

**Wilshire**



# Wilshire Advisors

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

*As of September 30, 2021*

## Asset Class Performance

### Asset Class Returns - Best to Worst

2016	2017	2018	2019	2020	2021 YTD	Annualized 5-Year as of 9/21
High Yield 17.1%	Emrg Mrkts 37.7%	T-Bills 1.9%	U.S. Equity 31.0%	U.S. Equity 20.8%	Commodities 29.1%	U.S. Equity 17.0%
U.S. Equity 13.4%	Developed 25.6%	Core Bond 0.0%	REITs 25.8%	Emrg Mrkts 18.7%	REITs 24.8%	Emrg Mrkts 9.6%
Commodities 11.8%	U.S. Equity 21.0%	U.S. TIPS -1.3%	Developed 22.7%	U.S. TIPS 11.0%	U.S. Equity 15.6%	Developed 9.3%
Emrg Mrkts 11.6%	High Yield 7.5%	High Yield -2.1%	Emrg Mrkts 18.9%	Developed 8.3%	Developed 8.8%	REITs 7.0%
REITs 7.2%	REITs 4.2%	REITs -4.8%	High Yield 14.3%	Core Bond 7.5%	High Yield 4.5%	High Yield 6.5%
U.S. TIPS 4.7%	Core Bond 3.6%	U.S. Equity -5.3%	Core Bond 8.7%	High Yield 7.1%	U.S. TIPS 3.5%	Commodities 4.5%
Core Bond 2.6%	U.S. TIPS 3.0%	Commodities -11.2%	U.S. TIPS 8.4%	T-Bills 0.7%	T-Bills 0.0%	U.S. TIPS 4.3%
Developed 1.5%	Commodities 1.7%	Developed -13.4%	Commodities 7.7%	Commodities -3.1%	Emrg Mrkts -1.0%	Core Bond 2.9%
T-Bills 0.3%	T-Bills 0.8%	Emrg Mrkts -14.2%	T-Bills 2.3%	REITs -7.9%	Core Bond -1.6%	T-Bills 1.2%

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

Grand Rapids Police & Fire Retirement System

## Market Commentary

### U.S. Equity

The U.S. stock market, represented by the FT Wilshire 5000 Index<sup>SM</sup>, was up 0.1% for the third quarter. A slim majority of the eleven sectors were in positive territory, with Financials (+2.6%) and Utilities (+1.2%) representing the best performing sectors. The worst performing sector this quarter was Materials (-4.6%). From a size perspective, large-cap outperformed small-cap. In fact, large-cap growth was the only U.S. segment in positive territory this quarter.

Consumer sentiment dropped dramatically during the third quarter, with the University of Michigan's Consumer Sentiment Index falling to its lowest point in almost a decade. The drop occurred with the August results and followed a six-month period when headline inflation surged 7.8% (annualized), the largest six-month increase in 30 years. Additionally, July brought a surge in Coronavirus infections as the highly contagious delta variant infected even vaccinated individuals. Finally, the August survey period coincided with the Taliban seizing control of Kabul, the capital city of Afghanistan, in less than a week's time.

### Non-U.S. Equity

Economic conditions in the U.K. appear to be rapidly deteriorating. The Office for National Statistics said that the economy grew by just 0.1% in July, hampered by supply-chain issues and Covid-19 infections. At the same time, inflation has spiked, with consumer prices in the U.K. rising 3.2% in August. Emerging Markets experienced a meaningful drop this quarter, down -8.0%. The main sources of weakness were South Korea (-13.2%) and China (-18.1%).

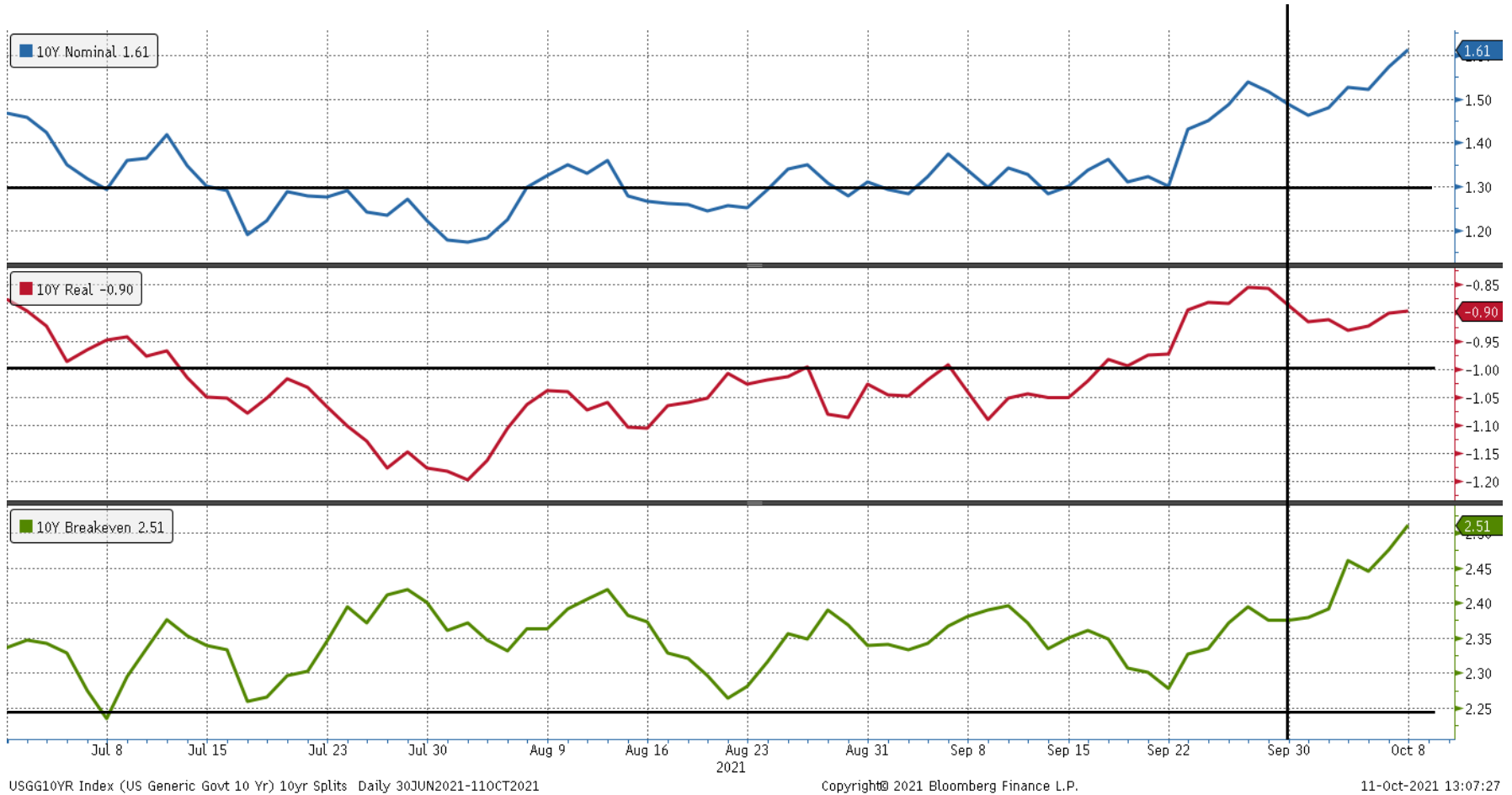
### Fixed Income

The U.S. Treasury yield curve was up, generally, during the quarter, with yields in the 3- to 10-year maturity range rising the most. The 10-year Treasury yield ended the quarter at 1.49%, up two basis points from June. The FOMC met twice, as scheduled, with no change to their overnight rate. Through the Fed's "dot plot," they are messaging that the current intent is for a 25 basis point increase in the overnight rate before the end of 2022. Their median forecast for year-end 2023 is for a Fed funds rate of 1.0%.

## September 2021 Asset Class Assumptions

	Equity						Fixed Income						Real Assets						
	U.S. Stock	Dev ex-U.S. Stock	Emg Mrkt Stock	Global ex-U.S. Stock	Global Stock	Private Equity	Cash	Core Bond	LT Core Bond	U.S. TIPS	High Yield	Non-U.S. Bond	U.S. Real Estate Secs	Global RE Secs	Private Real Estate	Cmdty	Real Assets	U.S. CPI	
<b>Compound Return (%)</b>	5.00	6.00	6.00	6.25	5.65	8.40	1.55	1.85	2.35	1.55	3.60	0.75	4.75	4.90	6.35	4.05	5.85	2.50	
<b>Arithmetic Return (%)</b>	6.35	7.50	9.00	7.90	7.00	11.75	1.55	1.95	2.75	1.75	4.10	0.85	6.10	6.05	7.25	5.10	6.35	2.50	
<b>Expected Risk (%)</b>	17.00	18.00	26.00	19.15	17.15	28.00	0.75	4.30	8.85	6.00	10.00	4.30	17.00	15.85	14.00	15.00	10.15	1.75	
<b>Cash Yield (%)</b>	1.30	2.50	2.00	2.35	1.75	0.00	1.55	3.00	3.40	2.30	7.50	1.80	2.85	2.85	2.30	1.55	1.95	0.00	
<b>Growth Exposure</b>	8.00	8.00	8.00	8.00	8.00	13.50	0.00	-0.80	-2.10	-3.00	4.00	-1.00	6.00	6.00	3.50	0.00	1.80	0.00	
<b>Inflation Exposure</b>	-3.00	0.00	5.00	1.55	-1.10	-3.80	0.00	-2.45	-6.55	2.50	-1.00	-3.00	1.00	1.95	1.00	12.00	4.90	1.00	
<b>Correlations</b>																			
<b>US Stock</b>	1.00																		
<b>Dev ex-US Stock (USD)</b>	0.81	1.00																	
<b>Emerging Mkt Stock</b>	0.74	0.74	1.00																
<b>Global ex-US Stock</b>	0.83	0.96	0.87	1.00															
<b>Global Stock</b>	0.95	0.92	0.83	0.94	1.00														
<b>Private Equity</b>	0.74	0.64	0.62	0.67	0.74	1.00													
<b>Cash Equivalents</b>	-0.05	-0.09	-0.05	-0.08	-0.07	0.00	1.00												
<b>Core Bond</b>	0.28	0.13	0.00	0.09	0.20	0.31	0.19	1.00											
<b>LT Core Bond</b>	0.31	0.16	0.01	0.12	0.23	0.32	0.11	0.92	1.00										
<b>TIPS</b>	-0.05	0.00	0.15	0.05	0.00	-0.03	0.20	0.59	0.47	1.00									
<b>High Yield Bond</b>	0.54	0.39	0.49	0.45	0.51	0.34	-0.10	0.25	0.32	0.05	1.00								
<b>Dev ex-US Bond (Hdg)</b>	0.16	0.25	-0.01	0.17	0.18	0.26	0.10	0.66	0.65	0.39	0.26	1.00							
<b>US RE Securities</b>	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						
<b>Global RE Securities</b>	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					
<b>Private Real Estate</b>	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				
<b>Commodities</b>	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			
<b>Real Assets</b>	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		
<b>Inflation (CPI)</b>	-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	

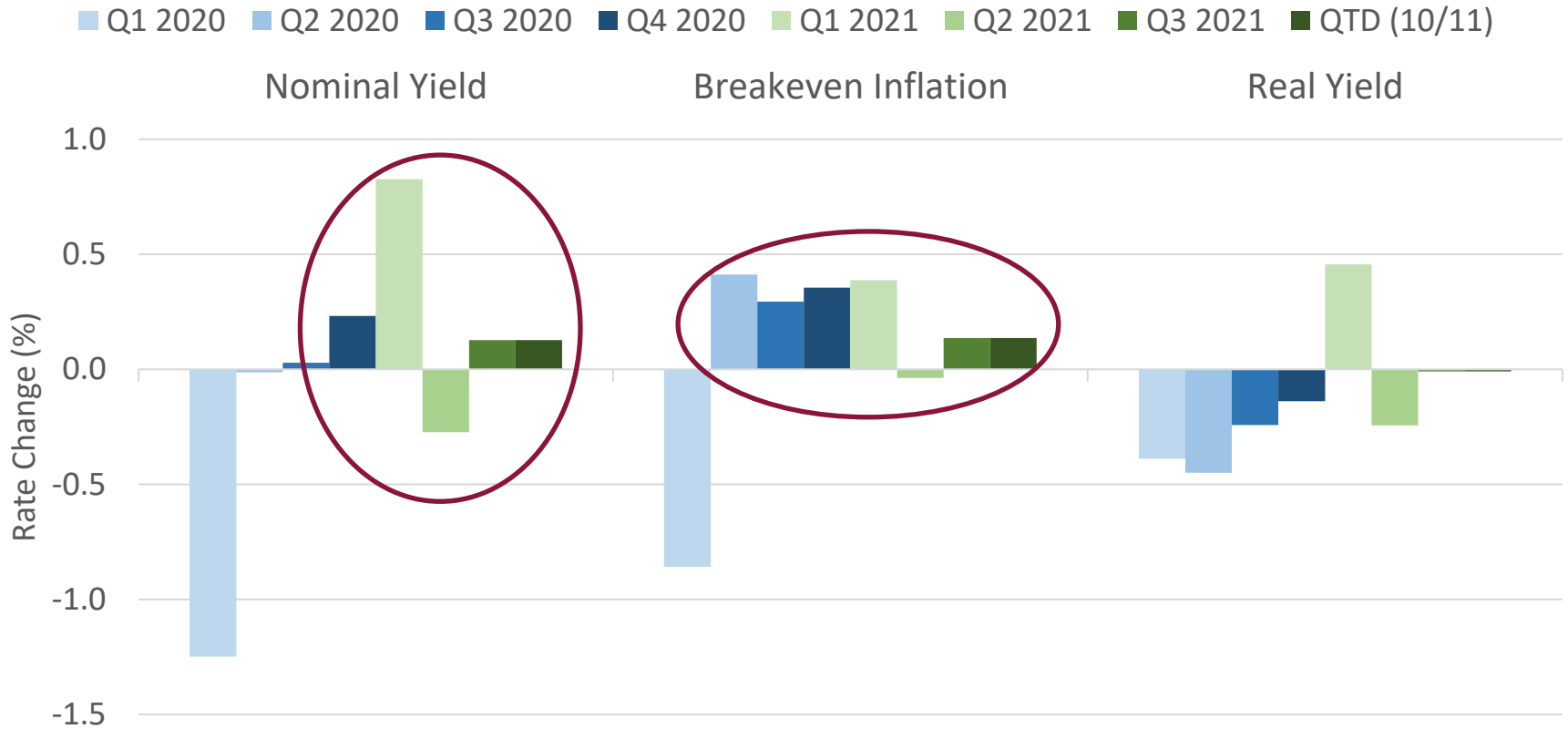
## Rate Splits: Yield / Inflation Environment



Data Source: Bloomberg

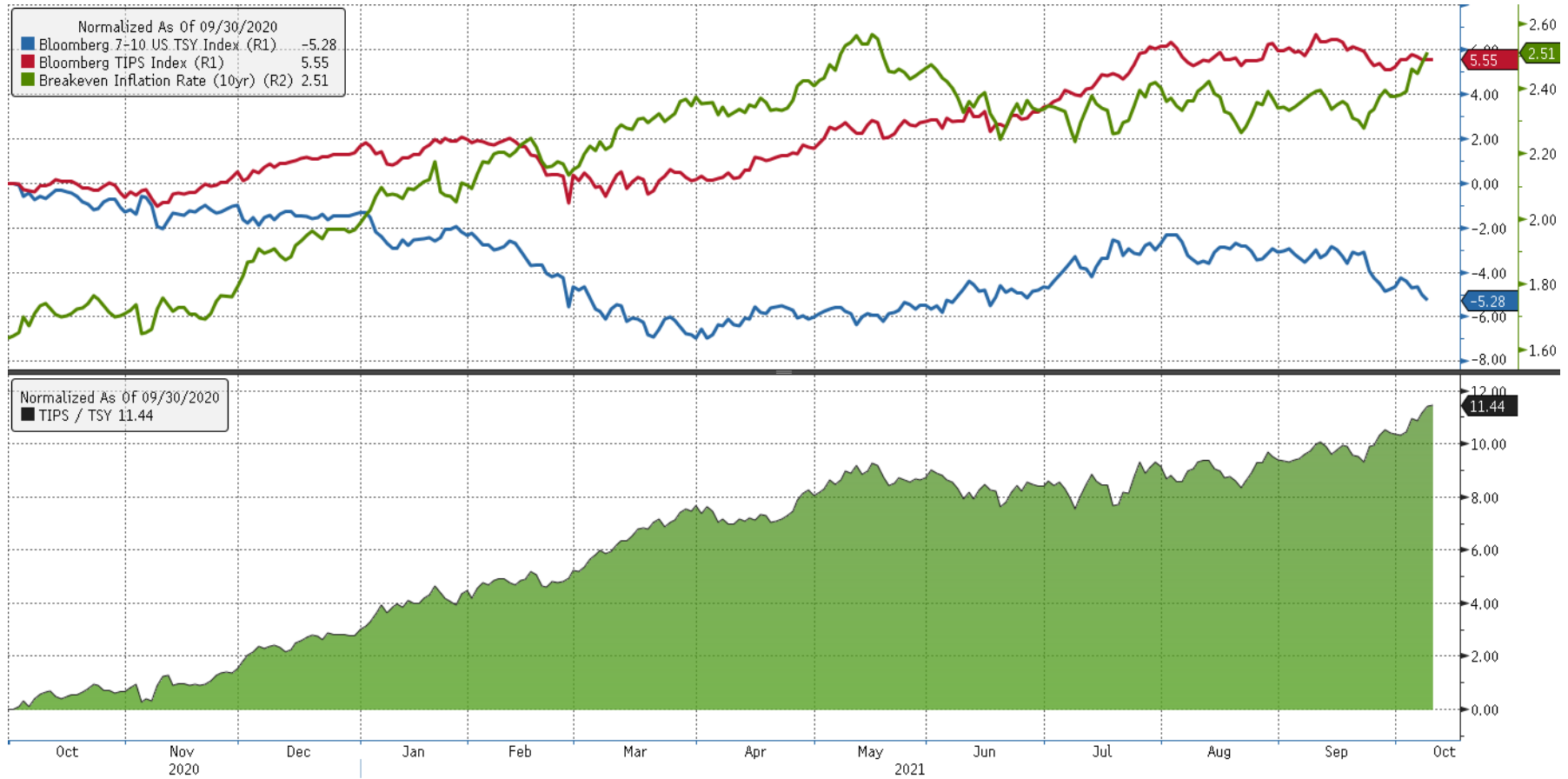
# Rate Change Attribution

## Quarterly Rate Changes



Data Source: Bloomberg

## U.S. Treasury vs. TIPS Returns



Data Source: Bloomberg

## Inflation Persists

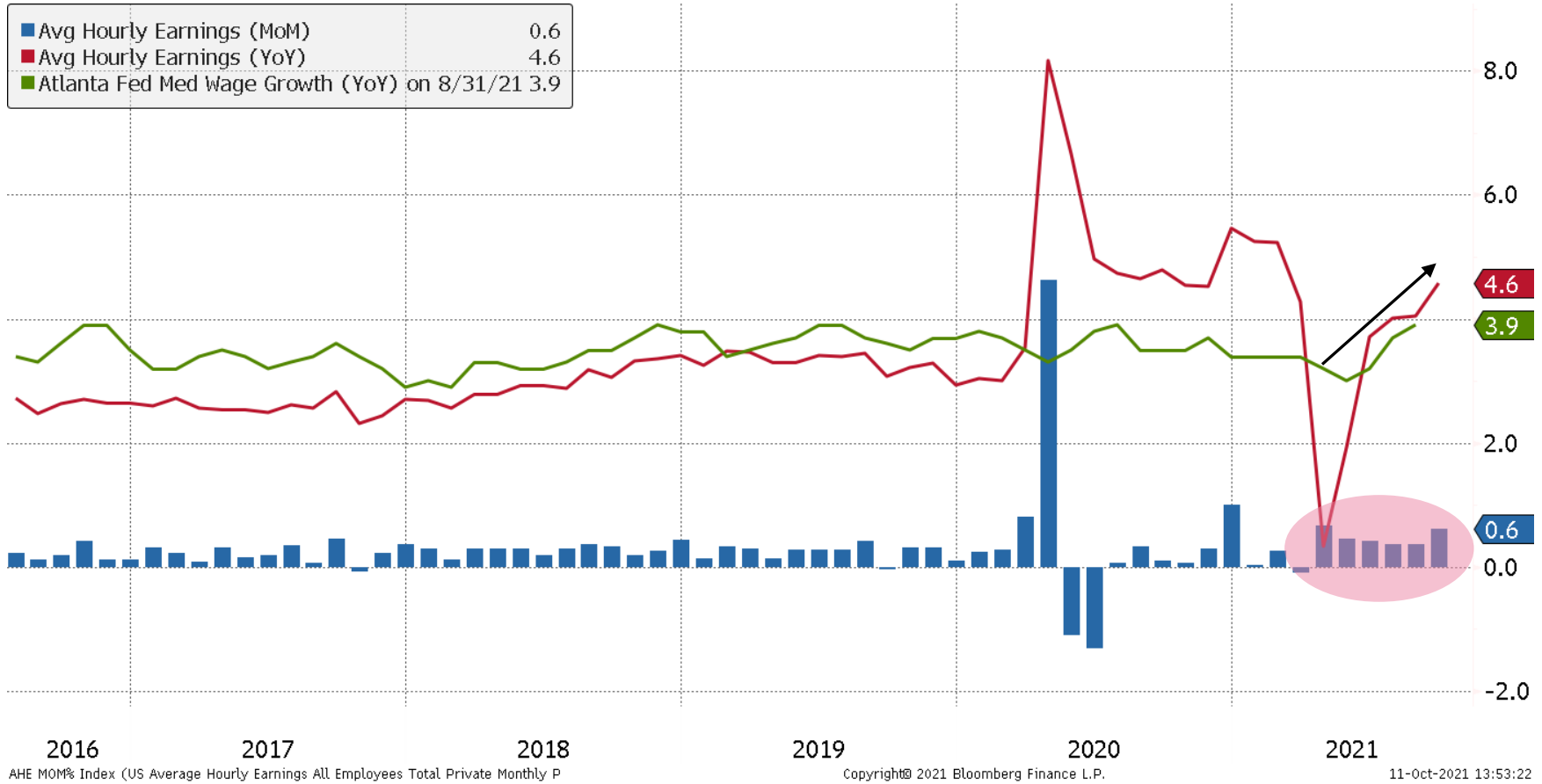


Data Source: Bloomberg



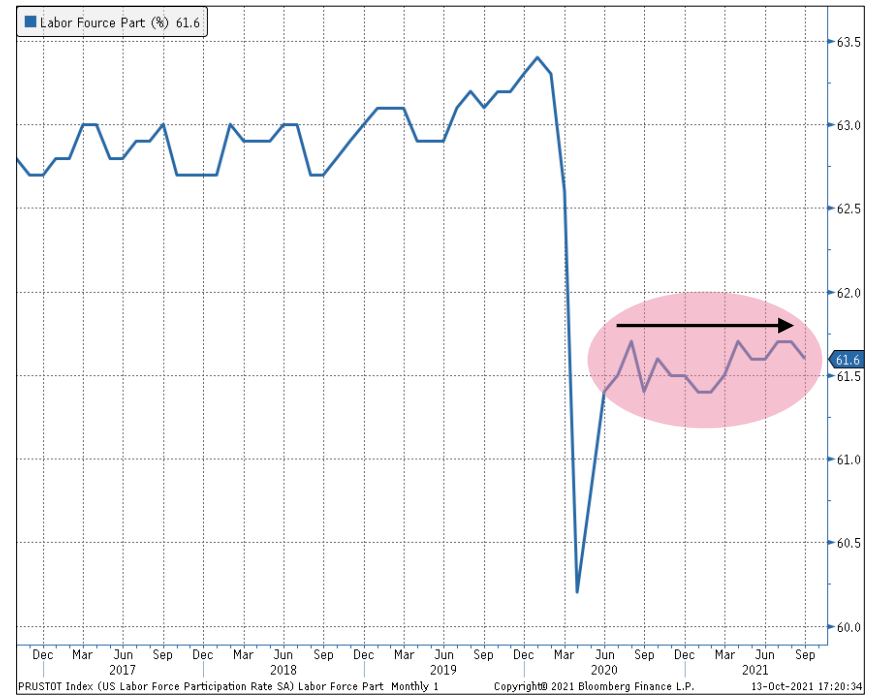
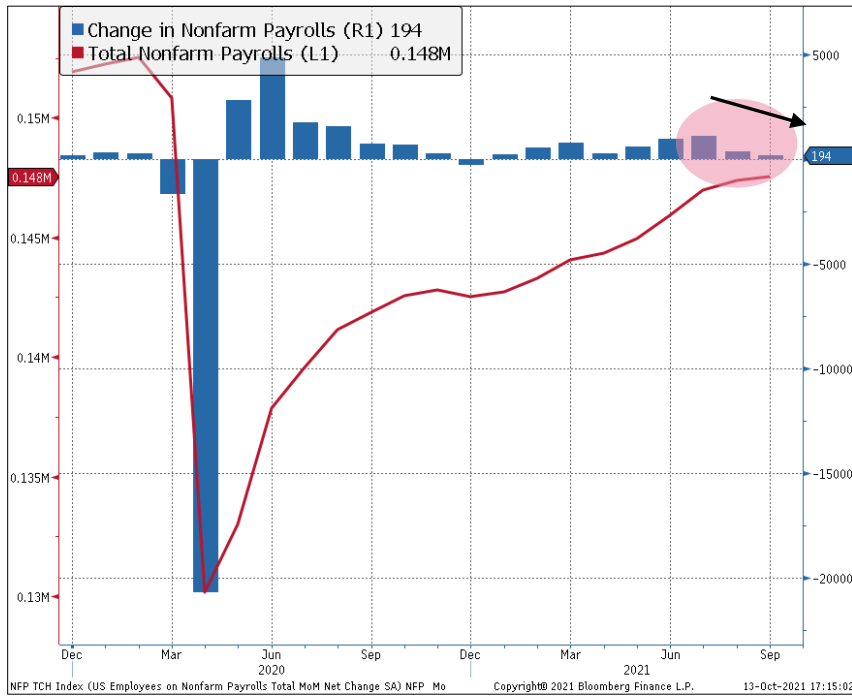
## Wages Rising

Since 2Q: AHE rose 3.7% to 4.6%; Atlanta Fed wage Growth: 3.2% to 3.9%



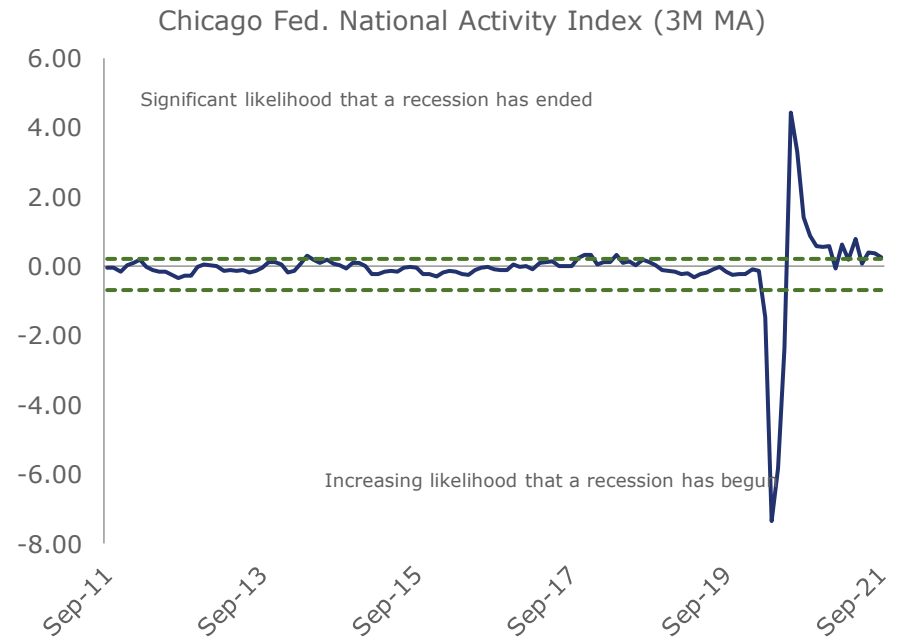
Data Source: Bloomberg

## Employment Gains Slowing...

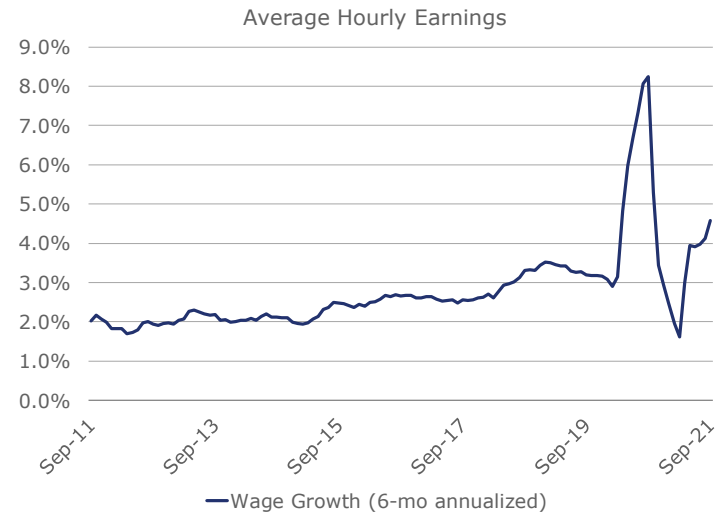
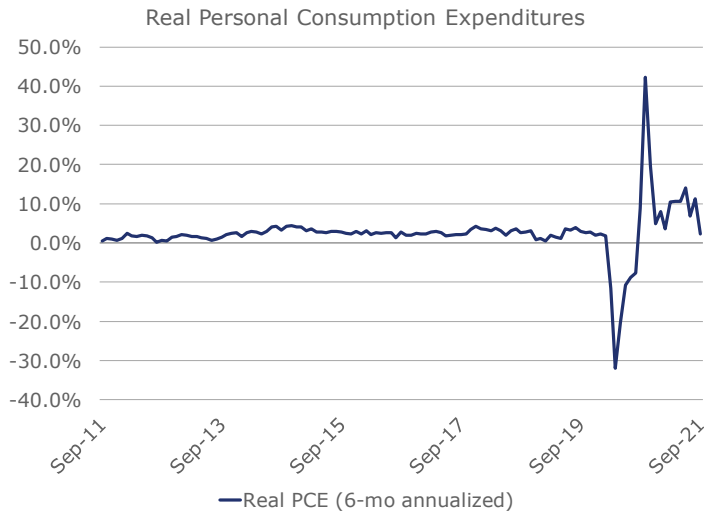
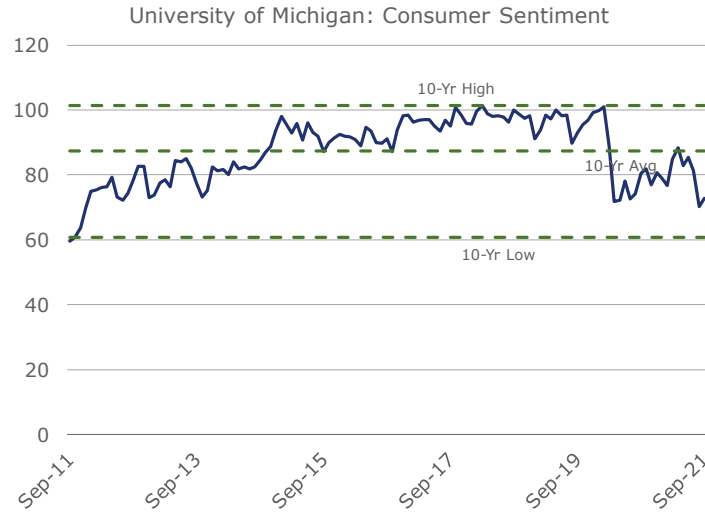


# Economic/Market Activity

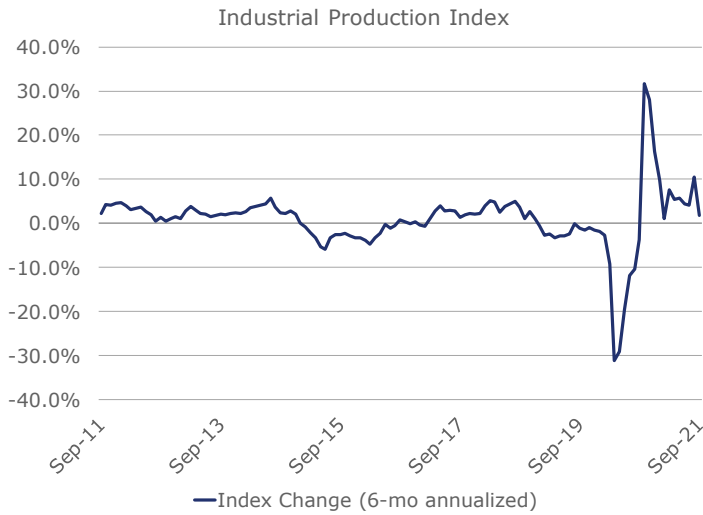
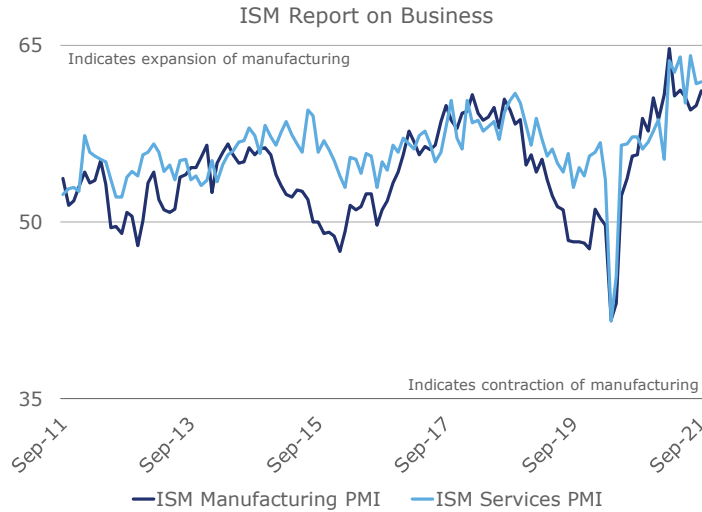
## Economic Growth



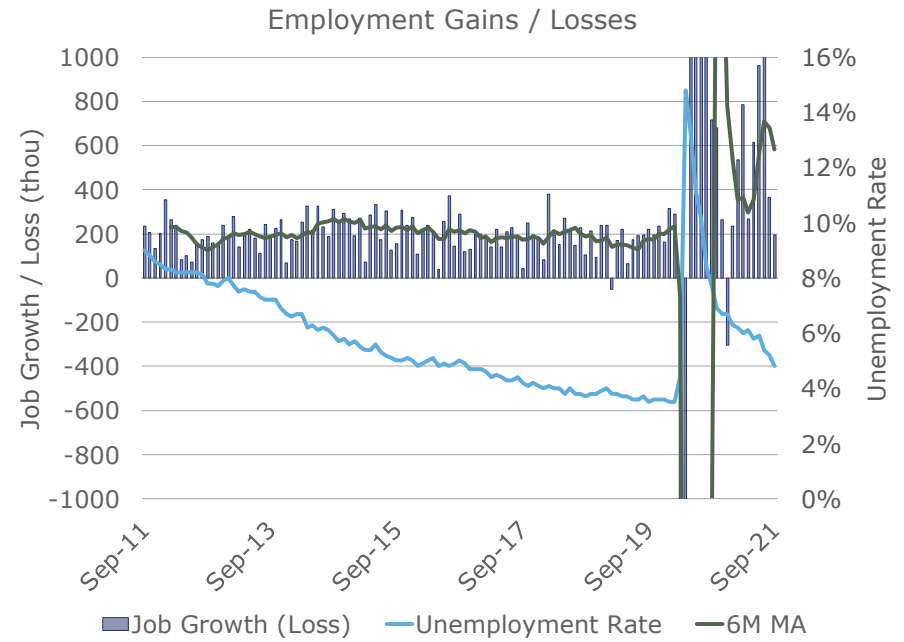
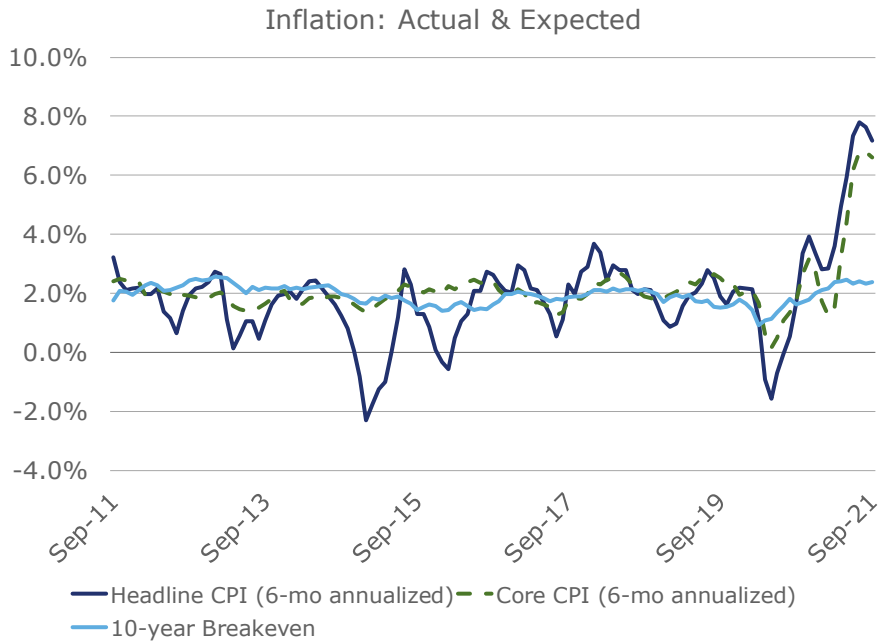
## Consumer Activity



## Business Activity



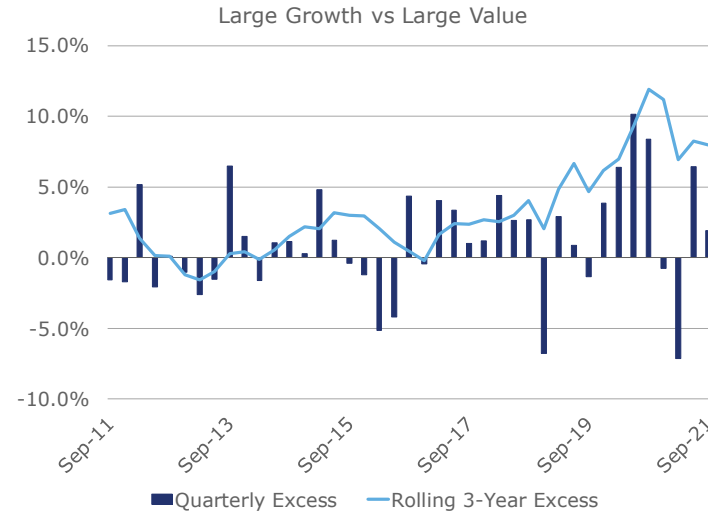
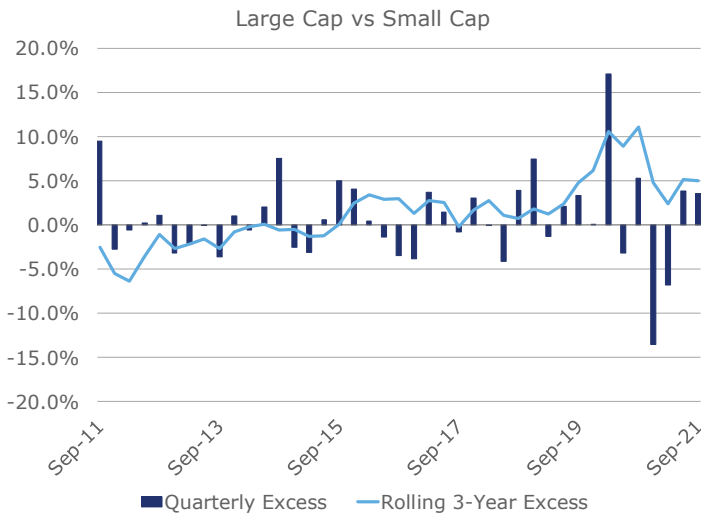
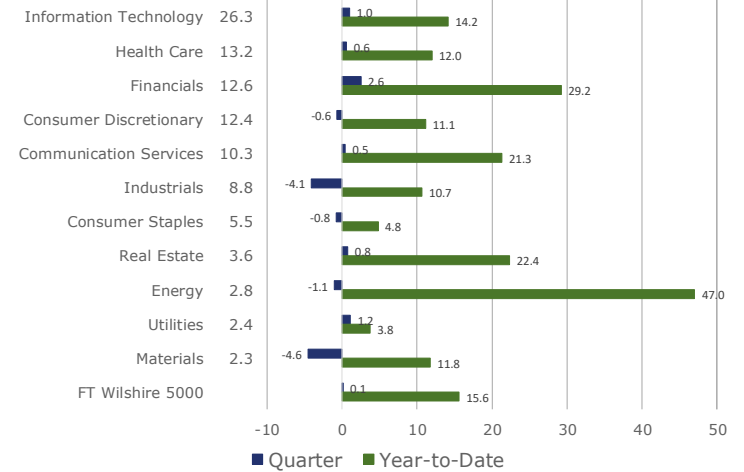
## Inflation and Employment



## U.S. Equity Market

As of 9/30/2021	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
FT Wilshire 5000	0.1	15.6	32.4	16.2	17.0	16.7
Wilshire U.S. Large Cap	0.4	15.6	30.9	16.7	17.4	16.8
Wilshire U.S. Small Cap	-3.0	15.4	51.1	11.2	13.4	15.1
Wilshire U.S. Large Growth	1.3	15.5	30.3	20.9	22.1	19.4
Wilshire U.S. Large Value	-0.6	14.7	30.3	12.0	12.4	14.1
Wilshire U.S. Small Growth	-3.8	8.2	40.4	13.0	16.1	15.7
Wilshire U.S. Small Value	-1.8	23.3	63.0	9.4	10.7	14.4
Wilshire REIT Index	1.6	24.8	38.0	10.4	7.0	11.3
MSCI USA Min. Vol. Index	0.3	9.6	17.2	11.1	12.4	14.2
FTSE RAFI U.S. 1000 Index	-0.8	20.8	41.9	12.9	13.8	15.2

U.S. Sector Weight and Return (%)

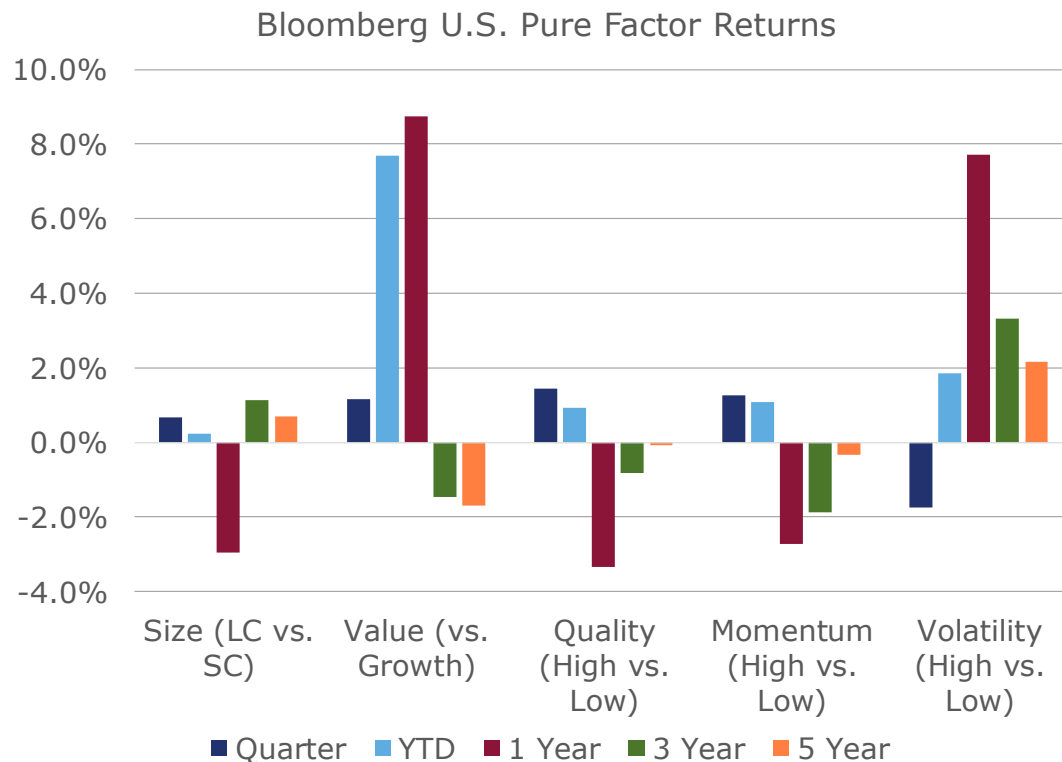


Data Sources: Bloomberg, Wilshire Atlas

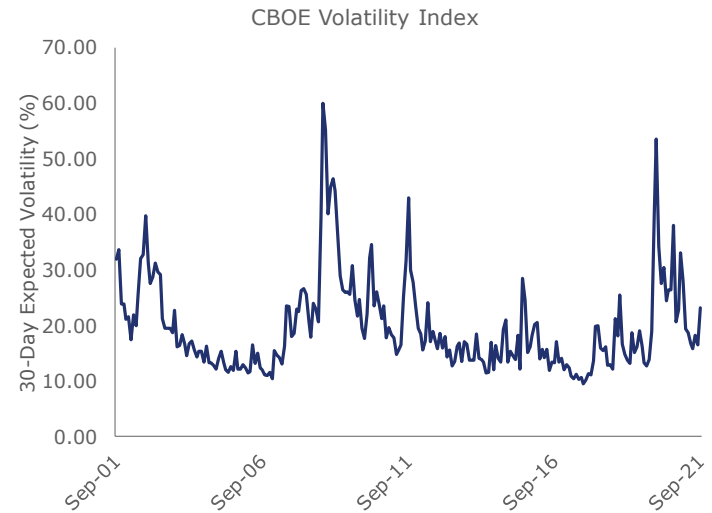
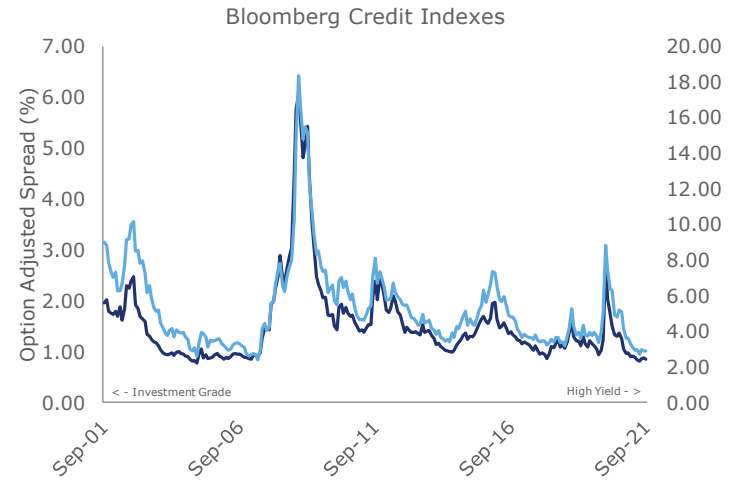
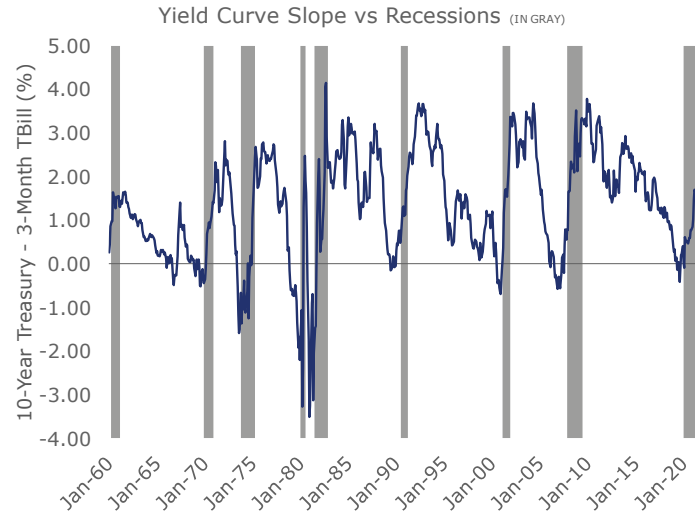


## U.S. Factor Returns

- 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

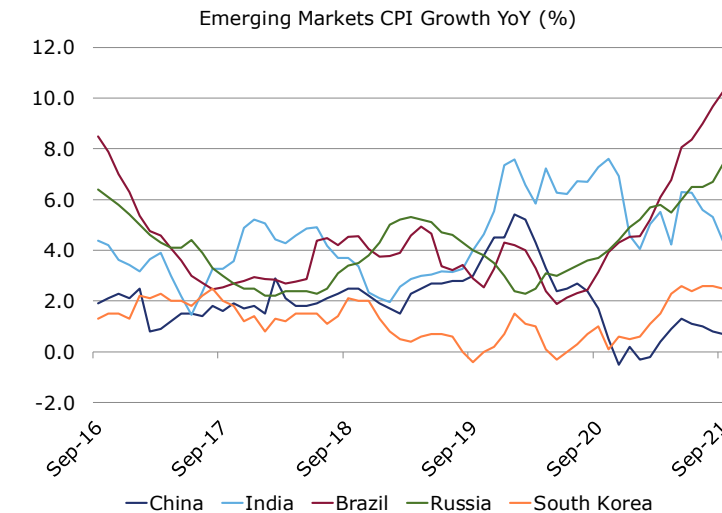
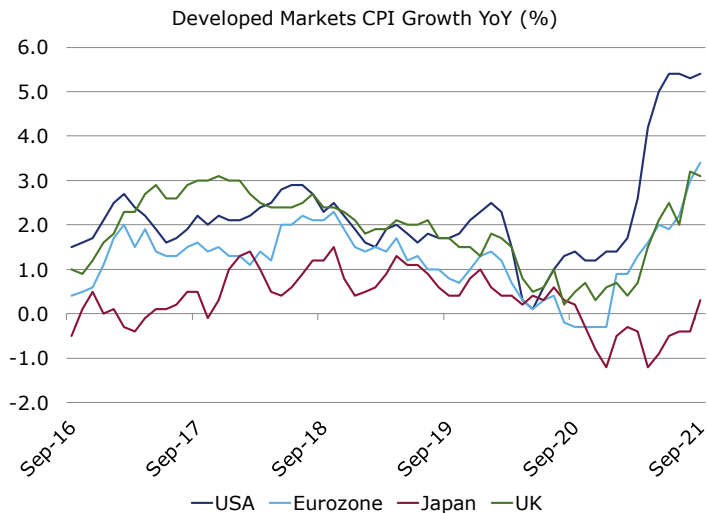
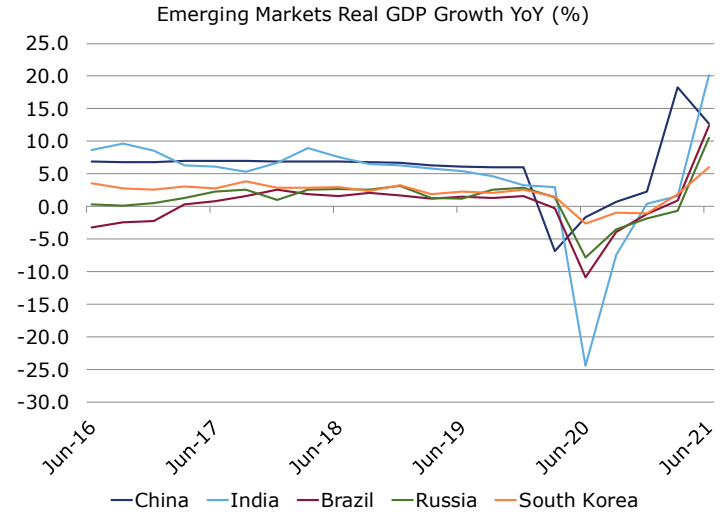
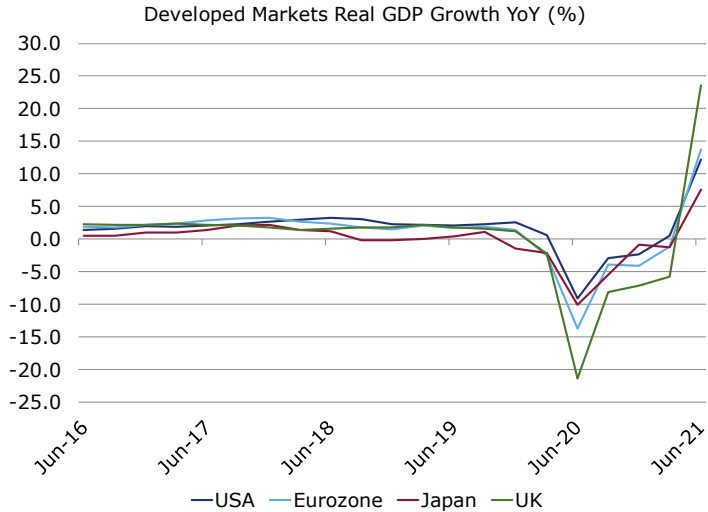


## Risk Monitor



Data Sources: Bloomberg

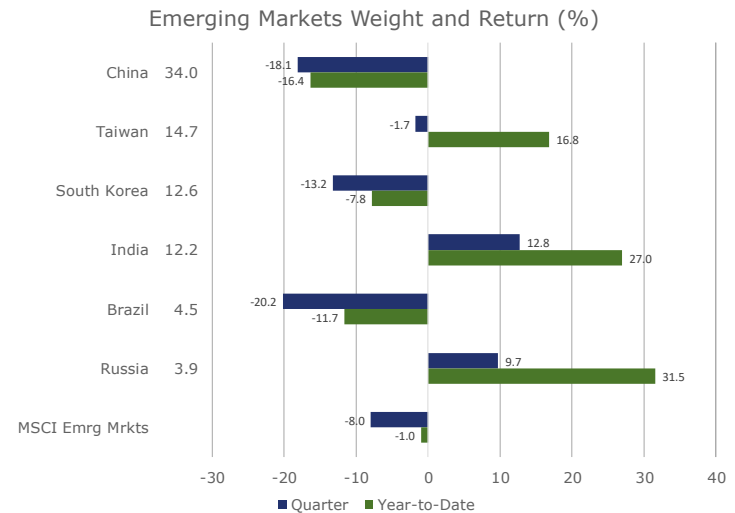
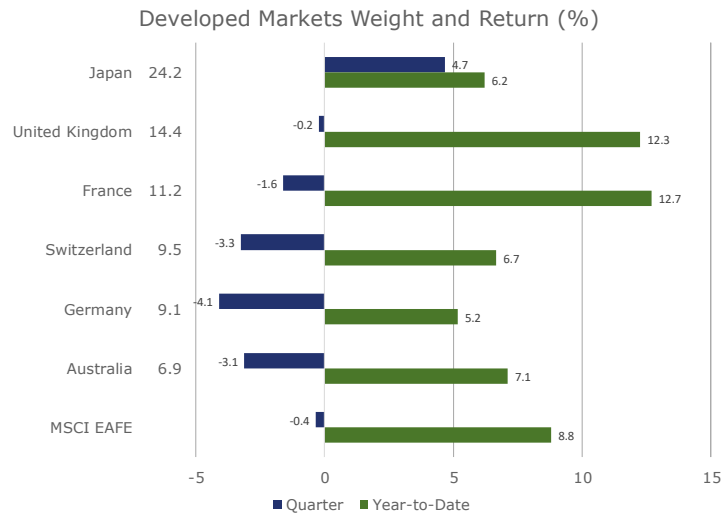
## Non-U.S. Growth and Inflation



Data Sources: Bloomberg

## Non-U.S. Equity Market

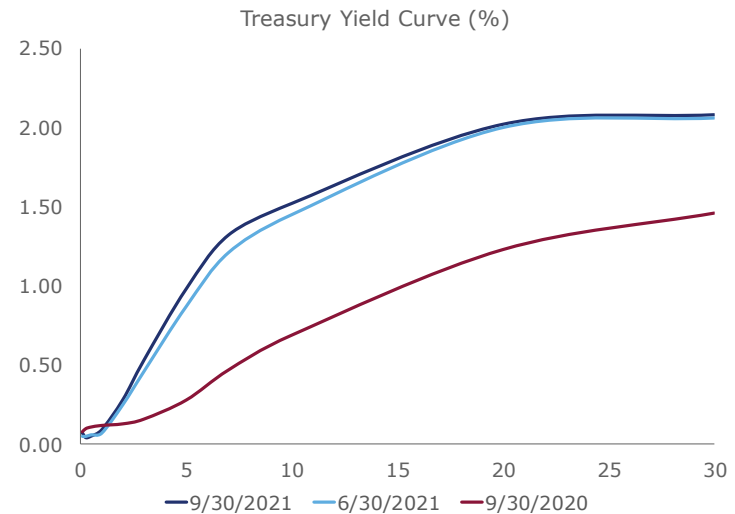
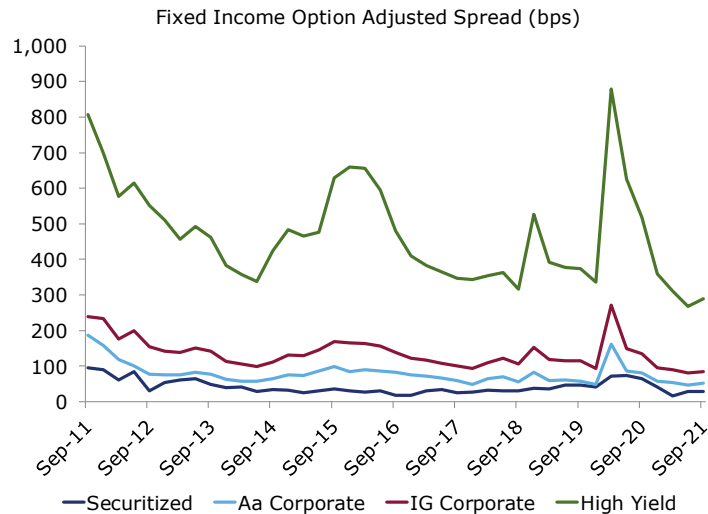
As of 9/30/2021	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
MSCI ACWI ex-US (\$G)	-2.9	6.3	24.4	8.5	9.4	8.0
MSCI EAFE (\$G)	-0.4	8.8	26.3	8.1	9.3	8.6
MSCI Emerging Markets (\$G)	-8.0	-1.0	18.6	9.0	9.6	6.5
MSCI Frontier Markets (\$G)	1.7	2.6	20.5	3.3	3.6	4.0
MSCI ACWI ex-US Growth (\$G)	-3.6	2.9	17.3	12.3	11.6	9.7
MSCI ACWI ex-US Value (\$G)	-1.9	10.3	33.0	4.9	7.3	6.5
MSCI ACWI ex-US Small (\$G)	0.1	12.6	33.5	10.8	10.7	9.8
MSCI ACWI Minimum Volatility	0.2	7.7	14.7	8.2	9.1	10.6
MSCI EAFE Minimum Volatility	0.3	4.9	13.4	4.7	6.1	7.9
FTSE RAFI Developed ex-US	-1.1	12.5	36.5	6.1	8.6	7.5
MSCI EAFE LC (G)	1.4	14.7	27.8	7.7	9.5	10.6
MSCI Emerging Markets LC (G)	-6.6	1.0	17.2	9.8	10.8	9.0



## U.S. Fixed Income

As of 9/30/2021	YTW	DUR.	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg Aggregate	1.6	6.7	0.1	-1.6	-0.9	5.4	2.9	3.0
Bloomberg Treasury	1.0	7.1	0.1	-2.5	-3.3	4.9	2.2	2.2
Bloomberg Gov't-Rel.	1.4	6.1	-0.1	-1.3	-0.4	4.9	2.9	2.9
Bloomberg Securitized	1.8	4.6	0.1	-0.7	-0.3	4.0	2.2	2.5
Bloomberg Corporate	2.1	8.7	0.0	-1.3	1.7	7.4	4.6	4.9
Bloomberg LT Gov't/Credit	2.7	16.6	0.1	-4.6	-3.0	10.1	5.2	5.8
Bloomberg LT Treasury	2.0	18.7	0.5	-7.5	-10.3	9.2	3.3	4.4
Bloomberg LT Gov't-Rel.	3.0	13.7	-0.5	-3.4	-0.7	7.9	4.7	5.5
Bloomberg LT Corporate	3.1	15.3	-0.1	-2.6	2.5	10.5	6.3	6.7
Bloomberg U.S. TIPS *	1.4	8.2	1.8	3.5	5.2	7.4	4.3	3.1
Bloomberg High Yield	4.0	4.0	0.9	4.5	11.3	6.9	6.5	7.4
Treasury Bills	0.0	0.3	0.0	0.0	0.1	1.2	1.2	0.7

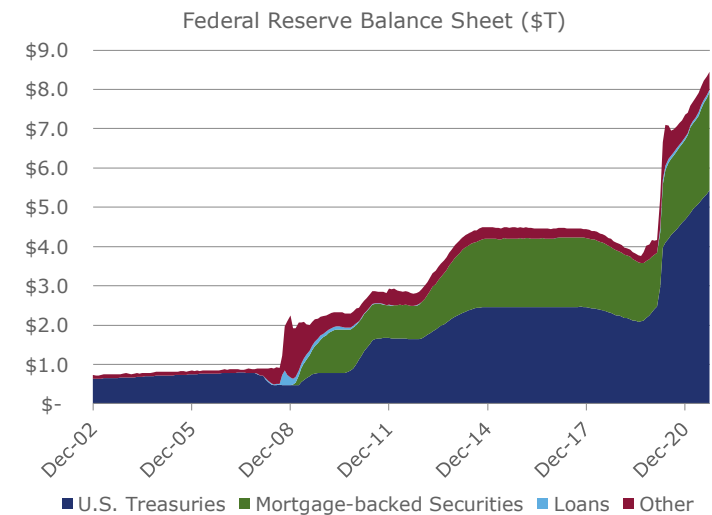
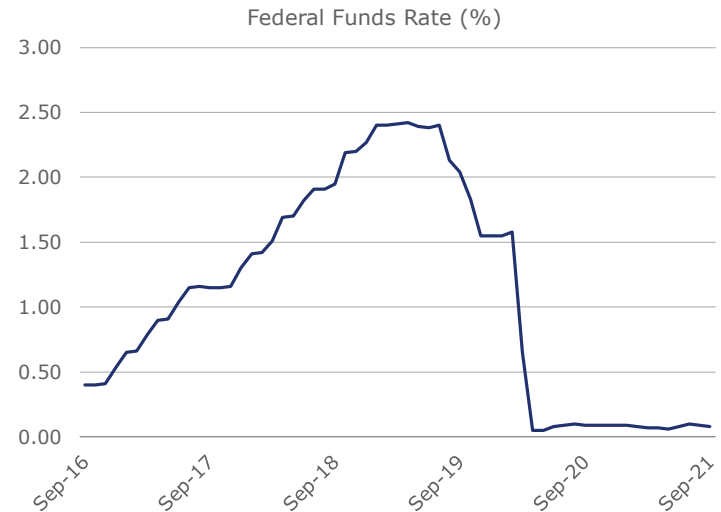
\* Yield and Duration statistics are for a proxy index based on similar maturity, the Bloomberg Barclays U.S. Treasury 7-10 Year Index



## Federal Reserve

- Current FOMC expectation is for one 25 basis point increase in the Fed-funds rate during 2022
- Federal Reserve has added more than \$4 trillion in assets to their balance sheet during the past 18 months
- QE4 is now larger than the 3 phases of quantitative easing – combined – following the global financial crisis

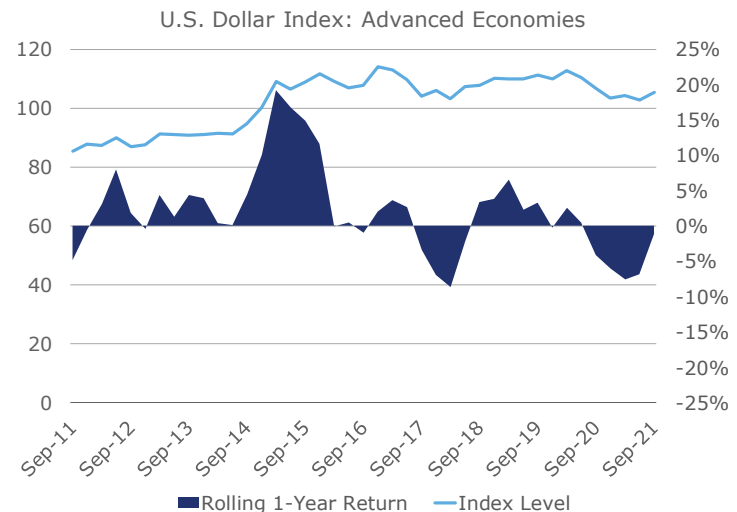
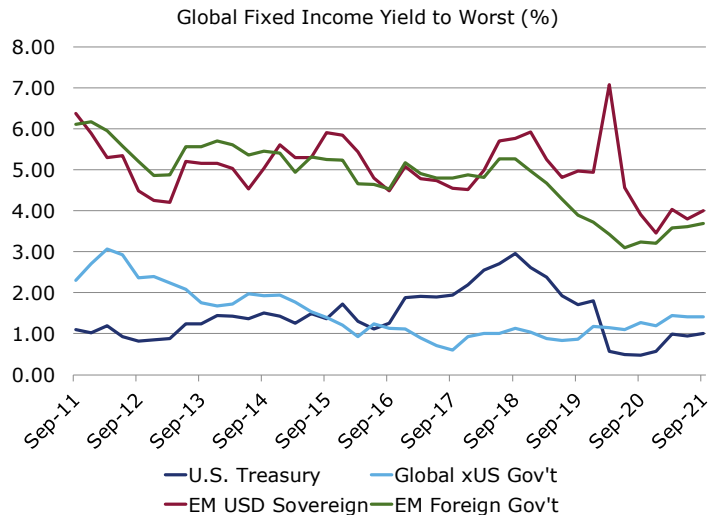
	Announced	Closed	Amount (bil)
QE1	11/25/2008	3/31/2010	\$1,403
QE2	11/3/2010	6/29/2012	\$568
QE3	9/13/2012	10/29/2014	\$1,674
QE4	3/23/2020		\$4,174



## Non-U.S. Fixed Income

As of 9/30/2021	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
<b>Developed Markets</b>						
Bloomberg Global Aggregate xUS	-1.6	-5.9	-1.2	3.2	1.1	0.9
Bloomberg Global Aggregate xUS *	0.1	-1.5	-0.5	3.9	2.7	3.9
Bloomberg Global Inflation Linked xUS	-0.1	-2.1	4.7	5.8	3.3	3.5
Bloomberg Global Inflation Linked xUS *	2.4	1.4	3.3	6.4	4.1	5.8
<b>Emerging Markets (Hard Currency)</b>						
Bloomberg EM USD Aggregate	-0.5	-1.1	3.3	5.9	4.1	5.7
<b>Emerging Markets (Foreign Currency)</b>						
Bloomberg EM Local Currency Gov't	-1.0	-2.0	4.9	5.0	2.9	2.6
Bloomberg EM Local Currency Gov't *	0.3	-1.0	-0.1	4.4	2.8	3.0
Euro vs. Dollar	-2.3	-5.2	-1.2	-0.1	0.6	-1.4
Yen vs. Dollar	-0.2	-7.2	-5.2	0.7	-1.9	-3.6
Pound vs. Dollar	-2.6	-1.4	4.3	1.1	0.8	-1.4

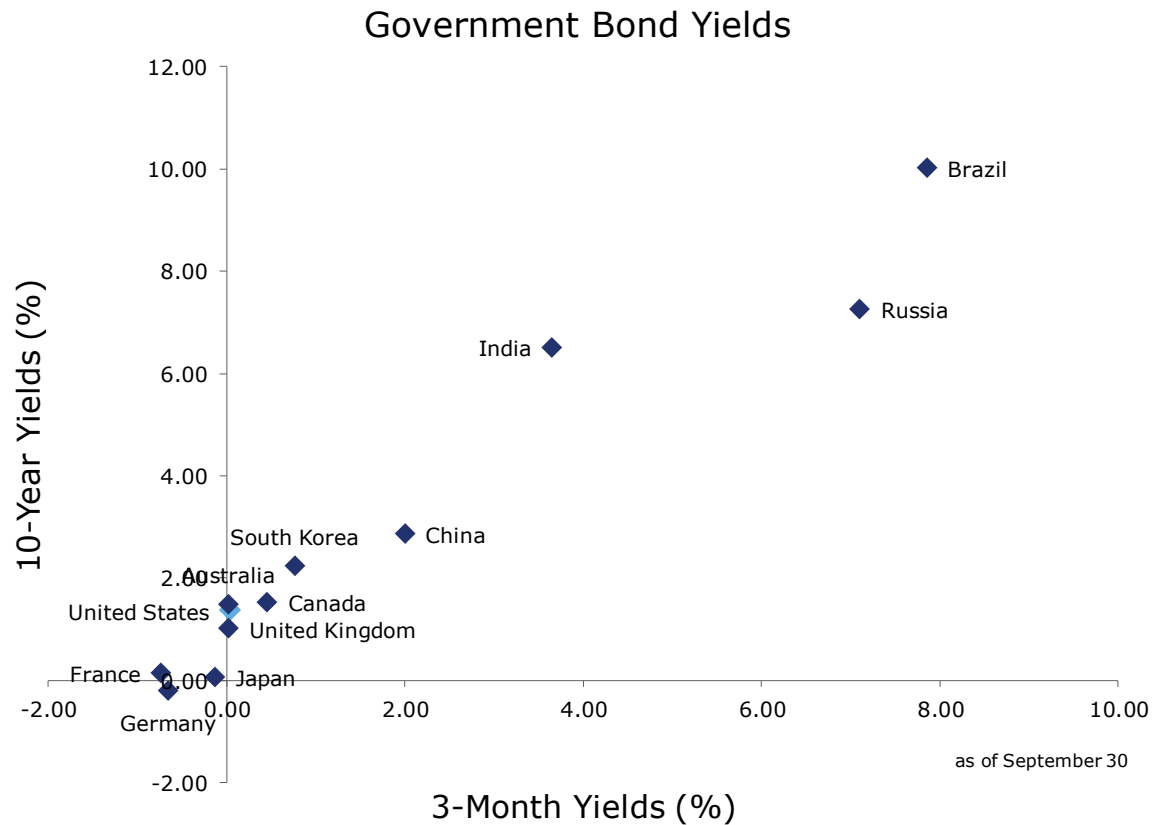
\* Returns are reported in terms of local market investors, which removes currency effects.



Data Sources: Bloomberg

# Global Interest Rates

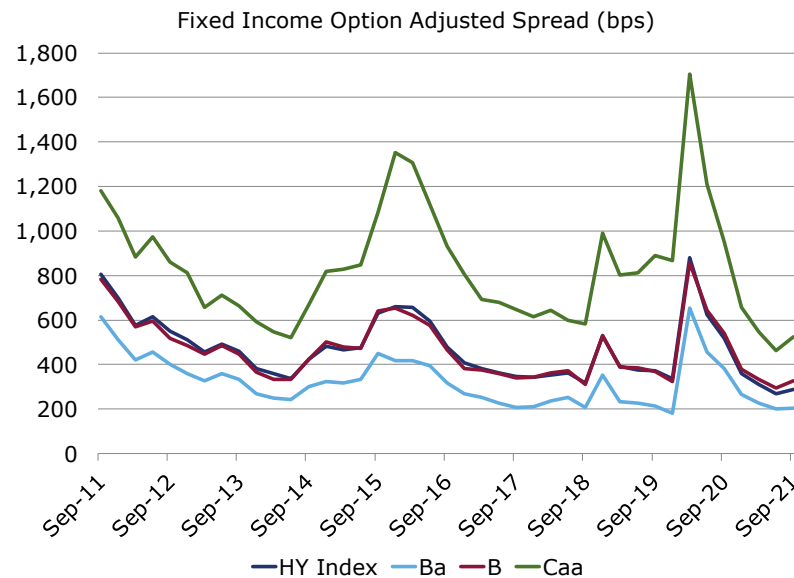
Negative rates found in Germany and France; low but positive rates, and at similar levels, in the U.S., Australia and in the U.K.





## High Yield Bond Market

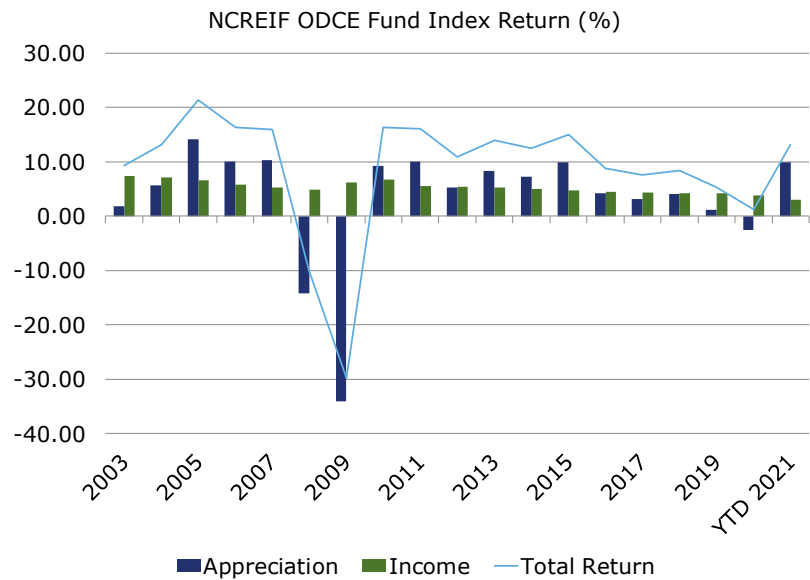
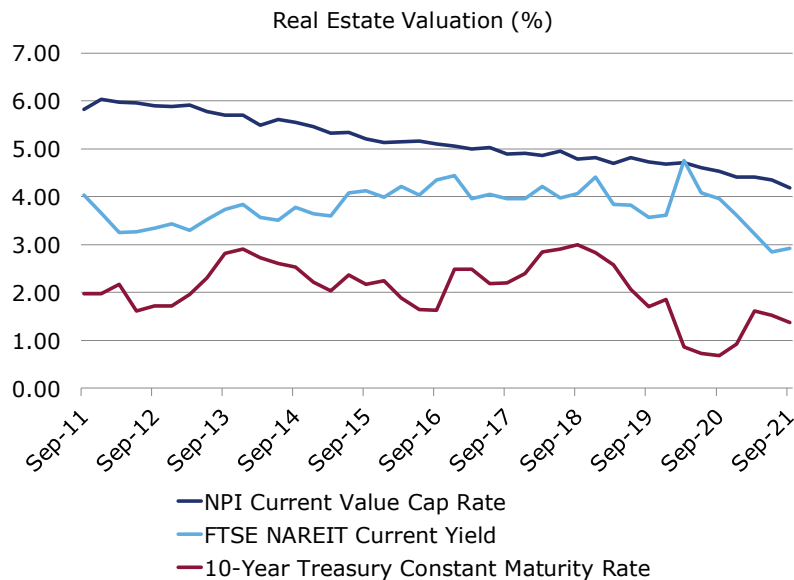
As of 9/30/2021		YTW	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg High Yield		4.0	0.9	4.5	11.3	6.9	6.5	7.4
S&P LSTA Leveraged Loan		3.7	1.0	3.2	6.7	3.9	4.3	4.7
<b>High Yield Quality Distribution</b>	<b>Weight</b>							
Ba U.S. High Yield	53.8%	3.2	1.1	3.8	9.7	8.7	6.8	7.5
B U.S. High Yield	34.1%	4.5	0.6	4.0	10.0	6.1	6.0	6.8
Caa U.S. High Yield	11.7%	6.3	0.8	8.0	18.7	3.1	6.1	7.9
Ca to D U.S. High Yield	0.4%	19.0	0.2	29.2	73.3	0.1	10.7	0.9
Non-Rated U.S. High Yield	0.0%	0.0	0.0	0.0	0.0	-0.8	2.2	3.4



Data Sources: Bloomberg

## Real Assets

As of 9/30/2021	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg U.S. TIPS	1.8	3.5	5.2	7.4	4.3	3.1
Bloomberg Commodity Index	6.6	29.1	42.3	6.9	4.5	-2.7
Bloomberg Gold Index	-1.0	-7.9	-8.2	12.1	4.7	-0.1
Wilshire Global RESI Index	0.4	18.5	34.4	8.2	6.2	9.9
NCREIF ODCE Fund Index	6.6	13.1	14.6	7.1	7.5	9.9
NCREIF Timberland Index	1.9	4.4	5.0	2.4	2.9	4.9
FTSE Global Core Infrastructure 50/50	-0.1	7.4	16.7	8.5	7.9	10.0
Alerian Midstream Energy	-1.3	38.9	66.9	3.9	2.4	n.a.
Bitcoin	25.6	49.8	305.7	87.8	135.0	147.0

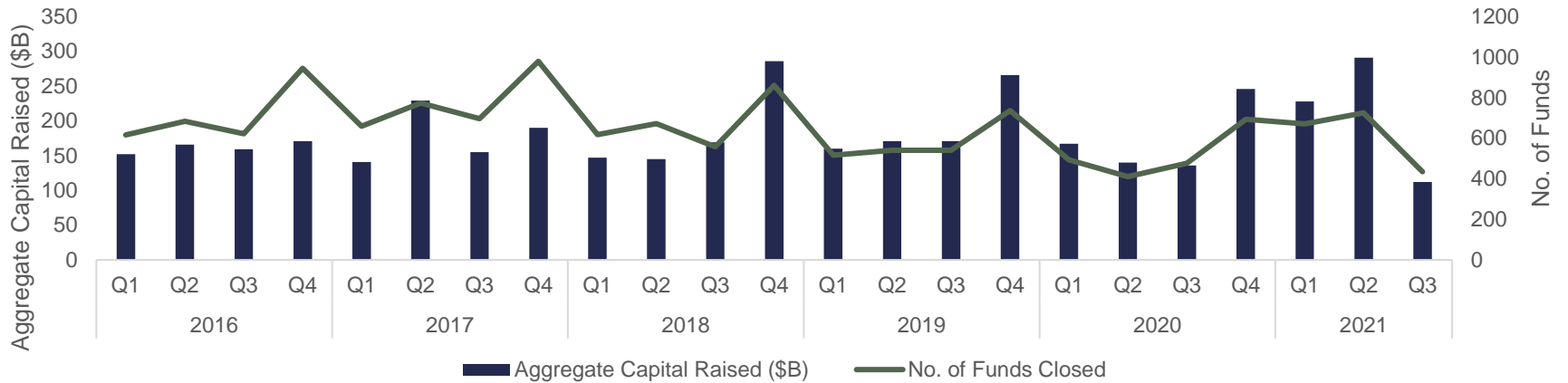


Data Sources: Bloomberg, National Council of Real Estate Investment Fiduciaries

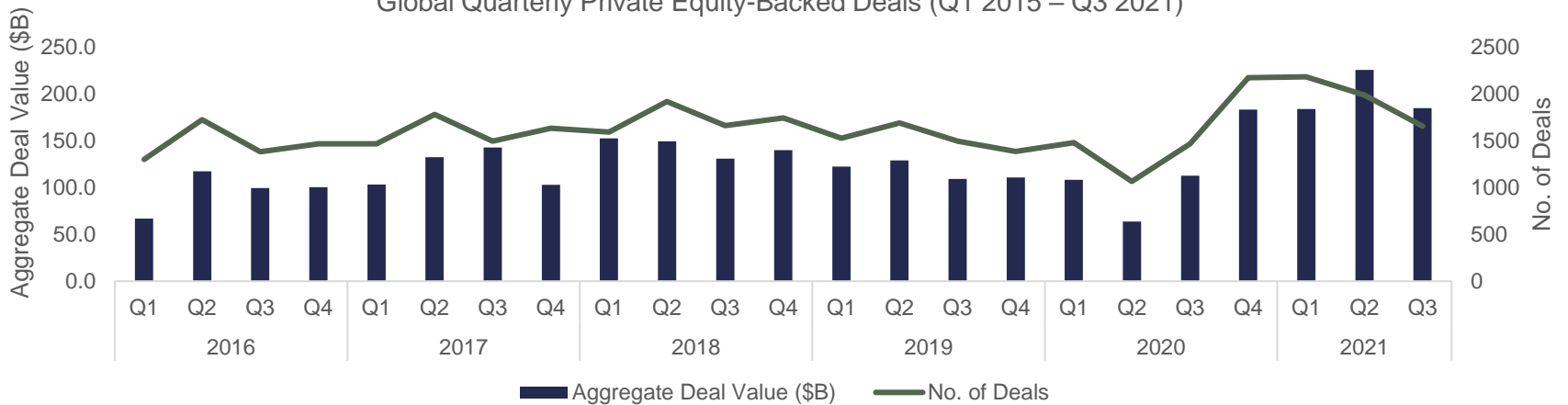
# Appendix: Private Market Trends

## Private Equity – Fundraising & Investment Activity

Global Quarterly Private Equity Fundraising (Q1 2015 – Q3 2021)



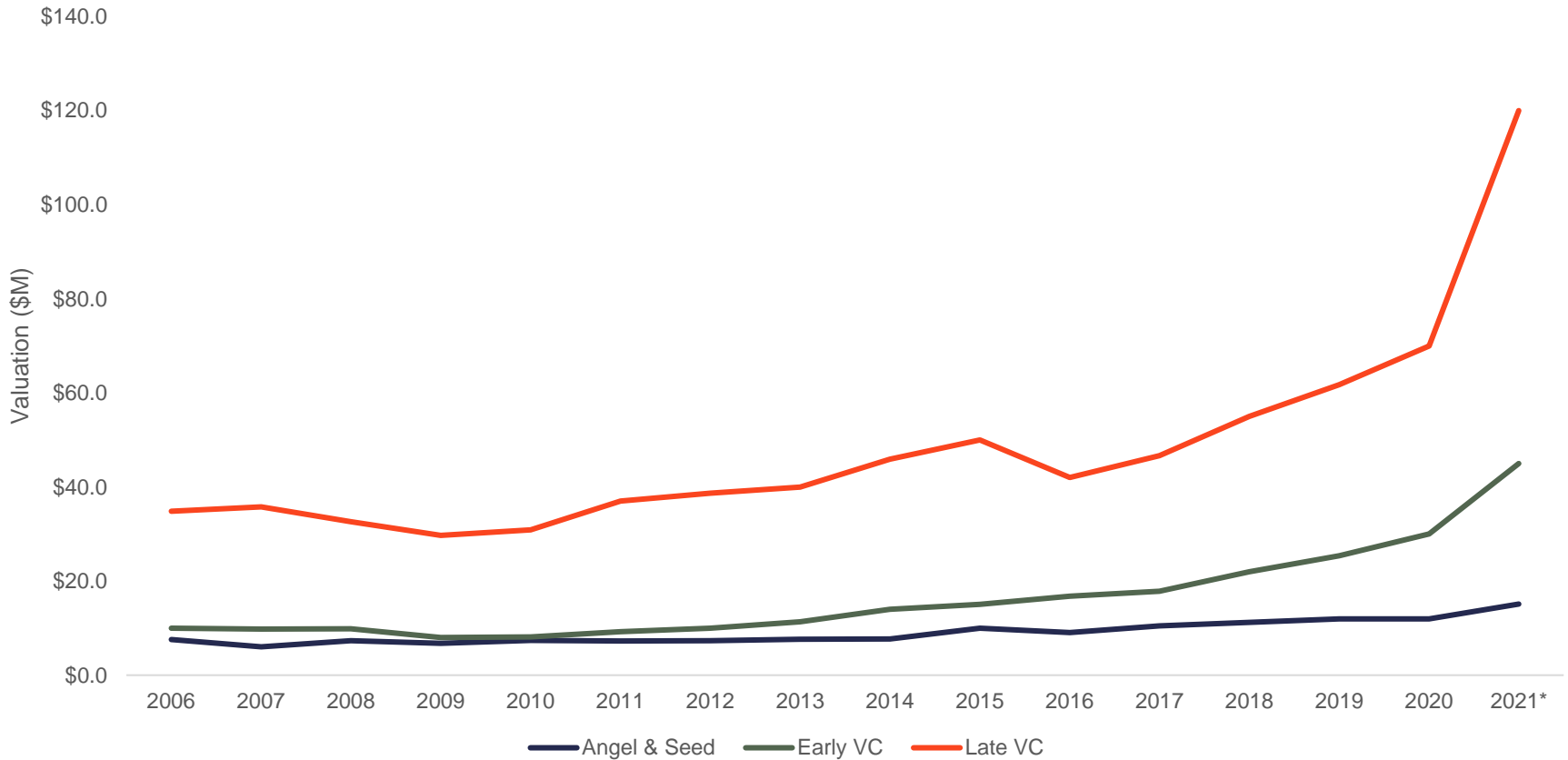
Global Quarterly Private Equity-Backed Deals (Q1 2015 – Q3 2021)



Source: Preqin, as of September 30, 2021.

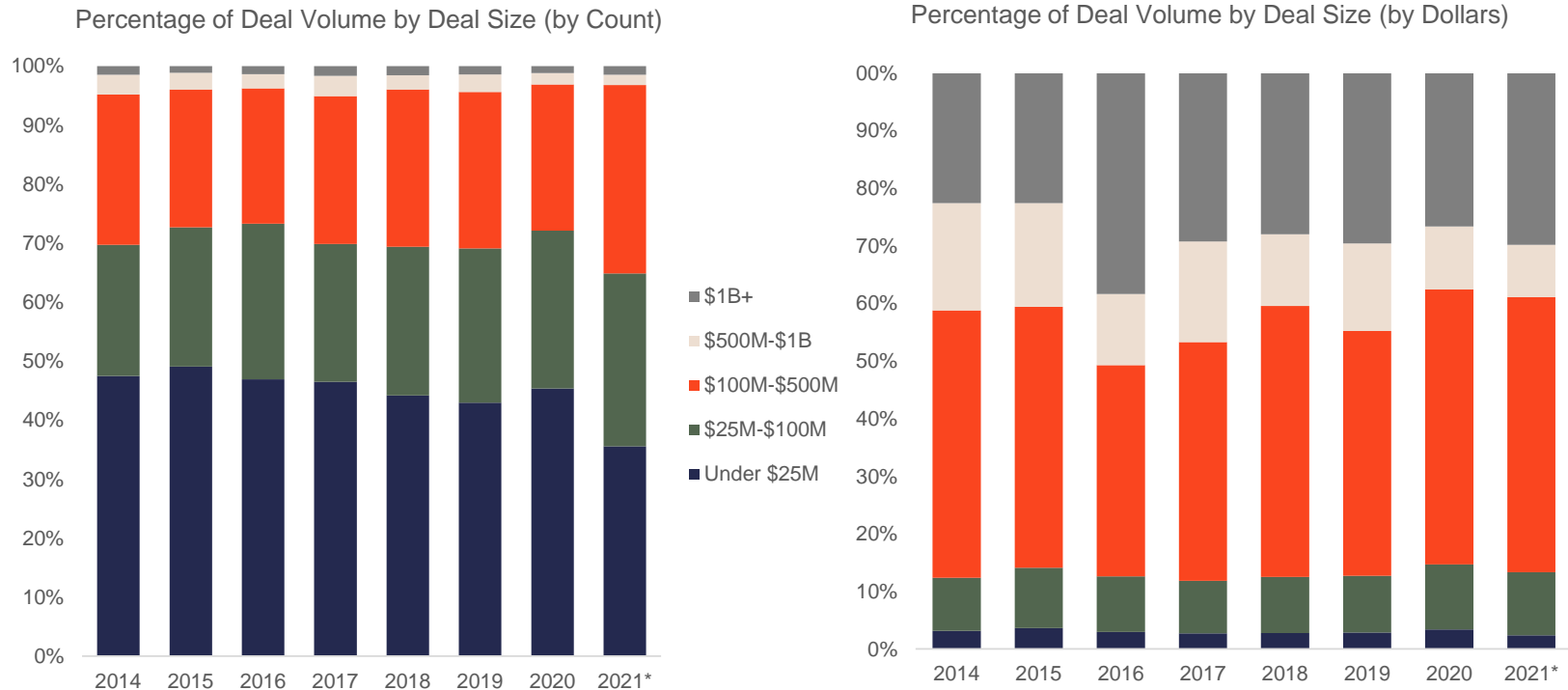
# Private Equity – Pricing & Valuations

U.S. Median Pre-Value by Stage (2006-Q3 2021)



Source: S&P LBO; Pitchbook, \*as of September 30, 2021.

## U.S. Investment Activity by Deal Size

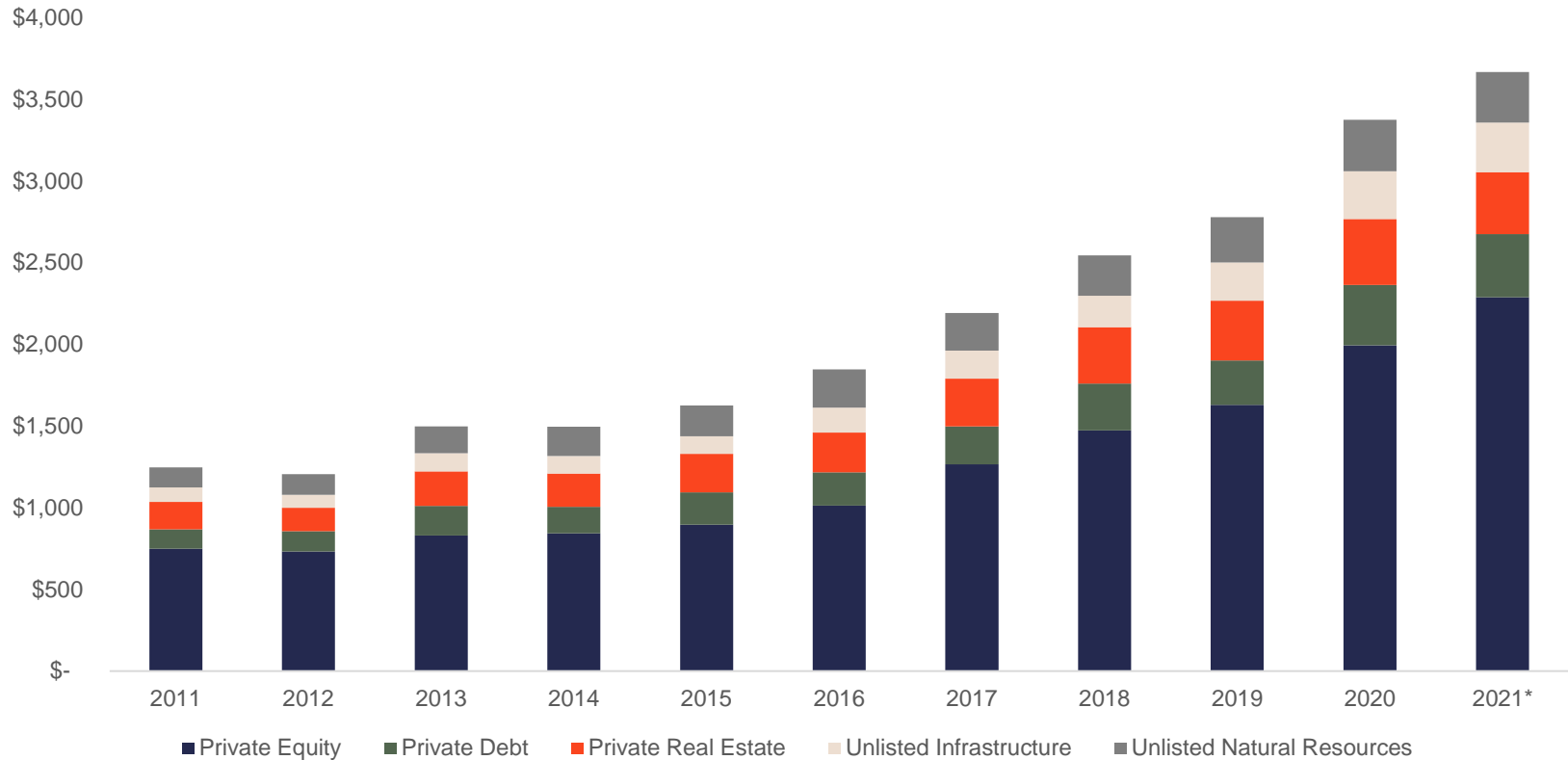


- Deal volume continues to be dominated by lower middle market deals with investment sizes below \$100 million through the third quarter of 2021
- However, deals with below \$100 million check sizes comprised only 13.3% of all deal volume by amount of capital invested in the third quarter of 2021

Source: Pitchbook, \*as of September 30, 2021.

# Private Capital Dry Powder

Private Capital Dry Powder by Fund Type (2011 – October 2021)

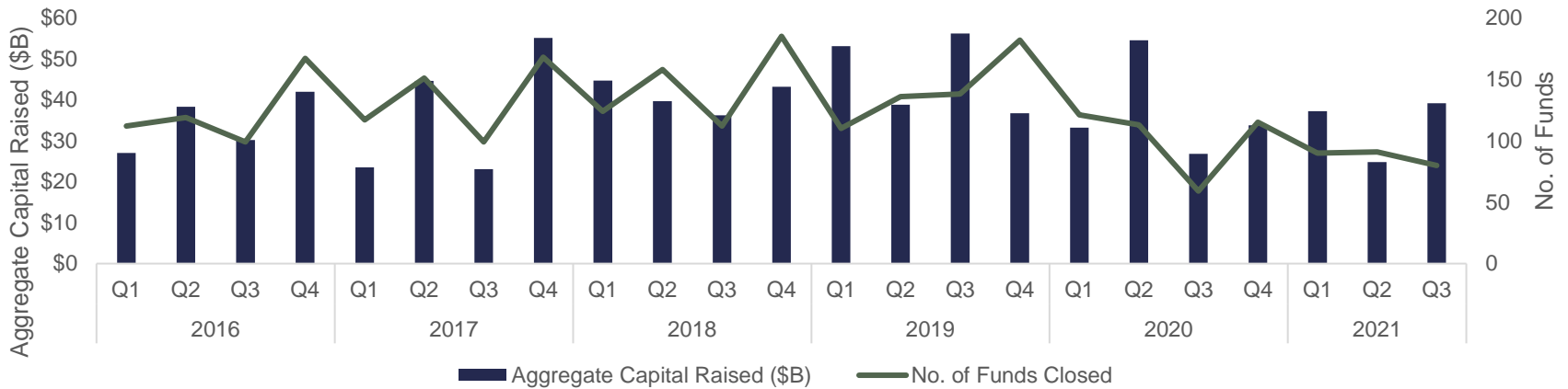


- Global private capital dry power continues to increase, topping \$3.6 trillion across all fund types
- Private equity comprises just over 62% of total dry powder in the market as of October 2021

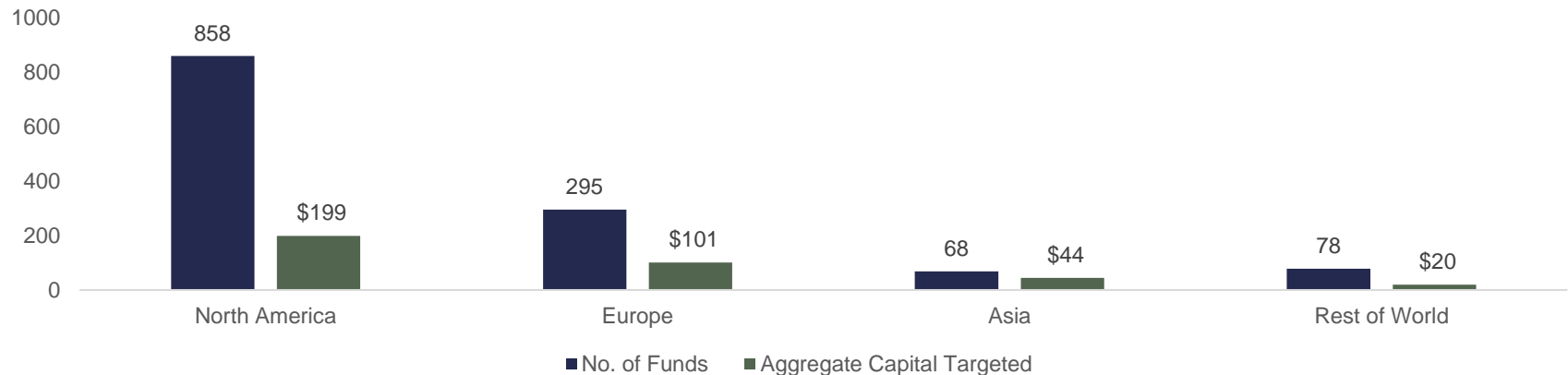
Source: Preqin, \*as of October 24, 2021.

## Private Real Estate – Fundraising Activity

Global Quarterly Closed-End Private Real Estate Fundraising (Q1 2015 – Q3 2021)



Closed-End Private Real Estate Funds Actively in Market in Q3 2021 by Primary Geographic Focus

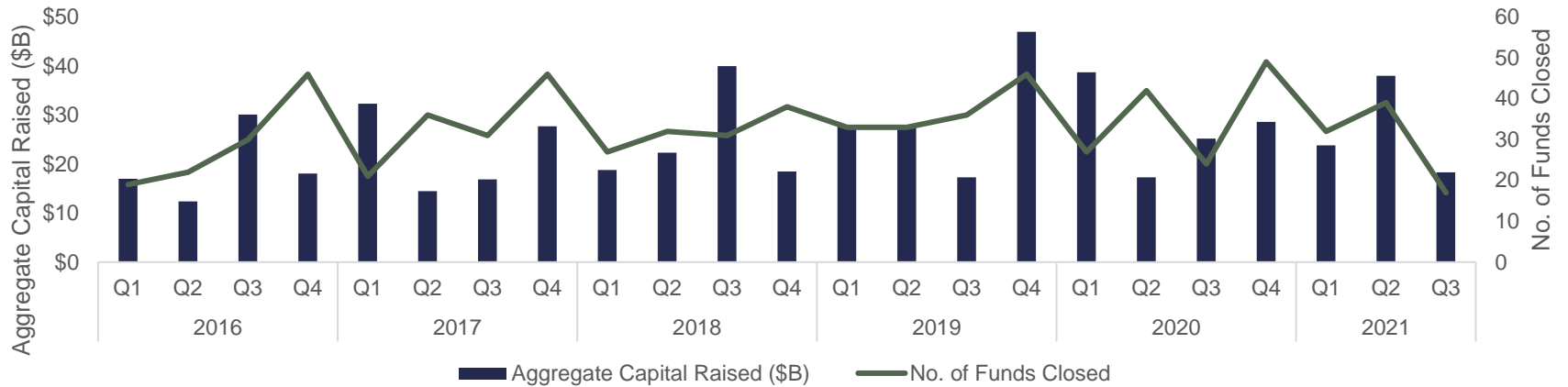


Source: Preqin, as of September 30, 2021.

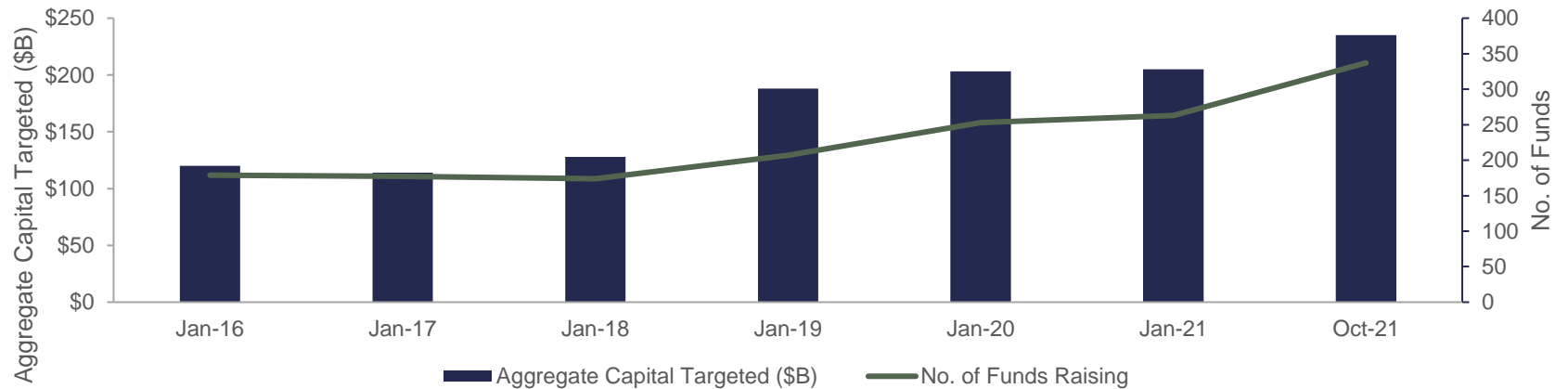


## Unlisted Infrastructure – Fundraising & Investment Activity

Global Quarterly Closed-End Private Real Estate Fundraising (Q1 2015 – Q3 2021)



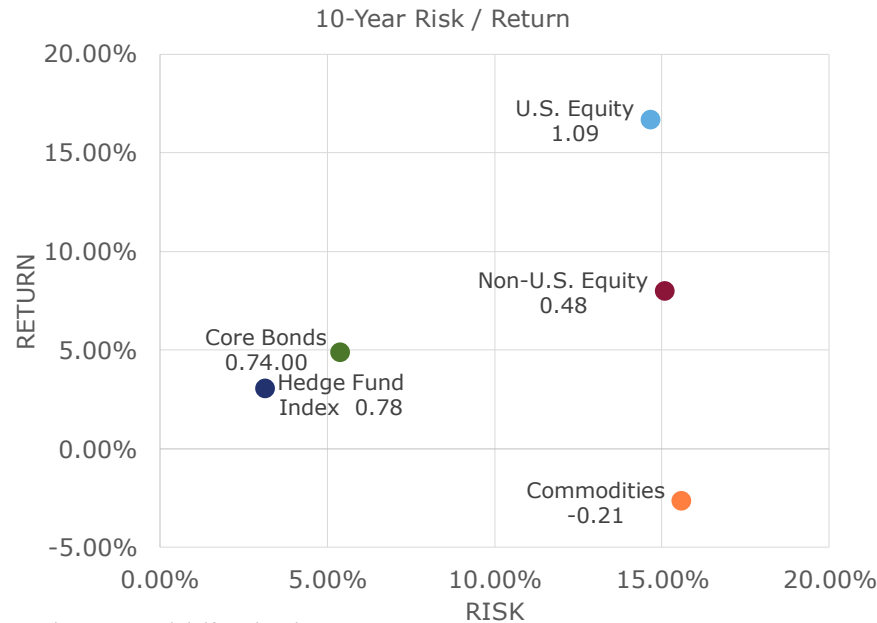
Unlisted Infrastructure Funds in Marker over Time (January 2016 - October 2021)



Source: Preqin, as of September 30, 2021.

## Hedge Fund Performance

As of 9/30/2021	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
Credit Suisse Hedge Fund Index	1.2	7.2	14.1	6.1	5.5	4.9
Event Driven	1.8	12.1	23.8	6.8	6.3	5.2
Global Macro	1.0	7.2	13.6	7.4	6.1	4.2
Long/Short Equity	2.3	7.8	16.0	6.8	7.1	6.8
Multi-Strategy	1.4	5.9	11.2	4.9	5.1	6.2
FT Wilshire 5000	0.1	15.6	32.4	16.2	17.0	16.7
MSCI ACWI ex-US (\$G)	-2.9	6.3	24.4	8.5	9.4	8.0
Bloomberg Aggregate	0.1	-1.6	-0.9	5.4	2.9	3.0
Bloomberg Commodity Index	6.6	29.1	42.3	6.9	4.5	-2.7



Data Source: Bloomberg

# Total Fund

# Asset Allocation Compliance

Total Fund

Periods Ended As of September 30, 2021

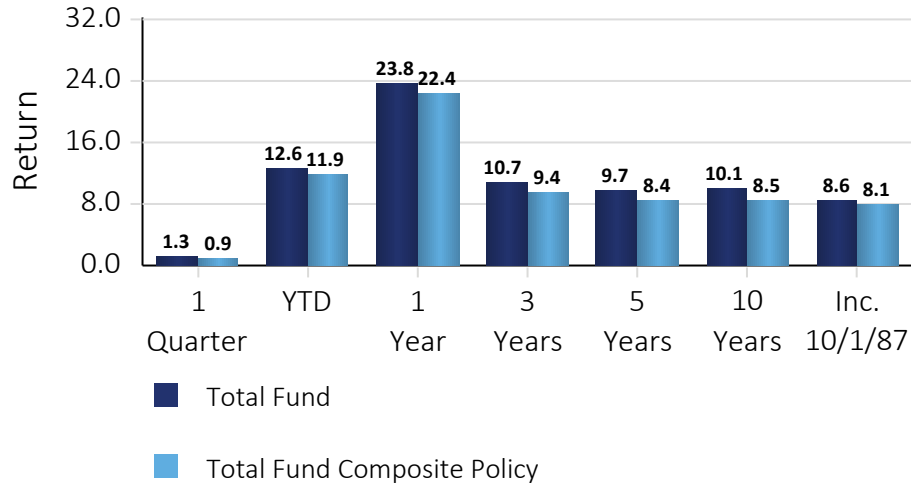
Asset Class	Current Allocation		Policy (%)	Difference to Target	
	(\$000)	(%)		(\$000)	(%)
Domestic Equity	98,950	19.0	17.8	6,366	1.2
International Equity	99,363	19.0	17.8	6,780	1.3
Private Equity	39,592	7.6	5.0	13,512	2.6
<b>Total Growth Assets</b>	<b>237,905</b>	<b>45.6</b>	<b>40.5</b>	<b>26,659</b>	<b>5.1</b>
Global Low Volatility Equity	47,924	9.2	10.0	(4,236)	(0.8)
Private Credit	21,388	4.1	5.0	(4,692)	(0.9)
<b>Total Defensive Growth Assets</b>	<b>69,311</b>	<b>13.3</b>	<b>15.0</b>	<b>(8,928)</b>	<b>(1.7)</b>
Core Fixed Income	108,465	20.8	24.5	(19,326)	(3.7)
Cash & Equivalents	4,103	0.8	0.0	4,103	0.8
<b>Total Defensive Assets</b>	<b>112,569</b>	<b>21.6</b>	<b>24.5</b>	<b>(15,222)</b>	<b>(2.9)</b>
U.S. TIPS	23,507	4.5	5.0	(2,572)	(0.5)
U.S. REITs	26,649	5.1	5.0	569	0.1
Commodities	25,651	4.9	5.0	(429)	(0.1)
Midstream Energy Infrastructure	26,004	5.0	5.0	(76)	(0.0)
<b>Total Inflation Oriented Assets</b>	<b>101,811</b>	<b>19.5</b>	<b>20.0</b>	<b>(2,508)</b>	<b>(0.5)</b>
<b>Total Fund Assets</b>	<b>521,596</b>	<b>100.0</b>	<b>100.0</b>	<b>-</b>	<b>0.0</b>

# Composite Performance Summary

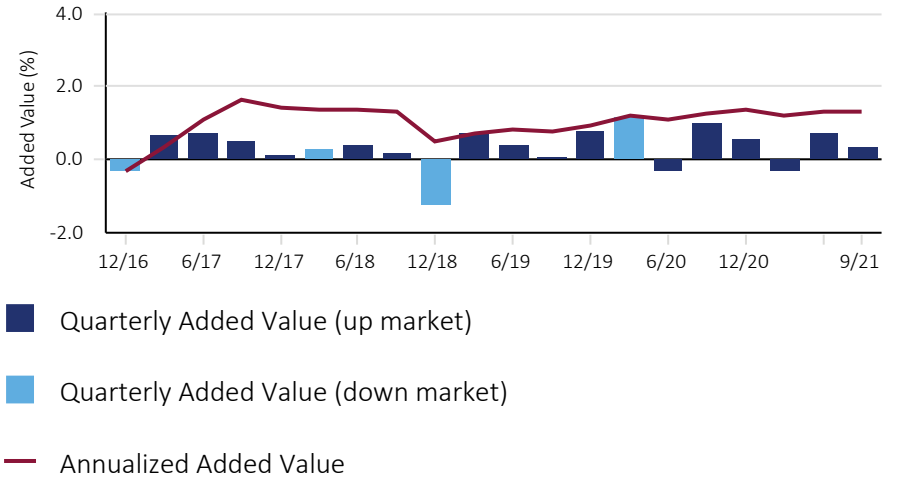
Total Fund

Periods Ended September 30, 2021

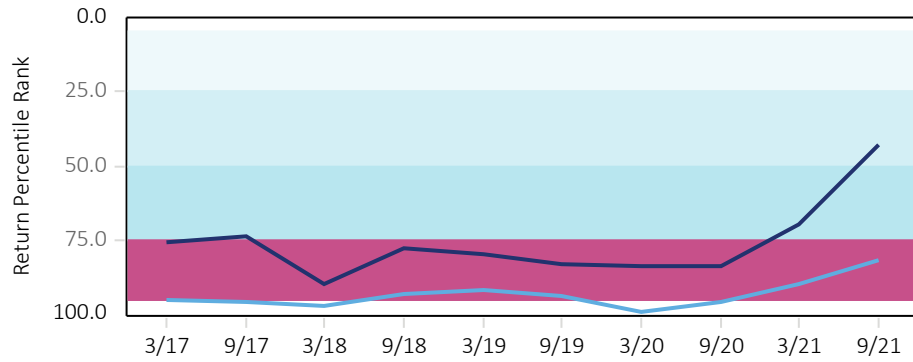
## Comparative Performance



## Added Value History

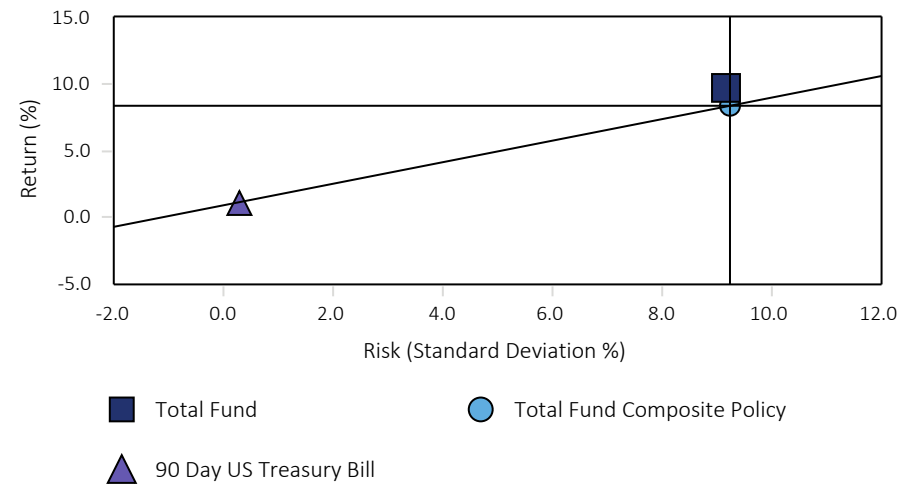


## Rolling Percentile Rank: All Public Plans-Total Fund



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
— Total Fund	10	0 (0%)	1 (10%)	2 (20%)	7 (70%)
— Benchmark	10	0 (0%)	0 (0%)	0 (0%)	10 (100%)

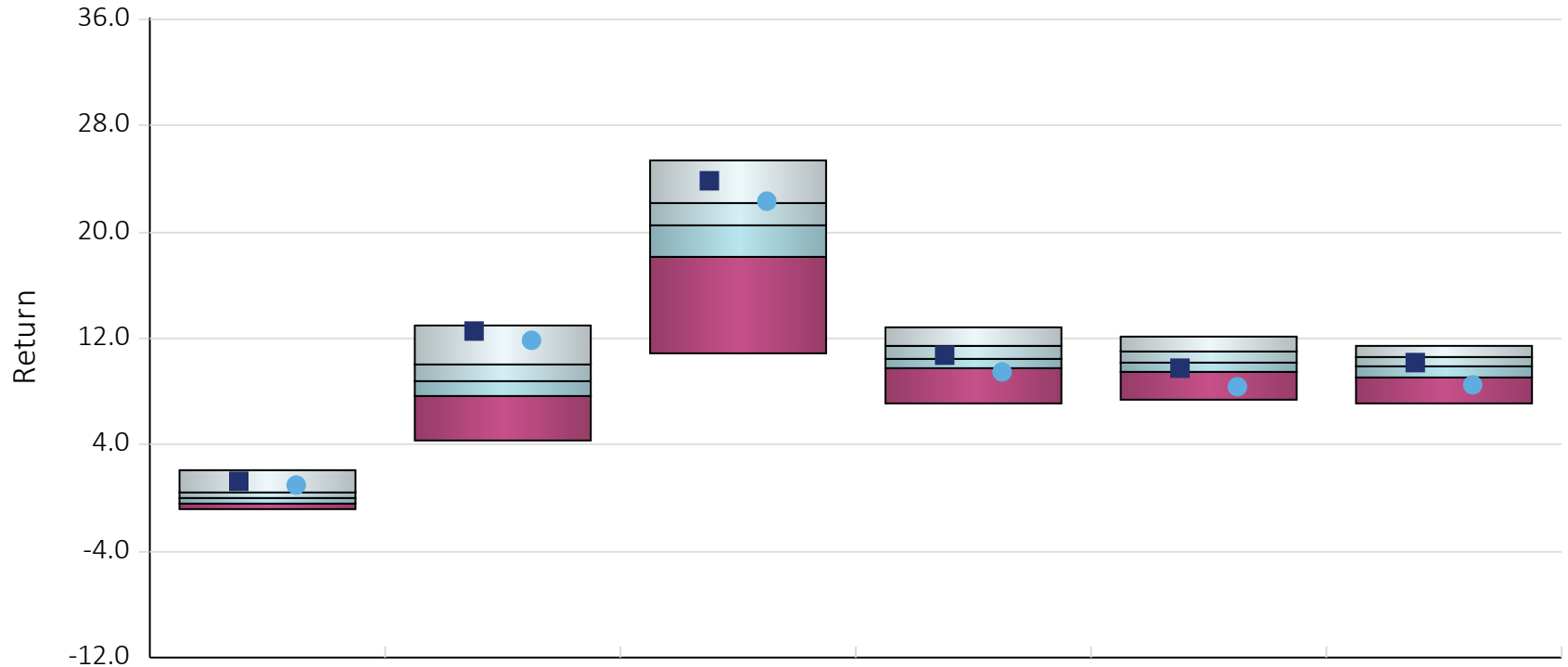
## Risk and Return 10/1/16 - 09/30/21



# Plan Sponsor Peer Group Analysis

Total Fund vs All Public Plans-Total Fund

Periods Ended September 30, 2021



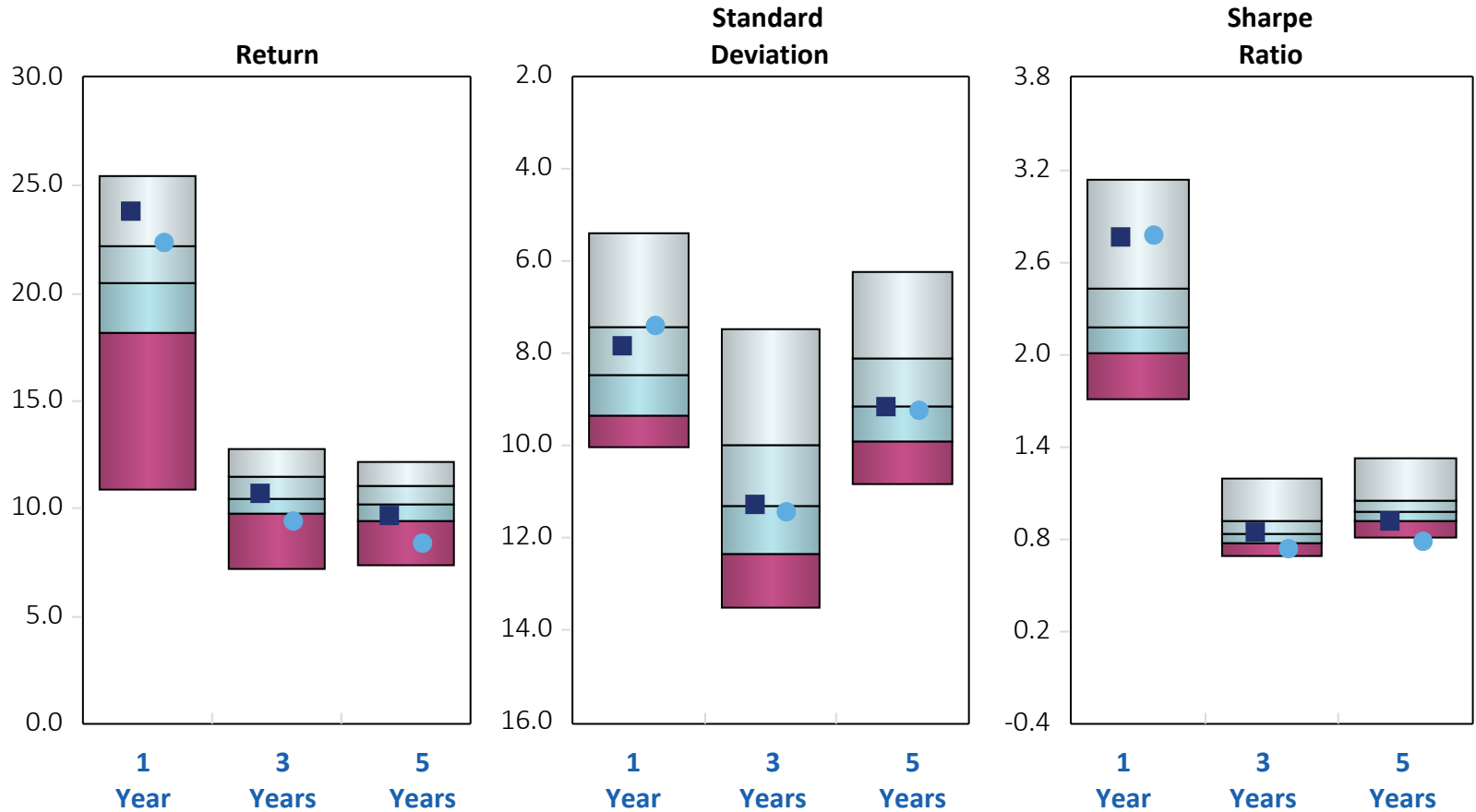
	QTD	YTD	1 Year	3 Years	5 Years	10 Years
■ Total Fund	1.27 (11)	12.61 (7)	23.79 (12)	10.74 (43)	9.71 (70)	10.15 (41)
● Total Fund Composite Policy	0.93 (14)	11.86 (10)	22.36 (24)	9.43 (82)	8.41 (92)	8.49 (89)
5th Percentile	2.05	12.97	25.43	12.81	12.14	11.49
1st Quartile	0.38	10.10	22.24	11.46	11.05	10.60
Median	-0.06	8.83	20.46	10.49	10.23	9.92
3rd Quartile	-0.41	7.66	18.14	9.73	9.44	9.10
95th Percentile	-0.84	4.28	10.91	7.16	7.37	7.15
Population	439	439	439	427	409	361

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 September 30, 2021



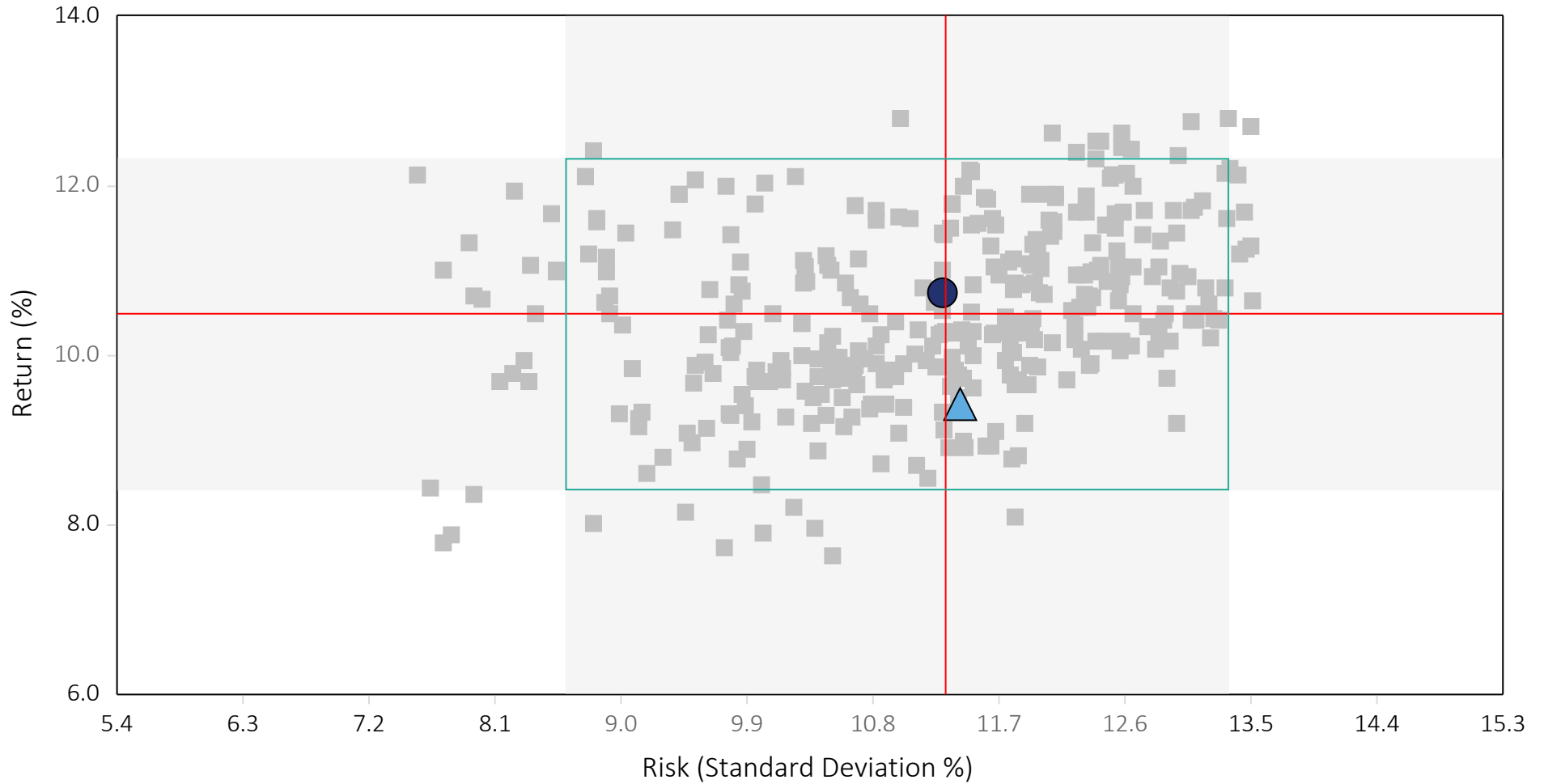
	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years
■ Total Fund	23.79 (12)	10.74 (43)	9.71 (70)	7.85 (33)	11.30 (48)	9.18 (51)	2.77 (11)	0.85 (43)	0.92 (70)
● Total Fund Composite Policy	22.36 (24)	9.43 (82)	8.41 (92)	7.39 (23)	11.42 (52)	9.22 (52)	2.78 (10)	0.74 (87)	0.79 (97)
5th Percentile	25.43	12.81	12.14	5.39	7.50	6.23	3.15	1.20	1.33
1st Quartile	22.24	11.46	11.05	7.44	10.02	8.14	2.43	0.92	1.06
Median	20.46	10.49	10.23	8.47	11.32	9.15	2.18	0.83	0.97
3rd Quartile	18.14	9.73	9.44	9.37	12.35	9.91	2.01	0.77	0.92
95th Percentile	10.91	7.16	7.37	10.04	13.52	10.85	1.71	0.69	0.81

Parenteses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Scattergram

Total Fund vs All Public Plans-Total Fund

Periods Ended October 1, 2018 To September 30, 2021



	Return	Standard Deviation
● Total Fund	10.74	11.30
▲ Total Fund Composite Policy	9.43	11.42
— Median	10.49	11.32

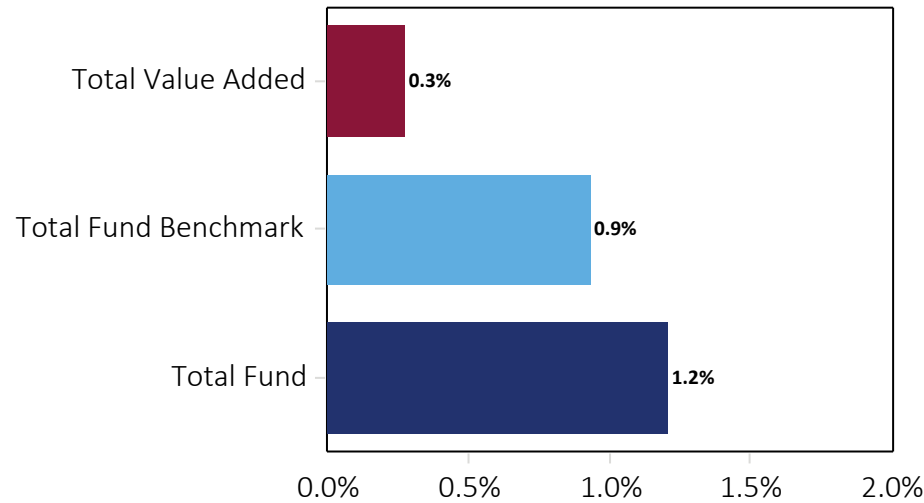


# Total Fund Attribution

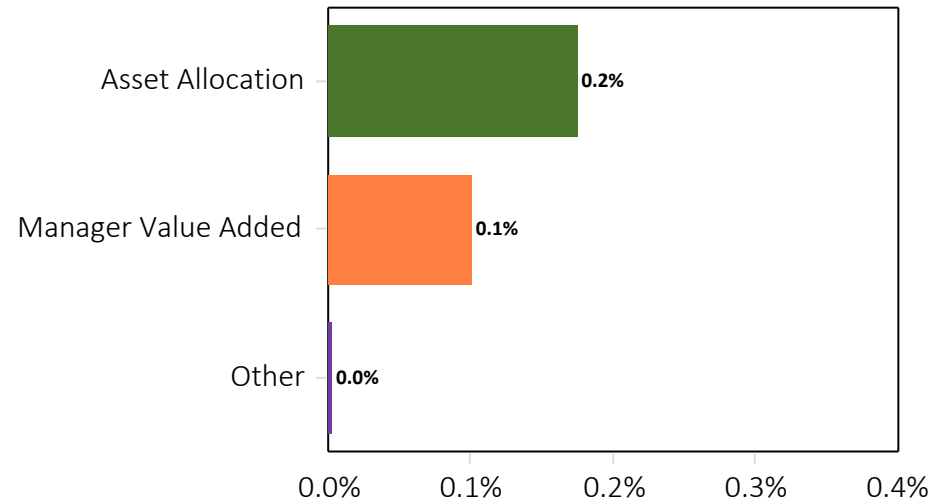
Total Fund

Periods Ended 1 Quarter Ending September 30, 2021

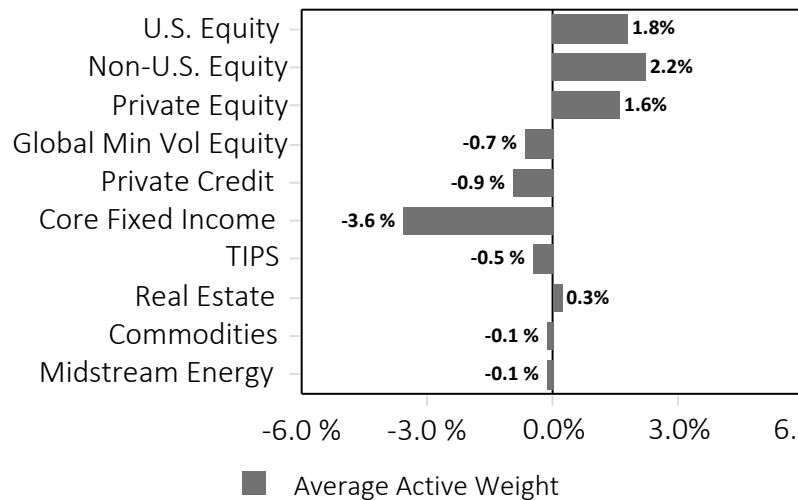
## Total Fund Performance



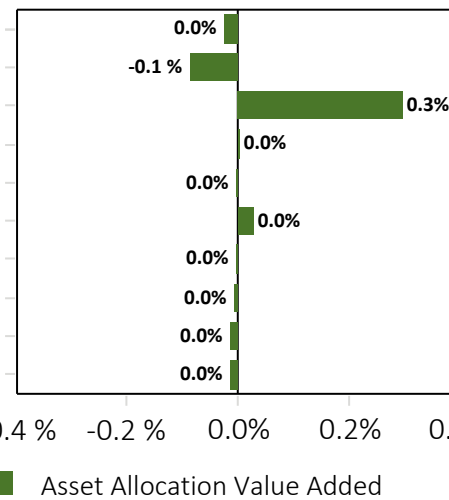
## Total Value Added:0.3%



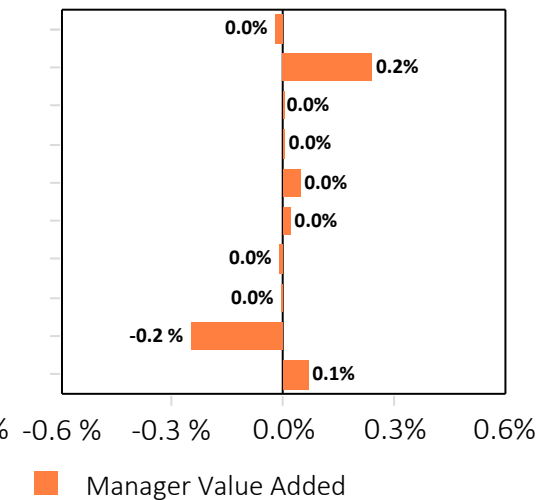
## Total Asset Allocation:0.2%



## Asset Allocation Value Added:0.2%



## Total Manager Value Added:0.1%

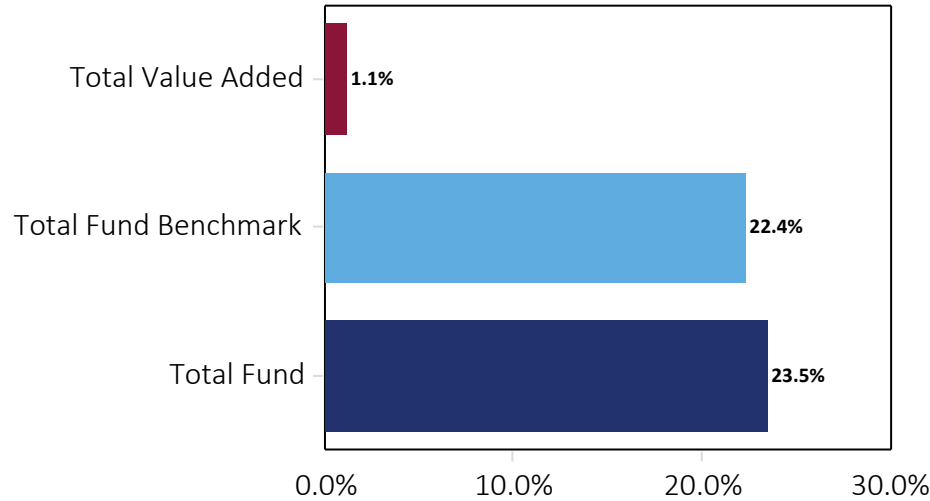


# Total Fund Attribution

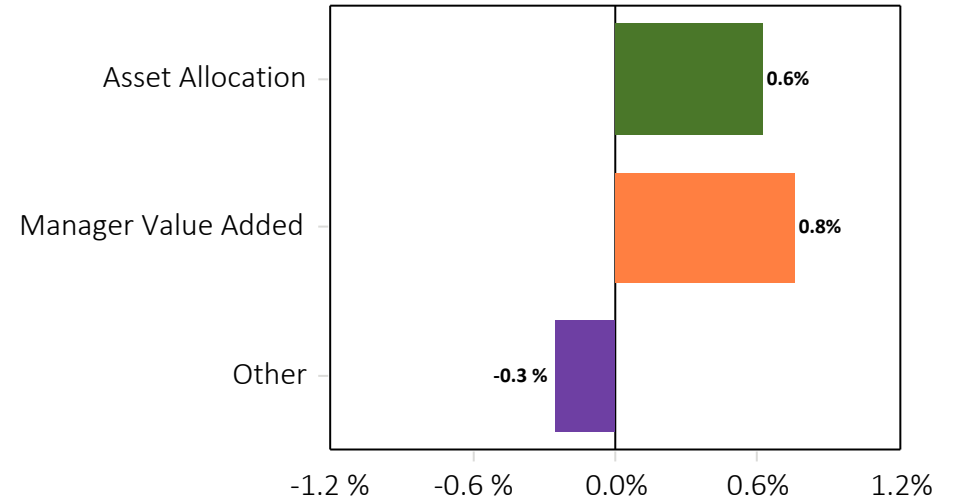
Total Fund

Periods Ended 1 Year Ending September 30, 2021

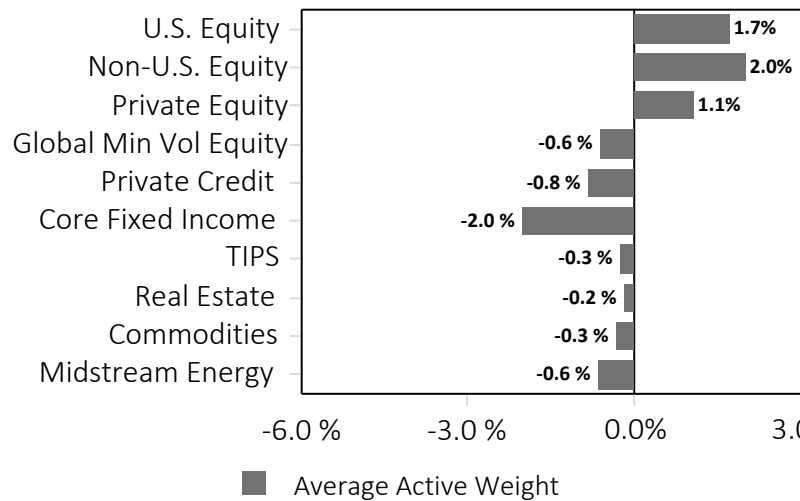
## Total Fund Performance



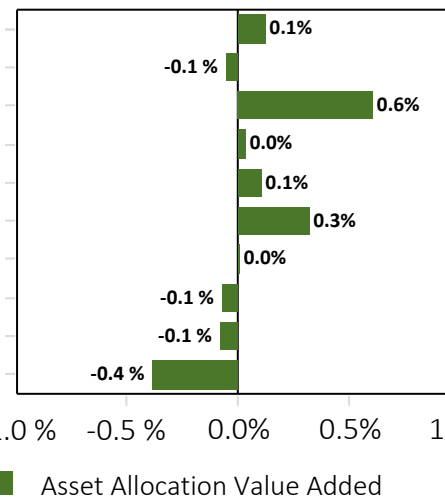
## Total Value Added: 1.1%



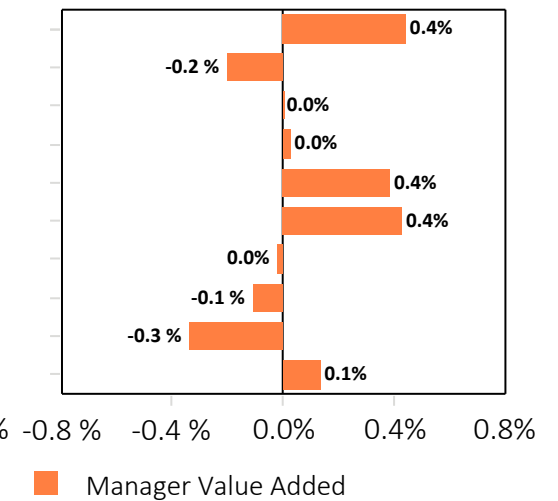
## Total Asset Allocation: 0.6%



## Asset Allocation Value Added: 0.6%



## Total Manager Value Added: 0.8%



# Asset Allocation & Performance

Total Fund

Periods Ended September 30, 2021

	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
<b>Total Fund</b>	<b>521,595,702</b>	<b>100.00</b>	<b>1.21</b>	<b>12.42</b>	<b>12.42</b>	<b>23.52</b>	<b>10.48</b>	<b>9.45</b>	<b>7.88</b>	<b>9.88</b>	<b>8.37</b>	<b>10/1/1987</b>
Total Fund Composite Policy			0.93	11.86	11.86	22.36	9.43	8.41	6.71	8.49	8.12	
Value Added			0.28	0.56	0.56	1.16	1.05	1.04	1.17	1.39	0.25	
<b>U.S. Equity</b>	<b>98,949,536</b>	<b>18.97</b>	<b>0.02</b>	<b>14.97</b>	<b>14.97</b>	<b>34.88</b>	<b>16.07</b>	<b>17.08</b>	<b>14.28</b>	<b>17.01</b>	<b>10.33</b>	<b>10/1/1987</b>
FT Wilshire 5000 Total Market TR Index			0.14	15.62	15.62	32.35	16.19	17.01	14.11	16.66	10.34	
Value Added			-0.12	-0.65	-0.65	2.53	-0.12	0.07	0.17	0.35	-0.01	
<b>Non-U.S. Equity</b>	<b>99,363,143</b>	<b>19.05</b>	<b>-1.84</b>	<b>6.79</b>	<b>6.79</b>	<b>22.73</b>	<b>10.93</b>	<b>10.74</b>	<b>8.45</b>	<b>9.47</b>	<b>8.43</b>	<b>1/1/1990</b>
International Equity Composite Policy			-2.99	5.90	5.90	23.92	8.03	8.94	5.68	7.48	4.92	
Value Added			1.15	0.89	0.89	-1.19	2.90	1.80	2.77	1.99	3.51	
<b>Private Equity</b>	<b>39,592,166</b>	<b>7.59</b>	<b>18.89</b>	<b>68.74</b>	<b>68.74</b>	<b>87.89</b>	<b>32.64</b>	<b>25.82</b>	<b>20.90</b>	<b>16.14</b>	<b>14.62</b>	<b>5/1/2010</b>
Private Equity Policy Index			18.89	68.74	68.74	87.89	32.64	25.82	20.90	16.14	14.62	
Value Added			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Global Low Volatility Equity</b>	<b>47,923,458</b>	<b>9.19</b>	<b>0.12</b>	<b>7.37</b>	<b>7.37</b>	<b>14.38</b>					<b>9.06</b>	<b>6/1/2019</b>
MSCI ACWI Minimum Volatility Index (Net)			0.08	7.20	7.20	14.08					8.69	
Value Added			0.04	0.17	0.17	0.30					0.37	
<b>Private Credit</b>	<b>21,387,644</b>	<b>4.10</b>	<b>2.29</b>	<b>11.04</b>	<b>11.04</b>	<b>17.01</b>	<b>5.14</b>				<b>5.14</b>	<b>10/1/2018</b>
S&P/LSTA Leverage Loan Index			1.11	4.42	4.42	8.40	4.14				4.14	
Value Added			1.18	6.62	6.62	8.61	1.00				1.00	
<b>Core Fixed Income</b>	<b>108,465,169</b>	<b>20.79</b>	<b>0.15</b>	<b>-1.29</b>	<b>-1.29</b>	<b>0.63</b>	<b>6.62</b>	<b>4.09</b>	<b>4.26</b>	<b>4.40</b>	<b>6.69</b>	<b>10/1/1987</b>
Blmbg. U.S. Aggregate			0.05	-1.56	-1.56	-0.90	5.35	2.94	3.26	3.01	6.21	
Value Added			0.10	0.27	0.27	1.53	1.27	1.15	1.00	1.39	0.48	

# Asset Allocation & Performance

Total Fund

Periods Ended September 30, 2021

	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
<b>Total Real Assets Composite</b>	<b>101,811,306</b>	<b>19.52</b>	<b>0.89</b>	<b>20.76</b>	<b>20.76</b>	<b>33.81</b>	<b>6.62</b>	<b>4.37</b>			<b>2.83</b>	<b>4/1/2015</b>
Real Assets Composite Policy			1.51	19.75	19.75	32.94	6.82	4.57			2.92	
Value Added			-0.62	1.01	1.01	0.87	-0.20	-0.20			-0.09	
<b>TIPS</b>	<b>23,507,445</b>	<b>4.51</b>	<b>1.54</b>	<b>3.48</b>	<b>3.48</b>	<b>4.84</b>	<b>7.19</b>	<b>4.13</b>			<b>3.80</b>	<b>5/1/2015</b>
Blmbg. U.S. TIPS			1.75	3.51	3.51	5.19	7.45	4.34			3.92	
Value Added			-0.21	-0.03	-0.03	-0.35	-0.26	-0.21			-0.12	
<b>Real Estate</b>	<b>26,648,529</b>	<b>5.11</b>	<b>1.15</b>	<b>23.16</b>	<b>23.16</b>	<b>37.81</b>	<b>10.13</b>	<b>6.20</b>	<b>6.35</b>	<b>8.55</b>	<b>9.39</b>	<b>6/1/2009</b>
Real Estate Policy Index			1.25	24.48	24.48	40.56	7.25	5.16	6.14	8.67	9.66	
Value Added			-0.10	-1.32	-1.32	-2.75	2.88	1.04	0.21	-0.12	-0.27	
<b>Commodities</b>	<b>25,651,151</b>	<b>4.92</b>	<b>1.39</b>	<b>20.82</b>	<b>20.82</b>	<b>34.85</b>	<b>8.83</b>	<b>6.80</b>	<b>0.20</b>		<b>-1.99</b>	<b>2/1/2013</b>
Bloomberg Commodity Index Total Return			6.59	29.13	29.13	42.29	6.86	4.54	-1.49		-3.25	
Value Added			-5.20	-8.31	-8.31	-7.44	1.97	2.26	1.69		1.26	
<b>Midstream Energy Composite</b>	<b>26,004,181</b>	<b>4.99</b>	<b>-0.43</b>	<b>38.97</b>	<b>38.97</b>	<b>70.17</b>	<b>-2.73</b>	<b>-0.85</b>			<b>-3.59</b>	<b>3/1/2015</b>
Midstream Energy Policy Index			-1.89	38.03	38.03	65.84	-7.68	-6.17			-10.13	
Value Added			1.46	0.94	0.94	4.33	4.95	5.32			6.54	

# Historical Hybrid Composition

## Grand Rapids General Retirement System

Periods Ended September 30, 2021

Policy Index	Weight (%)
<b>Jan-1976</b>	
FT Wilshire 5000 Total Market TR Index	55.00
Blmbg. U.S. Aggregate	40.00
MSCI EAFE Index (Net)	5.00
<b>Jul-1998</b>	
FT Wilshire 5000 Total Market TR Index	50.00
Blmbg. U.S. Aggregate	40.00
MSCI EAFE Index (Net)	10.00
<b>Oct-2002</b>	
FT Wilshire 5000 Total Market TR Index	50.00
Blmbg. U.S. Aggregate	35.00
MSCI EAFE Index (Net)	15.00
<b>Apr-2006</b>	
FT Wilshire 5000 Total Market TR Index	55.00
Blmbg. U.S. Aggregate	30.00
MSCI EAFE Index (Net)	15.00
<b>Jul-2006</b>	
FT Wilshire 5000 Total Market TR Index	55.00
Blmbg. U.S. Aggregate	30.00
MSCI AC World ex USA (Net)	15.00
<b>Jul-2009</b>	
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 (%)
<b>Apr-2010</b>	
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
<b>May-2010</b>	
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
<b>Jul-2010</b>	
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
<b>Jan-2013</b>	
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 September 30, 2021

Policy Index	Weight (%)
<b>Apr-2015</b>	
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
<b>Dec-2018</b>	
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 (%)
<b>Jul-2019</b>	
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
<b>Oct-2019</b>	
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 September 30, 2021*

<b>Policy Index</b>	<b>Weight (%)</b>
<b>Oct-2020</b>	
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

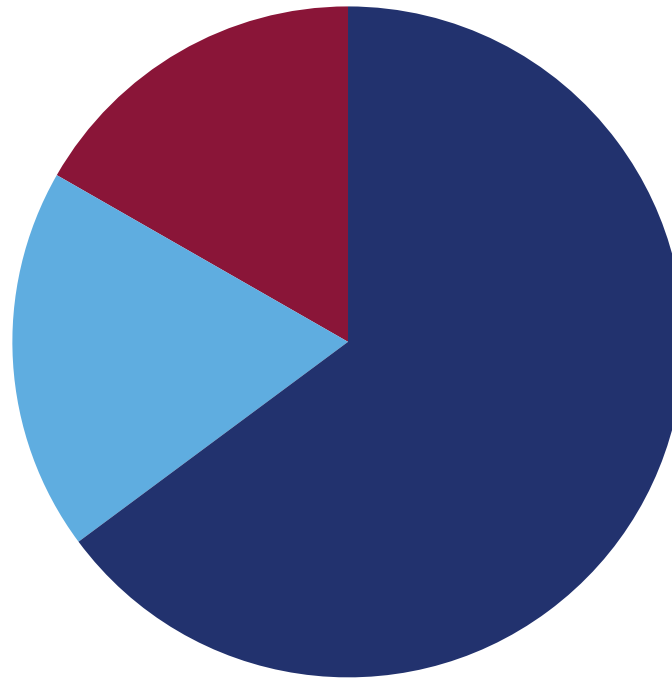


# Asset Allocation By Manager

U.S. Equity

Periods Ended September 30, 2021

Sep-2021 : 98,949,536



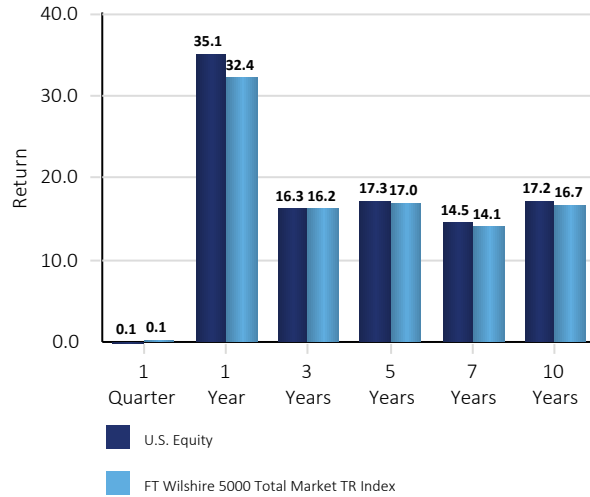
	Market Value \$	Allocation (%)
■ NTAM S&P 500	64,157,426	64.8
■ PIMCO Stock Plus	18,247,238	18.4
■ Wellington Small Cap	16,544,872	16.7

# Performance Summary

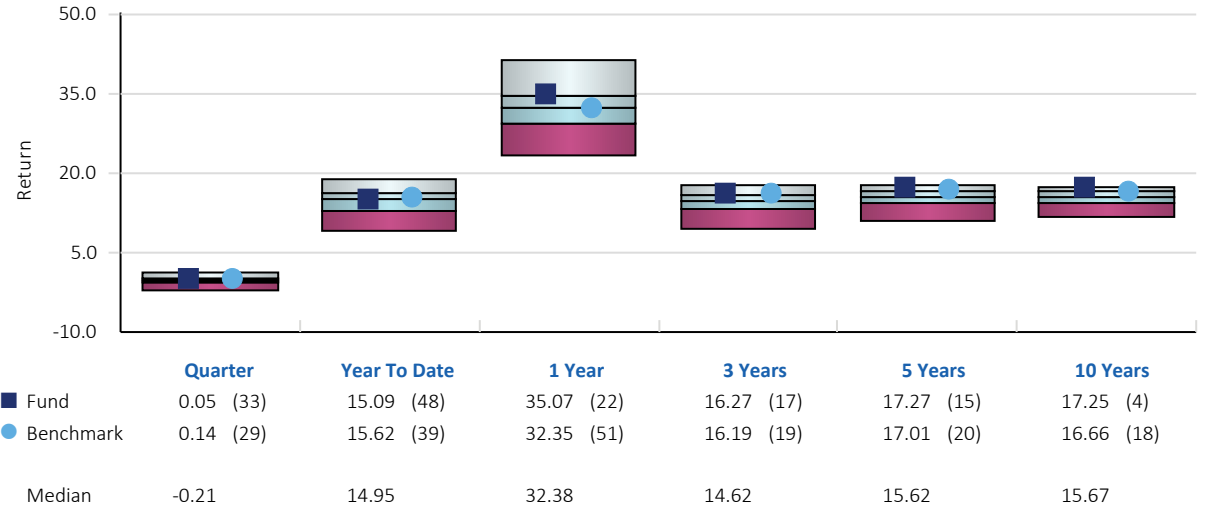
## U.S. Equity

Periods Ended September 30, 2021

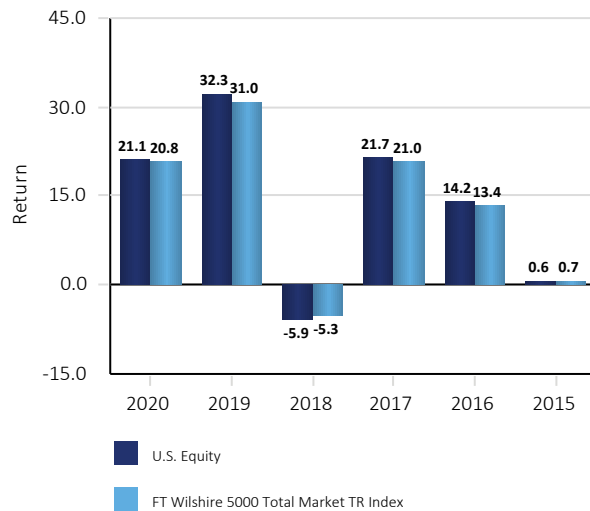
### Comparative Performance



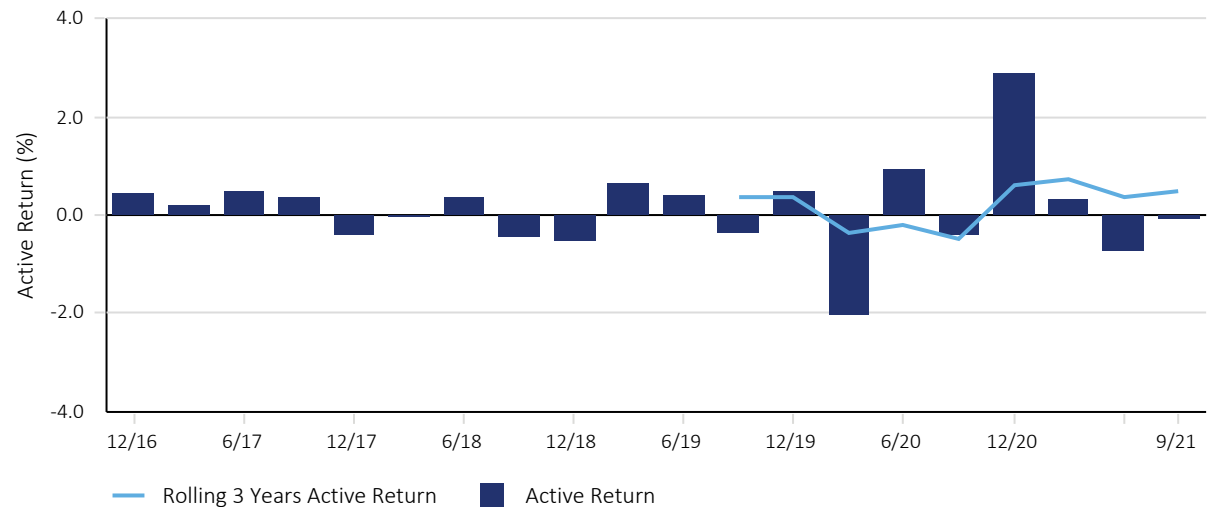
### Peer Group Analysis: All Master Trust-US Equity Segment



### Comparative Performance



### Rolling 3 Years Performance

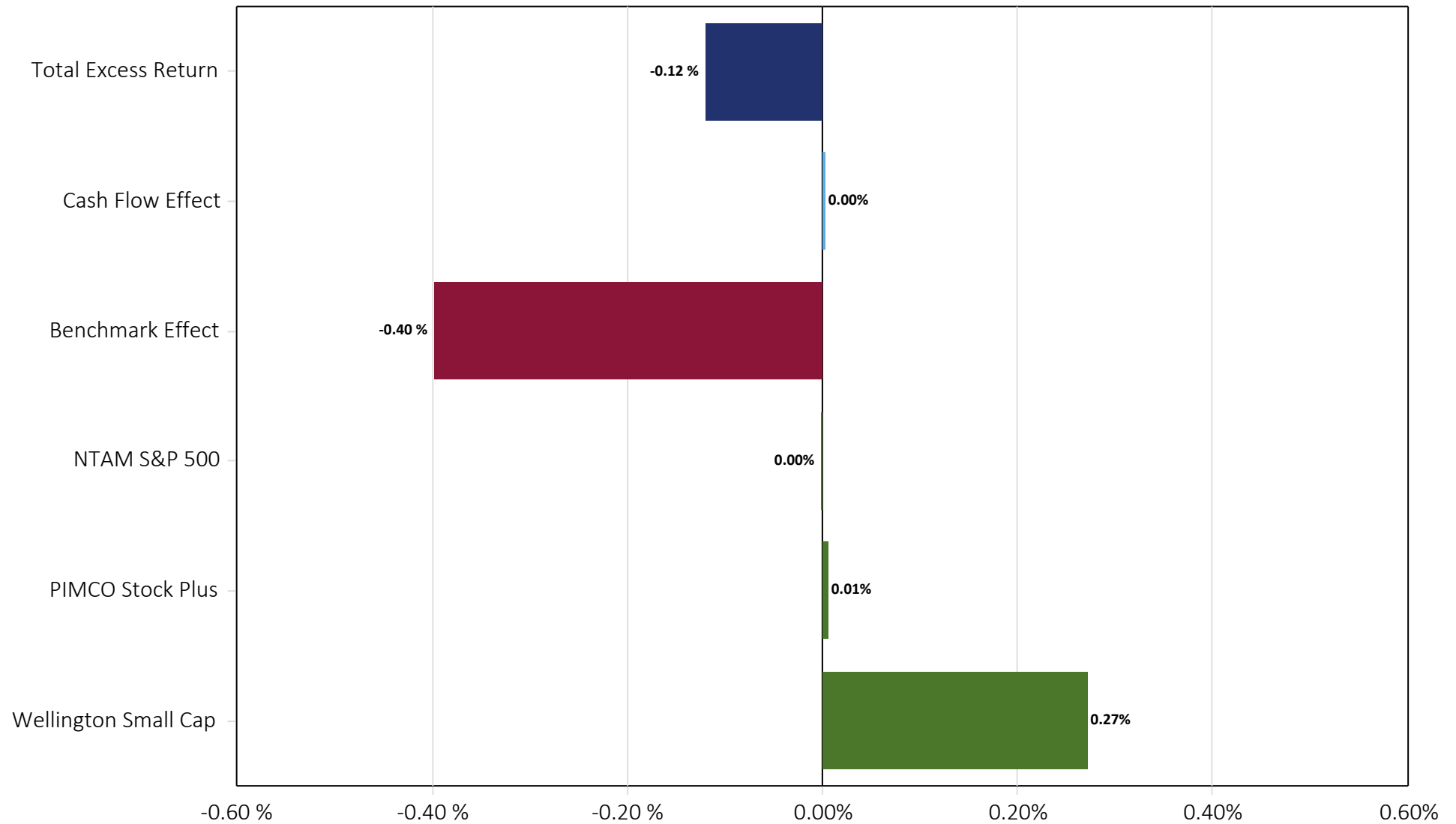


# Asset Class Attribution

U.S. Equity

Periods Ended 1 Quarter Ending September 30, 2021

1 Quarter



# Asset Allocation & Performance

## U.S. Equity

Periods Ended September 30, 2021

	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
<b>U.S. Equity</b>	<b>98,949,536</b>	<b>100.00</b>	<b>0.02</b>	<b>14.97</b>	<b>14.97</b>	<b>34.88</b>	<b>16.07</b>	<b>17.08</b>	<b>14.28</b>	<b>17.01</b>	<b>10.33</b>	<b>10/1/1987</b>
FT Wilshire 5000 Total Market TR Index			0.14	15.62	15.62	32.35	16.19	17.01	14.11	16.66	10.34	
Value Added			-0.12	-0.65	-0.65	2.53	-0.12	0.07	0.17	0.35	-0.01	
<b>NTAM S&amp;P 500</b>	<b>64,157,426</b>	<b>64.84</b>	<b>0.58</b>	<b>15.90</b>	<b>15.90</b>	<b>29.97</b>	<b>16.02</b>	<b>16.89</b>	<b>14.03</b>	<b>16.65</b>	<b>9.14</b>	<b>4/1/1998</b>
NTAM Policy			0.58	15.92	15.92	30.00	15.99	16.90	14.01	16.63	8.13	
Value Added			0.00	-0.02	-0.02	-0.03	0.03	-0.01	0.02	0.02	1.01	
<b>PIMCO Stock Plus</b>	<b>18,247,238</b>	<b>18.44</b>	<b>0.62</b>	<b>15.80</b>	<b>15.80</b>	<b>30.25</b>	<b>16.36</b>	<b>17.27</b>	<b>14.00</b>	<b>17.55</b>	<b>7.57</b>	<b>6/1/2000</b>
S&P 500			0.58	15.92	15.92	30.00	15.99	16.90	14.01	16.63	7.39	
Value Added			0.04	-0.12	-0.12	0.25	0.37	0.37	-0.01	0.92	0.18	
<b>Wellington Small Cap</b>	<b>16,544,872</b>	<b>16.72</b>	<b>-2.75</b>	<b>9.56</b>	<b>9.56</b>	<b>48.00</b>	<b>15.34</b>	<b>17.03</b>	<b>14.69</b>	<b>17.79</b>	<b>12.25</b>	<b>9/1/1999</b>
Russell 2000 Index			-4.36	12.41	12.41	47.68	10.54	13.45	11.90	14.63	9.14	
Value Added			1.61	-2.85	-2.85	0.32	4.80	3.58	2.79	3.16	3.11	

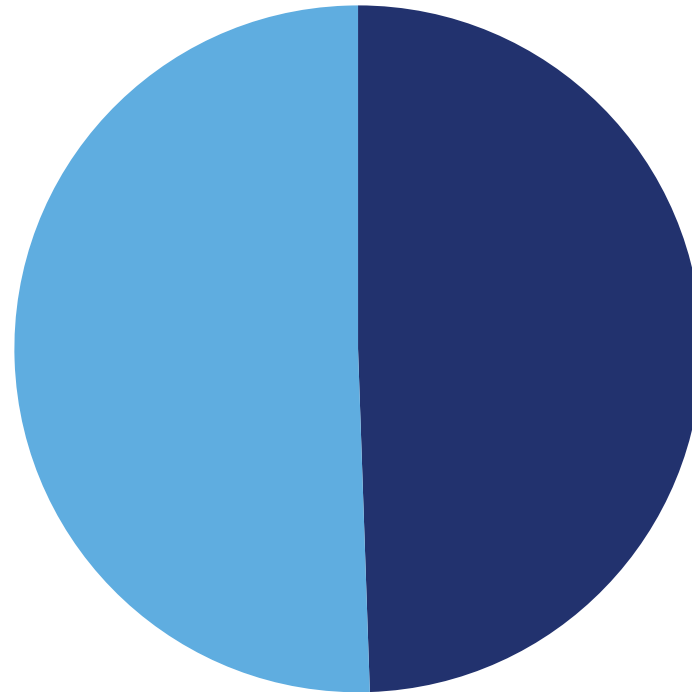
# Non-U.S. Equity

# Asset Allocation By Manager

Non-U.S. Equity

Periods Ended September 30, 2021

Sep-2021 : 99,363,143



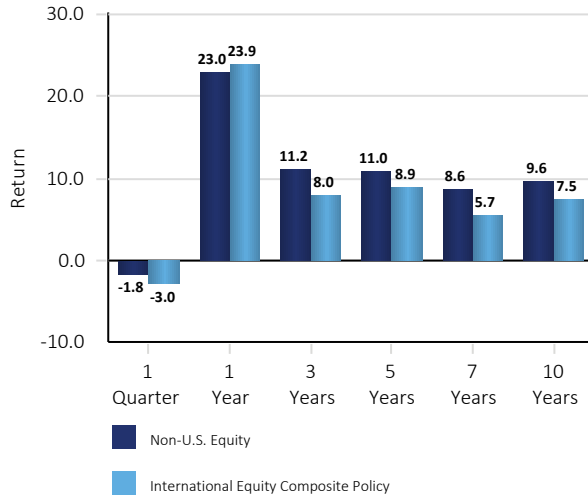
	Market Value \$	Allocation (%)
■ Harding Loevner	49,136,853	49.5
■ Neuberger Berman CIT	50,226,290	50.5

# Performance Summary

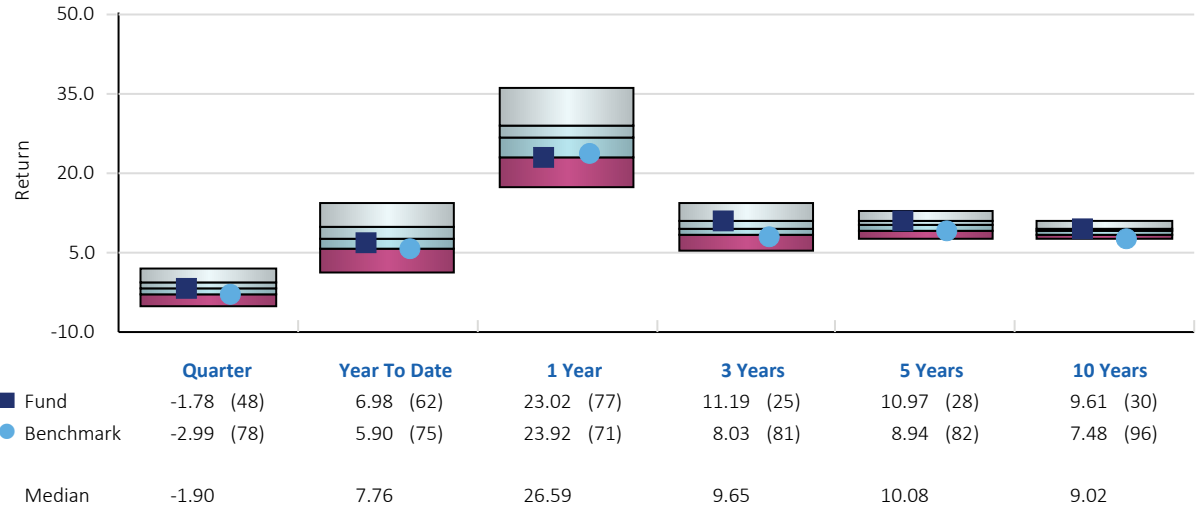
## Non-U.S. Equity

Periods Ended September 30, 2021

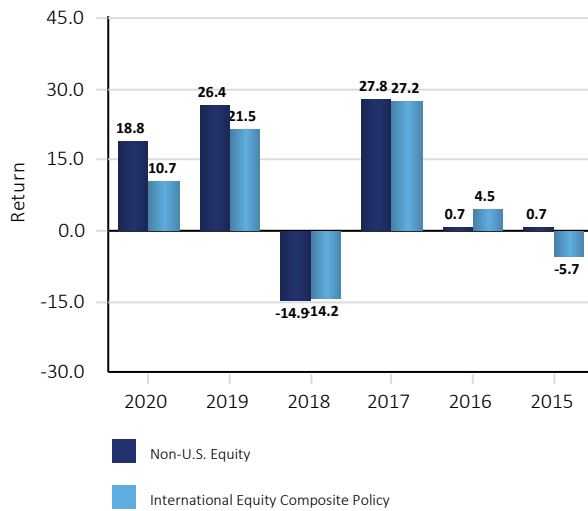
### Comparative Performance



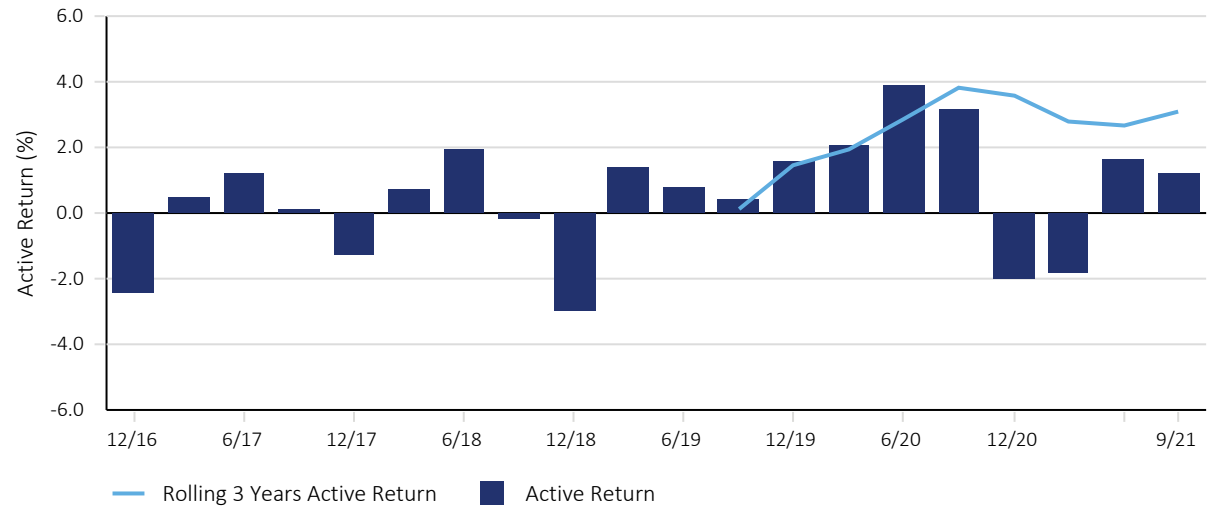
### Peer Group Analysis: All Master Trust-Intl. Equity Segment



### Comparative Performance



### Rolling 3 Years Performance

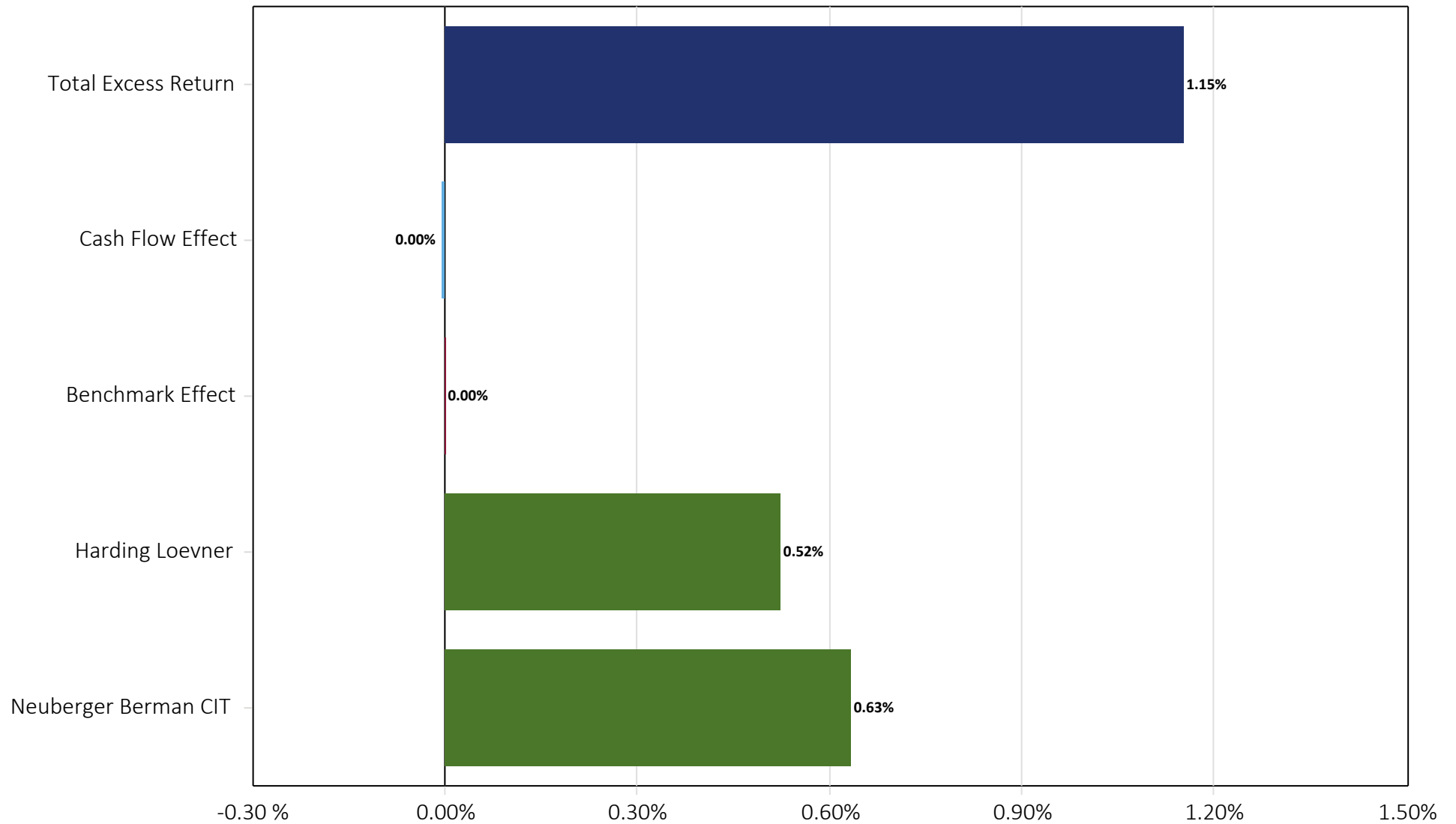


# Asset Class Attribution

Non-U.S. Equity

Periods Ended 1 Quarter Ending September 30, 2021

1 Quarter





# Asset Allocation & Performance

## Non-U.S. Equity

Periods Ended September 30, 2021

	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
<b>Non-U.S. Equity</b>	<b>99,363,143</b>	<b>100.00</b>	<b>-1.84</b>	<b>6.79</b>	<b>6.79</b>	<b>22.73</b>	<b>10.93</b>	<b>10.74</b>	<b>8.45</b>	<b>9.47</b>	<b>8.43</b>	<b>1/1/1990</b>
International Equity Composite Policy			-2.99	5.90	5.90	23.92	8.03	8.94	5.68	7.48	4.92	
Value Added			1.15	0.89	0.89	-1.19	2.90	1.80	2.77	1.99	3.51	
<b>Harding Loevner</b>	<b>49,136,853</b>	<b>49.45</b>	<b>-1.90</b>	<b>5.04</b>	<b>5.04</b>	<b>20.68</b>	<b>9.61</b>	<b>10.54</b>			<b>8.26</b>	<b>4/1/2015</b>
MSCI AC World ex USA (Net)			-2.99	5.90	5.90	23.92	8.03	8.94			6.22	
Value Added			1.09	-0.86	-0.86	-3.24	1.58	1.60			2.04	
<b>Neuberger Berman CIT</b>	<b>50,226,290</b>	<b>50.55</b>	<b>-1.77</b>	<b>8.50</b>	<b>8.50</b>	<b>24.75</b>	<b>11.94</b>				<b>10.70</b>	<b>7/1/2018</b>
MSCI AC World ex USA (Net)			-2.99	5.90	5.90	23.92	8.03				7.62	
Value Added			1.22	2.60	2.60	0.83	3.91				3.08	

# Private Equity

# Private Equity Composite Overview

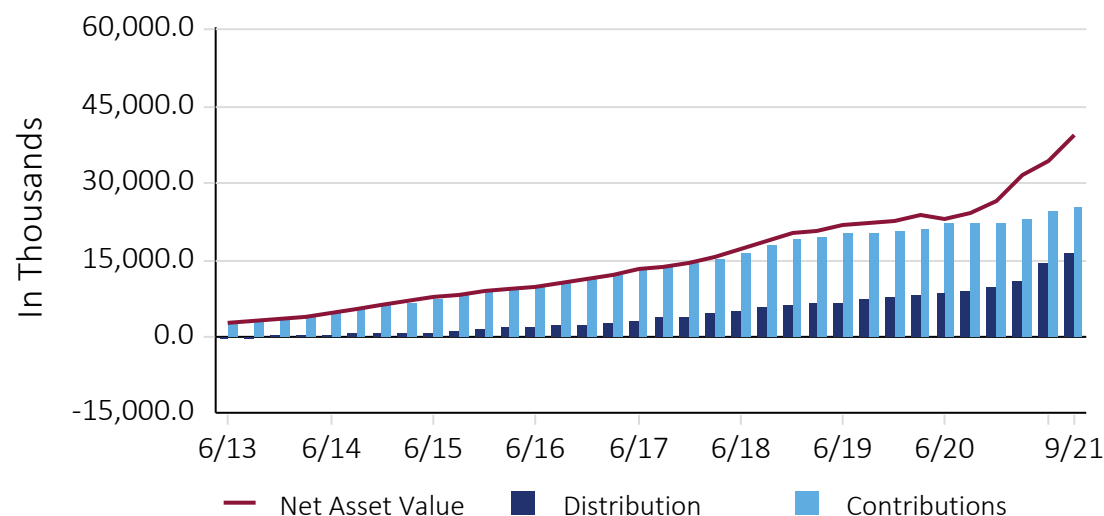
## Private Equity

Periods Ended As of September 30, 2021

### Cash Flow Summary

Capital Committed:	34,500,000
Capital Invested:	6,893,037
Total Contributions:	25,274,674
Remaining Capital Commitment:	9,594,081
Total Distributions:	16,521,638
Market Value:	39,592,166
Inception Date:	5/1/2010
Inception IRR:	20.1
TVPI:	2.2

### 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	643,556	299,111	13.0	2.0
Adams Street 2010 EM Fund	500,000	449,000	312,455	738,472	14.1	2.3
Adams Street 2010 Non-US Fund	1,500,000	1,350,750	1,549,687	1,097,034	14.2	2.0
Adams Street 2010 US Fund	2,500,000	2,202,500	3,198,545	2,257,030	17.3	2.5
Adams Street 2013 Global Fund	5,000,000	4,467,500	2,642,419	7,242,224	17.5	2.2
Adams Street 2015 Global	6,500,000	5,239,000	1,798,111	10,393,951	31.4	2.3
Adams Street 2017 Global Fund	6,000,000	4,167,000	322,300	7,048,944	28.9	1.8
Aberdeen Global	5,000,000	4,950,000	5,838,921	7,069,874	18.4	2.6
Adams Street 2019 Global	7,000,000	1,968,424	215,643	3,445,526	126.2	1.9

# Private Equity Composite Overview

Private Equity

*Periods Ended As of September 30, 2021*

<b>Partnerships</b>	<b>Capital Committed \$</b>	<b>Total Contribution \$</b>	<b>Total Distribution \$</b>	<b>Market Value \$</b>	<b>IRR (%)</b>	<b>TVPI Multiple (%)</b>
Private Equity	34,500,000	25,274,674	16,521,638	39,592,166	20.1	2.2

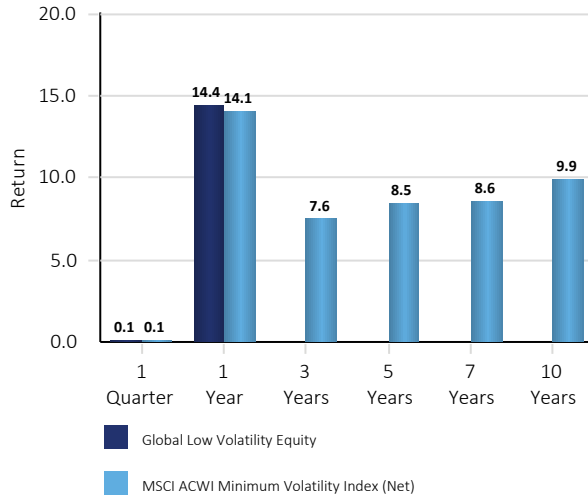
# Global Low Volatility Equity

# Performance Summary

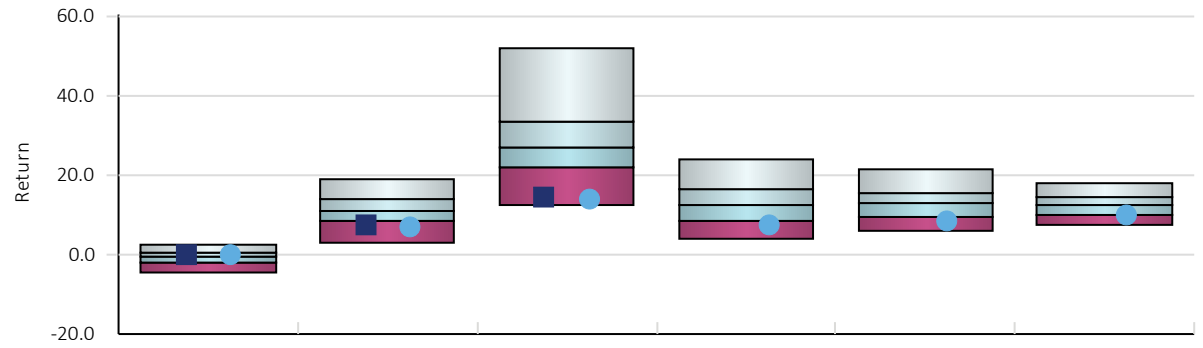
## Global Low Volatility Equity

Periods Ended September 30, 2021

### Comparative Performance

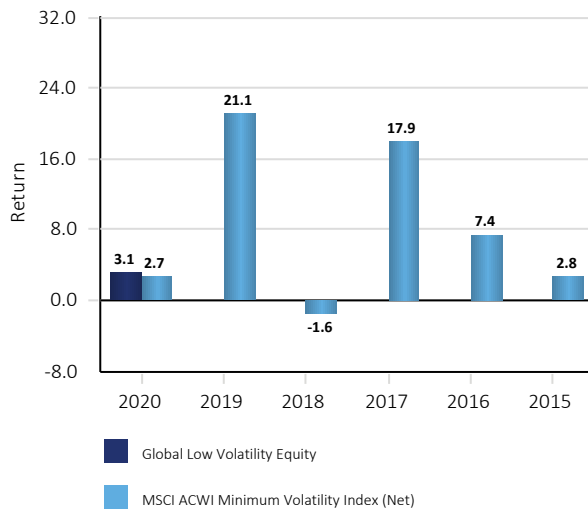


### Peer Group Analysis: IM Global Equity (SA+CF)

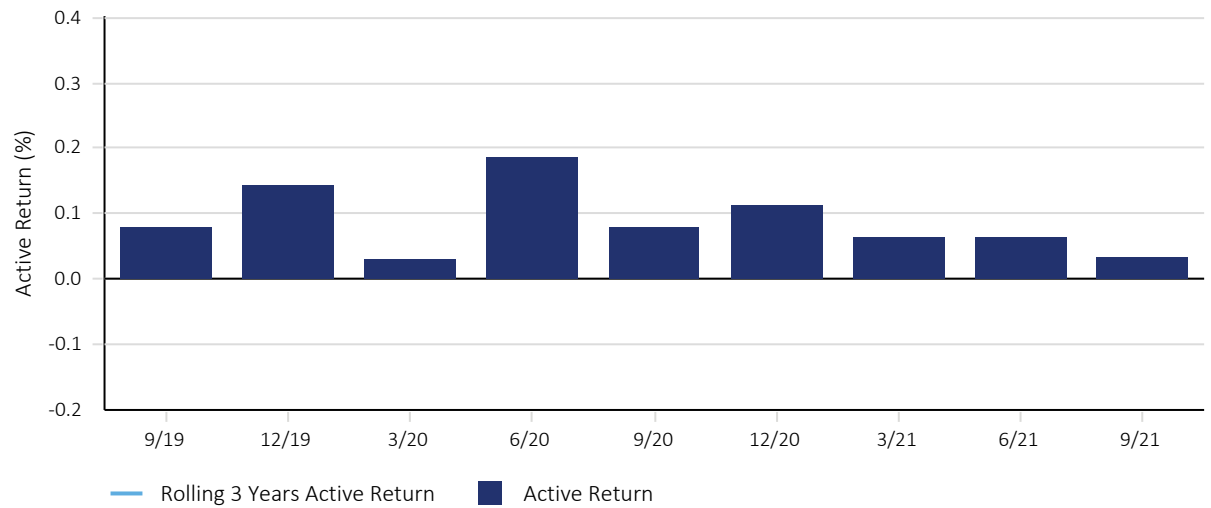


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
■ Fund	0.12 (30)	7.37 (81)	14.38 (92)	-	-	-
● Benchmark	0.08 (31)	7.20 (82)	14.08 (93)	7.55 (83)	8.48 (82)	9.92 (74)
Median	-0.66	11.14	27.09	12.38	12.93	12.47

### Comparative Performance



### Rolling 3 Years Performance



# Asset Allocation & Performance

## Global Low Volatility Equity

Periods Ended September 30, 2021

	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
<b>Global Low Volatility Equity</b>	<b>47,923,458</b>	<b>100.00</b>	<b>0.12</b>	<b>7.37</b>	<b>7.37</b>	<b>14.38</b>					<b>9.06</b>	<b>6/1/2019</b>
MSCI ACWI Minimum Volatility Index (Net)			0.08	7.20	7.20	14.08					8.69	
Value Added			0.04	0.17	0.17	0.30					0.37	
<b>BlackRock MSCI ACWI Min Vol</b>	<b>47,923,458</b>	<b>100.00</b>	<b>0.12</b>	<b>7.37</b>	<b>7.37</b>	<b>14.38</b>					<b>9.06</b>	<b>6/1/2019</b>
MSCI ACWI Minimum Volatility Index (Net)			0.08	7.20	7.20	14.08					8.69	
Value Added			0.04	0.17	0.17	0.30					0.37	

# Private Credit



# Private Credit Composite Overview

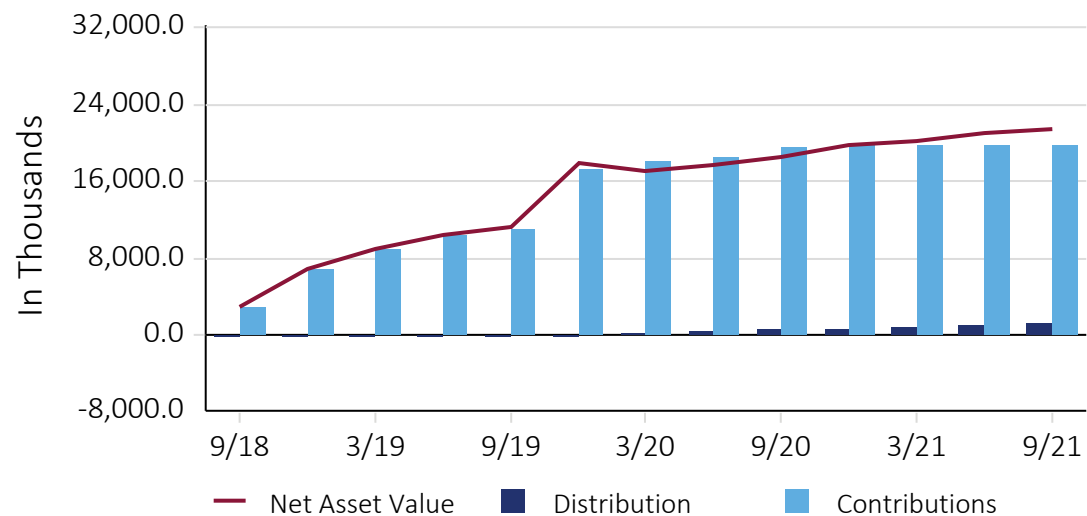
## Private Credit

Periods Ended As of September 30, 2021

### Cash Flow Summary

Capital Committed:	21,000,000
Capital Invested:	2,570,919
Total Contributions:	19,888,947
Remaining Capital Commitment:	1,111,053
Total Distributions:	1,284,080
Market Value:	21,387,644
Inception Date:	10/1/2018
Inception IRR:	6.2
TVPI:	1.1

### Cash Flow Analysis



### Private Credit Portfolio

Partnerships	Capital Committed \$	Total Contribution \$	Total Distribution \$	Market Value \$	IRR (%)	TVPI Multiple (%)
50 South Capital Private Credit	7,000,000	5,888,947	1,284,080	5,492,421	8.2	1.2
Grosvenor PC	14,000,000	14,000,000		15,895,223	5.5	1.1
Private Credit	21,000,000	19,888,947	1,284,080	21,387,644	6.2	1.1

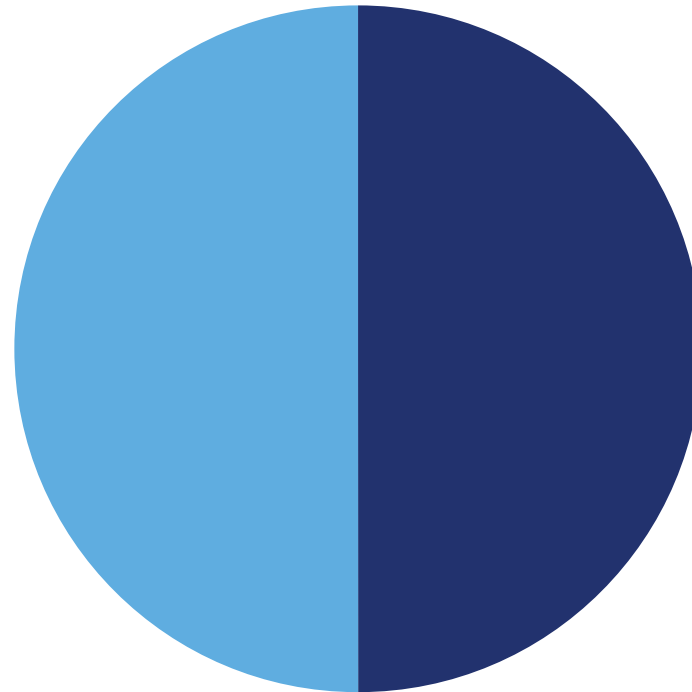
# Core Fixed Income

# Asset Allocation By Manager

Core Fixed Income

Periods Ended September 30, 2021

Sep-2021 : 108,465,169



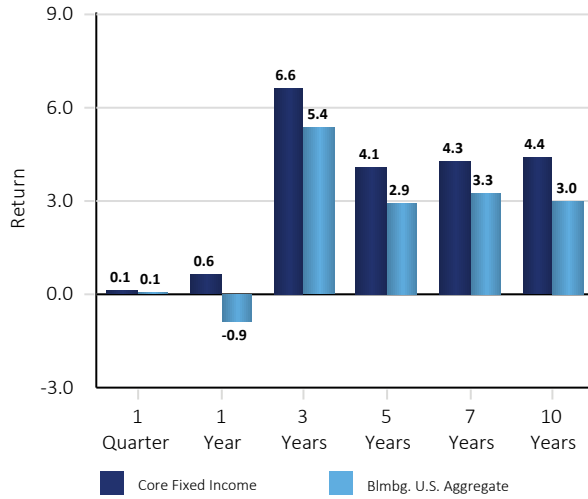
	Market Value \$	Allocation (%)
■ Baird Advisors	54,231,092	50.0
■ Western Asset Management	54,234,077	50.0

# Performance Summary

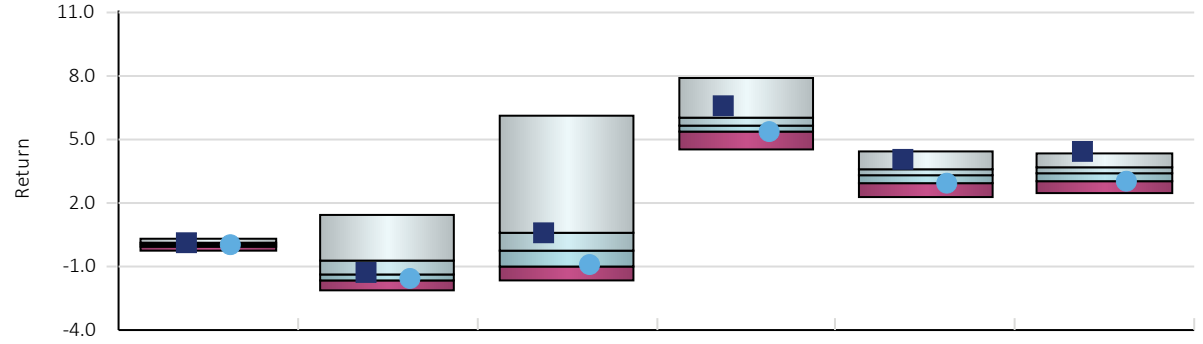
## Core Fixed Income

Periods Ended September 30, 2021

### Comparative Performance

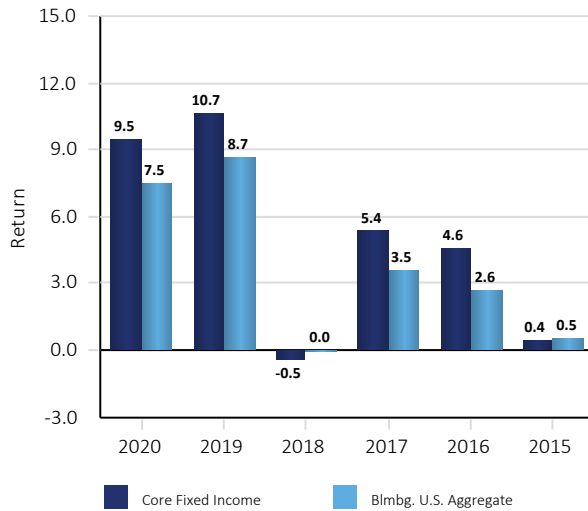


### Peer Group Analysis: IM U.S. Broad Market Core Fixed Income (SA+CF)

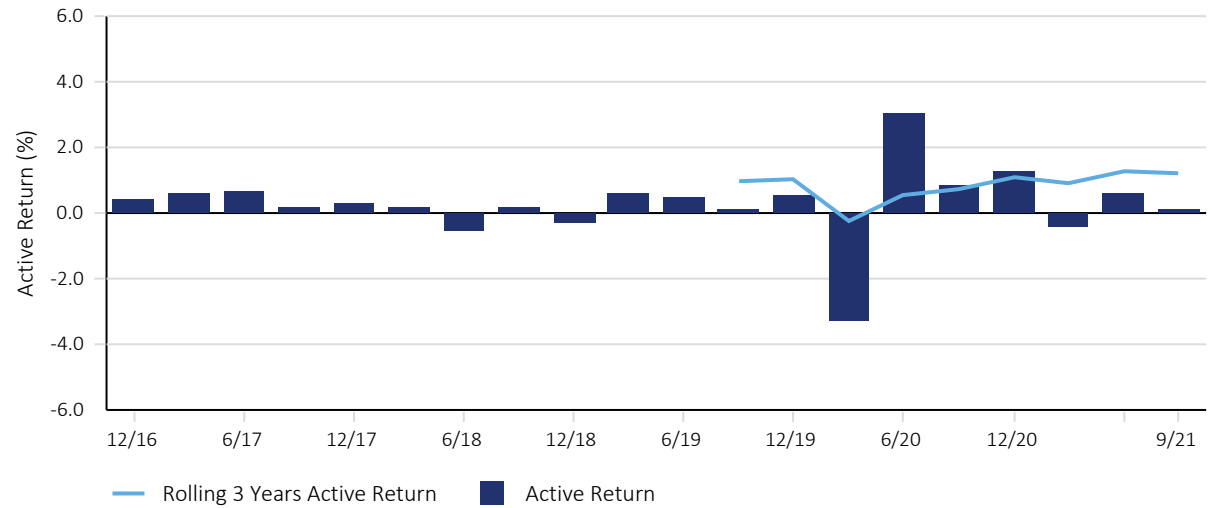


	Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
■ Fund	0.15 (17)	-1.29 (44)	0.63 (25)	6.62 (7)	4.09 (8)	4.40 (5)
● Benchmark	0.05 (44)	-1.56 (62)	-0.90 (72)	5.35 (72)	2.94 (75)	3.01 (80)
Median	0.03	-1.38	-0.29	5.70	3.33	3.41

### Comparative Performance



### Rolling 3 Years Performance

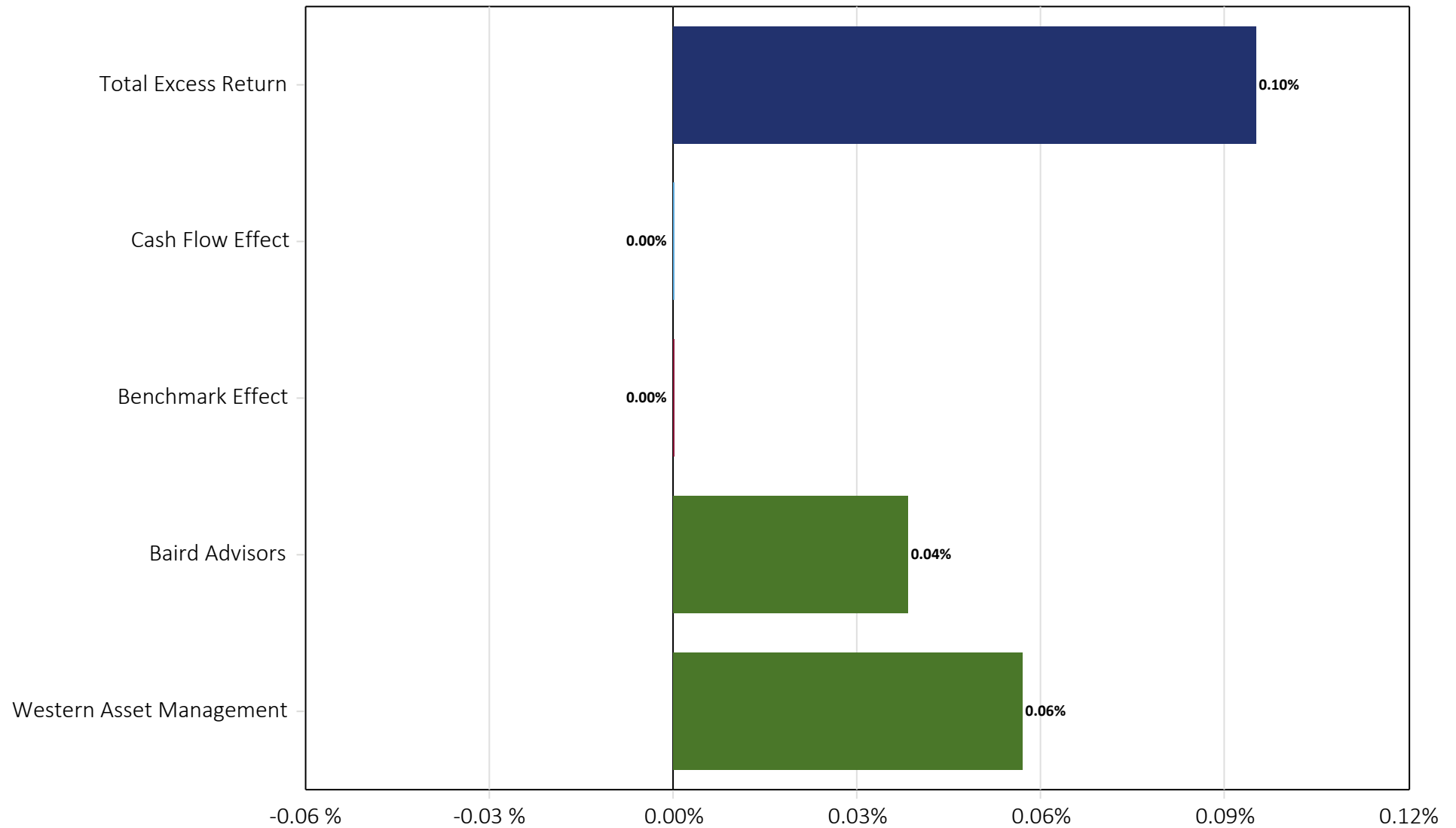


# Asset Class Attribution

Core Fixed Income

Periods Ended 1 Quarter Ending September 30, 2021

1 Quarter



# Asset Allocation & Performance

## Core Fixed Income

Periods Ended September 30, 2021

	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
<b>Core Fixed Income</b>	<b>108,465,169</b>	<b>100.00</b>	<b>0.15</b>	<b>-1.29</b>	<b>-1.29</b>	<b>0.63</b>	<b>6.62</b>	<b>4.09</b>	<b>4.26</b>	<b>4.40</b>	<b>6.69</b>	<b>10/1/1987</b>
Blmbg. U.S. Aggregate			0.05	-1.56	-1.56	-0.90	5.35	2.94	3.26	3.01	6.21	
Value Added			0.10	0.27	0.27	1.53	1.27	1.15	1.00	1.39	0.48	
<b>Baird Advisors</b>	<b>54,231,092</b>	<b>50.00</b>	<b>0.13</b>	<b>-1.24</b>	<b>-1.24</b>	<b>-0.41</b>	<b>5.90</b>	<b>3.50</b>	<b>3.82</b>	<b>3.76</b>	<b>4.43</b>	<b>12/1/2002</b>
Blmbg. U.S. Aggregate			0.05	-1.56	-1.56	-0.90	5.35	2.94	3.26	3.01	4.17	
Value Added			0.08	0.32	0.32	0.49	0.55	0.56	0.56	0.75	0.26	
<b>Western Asset Management</b>	<b>54,234,077</b>	<b>50.00</b>	<b>0.17</b>	<b>-1.34</b>	<b>-1.34</b>	<b>1.71</b>	<b>7.32</b>	<b>4.65</b>	<b>4.66</b>	<b>4.98</b>	<b>5.26</b>	<b>1/1/2004</b>
Blmbg. U.S. Aggregate			0.05	-1.56	-1.56	-0.90	5.35	2.94	3.26	3.01	4.08	
Value Added			0.12	0.22	0.22	2.61	1.97	1.71	1.40	1.97	1.18	

# TIPS

# Asset Allocation & Performance

TIPS

Periods Ended September 30, 2021

	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
<b>TIPS</b>	23,507,445	100.00	1.54	3.48	3.48	4.84	7.19	4.13			3.80	5/1/2015
Blmbg. U.S. TIPS			1.75	3.51	3.51	5.19	7.45	4.34			3.92	
Value Added			-0.21	-0.03	-0.03	-0.35	-0.26	-0.21			-0.12	
<b>Brown Brothers Harriman</b>	23,507,445	100.00	1.54	3.48	3.48	4.84	7.19	4.13			3.80	5/1/2015
Blmbg. U.S. TIPS			1.75	3.51	3.51	5.19	7.45	4.34			3.92	
Value Added			-0.21	-0.03	-0.03	-0.35	-0.26	-0.21			-0.12	



# Real Estate

# Asset Allocation & Performance

## Real Estate

Periods Ended September 30, 2021

	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
<b>Real Estate</b>	<b>26,648,529</b>	<b>100.00</b>	<b>1.15</b>	<b>23.16</b>	<b>23.16</b>	<b>37.81</b>	<b>10.13</b>	<b>6.20</b>	<b>6.35</b>	<b>8.55</b>	<b>9.39</b>	<b>6/1/2009</b>
Real Estate Policy Index			1.25	24.48	24.48	40.56	7.25	5.16	6.14	8.67	9.66	
Value Added			-0.10	-1.32	-1.32	-2.75	2.88	1.04	0.21	-0.12	-0.27	
<b>Centersquare</b>	<b>26,648,529</b>	<b>100.00</b>	<b>1.15</b>	<b>23.16</b>	<b>23.16</b>	<b>37.81</b>					<b>8.59</b>	<b>10/1/2019</b>
Dow Jones U.S. Select REIT			1.25	24.48	24.48	40.56					4.49	
Value Added			-0.10	-1.32	-1.32	-2.75					4.10	

# Commodities

# Asset Allocation & Performance

## Commodities

Periods Ended September 30, 2021

	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
<b>Commodities</b>	<b>25,651,151</b>	<b>100.00</b>	<b>1.39</b>	<b>20.82</b>	<b>20.82</b>	<b>34.85</b>	<b>8.83</b>	<b>6.80</b>	<b>0.20</b>		<b>-1.99</b>	<b>2/1/2013</b>
Bloomberg Commodity Index Total Return			6.59	29.13	29.13	42.29	6.86	4.54	-1.49		-3.25	
Value Added			-5.20	-8.31	-8.31	-7.44	1.97	2.26	1.69		1.26	
<b>Wellington Commodities</b>	<b>25,651,151</b>	<b>100.00</b>	<b>1.39</b>	<b>20.82</b>	<b>20.82</b>	<b>34.85</b>	<b>8.83</b>	<b>6.80</b>	<b>0.20</b>		<b>-1.99</b>	<b>2/1/2013</b>
Bloomberg Commodity Index Total Return			6.59	29.13	29.13	42.29	6.86	4.54	-1.49		-3.25	
Value Added			-5.20	-8.31	-8.31	-7.44	1.97	2.26	1.69		1.26	

# Midstream Energy

# Asset Allocation & Performance

## Midstream Energy Composite

Periods Ended September 30, 2021

	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
<b>Midstream Energy Composite</b>	26,004,181	100.00	-0.43	38.97	38.97	70.17	-2.73	-0.85			-3.59	3/1/2015
Midstream Energy Policy Index			-1.89	38.03	38.03	65.84	-7.68	-6.17			-10.13	
Value Added			1.46	0.94	0.94	4.33	4.95	5.32			6.54	
<b>Harvest MLP</b>	26,004,181	100.00	-0.43	38.97	38.97	70.17	-2.73	-0.85			-3.59	3/1/2015
Midstream Energy Policy Index			-1.89	38.03	38.03	65.84	-7.68	-6.17			-10.13	
Value Added			1.46	0.94	0.94	4.33	4.95	5.32			6.54	

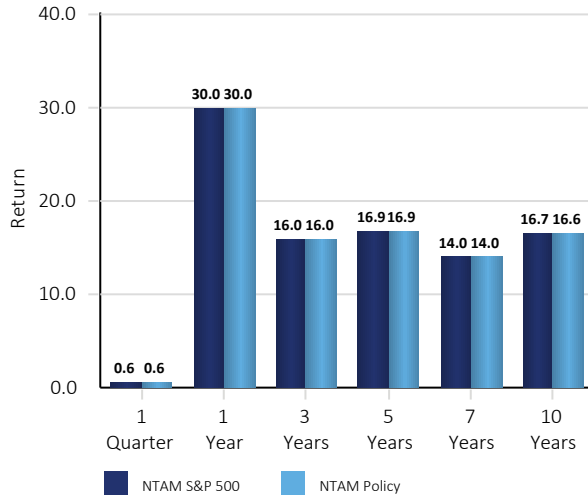
# Appendix

# Performance Summary

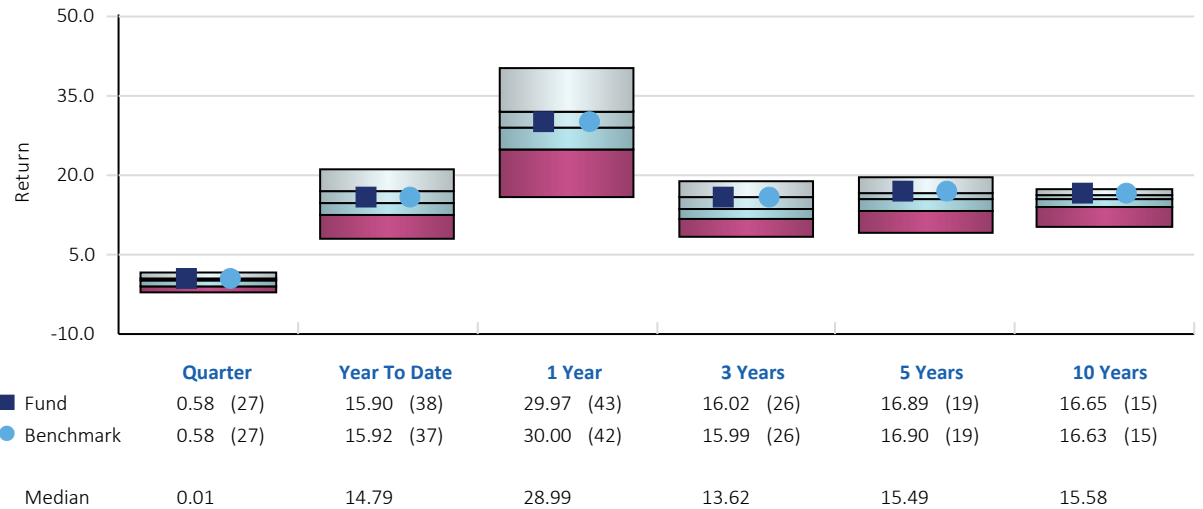
NTAM S&P 500

Periods Ended September 30, 2021

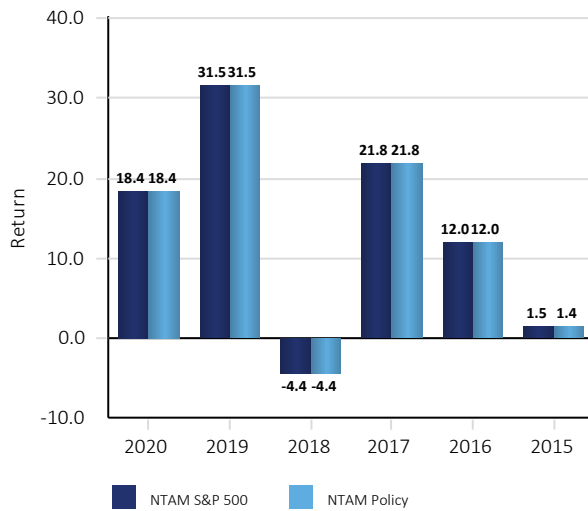
## Comparative Performance



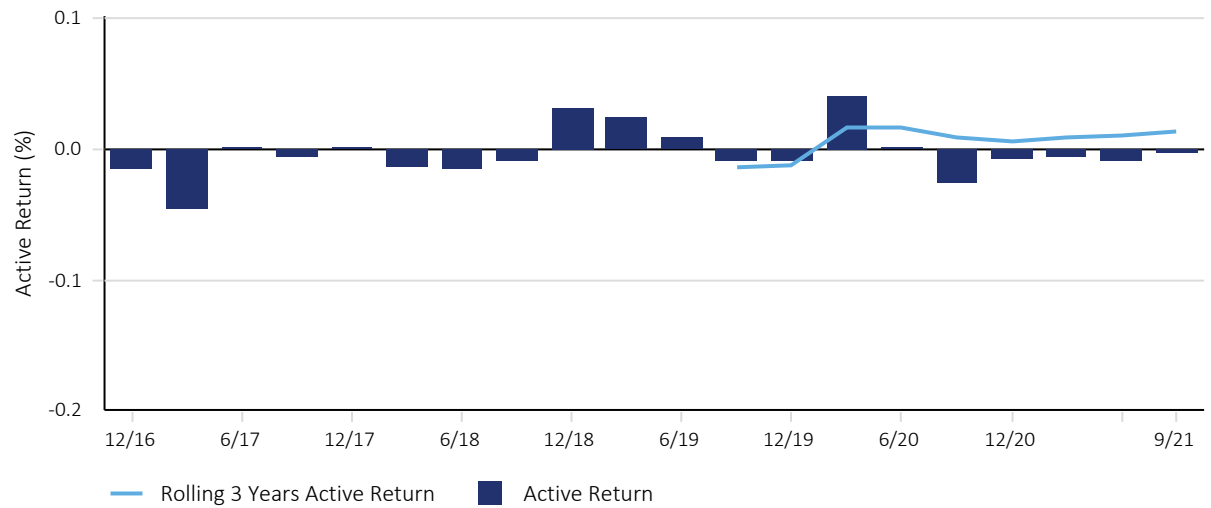
## Peer Group Analysis: IM U.S. Large Cap Core Equity (SA+CF)



## Comparative Performance



## Rolling 3 Years Performance



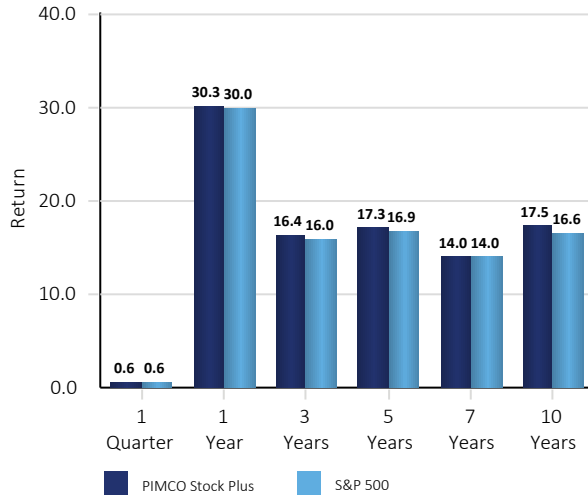


# Performance Summary

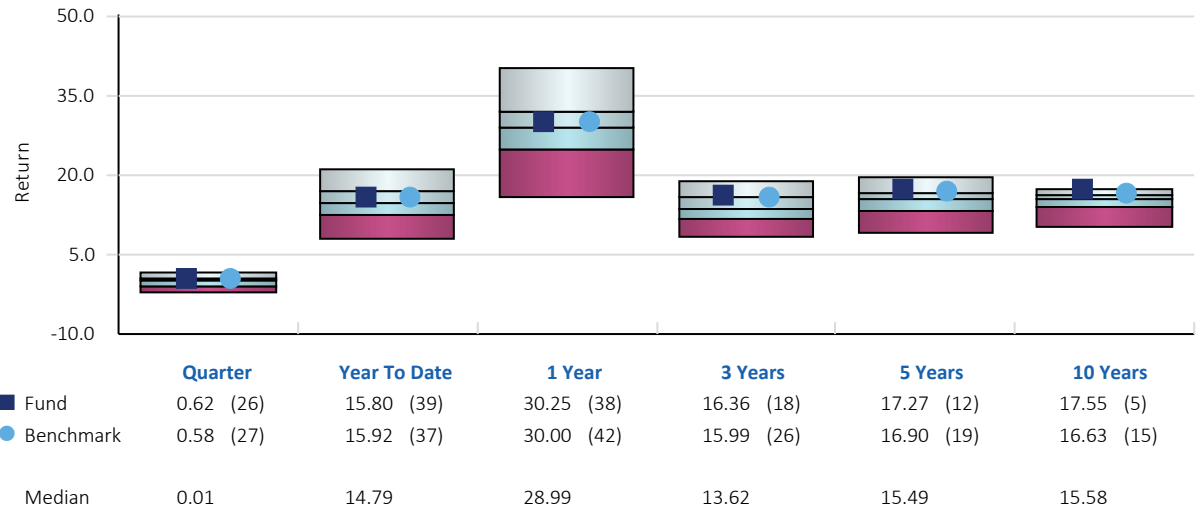
## PIMCO Stock Plus

Periods Ended September 30, 2021

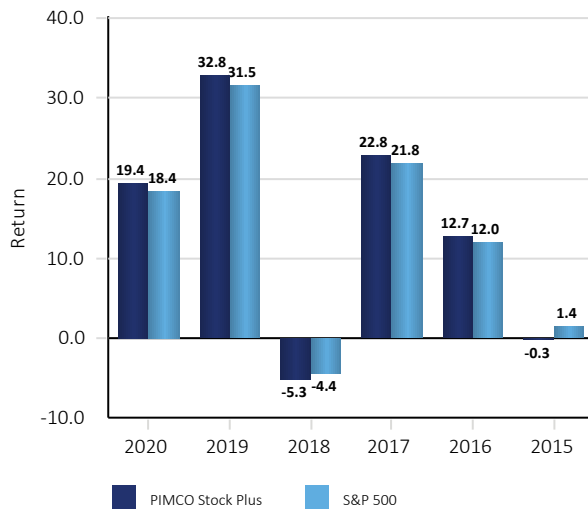
### Comparative Performance



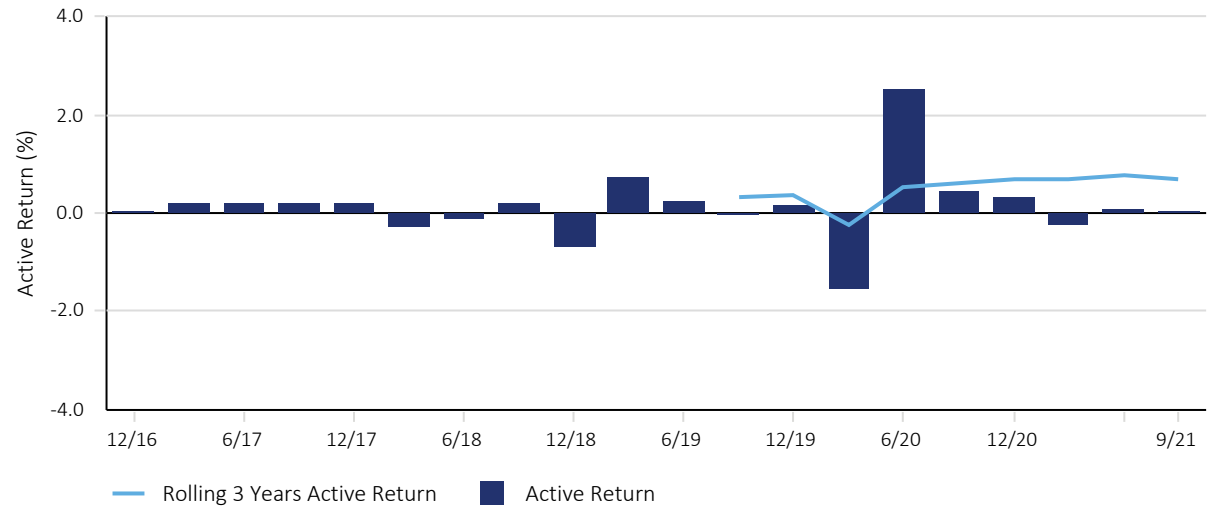
### Peer Group Analysis: IM U.S. Large Cap Core Equity (SA+CF)



### Comparative Performance



### Rolling 3 Years Performance

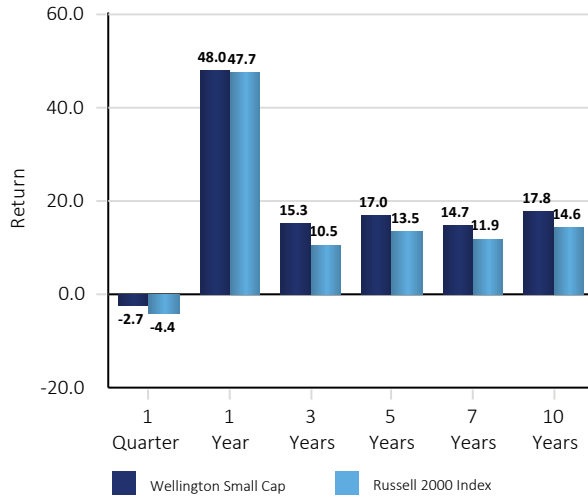


# Performance Summary

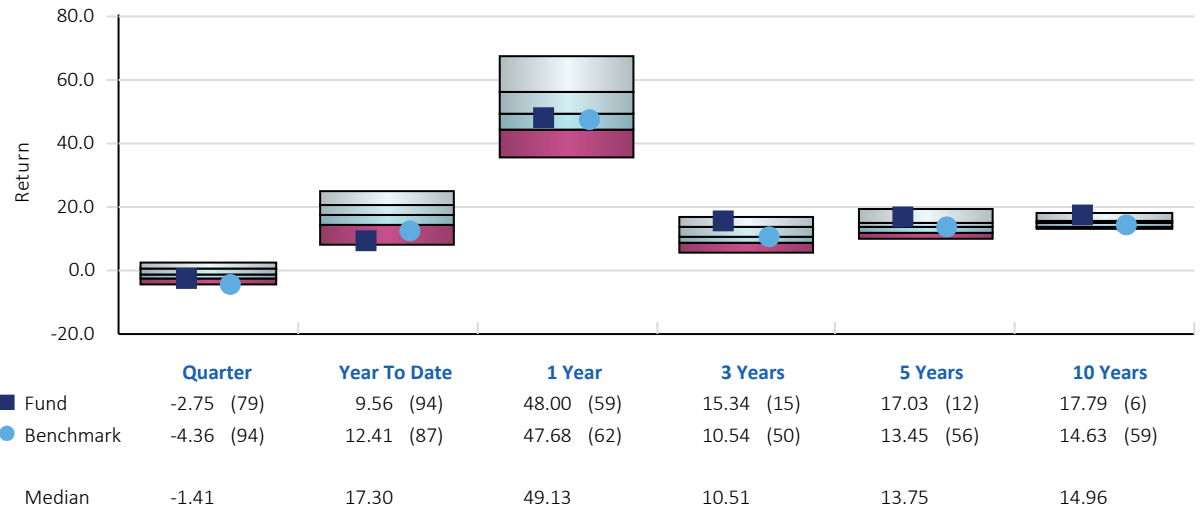
Wellington Small Cap

Periods Ended September 30, 2021

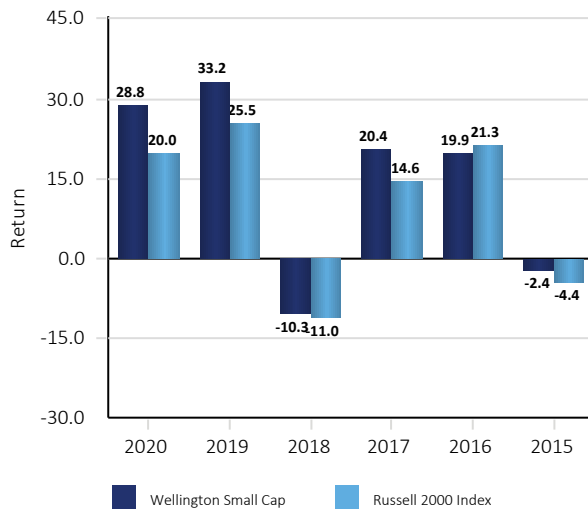
## Comparative Performance



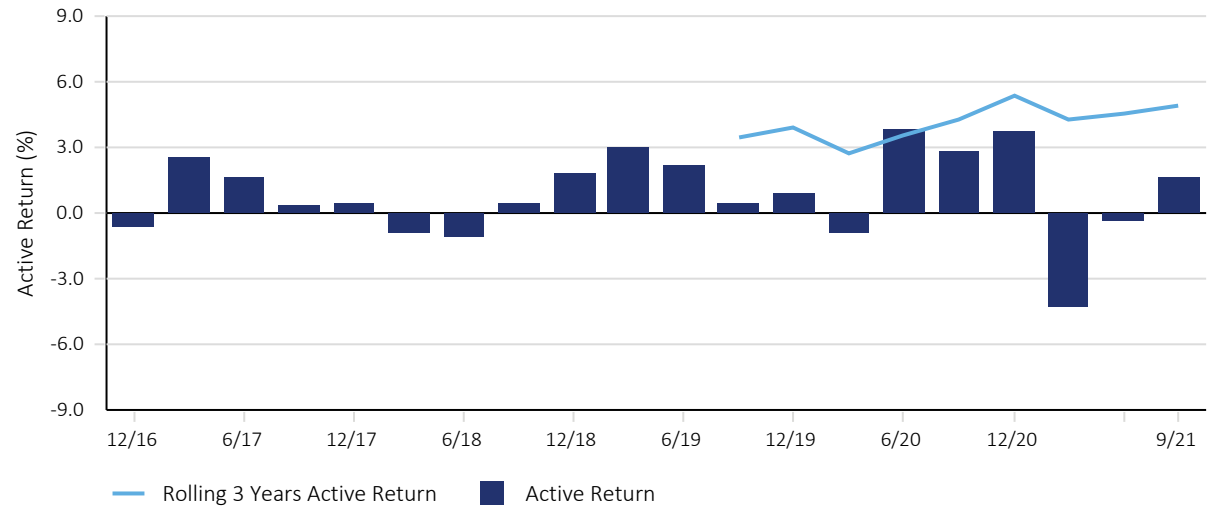
## Peer Group Analysis: IM U.S. Small Cap Core Equity (SA+CF)



## Comparative Performance



## Rolling 3 Years Performance

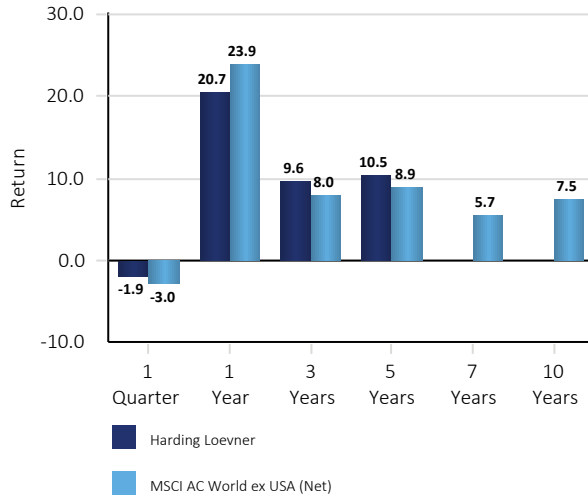


# Performance Summary

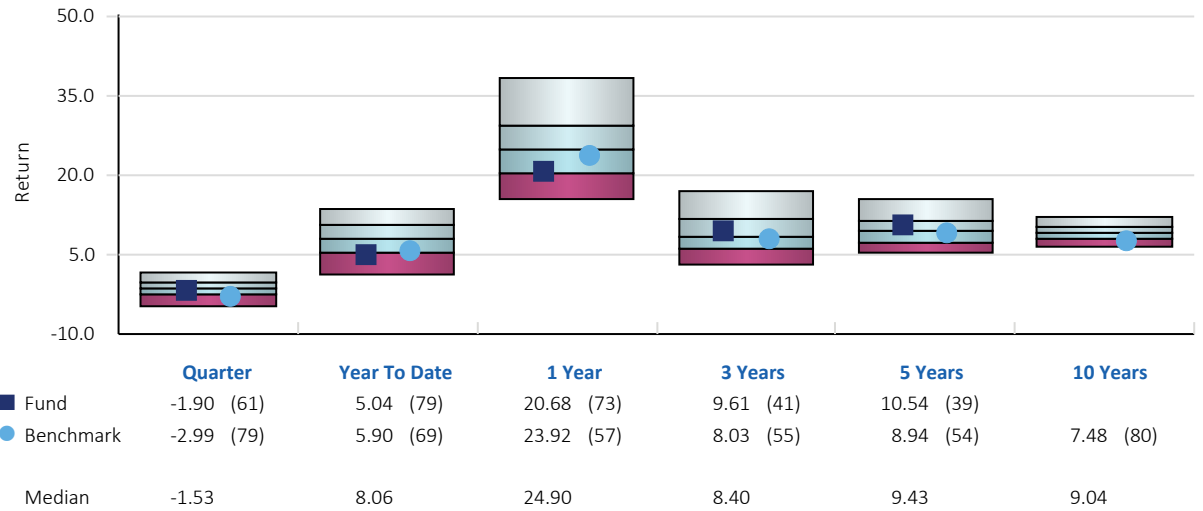
Harding Loevner

Periods Ended September 30, 2021

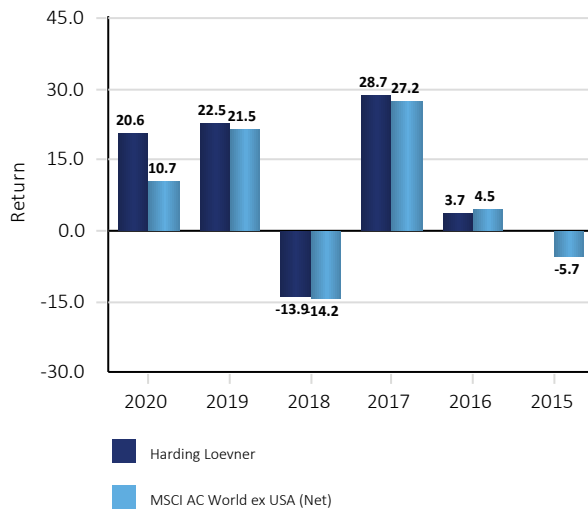
## Comparative Performance



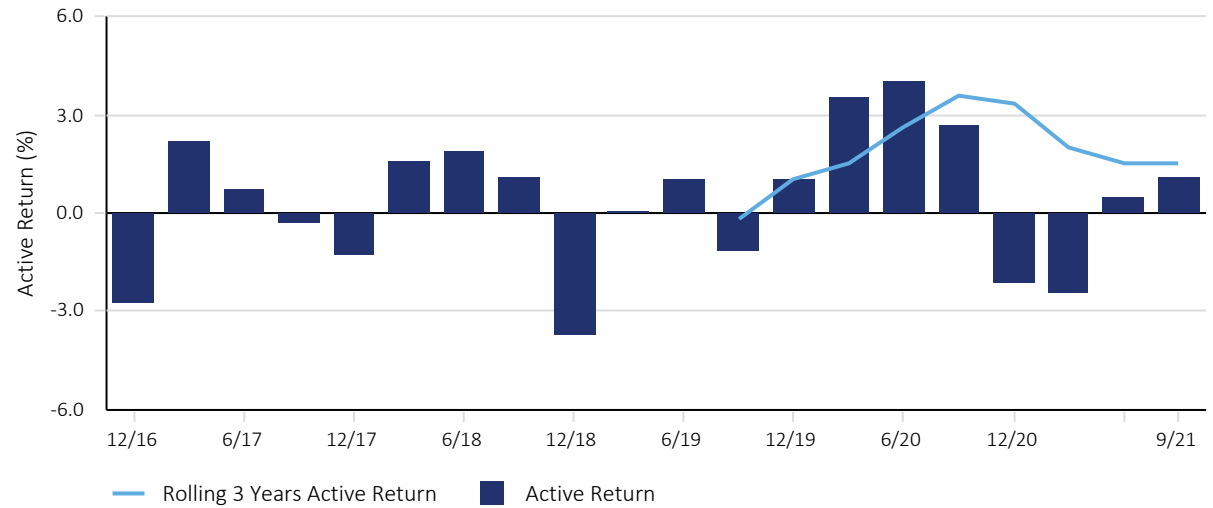
## Peer Group Analysis: IM International Large Cap Equity (SA+CF)



## Comparative Performance



## Rolling 3 Years Performance

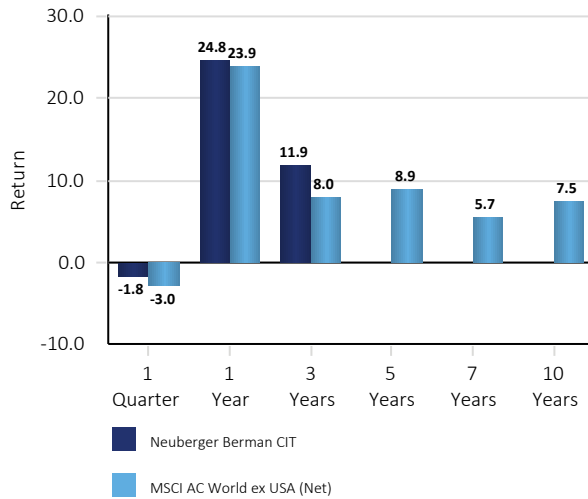


# Performance Summary

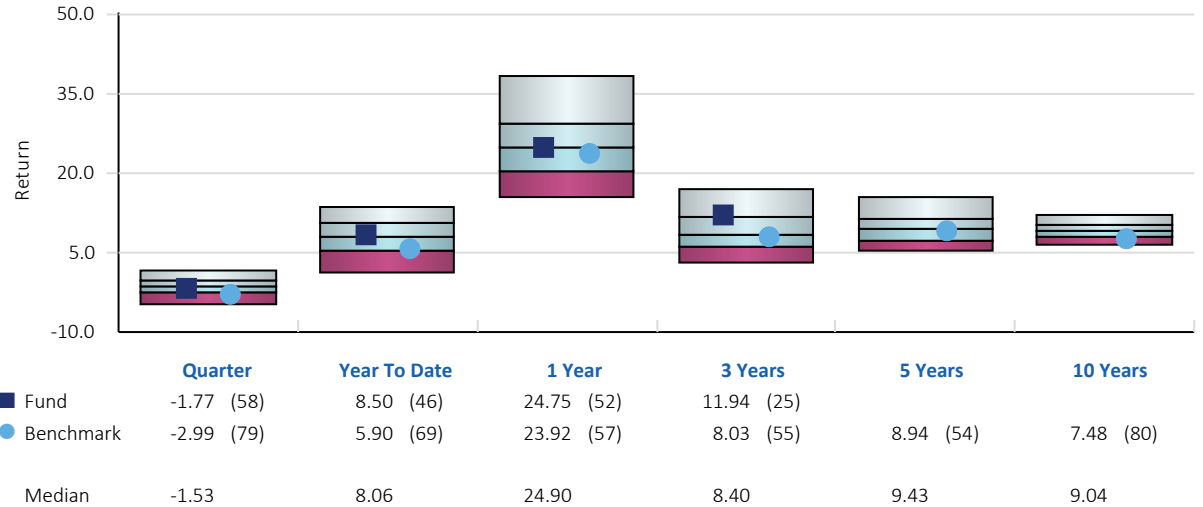
Neuberger Berman CIT

Periods Ended September 30, 2021

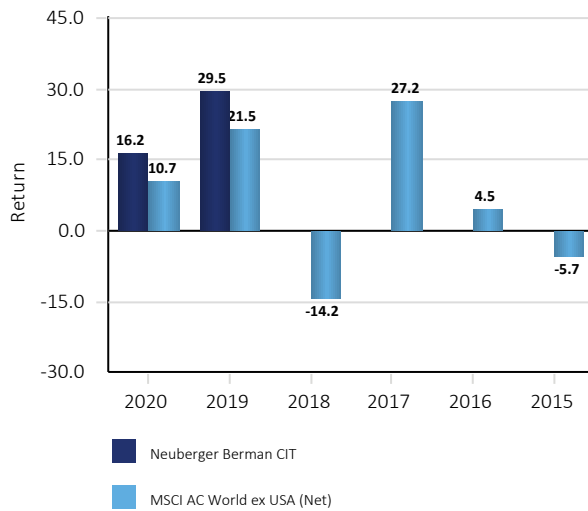
## Comparative Performance



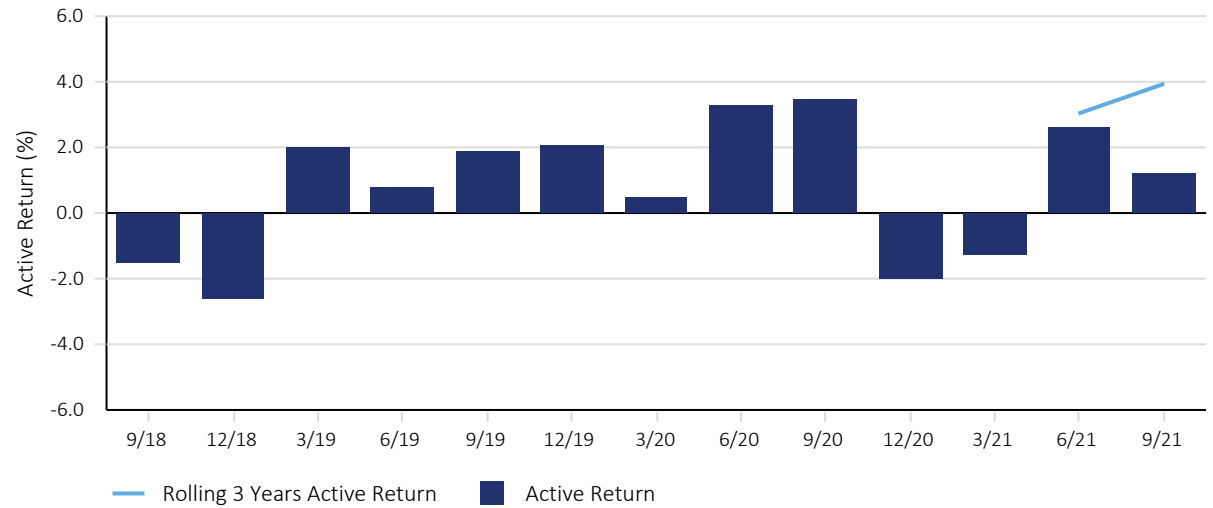
## Peer Group Analysis: IM International Large Cap Equity (SA+CF)



## Comparative Performance



## Rolling 3 Years Performance

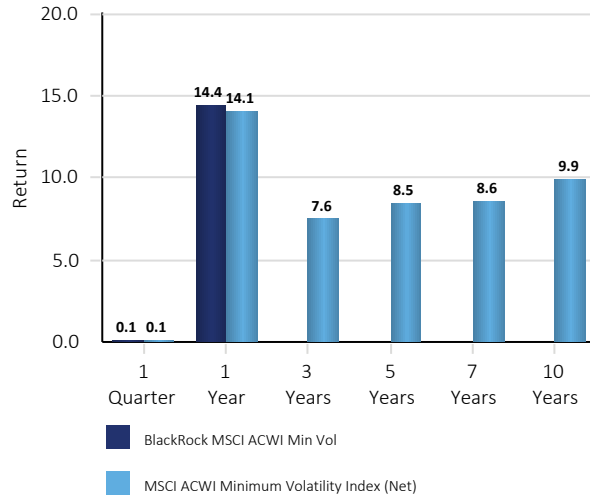


# Performance Summary

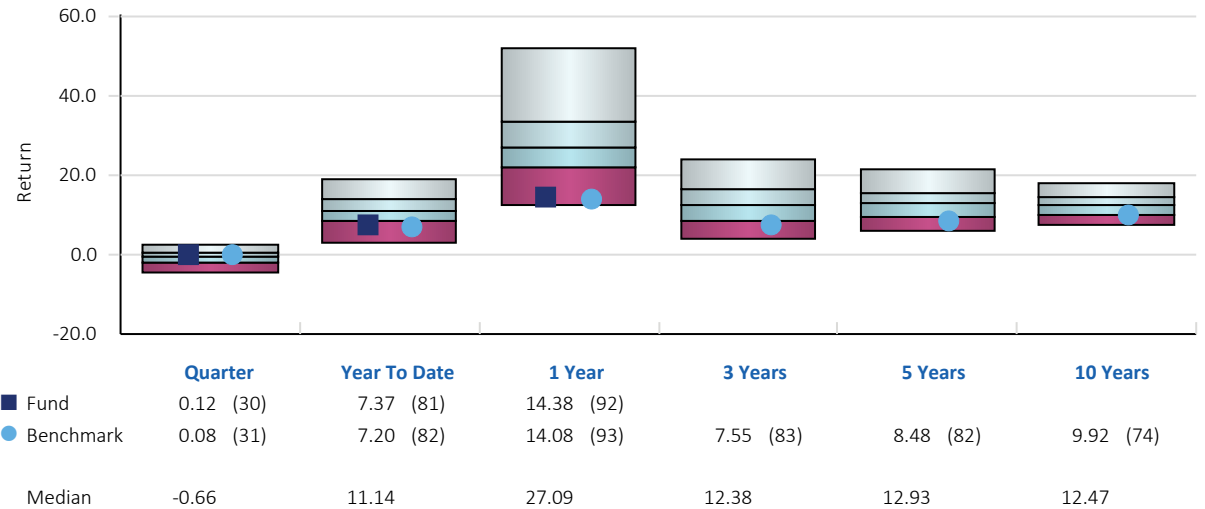
BlackRock MSCI ACWI Min Vol

Periods Ended September 30, 2021

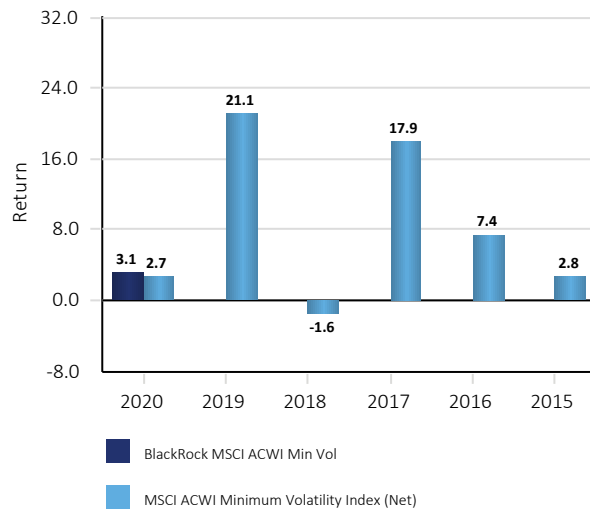
## Comparative Performance



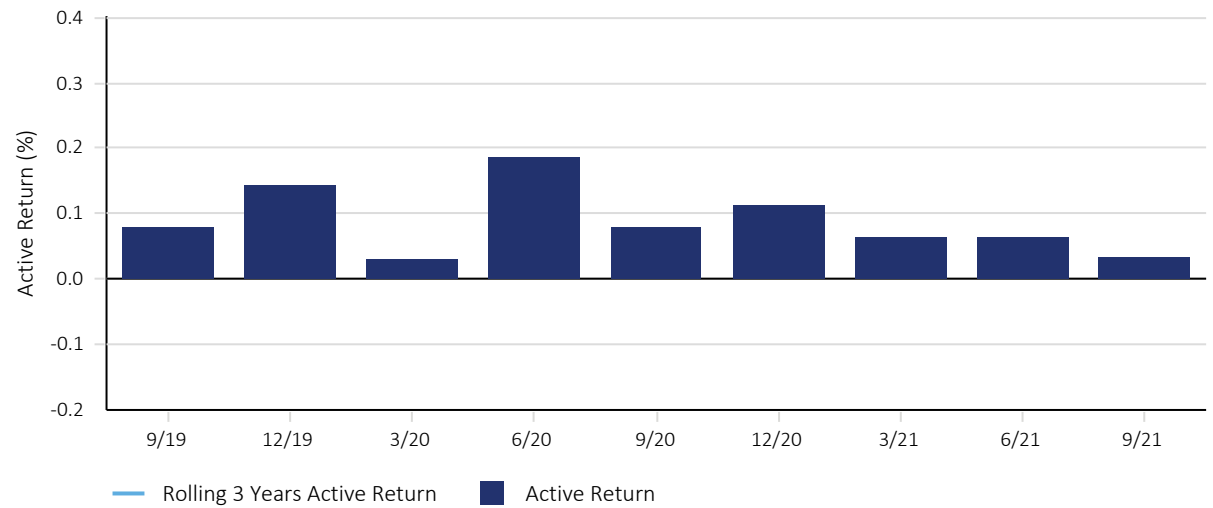
## Peer Group Analysis: IM Global Equity (SA+CF)



## Comparative Performance



## Rolling 3 Years Performance

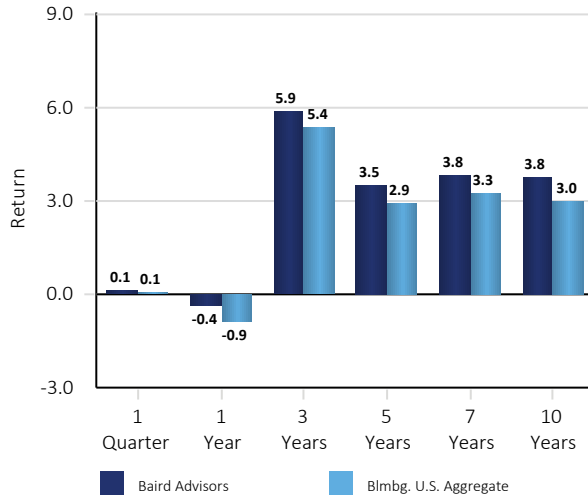


# Performance Summary

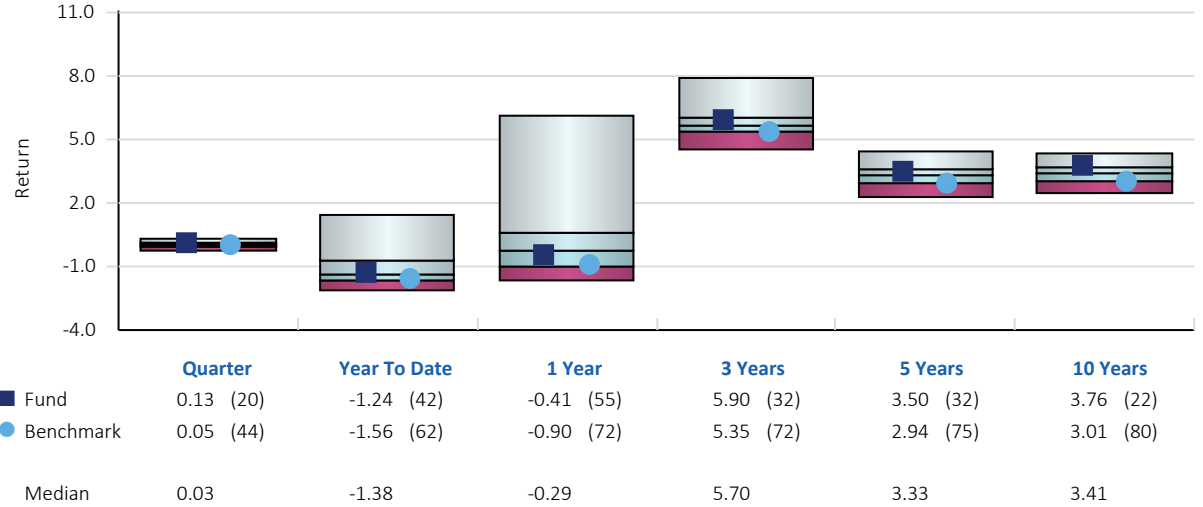
Baird Advisors

Periods Ended September 30, 2021

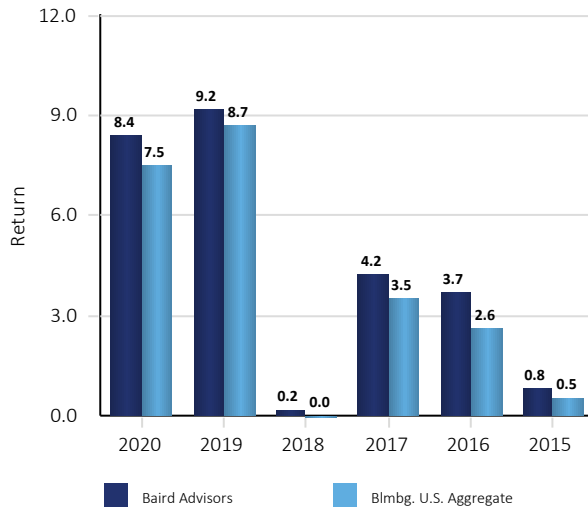
## Comparative Performance



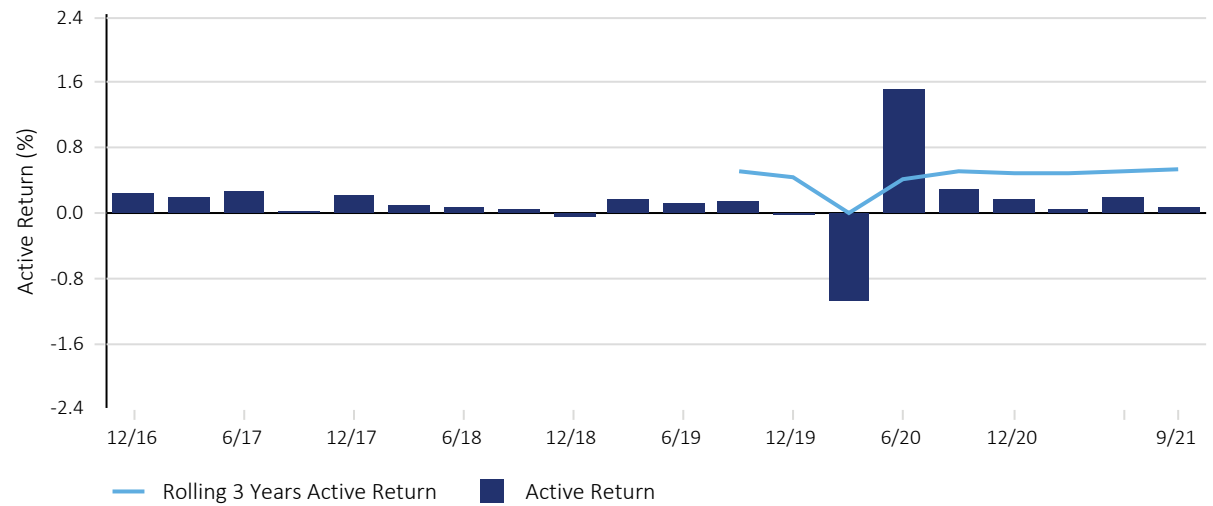
## Peer Group Analysis: IM U.S. Broad Market Core Fixed Income (SA+CF)



## Comparative Performance



## Rolling 3 Years Performance

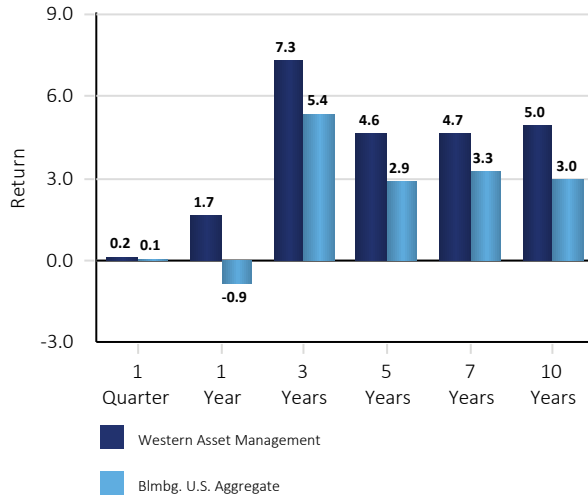


# Performance Summary

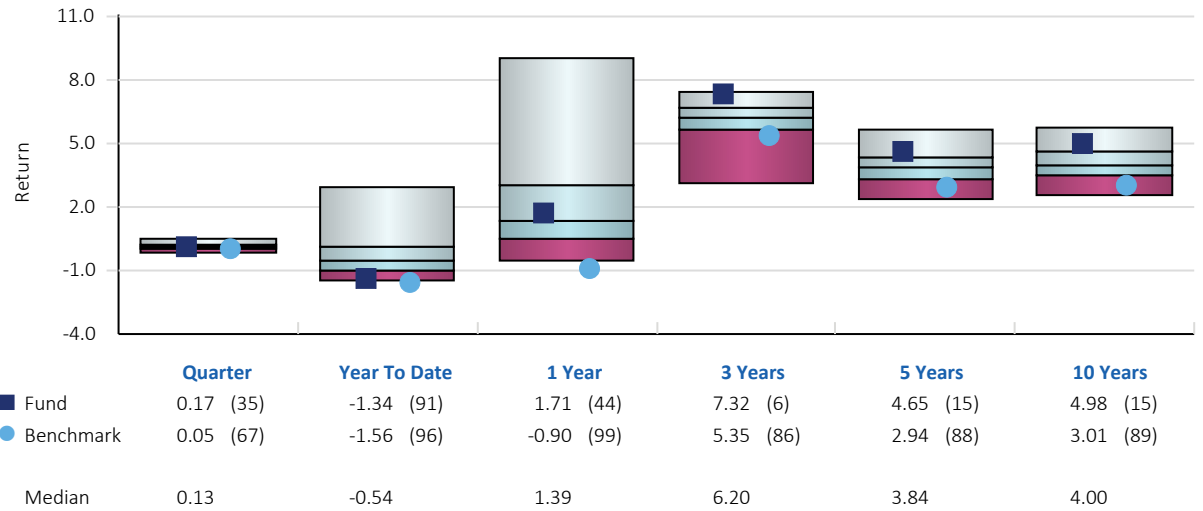
Western Asset Management

Periods Ended September 30, 2021

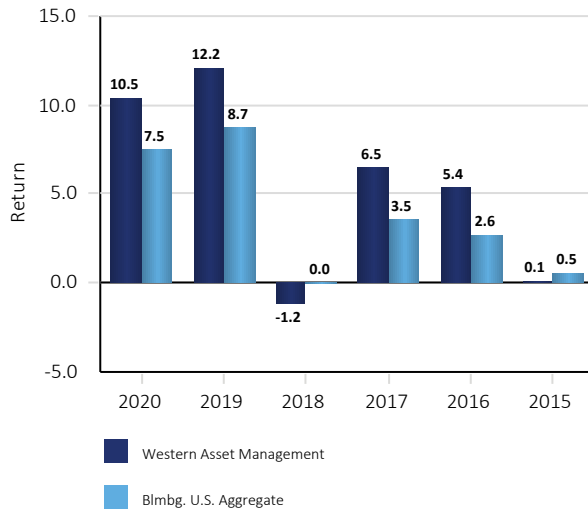
## Comparative Performance



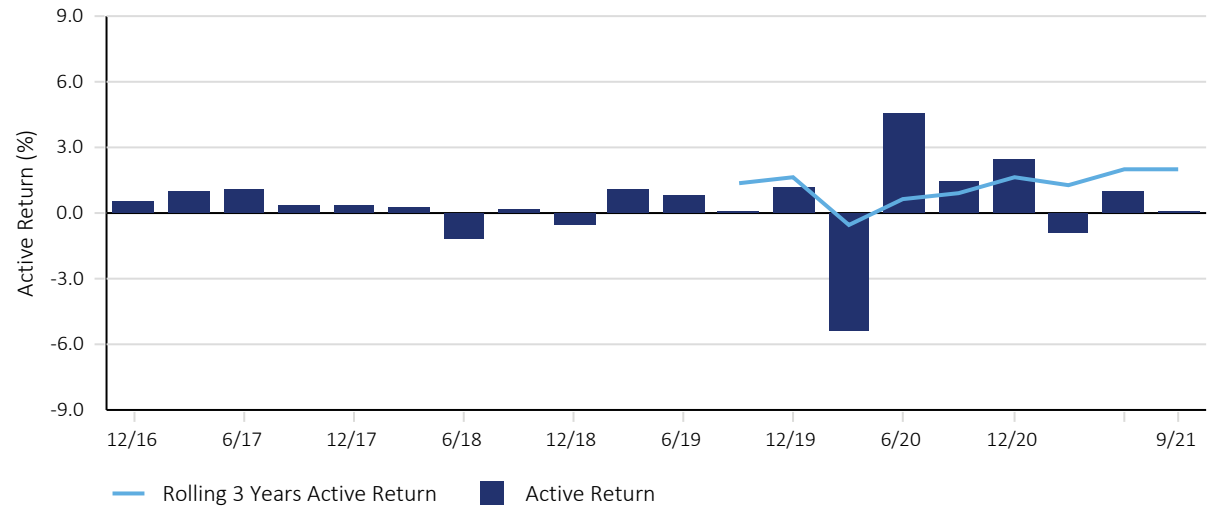
## Peer Group Analysis: IM U.S. Broad Market Core+ Fixed Income (SA+CF)



## Comparative Performance



## Rolling 3 Years Performance

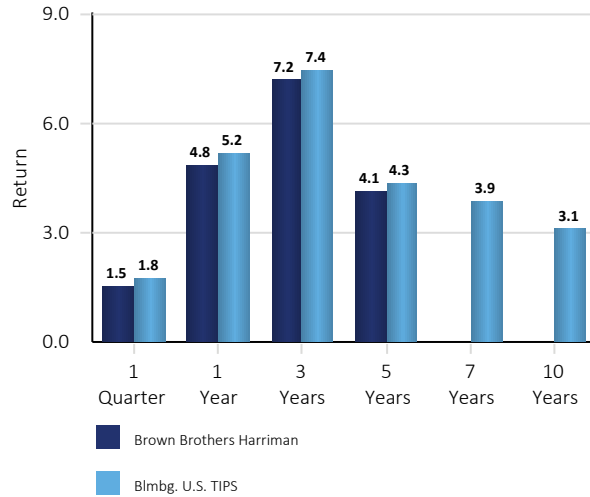


## Performance Summary

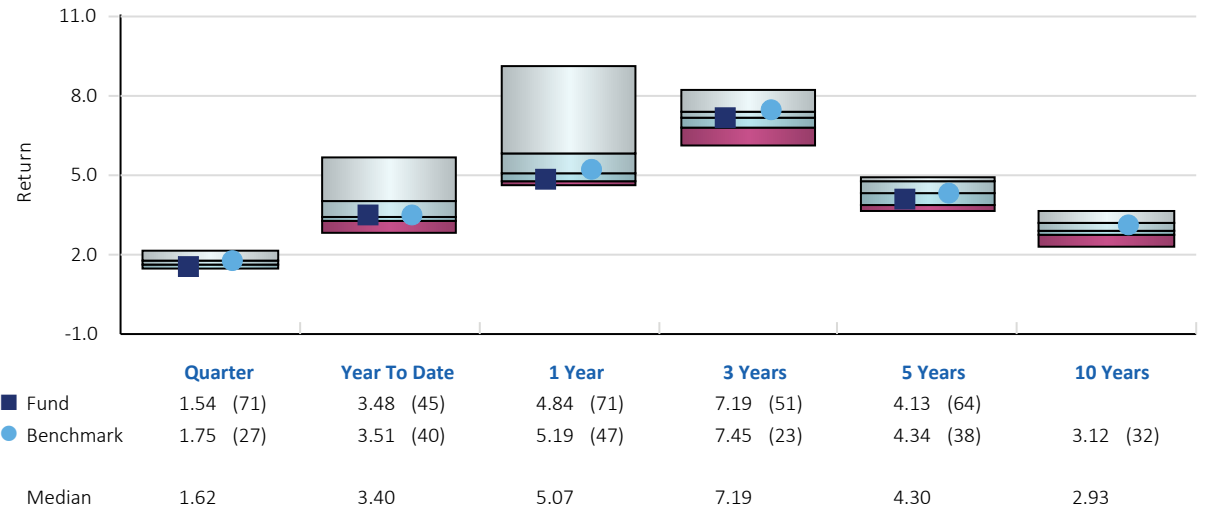
Brown Brothers Harriman

Periods Ended September 30, 2021

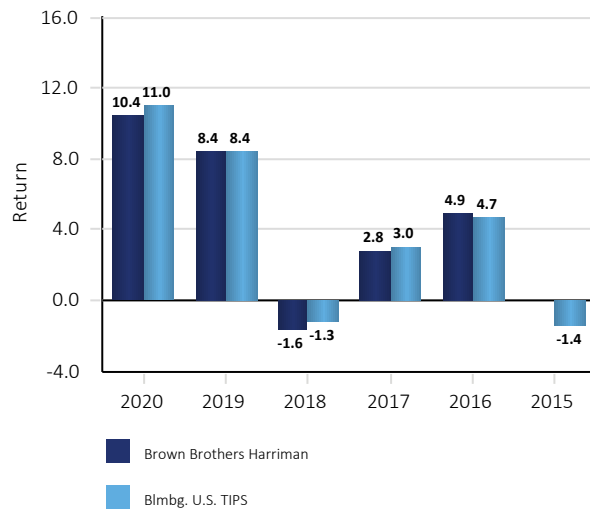
### Comparative Performance



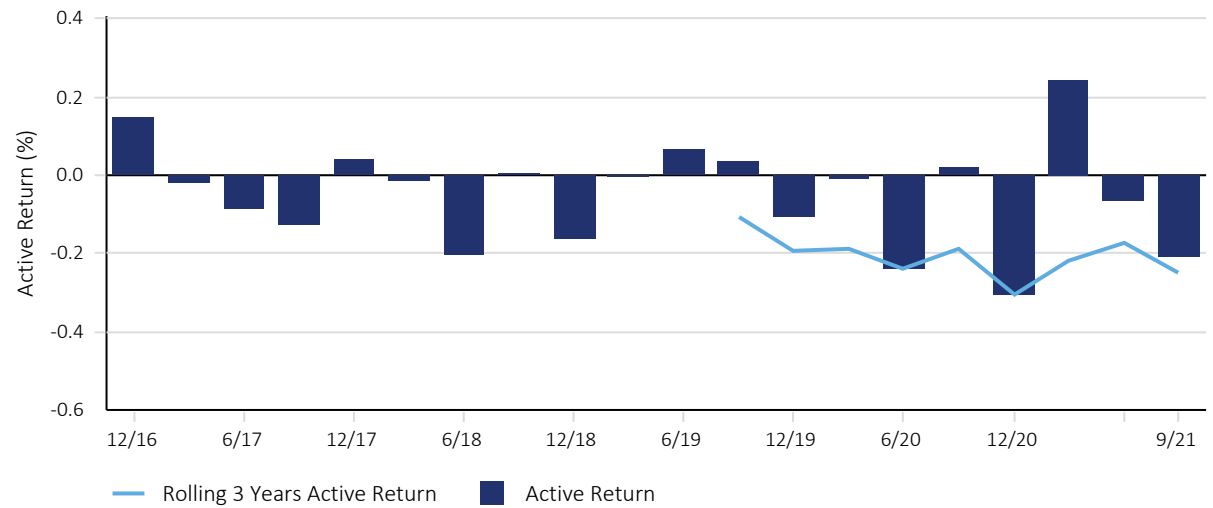
### Peer Group Analysis: IM U.S. TIPS (SA+CF)



### Comparative Performance



### Rolling 3 Years Performance



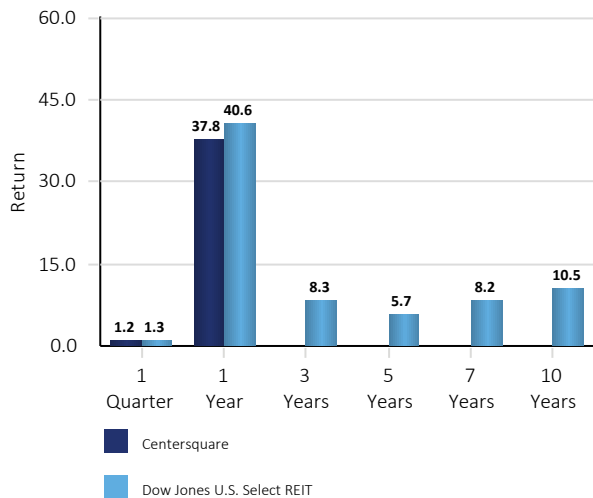


# Performance Summary

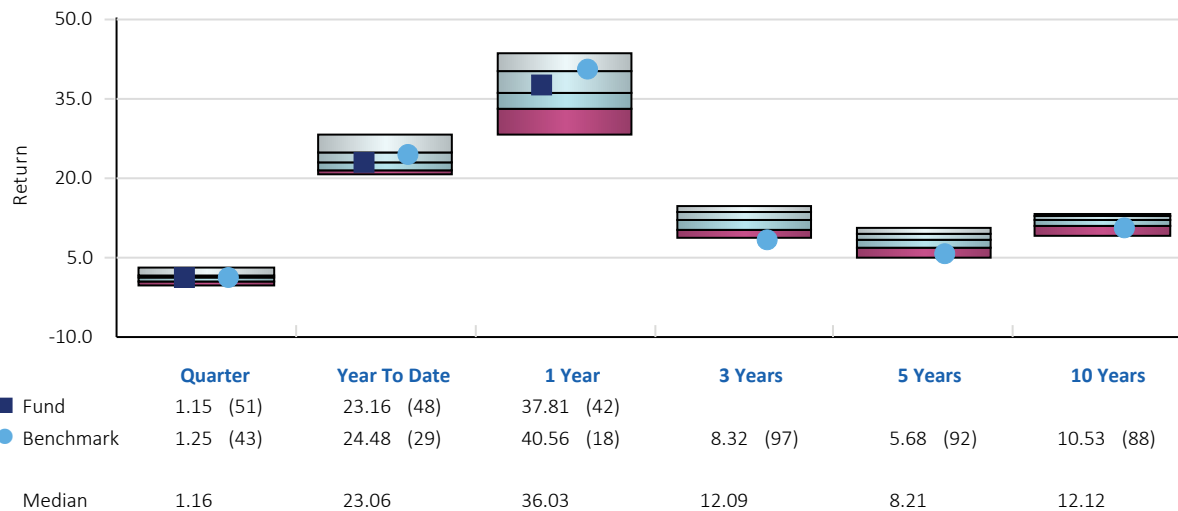
Centersquare

Periods Ended September 30, 2021

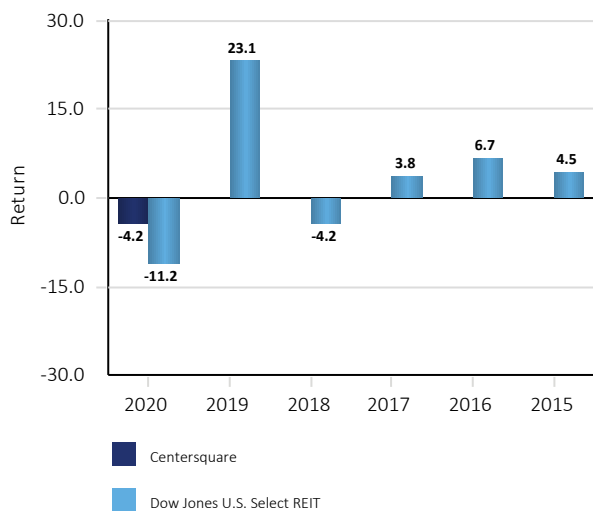
## Comparative Performance



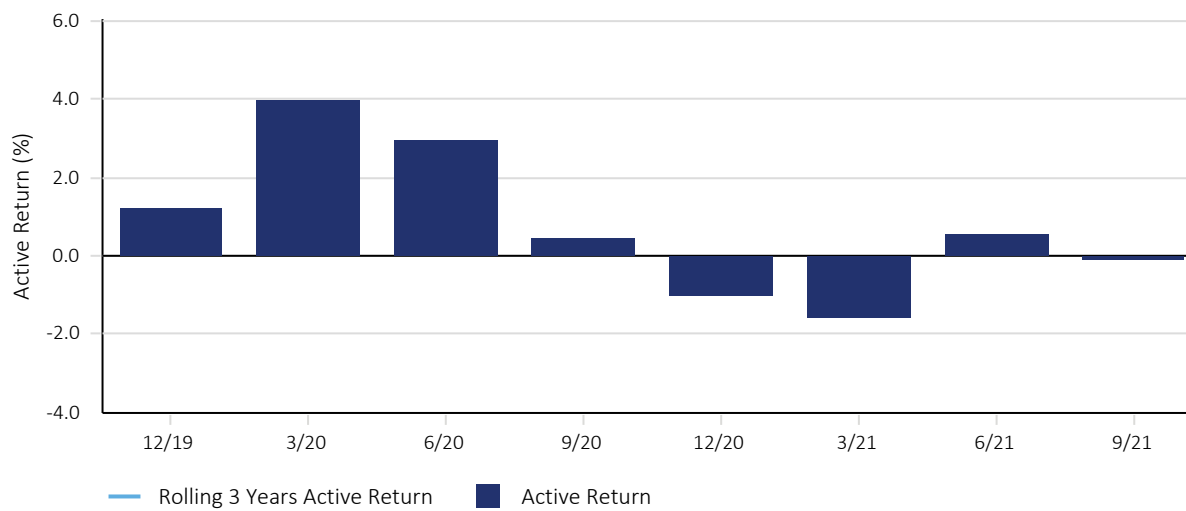
## Peer Group Analysis: IM U.S. REIT (SA+CF)



## Comparative Performance



## Rolling 3 Years Performance

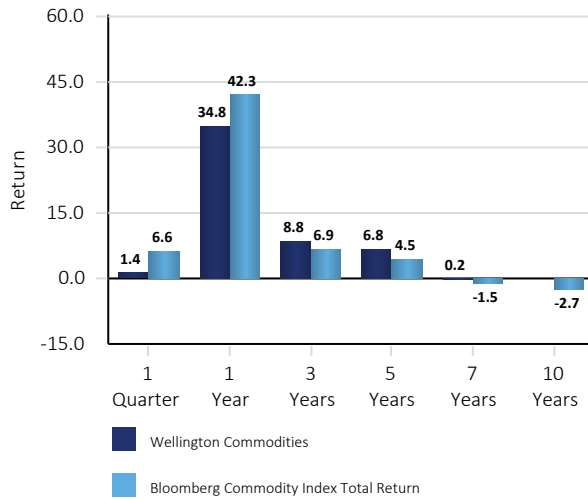


# Performance Summary

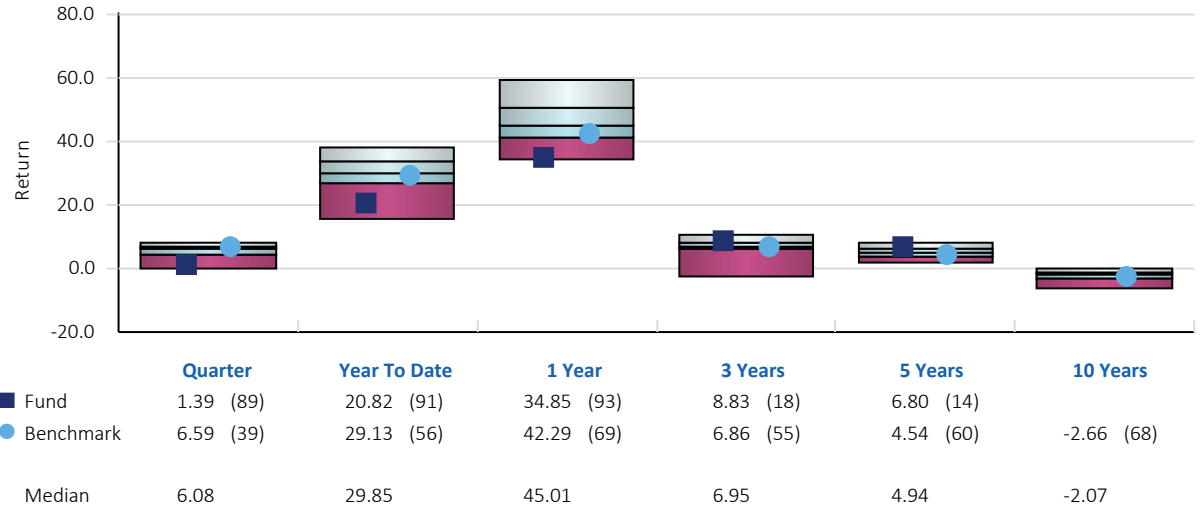
## Wellington Commodities

Periods Ended September 30, 2021

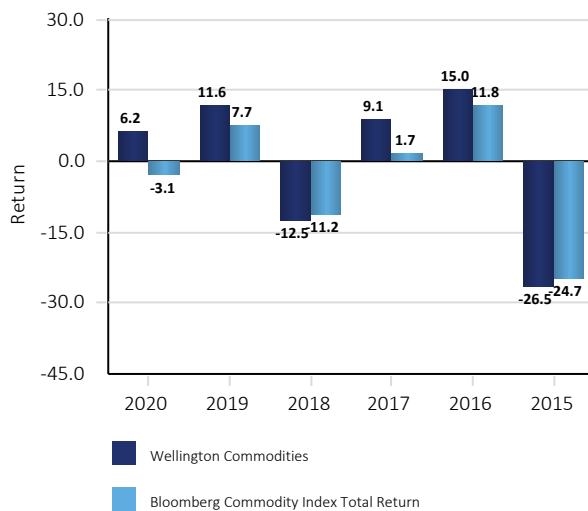
### Comparative Performance



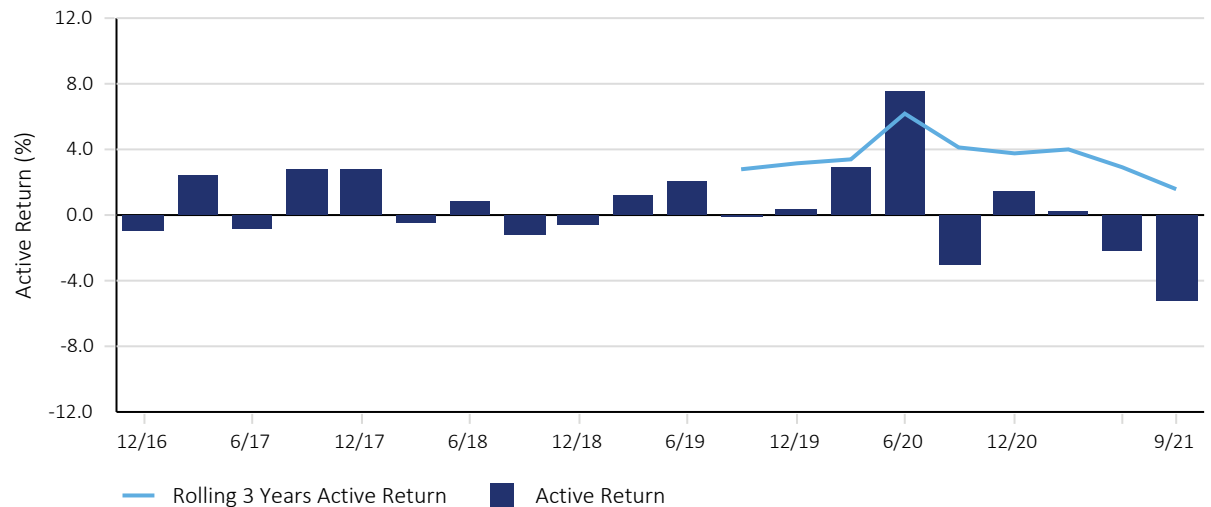
### Peer Group Analysis: Commodities Broad Basket



### Comparative Performance



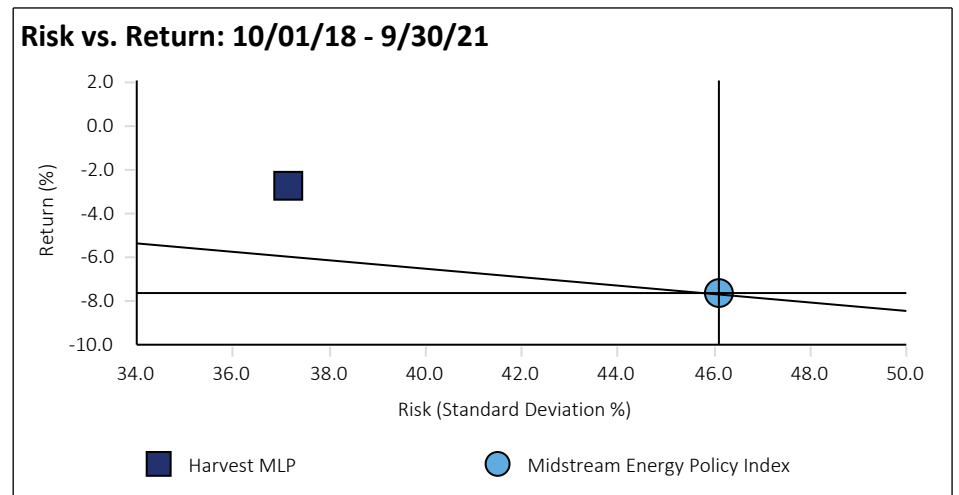
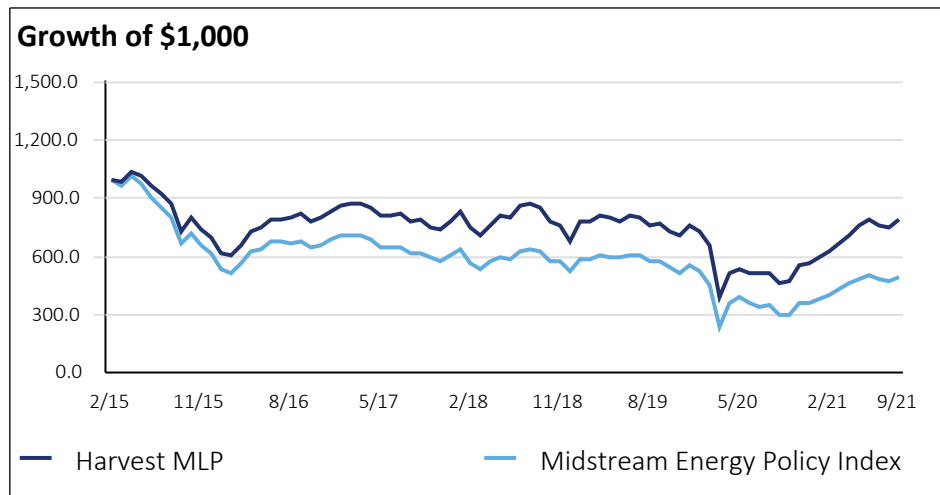
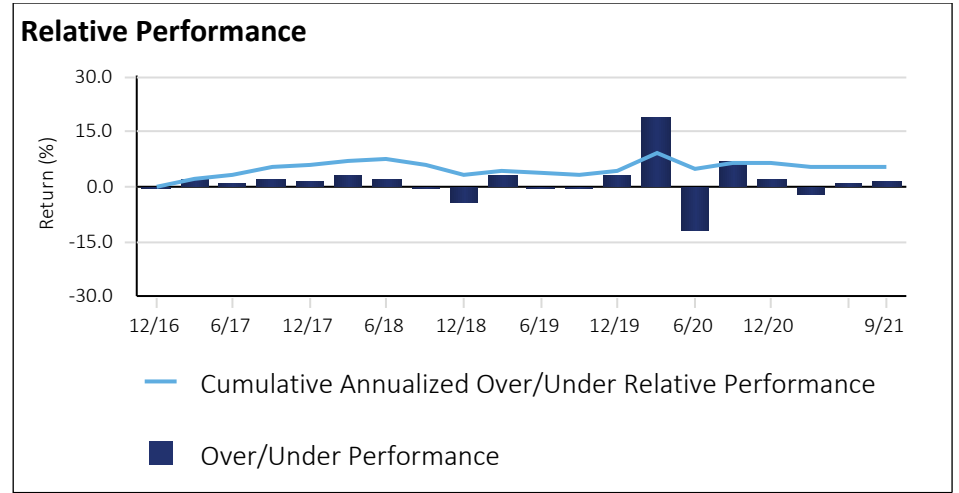
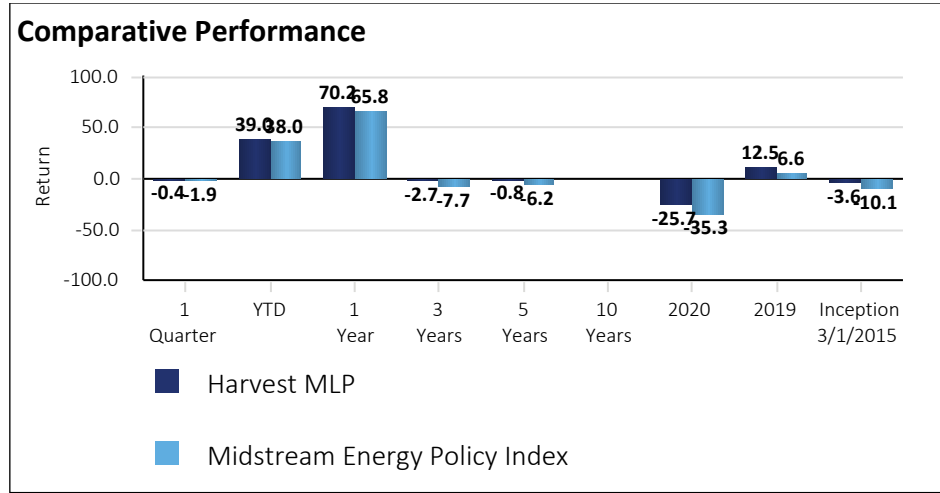
### Rolling 3 Years Performance



# Manager Summary

## Harvest MLP

Periods Ended September 30, 2021



### Historical Statistics: 10/01/18 - 9/30/21

	Alpha	Tracking Error	Information Ratio	Beta	Standard Deviation	Sharpe Ratio	Maximum Drawdown	Up Capture	Down Capture
Fund	1.94	12.48	0.05	0.83	43.07	0.16	-54.57	89.51	85.32
Benchmark	0.00	0.00		1.00	50.82	0.13	-62.27	100.00	100.00