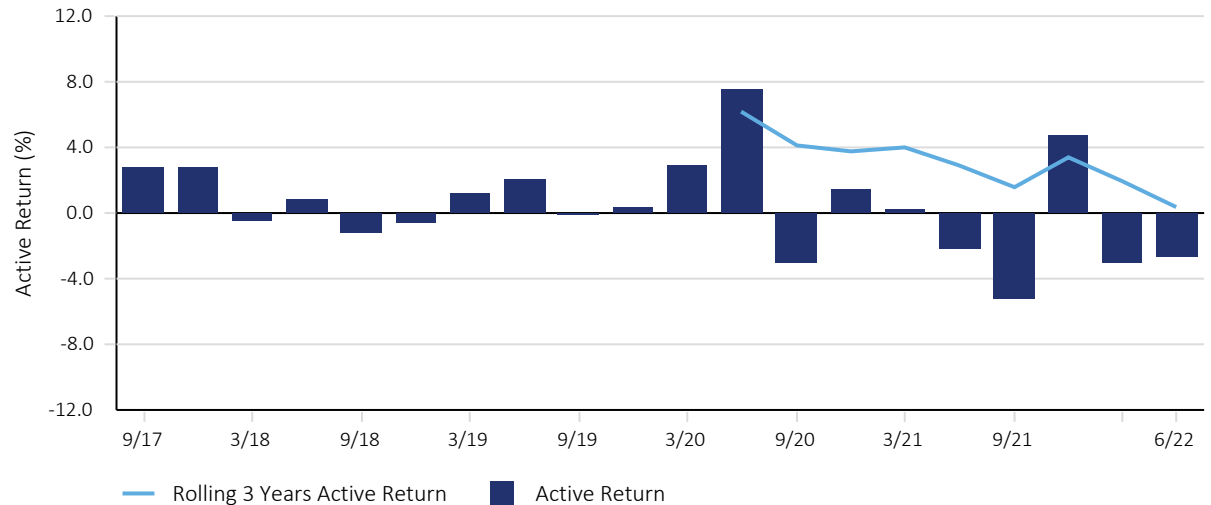
Peer Group Analysis: Commodities Broad Basket



Comparative Performance



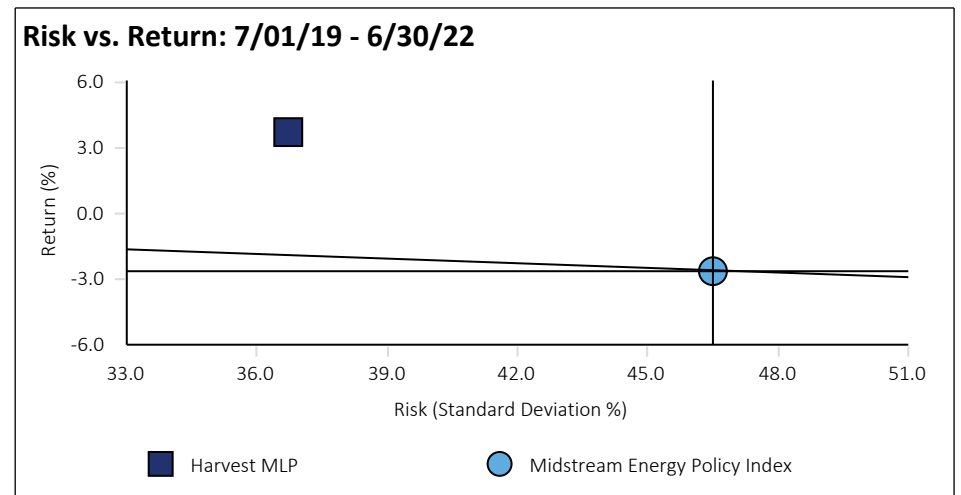
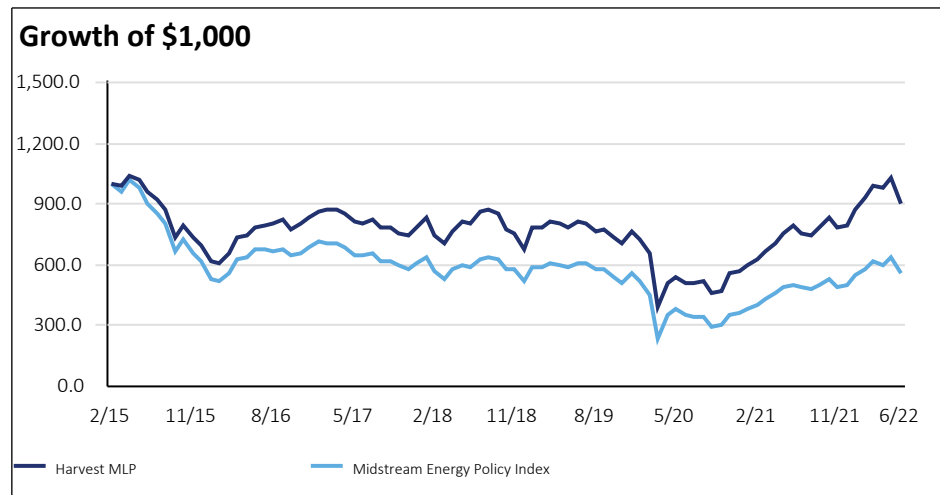
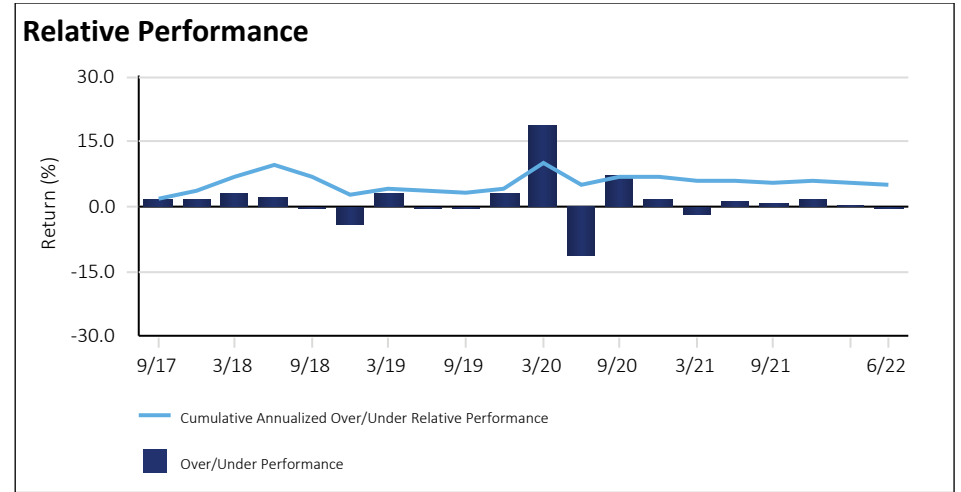
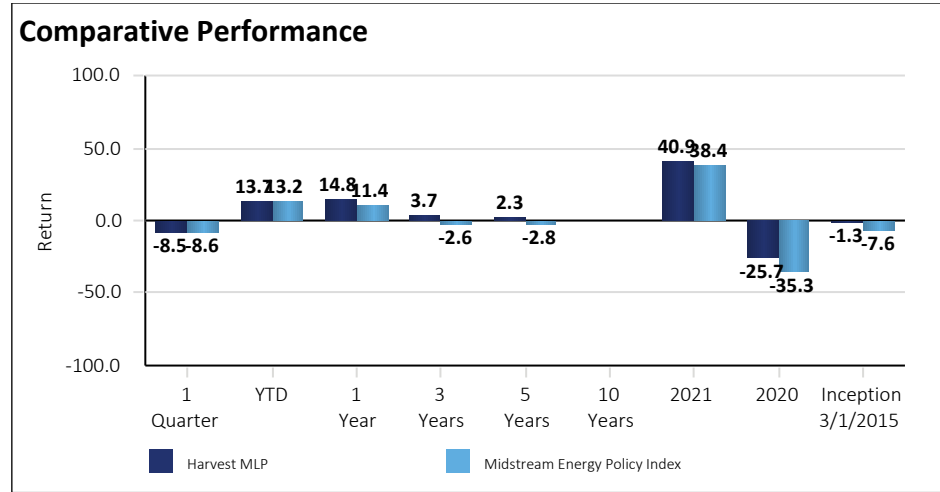
Rolling 3 Years Performance



Manager Summary

Harvest MLP

Periods Ended June 30, 2022



Historical Statistics: 7/01/19 - 6/30/22

	Alpha	Tracking Error	Information Ratio	Beta	Standard Deviation	Sharpe Ratio	Maximum Drawdown	Up Capture	Down Capture
Fund	3.69	12.12	0.10	0.81	41.92	0.32	-52.26	87.85	78.83
Benchmark	0.00	0.00	-	1.00	50.76	0.24	-61.00	100.00	100.00