



## Watertown Contributory Retirement System

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### Quarterly Investment Review - Third Quarter 2021

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*Past performance does not indicate future performance and there is possibility of a loss.*



# Fiducient Advisors Update



## Retirement Plans

### Featured Insights

- Webcast: DOL Cybersecurity Guidance for ERISA Plans
- Plan Sponsor Newsletter – September

### Coming Soon

- The Public Fiduciary Newsletter – October
- Cybersecurity Webcast Series: Recordkeeper Updates



## Endowments & Foundations

### Featured Insights

- Nonprofit Investment Stewards Podcast – bimonthly episodes

### Coming Soon

- The Steward Newsletter – November
- ESG Annual Update



## The Wealth Office®

### Featured Insights

- Seeking Clarity on Tax Reform – The Wait Continues...
- The Advisor Newsletter - August

### Coming Soon

- The Advisor Newsletter – October

### Recent Speaking Engagements

- ALTSCHI Virtual Conference 2021
- ASAE Annual Meeting
- CAIA Info Series
- CUPA-HR NYC Meeting
- Markets Group 7th Annual Midwest Institutional Forum
- P&I Conferences: DC Investment Lineup Virtual Series
- P&I Conferences: ESG Investing Virtual Series
- PLANSPONSOR 2021 Virtual HSA Conference



# Fiducient Advisors Update



- Monthly market recaps
- Monthly market updates
  - Summer Rain Feeds the Equity Market – August
  - Normalcy Moves Markets Higher, but Concerns Rise – July
- 2021 Third Quarter Considerations
- In Focus: China's Regulatory Shifts Impacting Emerging Markets
- The Next Chapter in the Active versus Passive Debate
- Private Markets Updates: Growth and New Highs
- Webcast: Who Said U.S. Stocks are Boring? U.S. Macro Update

## 2021 New Associates – Welcome!

- Miguele Atkins, Performance Analyst
- John Bayer, Performance Analyst
- Stephen Bergman, Consultant
- Maggie Bujdasz, Middle Office Operations Analyst
- Linda Byrnes, Senior RFP Specialist
- Josh Daniel, Consulting Analyst
- Meredith Doyle, Director of Human Resources
- Andrew Dufur, Performance Analyst
- Kerry Elsass, Senior Consultant
- Michelle Goedken, Client Service Associate, TWO®
- Michael Hargrove, Human Resources Coordinator
- Duncan Harris, Middle Office Associate
- Emilee Lalchandani, Client Service Associate
- Timothy Ng, Senior Consultant
- Cheryl Rabin, Client Service Associate
- Alex Wikstrom, Consulting Analyst

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## Fiduciary Governance Calendar



# Fiduciary Governance Calendar



\*Timing of actuarial review is dependent on client's individual plan and/or fiscal year and actuarial input.



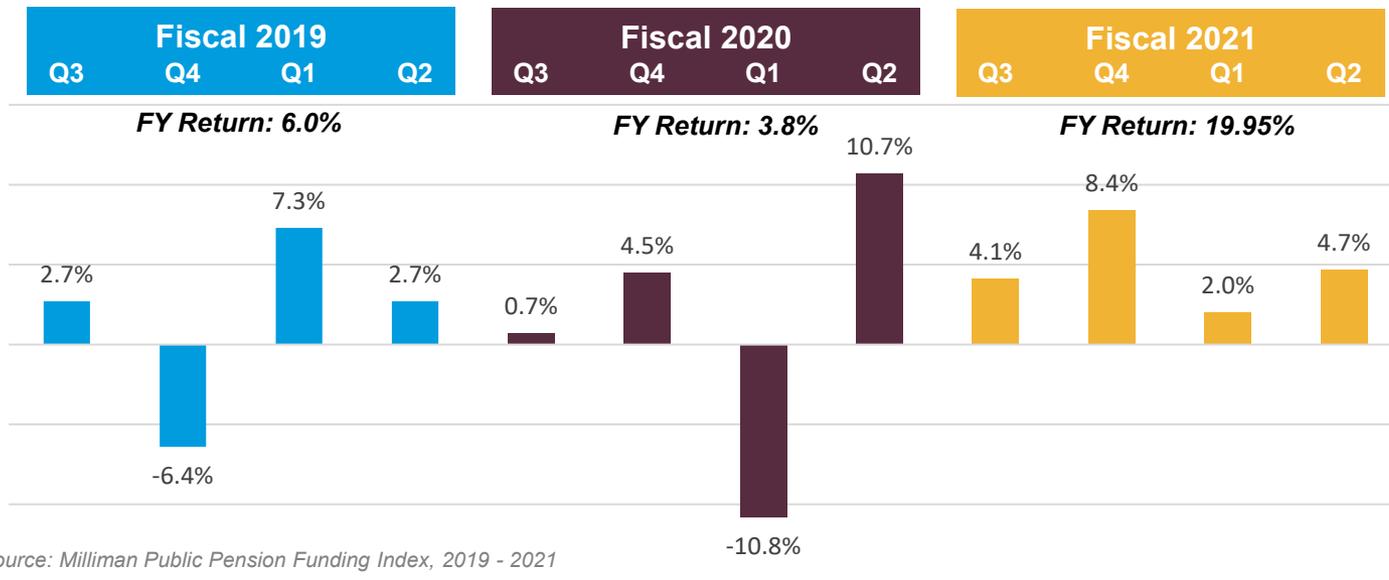
Watertown Retirement System		
	<u>1/1/2020</u>	<u>7/1/2019</u>
Actuarial Value of Assets	\$214,181,849	\$199,018,792
Total Accrued Liability	\$234,085,877	\$223,592,023
Funded Ratio	91.5%	89.0%
Actuarial Return Assumption	7.8%	7.8%



# Trends in Public Pension Asset Returns

- According to Milliman's Public Pension Index, the average return for the 12-month period ending 6/30/2021 for the 100 largest U.S. public pension plans was 19.95%, well exceeding their expected long-term earnings assumptions.<sup>1</sup>
- The strong investment returns may provide municipalities with an opportunity to revisit the actuarial assumptions used to value plan liabilities and address any inconsistencies.

Investment Returns for the 100 Largest U.S. Public Pension Plans<sup>1</sup>



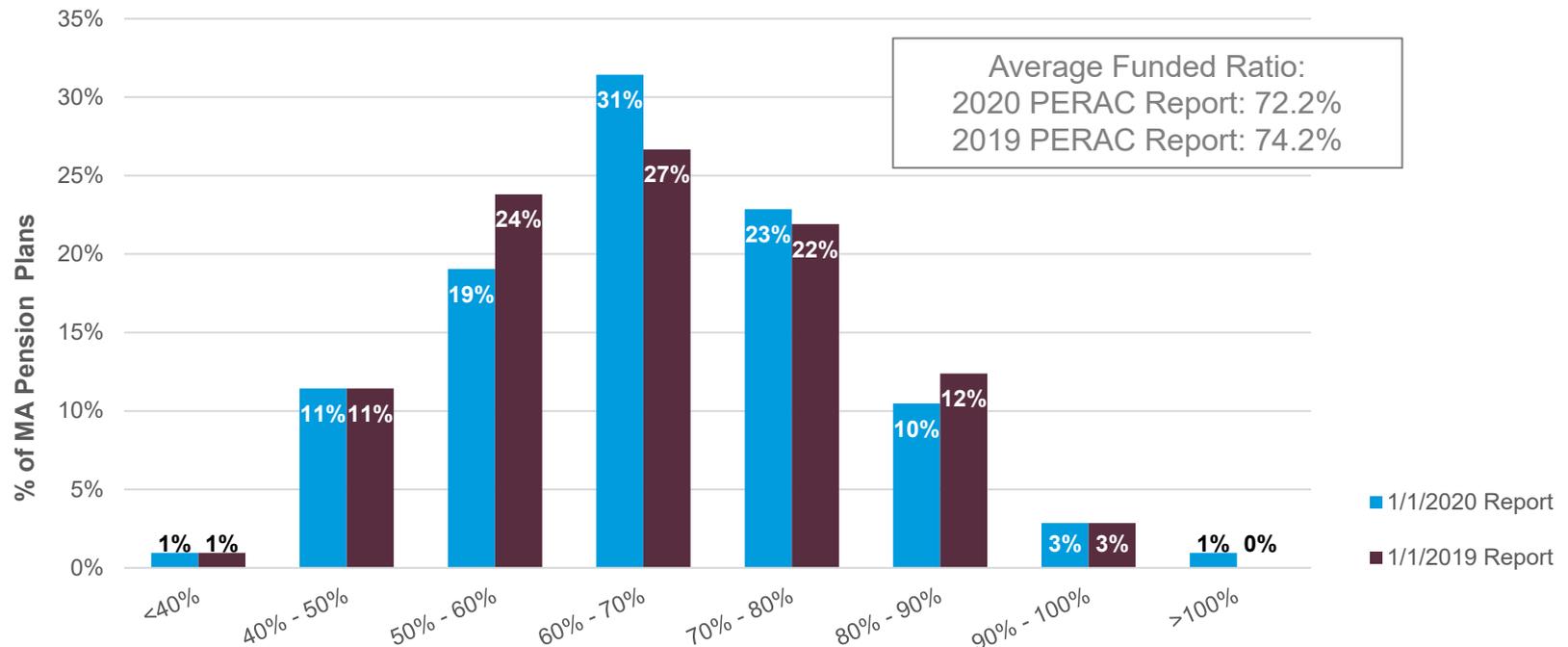
<sup>1</sup>Milliman Public Pension Funding Index Q2 2021



# Trends in Funded Ratios

- Milliman estimates average funded ratio of the 100 largest U.S. public pension plans during the past year improved by more than 10-percentage points, driven primarily part by the strong investment results in FYE 6/30/2021.<sup>1</sup>
- If markets continue on a similar path for the remainder of 2021, Massachusetts Retirement Systems may also see significant improvement in funded ratios as of 1/1/2022 compared to the marginal improvements experienced over the past few years.

Distribution of Funded Ratios for Municipal Pension Plans in Massachusetts<sup>2</sup>



<sup>1</sup>Milliman Public Pension Funding Index Q2 2021

<sup>2</sup>PERAC Investment Report 2020 & 2019



## Capital Markets Overview

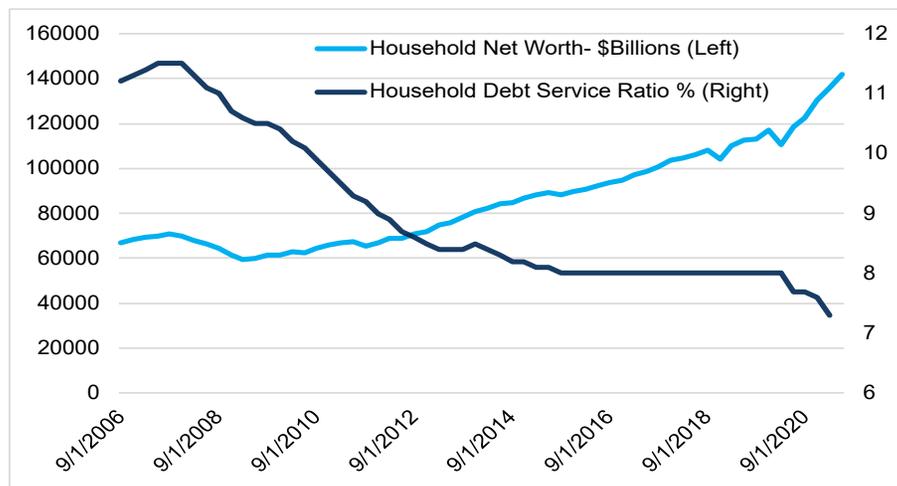


# Market Themes

1. Markets have encountered a somewhat more challenging landscape recently, evidenced by an evolving Fed message, policy gridlock in Washington, and the lingering challenges presented by the Delta variant.
2. The financial health of consumers remains strong, which may serve to sustain economic momentum moving forward.
3. Investment returns this quarter returned to a profile reminiscent of the first wave of market stability that occurred in the spring of 2020, with U.S. large cap and growth equity names outpacing their small cap and value counterparts.

## Strength of the Consumer

The financial health of the consumer (whose spending comprises approximately 70% of GDP) remains robust, evidenced by record high household net worth and very low indebtedness.

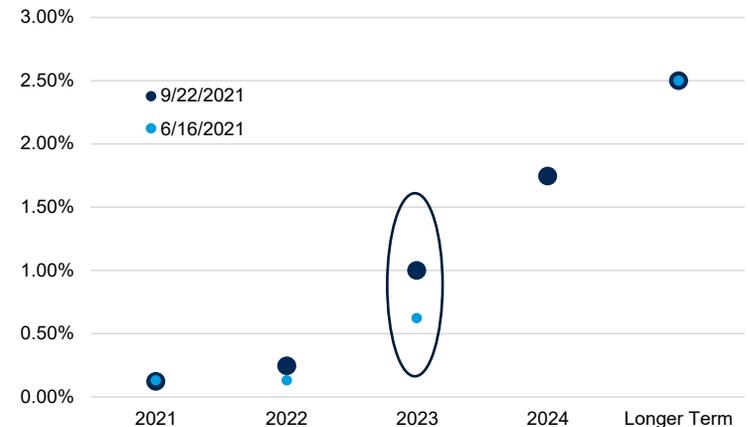


Source: FactSet

See disclosures for list of indices representing each asset class. Past performance does not indicate future performance and there is a possibility of a loss.

## Median FOMC Committee Federal Funds Rate Forecast

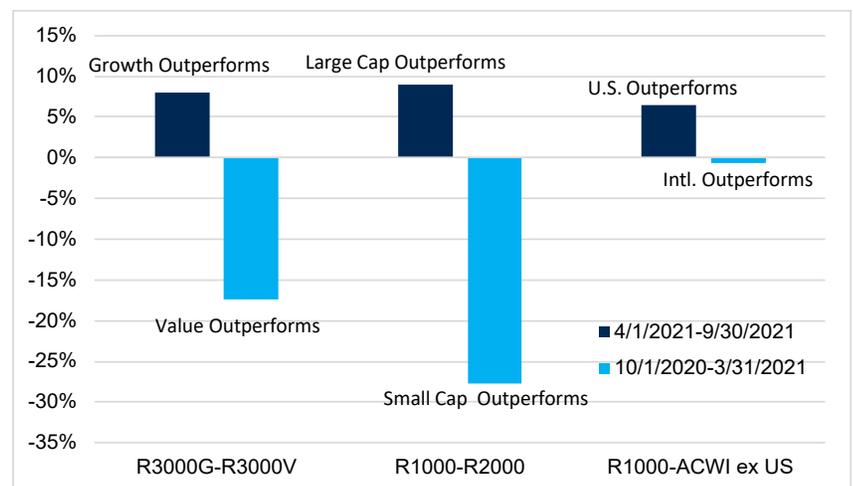
While there were no changes in the FOMC Committee's ultimate forecast for the Fed Funds Rate, the projected timeline for getting there has been accelerated, as noted by the higher expected rates for 2022 and 2023 when comparing the June and September forecasts.



Source: Federal Reserve

## A Reversal in Market Leadership

Value, small cap, and international equity market outperformance for the six-month period ending 3/31/21 has now completely reversed with growth, large cap, and domestic markets leading the way more recently.



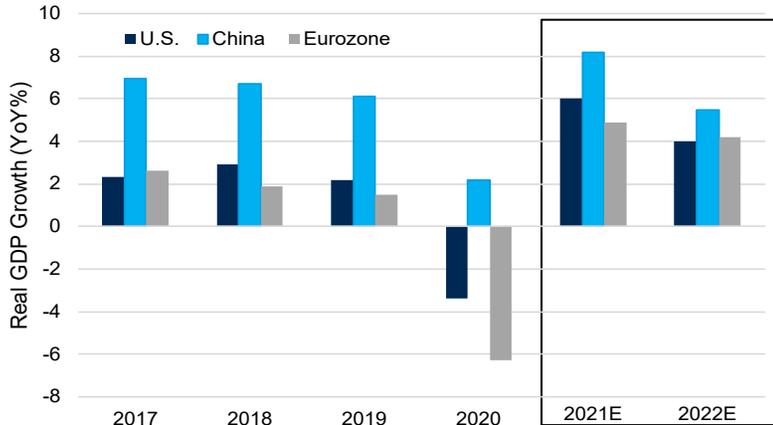
Source: FactSet



# Economic Review

## Real GDP (YoY)

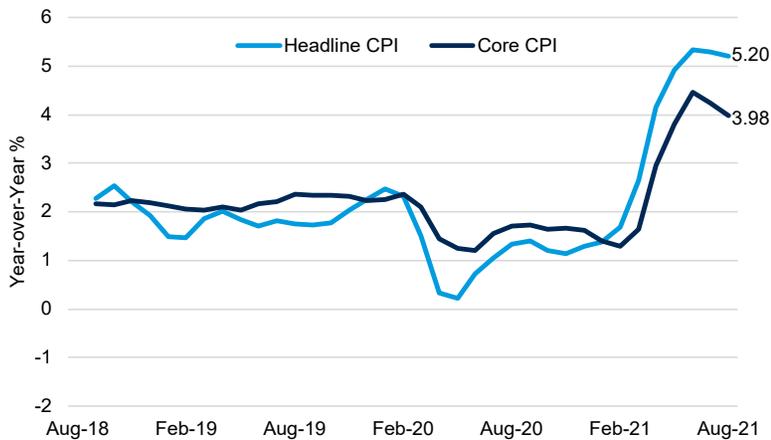
Estimates for 2021 GDP remain robust, reflecting pent up consumer demand and robust household savings rates, although persisting challenges brought about by Covid could pose a risk to this outlook.



Source: FactSet

## U.S. Inflation

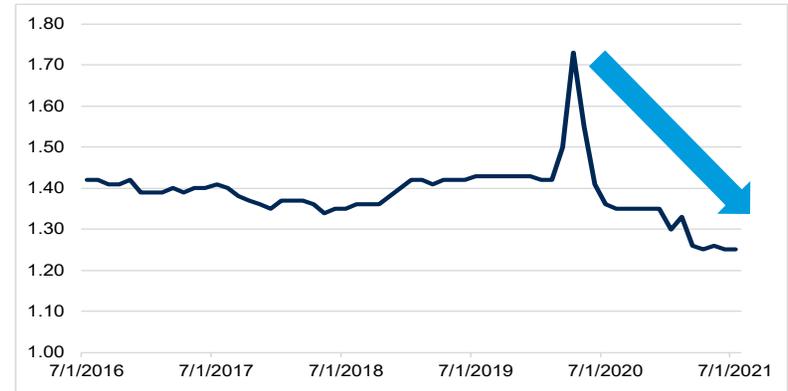
Inflation has moved noticeably higher this year. Supply chain disruptions, rising energy prices, and a lower 2020 base have all contributed to this condition.



Source: FactSet

## Total Business: Inventories to Sales Ratio

Supply chain disruptions have presented challenges to many businesses. The graph below highlights the supply shocks faced by many companies through declining inventories as a percentage of sales.



Source: Federal Reserve Bank of St. Louis

## WTI Crude Oil Prices (\$/bbl)

Oil prices have touched 5-year highs at nearly \$80 per barrel. Supply has been slow to come back online coming out of the pandemic.

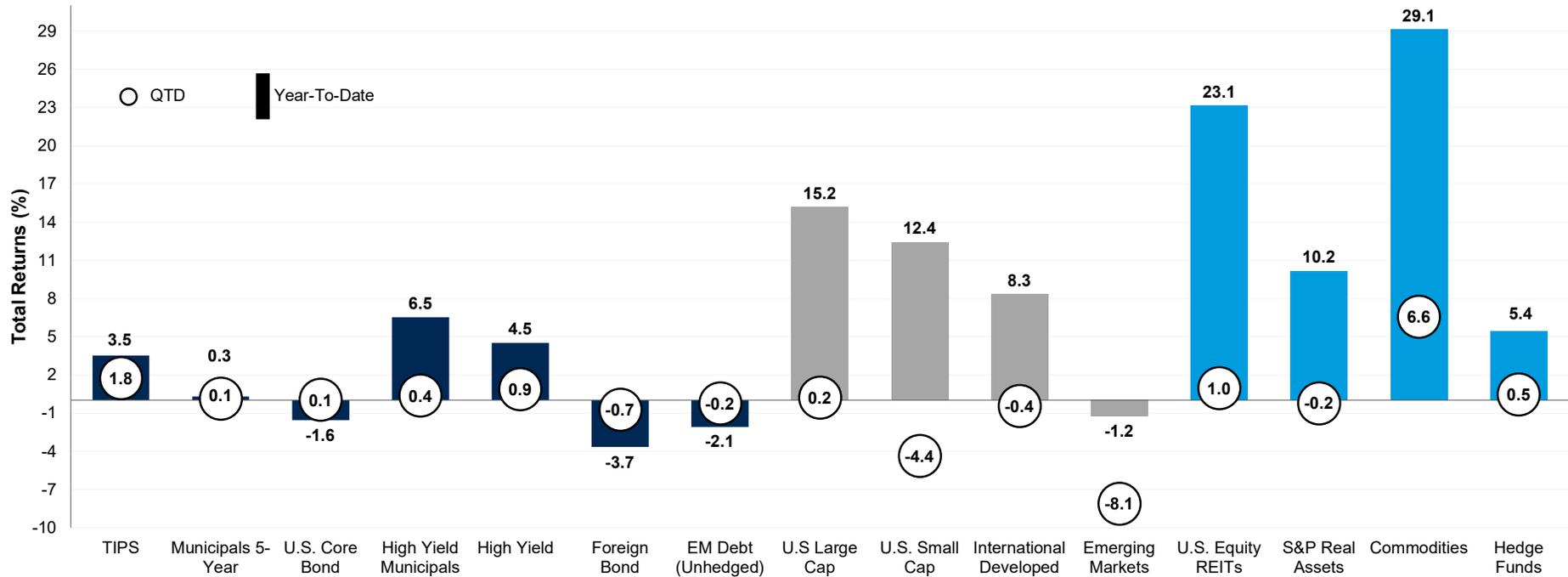


Source: FactSet

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# Asset Class Returns



\*Hedge fund returns are lagged 1 month. Sources: FactSet, J.P. Morgan, Russell, MSCI, FTSE Russell, Alerian.

## Fixed Income (3Q)

- Interest rates moved higher across the curve as investors continue to grapple with potential impacts from future Federal Reserve policy.
- Investment grade and high yield spreads widened during the quarter.

## Equity (3Q)

- Sentiment shifted during the 3<sup>rd</sup> quarter with investors selling out of the perceived riskier asset classes, namely small caps and emerging markets.
- Emerging markets struggled, driven by poor performance from the larger country constituents, namely China and Korea.

## Real Asset / Alternatives (3Q)

- + REITs continued to benefit from increasing demand and low interest rates.
- + Commodities drew considerable strength from higher energy prices (particularly advances in oil), although strong performance was broad based across sectors.

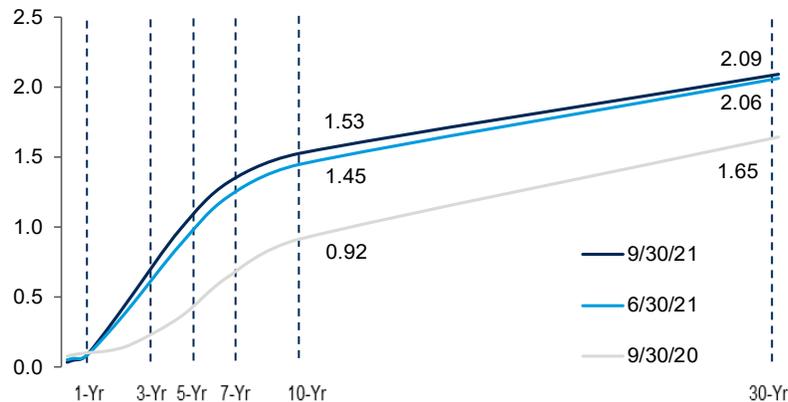
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# Fixed Income Market Update

## U.S. Treasury Yield Curve

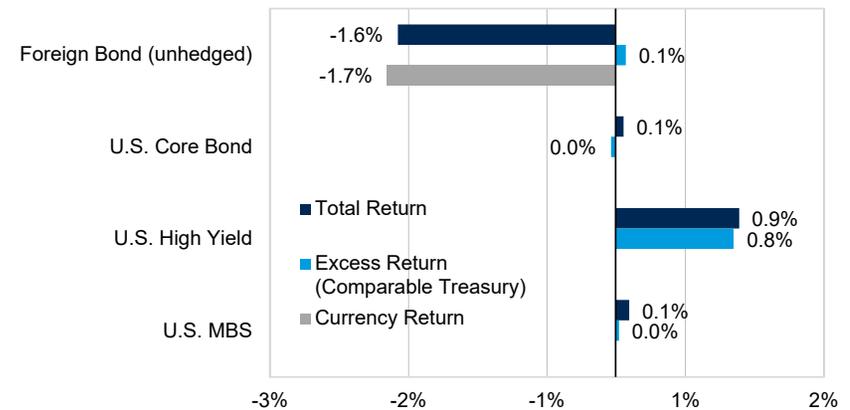
U.S. Treasuries moved slightly higher in the quarter with the 10-year and 30-year rates increasing 8bps and 3bps, respectively.



Source: FactSet

## Index Performance Attribution (3Q 2021)

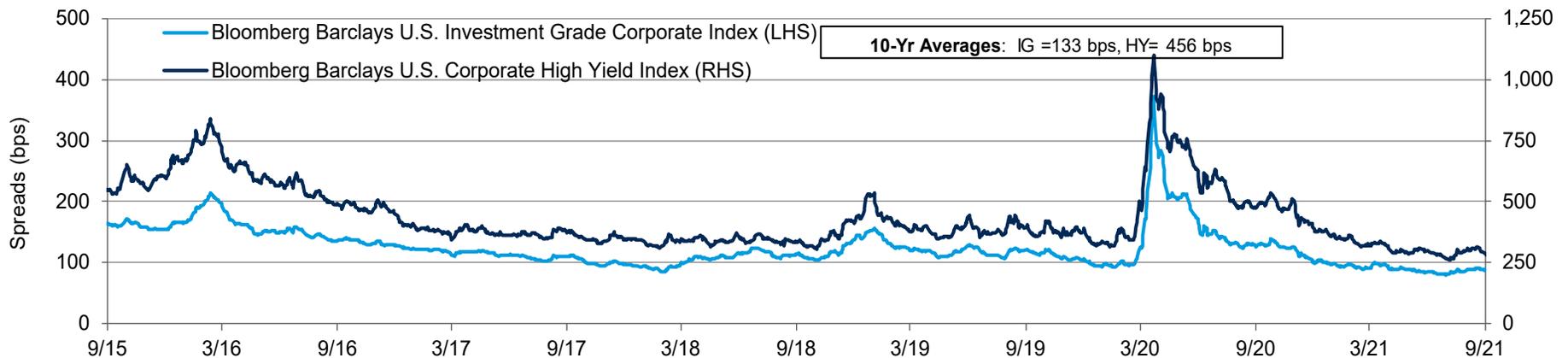
Despite headwinds from rising rates and wider spreads, U.S. fixed income markets were marginally positive driven by coupon payments. Dollar strength, particularly in September, weighed on foreign bonds.



Source: FactSet

## Credit Market Spreads – Trailing 5 Years

Credit spreads widened during the quarter with investment grade and high yield spreads increasing 4bps and 21bps, respectively.



Source: FactSet

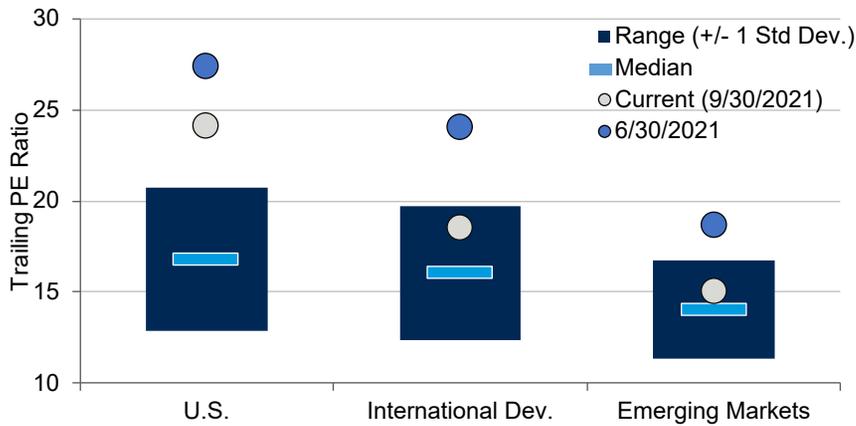
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# Equity Market Update

## Equity Valuations (Trailing 15 Years)

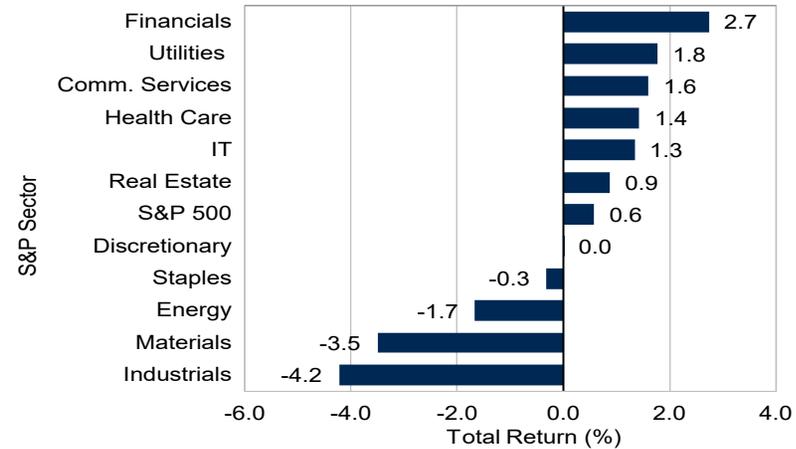
While valuations remain somewhat elevated relative to historical norms, underlying company earnings have proven resilient, which has helped investors rationalize current price levels.



Source: FactSet

## U.S. Equities – Return by Sector (3Q 2021)

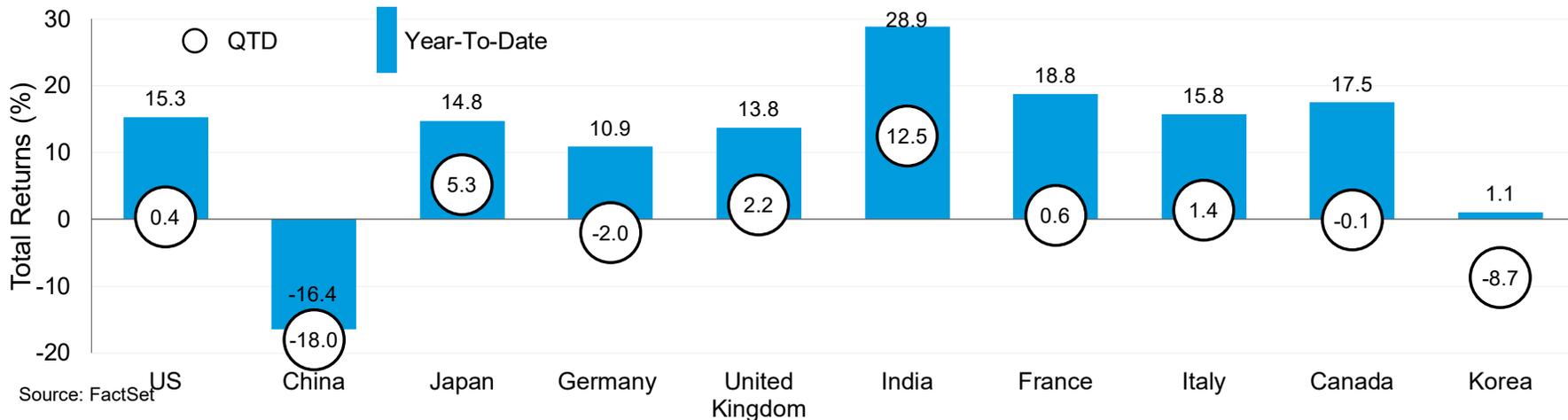
U.S. equity performance was mixed across sectors. Financials and utilities led for the quarter while materials and industrials were laggards.



Source: FactSet.

## Country Total Returns (%) – Top 10 Largest Economies

While there were pockets of opportunity across countries, China was at the center of headlines during the quarter. Regulatory restrictions caused major sell-offs across the market with the education and technology sectors getting hit the hardest. Contagion effects were felt across emerging markets with Korea getting caught up in the sell-off as well. For more details on the evolving situation in China please reference our white paper [here](#).



Source: FactSet

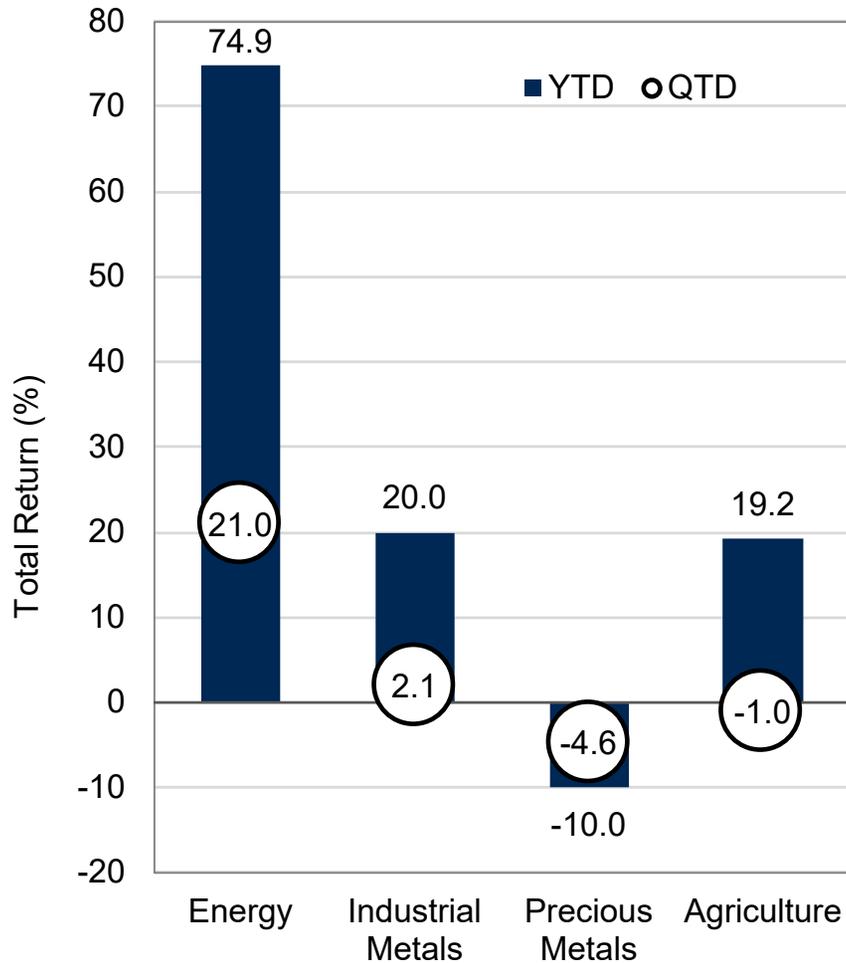
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# Real Assets Market Update

## Real Assets Performance

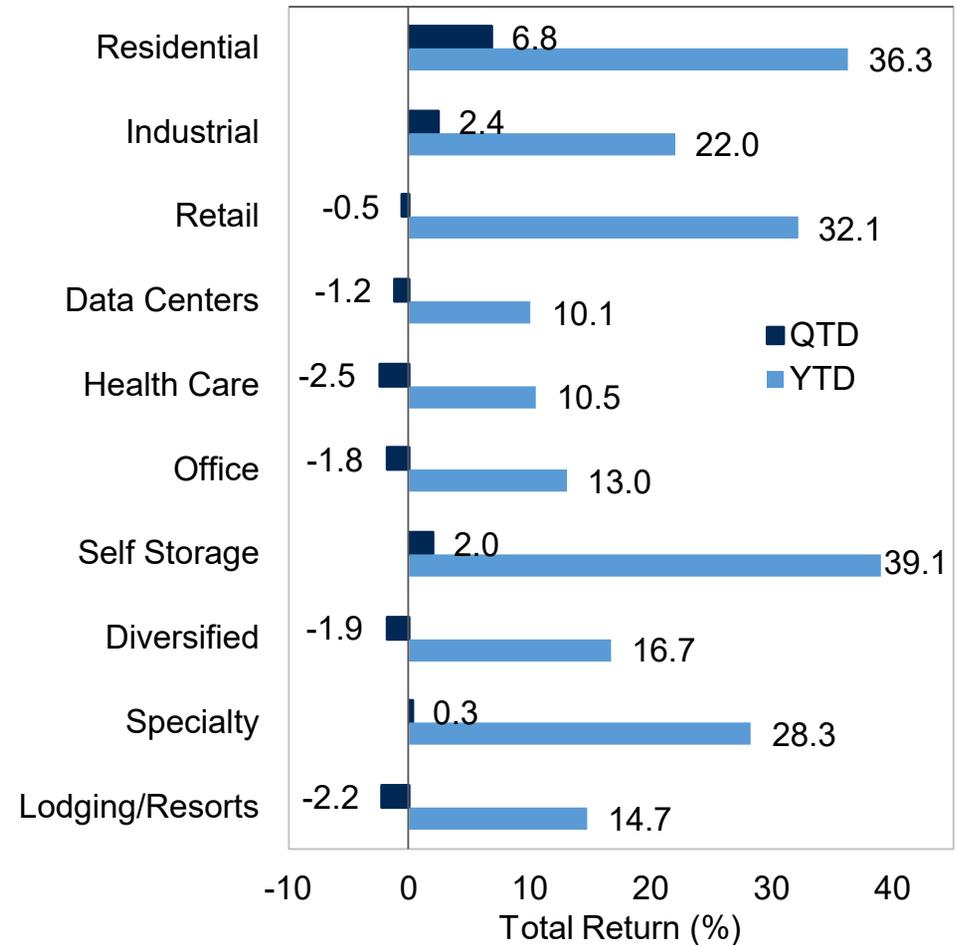
Energy was the primary contributor to the performance within real assets. Supply disruptions have impacted output and have significantly driven up the prices of natural gas and crude oil.



Source: FactSet

## REIT Sector Performance

The residential, industrial and self storage sectors continued to perform well, benefitting from the suburbanization trend. Health care and lodging & resorts were laggards for the period.



Source: FactSet

Past performance does not indicate future performance and there is a possibility of a loss.



# The Case For Diversification

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD	10Yr (Ann)
TIPS 13.6	Emerging Markets 18.2	U.S. Small Cap 38.8	U.S. Equity REITs 30.1	U.S. Equity REITs 3.2	U.S. Small Cap 21.3	Emerging Markets 37.3	High Yield Munis 4.8	U.S. Large Cap 31.5	U.S. Small Cap 20.0	Commodities 29.1	U.S. Large Cap 16.6
High Yield Munis 9.3	High Yield Munis 18.1	U.S. Large Cap 32.4	High Yield Munis 13.8	Municipals 5-Year 2.4	High Yield 17.1	International Dev. 25.0	Municipals 5-Year 1.7	U.S. Equity REITs 26.0	U.S. Large Cap 18.4	U.S. Equity REITs 23.1	U.S. Small Cap 14.6
U.S. Equity REITs 8.3	U.S. Equity REITs 18.1	International Dev. 22.8	U.S. Large Cap 13.7	High Yield Munis 1.8	U.S. Large Cap 12.0	U.S. Large Cap 21.8	Foreign Bond 0.5	U.S. Small Cap 25.5	Emerging Markets 18.3	U.S. Large Cap 15.9	U.S. Equity REITs 11.3
Core Bond 7.8	International Dev. 17.3	Balanced 12.2	Core Bond 6.0	U.S. Large Cap 1.4	Commodities 11.7	EM Debt (unhedged) 15.2	Core Bond 0.0	International Dev. 22.5	TIPS 11.0	U.S. Small Cap 12.4	International Dev. 8.1
Municipals 5-Year 6.9	EM Debt (unhedged) 16.9	Hedge Funds 9.0	Balanced 5.1	Core Bond 0.6	Emerging Markets 11.2	U.S. Small Cap 14.6	TIPS -1.3	Emerging Markets 18.4	Balanced 8.8	International Dev. 8.3	Balanced 7.7
High Yield 5.0	U.S. Small Cap 16.3	High Yield 7.4	U.S. Small Cap 4.9	Hedge Funds -0.3	EM Debt (unhedged) 9.9	Balanced 13.6	High Yield -2.1	Balanced 17.5	International Dev. 7.8	Balanced 6.6	High Yield 7.4
Foreign Bond 4.2	U.S. Large Cap 16.0	U.S. Equity REITs 2.5	TIPS 3.6	International Dev. -0.8	U.S. Equity REITs 8.5	High Yield Munis 9.7	Hedge Funds -4.0	High Yield 14.3	Core Bond 7.5	High Yield Munis 6.5	High Yield Munis 6.7
U.S. Large Cap 2.1	High Yield 15.8	Municipals 5-Year 0.8	Hedge Funds 3.4	TIPS -1.4	Balanced 7.6	Hedge Funds 7.8	U.S. Large Cap -4.4	EM Debt (unhedged) 13.5	Hedge Funds 7.1	Municipals 5-Year 6.5	EM Debt (unhedged) 6.6
Balanced 0.9	Balanced 11.5	Foreign Bond -1.0	Municipals 5-Year 3.2	Foreign Bond -2.3	TIPS 4.7	High Yield 7.5	U.S. Equity REITs -4.6	High Yield Munis 10.7	High Yield 7.1	Hedge Funds 5.4	Emerging Markets 6.1
EM Debt (unhedged) -1.8	TIPS 7.0	Core Bond -2.0	Foreign Bond 2.9	Balanced -3.3	Foreign Bond 3.2	Foreign Bond 6.5	Balanced -5.8	Core Bond 8.7	Foreign Bond 7.0	High Yield 4.5	Hedge Funds 4.1
U.S. Small Cap -4.2	Foreign Bond 5.3	Emerging Markets -2.6	High Yield 2.5	U.S. Small Cap -4.4	High Yield Munis 3.0	U.S. Equity REITs 5.2	EM Debt (unhedged) -6.2	TIPS 8.4	High Yield Munis 4.9	TIPS 3.5	Foreign Bond 3.9
Hedge Funds -5.7	Hedge Funds 4.8	High Yield Munis -5.5	Emerging Markets -2.2	High Yield -4.5	Core Bond 2.6	Core Bond 3.5	U.S. Small Cap -11.0	Hedge Funds 7.8	Municipals 5-Year 4.3	Emerging Markets -1.2	TIPS 3.1
Commodities -13.3	Core Bond 4.2	TIPS -8.6	International Dev. -4.9	Emerging Markets -14.9	International Dev. 1.0	Municipals 5-Year 3.1	Commodities -11.2	Commodities 7.7	EM Debt (unhedged) 2.7	Foreign Bond -1.4	Core Bond 3.0
International Dev. -12.1	Municipals 5-Year 3.0	EM Debt (unhedged) -9.0	EM Debt (unhedged) -5.7	EM Debt (unhedged) -14.9	Hedge Funds 0.5	TIPS 3.0	International Dev. -13.8	Foreign Bond 6.3	Commodities -3.1	Core Bond -1.6	Municipals 5-Year 2.5
Emerging Markets -18.4	Commodities -1.1	Commodities -9.5	Commodities -17.0	Commodities -24.7	Municipals 5-Year -0.4	Commodities 1.7	Emerging Markets -14.6	Municipals 5-Year 5.4	U.S. Equity REITs -8.0	EM Debt (unhedged) -1.9	Commodities -2.7

See disclosures for list of indices representing each asset class. Past performance does not indicate future performance and there is a possibility of a loss.

# Financials Markets Performance



## Financial Markets Performance

Total return as of September 30, 2021

Periods greater than one year are annualized

All returns are in U.S. dollar terms

Global Fixed Income Markets	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Bloomberg Barclays 1-3-Month T-Bill	0.0%	0.0%	0.1%	1.1%	1.1%	0.8%	0.6%	0.9%
Bloomberg Barclays U.S. TIPS	1.8%	3.5%	5.2%	7.4%	4.3%	3.9%	3.1%	4.4%
Bloomberg Barclays Municipal Bond (5 Year)	0.1%	0.3%	1.1%	3.9%	2.4%	2.4%	2.5%	3.5%
Bloomberg Barclays High Yield Municipal Bond	0.4%	6.5%	11.3%	7.4%	6.0%	6.0%	6.7%	5.3%
Bloomberg Barclays U.S. Aggregate	0.1%	-1.6%	-0.9%	5.4%	2.9%	3.3%	3.0%	4.2%
Bloomberg Barclays U.S. Corporate High Yield	0.9%	4.5%	11.3%	6.9%	6.5%	5.9%	7.4%	7.3%
Bloomberg Barclays Global Aggregate ex-U.S. Hedged	-1.6%	-1.4%	-0.5%	3.9%	2.7%	3.5%	3.9%	4.0%
Bloomberg Barclays Global Aggregate ex-U.S. Unhedged	-1.6%	-5.9%	-1.1%	3.2%	1.1%	1.2%	0.9%	2.9%
Bloomberg Barclays U.S. Long Gov / Credit	0.1%	-4.6%	-3.0%	10.1%	5.2%	6.2%	5.8%	7.0%
JPMorgan GBI-EM Global Diversified	-0.2%	-2.1%	0.6%	7.1%	5.7%	6.4%	6.6%	7.7%
Global Equity Markets	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
S&P 500	0.6%	15.9%	30.0%	16.0%	16.9%	14.0%	16.6%	10.4%
Dow Jones Industrial Average	-1.5%	12.1%	24.2%	11.0%	15.7%	12.9%	14.7%	10.1%
NASDAQ Composite	-0.2%	12.7%	30.3%	22.7%	23.4%	19.4%	20.9%	14.3%
Russell 3000	-0.1%	15.0%	31.9%	16.0%	16.9%	13.9%	16.6%	10.4%
Russell 1000	0.2%	15.2%	31.0%	16.4%	17.1%	14.1%	16.8%	10.5%
Russell 1000 Growth	1.2%	14.3%	27.3%	22.0%	22.8%	18.5%	19.7%	13.3%
Russell 1000 Value	-0.8%	16.1%	35.0%	10.1%	10.9%	9.3%	13.5%	7.5%
Russell Mid Cap	-0.9%	15.2%	38.1%	14.2%	14.4%	12.2%	15.5%	10.3%
Russell Mid Cap Growth	-0.8%	9.6%	30.5%	19.1%	19.3%	15.4%	17.5%	12.0%
Russell Mid Cap Value	-1.0%	18.2%	42.4%	10.3%	10.6%	9.6%	13.9%	8.8%
Russell 2000	-4.4%	12.4%	47.7%	10.5%	13.5%	11.9%	14.6%	9.2%
Russell 2000 Growth	-5.7%	2.8%	33.3%	11.7%	15.3%	13.2%	15.7%	10.6%
Russell 2000 Value	-3.0%	22.9%	63.9%	8.6%	11.0%	10.2%	13.2%	7.5%
MSCI ACWI	-1.1%	11.1%	27.4%	12.6%	13.2%	9.9%	11.9%	7.2%
MSCI ACWI ex. U.S.	-3.0%	5.9%	23.9%	8.0%	8.9%	5.7%	7.5%	4.4%
MSCI EAFE	-0.4%	8.3%	25.7%	7.6%	8.8%	5.8%	8.1%	4.1%
MSCI EAFE Growth	0.1%	6.9%	20.9%	11.9%	11.4%	8.7%	10.1%	5.8%
MSCI EAFE Value	-1.0%	9.6%	30.7%	3.0%	6.0%	2.7%	6.0%	2.2%
MSCI EAFE Small Cap	0.9%	10.0%	29.0%	9.0%	10.4%	9.2%	10.7%	6.4%
MSCI Emerging Markets	-8.1%	-1.2%	18.2%	8.6%	9.2%	5.6%	6.1%	5.7%
Alternatives	QTD	YTD	1YR	3YR	5YR	7YR	10YR	15YR
Consumer Price Index*	0.7%	4.4%	5.2%	2.7%	2.6%	2.0%	1.9%	2.0%
FTSE NAREIT Equity REITs	1.0%	23.1%	37.4%	10.0%	6.8%	9.0%	11.3%	6.5%
S&P Real Assets	-0.2%	10.2%	21.4%	7.3%	6.0%	4.5%	6.0%	5.6%
FTSE EPRA NAREIT Developed	1.6%	21.7%	32.4%	7.3%	4.9%	8.0%	10.9%	5.2%
FTSE EPRA NAREIT Developed ex U.S.	-2.6%	6.6%	21.5%	4.9%	5.0%	4.8%	7.7%	3.4%
Bloomberg Commodity Total Return	6.6%	29.1%	42.3%	6.9%	4.5%	-1.5%	-2.7%	-2.1%
HFRI Fund of Funds Composite*	0.5%	5.4%	13.8%	6.3%	5.8%	4.1%	4.1%	3.1%
HFRI Fund Weighted Composite*	-0.2%	10.0%	20.8%	8.4%	7.4%	5.5%	5.4%	5.0%
Alerian MLP	-5.7%	39.4%	84.6%	-4.3%	-2.4%	-6.9%	1.2%	5.1%

\*One month lag.

Source: FactSet & Morningstar as of 9/30/21. Periods greater than 1 year are annualized. All returns are in U.S. dollar terms.



## Portfolio and Manager Review

# Asset Allocation

As of September 30, 2021

	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
<b>Total Fund Composite</b>	<b>275,677,552</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>
Collective US Govt STIF Fund	1,759,606	0.6	0.0	0.6
<b>Fixed Income</b>	<b>55,463,890</b>	<b>20.1</b>	<b>23.5</b>	<b>-3.4</b>
IRM Core Bond Fund LLC	40,214,049	14.6	17.0	-2.4
Eaton Vance Trust CIT High Yield Fund	6,015,162	2.2	2.5	-0.3
Brandywine Global Opportunistic Fixed Income	9,234,679	3.3	4.0	-0.7
<b>Asset Allocation</b>	<b>16,145,484</b>	<b>5.9</b>	<b>6.0</b>	<b>-0.1</b>
WTC-CIF Opportunistic Invst Allocation	7,946,022	2.9	3.0	-0.1
PineBridge Global Dynamic Asset Allocation Fund LLC	8,199,462	3.0	3.0	0.0
<b>Domestic Equity</b>	<b>80,870,121</b>	<b>29.3</b>	<b>28.2</b>	<b>1.1</b>
PRIT Domestic Equity	30,360,587	11.0	10.5	0.5
Columbia US Contrarian Core Equity Fund	34,414,999	12.5	12.0	0.5
Wellington Small Cap 2000	16,094,535	5.8	5.7	0.1
<b>International Equity</b>	<b>55,779,462</b>	<b>20.2</b>	<b>19.8</b>	<b>0.4</b>
Earnest Partners Intl Equity	24,240,677	8.8	8.6	0.2
MFS Instl International Equity Fund	23,260,284	8.4	8.6	-0.2
Acadian Intl Small Cap Fund	8,278,502	3.0	2.6	0.4
<b>Real Estate</b>	<b>25,746,003</b>	<b>9.3</b>	<b>10.0</b>	<b>-0.7</b>
PRIT Real Estate Fund	17,967,307	6.5	7.0	-0.5
TA Realty Core Property Fund, LP	4,677,695	1.7	1.5	0.2
American Strategic Value Realty Fund	2,246,178	0.8	1.0	-0.2
TerraCap Partners IV	854,822	0.3	0.5	-0.2
<b>Hedge Funds</b>	<b>19,288,515</b>	<b>7.0</b>	<b>7.5</b>	<b>-0.5</b>
PRIT Hedge Funds	19,288,515	7.0	7.5	-0.5
<b>Private Equity</b>	<b>20,624,471</b>	<b>7.5</b>	<b>5.0</b>	<b>2.5</b>
RCP Fund IV	8,320	0.0		
<b>PRIT VY Investments</b>	<b>20,616,151</b>	<b>7.5</b>	<b>0.0</b>	<b>7.5</b>
PRIT Vintage 2011	1,116,667	0.4		
PRIT Vintage 2012	1,343,849	0.5		
PRIT Vintage 2013	1,609,243	0.6		
PRIT Vintage 2014	1,813,087	0.7		

Investments with a zero balance were held in the portfolio during the reporting period and will be removed once they no longer impact portfolio performance.

Asset Allocation weightings may not add up to 100% due to rounding.

## Asset Allocation

As of September 30, 2021

	Asset Allocation (\$)	Asset Allocation (%)	Target Allocation (%)	Differences (%)
PRIT Vintage 2015	2,943,750	1.1		
PRIT Vintage 2016	1,464,071	0.5		
PRIT Vintage 2017	3,396,635	1.2		
PRIT Vintage 2018	2,750,390	1.0		
PRIT Vintage 2019	2,399,177	0.9		
PRIT Vintage 2020	1,056,278	0.4		
PRIT Vintage 2021	723,004	0.3		

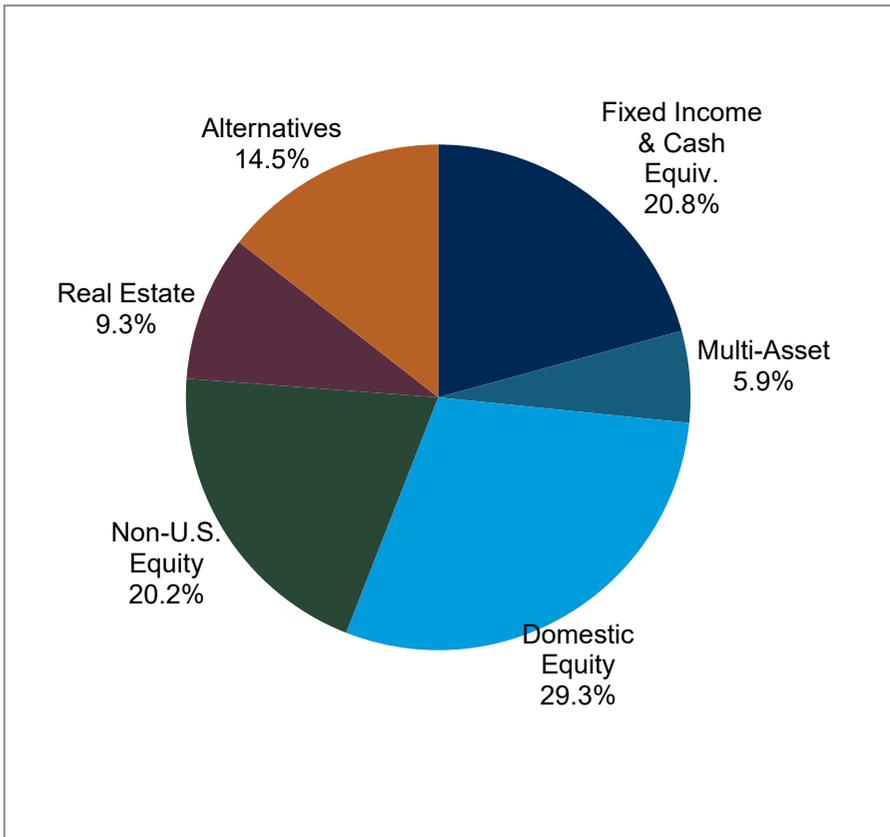
Investments with a zero balance were held in the portfolio during the reporting period and will be removed once they no longer impact portfolio performance.  
Asset Allocation weightings may not add up to 100% due to rounding.

# Watertown Retirement System

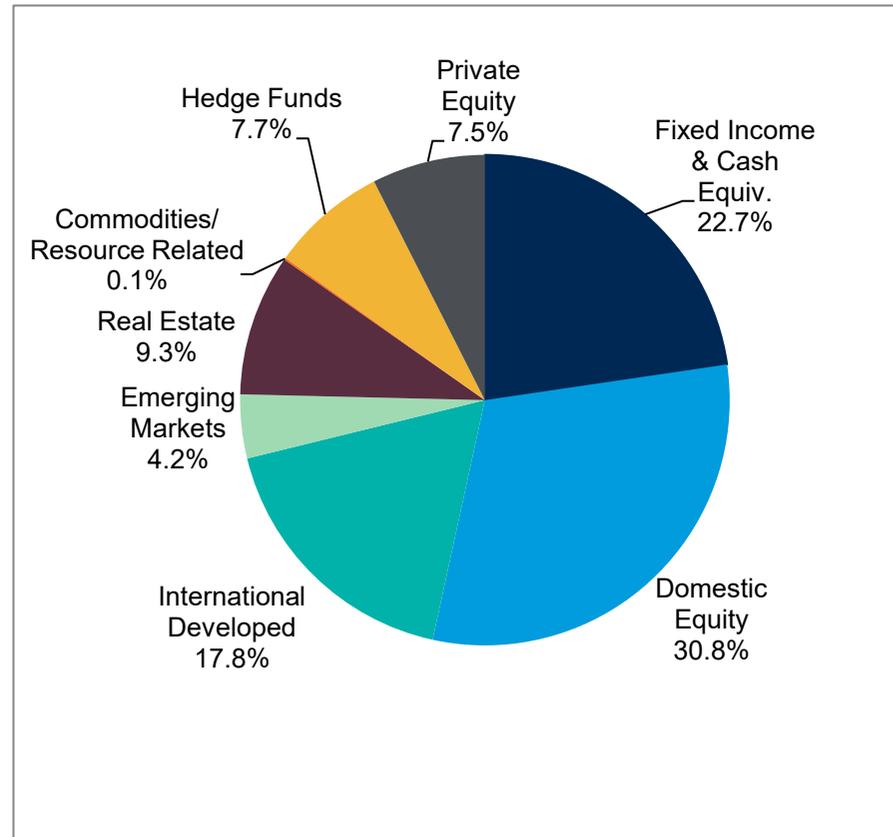
## Asset Allocation

As of September 30, 2021

Asset Allocation by Mandate Type



Asset Allocation by Asset Class



### Asset Class Look Through

**Wellington Opportunistic Investment Fund** allocation as of **9/30/2021** consisted of approximately: 34% fixed income & cash equivalents, 25% domestic equity, 27% developed international equity, 13% emerging markets and 1% commodities. Please note, percentages may not sum to 100 due to rounding.

**PineBridge Global Dynamic Asset Allocation Fund** allocation as of **9/30/2021** consisted of approximately: 32% fixed income & cash equivalents, 23% domestic equity, 6% developed international equity, 13% emerging markets, 3% commodities, and 23% hedge funds. Please note, percentages may not sum to 100 due to rounding.

#### International Breakdown:

- Earnest Partners - 65% developed, 35% emerging
- MFS International - 95% developed, 5% emerging
- Acadian Small Cap - 100% developed

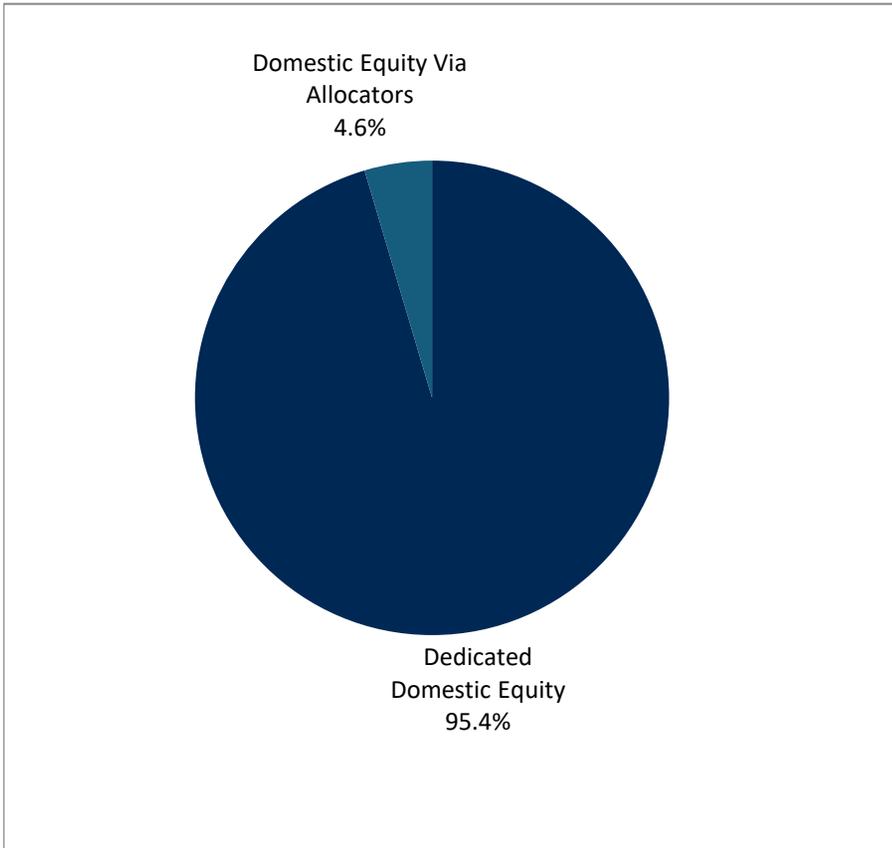
*DISCLAIMER: The "look through" information provided above has been gathered from sources deemed to be reliable, including Morningstar and the managers. The asset class look through on the right is designed to give a general representation of how portfolio assets are allocated among various asset classes. However, the information may include discrepancies, based on how managers classify certain holdings.*

# Watertown Retirement System

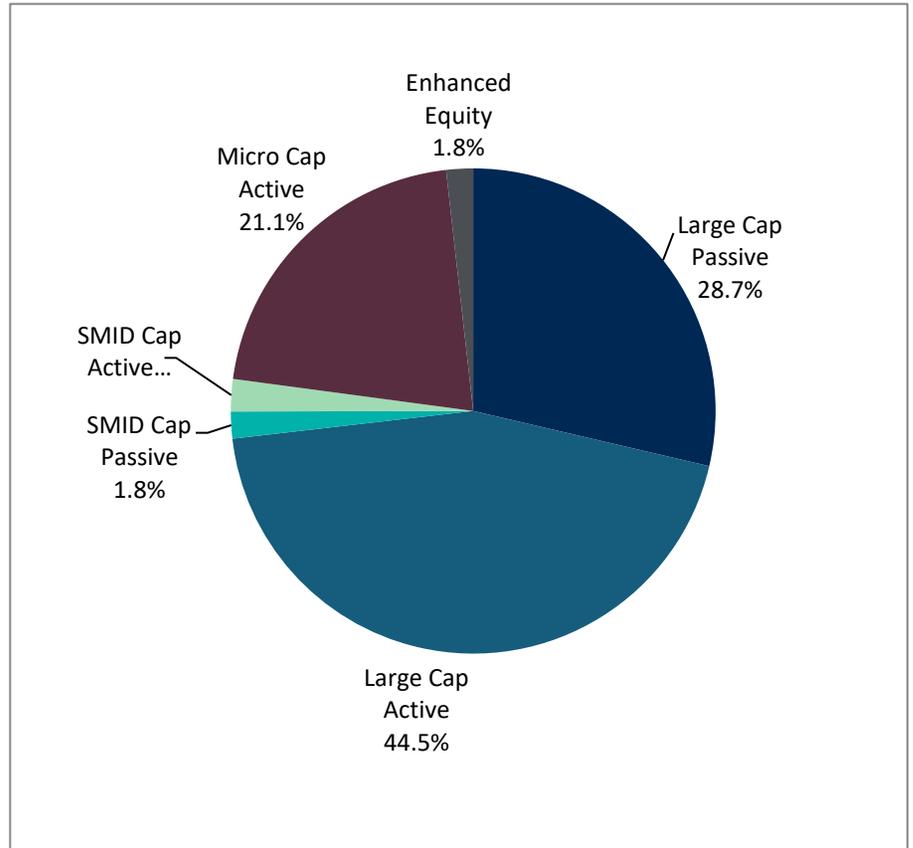
## Domestic Equity Look Through

As of September 30, 2021

### Asset Allocation by Mandate Type



### Asset Allocation by Asset Class



**PRIT Domestic Equity** allocation: 80% Passive Large Cap, 5% Passive SMID Cap (Russell 2500 Index), 6% Active SMID, 4% Active Micro Cap, 5% enhanced equity (put-spread-collar). Domestic Equity allocation in the Asset Allocation strategies assume the allocation in US Equity is primarily in large cap equity.

*DISCLAIMER: The "look through" information provided above has been gathered from sources deemed to be reliable, including Morningstar and the managers. The asset class look through on the right is designed to give a general representation of how portfolio assets are allocated among various asset classes. However, the information may include discrepancies, based on how managers classify certain holdings.*

# Total Plan Performance Summary

As of September 30, 2021

## Account Reconciliation

	QTR	YTD	Since Inception	Inception Date
<b>Total Fund Composite</b>				<b>10/01/1999</b>
Beginning Market Value	269,433,265	249,792,458	89,230,180	
Net Contributions	4,388,376	-1,233,213	34,210,395	
Total Gain/Loss	1,855,911	27,118,307	152,236,977	
Ending Market Value	275,677,552	275,677,552	275,677,552	
<p>** Data displayed in the Since Inception column is as of 1/1/2007. Historical market values and flow information prior to 1/1/2007 was not available from the prior consultant. The stated inception date of 10/1/1999 is the plan's performance inception date.</p>				

## Policy Index Composition

Allocation Mandate	Weight (%)
<b>Apr-2018</b>	
Blmbg. U.S. Aggregate Index	20.00
ICE BofAML US High Yield Master II Constrained	2.50
FTSE World Government Bond Index	2.50
Russell 3000 Index	35.00
MSCI AC World ex USA (Net)	20.00
MSCI EAFE Small Cap (net) Index	2.50
PRIM Custom Total RE Benchmark	10.00
HFRI Fund of Funds Composite Index	7.50

## Trailing Performance Summary

	QTR	YTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Inception	Inception Date
<b>Total Fund Composite</b>	<b>0.7</b>	<b>11.0</b>	<b>24.3</b>	<b>11.1</b>	<b>10.3</b>	<b>8.6</b>	<b>9.8</b>	<b>6.8</b>	<b>10/01/1999</b>
<i>Policy Index</i>	-0.2	7.5	18.5	10.2	10.0	8.4	9.8	6.7	
Difference	0.9	3.5	5.8	0.9	0.3	0.2	0.0	0.1	

## Calendar Year Performance Summary

	2020	2019	2018	2017	2016	2015	2014	2013
<b>Total Fund Composite</b>	<b>12.5</b>	<b>18.7</b>	<b>-4.9</b>	<b>15.6</b>	<b>6.6</b>	<b>1.0</b>	<b>6.6</b>	<b>15.6</b>
<i>Policy Index</i>	13.1	19.5	-4.9	15.8	7.4	0.4	6.1	16.7
Difference	-0.6	-0.8	0.0	-0.2	-0.8	0.6	0.5	-1.1

Investment performance history data prior to 3/31/2010 was sourced from prior consultant.

# Manager Performance Overview

As of September 30, 2021

	QTR	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Total Fund Composite</b>	<b>0.7</b>	<b>11.0</b>	<b>24.3</b>	<b>11.1</b>	<b>10.3</b>	<b>9.8</b>	<b>6.8</b>	<b>10/01/1999</b>
<i>Policy Index</i>	-0.2	7.5	18.5	10.2	10.0	9.8	6.7	
<b>PRIT General Allocation Fund **</b>	<b>2.3</b>	<b>13.8</b>	<b>24.8</b>	<b>11.6</b>	<b>11.1</b>	<b>10.3</b>	<b>9.4</b>	<b>02/01/1985</b>
<i>PRIT Benchmark</i>	1.7	12.4	23.0	11.7	11.0	10.1	10.0	
<b>Short Term Liquidity</b>								
<b>Collective US Govt STIF Fund</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.9</b>	<b>0.8</b>	<b>0.4</b>	<b>1.1</b>	<b>03/01/2004</b>
<i>90 Day U.S. Treasury Bill</i>	0.0	0.0	0.1	1.2	1.2	0.6	1.3	
<b>Fixed Income</b>	<b>-0.4</b>	<b>-1.1</b>	<b>2.1</b>	<b>6.0</b>	<b>3.8</b>	<b>4.1</b>	<b>4.4</b>	<b>04/01/2007</b>
<i>Fixed Income Benchmark</i>	0.0	-1.4	0.0	5.4	3.1	3.3	4.3	
<b>IRM Core Bond Fund LLC</b>	<b>0.1 (21)</b>	<b>-1.0 (37)</b>	<b>0.2 (52)</b>	<b>6.2 (25)</b>	<b>3.5 (25)</b>	<b>3.7 (17)</b>	<b>5.2 (17)</b>	<b>07/01/2000</b>
<i>Blmbg. U.S. Aggregate Index</i>	0.1	-1.6	-0.9	5.4	2.9	3.0	4.8	
IM U.S. Broad Market Core Fixed Income (MF) Median	0.0	-1.2	0.2	5.6	3.2	3.3	4.8	
<b>Eaton Vance Trust CIT High Yield Fund</b>	<b>0.7 (48)</b>	<b>4.3 (48)</b>	<b>10.4 (52)</b>	<b>6.4 (29)</b>	<b>N/A</b>	<b>N/A</b>	<b>6.3 (30)</b>	<b>04/01/2018</b>
<i>ICE BofAML US High Yield Master II Constrained</i>	0.9	4.7	11.5	6.6	N/A	N/A	6.7	
IM U.S. High Yield Bonds (MF) Median	0.7	4.2	10.5	5.9	N/A	N/A	5.8	
<b>Brandywine Global Opportunistic Fixed Income</b>	<b>-3.3 (98)</b>	<b>-4.8 (90)</b>	<b>5.2 (4)</b>	<b>4.7 (44)</b>	<b>3.2 (26)</b>	<b>3.5 (18)</b>	<b>3.5 (14)</b>	<b>06/01/2011</b>
<i>FTSE World Government Bond Index</i>	-1.2	-5.9	-3.3	3.7	1.4	1.1	1.3	
IM Global Fixed Income (MF) Median	-0.3	-2.1	0.9	4.6	2.6	2.6	2.4	
<b>Asset Allocation</b>	<b>-1.8</b>	<b>4.9</b>	<b>19.5</b>	<b>9.2</b>	<b>7.5</b>	<b>7.1</b>	<b>6.5</b>	<b>08/01/2010</b>
<i>65% MSCI AC World ND/ 35% Blmbg Brclys US Agg</i>	-0.6	6.6	17.0	10.4	9.8	8.9	8.2	
<b>WTC-CIF Opportunistic Invst Allocation</b>	<b>-3.3</b>	<b>4.5</b>	<b>19.3</b>	<b>10.7</b>	<b>8.6</b>	<b>7.6</b>	<b>5.7</b>	<b>11/01/2010</b>
<i>Wellington Opportunistic Index</i>	-0.6	6.6	17.0	10.4	9.8	9.0	7.9	
<b>PineBridge Global Dynamic Asset Allocation Fund LLC</b>	<b>-0.2</b>	<b>5.4</b>	<b>19.6</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>10.2</b>	<b>02/01/2019</b>
<i>60% MSCI AC World 40% BC AGG</i>	-0.6	5.9	15.5	N/A	N/A	N/A	12.4	

Returns for periods less than one year are not annualized. Returns are net of fees unless otherwise noted.

## Manager Performance Overview

As of September 30, 2021

	QTR	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Domestic Equity</b>	<b>-0.9</b>	<b>14.5</b>	<b>35.5</b>	<b>15.8</b>	<b>15.9</b>	<b>16.0</b>	<b>10.6</b>	<b>04/01/2007</b>
<i>Domestic Equity Benchmark</i>	-0.1	15.0	31.9	16.0	16.9	16.6	10.0	
<b>PRIT Domestic Equity</b>	<b>0.3 (38)</b>	<b>16.3 (28)</b>	<b>34.2 (15)</b>	<b>15.9 (34)</b>	<b>16.9 (27)</b>	<b>16.5 (21)</b>	<b>15.7 (19)</b>	<b>07/01/2010</b>
<i>PRIT Equity Benchmark</i>	-0.1	15.6	33.0	15.4	16.4	16.4	15.6	
IM U.S. Large Cap Core Equity (MF) Median	0.0	15.0	29.0	14.7	15.7	15.4	14.5	
<b>Columbia US Contrarian Core Equity Fund</b>	<b>-1.0 (85)</b>	<b>15.0 (53)</b>	<b>31.2 (25)</b>	<b>17.1 (14)</b>	<b>16.4 (36)</b>	<b>N/A</b>	<b>13.6 (21)</b>	<b>01/01/2015</b>
<i>Russell 1000 Index</i>	0.2	15.2	31.0	16.4	17.1	N/A	13.8	
IM U.S. Large Cap Core Equity (MF) Median	0.0	15.0	29.0	14.7	15.7	N/A	12.4	
<b>Wellington Small Cap 2000</b>	<b>-3.0 (70)</b>	<b>9.0 (95)</b>	<b>47.3 (68)</b>	<b>15.0 (4)</b>	<b>16.7 (2)</b>	<b>17.4 (2)</b>	<b>12.7 (1)</b>	<b>04/01/1991</b>
<i>Russell 2000 Index</i>	-4.4	12.4	47.7	10.5	13.5	14.6	10.2	
IM U.S. Small Cap Core Equity (MF) Median	-2.3	17.3	49.9	9.1	11.8	13.5	10.9	
<b>International Equity</b>	<b>-0.8</b>	<b>10.1</b>	<b>31.4</b>	<b>9.9</b>	<b>10.8</b>	<b>9.2</b>	<b>5.5</b>	<b>04/01/2007</b>
<i>International Equity Benchmark</i>	-2.6	6.4	24.5	8.2	9.1	7.9	3.8	
<b>Earnest Partners Intl Equity</b>	<b>-1.3 (32)</b>	<b>10.2 (12)</b>	<b>39.3 (1)</b>	<b>8.6 (31)</b>	<b>9.7 (15)</b>	<b>7.4 (40)</b>	<b>5.3 (14)</b>	<b>08/01/2008</b>
<i>MSCI AC World ex USA (Net)</i>	-3.0	5.9	23.9	8.0	8.9	7.5	4.1	
IM International Large Cap Core Equity (MF) Median	-2.0	7.7	26.0	6.8	7.7	7.1	3.7	
<b>MFS Intl International Equity Fund</b>	<b>-0.2 (9)</b>	<b>7.9 (47)</b>	<b>22.9 (70)</b>	<b>10.9 (10)</b>	<b>11.5 (9)</b>	<b>10.0 (1)</b>	<b>8.4 (1)</b>	<b>12/01/2010</b>
<i>MSCI EAFE (Net) Index</i>	-0.4	8.3	25.7	7.6	8.8	8.1	6.6	
IM International Large Cap Core Equity (MF) Median	-2.0	7.7	26.0	6.8	7.7	7.1	5.6	
<b>Acadian Intl Small Cap Fund</b>	<b>-1.0 (78)</b>	<b>16.0 (17)</b>	<b>33.8 (30)</b>	<b>10.1 (53)</b>	<b>11.8 (44)</b>	<b>12.2 (41)</b>	<b>9.8 (44)</b>	<b>02/01/2011</b>
<i>MSCI EAFE Small Cap (net) Index</i>	0.9	10.0	29.0	9.0	10.4	10.7	8.2	
IM International Small Cap Equity (SA+CF+MF) Median	0.1	12.3	31.7	10.4	11.3	11.6	9.3	

Returns for periods less than one year are not annualized. Returns are net of fees unless otherwise noted.

# Manager Performance Overview

As of September 30, 2021

	QTR	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>Real Estate</b>	<b>4.5</b>	<b>14.4</b>	<b>18.5</b>	<b>8.4</b>	<b>7.5</b>	<b>9.1</b>	<b>3.0</b>	<b>04/01/2007</b>
<i>Real Estate Benchmark</i>	2.8	8.4	12.0	6.2	6.3	8.9	6.6	
<b>PRIT Real Estate Fund</b>	<b>6.6</b>	<b>18.0</b>	<b>22.7</b>	<b>9.1</b>	<b>8.3</b>	<b>10.4</b>	<b>9.9</b>	<b>06/01/2011</b>
<i>PRIM Custom Total RE Benchmark</i>	2.8	8.4	12.0	6.2	6.2	9.1	9.0	
<b>TA Realty Core Property Fund, LP</b>	<b>0.0</b>	<b>7.7</b>	<b>11.5</b>	<b>8.0</b>	<b>N/A</b>	<b>N/A</b>	<b>10.0</b>	<b>04/01/2018</b>
<i>NCREIF Property Index</i>	5.2	10.9	12.1	6.7	N/A	N/A	6.8	
<b>American Strategic Value Realty Fund</b>	<b>0.0</b>	<b>6.6</b>	<b>7.5</b>	<b>6.1</b>	<b>N/A</b>	<b>N/A</b>	<b>6.1</b>	<b>07/01/2018</b>
<i>NCREIF Property Index</i>	5.2	10.9	12.1	6.7	N/A	N/A	6.7	
<b>TerraCap Partners IV</b>	<b>0.0</b>	<b>5.3</b>	<b>8.9</b>	<b>8.0</b>	<b>N/A</b>	<b>N/A</b>	<b>9.3</b>	<b>07/01/2018</b>
<i>NCREIF Property Index</i>	5.2	10.9	12.1	6.7	N/A	N/A	6.7	
<b>Hedge Funds</b>	<b>0.2</b>	<b>8.0</b>	<b>14.5</b>	<b>4.4</b>	<b>5.2</b>	<b>5.2</b>	<b>4.8</b>	<b>07/01/2010</b>
<i>HFRI Fund of Funds Composite Index</i>	0.7	5.7	14.3	6.5	5.8	4.5	4.1	
<b>PRIT Hedge Funds</b>	<b>0.2</b>	<b>8.0</b>	<b>14.5</b>	<b>4.4</b>	<b>5.2</b>	<b>5.2</b>	<b>4.8</b>	<b>07/01/2010</b>
<i>HFRI Fund of Funds Composite Index</i>	0.7	5.7	14.3	6.5	5.8	4.5	4.1	
<b>Private Equity</b>	<b>13.4</b>	<b>50.4</b>	<b>67.4</b>	<b>29.7</b>	<b>26.6</b>	<b>23.4</b>	<b>15.6</b>	<b>04/01/2007</b>
<b>RCP Fund IV</b>	<b>0.0</b>	<b>-1.1</b>	<b>-9.5</b>	<b>-7.3</b>	<b>4.1</b>	<b>14.4</b>	<b>13.1</b>	<b>01/01/2007</b>
<i>S&amp;P 500 + 5%</i>	1.8	20.2	36.5	21.8	22.7	22.5	15.6	
<b>PRIT VY Investments</b>	<b>13.4</b>	<b>50.5</b>	<b>67.6</b>	<b>30.5</b>	<b>26.9</b>	<b>13.2</b>	<b>7.3</b>	<b>04/01/2011</b>
<i>Russell 3000 Index</i>	-0.1	15.0	31.9	16.0	16.9	16.6	13.9	
<b>PRIT Vintage 2011</b>	<b>25.9</b>	<b>92.1</b>	<b>112.1</b>	<b>34.9</b>	<b>30.4</b>	<b>17.2</b>	<b>10.9</b>	<b>04/01/2011</b>
<i>Russell 3000 Index</i>	-0.1	15.0	31.9	16.0	16.9	16.6	13.9	
<b>PRIT Vintage 2012</b>	<b>10.1</b>	<b>44.3</b>	<b>56.3</b>	<b>29.9</b>	<b>27.0</b>	<b>N/A</b>	<b>-7.0</b>	<b>06/01/2012</b>
<i>Russell 3000 Index</i>	-0.1	15.0	31.9	16.0	16.9	N/A	15.8	
<b>PRIT Vintage 2013</b>	<b>12.0</b>	<b>77.4</b>	<b>116.6</b>	<b>44.1</b>	<b>32.6</b>	<b>N/A</b>	<b>18.0</b>	<b>07/01/2013</b>
<i>Russell 3000 Index</i>	-0.1	15.0	31.9	16.0	16.9	N/A	14.8	

Returns for periods less than one year are not annualized. Returns are net of fees unless otherwise noted.

## Manager Performance Overview

As of September 30, 2021

	QTR	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>PRIT Vintage 2014</b>	<b>12.7</b>	<b>39.2</b>	<b>48.6</b>	<b>28.6</b>	<b>27.4</b>	<b>N/A</b>	<b>12.8</b>	<b>06/01/2014</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>16.9</i>	<i>N/A</i>	<i>13.6</i>	
<b>PRIT Vintage 2015</b>	<b>15.7</b>	<b>55.7</b>	<b>76.9</b>	<b>38.3</b>	<b>32.4</b>	<b>N/A</b>	<b>21.8</b>	<b>04/01/2015</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>16.9</i>	<i>N/A</i>	<i>13.9</i>	
<b>PRIT Vintage 2016</b>	<b>15.1</b>	<b>49.2</b>	<b>68.1</b>	<b>28.0</b>	<b>15.2</b>	<b>N/A</b>	<b>5.6</b>	<b>04/01/2016</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>16.9</i>	<i>N/A</i>	<i>16.7</i>	
<b>PRIT Vintage 2017</b>	<b>16.3</b>	<b>48.0</b>	<b>63.3</b>	<b>25.2</b>	<b>N/A</b>	<b>N/A</b>	<b>18.5</b>	<b>05/01/2017</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>N/A</i>	<i>N/A</i>	<i>16.4</i>	
<b>PRIT Vintage 2018</b>	<b>13.0</b>	<b>42.9</b>	<b>61.2</b>	<b>19.0</b>	<b>N/A</b>	<b>N/A</b>	<b>12.0</b>	<b>06/01/2018</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>N/A</i>	<i>N/A</i>	<i>16.9</i>	
<b>PRIT Vintage 2019</b>	<b>12.1</b>	<b>46.5</b>	<b>56.1</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>24.4</b>	<b>04/01/2019</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>20.6</i>	
<b>PRIT Vintage 2020</b>	<b>5.1</b>	<b>26.6</b>	<b>37.2</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>22.5</b>	<b>03/01/2020</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>30.0</i>	
<b>PRIT Vintage 2021</b>	<b>2.2</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.2</b>	<b>04/01/2021</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>8.1</i>	

The inception date expressed on the Manager Performance Overview page(s) represents the first day of the first full month following the purchase of the investment. Performance figures shown at the fund level begin on this inception date. Your performance may differ slightly if the fund was purchased during the previous month. Actual performance is captured at the total plan level.

Investment returns are derived from custodian valuations and may deviate slightly from fund level returns displayed in other pages in your report which can result in minor differences in universe rankings. Mutual fund performance may differ from the current share class's historical performance due to share class exchanges.

\*\* PRIT General Allocation Fund performance is provided net of fees for comparative purposes only.

Returns for periods less than one year are not annualized. Returns are net of fees unless otherwise noted.

# Liquidity Analysis

As of September 30, 2021

Investment	Initial Lock-up Period	Terms	Investment Date
IRM Core Bond Fund	None	Daily liquidity: requires 5 business days notice	Jul-00
Eaton Vance Trust CIT High Yield Fund	None	Daily Liquidity	Mar-18
Brandywine Global Opportunistic Fund	None	Daily liquidity: contributions require 24 hours notice; redemptions require 10 days notice	Jun-11
Wellington Opportunistic Investment Allocation Fund	None	Monthly contributions and/or redemptions with 30 days notice	Nov-10
PRIT Domestic Equity Account	None	Monthly liquidity for contributions and withdrawals on first business day; redemptions require 5 days notice	Jul-10
Columbia U.S. Contrarian Core Equity Fund	None	Monthly liquidity for contributions; withdrawals on first business day with wire T+10 business days; 30 days notice required	Jan-15
Wellington Small Cap 2000 Portfolio	None	Monthly liquidity for contributions and withdrawals on first business day; notice by 22nd prior to month the flow occurs	Oct-99
Earnest Partners International Equity Fund	None	Monthly liquidity for contributions and withdrawals; 5 business days notice required	Aug-08
MFS Institutional International Equity Fund	None	Daily liquidity for contributions and withdrawals, subject to T+1	Dec-10
Acadian International Small Cap Fund	None	Daily liquidity for contributions and withdrawals, 7 business days requested	Feb-11
PRIT Real Estate Fund	None	Monthly liquidity for contributions and withdrawals on first business day; 5 days notice required	Jun-11
TA Realty Core Property Fund, LP	Reducing percentage over 3 year period	Quarterly liquidity for withdrawals on first business day; 45 days notice required.	Apr-18
American Strategic Value Realty Fund	One-year	Quarterly liquidity for withdrawals on first business day subject to liquidity restraints due to fund activity; 30 days notice required	Jul-18
TerraCap Partners IV	8 year term plus two one-year extension options	Not applicable	Aug-18
PRIT Hedge Funds	None	Quarterly liquidity for contributions and withdrawals on first business day; 30 days notice required	Jul-10
RCP Fund IV	Term expires 12/31/18 and is subject to three one-year extensions	Not applicable	Jan-07
PRIT Vintage Year Funds	Illiquid Generally 10-15 Years	Commitments must be made annually in December. Drawdowns occur monthly on first business day.	Apr-11

## Summary of Private Equity Investments

As of September 30, 2021

### Direct/Non-Core Real Estate<sup>1</sup>

Investment	Commitment	Adjusted Commitment	Drawdowns to Date	% Drawn	Remaining Commitment	Distributions to Date	Ending Capital Balance	Notes on Fund Terms/Extensions
TerraCap Partners IV	\$1,000,000	N/A	\$1,000,000	100.0%	\$0	\$433,827	\$854,822	The fund was fully called on July 17, 2018 including \$58,438 in notional interest also due
<b>Total Private Real Estate</b>	<b>\$1,000,000</b>		<b>\$1,000,000</b>	<b>100.0%</b>	<b>\$0</b>	<b>\$433,827</b>	<b>\$854,822</b>	

### Private Equity<sup>2</sup>

Investment	Commitment	Adjusted Commitment <sup>3</sup>	Drawdowns to Date	% Drawn <sup>3</sup>	Remaining Commitment	Distributions to Date	Ending Capital Balance	Notes on Fund Terms/Extensions
RCP Fund IV	\$3,000,000	\$3,000,000	\$3,314,717	110.5%	\$0	\$6,453,447	\$8,320	Term expires December 31, 2018 and is subject to three one-year extensions.
<b>PRIT VY Program<sup>4</sup></b>								
PRIT Vintage 2011	\$1,500,000	\$1,372,500	\$1,242,361	82.8%	\$257,639	\$2,241,708	\$1,116,667	Illiquid: 10-15 time horizon
PRIT Vintage 2012	\$1,500,000	\$942,957	\$867,564	57.8%	\$632,436	\$1,094,761	\$1,343,849	Illiquid: 10-15 time horizon
PRIT Vintage 2013	\$1,500,000	\$1,141,688	\$1,053,724	70.2%	\$446,276	\$1,170,111	\$1,609,243	Illiquid: 10-15 time horizon
PRIT Vintage 2014	\$1,500,000	\$1,362,271	\$1,219,807	81.3%	\$280,193	\$990,684	\$1,813,087	Illiquid: 10-15 time horizon
PRIT Vintage 2015	\$2,000,000	\$1,646,632	\$1,497,845	74.9%	\$502,155	\$1,163,469	\$2,943,750	Illiquid: 10-15 time horizon
PRIT Vintage 2016	\$2,000,000	\$1,108,608	\$920,841	46.0%	\$1,079,159	\$264,198	\$1,464,071	Illiquid: 10-15 time horizon
PRIT Vintage 2017	\$3,000,000	\$3,114,984	\$2,093,313	69.8%	\$906,687	\$304,065	\$3,396,635	Illiquid: 10-15 time horizon
PRIT Vintage 2018	\$3,000,000	\$2,871,599	\$1,928,791	64.3%	\$1,071,209	\$213,092	\$2,750,390	Illiquid: 10-15 time horizon
PRIT Vintage 2019	\$3,500,000	\$3,302,186	\$1,894,758	54.1%	\$1,605,242	\$402,751	\$2,399,177	Illiquid: 10-15 time horizon
PRIT Vintage 2020	\$3,500,000	\$3,523,193	\$979,954	28.0%	\$2,520,046	\$2,728	\$1,056,278	Illiquid: 10-15 time horizon
PRIT Vintage 2021	\$5,000,000	\$2,624,918	\$807,559	16.2%	\$4,192,441	-\$283	\$723,004	Illiquid: 10-15 time horizon
<b>Total PRIT VY Program</b>	<b>\$28,000,000</b>	<b>\$23,011,536</b>	<b>\$14,506,517</b>	<b>51.8%</b>	<b>\$13,493,483</b>	<b>\$7,847,284</b>	<b>\$20,616,151</b>	
<b>Total Private Equity</b>	<b>\$31,000,000</b>	<b>\$26,011,536</b>	<b>\$17,821,234</b>	<b>57.5%</b>	<b>\$13,493,483</b>	<b>\$14,300,731</b>	<b>\$20,624,471</b>	

<sup>1</sup>Ending capital balances for TerraCap Partners IV is as of 6/30/21 and are adjusted for any capital activity during the current quarter.

<sup>2</sup>Ending capital balances for RCP IV is reported on a quarter lag as of 6/30/21 and adjusted for any capital activity in the current quarter.

<sup>3</sup>The adjusted commitment is expected to fluctuate widely over the first two years of the initial investment period for each PRIT vintage year. The figure represents the capital commitment adjusted for what PRIM expects to fully commit for a given vintage year once all deals are close to final. There is no guarantee that a participating system will reach its expected commitment in full. The % drawn value is calculated based on the unadjusted commitment.

<sup>4</sup>Ending capital balances for PRIT VY Program assets are reported as of 9/30/2021.

DISCLOSURE: The figures on this page have been obtained from sources we deem to be reliable. Fiducient Advisors has not independently verified this information.

## Estimated Fee Analysis

As of September 30, 2021

Manager	Target Allocation	Market Value	Fee Schedule <sup>2</sup>	Estimated Annualized Totals <sup>1</sup>
IRM Core Bond Fund	17.0%	40,214,049	0.28%	\$112,599
Eaton Vance Trust CIT High Yield Fund	2.5%	6,015,162	0.50%	\$30,076
Brandywine Global Opportunistic Fixed Income	4.0%	9,234,679	0.45%	\$41,556
Wellington Opportunistic Investment Allocation <sup>3</sup>	3.0%	7,946,022	0.65%	\$51,649
PineBridge Global Dynamic Asset Allocation	3.0%	8,199,462	0.75%	\$61,496
PRIT Domestic Equity	10.5%	30,360,587	0.08%	\$24,288
Columbia U.S. Contrarian Core Equity Private Fund	12.0%	34,414,999	0.50%	\$172,075
Wellington Small Cap 2000 Portfolio <sup>3</sup>	5.7%	16,094,535	0.90% on first \$25 Mil; 0.80% on next \$25 Mil; 0.70% on next \$50 Mil; negotiable thereafter	\$144,851
EARNEST Partners International Equity	8.6%	24,240,677	1.00%	\$242,407
MFS Institutional International Equity	8.6%	23,260,284	0.71%	\$165,148
Acadian International Small Cap Equity	2.6%	8,278,502	0.75%	\$62,089
PRIT Core Real Estate <sup>4</sup>	7.0%	17,967,307	0.49%	\$88,040
TA Realty Core Property Fund, LP	1.5%	4,677,695	0.70%	\$32,744
American Strategic Value Realty Fund <sup>5</sup>	1.0%	2,246,178	1.25% on first \$10 Mil; 1.20% on next \$15 Mil; 1.10% on next \$25 Mil; 1.00% thereafter	\$28,077
TerraCap Partners IV <sup>6</sup>	0.5%	854,822	1.50%	\$12,822
PRIT Hedge Funds <sup>4</sup>	7.5%	19,288,515	0.96%	\$185,170
RCP Fund IV	5.0%	8,320	0.75% of contributions	No longer charging management fee
PRIT Vintage Year Portfolios <sup>4</sup>		20,616,151	1.00%	\$206,162
<b>Average Weighted Investment Management Fee</b>			<b>0.61%</b>	<b>Approximately \$1,660,000</b>

TerraCap and RCP valued as of 6/30/2021, adjusted for capital calls and distributions in the quarter.

Footnotes: <sup>1</sup>Estimated Annualized Totals does not include applicable incentive fees. <sup>2</sup>Management fees for commingled funds may not include additional underlying fund expenses such as custody, audit, legal and administrative expenses that are typically deducted from the net asset value of the fund. <sup>3</sup>Wellington: Opportunistic Investment Allocation Fund fee structure changed to performance based with a lower base fee of 0.65% effective 1/1/2015; the maximum annual fee provided that the manager meets performance based objectives is the original fee of 1.10%; Wellington has waived minimum annual fee for the Small Cap 2000 portfolio. <sup>4</sup>PRIT Investments reflect expense ratios as of most recent fiscal year end (FY 2021 CAFR) and will vary year-to-year depending on performance incentive fees paid out to managers. Fees for Vintage Year portfolios vary widely; the estimated fee of 1.00% is expected as the management fee over the life of the investments. <sup>5</sup>American Strategic Value Realty Fund fee reflects base fee not including carried interest of 20% after 10% preferred return. <sup>6</sup>TerraCap Partners IV fee reflects base fee not including carried interest of 20% after 8% preferred return and 30% after 15% secondary preferred return.

DISCLOSURE: The figures on this page have been obtained from sources we deem to be reliable. Fiduciant Advisors has not independently verified this information.

**The Watertown Retirement System**  
**Investment Mandates - Procurement Review**  
 Updated as of November 2021

Color legend: Near term expirations - Extend or Issue RFP in next 6 months  
Issue RFP in next 12 months

Asset Class	Style	Manager/Mandate	RFP Last Issued (Mo/Yr)	Most Recent IMA/Contract/ Side Letter Date (Mo/Yr)	Current Length of Term (Yrs)	Current Term/Contract Expiration (Mo/Yr)	Status of Extensions	New Term/Contract Expiration (Mo/Yr)	Anticipated RFP/Search Date
Fixed Income	Core/Core Plus	IRM Core Bond Fund (CF)	Feb-21	Nov-21	7	Nov-28	N/A	Nov-28	May-27
	High Yield	Eaton Vance Trust High Yield Fund (CF)	Jun-17	Feb-18	7	Feb-25	N/A	Feb-25	Aug-24
	Global Bonds	Brandywine Global Opportunistic Bond Fund (CF)	May-17	Jul-17	7	Jul-24	N/A	Jul-24	Jan-24
Domestic Equity	Core Equity	PRIT Domestic Equity Account	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Core Equity	Columbia Contrarian Core Equity Private Fund (CF)	Jul-21	Nov-14	5	Nov-19	2 Years	Nov-21	Search Issued Jul-21
	Mid Cap	Lee Munder Mid Cap Core Collective Fund (CF)	Jan-18	Mar-18	7	Mar-25	N/A	Mar-25	Sep-24
	Small Cap	Wellington Small Cap 2000 Portfolio (CF)	Feb-17	Jul-17	7	Jul-24	N/A	Jul-24	Jan-24
International Equity	International Equity	Earnest Partners International Pooled Group Trust (CF)	Apr-21	Oct-14	5	Oct-19	2 Years	Oct-21	Search Issued Apr-21
	International Equity	MFS Instl International Equity (MF)	Apr-21	Sep-21	7	Sep-28	N/A	Sep-28	Mar-28
	International Small Cap	Acadian Int'l Small Cap (CF)	Feb-17	Jun-17	7	Jun-24	N/A	June-24	Dec-23
Asset Allocation	Asset Allocation	Wellington Opportunistic Investment Allocation (CF)	Jun-18	Nov-18	7	Nov-25	N/A	Nov-25	May-25
	Asset Allocation	PineBridge Global Dynamic Asset Allocation (CF)	Jun-18	Nov-18	7	Nov-25	N/A	Nov-25	May-25
Real Estate	Real Estate	PRIT Real Estate Account	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Real Estate	American Realty Advisors Strategic Value Realty	Dec-17	Jun-18	7	Jun-25	N/A	Jun-25	Dec-24
	Real Estate	TA Realty Core Property Fund	Sep-17	Mar-18	7	Mar-25	N/A	Mar-25	Sep-24
	Real Estate (Illiquid)	TerraCap Management TerraCap Partners IV	Dec-17	N/A	Closed End	N/A	N/A	N/A	N/A
	Real Estate (Winding Down)	Arsenal Real Estate	Illiquid Inherited	N/A	Closed End	N/A	N/A	N/A	N/A
Hedge Funds	Hedge Funds	PRIT Hedge Funds Account	N/A	N/A	N/A	N/A	N/A	N/A	
Private Equity	Private Equity (Illiquid)	Auda Ventures LP	Illiquid Inherited	N/A	Closed End	N/A	N/A	N/A	N/A
	Private Equity (Illiquid)	RCP IV	Illiquid Inherited	N/A	Closed End	N/A	N/A	N/A	N/A
	Private Equity (Illiquid)	PRIT Vintage Year	N/A	N/A	Closed End	N/A	N/A	N/A	N/A
Other Investment Related Vendors	Custodian	People's United Bank	Apr-18	Nov-18	7	Nov-25	N/A	Nov-25	May-25
	Investment Consultant	Fiduciary Investment Advisors	Jan-15	Mar-15	5	Mar-20	2 Years	March-22	Sep-21
	Actuarial Services	Sherman Actuarial Services	Nov-19	Feb-20	4	Feb-24	N/A	Feb-24	Aug-23
	Legal Services	Attorney Thomas Gibson	Sep-18	Nov-18	7	Nov-25	N/A	Nov-25	May-25

# Manager Commentary

As of September 30, 2021

Manager	Manager Status	Comments
<b>Fixed Income</b>		
IRM Core Bond Fund LLC	Maintain	3Q 2021 – The IR+M strategy produced a positive return during the third quarter and outpaced the Bloomberg U.S. Aggregate Bond Index. The broad fixed income market was essentially flat in the period as rising interest rates in September offset favorable results earlier in the quarter. (+) The portfolio’s overweight to CMBS and an underweight to fixed rate MBS contributed to results. (+) Issue selection was favorable across sectors with positive relative performance in financials, industrials and MBS. (-) An underweight to Treasuries was a slight headwind in the period.
Eaton Vance Trust CIT High Yield Fund	Maintain	3Q 2021 - Commentary not available at time of report production.
Brandywine Global Opportunistic Fixed Income	Maintain	3Q 2021 - The strategy generated a negative return and underperformed its benchmark during the quarter. Investment grade fixed income markets were slightly positive during the quarter despite headwinds from rising rates and wider spreads. (+) An overweight allocation to investment grade bonds in energy and industrials added to relative returns. (-) Overweight to local currency bonds in Mexico detracted from relative returns. (-) An Overweight to Brazil and South Africa in the emerging markets detracted from returns.
<b>Asset Allocation</b>		
WTC-CIF Opportunistic Invst Allocation	Discuss 3Q 2021	3Q 2021 – The Wellington strategy declined during the third quarter and underperformed the blended benchmark (65% MSCI AC World Index/35% Barclays U.S. Aggregate Bond Index). Global financial markets took a step back in September erasing the favorable results from earlier in the quarter. U.S. markets generally outpaced their international counterparts and growth stocks outperformed value. Within fixed income, rates moved higher putting negative pressure on bond prices. The strategy added a new component to the Activist Government theme during the quarter through a Crypto Equities position. This accounts for approximately 1% of the portfolio and invests in crypto and blockchain related equities, not crypto currencies directly. (-) The portfolio’s Transportation Disruption theme, notably the long/short auto-related sleeve, was the largest detractor in the period as many of the electric vehicle and component makers saw a pullback in valuations. (-) Information Inefficiencies and Healthcare Innovation also weighed on relative performance in the third quarter. (+) The Japan’s New Decade theme was the strategy’s top contributor due to the special situations component.  The Wellington strategy was placed on discuss following the announcement of Scott Elliott's upcoming retirement in June 2022. Mr. Elliott was the founding architect of the strategy but has not had day-to-day portfolio management responsibilities since 2014. Brian Garvey remains as the lead portfolio manager.
PineBridge Global Dynamic Asset Allocation Fund LLC	Maintain	3Q 2021 - Commentary not available at time of report production.
<b>Domestic Equity</b>		
PRIT Domestic Equity	Maintain	3Q 2021 - Commentary not available at time of report production.
Columbia US Contrarian Core Equity Fund	Maintain	3Q 2021 - Commentary not available at time of report production.
Wellington Small Cap 2000	Maintain	3Q 2021 - Commentary not available at time of report production.
<b>International Equity</b>		
Earnest Partners Intl Equity	Maintain	3Q 2021 - Commentary not available at time of report production.

# Manager Commentary

As of September 30, 2021

Manager	Manager Status	Comments
MFS Instl International Equity Fund	Maintain	<p>3Q 2021 - The Strategy declined during the quarter but outperformed the MSCI EAFE Index. Both developed foreign and emerging market stocks posted negative returns during the quarter. Within developed markets small caps beat large caps and growth outpaced value. Style trends differed within emerging markets with value and small cap stocks fairing best. Regionally, Japan and the Netherlands were among the strongest performers while Hong Kong and Germany were laggards within the index.</p> <p>(+) Strong stock selection in industrials was the principal contributor to performance (+0.9%) during the third quarter.</p> <p>(+) Stock selection in health care was also beneficial adding another 0.7% for the most recent calendar year quarter.</p> <p>(-) Weak stock selection in the Netherlands had the most damaging impact on performance (-0.5%) throughout the third quarter.</p> <p>(-) Between January 1 and September 30, unfavorable stock selection in the Netherlands was the biggest performance hindrance (-0.7%).</p> <p>(+) For the past 3 years, effective stock selection in health care was the largest contributor to performance (+4%).</p> <p>As of 8/31/2021, the chief sector or country overweights (versus the MSCI EAFE Index) were in France (+6%), Switzerland (+4%), and health care (+4.2%). The biggest underweights were in Australia (-7%), Japan (-7%), and the United Kingdom (-4%). The cash allocation was 1.6%.</p>
Acadian Intl Small Cap Fund	Maintain	<p>3Q 2021 – The strategy posted a negative total return and underperformed the MSCI EAFE Small Cap Index in the third quarter. Both developed foreign and emerging market stocks posted negative returns during the quarter. Within developed markets small caps beat large caps and growth outpaced value. Style trends differed within emerging markets with value and small cap stocks fairing best. Regionally, Israel and Japan were among the strongest performers while Hong Kong and Finland were laggards within the index.</p> <p>(-) Security selection in the industrials sector was the largest detractor from performance in the third quarter.</p> <p>(-) Security selection in the materials and consumer discretionary sectors also weighed on quarterly performance.</p> <p>(-) On a geographic basis, stock selection in Australia and Japan negatively impacted returns in the quarter.</p> <p>(+) In contrast, security selection in the health care and information technology sectors provided a boost to results.</p> <p>(+) From a geographic perspective, stock picking in Israel and Ireland added value in the third quarter.</p>
<b>Real Estate</b>		
PRIT Real Estate Fund	Maintain	<p>The PRIT Real Estate Account provides diversified exposure to the commercial real estate market through exposure to physical assets and public securities. Approximately 80% of the portfolio is invested in separate account core portfolios with Invesco, LaSalle, AEW, and JP Morgan. The Core portfolio includes portfolio debt of approximately \$1 billion. The portfolio also includes dedicated allocations to Global REIT portfolios managed by CenterSquare, Invesco, Presima, and Brookfield. Non-Core portfolio investments of approximately \$500 million include allocations with Carlyle Group and DivcoWest. There is also a modest allocation to economically targeted investments. The PRIT board expects to identify additional real estate opportunities in the upcoming year and will formally evaluate their advisory relationship. Townsend currently serves as Real Estate Consultant.</p>
TA Realty Core Property Fund, LP	Maintain	<p>3Q 2021 – The TA Realty Core Property Fund generated a gross return of 11.14% (10.96% net) during the third quarter, comprised of 0.85% income and 10.29% appreciation. Portfolio occupancy stands at 93% as of quarter end with a leverage ratio of 22.2%. The portfolio made six acquisitions during the quarter, including one industrial property, one retail property, and four multifamily properties. There were no dispositions made this period. Acquisition costs totaled \$423 million in the period. Positioning remains with large overweights to industrial and multifamily relative to the ODCE and with underweights to retail and office. The main drivers of relative outperformance continues to come from these allocation stances.</p>
American Strategic Value Realty Fund	Maintain	3Q 2021 - Commentary not available at time of report production.
TerraCap Partners IV	Maintain	3Q 2021 - Commentary not available at time of report production.
<b>Hedge Funds</b>		
PRIT Hedge Funds	Maintain	<p>The PRIT Hedge Fund segmented portfolio consists primarily of direct hedge funds which comprise approximately 85% of the capital invested across 28 direct fund investments. The portfolio's active Fund of Funds allocation, which accounts for 15% of the program, focuses on emerging managers and is managed by PAAMCO. Residual capital in the fund of funds closed portfolios is being overseen and actively wound down by Arden, advisor to the PRIM Board. Earlier in 2017, the PRIM Board merged the 4% target allocation to portfolio completion strategies, which currently includes three risk premia strategies, a residential real estate holding, an agricultural investment and an equity hedge, with the 9% hedge fund allocation for a combined PCS allocation of 13%. Participating investors will continue to access the Hedge Funds sleeve on a stand-alone basis.</p>

## Manager Commentary

As of September 30, 2021

Manager	Manager Status	Comments
<b>Private Equity</b>		
RCP Fund IV	Illiquid Inherited	This Fund is reported on a one quarter lag. As of December 31, 2016 the Fund reported a new IRR of 14.3% and has returned a total of 134.4% of paid in capital to investors. The portfolio made its 37th distribution during the fourth quarter following multiple liquidity events in the underlying portfolio. The portfolio's net return on invested capital ended the quarter at 1.9x. Both the IRR and multiples moved slightly higher during the quarter. The portfolio has also made additional distributions early in 2017 although a portion was held back as a capital call.
PRIT VY Investments	Maintain	The PRIT Private Equity Vintage year program is raised annually seeking to make approximately 30 investment decisions per year. The strategy has two key components: special equity and venture capital. Special equity is comprised of opportunities across large buyouts, small and mid-cap buyouts, and growth equity. The portfolio is built through commitments to a number of private partnerships and can also include co-investments. The private equity program is overseen by Senior Investment Officer, Michael Bailey.

## Manager Investment Gain/Loss Summary

Quarter Ending September 30, 2021

	Market Value As of 07/01/2021	Net Flows	Return On Investment	Market Value As of 09/30/2021
<u>Short Term Liquidity</u>				
Collective US Govt STIF Fund	1,805,498	-45,892	-	1,759,606
<b>Total Short Term Liquidity</b>	<b>1,805,498</b>	<b>-45,892</b>	<b>-</b>	<b>1,759,606</b>
<u>Fixed Income</u>				
IRM Core Bond Fund LLC	36,977,060	3,200,000	36,989	40,214,049
Eaton Vance Trust CIT High Yield Fund	5,974,273	-	40,888	6,015,162
Brandywine Global Opportunistic Fixed Income	9,553,527	-	-318,848	9,234,679
<b>Total Fixed Income</b>	<b>52,504,860</b>	<b>3,200,000</b>	<b>-240,970</b>	<b>55,463,890</b>
<u>Asset Allocation</u>				
WTC-CIF Opportunistic Invst Allocation	8,218,320	-	-272,298	7,946,022
PineBridge Global Dynamic Asset Allocation Fund LLC	8,215,326	-	-15,864	8,199,462
<b>Total Asset Allocation</b>	<b>16,433,646</b>	<b>-</b>	<b>-288,162</b>	<b>16,145,484</b>
<u>Domestic Equity</u>				
PRIT Domestic Equity	22,724,291	7,700,000	-63,704	30,360,587
Columbia US Contrarian Core Equity Fund	34,768,958	-	-353,959	34,414,999
LMCG Mid Cap Collective Fund	15,491,489	-15,451,550	-39,939	-
Wellington Small Cap 2000	8,700,164	7,700,000	-305,629	16,094,535
<b>Total Domestic Equity</b>	<b>81,684,902</b>	<b>-51,550</b>	<b>-763,231</b>	<b>80,870,121</b>
<u>International Equity</u>				
Earnest Partners Intl Equity	24,557,919	-	-317,243	24,240,677
MFS Intl International Equity Fund	23,302,511	-	-42,227	23,260,284
Acadian Intl Small Cap Fund	8,359,563	-	-81,061	8,278,502
<b>Total International Equity</b>	<b>56,219,993</b>	<b>-</b>	<b>-440,531</b>	<b>55,779,462</b>

## Manager Investment Gain/Loss Summary

Quarter Ending September 30, 2021

	Market Value As of 07/01/2021	Net Flows	Return On Investment	Market Value As of 09/30/2021
<u>Real Estate</u>				
PRIT Real Estate Fund	16,068,359	800,000	1,098,948	17,967,307
TA Realty Core Property Fund, LP	4,677,695	-	-	4,677,695
American Strategic Value Realty Fund	2,246,178	-	-	2,246,178
TerraCap Partners IV	860,652	-5,830	-	854,822
<b>Total Real Estate</b>	<b>23,852,884</b>	<b>794,170</b>	<b>1,098,949</b>	<b>25,746,003</b>
<u>Hedge Funds</u>				
PRIT Hedge Funds	19,243,405	-	45,110	19,288,515
<b>Total Hedge Funds</b>	<b>19,243,405</b>	<b>-</b>	<b>45,110</b>	<b>19,288,515</b>
<u>Private Equity</u>				
RCP Fund IV	8,320	-	-	8,320
PRIT Vintage 2011	958,109	-72,059	230,618	1,116,667
PRIT Vintage 2012	1,303,818	-83,782	123,813	1,343,849
PRIT Vintage 2013	1,538,227	-101,908	172,925	1,609,243
PRIT Vintage 2014	1,666,122	-57,466	204,430	1,813,087
PRIT Vintage 2015	2,784,061	-241,165	400,855	2,943,750
PRIT Vintage 2016	1,247,387	24,851	191,833	1,464,071
PRIT Vintage 2017	2,851,904	69,337	475,394	3,396,635
PRIT Vintage 2018	2,335,160	97,912	317,318	2,750,390
PRIT Vintage 2019	2,049,260	90,541	259,377	2,399,177
PRIT Vintage 2020	583,416	420,481	52,382	1,056,278
PRIT Vintage 2021	362,294	344,906	15,804	723,004
<b>Total Private Equity</b>	<b>17,688,077</b>	<b>491,647</b>	<b>2,444,747</b>	<b>20,624,471</b>
<b>Total Fund Composite</b>	<b>269,433,265</b>	<b>4,388,376</b>	<b>1,855,911</b>	<b>275,677,552</b>

## Market Value & Flow Summary

January 1, 2007 To September 30, 2021

Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
Dec-2006	-	-	-	89,230,180	N/A
Mar-2007	89,230,180	-1,452,000	2,119,807	89,897,987	2.3
Jun-2007	89,897,987	-1,819,719	4,083,544	92,161,812	4.6
Sep-2007	92,161,812	4,632,269	846,853	97,640,934	0.9
Dec-2007	97,640,934	-1,249,275	-1,131,003	95,260,656	-1.2
Mar-2008	95,260,656	-1,792,164	-5,030,268	88,438,224	-5.3
Jun-2008	88,438,224	-1,815,961	78,271	86,700,534	0.1
Sep-2008	86,700,534	4,911,404	-8,574,440	83,037,498	-9.2
Dec-2008	83,037,498	-1,492,765	-13,101,380	68,443,353	-15.8
Mar-2009	68,443,353	-1,235,448	-5,286,840	61,921,064	-7.7
Jun-2009	61,921,064	545,007	6,676,722	69,142,792	10.8
Sep-2009	69,142,792	2,411,486	7,754,039	79,308,316	10.9
Dec-2009	79,308,316	-1,279,156	2,632,754	80,661,914	3.4
Mar-2010	80,661,914	-1,922,947	3,126,385	81,865,352	4.1
Jun-2010	81,865,352	-1,925,000	-4,203,687	75,736,665	-5.2
Sep-2010	75,736,665	5,886,079	6,954,108	88,576,852	8.4
Dec-2010	88,576,852	-1,724,125	5,510,048	92,362,776	6.3
Mar-2011	92,362,776	-1,700,936	4,147,117	94,808,957	4.5
Jun-2011	94,808,957	-1,865,526	211,020	93,154,452	0.2
Sep-2011	93,154,452	6,658,409	-10,467,449	89,345,412	-10.4
Dec-2011	89,345,412	-2,092,157	4,734,765	91,988,020	5.3
Mar-2012	91,988,020	-2,409,805	7,144,754	96,722,969	7.8
Jun-2012	96,722,969	-1,772,726	-2,681,394	92,268,849	-2.8
Sep-2012	92,268,849	7,452,391	4,711,288	104,432,529	4.7
Dec-2012	104,432,529	-2,350,397	2,444,417	104,526,549	2.4
Mar-2013	104,526,549	-1,858,369	5,250,456	107,918,636	5.0
Jun-2013	107,918,636	-1,987,842	233,385	106,164,179	0.2
Sep-2013	106,164,179	8,048,762	4,867,503	119,080,444	4.2
Dec-2013	119,080,444	-2,186,900	6,362,761	123,256,305	5.4
Mar-2014	123,256,305	-2,278,454	2,325,881	123,303,733	1.9
Jun-2014	123,303,733	-2,288,304	4,577,761	125,593,191	3.8

## Market Value & Flow Summary

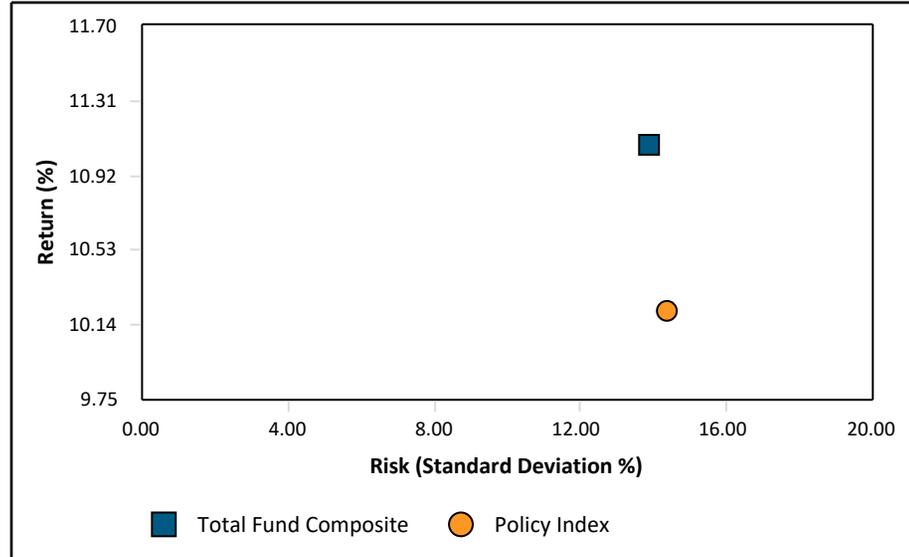
January 1, 2007 To September 30, 2021

Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
Sep-2014	125,593,191	10,268,246	-1,388,534	134,472,902	-1.0
Dec-2014	134,472,902	-2,378,442	2,458,142	134,552,603	1.8
Mar-2015	134,552,603	-2,246,378	3,961,230	136,267,455	3.0
Jun-2015	136,267,455	-2,431,339	626,466	134,462,581	0.4
Sep-2015	134,462,581	11,403,254	-7,359,560	138,506,275	-5.0
Dec-2015	138,506,275	-2,460,269	3,853,192	139,899,197	2.8
Mar-2016	139,899,197	-2,498,851	819,948	138,220,294	0.6
Jun-2016	138,220,294	-2,785,444	2,126,432	137,561,282	1.5
Sep-2016	137,561,282	12,738,176	6,043,012	156,342,470	4.0
Dec-2016	156,342,470	-2,537,607	469,452	154,274,315	0.3
Mar-2017	154,274,315	-2,722,539	7,091,039	158,642,816	4.6
Jun-2017	158,642,816	-2,413,060	5,793,050	162,022,805	3.7
Sep-2017	162,022,805	14,079,967	5,793,985	181,896,757	3.3
Dec-2017	181,896,757	-2,754,427	5,718,358	184,860,688	3.2
Mar-2018	184,860,688	-3,098,102	-754,895	181,007,690	-0.4
Jun-2018	181,007,690	-2,224,279	1,822,461	180,605,873	1.0
Sep-2018	180,605,873	16,257,221	4,362,452	201,225,545	2.2
Dec-2018	201,225,545	-2,992,611	-15,029,022	183,203,912	-7.5
Mar-2019	183,203,912	-3,071,501	14,347,043	194,479,454	7.9
Jun-2019	194,479,454	-2,776,405	6,644,655	198,347,704	3.4
Sep-2019	198,347,704	10,498,159	1,439,819	210,285,682	0.7
Dec-2019	210,285,682	-3,120,621	11,747,408	218,912,469	5.6
Mar-2020	218,912,469	-2,843,037	-29,325,457	186,743,975	-13.5
Jun-2020	186,743,975	-3,047,010	19,603,396	203,300,361	10.6
Sep-2020	203,300,361	11,530,578	10,940,334	225,771,273	5.0
Dec-2020	225,771,273	-2,975,901	26,997,086	249,792,458	12.0
Mar-2021	249,792,458	-2,975,967	10,692,961	257,509,452	4.3
Jun-2021	257,509,452	-2,645,621	14,569,435	269,433,265	5.7
Sep-2021	269,433,265	4,388,376	1,855,911	275,677,552	0.7

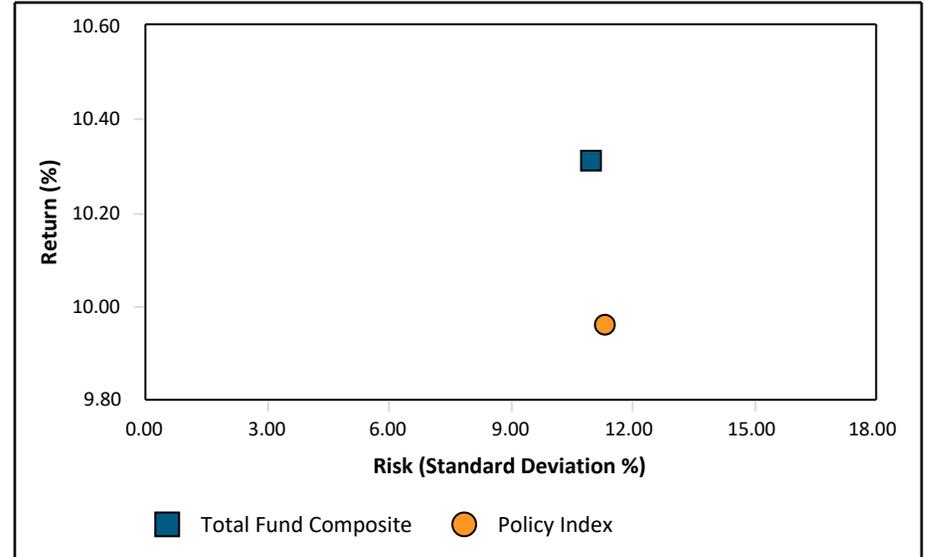
# Risk vs. Return Analysis

As of September 30, 2021

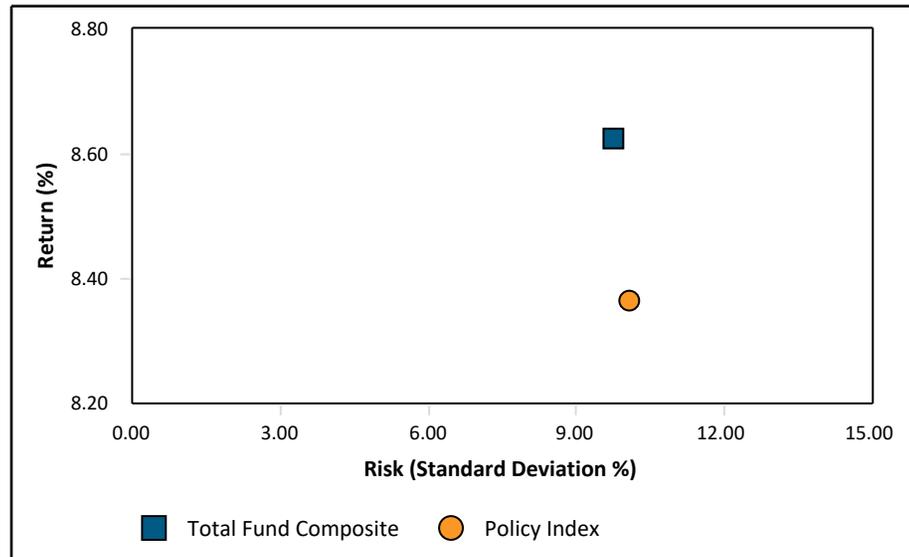
### 3 Year Risk and Return



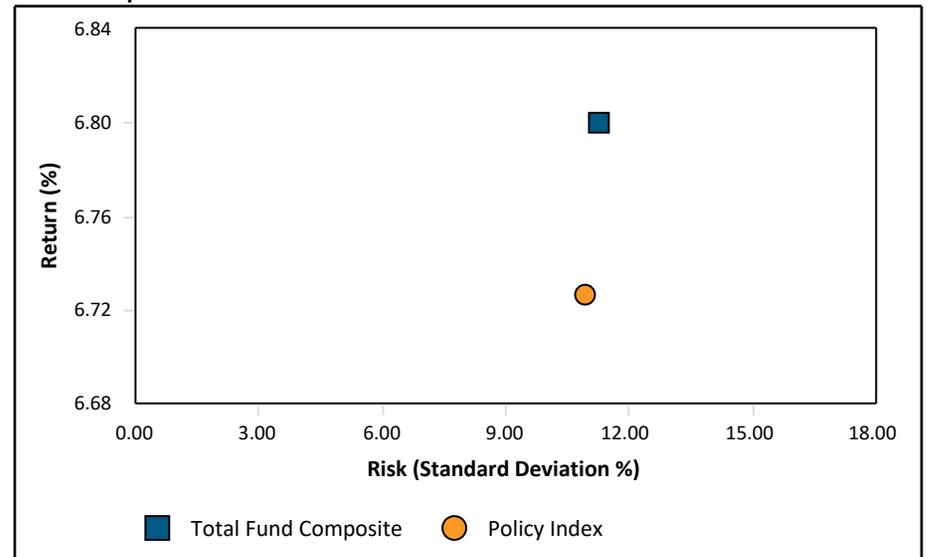
### 5 Year Risk and Return



### 7 Year Risk and Return



### Since Inception Risk and Return



# MPT Statistics

As of September 30, 2021

## 3 Year Historical MPT Statistics

	Return	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Tracking Error	R-Squared	Beta	Alpha
Total Fund Composite	11.08	13.87	8.93	0.74	0.34	2.18	0.98	0.95	1.24
Policy Index	10.21	14.36	9.18	0.66	N/A	0.00	1.00	1.00	0.00
90 Day U.S. Treasury Bill	1.18	0.55	0.00	N/A	-0.66	14.62	0.21	-0.02	1.37

## 5 Year Historical MPT Statistics

	Return	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Tracking Error	R-Squared	Beta	Alpha
Total Fund Composite	10.31	10.96	6.92	0.84	0.16	1.79	0.98	0.96	0.74
Policy Index	9.96	11.33	7.12	0.79	N/A	0.00	1.00	1.00	0.00
90 Day U.S. Treasury Bill	1.15	0.46	0.00	N/A	-0.79	11.54	0.18	-0.02	1.33

## 7 Year Historical MPT Statistics

	Return	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Tracking Error	R-Squared	Beta	Alpha
Total Fund Composite	8.63	9.76	6.15	0.81	0.14	1.57	0.98	0.96	0.57
Policy Index	8.37	10.05	6.31	0.76	N/A	0.00	1.00	1.00	0.00
90 Day U.S. Treasury Bill	0.85	0.46	0.00	N/A	-0.76	10.19	0.08	-0.01	0.96

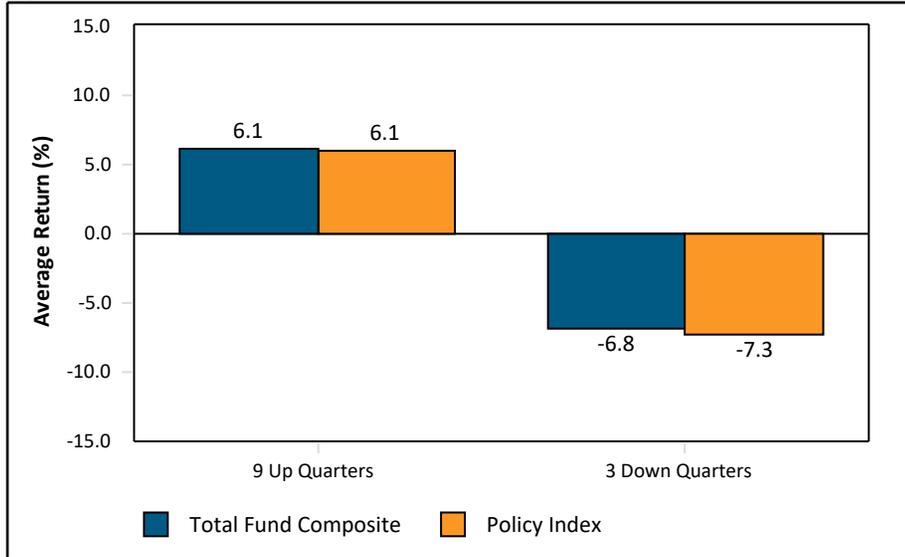
## Since Inception Historical MPT Statistics

	Return	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Tracking Error	R-Squared	Beta	Alpha	Inception Date
Total Fund Composite	6.80	11.27	7.04	0.49	0.05	2.24	0.96	1.01	0.03	10/01/1999
Policy Index	6.73	10.92	6.84	0.50	N/A	0.00	1.00	1.00	0.00	10/01/1999
90 Day U.S. Treasury Bill	1.66	0.94	0.00	N/A	-0.50	11.11	0.02	-0.01	1.76	10/01/1999

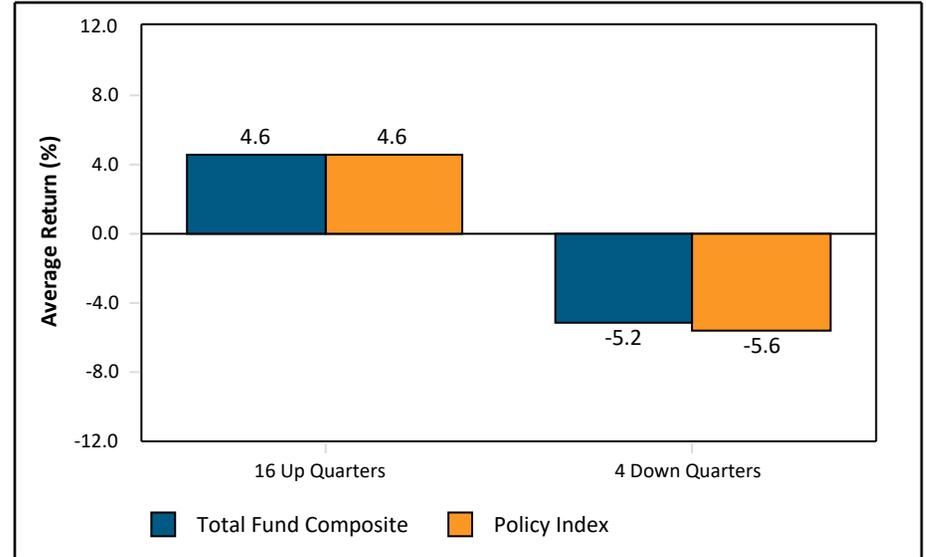
# Market Capture Report

As of September 30, 2021

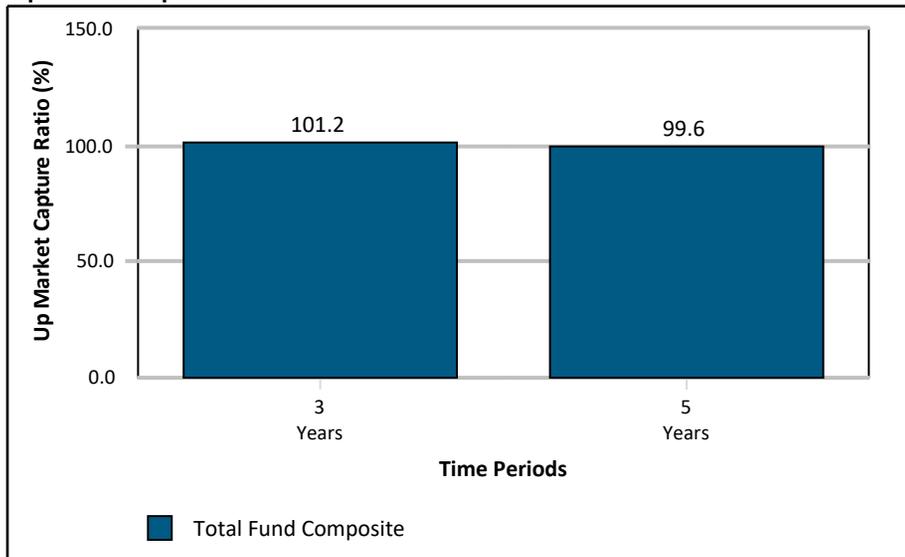
### Up/Down Markets - 3 Years



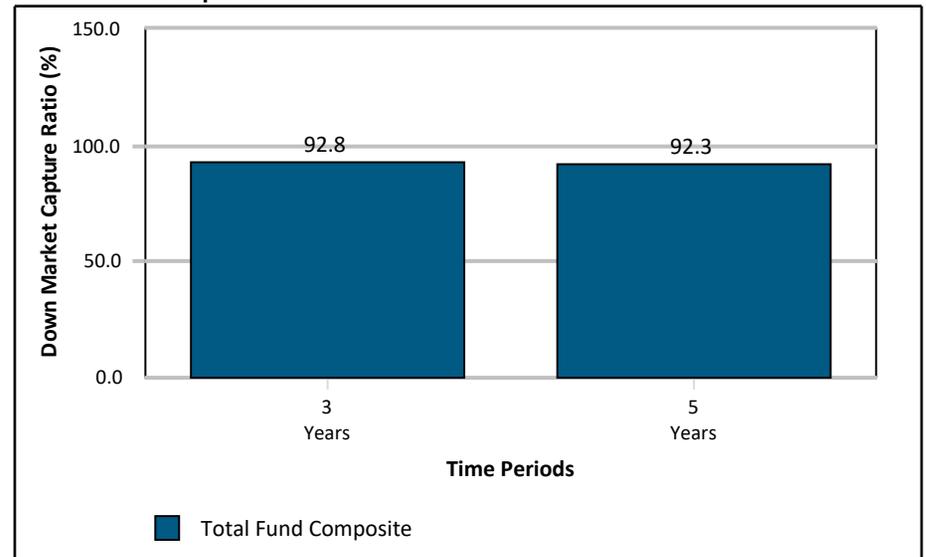
### Up/Down Markets - 5 Years



### Up Market Capture Ratio



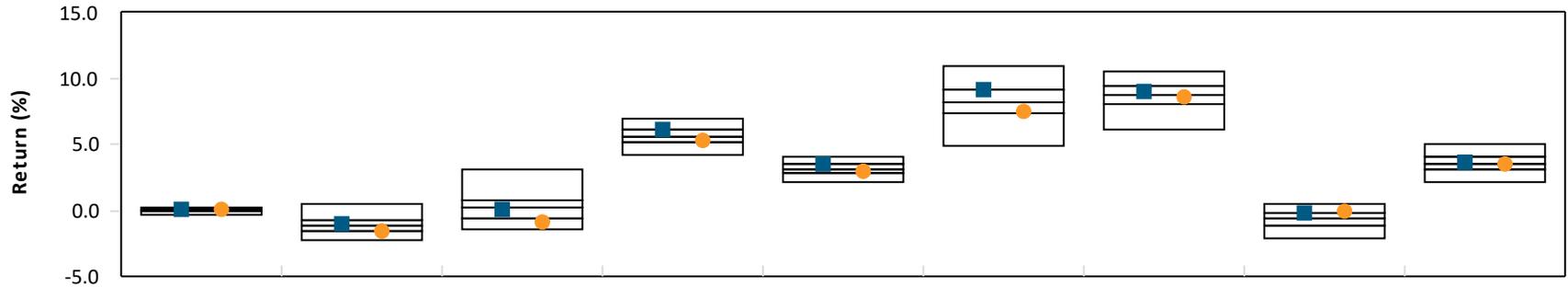
### Down Market Capture Ratio



# Manager Evaluation

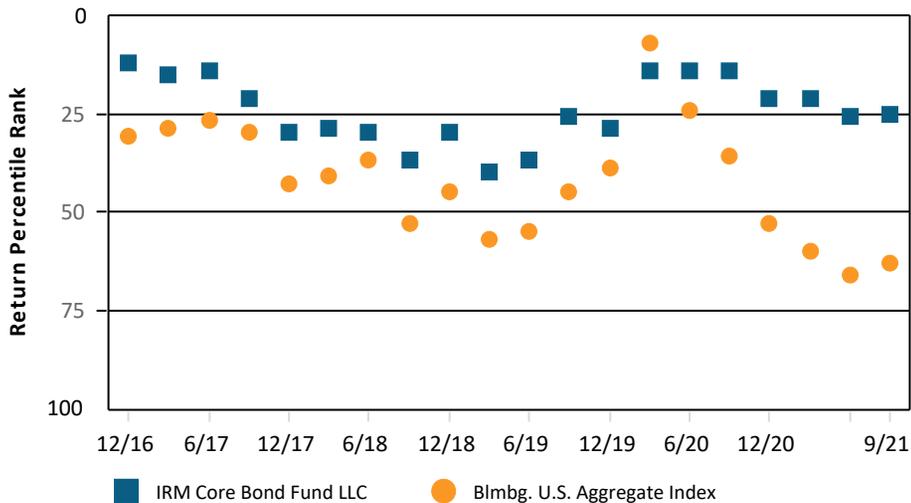
IRM Core Bond Fund LLC  
As of September 30, 2021

## Peer Group Analysis vs. IM U.S. Broad Market Core Fixed Income (MF)

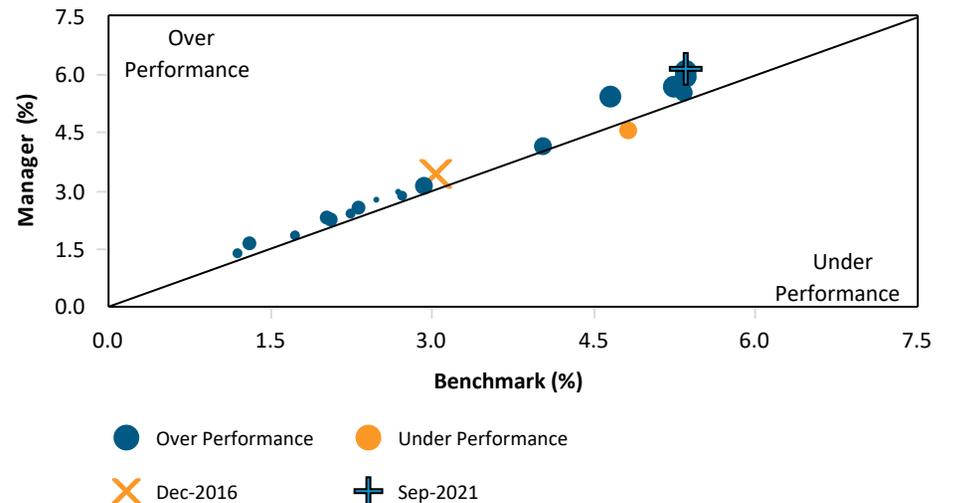


	QTR	YTD	1 Year	3 Years	5 Years	2020	2019	2018	2017
IRM Core Bond Fund LLC	0.1 (21)	-1.0 (37)	0.2 (52)	6.2 (25)	3.5 (25)	9.2 (23)	9.1 (39)	-0.2 (26)	3.7 (46)
Blmbg. U.S. Aggregate Index	0.1 (44)	-1.6 (71)	-0.9 (83)	5.4 (63)	2.9 (66)	7.5 (72)	8.7 (53)	0.0 (18)	3.5 (54)
5th Percentile	0.3	0.5	3.1	6.9	4.1	10.9	10.6	0.6	5.0
1st Quartile	0.1	-0.7	0.9	6.2	3.5	9.1	9.5	-0.2	4.1
Median	0.0	-1.2	0.2	5.6	3.2	8.2	8.8	-0.6	3.6
3rd Quartile	-0.1	-1.6	-0.6	5.2	2.8	7.4	8.1	-1.1	3.1
95th Percentile	-0.3	-2.3	-1.4	4.2	2.2	4.9	6.2	-2.1	2.1

## 3 Year Rolling Percentile Ranking vs. IM U.S. Broad Market Core Fixed Income (MF)



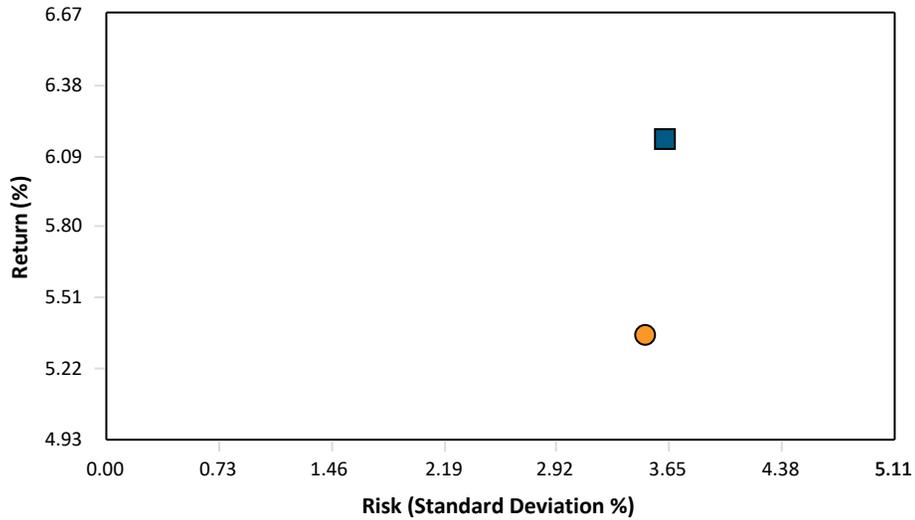
## 3 Year Rolling Under/Over Performance vs. Blmbg. U.S. Aggregate Index



# Manager Evaluation

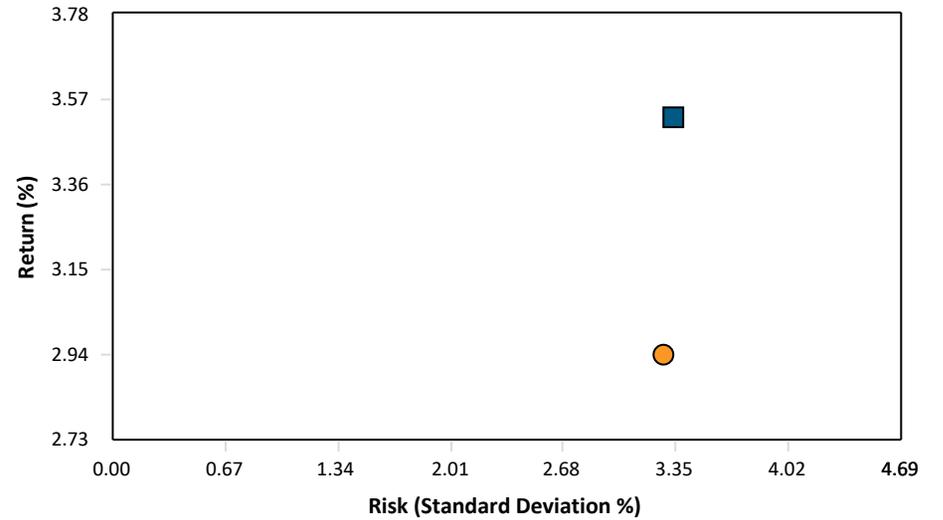
**IRM Core Bond Fund LLC**  
As of September 30, 2021

## 3 Year Risk and Return



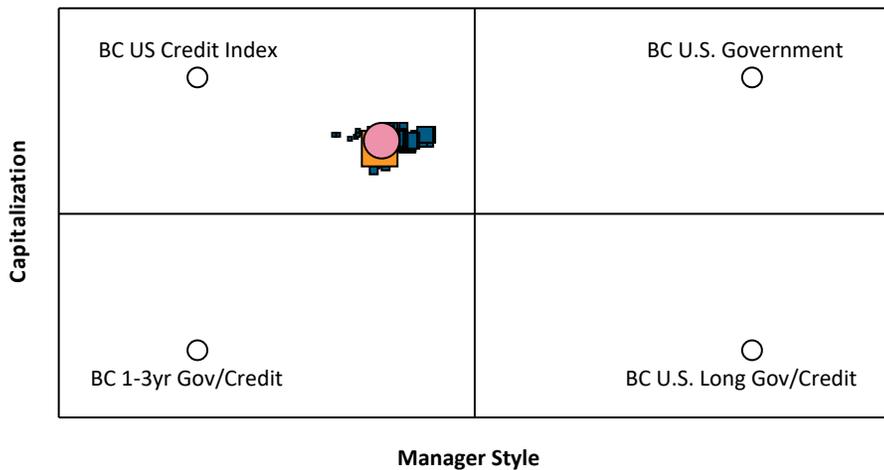
IRM Core Bond Fund LLC (Blue Square) Blmbg. U.S. Aggregate Index (Orange Circle)

## 5 Year Risk and Return



IRM Core Bond Fund LLC (Blue Square) Blmbg. U.S. Aggregate Index (Orange Circle)

## Style Map - 3 Years



Style History (Blue Square) Sep-2021 (Orange Square) Average Style Exposure (Pink Circle)

## MPT Statistics vs. Blmbg. U.S. Aggregate Index

	3 Years	5 Years
Return	6.2	3.5
Standard Deviation	3.6	3.3
vs. Blmbg. U.S. Aggregate Index		
Alpha	0.7	0.6
Beta	1.0	1.0
R-Squared	0.9	1.0
Consistency	66.7	66.7
Up Market Capture	109.3	106.5
Down Market Capture	98.6	94.2
vs. 90 Day U.S. Treasury Bill		
Sharpe Ratio	1.4	0.7

Mutual fund data sourced from Lipper Analytical Services.

## Manager Evaluation

IRM Core Bond Commingled Fund

As of 09/30/2021

### Portfolio Information

<b>Firm Name</b>	Income Research & Management	<b>Portfolio Manager</b>	Team Managed
<b>Product Name</b>	Core Bond Fund	<b>Fund Style</b>	Fixed Income - Core
<b>Portfolio Assets</b>	\$40.2 million	<b>Style Benchmark</b>	Bloomberg Aggregate Index
<b>Inception Date</b>	3/31/2002		

### Portfolio Investment Policy

This fund invests in fixed income instruments, including government and agency issues, corporate issues, and asset-backed securities.

#### Sector Weightings

	<u>% of Portfolio</u>
Treasury	14.8%
Agency	0.0%
Financials	9.8%
Industrials	18.0%
Utilities	4.1%
Non-Corporates	0.0%
Mortgage Backed	33.2%
Asset Backed	8.0%
CMBS	9.9%
Muni	2.1%
Cash	0.1%

#### Fixed Income Characteristics

<b>Maturity</b>		
less than 1 year		6.4%
1 to 3 years		10.8%
3 to 5 years		38.3%
5 to 10 years		23.4%
10 to 20 years		11.0%
Over 20 years		9.9%

	<u># of yrs</u>
<b>Portfolio Average</b>	6.73
<b>Duration at Quarter End</b>	6.55

#### Credit Quality Allocations

<u>Quality</u>	<u>% of Port.</u>	<u>Quality</u>	<u>% of Port.</u>
AAA	62.1%	BB	0.8%
AA	3.2%	B	0.0%
A	13.6%	Below B	0.0%
BBB	20.3%	N/R	0.0%

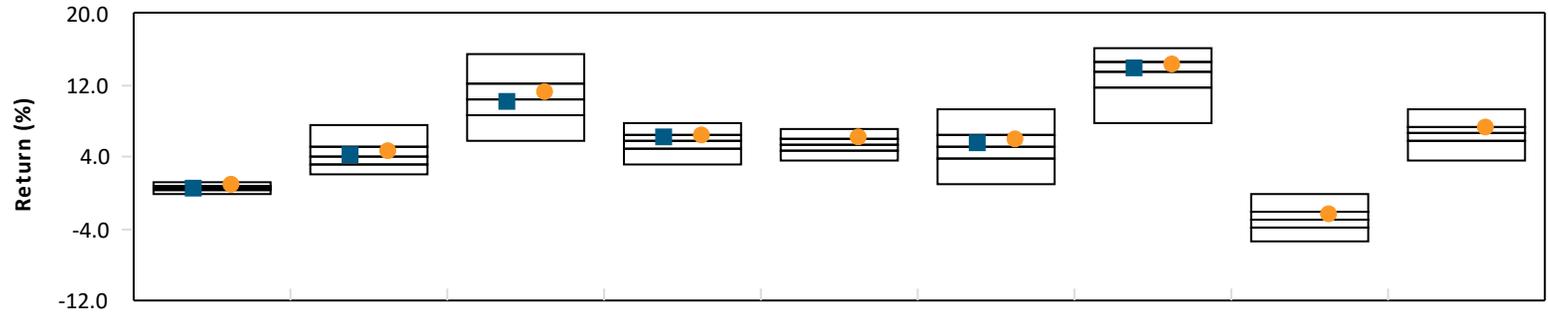
Average Quality = Aa2/AA-

# Manager Evaluation

## Eaton Vance Trust CIT High Yield Fund

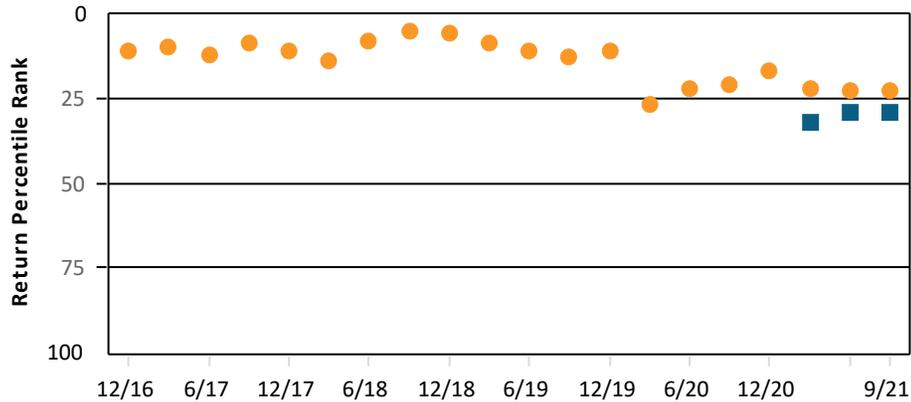
As of September 30, 2021

### Peer Group Analysis vs. IM U.S. High Yield Bonds (MF)



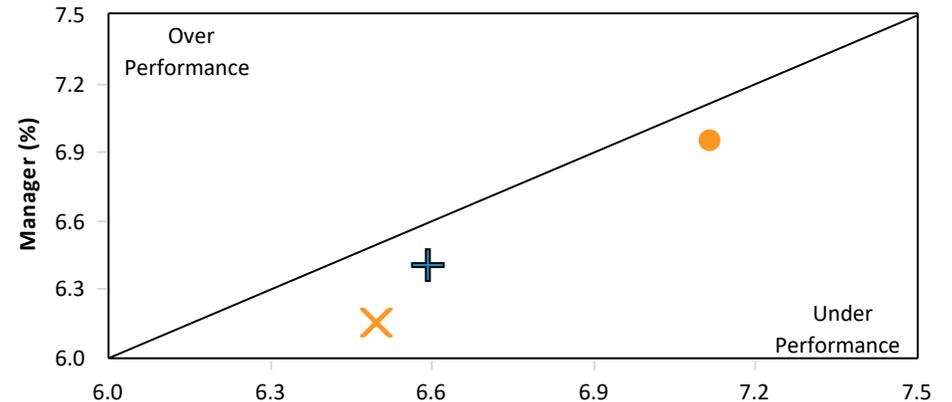
	QTR	YTD	1 Year	3 Years	5 Years	2020	2019	2018	2017
Eaton Vance Trust CIT High Yield Fund	0.7 (48)	4.3 (48)	10.4 (52)	6.4 (29)	N/A	5.6 (41)	14.1 (40)	N/A	N/A
ICE BofAML US High Yield Master II Constrained	0.9 (16)	4.7 (37)	11.5 (35)	6.6 (23)	6.3 (17)	6.1 (33)	14.4 (32)	-2.3 (32)	7.5 (25)
5th Percentile	1.2	7.6	15.5	7.8	7.1	9.5	16.3	0.0	9.4
1st Quartile	0.8	5.2	12.4	6.5	6.1	6.6	14.7	-2.0	7.5
Median	0.7	4.2	10.5	5.9	5.5	5.3	13.5	-2.9	6.7
3rd Quartile	0.5	3.2	8.8	5.1	4.9	3.8	11.9	-3.8	5.8
95th Percentile	-0.1	2.1	6.0	3.3	3.6	1.0	7.8	-5.4	3.7

### 3 Year Rolling Percentile Ranking vs. IM U.S. High Yield Bonds (MF)



■ Eaton Vance Trust CIT High Yield Fund  
● ICE BofAML US High Yield Master II Constrained

### 3 Year Rolling Under/Over Performance vs. ICE BofAML US High Yield Master II



● Under Performance   
 X Mar-2021   
 + Sep-2021

## Manager Evaluation

Eaton Vance Trust High Yield Bond CIT

As of 09/30/2021

### Portfolio Information

<b>Firm Name</b>	Eaton Vance	<b>Portfolio Manager</b>	
<b>Product Name</b>	Eaton Vance High Yield Bond	<b>Fund Style</b>	
<b>Portfolio Assets</b>	\$6.0 million	<b>Style Benchmark</b>	BofA Merrill Lynch U.S. High Yield Master II Constrained Index
<b>Inception Date</b>	4/1/2018		

### Portfolio Investment Policy

Eaton Vance seeks to identify opportunities as value changes in the market using a combination of bottom up research and Market Factor analysis. Security selection is expected to drive the majority of excess returns over time. Analysts seek to identify credits with attractive return prospects per unit of risk. The research process centers on qualitative assessment, quantitative analysis, and a relative value analysis. The Market Factor component begins with an overall macroeconomic assessment. Top down analysis seeks to identify optimal market biases and risk/return positioning to complement bottom up research.

### Sector Weightings

	<u>% of Portfolio</u>
Treasury	0.0%
Agency	0.2%
Financials	7.6%
Industrials	84.1%
Utilities	3.8%
Non-Corporates	0.0%
Mortgage Backed	0.0%
Asset Backed	0.0%
CMBS	0.0%
Muni	0.0%
Cash	4.3%

### Fixed Income Characteristics

<b>Maturity</b>		
less than 1 year		5.1%
1 to 3 years		3.3%
3 to 5 years		22.4%
5 to 10 years		63.5%
10 to 20 years		2.8%
Over 20 years		2.9%

	<u># of yrs</u>
<b>Portfolio Average</b>	6.59
<b>Duration at Quarter End</b>	3.69

### Credit Quality Allocations

<u>Quality</u>	<u>% of Port.</u>	<u>Quality</u>	<u>% of Port.</u>
AAA	4.3%	BB	44.9%
AA	0.0%	B	36.7%
A	0.0%	Below B	12.2%
BBB	1.0%	N/R	0.9%

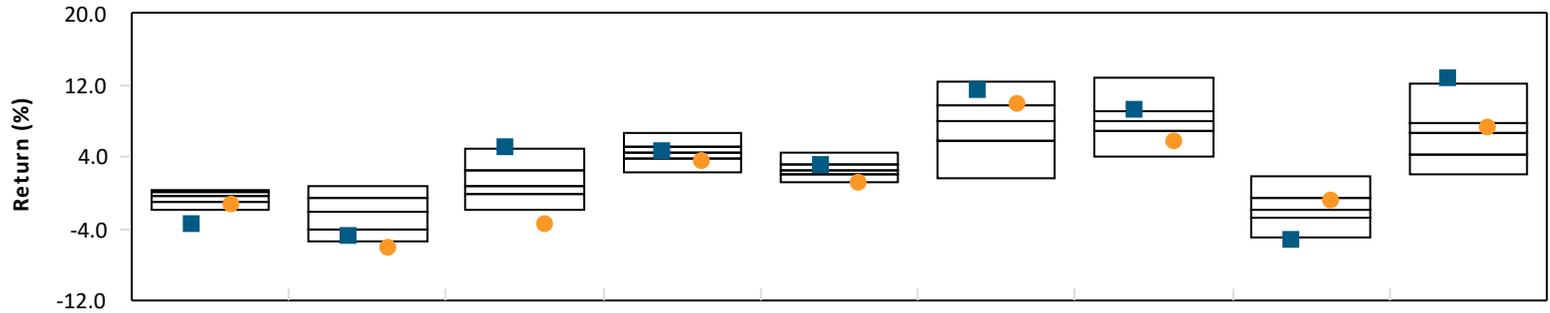
**Average Quality** = B+B1

# Manager Evaluation

## Brandywine Global Opportunistic Fixed Income

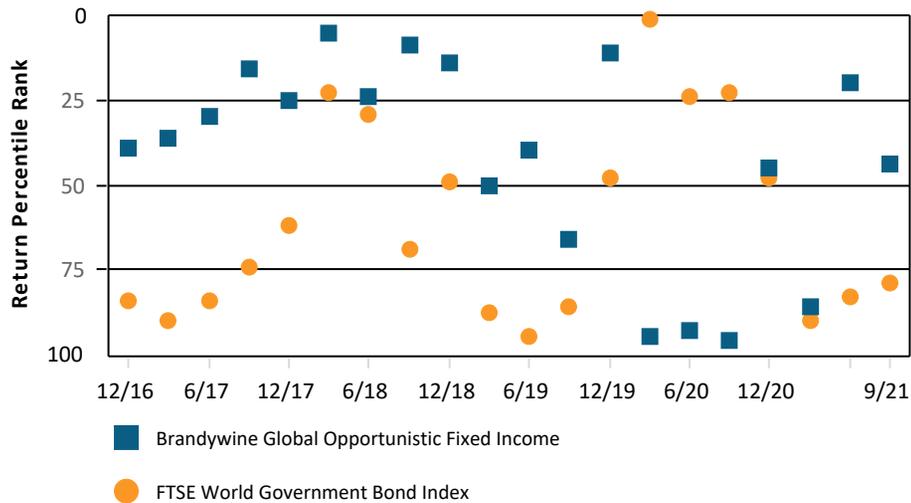
As of September 30, 2021

### Peer Group Analysis vs. IM Global Fixed Income (MF)

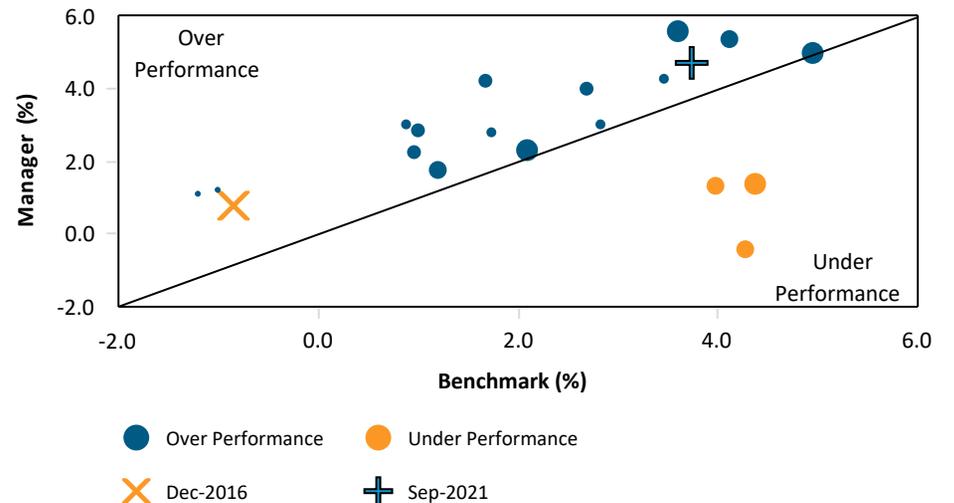


	QTR	YTD	1 Year	3 Years	5 Years	2020	2019	2018	2017
Brandywine Global Opportunistic Fixed Income	-3.3 (98)	-4.8 (90)	5.2 (4)	4.7 (44)	3.2 (26)	11.7 (12)	9.4 (24)	-5.2 (96)	12.9 (3)
FTSE World Government Bond Index	-1.2 (86)	-5.9 (98)	-3.3 (99)	3.7 (79)	1.4 (91)	10.1 (21)	5.9 (88)	-0.8 (35)	7.5 (35)
5th Percentile	0.3	0.8	4.9	6.7	4.5	12.5	13.0	1.8	12.3
1st Quartile	0.0	-0.6	2.5	5.3	3.2	9.8	9.3	-0.4	7.9
Median	-0.3	-2.1	0.9	4.6	2.6	8.1	8.1	-1.8	6.8
3rd Quartile	-1.0	-4.0	-0.2	3.9	2.1	5.9	6.9	-2.8	4.4
95th Percentile	-1.8	-5.4	-1.7	2.3	1.1	1.7	4.0	-5.0	2.2

### 3 Year Rolling Percentile Ranking vs. IM Global Fixed Income (MF)



### 3 Year Rolling Under/Over Performance vs. FTSE World Government Bond Index

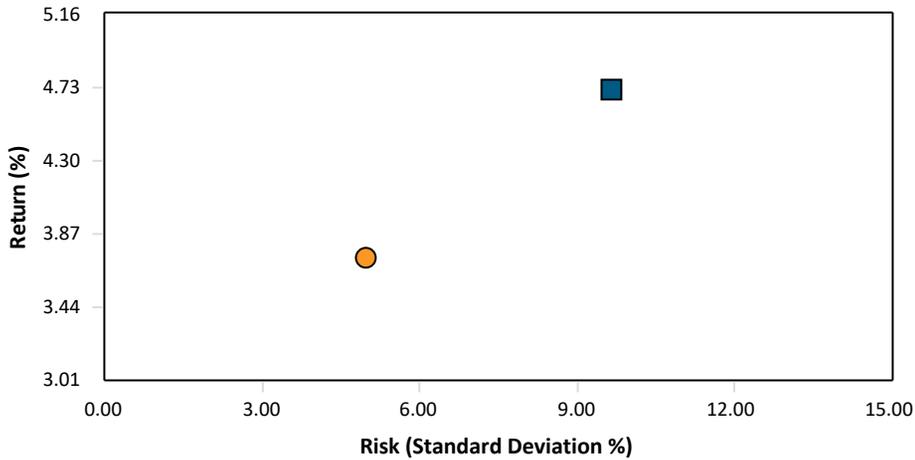


# Manager Evaluation

## Brandywine Global Opportunistic Fixed Income

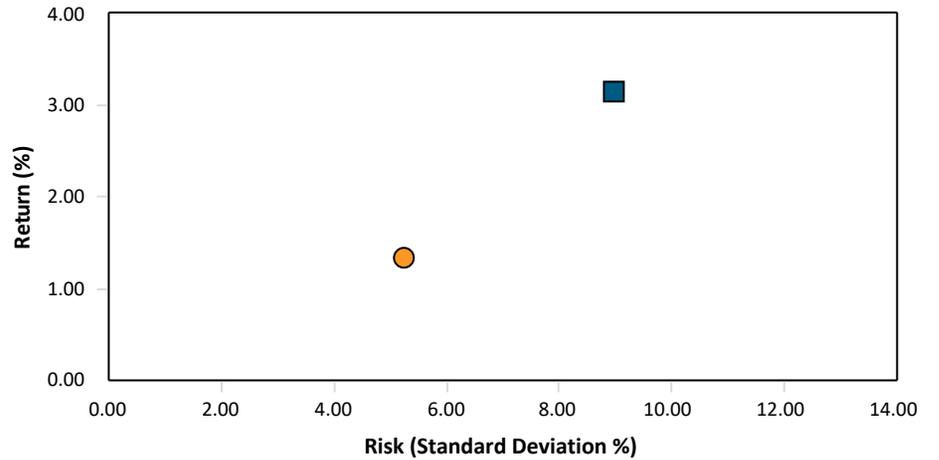
As of September 30, 2021

### 3 Year Risk and Return



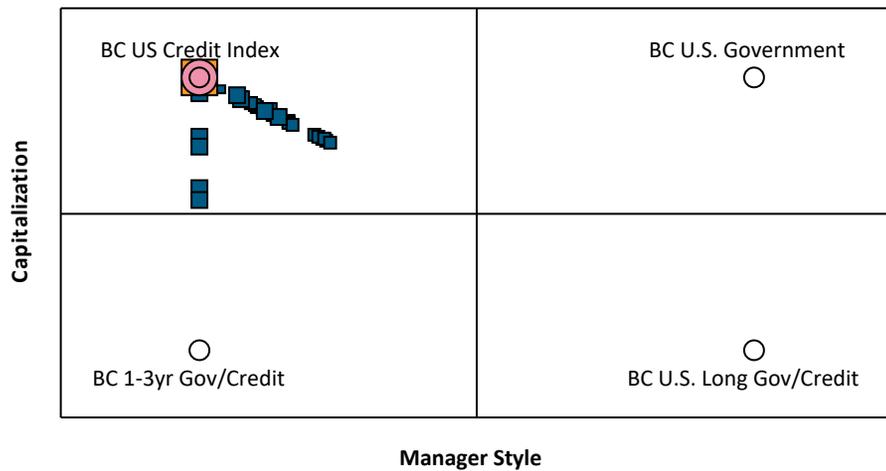
- Brandywine Global Opportunistic Fixed Income
- FTSE World Government Bond Index

### 5 Year Risk and Return



- Brandywine Global Opportunistic Fixed Income
- FTSE World Government Bond Index

### Style Map - 3 Years



- Style History
- Sep-2021
- Average Style Exposure

### MPT Statistics vs. FTSE World Government Bond Index

	3 Years	5 Years
Return	4.7	3.2
Standard Deviation	9.7	9.0
vs. FTSE World Government Bond Index		
Alpha	0.7	1.9
Beta	1.2	1.1
R-Squared	0.4	0.4
Consistency	55.6	53.3
Up Market Capture	147.4	149.5
Down Market Capture	156.4	129.7
vs. 90 Day U.S. Treasury Bill		
Sharpe Ratio	0.4	0.3

Mutual fund data sourced from Lipper Analytical Services.

## Manager Evaluation

Brandywine Global Asset Management

As of 09/30/2021

### Portfolio Information

<b>Firm Name</b>	Brandywine Global Asset Management	<b>Portfolio Manager</b>	Team Managed
<b>Product Name</b>	Brandywine Global Opportunistic Fund	<b>Fund Style</b>	Fixed Income - Global Bonds
<b>Portfolio Assets</b>	\$9.2 million	<b>Style Benchmark</b>	Citigroup World Government Bond Index
<b>Inception Date</b>	6/1/2011		

### Portfolio Investment Policy

The Fund invests primarily in debt and fixed income securities of domestic and foreign issuers located in developed countries. The Fund considers any country that has a sovereign debt rating of A- or better from at least one nationally recognized statistical rating organization at the time of purchase to be a developed country. The Fund may opportunistically invest in high yield and emerging markets debt.

### Sector Weightings

	<u>% of Portfolio</u>
Treasury	70.9%
Agency	3.9%
Financials	10.4%
Industrials	8.5%
Utilities	0.0%
Non-Corporates	0.0%
Mortgage Backed	1.7%
Asset Backed	0.0%
CMBS	0.0%
Muni	0.0%
Cash	4.5%

### Fixed Income Characteristics

<u>Maturity</u>	<u>% of Portfolio</u>
less than 1 year	10.6%
1 to 3 years	42.1%
3 to 5 years	5.0%
5 to 10 years	13.9%
10 to 20 years	6.0%
Over 20 years	18.9%

	<u># of yrs</u>
<b>Portfolio Average</b>	8.37
<b>Duration at Quarter End</b>	3.45

### Credit Quality Allocations

<u>Quality</u>	<u>% of Port.</u>	<u>Quality</u>	<u>% of Port.</u>
AAA	41.1%	BB	11.9%
AA	13.2%	B	0.2%
A	12.6%	Below B	0.0%
BBB	21.0%	N/R	0.0%

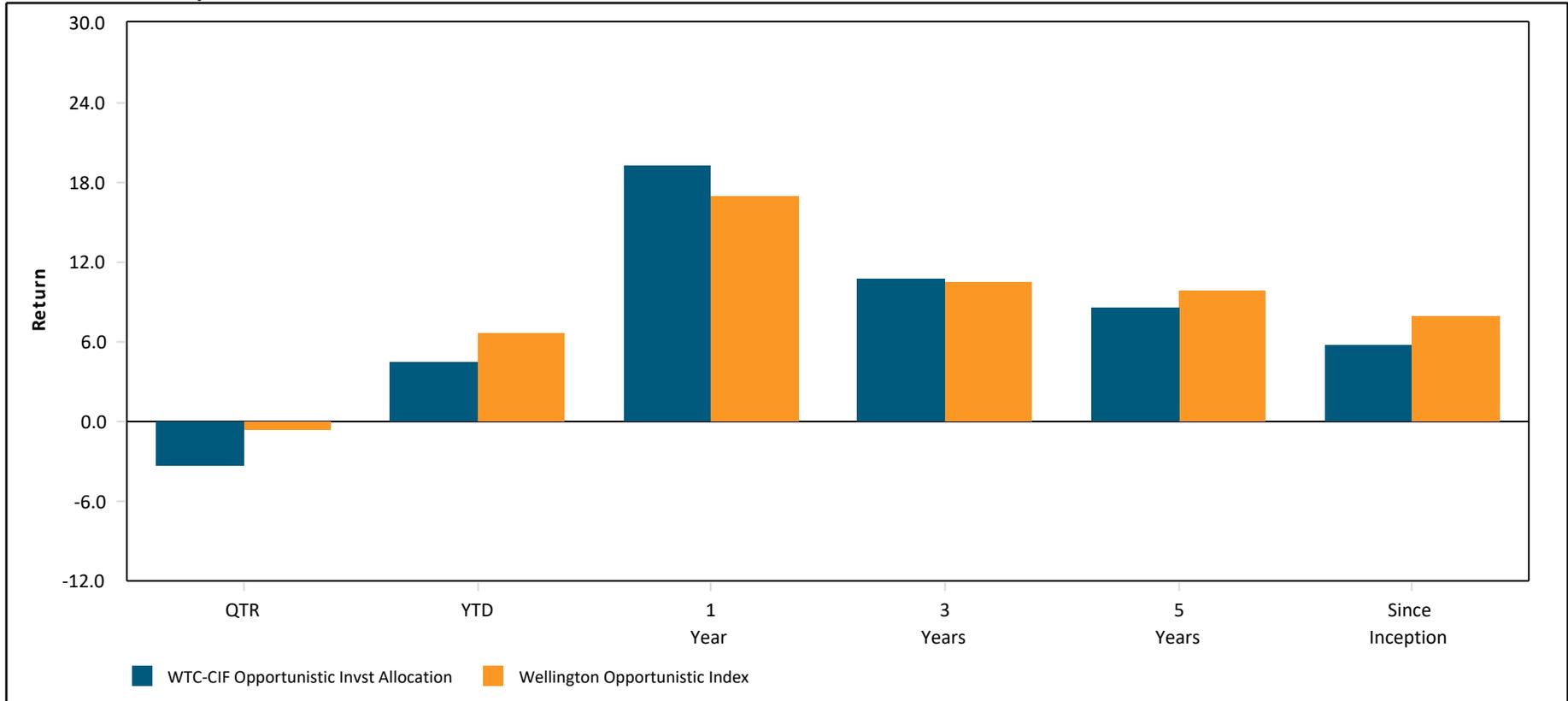
Average Quality = A+

# Manager Evaluation

WTC-CIF Opportunistic Invst Allocation

As of September 30, 2021

## Performance Analysis



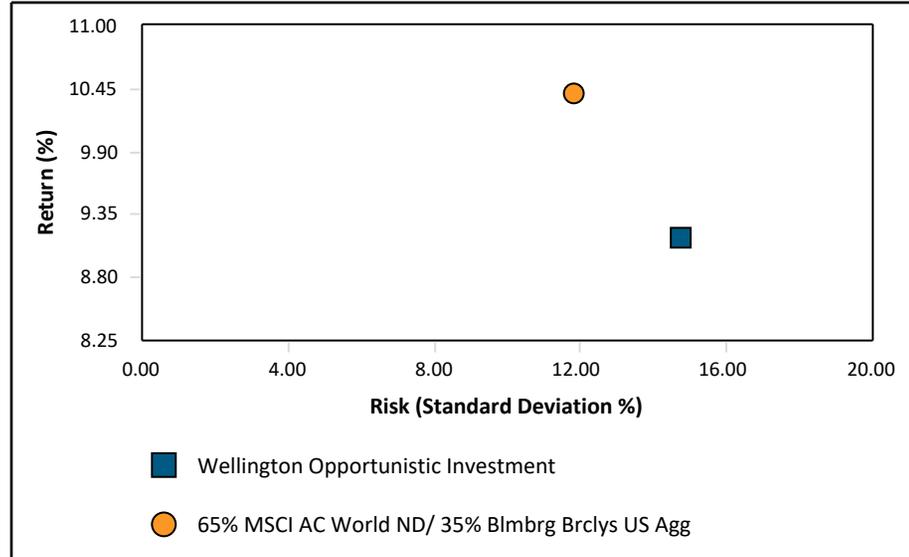
	QTR	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>WTC-CIF Opportunistic Invst Allocation</b>	<b>-3.3</b>	<b>4.5</b>	<b>19.3</b>	<b>10.7</b>	<b>8.6</b>	<b>5.7</b>	<b>11/01/2010</b>
<i>Wellington Opportunistic Index</i>	<i>-0.6</i>	<i>6.6</i>	<i>17.0</i>	<i>10.4</i>	<i>9.8</i>	<i>7.9</i>	
Difference	-2.7	-2.1	2.3	0.3	-1.2	-2.2	

# Manager Evaluation

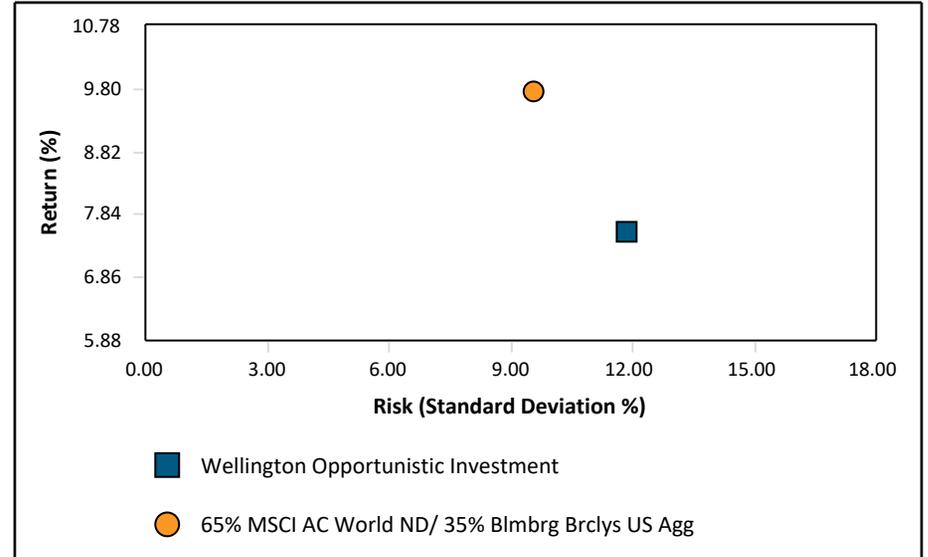
## Wellington Opportunistic Investment - Risk vs Return

As of September 30, 2021

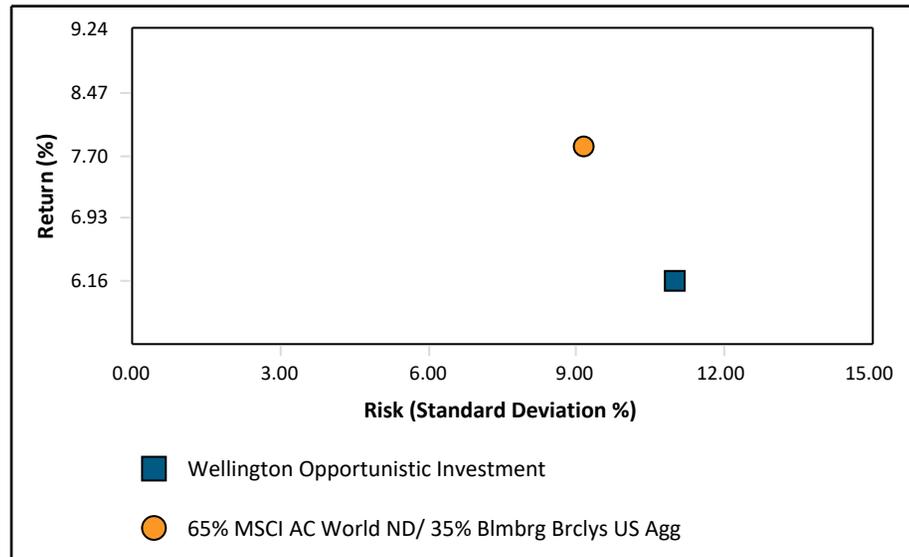
### 3 Year Risk and Return



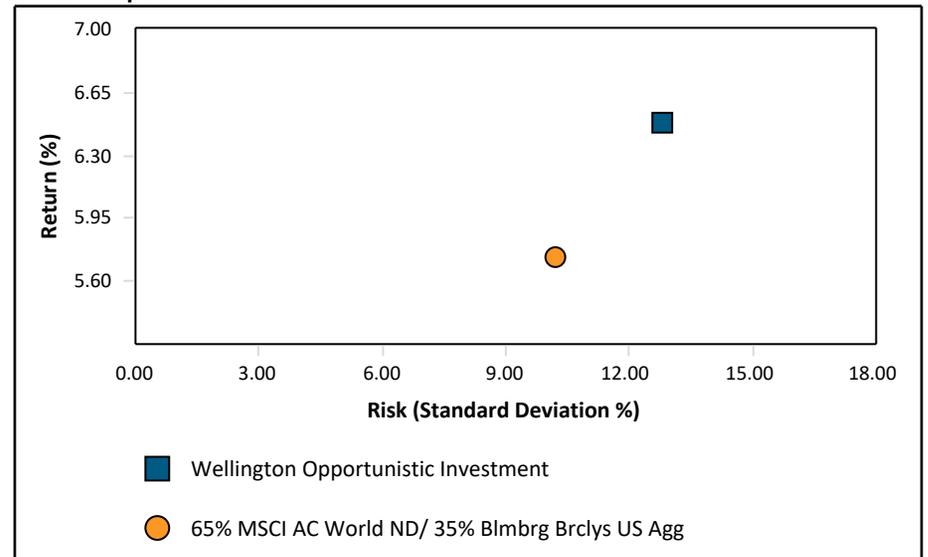
### 5 Year Risk and Return



### 7 Year Risk and Return



### Since Inception Risk and Return



Returns for this exhibit are based on the investment composite gross returns from the manager, and then adjusted to reflect the stated management fee.

# Manager Evaluation

## Wellington Opportunistic Investment - MPT Statistics

As of September 30, 2021

### 3 Year Historical MPT Statistics

	Return	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Tracking Error	R-Squared	Beta	Alpha
Wellington Opportunistic Investment	9.16	14.74	10.14	0.59	-0.14	5.18	0.90	1.18	-2.66
65% MSCI AC World ND/ 35% Blmbrg Brclys US Agg	10.42	11.80	7.56	0.79	N/A	0.00	1.00	1.00	0.00
90 Day U.S. Treasury Bill	1.18	0.33	0.00	N/A	-0.79	11.92	0.12	-0.01	1.29

### 5 Year Historical MPT Statistics

	Return	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Tracking Error	R-Squared	Beta	Alpha
Wellington Opportunistic Investment	7.56	11.87	8.10	0.57	-0.40	4.47	0.87	1.16	-3.29
65% MSCI AC World ND/ 35% Blmbrg Brclys US Agg	9.78	9.59	6.07	0.90	N/A	0.00	1.00	1.00	0.00
90 Day U.S. Treasury Bill	1.15	0.28	0.00	N/A	-0.90	9.68	0.10	-0.01	1.24

### 7 Year Historical MPT Statistics

	Return	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Tracking Error	R-Squared	Beta	Alpha
Wellington Opportunistic Investment	6.16	10.98	7.40	0.52	-0.33	4.08	0.87	1.12	-2.29
65% MSCI AC World ND/ 35% Blmbrg Brclys US Agg	7.81	9.16	5.72	0.77	N/A	0.00	1.00	1.00	0.00
90 Day U.S. Treasury Bill	0.85	0.27	0.01	N/A	-0.77	9.21	0.03	-0.01	0.90

### Since Inception Historical MPT Statistics

	Return	Standard Deviation	Downside Risk	Sharpe Ratio	Information Ratio	Tracking Error	R-Squared	Beta	Alpha	Inception Date
Wellington Opportunistic Investment	6.49	12.78	8.84	0.43	0.20	5.04	0.86	1.16	0.04	03/01/2000
65% MSCI AC World ND/ 35% Blmbrg Brclys US Agg	5.73	10.21	6.95	0.44	N/A	0.00	1.00	1.00	0.00	03/01/2000
90 Day U.S. Treasury Bill	1.60	0.54	0.01	N/A	-0.44	10.30	0.02	-0.01	1.64	03/01/2000

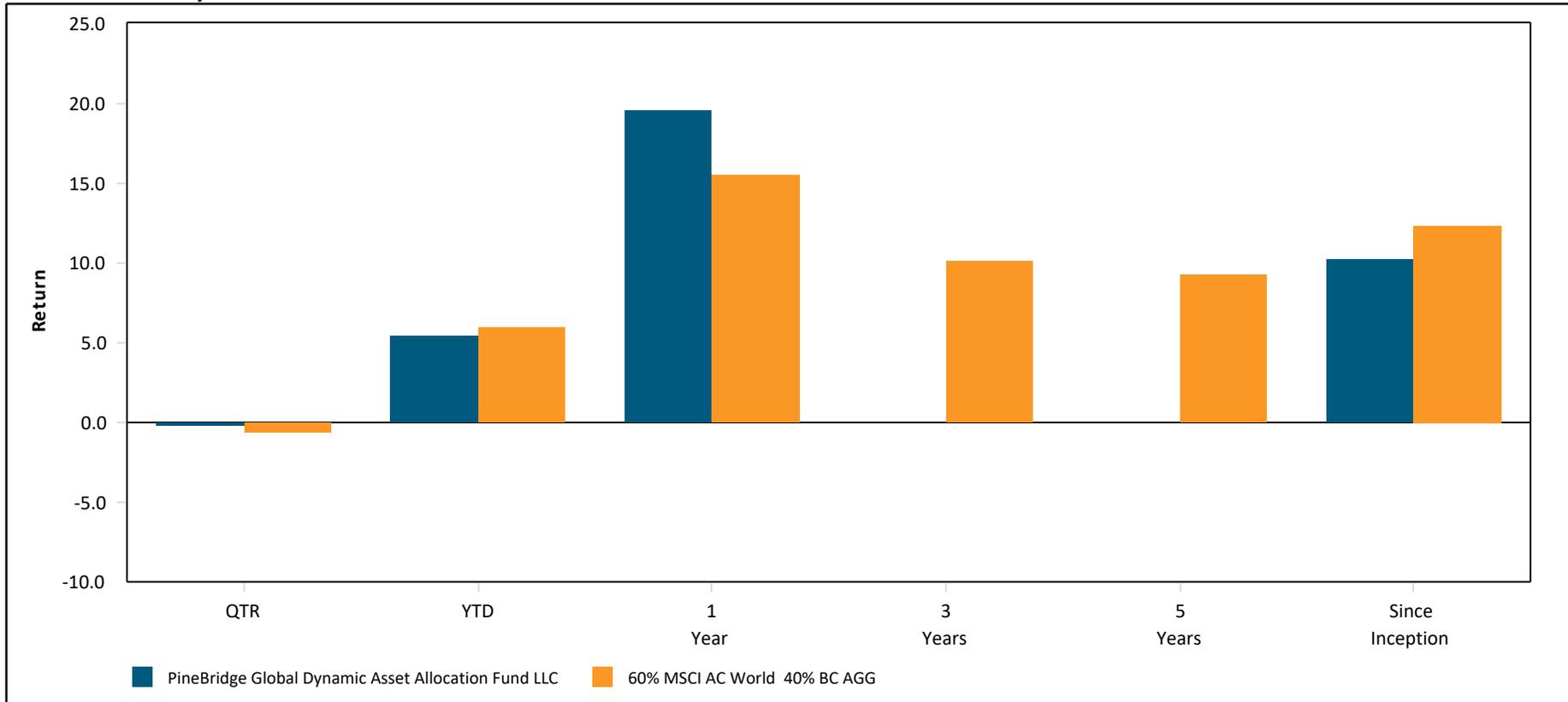
Returns for this exhibit are based on the investment composite gross return from the manager, and adjusted for the management fee.

# Manager Evaluation

PineBridge Global Dynamic Asset Allocation Fund LLC

As of September 30, 2021

## Performance Analysis

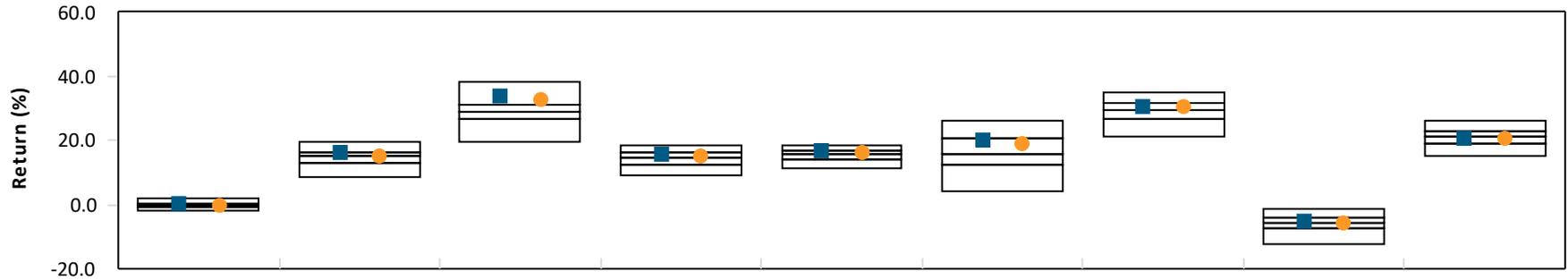


	QTR	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>PineBridge Global Dynamic Asset Allocation Fund LLC</b>	<b>-0.2</b>	<b>5.4</b>	<b>19.6</b>	<b>N/A</b>	<b>N/A</b>	<b>10.2</b>	<b>02/01/2019</b>
<i>60% MSCI AC World 40% BC AGG</i>	<i>-0.6</i>	<i>5.9</i>	<i>15.5</i>	<i>10.1</i>	<i>9.3</i>	<i>12.4</i>	
Difference	0.4	-0.5	4.1	N/A	N/A	-2.2	

# Manager Evaluation

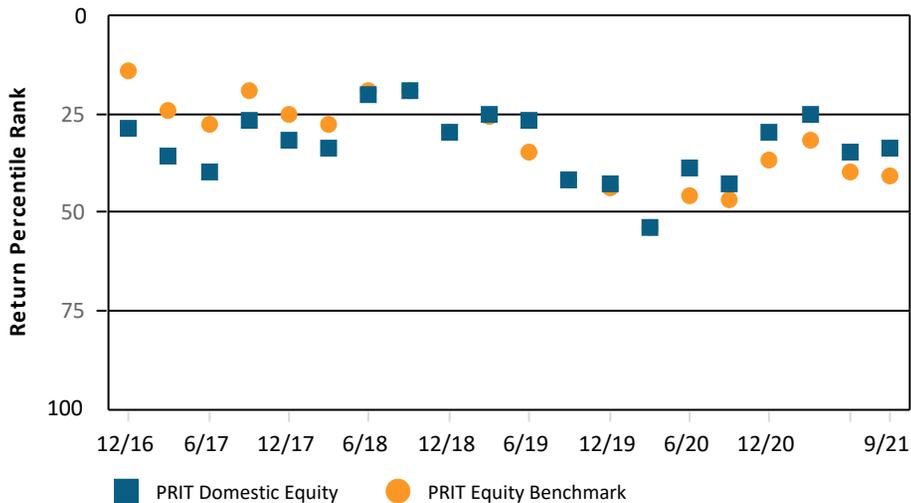
PRIT Domestic Equity  
As of September 30, 2021

## Peer Group Analysis vs. IM U.S. Large Cap Core Equity (MF)

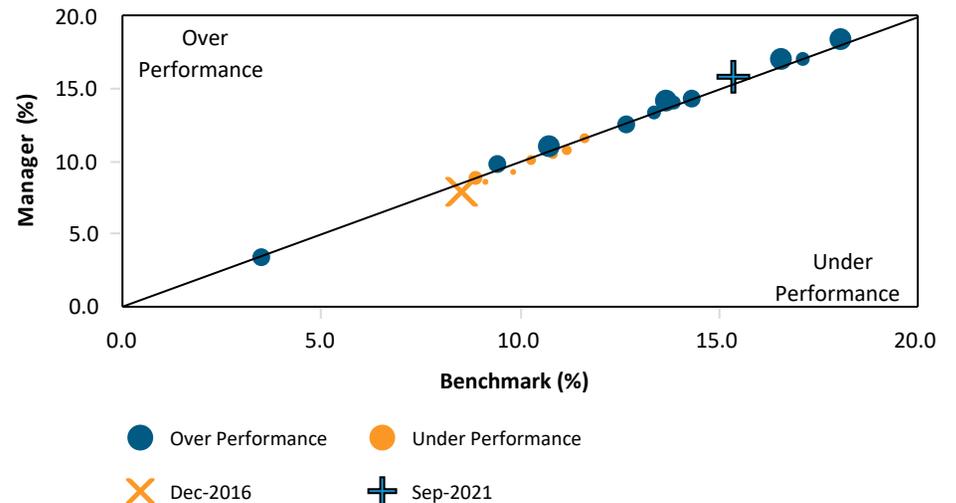


	QTR	YTD	1 Year	3 Years	5 Years	2020	2019	2018	2017
PRIT Domestic Equity	0.3 (38)	16.3 (28)	34.2 (15)	15.9 (34)	16.9 (27)	20.2 (28)	30.6 (42)	-5.2 (42)	20.7 (58)
PRIT Equity Benchmark	-0.1 (57)	15.6 (40)	33.0 (16)	15.4 (41)	16.4 (35)	18.9 (34)	30.8 (41)	-5.5 (48)	20.8 (56)
5th Percentile	1.8	19.5	38.7	18.8	18.4	26.6	35.2	-1.4	26.2
1st Quartile	0.6	16.6	31.2	16.4	16.9	20.7	31.8	-3.7	22.8
Median	0.0	15.0	29.0	14.7	15.7	16.0	29.7	-5.6	21.2
3rd Quartile	-0.5	13.0	26.8	12.7	14.0	12.3	27.1	-7.2	19.3
95th Percentile	-1.9	8.5	19.9	9.0	11.4	4.5	21.5	-12.0	15.5

## 3 Year Rolling Percentile Ranking vs. IM U.S. Large Cap Core Equity (MF)



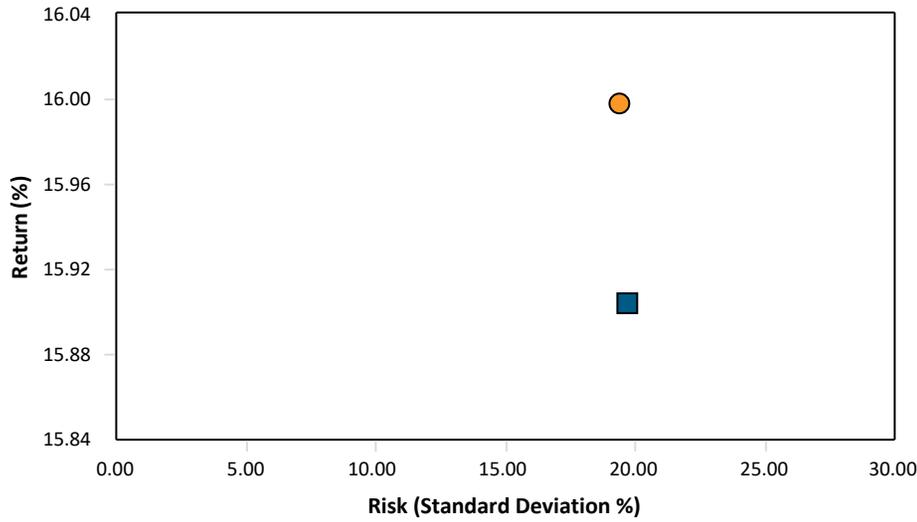
## 3 Year Rolling Under/Over Performance vs. PRIT Equity Benchmark



# Manager Evaluation

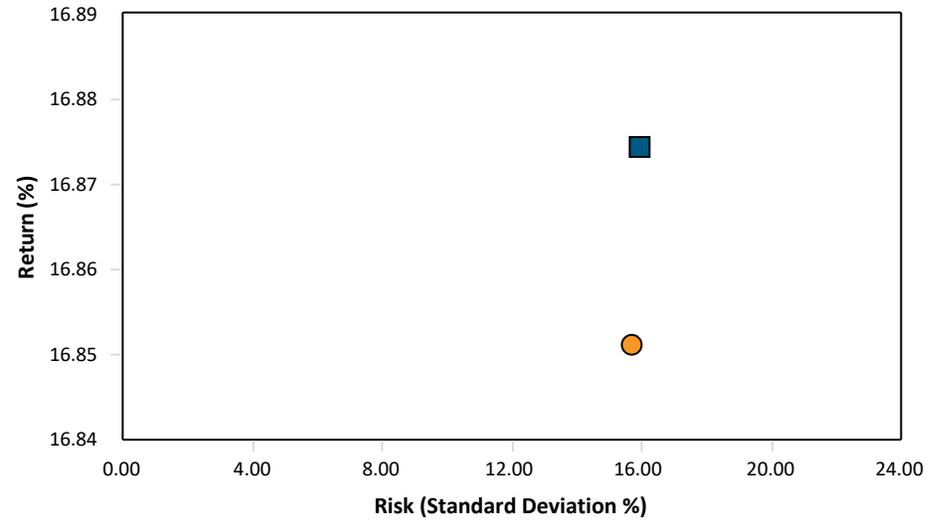
**PRIT Domestic Equity**  
As of September 30, 2021

**3 Year Risk and Return**



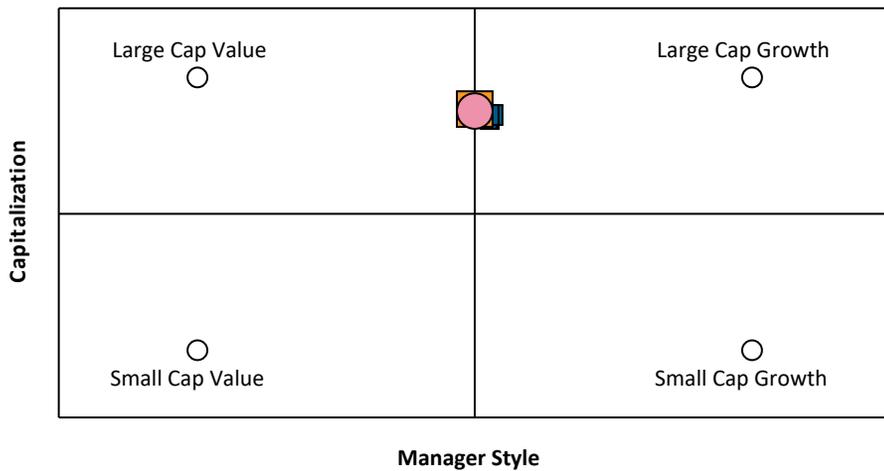
■ PRIT Domestic Equity    ● Russell 3000 Index

**5 Year Risk and Return**



■ PRIT Domestic Equity    ● Russell 3000 Index

**Style Map - 3 Years**



■ Style History    ■ Sep-2021    ● Average Style Exposure

**MPT Statistics vs. Russell 3000 Index**

	<b>3 Years</b>	<b>5 Years</b>
Return	15.9	16.9
Standard Deviation	19.7	15.9
vs. Russell 3000 Index		
Alpha	-0.3	-0.2
Beta	1.0	1.0
R-Squared	1.0	1.0
Consistency	61.1	56.7
Up Market Capture	100.5	100.5
Down Market Capture	101.0	100.7
vs. 90 Day U.S. Treasury Bill		
Sharpe Ratio	0.8	1.0

Mutual fund data sourced from Lipper Analytical Services.

# Manager Evaluation

## PRIT Domestic Equity Account

As of September 30, 2021

### Asset Allocation by Mandate Type

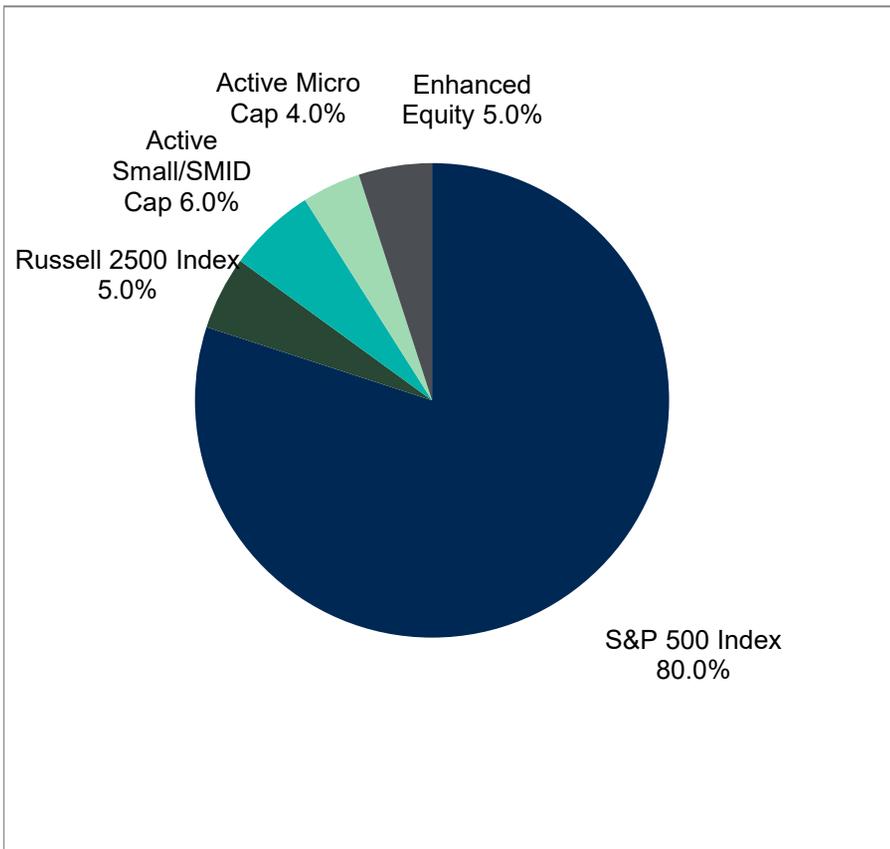
Fund Style: U.S. Core Equity

AUM: \$23.1 Bn

Inception Date: February 1985

Percent of PRIT Fund: 24.2%

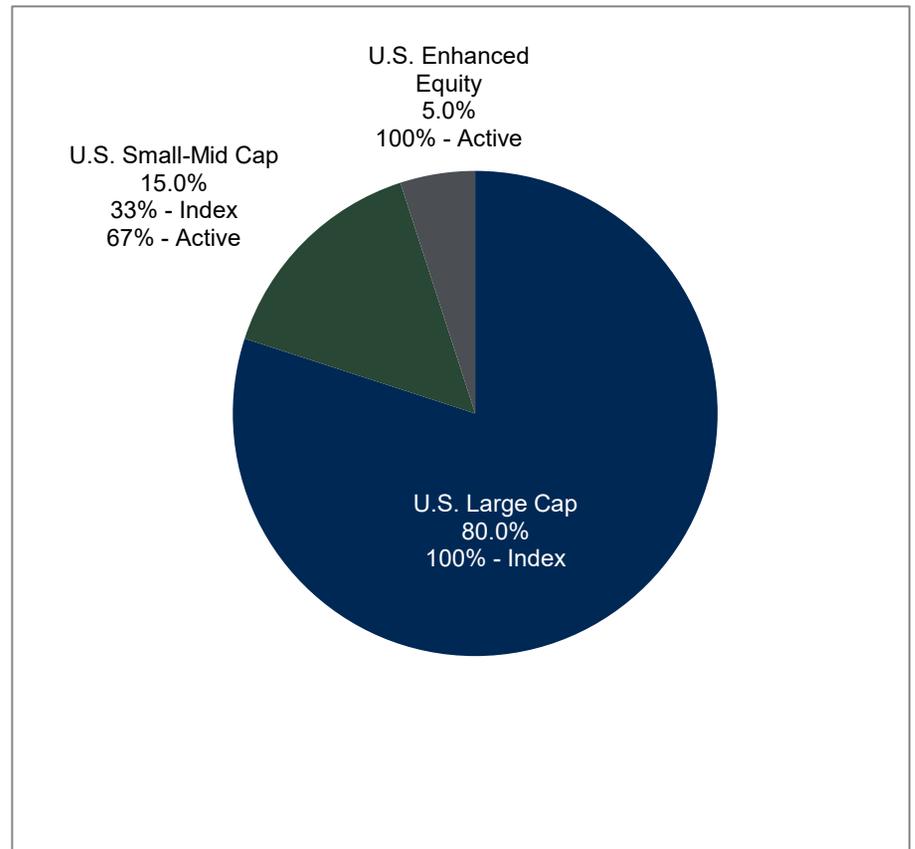
### Strategy Allocations by Manager



### Fund Investment Policy

PRIT is seeking to generate returns that are slightly better than the blended benchmark through an allocation to active management for a portion of the Small to Mid Cap allocation.

### Strategy Allocation Targets



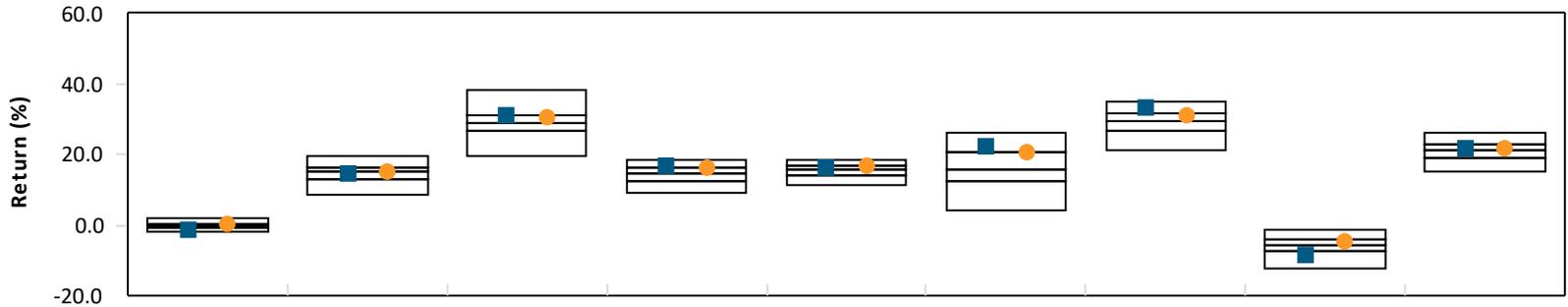
Source: 2021 Comprehensive Annual Financial Report

# Manager Evaluation

## Columbia US Contrarian Core Equity Fund

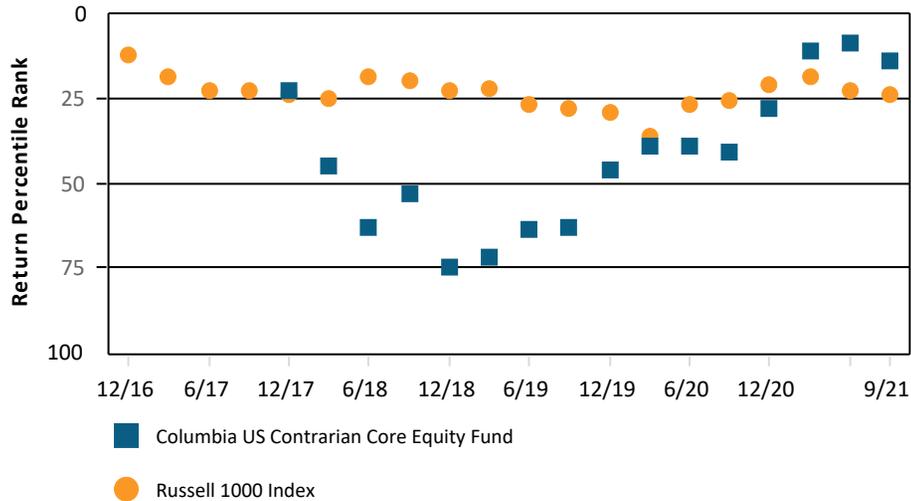
As of September 30, 2021

### Peer Group Analysis vs. IM U.S. Large Cap Core Equity (MF)

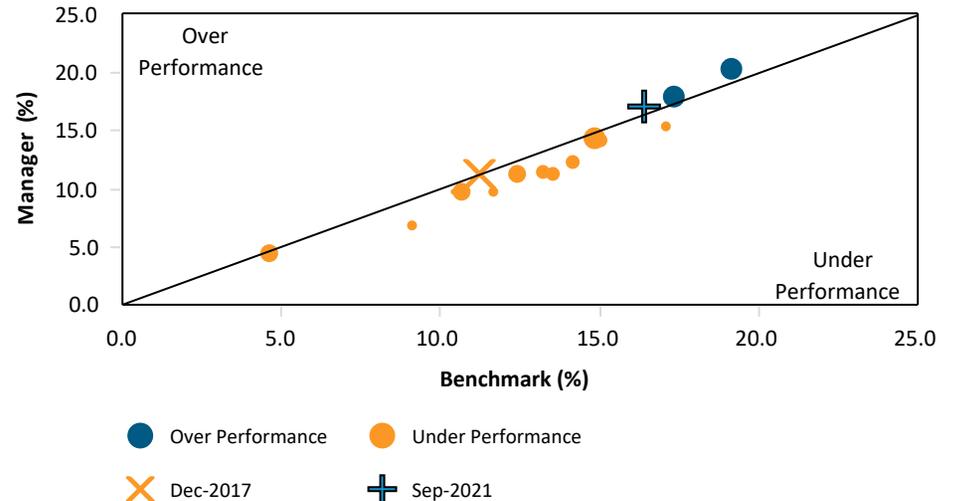


	QTR	YTD	1 Year	3 Years	5 Years	2020	2019	2018	2017
■ Columbia US Contrarian Core Equity Fund	-1.0 (85)	15.0 (53)	31.2 (25)	17.1 (14)	16.4 (36)	22.3 (17)	33.4 (12)	-8.3 (86)	21.7 (40)
● Russell 1000 Index	0.2 (42)	15.2 (47)	31.0 (28)	16.4 (24)	17.1 (20)	21.0 (23)	31.4 (31)	-4.8 (36)	21.7 (41)
5th Percentile	1.8	19.5	38.7	18.8	18.4	26.6	35.2	-1.4	26.2
1st Quartile	0.6	16.6	31.2	16.4	16.9	20.7	31.8	-3.7	22.8
Median	0.0	15.0	29.0	14.7	15.7	16.0	29.7	-5.6	21.2
3rd Quartile	-0.5	13.0	26.8	12.7	14.0	12.3	27.1	-7.2	19.3
95th Percentile	-1.9	8.5	19.9	9.0	11.4	4.5	21.5	-12.0	15.5

### 3 Year Rolling Percentile Ranking vs. IM U.S. Large Cap Core Equity (MF)



### 3 Year Rolling Under/Over Performance vs. Russell 1000 Index

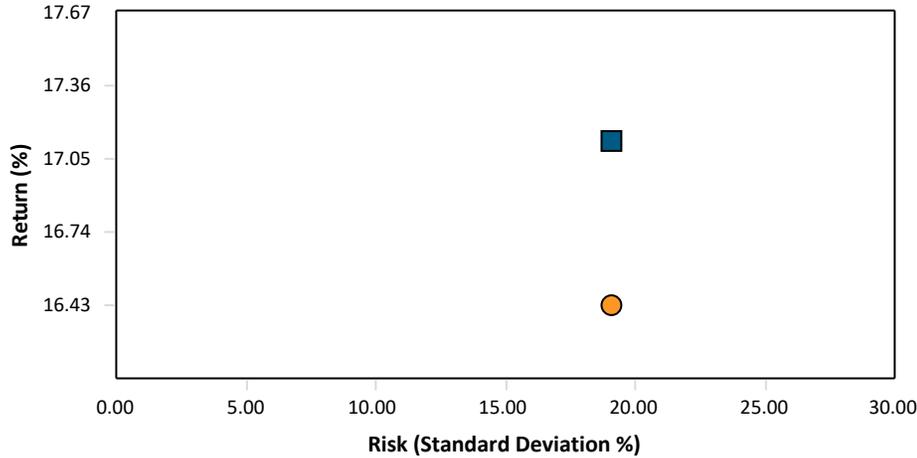


# Manager Evaluation

## Columbia US Contrarian Core Equity Fund

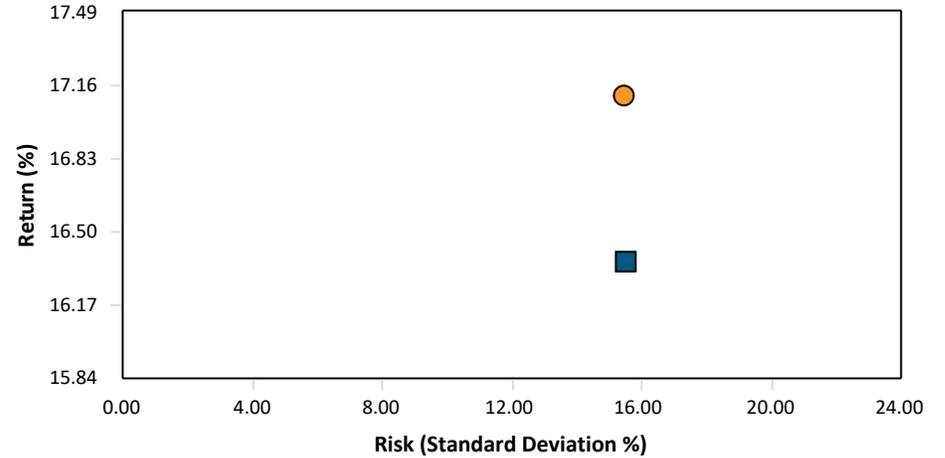
As of September 30, 2021

### 3 Year Risk and Return



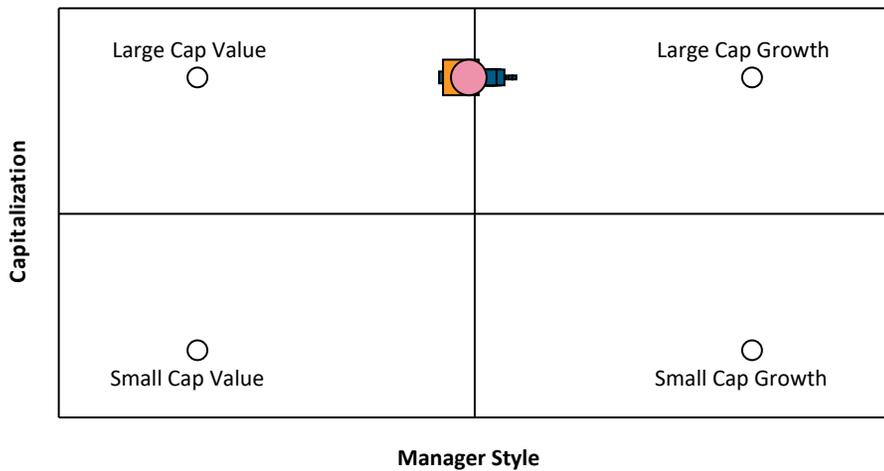
- Columbia US Contrarian Core Equity Fund
- Russell 1000 Index

### 5 Year Risk and Return



- Columbia US Contrarian Core Equity Fund
- Russell 1000 Index

### Style Map - 3 Years



- Style History
- Sep-2021
- Average Style Exposure

### MPT Statistics vs. Russell 1000 Index

	3 Years	5 Years
Return	17.1	16.4
Standard Deviation	19.1	15.5
vs. Russell 1000 Index		
Alpha	0.7	-0.5
Beta	1.0	1.0
R-Squared	1.0	1.0
Consistency	50.0	48.3
Up Market Capture	101.8	99.0
Down Market Capture	100.4	102.7
vs. 90 Day U.S. Treasury Bill		
Sharpe Ratio	0.9	1.0

Mutual fund data sourced from Lipper Analytical Services.

## Manager Evaluation

### Columbia Management Contrarian U.S. Core Equity Fund

As of 09/30/2021

#### Portfolio Information

<b>Firm Name</b>	Columbia Management	<b>Portfolio Manager</b>	Team Managed
<b>Product Name</b>	Columbia U.S. Contrarian Core Equity Fund	<b>PM Tenure</b>	-
<b>Portfolio Assets</b>	\$34.4 million	<b>Fund Style</b>	Large Cap Core
<b>Inception Date</b>	1/1/2015	<b>Style Benchmark</b>	Russell 1000 Index

#### Portfolio Investment Policy

The Columbia U.S. Contrarian Core Equity Fund seeks to achieve a total return consisting of long-term capital appreciation and current income. The Fund invests primarily in large cap stocks of U.S. companies that have the potential for long-term growth and current income. The minimum market capitalization guideline is \$2 billion. The manager employs fundamental research combined with quantitative analysis and risk management to construct portfolios.

#### Largest Equity Holdings

<u>Stock</u>	<u>% of Portfolio</u>
1. Microsoft	6.6
2. Apple	5.6
3. Amazon.com	4.7
4. Raytheon	2.9
5. Alphabet-Cl C	2.8
6. Alphabet-Cl A	2.7
7. Facebook -Class A	2.7
8. Berkshire Hathaway	2.5
9. Johnson & Johnson	2.5
10. Mastercard	2.3

#### Largest Contributors & Detractors

<u>Contributors</u>	<u>% of Portfolio</u>	<u>Bps Contribution</u>
Palo Alto Networks	1.4	0.29
Microsoft	6.6	0.25
Alphabet-Cl A	2.7	0.20
Aon	1.2	0.18
Apple	5.6	0.16
<u>Detractors</u>	<u>% of Portfolio</u>	<u>Bps Contribution</u>
Amazon.com	4.7	-0.22
Activision Blizzard	0.7	-0.20
T-Mobile USA	1.3	-0.16
Stanley Black & Decker	0.8	-0.15
Fidelity National Investment Servic	1.0	-0.13

#### Sector Weightings

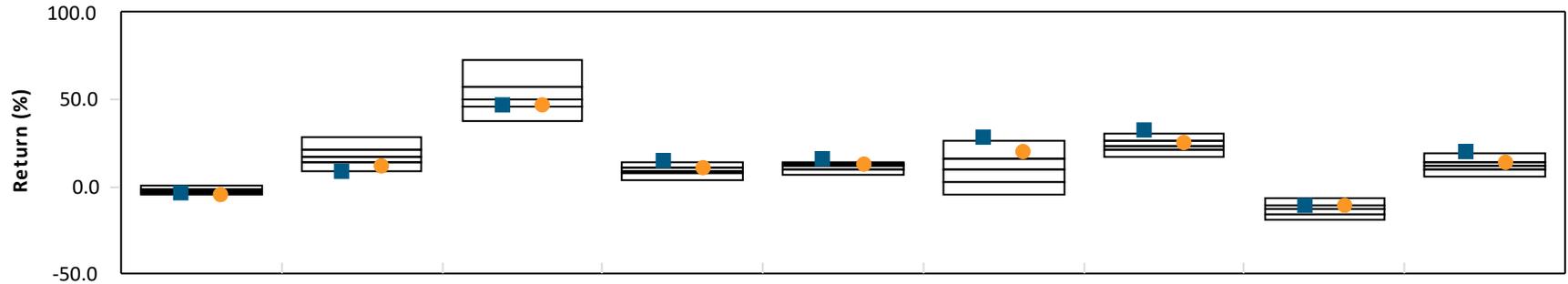
<u>Sector</u>	<u>Port. Wt.</u>	<u>Bmk Wt.</u>	<u>Sector</u>	<u>Port. Wt.</u>	<u>Bmk Wt.</u>
Communication Services	13.0%	10.6%	Industrials	9.1%	8.7%
Consumer Discretionary	9.1%	12.3%	Materials	3.7%	2.3%
Consumer Staples	5.1%	5.4%	Real Estate	0.8%	3.1%
Energy	2.8%	2.6%	Technology	28.9%	27.9%
Financials	11.6%	11.6%	Utilities	1.2%	2.4%
Health Care	12.8%	13.1%	Cash	2.0%	0.0%

# Manager Evaluation

## Wellington Small Cap 2000

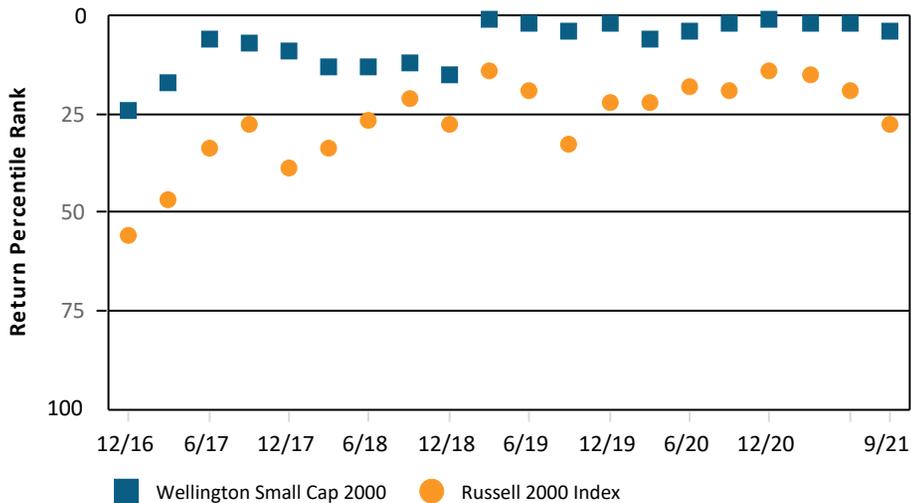
As of September 30, 2021

### Peer Group Analysis vs. IM U.S. Small Cap Core Equity (MF)

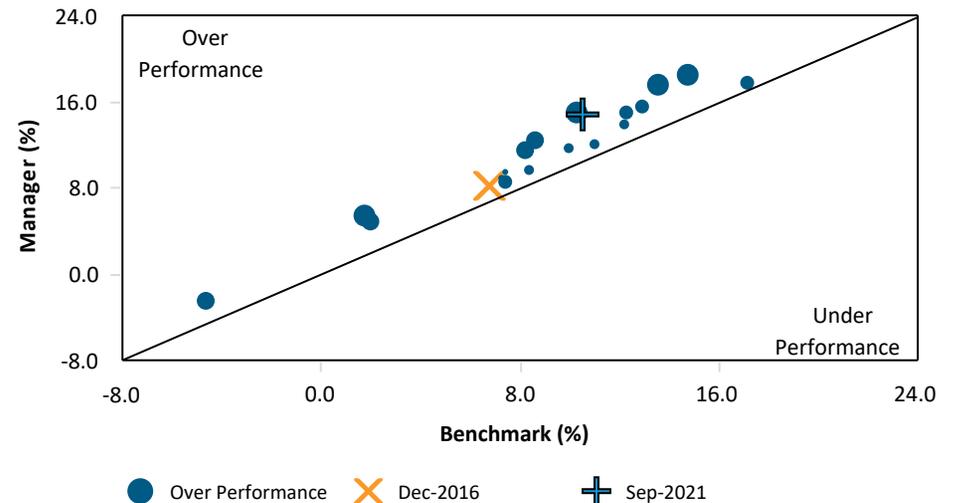


	QTR	YTD	1 Year	3 Years	5 Years	2020	2019	2018	2017
Wellington Small Cap 2000	-3.0 (70)	9.0 (95)	47.3 (68)	15.0 (4)	16.7 (2)	28.5 (3)	33.1 (2)	-10.7 (28)	20.1 (4)
Russell 2000 Index	-4.4 (88)	12.4 (82)	47.7 (65)	10.5 (28)	13.5 (24)	20.0 (13)	25.5 (32)	-11.0 (33)	14.6 (22)
5th Percentile	0.8	28.6	73.0	14.1	14.6	26.3	31.2	-6.4	19.5
1st Quartile	-1.2	21.2	57.6	10.7	13.4	16.2	26.1	-10.5	14.3
Median	-2.3	17.3	49.9	9.1	11.8	10.4	23.9	-12.7	12.4
3rd Quartile	-3.3	13.7	45.9	7.5	10.1	3.1	21.7	-15.8	9.6
95th Percentile	-4.8	8.9	37.6	3.5	7.2	-4.8	17.3	-19.3	5.4

### 3 Year Rolling Percentile Ranking vs. IM U.S. Small Cap Core Equity (MF)



### 3 Year Rolling Under/Over Performance vs. Russell 2000 Index

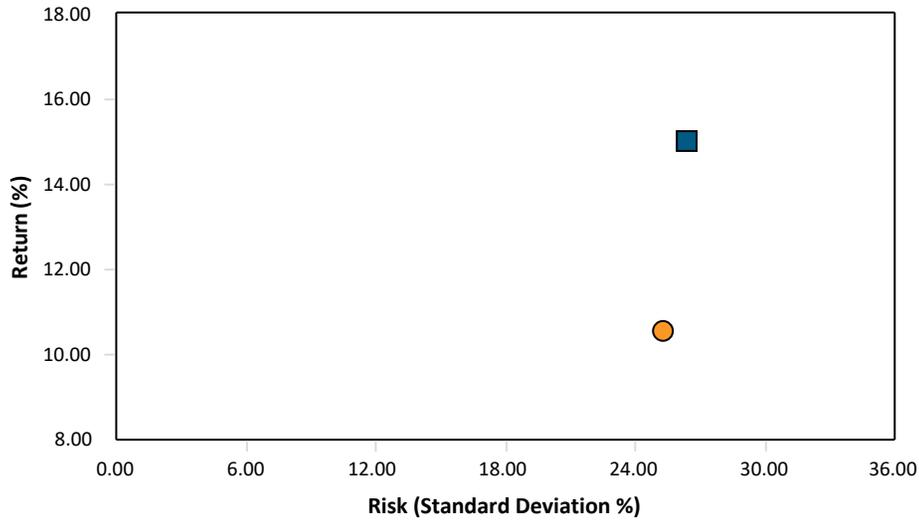


# Manager Evaluation

## Wellington Small Cap 2000

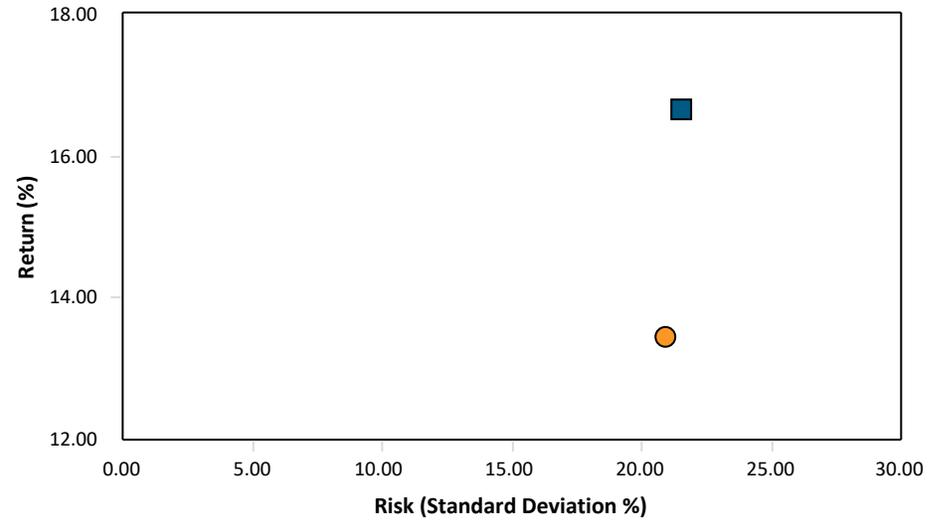
As of September 30, 2021

### 3 Year Risk and Return



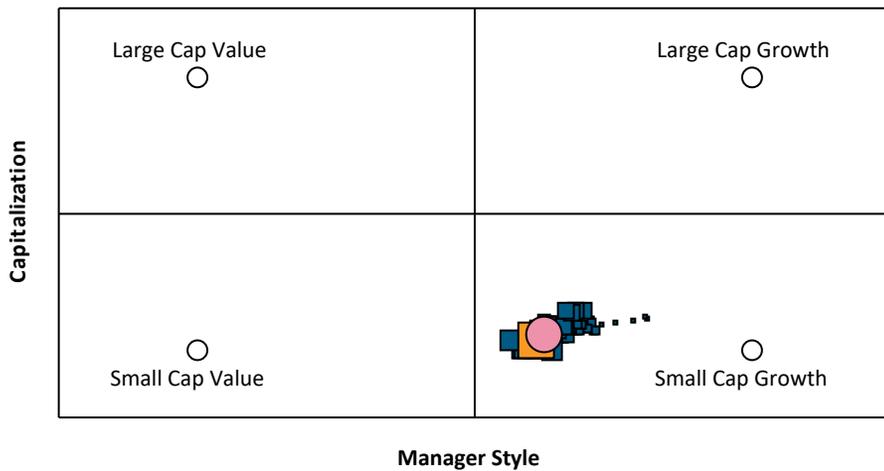
Wellington Small Cap 2000    Russell 2000 Index

### 5 Year Risk and Return



Wellington Small Cap 2000    Russell 2000 Index

### Style Map - 3 Years



Style History    Sep-2021    Average Style Exposure

### MPT Statistics vs. Russell 2000 Index

	3 Years	5 Years
Return	15.0	16.7
Standard Deviation	26.3	21.6
vs. Russell 2000 Index		
Alpha	4.0	2.8
Beta	1.0	1.0
R-Squared	1.0	1.0
Consistency	75.0	65.0
Up Market Capture	105.5	103.7
Down Market Capture	92.2	91.0
vs. 90 Day U.S. Treasury Bill		
Sharpe Ratio	0.6	0.8

Mutual fund data sourced from Lipper Analytical Services.

## Manager Evaluation

Wellington Management - Small Cap 2000 Portfolio

As of 09/30/2021

### Portfolio Information

<b>Firm Name</b>	Wellington Management	<b>Portfolio Manager</b>	Mark Mandell, Cheryl Duckworth, Camilla Martin
<b>Product Name</b>	Small Cap 2000 Portfolio	<b>PM Tenure</b>	Average: 17 Years
<b>Portfolio Assets</b>	\$16.1 million	<b>Fund Style</b>	Small Cap Core Equity
<b>Inception Date</b>	10/1/1999	<b>Style Benchmark</b>	Russell 2000 Index

### Portfolio Investment Policy

The investment objective of the Small Cap 2000 Portfolio is to achieve long-term total return in excess of the Russell 2000 Index by focusing on adding value through superior security selection. The Portfolio invests in equity securities of US companies, emphasizing those that have above-average potential for capital appreciation.

#### Largest Equity Holdings

<u>Stock</u>	<u>% of Portfolio</u>
1. Skyline Champion Co	1.42
2. Clean Harbors Inc	1.35
3. Essential Prop Rlty	1.19
4. Crocs Inc.	1.17
5. National Storage Aff	1.16
6. Century Communities	1.12
7. Trupanion Inc	1.11
8. Lattice Semicondctr	1.10
9. Varonis Systems Inc	1.09
10. Dycom Industries Inc	1.08

#### Largest Contributors & Detractors

<u>Contributors</u>	<u>% of Portfolio</u>	<u>Bps Contribution</u>
AMC Entertainment Ho	0.00	0.23
Clean Harbors Inc	1.35	0.21
TriNet Group Inc	0.90	0.21
Builders FirstSource	0.64	0.20
Triumph Bancorp Inc	0.70	0.20
<u>Detractors</u>	<u>% of Portfolio</u>	<u>Bps Contribution</u>
Trupanion Inc	1.11	-0.41
Cardlytics Inc	0.82	-0.25
Glaukos Corp	0.55	-0.23
Apellis Pharmaceutic	0.31	-0.19
Hydrofarm Hldgs Grp	0.39	-0.14

#### Sector Weightings

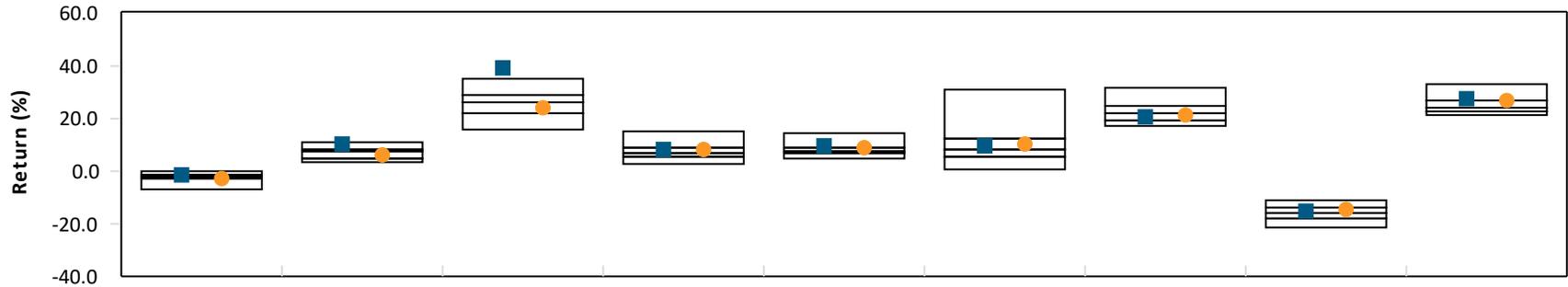
<u>Sector</u>	<u>Port. Wt.</u>	<u>Bmk Wt.</u>	<u>Sector</u>	<u>Port. Wt.</u>	<u>Bmk Wt.</u>
Communication Services	3.37%	3.42%	Industrials	11.89%	14.63%
Consumer Discretionary	14.53%	11.49%	Materials	3.62%	3.71%
Consumer Staples	3.42%	3.22%	Real Estate	8.99%	6.89%
Energy	4.10%	4.54%	Technology	13.25%	14.16%
Financials	15.87%	15.45%	Utilities	1.68%	2.26%
Health Care	19.27%	20.24%	Cash	0	0

# Manager Evaluation

## Earnest Partners Intl Equity

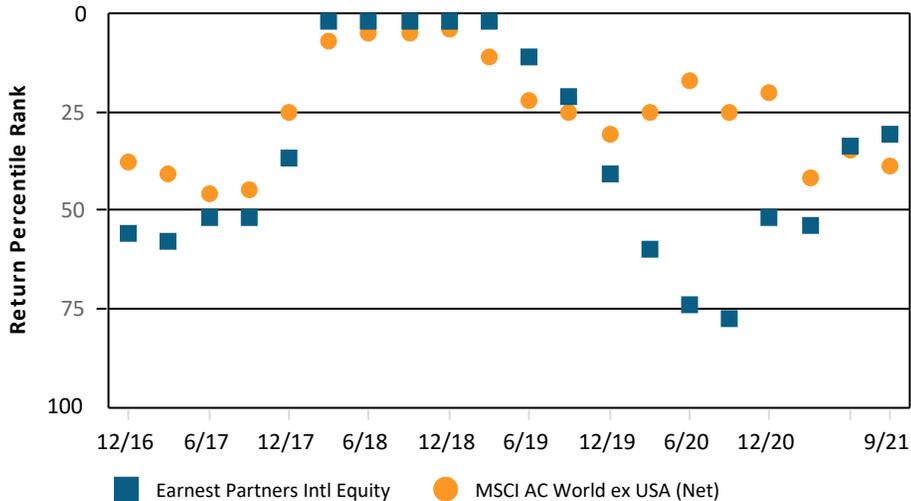
As of September 30, 2021

### Peer Group Analysis vs. IM International Large Cap Core Equity (MF)

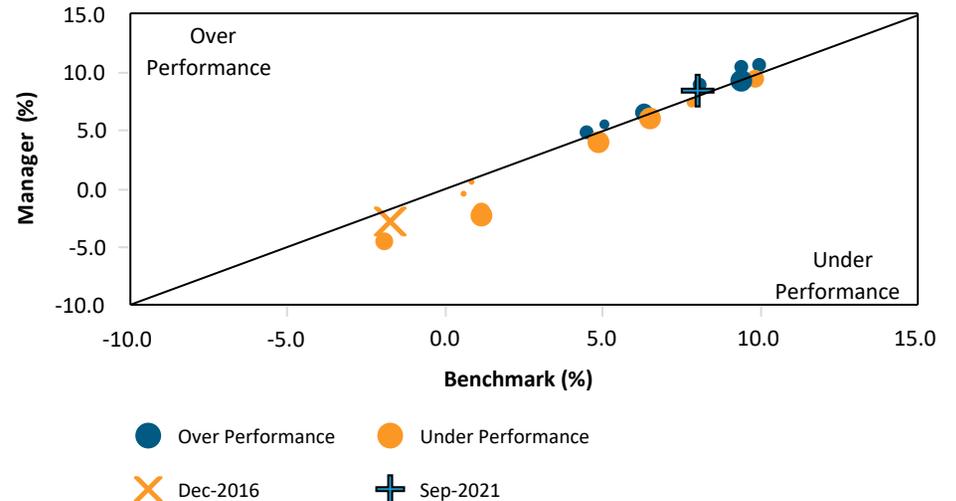


	QTR	YTD	1 Year	3 Years	5 Years	2020	2019	2018	2017
■ Earnest Partners Intl Equity	-1.3 (32)	10.2 (12)	39.3 (1)	8.6 (31)	9.7 (15)	9.7 (32)	21.0 (63)	-14.9 (44)	27.8 (14)
● MSCI AC World ex USA (Net)	-3.0 (78)	5.9 (67)	23.9 (65)	8.0 (39)	8.9 (28)	10.7 (27)	21.5 (59)	-14.2 (33)	27.2 (17)
5th Percentile	0.2	11.2	35.2	15.0	14.4	31.2	31.9	-11.1	32.9
1st Quartile	-1.1	8.3	28.8	8.8	9.2	12.2	25.0	-13.9	26.7
Median	-2.0	7.7	26.0	6.8	7.7	8.5	22.1	-15.7	24.4
3rd Quartile	-2.6	5.0	21.8	5.7	7.1	5.4	19.0	-17.9	23.0
95th Percentile	-6.9	3.4	15.6	2.8	4.9	0.6	17.5	-21.7	21.4

### 3 Year Rolling Percentile Ranking vs. IM International Large Cap Core Equity (MF)



### 3 Year Rolling Under/Over Performance vs. MSCI AC World ex USA (Net)

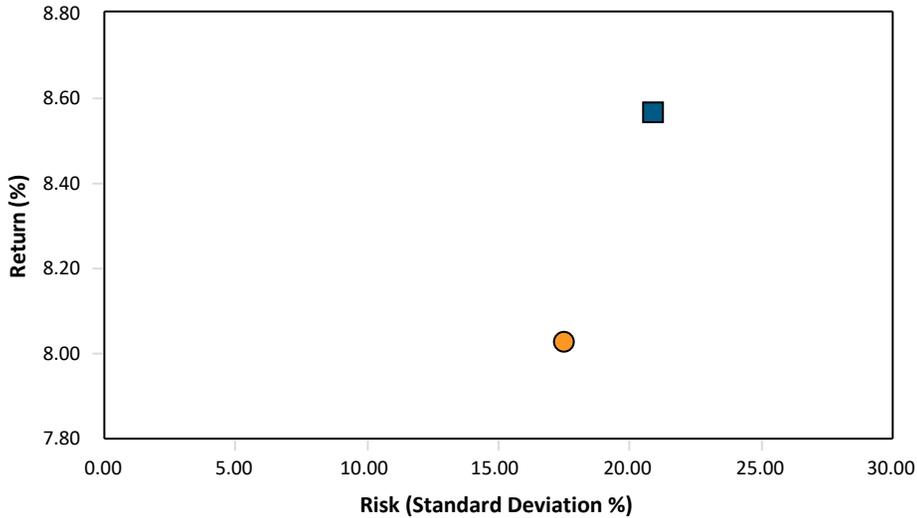


# Manager Evaluation

## Earnest Partners Intl Equity

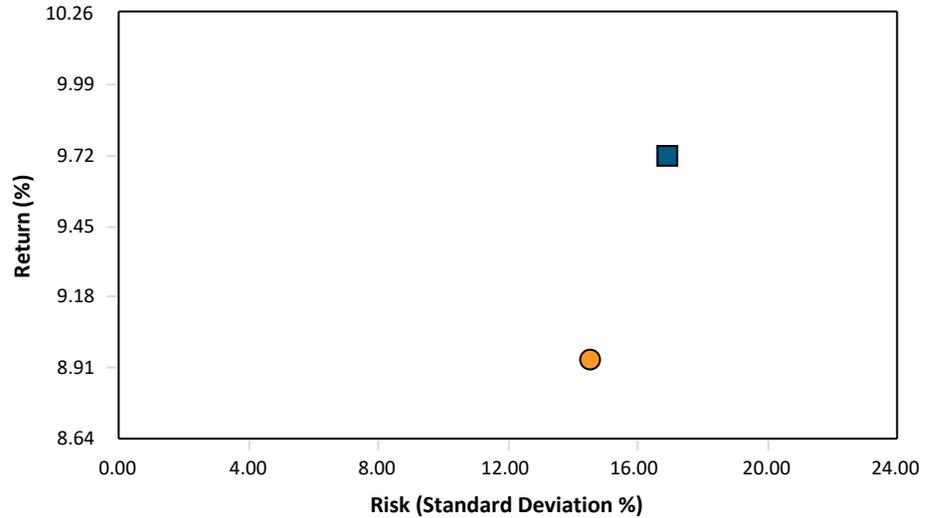
As of September 30, 2021

### 3 Year Risk and Return



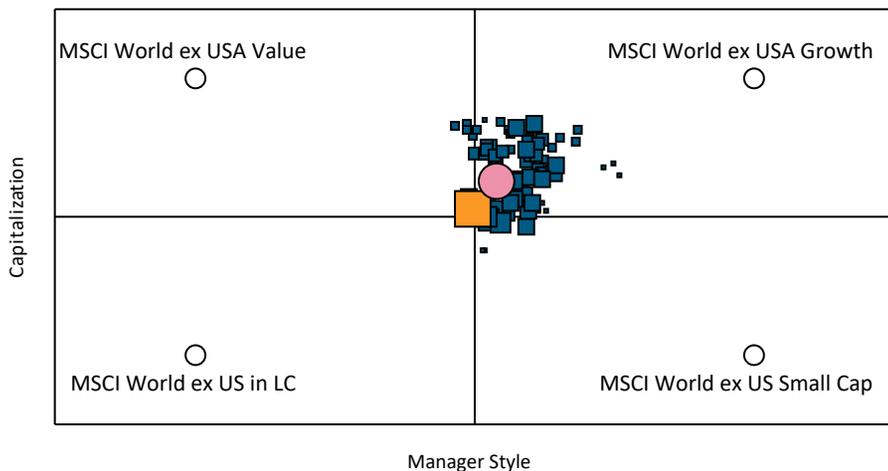
■ Earnest Partners Intl Equity    ● MSCI AC World ex USA (Net)

### 5 Year Risk and Return



■ Earnest Partners Intl Equity    ● MSCI AC World ex USA (Net)

### Style Map - 3 Years



■ Style History    ■ Sep-2021    ● Average Style Exposure

### MPT Statistics vs. MSCI AC World ex USA (Net)

	3 Years	5 Years
Return	8.6	9.7
Standard Deviation	20.9	16.9
vs. MSCI AC World ex USA (Net)		
Alpha	-0.4	-0.2
Beta	1.2	1.1
R-Squared	1.0	1.0
Consistency	44.4	50.0
Up Market Capture	111.9	106.8
Down Market Capture	111.6	103.8
vs. 90 Day U.S. Treasury Bill		
Sharpe Ratio	0.4	0.6

Mutual fund data sourced from Lipper Analytical Services.

## Manager Evaluation

### EARNEST Partners - International Pooled Group Trust

As of March 31, 2021

#### Portfolio Information

<b>Firm Name</b>	Earnest Partners	<b>Portfolio Manager</b>	Team based
<b>Product Name</b>	International Pooled Group Trust	<b>PM Tenure</b>	Average 20 Years
<b>Strategy Assets</b>	\$24.2 million	<b>Fund Style</b>	International ex-U.S. Equity
<b>Inception Date</b>	8/1/2008	<b>Style Benchmark</b>	MSCI ACWI ex-U.S. Index

#### Portfolio Investment Policy

Earnest Partners seeks to outperform the benchmark while controlling volatility and risk. Security selection is driven by the firm's proprietary screening tool - Return Pattern Recognition, fundamental analysis and risk management. The Fund typically holds up to 30% in Emerging Markets. The manager uses a statistical approach referred to as downside deviation to measure and constrain the likelihood of underperforming the assigned benchmark.

#### Largest Equity Holdings

<u>Stock</u>	<u>Portfolio Wt.</u>
1 Barclays PLC	2.4%
2 Entain PLC	2.4%
3 Eurofins Scientific Societe Europeenne	2.4%
4 Merck KGaA	2.2%
5 Norsk Hydro ASA	2.1%
6 Taiwan Semiconductor Manufacturing Co., Ltd.	2.1%
7 DENSO CORPORATION	2.0%
8 Hitachi, Ltd.	2.0%
9 Capgemini SE	2.0%
10 Amadeus IT Group SA Class A	<u>1.9%</u>
	<b>21.5%</b>

#### Largest Contributors & Detractors / Country Weightings

<u>Top Contributors</u>	<u>Portfolio Wt.</u>	<u>Bottom Contributors</u>
		Data not available from manager.
<u>Country</u>	<u>Portfolio Wt.</u>	<u>Benchmark Wt.</u>
Americas (ex US)	13.1%	10.8%
Asia (ex Japan)	25.1%	29.7%
Europe (ex UK)	39.3%	33.5%
Japan	8.9%	14.6%
Middle East/Africa	1.3%	2.8%
United Kingdom	11.8%	8.6%

#### Weightings

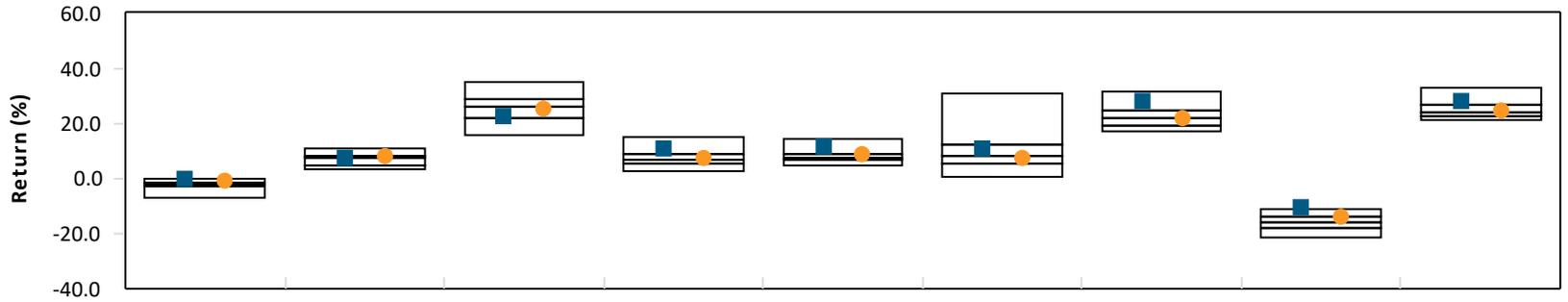
<u>Sector</u>	<u>Port. Wt.</u>	<u>Bmk Wt.</u>	<u>Sector</u>	<u>Port. Wt.</u>	<u>Bmk Wt.</u>
Communication Services	1.3%	6.9%	Industrials	13.4%	11.8%
Consumer Discretionary	14.6%	11.7%	Information Technology	17.1%	13.5%
Consumer Staples	8.0%	8.4%	Materials	8.9%	7.9%
Energy	6.1%	5.2%	Real Estate	1.0%	2.4%
Financials	16.2%	19.5%	Utilities	0.0%	3.0%
Health Care	13.3%	9.7%			

# Manager Evaluation

## MFS Instl International Equity Fund

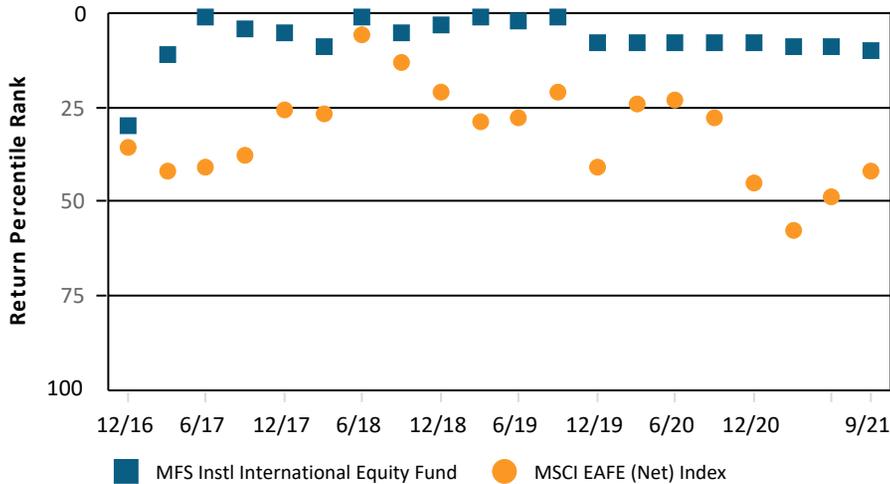
As of September 30, 2021

### Peer Group Analysis vs. IM International Large Cap Core Equity (MF)

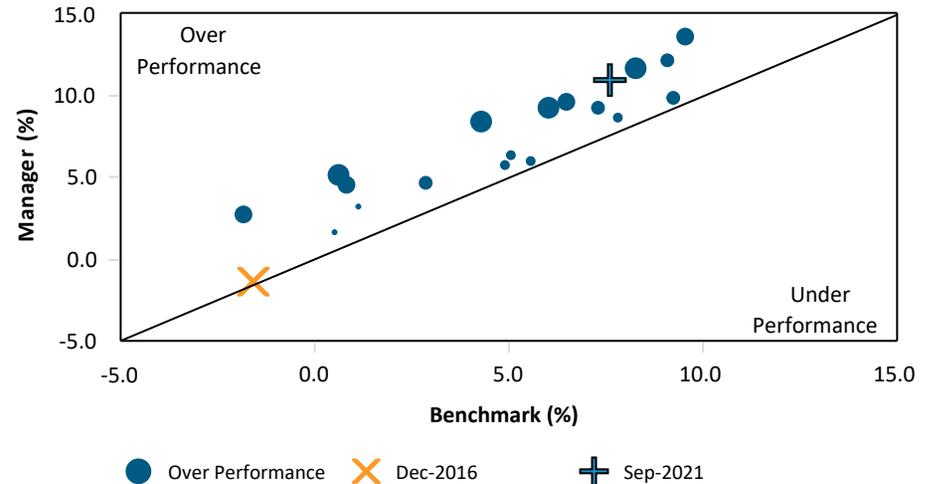


	QTR	YTD	1 Year	3 Years	5 Years	2020	2019	2018	2017
■ MFS Instl International Equity Fund	-0.2 (9)	7.9 (47)	22.9 (70)	11.0 (10)	11.5 (9)	11.1 (26)	28.4 (10)	-10.7 (5)	28.0 (12)
● MSCI EAFE (Net) Index	-0.4 (14)	8.3 (25)	25.7 (56)	7.6 (42)	8.8 (29)	7.8 (55)	22.0 (52)	-13.8 (25)	25.0 (38)
5th Percentile	0.2	11.2	35.2	15.0	14.4	31.2	31.9	-11.1	32.9
1st Quartile	-1.1	8.3	28.8	8.8	9.2	12.2	25.0	-13.9	26.7
Median	-2.0	7.7	26.0	6.8	7.7	8.5	22.1	-15.7	24.4
3rd Quartile	-2.6	5.0	21.8	5.7	7.1	5.4	19.0	-17.9	23.0
95th Percentile	-6.9	3.4	15.6	2.8	4.9	0.6	17.5	-21.7	21.4

### 3 Year Rolling Percentile Ranking vs. IM International Large Cap Core Equity (MF)



### 3 Year Rolling Under/Over Performance vs. MSCI EAFE (Net) Index



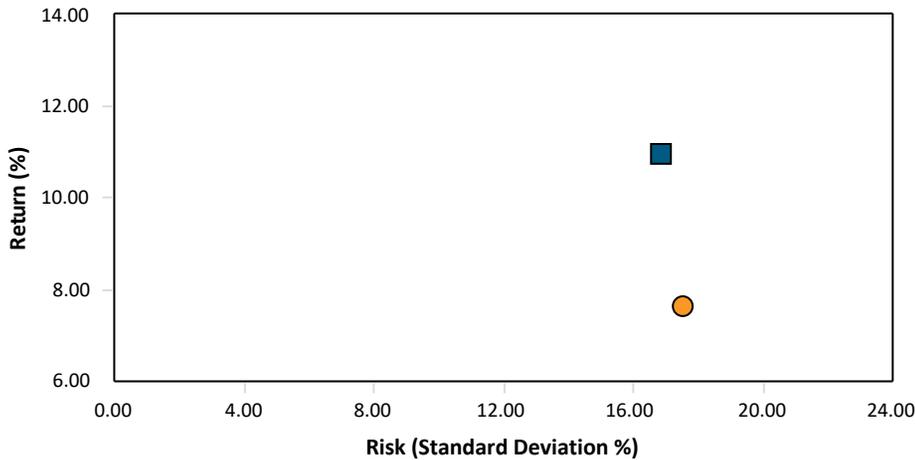
Mutual fund data sourced from Lipper Analytical Services.

# Manager Evaluation

## MFS Instl International Equity Fund

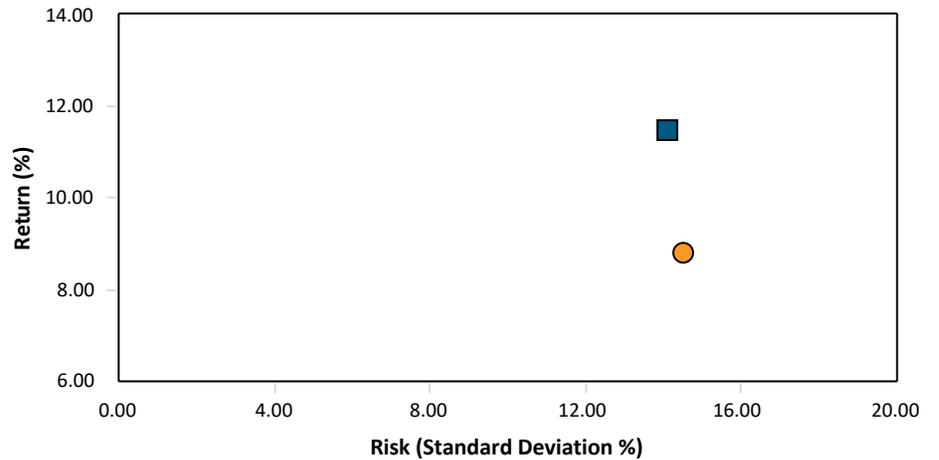
As of September 30, 2021

### 3 Year Risk and Return



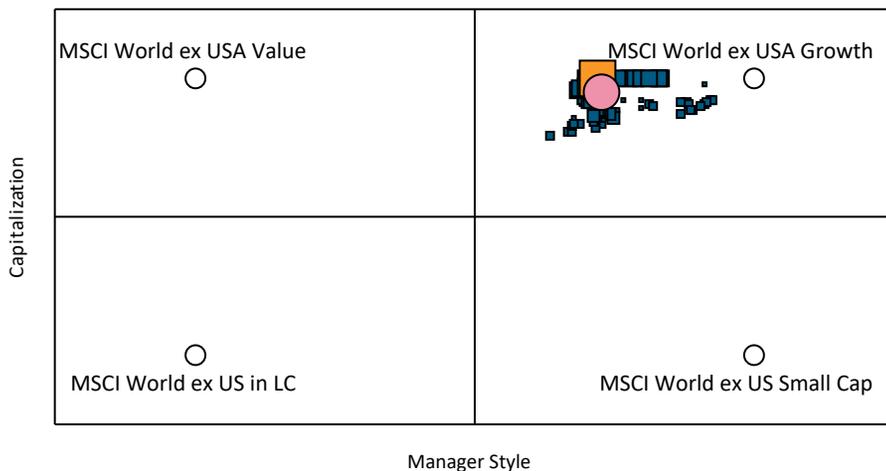
- MFS Instl International Equity Fund
- MSCI EAFE (Net) Index

### 5 Year Risk and Return



- MFS Instl International Equity Fund
- MSCI EAFE (Net) Index

### Style Map - 3 Years



- Style History
- Sep-2021
- Average Style Exposure

### MPT Statistics vs. MSCI EAFE (Net) Index

	<b>3 Years</b>	<b>5 Years</b>
Return	11.0	11.5
Standard Deviation	16.8	14.1
vs. MSCI EAFE (Net) Index		
Alpha	3.5	2.9
Beta	0.9	0.9
R-Squared	1.0	1.0
Consistency	61.1	56.7
Up Market Capture	105.2	104.5
Down Market Capture	92.3	91.0
vs. 90 Day U.S. Treasury Bill		
Sharpe Ratio	0.6	0.8

Mutual fund data sourced from Lipper Analytical Services.

# Manager Evaluation

## MFS Instl International Equity Fund

Report Date September 30, 2021

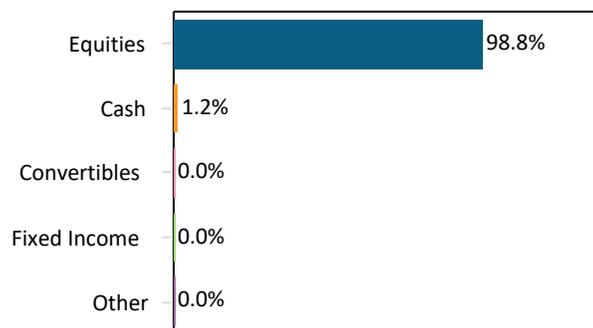
### Mutual Fund Information

Fund Name :	MFS Institutional Trust: MFS Institutional International Equity Fund	Portfolio Assets :	\$12,805 Million
Fund Family :	MFS Investment Management	Fund Assets :	\$12,805 Million
Ticker :	MIEIX	Portfolio Manager :	Ling/Benzinho
Inception Date :	01/31/1996	PM Tenure :	2009--2016
Portfolio Turnover :	13%		

### Fund Investment Policy

The Fund seeks capital appreciation. The Fund normally invests at least 80% of its net assets in non-U.S. equity securities. The Fund uses a bottom-up investment approach. Stocks are selected primarily based on fundamental analysis of issuers and their potential.

#### Asset Allocation as of 04/30/21



#### Top 10 Securities as of 04/30/21

Nestle SA ORD	3.7 %
Schneider Electric SE ORD	3.2 %
AIA Group Ltd ORD	2.8 %
L'Air Liquide Societe Anonyme pour	2.8 %
Roche Holding AG	2.8 %
LVMH Moet Hennessy Louis Vuitton	2.6 %
SAP SE ORD	2.3 %
Hitachi Ltd ORD	2.0 %
Daikin Industries Ltd ORD	2.0 %
Novo Nordisk A/S ORD	1.9 %

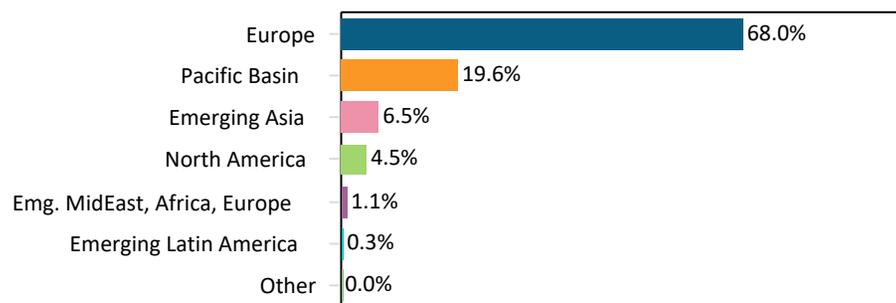
#### Top 5 Countries as of 04/30/21

France	18.4 %
Japan	15.7 %
Switzerland	13.8 %
United Kingdom	9.9 %
Germany	8.9 %

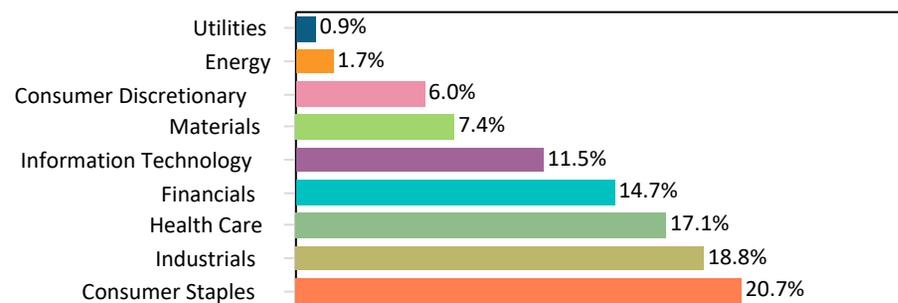
#### Equity Characteristics as of 04/30/21

Total Securities	84
Avg. Market Cap	\$104,989 Million
P/E	33.1
P/B	4.8
Div. Yield	1.9%
Annual EPS	-0.3

#### Region Allocation as of 04/30/21



#### Sector Allocation as of 04/30/21

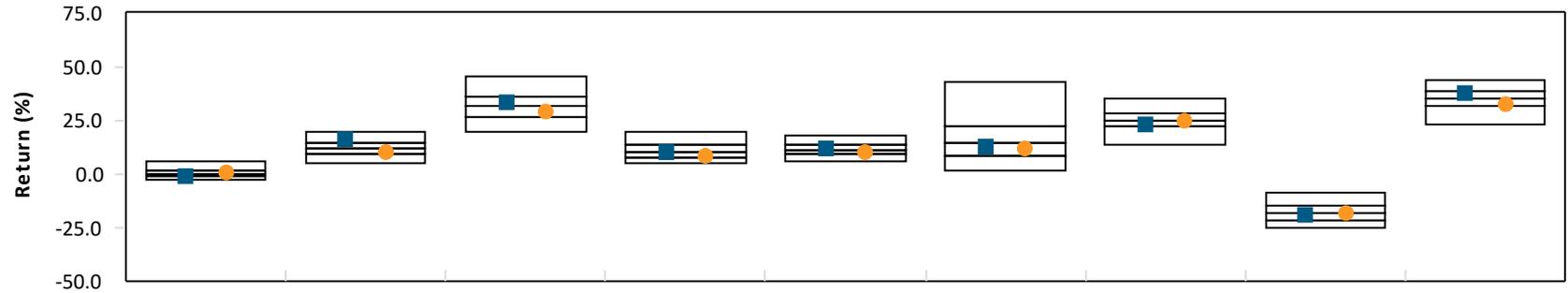


# Manager Evaluation

## Acadian Intl Small Cap Fund

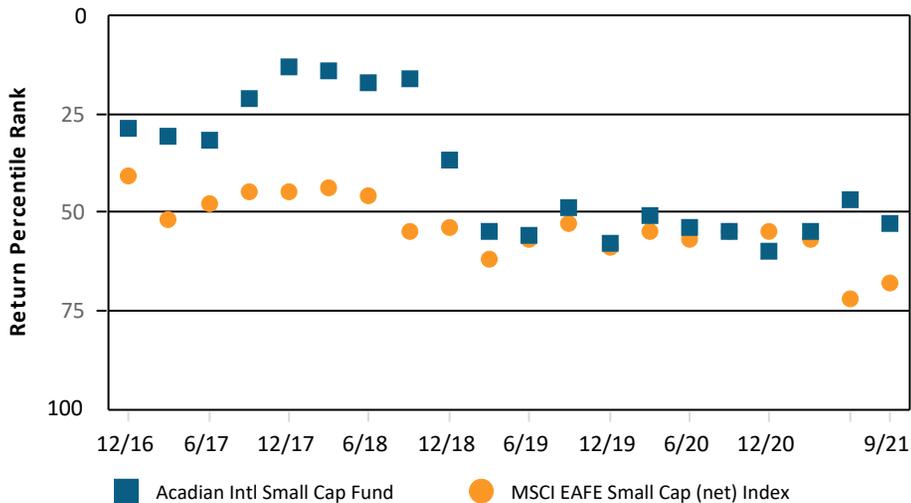
As of September 30, 2021

### Peer Group Analysis vs. IM International Small Cap Equity (SA+CF+MF)

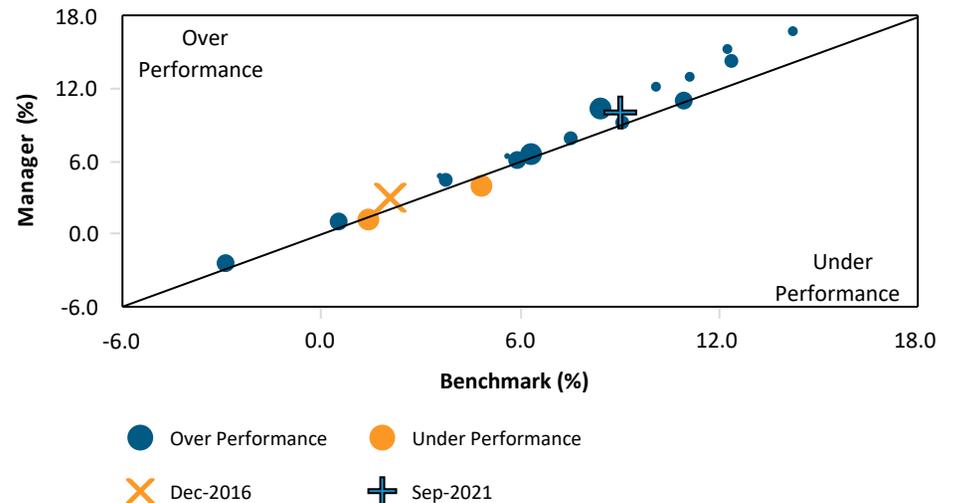


	QTR	YTD	1 Year	3 Years	5 Years	2020	2019	2018	2017
■ Acadian Intl Small Cap Fund	-1.0 (78)	16.0 (17)	33.8 (30)	10.1 (53)	11.8 (44)	13.3 (55)	22.9 (67)	-19.2 (59)	37.9 (31)
● MSCI EAFE Small Cap (net) Index	0.9 (32)	10.0 (73)	29.0 (67)	9.0 (68)	10.4 (64)	12.3 (57)	25.0 (51)	-17.9 (44)	33.0 (73)
5th Percentile	5.6	19.5	45.4	19.9	17.7	42.9	35.0	-8.2	44.0
1st Quartile	1.5	14.9	36.0	13.8	14.1	22.8	28.4	-15.1	38.8
Median	0.1	12.3	31.7	10.4	11.3	14.8	25.0	-18.5	35.2
3rd Quartile	-0.8	9.7	27.0	8.1	9.9	8.7	22.2	-21.6	32.3
95th Percentile	-2.7	5.4	19.8	4.9	5.9	1.6	14.0	-24.8	23.2

### 3 Year Rolling Percentile Ranking vs. IM International Small Cap Equity (SA+CF+MF)



### 3 Year Rolling Under/Over Performance vs. MSCI EAFE Small Cap (net) Index

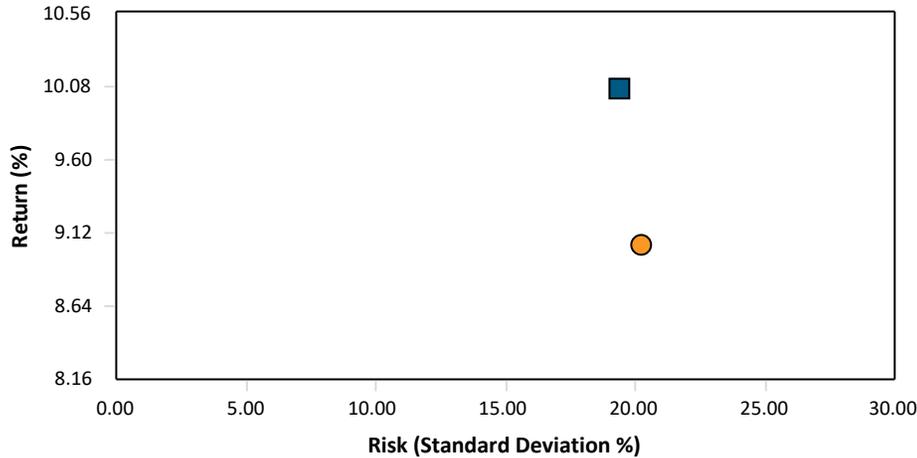


# Manager Evaluation

## Acadian Intl Small Cap Fund

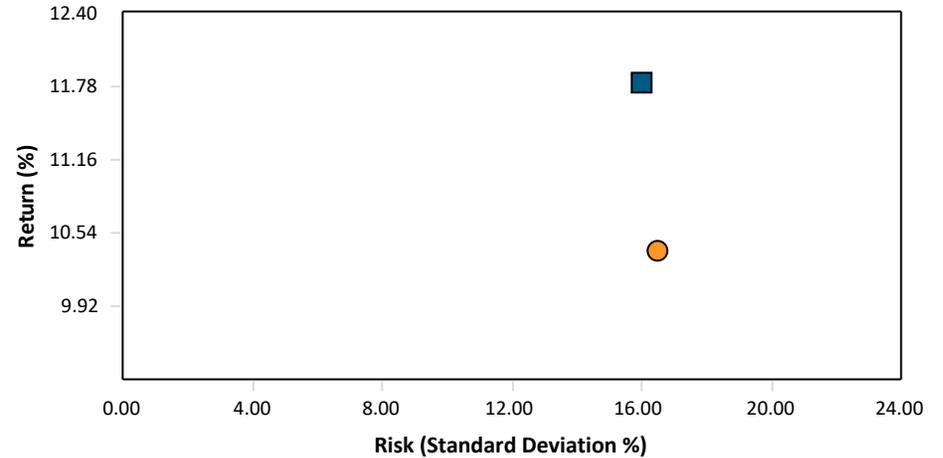
As of September 30, 2021

### 3 Year Risk and Return



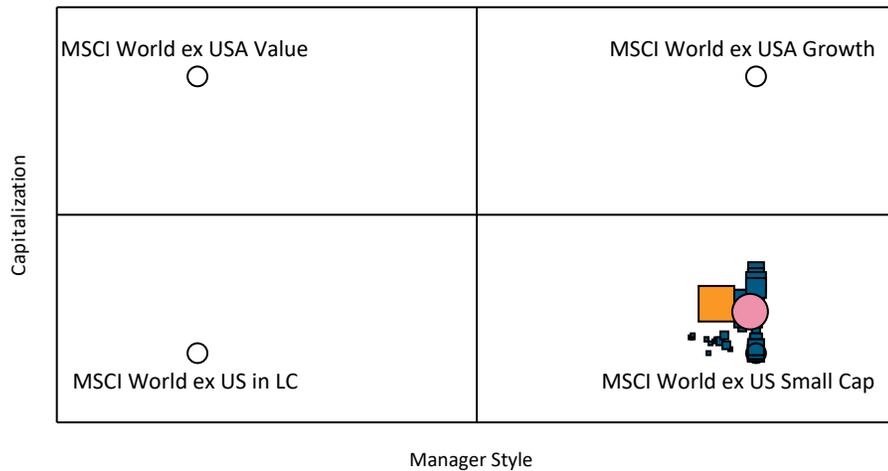
- Acadian Intl Small Cap Fund
- MSCI EAFE Small Cap (net) Index

### 5 Year Risk and Return



- Acadian Intl Small Cap Fund
- MSCI EAFE Small Cap (net) Index

### Style Map - 3 Years



- Style History
- Sep-2021
- Average Style Exposure

### MPT Statistics vs. MSCI EAFE Small Cap (net) Index

	3 Years	5 Years
Return	10.1	11.8
Standard Deviation	19.4	16.0
vs. MSCI EAFE Small Cap (net) Index		
Alpha	1.4	1.8
Beta	0.9	1.0
R-Squared	1.0	1.0
Consistency	50.0	56.7
Up Market Capture	97.4	99.3
Down Market Capture	92.6	91.1
vs. 90 Day U.S. Treasury Bill		
Sharpe Ratio	0.5	0.7

Mutual fund data sourced from Lipper Analytical Services.

## Manager Evaluation

Acadian Asset Management -Acadian International Small-Cap Fund  
As of 09/30/2021

### Portfolio Information

<b>Firm Name</b>	Acadian Asset Management	<b>Portfolio Manager</b>	Team based
<b>Product Name</b>	Acadian International Small-Cap Fund	<b>PM Tenure</b>	Average 14 Years
<b>Strategy Assets</b>	\$8.3 million	<b>Fund Style</b>	Non-US Small Capitalization
<b>Inception Date</b>	2011-02-01	<b>Style Benchmark</b>	MSCI EAFE Small-Cap (net)

### Portfolio Investment Policy

Acadian uses a quantitative investment process, aimed at isolating companies that are poised to benefit from value, growth, quality and technical factors. The firm uses the model to predict the expected relative performance of each investment in its universe. Portfolio optimization is used to construct a balanced, risk-controlled portfolio. The resulting portfolio has 500-1,700 positions with individual position sizing no more than 2.25% at market value, sector exposure that is +/- 8% of the benchmark, industry/country exposure that is +/- 6% of the benchmark, and 4-6% tracking error. The portfolio invests opportunistically in emerging markets

### Largest Equity Holdings

<u>Stock</u>	<u>Active Weight</u>
1. ASM INTERNATIONAL NV	1.7%
2. ICON PLC	1.4%
3. INMODE LTD	1.2%
4. OZ MINERALS LTD	1.1%
5. GETINGE AB	1.0%
6. TECAN GROUP AG	1.0%
7. MINERAL RESOURCES LTD	1.0%
8. BE SEMICONDUCTOR INDUSTRIES NV	1.0%
9. ROYAL MAIL PLC	0.9%
10. SIEGFRIED HOLDING AG	0.9%
	11.3%

### Largest Contributors & Detractors / Country Weightings

<u>Top Contributors</u>	<u>Portfolio Wt.</u>	<u>Bottom Contributors</u>	<u>Portfolio Wt.</u>
INMODE ORD SHS (PROPOSED)	1.0%	ROYAL MAIL PLC	1.2%
ICON ORD SHS	1.2%	GN STORE NORD AS	1.0%
ASM INTERNATIONAL NV	1.7%	MINERAL RESOURCES LTD	1.5%
TECAN GROUP AG	1.2%	SIMS LTD	0.8%
ENDAVA PLC	0.6%	KAMBI GROUP PLC	0.2%
	<u>Portfolio Wt.</u>	<u>Benchmark Wt.</u>	
Europe ex UK	42.3%	37.5%	
UK	11.8%	17.1%	
Asia ex Japan	12.3%	13.5%	
Japan	23.1%	28.9%	
North America	5.3%	0.0%	
Middle East	4.6%	2.9%	
Emerging Markets	0.0%	0.0%	

### Sector Weightings

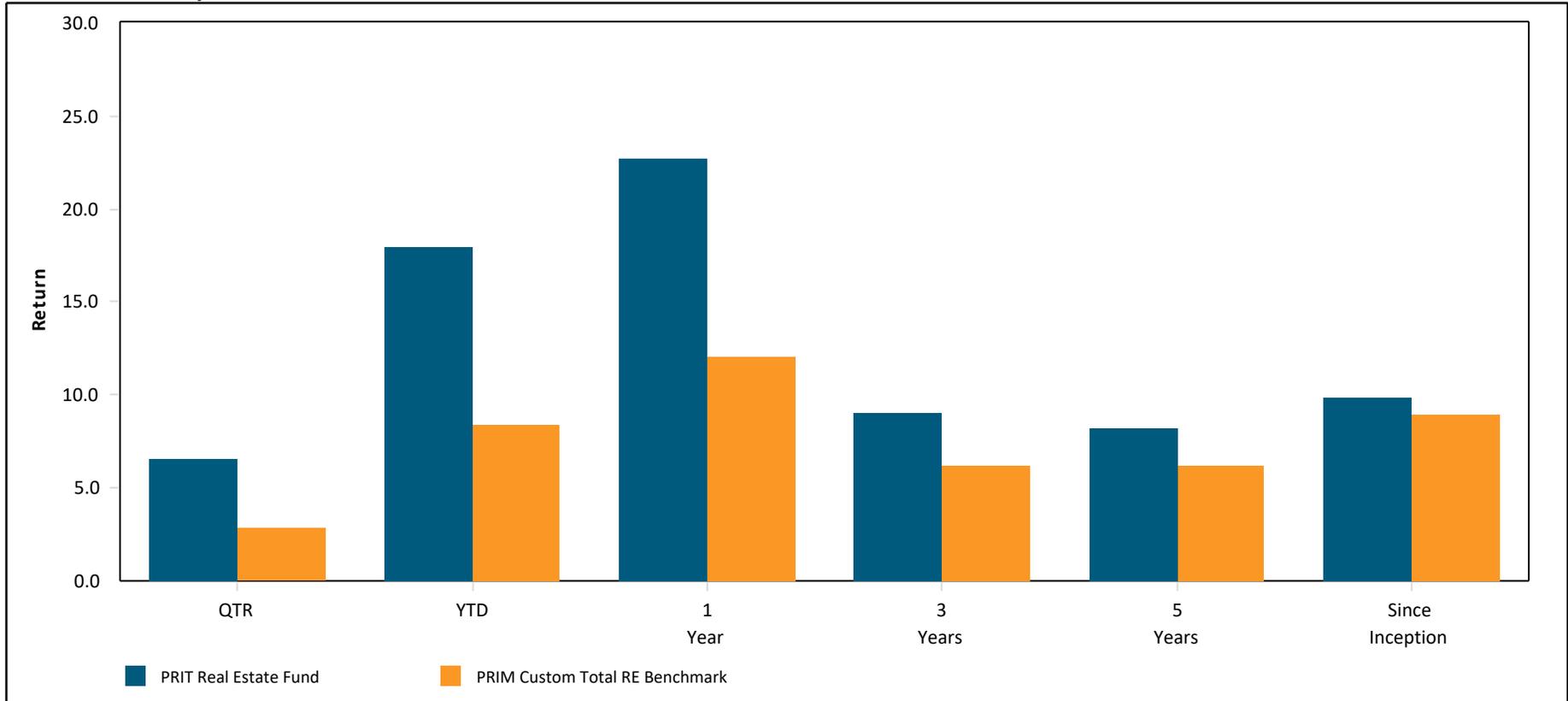
<u>Sector</u>	<u>Port. Wt.</u>	<u>Bmk Wt.</u>	<u>Sector</u>	<u>Port. Wt.</u>	<u>Bmk Wt.</u>
Communication Services	3.2%	4.6%	Industrials	27.3%	23.7%
Consumer Discretionary	10.6%	13.2%	Information Technology	17.6%	10.0%
Consumer Staples	0.2%	5.6%	Materials	12.8%	8.8%
Energy	1.5%	1.6%	Real Estate	5.7%	11.6%
Financials	5.7%	10.8%	Utilities	0.0%	2.8%
Health Care	14.7%	7.3%			

# Manager Evaluation

PRIT Real Estate Fund

As of September 30, 2021

## Performance Analysis



	QTR	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>PRIT Real Estate Fund</b>	<b>6.6</b>	<b>18.0</b>	<b>22.7</b>	<b>9.1</b>	<b>8.3</b>	<b>9.9</b>	<b>06/01/2011</b>
<i>PRIM Custom Total RE Benchmark</i>	<i>2.8</i>	<i>8.4</i>	<i>12.0</i>	<i>6.2</i>	<i>6.2</i>	<i>9.0</i>	
Difference	3.8	9.6	10.7	2.9	2.1	0.9	

# Manager Evaluation

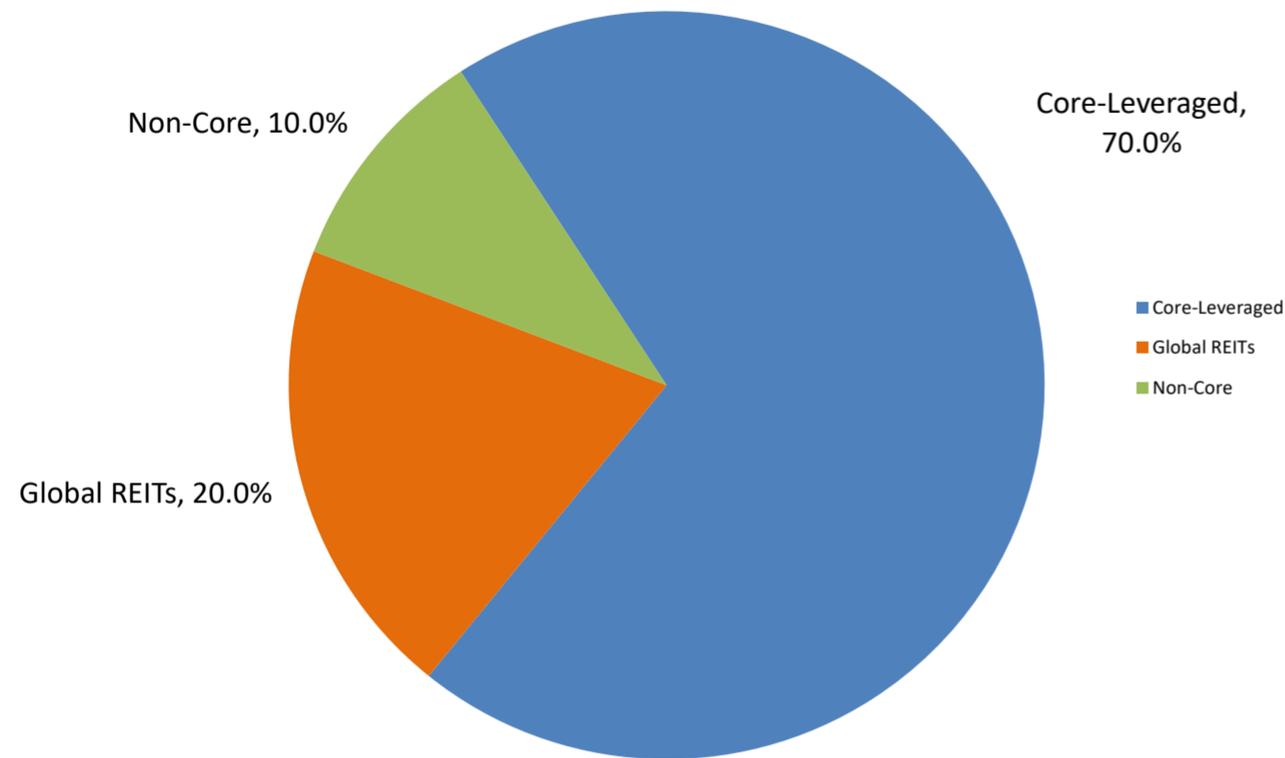
## PRIT Real Estate Account

### Portfolio Information

Fund Style: Real Estate - combined

PRIT Real Estate target range of PRIT Fund: 7%-13%

### Target Allocations



### Fund Investment Policy

The PRIT Real Estate Account provides diversified exposure to the commercial real estate market through exposure to physical assets and public securities. Approximately 70% of the portfolio is invested in separate account core portfolios with Invesco, LaSalle, CBRE, Stockbridge and AEW and PRIM has been building a portfolio of direct real estate investments. The Core portfolio includes portfolio debt of approximately \$1 billion. The portfolio also includes dedicated allocations to Global REIT portfolios managed by CenterSquare, Presima, and Brookfield. Non-Core portfolio investments include allocations with Intercontinental and DivcoWest. Townsend serves as Real Estate Consultant to the PRIM Board.

#### Active Core

Invesco  
AEW  
CBRE  
Lasalle  
Stockbridge  
Prim

#### Global REITs

CenterSquare  
Presima  
Brookfield

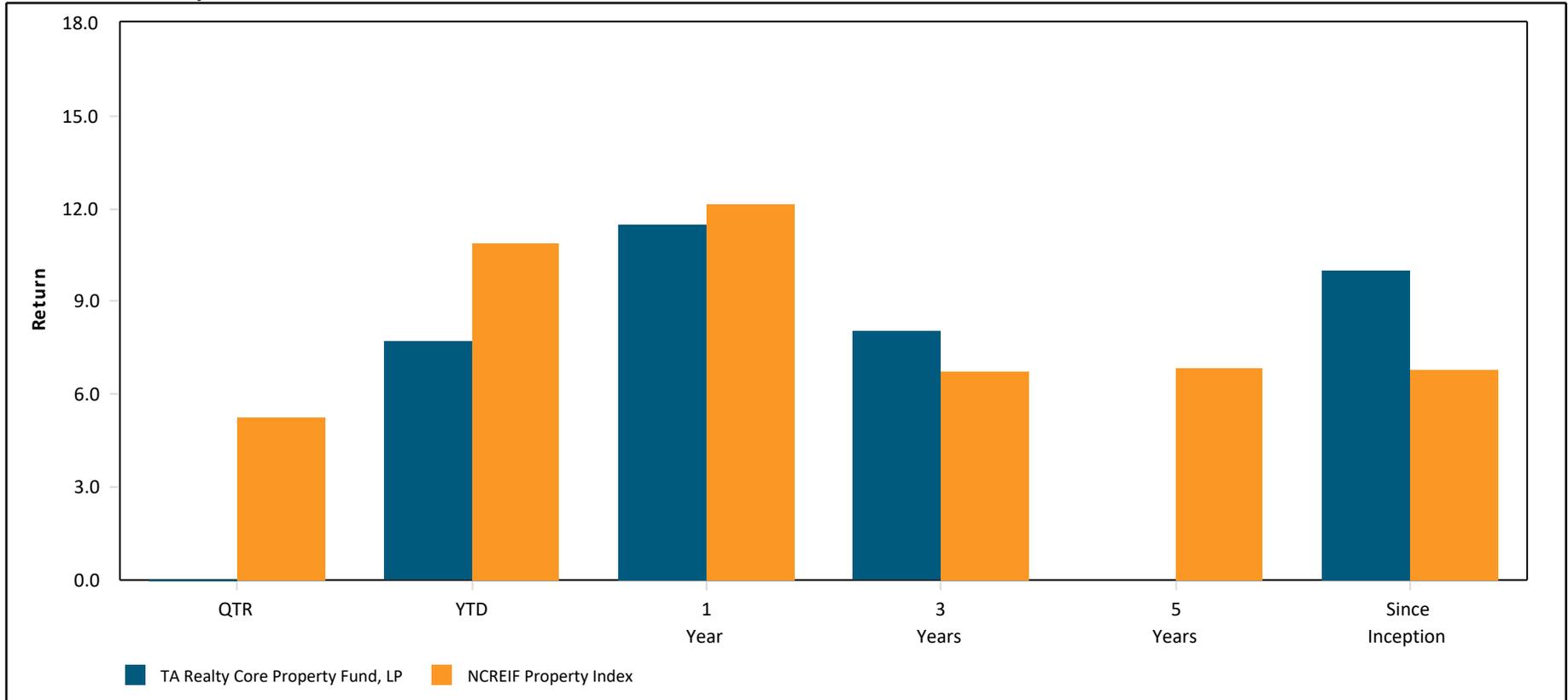
#### Non-Core

Intercontinental  
DivcoWest

# Manager Evaluation

TA Realty Core Property Fund, LP  
As of September 30, 2021

## Performance Analysis



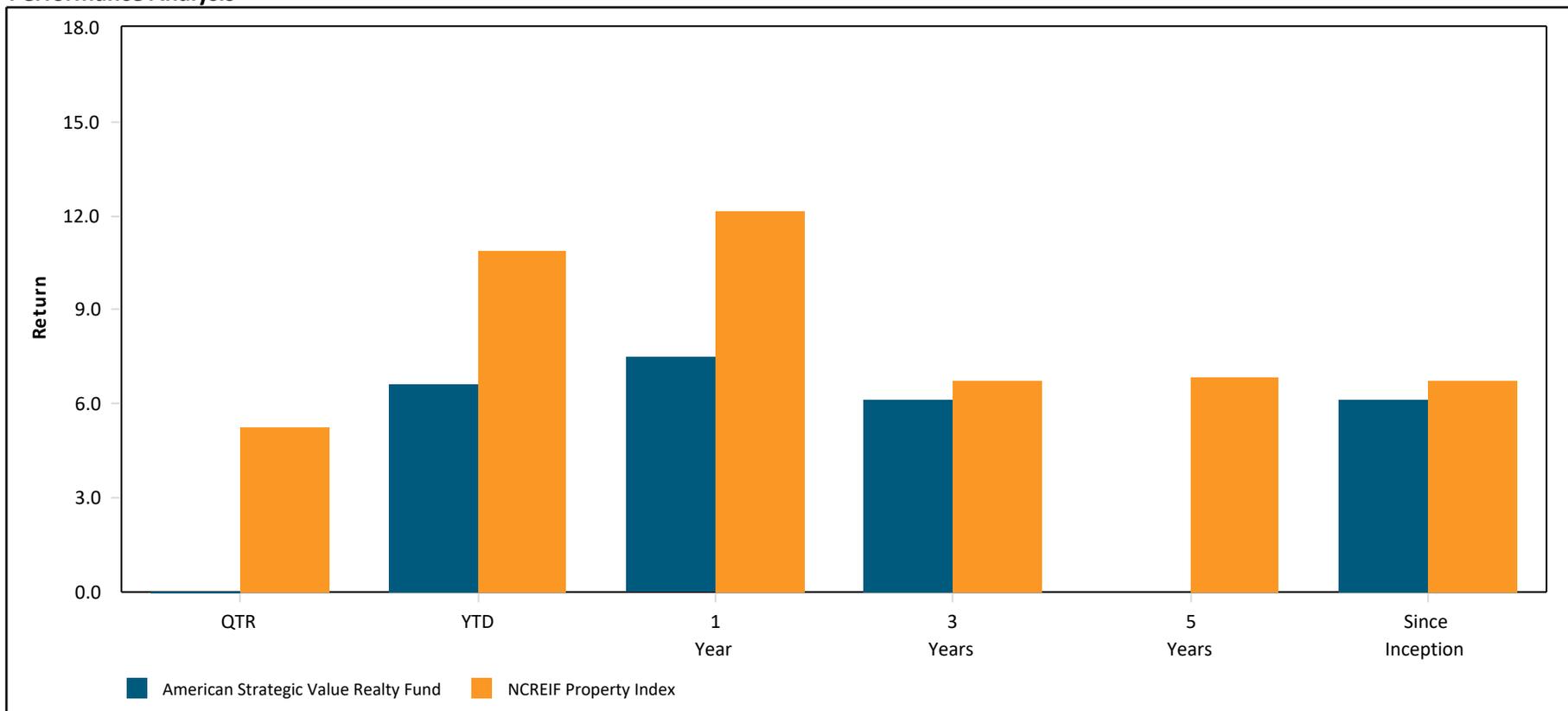
	QTR	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
TA Realty Core Property Fund, LP	0.0	7.7	11.5	8.0	N/A	10.0	04/01/2018
NCREIF Property Index	5.2	10.9	12.1	6.7	6.8	6.8	
Difference	-5.2	-3.2	-0.6	1.3	N/A	3.2	

# Manager Evaluation

American Strategic Value Realty Fund

As of September 30, 2021

## Performance Analysis



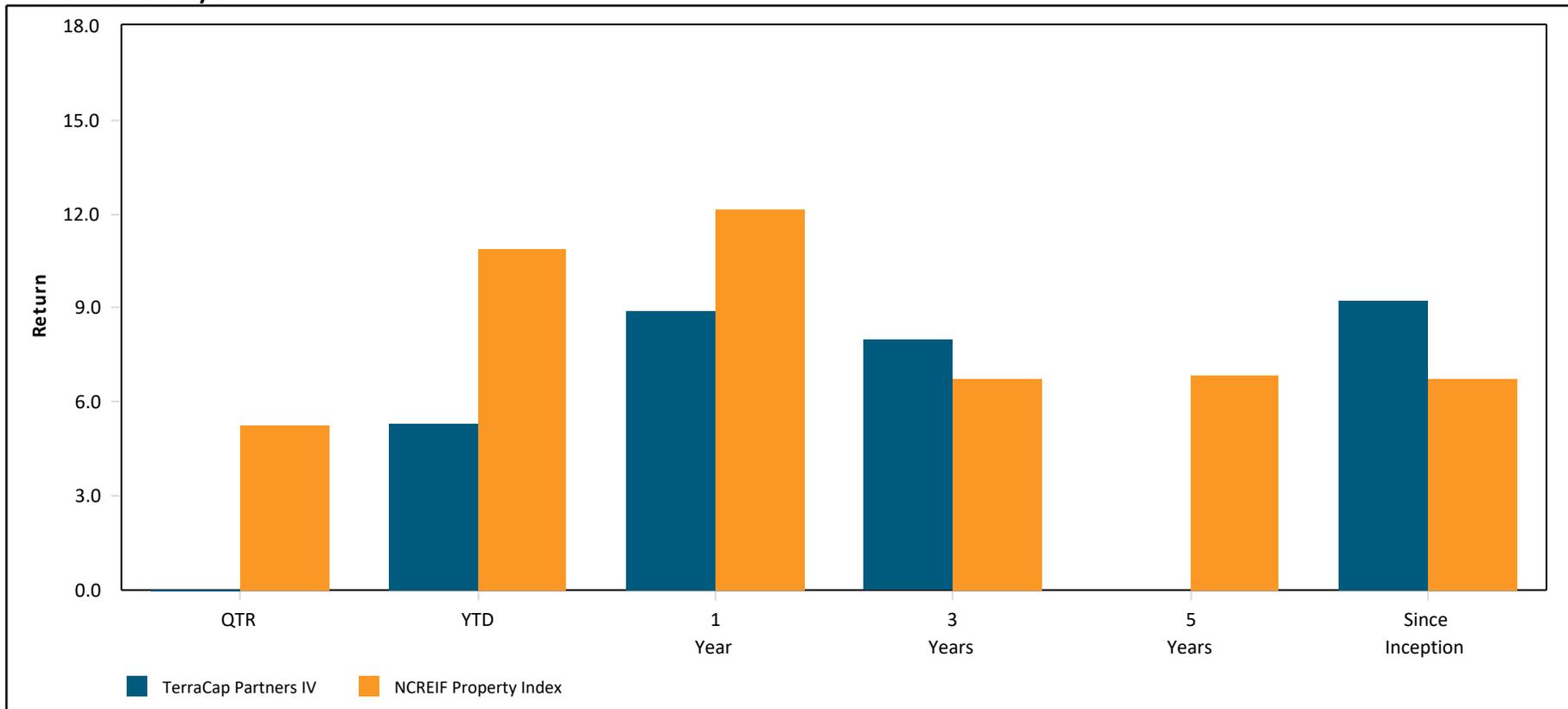
	QTR	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>American Strategic Value Realty Fund</b>	<b>0.0</b>	<b>6.6</b>	<b>7.5</b>	<b>6.1</b>	<b>N/A</b>	<b>6.1</b>	<b>07/01/2018</b>
<i>NCREIF Property Index</i>	<i>5.2</i>	<i>10.9</i>	<i>12.1</i>	<i>6.7</i>	<i>6.8</i>	<i>6.7</i>	
Difference	-5.2	-4.3	-4.6	-0.6	N/A	-0.6	

# Manager Evaluation

TerraCap Partners IV

As of September 30, 2021

## Performance Analysis



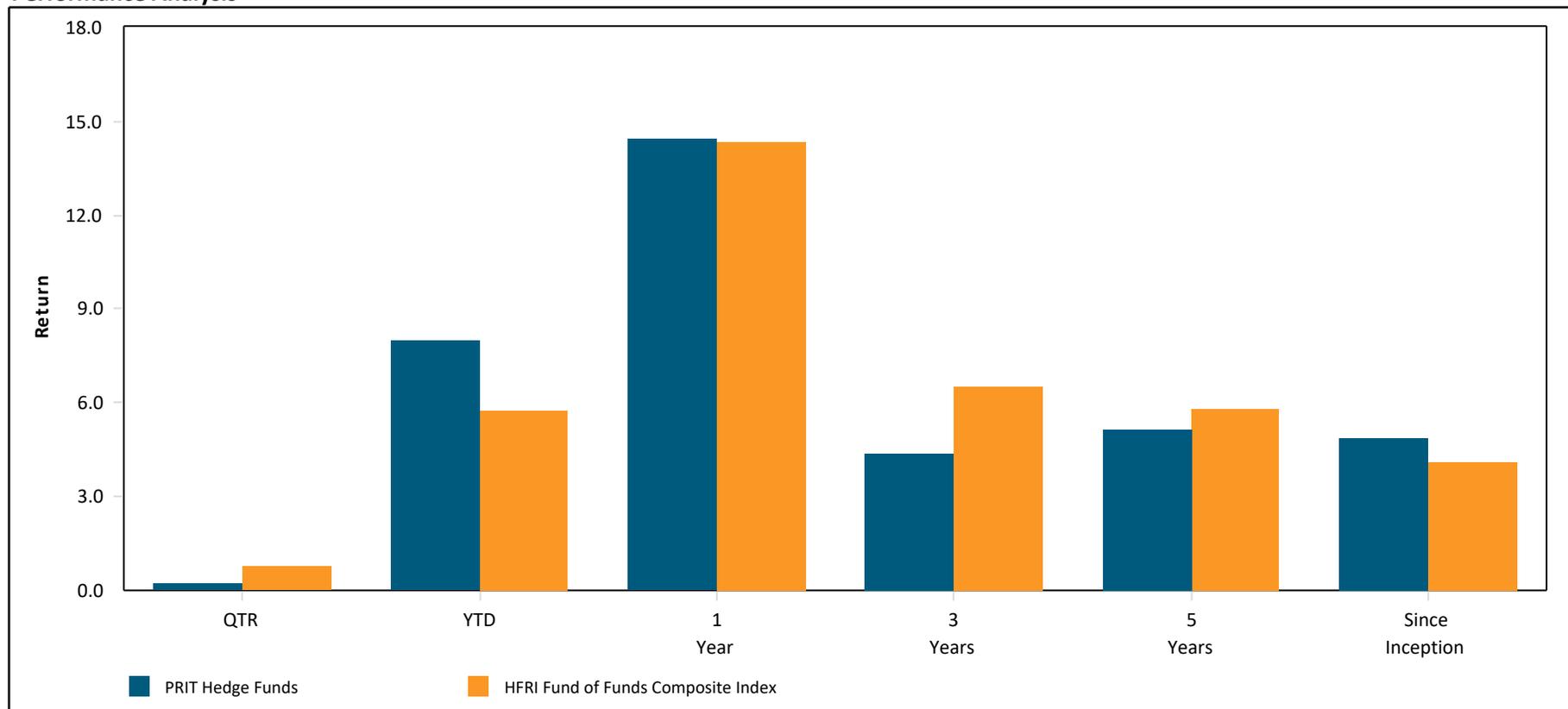
	QTR	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>TerraCap Partners IV</b>	<b>0.0</b>	<b>5.3</b>	<b>8.9</b>	<b>8.0</b>	<b>N/A</b>	<b>9.3</b>	<b>07/01/2018</b>
<i>NCREIF Property Index</i>	<i>5.2</i>	<i>10.9</i>	<i>12.1</i>	<i>6.7</i>	<i>6.8</i>	<i>6.7</i>	
Difference	-5.2	-5.6	-3.2	1.3	N/A	2.6	

# Manager Evaluation

PRIT Hedge Funds

As of September 30, 2021

## Performance Analysis



	QTR	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>PRIT Hedge Funds</b>	<b>0.2</b>	<b>8.0</b>	<b>14.5</b>	<b>4.4</b>	<b>5.2</b>	<b>4.8</b>	<b>07/01/2010</b>
<i>HFRI Fund of Funds Composite Index</i>	<i>0.7</i>	<i>5.7</i>	<i>14.3</i>	<i>6.5</i>	<i>5.8</i>	<i>4.1</i>	
Difference	-0.5	2.3	0.2	-2.1	-0.6	0.7	

# Manager Evaluation

## PRIT Hedge Funds

### Portfolio Information

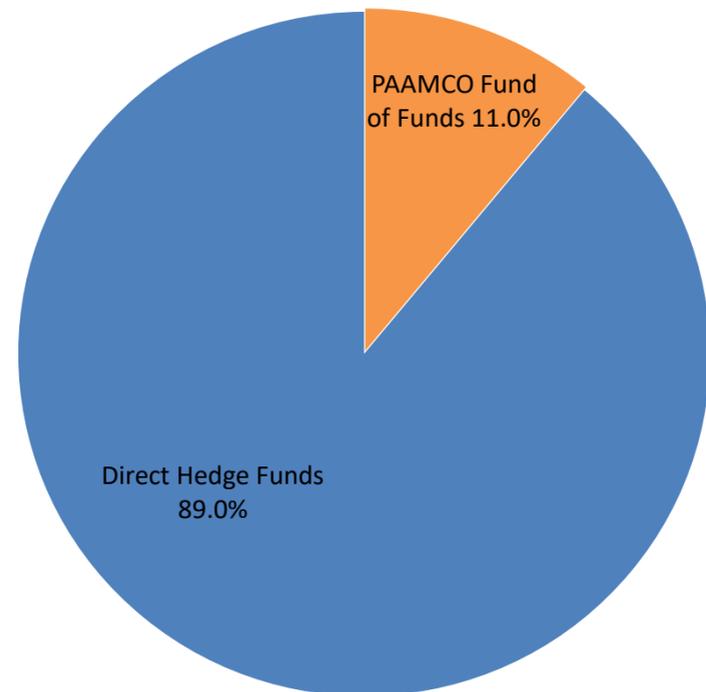
Fund Style: Direct and Fund of Funds

Inception Date: July 2004

PRIT Fund AUM: \$98.5 Bn as of 9/30/21

Hedge Funds as % of PRIT Fund: 8.1%

### Fund Allocations by Fund Type (Hedge Funds Sleeve)

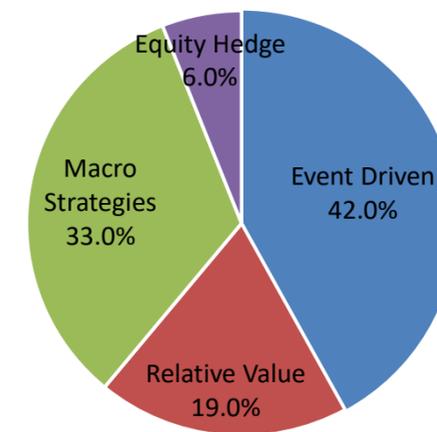


### Fund Investment Policy

The PRIT Hedge Funds allocation seeks to generate attractive long term absolute performance. This is accomplished via direct hedge funds and a fund of funds tasked with generating returns independent of the direction of the broader markets. The PRIM Board has transitioned the portfolio from a fund of funds structure to one that is predominantly direct hedge funds with a long-term target of 85% of assets in direct investments. The active fund of funds mandate with PAAMCO is focused on emerging managers. PRIM is currently working to ramp up committed assets to emerging manager direct hedge funds. Other initiatives include an alternative beta analysis framework, a hedge fund replication strategy and position based portfolio risk monitoring.

Effective February 2017, the PRIM Board approved plans to merge the Portfolio Completion Strategy allocation with the Hedge Funds allocation for a combined target a risk reducing "PCS" allocation of 13.0%. Other mandates in the allocation include risk premia strategies, real assets and an equity hedge overlay. Hedge Funds, as a sleeve which includes the fund of fund and direct allocations, will continue to be available for local systems to invest through segmentation.

### Strategic Allocations

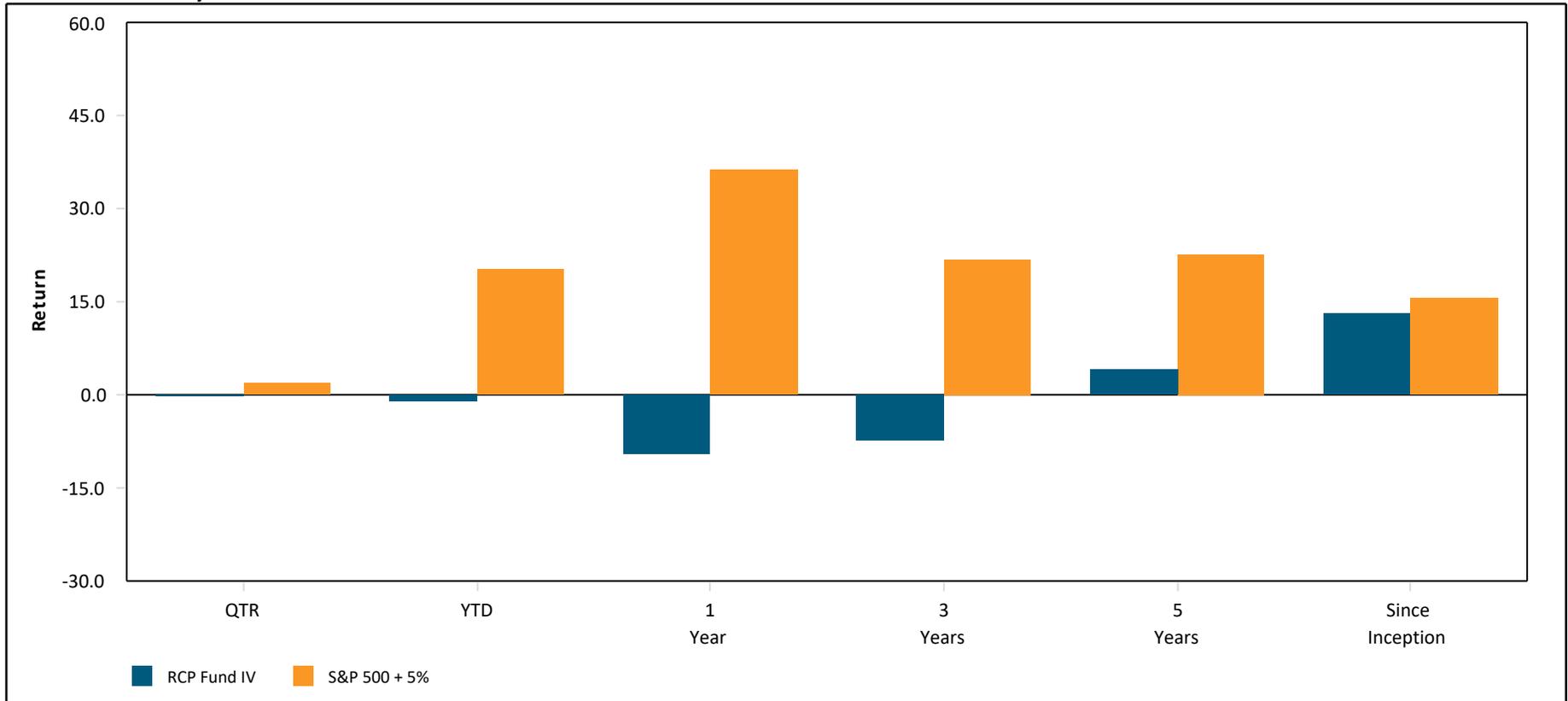


# Manager Evaluation

RCP Fund IV

As of September 30, 2021

## Performance Analysis



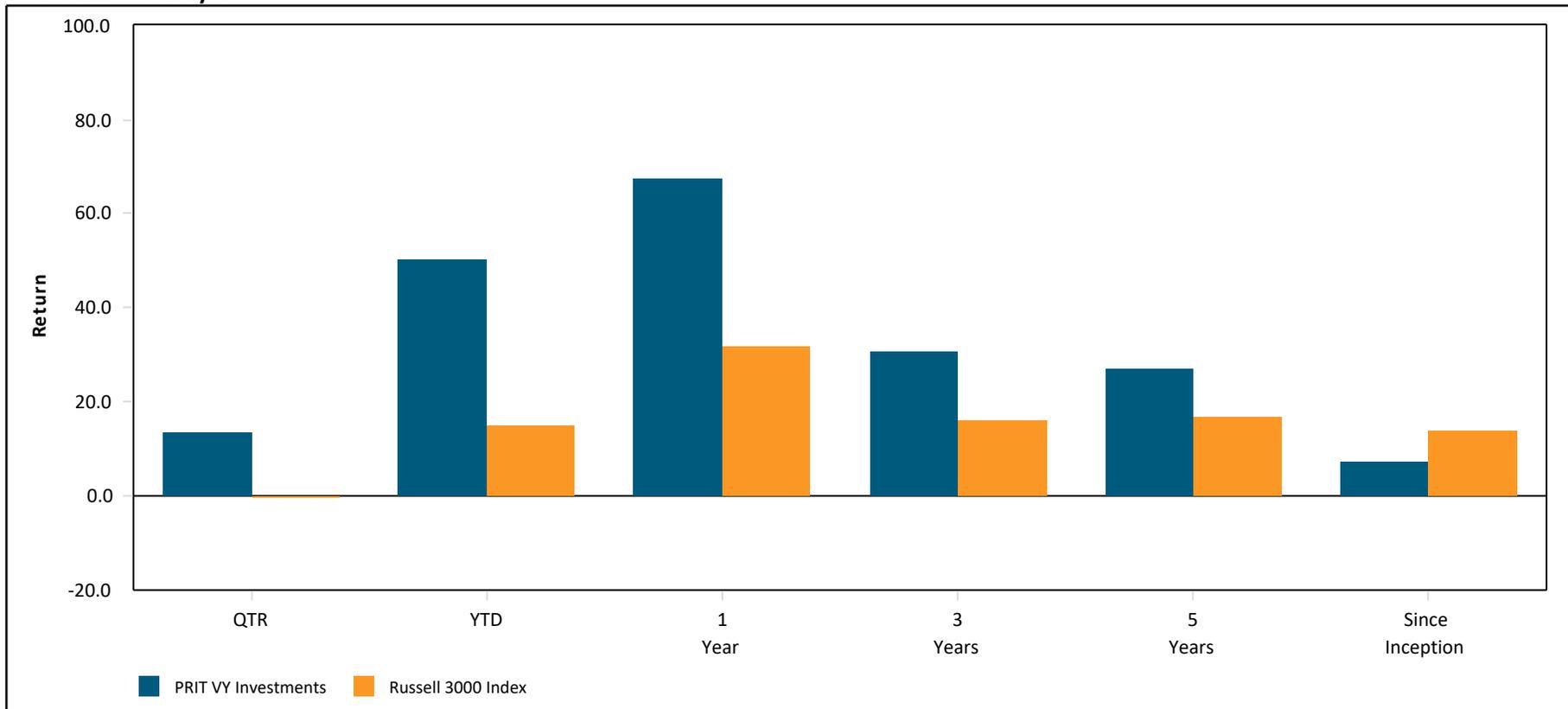
	QTR	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>RCP Fund IV</b>	<b>0.0</b>	<b>-1.1</b>	<b>-9.5</b>	<b>-7.3</b>	<b>4.1</b>	<b>13.1</b>	<b>01/01/2007</b>
<i>S&amp;P 500 + 5%</i>	<i>1.8</i>	<i>20.2</i>	<i>36.5</i>	<i>21.8</i>	<i>22.7</i>	<i>15.6</i>	
Difference	-1.8	-21.3	-46.0	-29.1	-18.6	-2.5	

# Manager Evaluation

PRIT VY Investments

As of September 30, 2021

## Performance Analysis



	QTR	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date
<b>PRIT VY Investments</b>	<b>13.4</b>	<b>50.5</b>	<b>67.6</b>	<b>30.5</b>	<b>26.9</b>	<b>7.3</b>	<b>04/01/2011</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>16.9</i>	<i>13.9</i>	
Difference	13.5	35.5	35.7	14.5	10.0	-6.6	

## Manager Performance Overview - PRIT VY Investments

As of September 30, 2021

	QTR	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
<b>PRIT VY Investments</b>	<b>13.4</b>	<b>50.5</b>	<b>67.6</b>	<b>30.5</b>	<b>26.9</b>	<b>13.2</b>	<b>7.3</b>	<b>04/01/2011</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>16.9</i>	<i>16.6</i>	<i>13.9</i>	
<b>PRIT Vintage 2011</b>	<b>25.9</b>	<b>92.1</b>	<b>112.1</b>	<b>34.9</b>	<b>30.4</b>	<b>17.2</b>	<b>10.9</b>	<b>04/01/2011</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>16.9</i>	<i>16.6</i>	<i>13.9</i>	
<b>PRIT Vintage 2012</b>	<b>10.1</b>	<b>44.3</b>	<b>56.3</b>	<b>29.9</b>	<b>27.0</b>	<b>N/A</b>	<b>-7.0</b>	<b>06/01/2012</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>16.9</i>	<i>N/A</i>	<i>15.8</i>	
<b>PRIT Vintage 2013</b>	<b>12.0</b>	<b>77.4</b>	<b>116.6</b>	<b>44.1</b>	<b>32.6</b>	<b>N/A</b>	<b>18.0</b>	<b>07/01/2013</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>16.9</i>	<i>N/A</i>	<i>14.8</i>	
<b>PRIT Vintage 2014</b>	<b>12.7</b>	<b>39.2</b>	<b>48.6</b>	<b>28.6</b>	<b>27.4</b>	<b>N/A</b>	<b>12.8</b>	<b>06/01/2014</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>16.9</i>	<i>N/A</i>	<i>13.6</i>	
<b>PRIT Vintage 2015</b>	<b>15.7</b>	<b>55.7</b>	<b>76.9</b>	<b>38.3</b>	<b>32.4</b>	<b>N/A</b>	<b>21.8</b>	<b>04/01/2015</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>16.9</i>	<i>N/A</i>	<i>13.9</i>	
<b>PRIT Vintage 2016</b>	<b>15.1</b>	<b>49.2</b>	<b>68.1</b>	<b>28.0</b>	<b>15.2</b>	<b>N/A</b>	<b>5.6</b>	<b>04/01/2016</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>16.9</i>	<i>N/A</i>	<i>16.7</i>	
<b>PRIT Vintage 2017</b>	<b>16.3</b>	<b>48.0</b>	<b>63.3</b>	<b>25.2</b>	<b>N/A</b>	<b>N/A</b>	<b>18.5</b>	<b>05/01/2017</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>N/A</i>	<i>N/A</i>	<i>16.4</i>	
<b>PRIT Vintage 2018</b>	<b>13.0</b>	<b>42.9</b>	<b>61.2</b>	<b>19.0</b>	<b>N/A</b>	<b>N/A</b>	<b>12.0</b>	<b>06/01/2018</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>16.0</i>	<i>N/A</i>	<i>N/A</i>	<i>16.9</i>	
<b>PRIT Vintage 2019</b>	<b>12.1</b>	<b>46.5</b>	<b>56.1</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>24.4</b>	<b>04/01/2019</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>20.6</i>	
<b>PRIT Vintage 2020</b>	<b>5.1</b>	<b>26.6</b>	<b>37.2</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>22.5</b>	<b>03/01/2020</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>15.0</i>	<i>31.9</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>30.0</i>	
<b>PRIT Vintage 2021</b>	<b>2.2</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.2</b>	<b>04/01/2021</b>
<i>Russell 3000 Index</i>	<i>-0.1</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>8.1</i>	

The inception date expressed on the Manager Performance Overview page(s) represents the first day of the first full month following the purchase of the investment. Performance figures shown at the fund level begin on this inception date. Your performance may differ slightly if the fund was purchased during the previous month. Actual performance is captured at the total plan level.

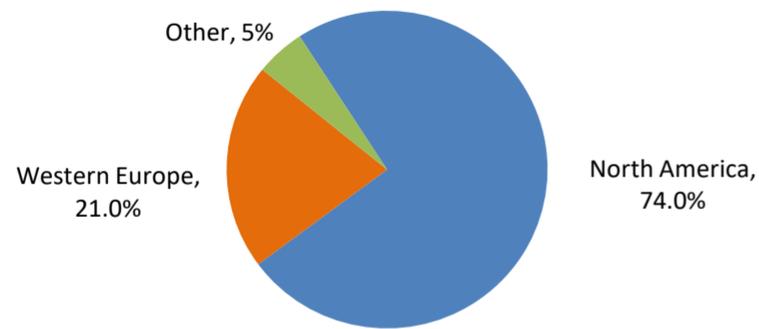
Returns for periods less than one year are not annualized. Returns are net of fees unless otherwise noted.

# Manager Evaluation

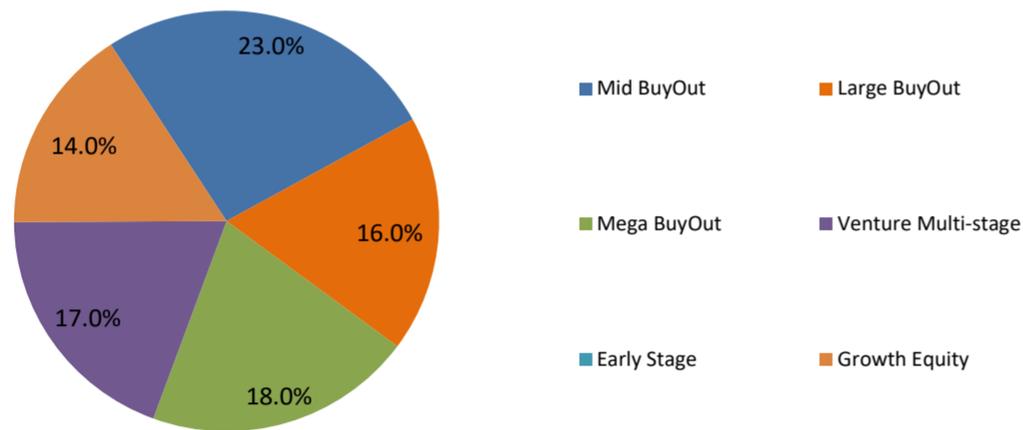
## PRIT Private Equity Program

**Portfolio Information**  
 Fund Style: Private Equity  
 PRIT Private Equity Target Allocation Range: 11-17% of PRIT Fund

### Allocation by Geography



### Allocation by Strategy (As of 6/30/20)



### Fund Investment Policy

PRIM's private equity program seeks to earn a return that provides a premium over investment in public market equities over a long-term market cycle. The program is a significant component of the General Allocation Fund and is available to local Retirement Systems on a segmented basis, via vintage year commitments. The PRIM Board generally targets commitments on a Vintage Year basis which typically range from \$1.4-2.0 Billion annually. The portfolio consists of allocations to special situations private equity (primarily buyout) and venture capital, and is diversified by strategy and manager. Systems wishing to make a commitment to the program provide notice at each calendar year end for the prospective vintage year. The commitment is long term and illiquid. Hamilton Lane serves as PRIM's investment adviser for the allocation.

## Benchmark Composition

### Policy Index

As of September 30, 2021

Allocation Mandate	Weight (%)	Allocation Mandate	Weight (%)
Apr-2018		Jul-2011	
Blmbg. U.S. Aggregate Index	20.0	Blmbg. U.S. Aggregate Index	20.0
ICE BofAML US High Yield Master II Constrained	2.5	Guggenheim High-Yield Index	2.5
FTSE World Government Bond Index	2.5	FTSE World Government Bond Index	2.5
Russell 3000 Index	35.0	Russell 3000 Index	37.5
MSCI AC World ex USA (Net)	20.0	MSCI AC World ex USA (Net)	17.5
MSCI EAFE Small Cap (net) Index	2.5	MSCI EAFE Small Cap (net) Index	2.5
PRIM Custom Total RE Benchmark	10.0	NCREIF Property Index	5.0
HFRI Fund of Funds Composite Index	7.5	PRIM Custom Total RE Benchmark	5.0
Jan-2017		HFRI Fund of Funds Composite Index	
Blmbg. U.S. Aggregate Index	20.0	Jan-2009	
Guggenheim High-Yield Index	2.5	Blmbg. U.S. Aggregate Index	25.0
FTSE World Government Bond Index	2.5	Blmbg. U.S. Corp High Yield	3.0
Russell 3000 Index	35.0	Russell 3000 Index	30.0
MSCI AC World ex USA (Net)	20.0	MSCI AC World ex USA (Net)	17.0
MSCI EAFE Small Cap (net) Index	2.5	NCREIF Property Index	15.0
PRIM Custom Total RE Benchmark	10.0	S&P 500 + 5%	7.0
HFRI Fund of Funds Composite Index	7.5	90 Day T-Bill + 5%	3.0
Jan-2014		Jan-2008	
Blmbg. U.S. Aggregate Index	20.0	Blmbg. U.S. Aggregate Index	17.0
Guggenheim High-Yield Index	2.5	Blmbg. U.S. Corp High Yield	4.0
FTSE World Government Bond Index	2.5	FTSE Non-U.S. World Government Bond	4.0
Russell 3000 Index	35.0	S&P 500 Index	28.0
MSCI AC World ex USA (Net)	20.0	Russell 2000 Index	7.0
MSCI EAFE Small Cap (net) Index	2.5	Russell Midcap Index	7.0
NCREIF Property Index	2.0	MSCI EAFE (Net) Index	15.0
PRIM Custom Total RE Benchmark	8.0	MSCI Emerging Markets Index	3.0
HFRI Fund of Funds Composite Index	7.5	NCREIF Property Index	10.0
		90 Day T-Bill + 5%	5.0

## Benchmark Composition

### Policy Index

As of September 30, 2021

Allocation Mandate	Weight (%)
Jul-2006	
Blmbg. U.S. Aggregate Index	17.0
Blmbg. U.S. Corp High Yield	4.5
FTSE Non-U.S. World Government Bond	4.0
S&P 500 Index	16.5
Russell 2000 Index	14.0
Russell Midcap Growth Index	6.5
Russell Midcap Value Index	8.5
MSCI EAFE Index	14.0
MSCI Emerging Markets Index	3.0
NCREIF Property Index	7.0
S&P 500 + 4%	5.0
Oct-2000	
Blmbg. U.S. Aggregate Index	20.0
Blmbg. U.S. Corp High Yield	4.5
FTSE Non-U.S. World Government Bond	4.0
S&P 500 Index	31.5
Russell 2000 Index	14.0
MSCI EAFE Index	14.0
NCREIF Property Index	7.0
S&P 500 + 4%	5.0
Jan-1979	
S&P 500 Index	45.0
Russell 2000 Index	10.0
NCREIF Property Index	6.0
MSCI EAFE Index	11.0
Blmbg. U.S. Aggregate Index	28.0

## Benchmark Composition

Fixed Income Benchmark

As of September 30, 2021

Allocation Mandate	Weight (%)
Apr-2018	
Blmbg. U.S. Aggregate Index	80.0
ICE BofAML US High Yield Master II Constrained	10.0
FTSE World Government Bond Index	10.0
Jul-2011	
Blmbg. U.S. Aggregate Index	80.0
Guggenheim High-Yield Index	10.0
FTSE World Government Bond Index	10.0
Jan-2009	
Blmbg. U.S. Aggregate Index	89.3
Blmbg. U.S. Corp High Yield	10.7
Jan-2008	
Blmbg. U.S. Aggregate Index	68.0
Blmbg. U.S. Corp High Yield	16.0
FTSE Non-U.S. World Government Bond	16.0
Apr-2007	
Blmbg. U.S. Aggregate Index	66.7
Blmbg. U.S. Corp High Yield	17.6
FTSE Non-U.S. World Government Bond	15.7

## Benchmark Composition

Domestic Equity Benchmark

As of September 30, 2021

Allocation Mandate	Weight (%)
Jan-2009	
Russell 3000 Index	100.0
Jan-2008	
S&P 500 Index	66.7
Russell 2000 Index	16.7
Russell Midcap Index	16.7
Apr-2007	
S&P 500 Index	36.3
Russell 2000 Index	30.8
Russell Midcap Growth Index	14.3
Russell Midcap Value Index	18.7

## Benchmark Composition

International Equity Benchmark

As of September 30, 2021

Allocation Mandate	Weight (%)
Jan-2014	
MSCI AC World ex USA (Net)	88.9
MSCI EAFE Small Cap (net) Index	11.1
Jul-2011	
MSCI AC World ex USA (Net)	87.5
MSCI EAFE Small Cap (net) Index	12.5
Jan-2009	
MSCI AC World ex USA (Net)	100.0
Jan-2008	
MSCI EAFE Index	83.3
MSCI Emerging Markets Index	16.7
Apr-2007	
MSCI EAFE Index	82.4
MSCI Emerging Markets Index	17.6

# Definitions & Disclosures

Please note: Due to rounding methodologies of various data providers, certain returns in this report might differ slightly when compared to other sources

## REGULATORY DISCLOSURES

**Offer of ADV Part 2A:** Rule 204-3 under the Investment Advisers Act of 1940 requires that we make an annual offer to clients to send them, without charge, a written disclosure statement meeting the requirements of such rule. We will be glad to send a copy of our ADV Part 2A to you upon your written request to [compliance@fiducient.com](mailto:compliance@fiducient.com).

## ASSET CLASS REPRESENTATIONS

All material and information is intended for Fiducient Advisors L.L.C. business only. Any use or public dissemination outside firm business is prohibited. Information is obtained from a variety of sources which are believed though not guaranteed to be accurate. Any forecast represents future expectations and actual returns, volatilities and correlations will differ from forecasts. Past performance does not indicate future performance. This presentation does not represent a specific investment recommendation. Please consult with your advisor, attorney and accountant, as appropriate, regarding specific advice.

When referencing asset class returns or statistics, the following indices are used to represent those asset classes, unless otherwise notes. Each index is unmanaged and investors can not actually invest directly into an index:

**TIPS:** Bloomberg Barclays Global Inflation-Linked: U.S. TIPS Total Return Index Unhedged

**Municipals 5-Year:** Bloomberg Barclays Municipal Bond 5 Year (4-6) Total Return Index Unhedged USD

**Core Bond:** Bloomberg Barclays US Agg Total Return Value Unhedged USD

**High Yield Municipals:** Bloomberg Barclays Muni High Yield Total Return Index Value Unhedged USD

**High Yield:** Bloomberg Barclays US Corporate High Yield Total Return Index Value Unhedged USD

**Foreign Bond:** Bloomberg Barclays Global Aggregate ex-USD Total Return Index Value USD (50/50 blend of hedged and unhedged)

**EM Debt (unhedged):** J.P. Morgan GBI-EM Global Diversified Composite Unhedged USD

**U.S. Large Cap:** S&P 500 Total Return Index

**U.S. Small Cap:** Russell 2000 Total Return Index

**International Developed:** MSCI EAFE Net Total Return USD Index

**Emerging Markets:** MSCI Emerging Markets Net Total Return USD Index

**World:** MSCI ACWI Net Total Return USD Index

**U.S. Equity REITs:** FTSE Nareit Equity REITs Total Return Index USD

**S&P Real Assets:** S&P Real Assets Total Return Index

**Commodities:** Bloomberg Commodity Total Return Index

**Hedge Funds:** Hedge Fund Research HFRI Fund of Funds Composite Index

**Balanced:** 3% TIPS, 33% Core Bond, 4% High Yield, 2% Foreign Bond, 2% EM Debt (unhedged), 18% U.S. Large Cap, 6% U.S. Small Cap, 16% International, 8% Emerging Markets, 5% U.S. Equity REITs, 3% Commodities

**U.S.:** MSCI USA Net Total Return USD Index

**China:** MSCI CHINA Net Total Return USD Index

**Japan:** MSCI Japan Net Total Return USD Index

**Germany:** MSCI Germany Net Total Return USD Index

**India:** MSCI India Net Total Return USD Index

**United Kingdom:** MSCI UK Net Total Return USD Index

**France:** MSCI France Net Total Return USD Index

**Italy:** MSCI Italy Net Total Return USD Index

**Brazil:** MSCI Brazil Net Total Return USD Index

**Canada:** MSCI Canada Net Total Return USD Index

## INDEX DEFINITIONS

- **Citigroup 3 Month T-Bill** measures monthly return equivalents of yield averages that are not marked to market. The Three-Month Treasury Bill Indexes consist of the last three three-month Treasury bill issues.
- **Ryan 3 Yr. GIC** is an arithmetic mean of market rates of \$1 million Guaranteed Interest Contracts held for three years.
- **Bloomberg Barclays Treasury U.S. T-Bills-1-3 Month Index** includes aged U.S. Treasury bills, notes and bonds with a remaining maturity from 1 up to (but not including) 3 months. It excludes zero coupon strips.
- **Bloomberg Barclays Capital US Treasury Inflation Protected Securities Index** consists of Inflation-Protection securities issued by the U.S. Treasury.
- **Bloomberg Barclays Muni Index** is a rules-based, market-value-weighted index engineered for the long-term tax-exempt bond market. Bonds must be rated investment-grade by at least two ratings agencies.
- **Bloomberg Barclays Muni 1 Year Index** is the 1-year (1-2) component of the Municipal Bond index.
- **Bloomberg Barclays Muni 3 Year Index** is the 3-year (2-4) component of the Municipal Bond index.
- **Bloomberg Barclays Muni 5 Year Index** is the 5-year (4-6) component of the Municipal Bond index.
- **Bloomberg Barclays Muni 7 Year Index** is the 7-year (6-8) component of the Municipal Bond index.
- **Bloomberg Barclays Intermediate U.S. Gov't/Credit** is the Intermediate component of the U.S. Government/Credit index, which includes securities in the Government and Credit Indices. The Government Index includes treasuries and agencies, while the credit index includes publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements.

- **Bloomberg Barclays U.S. Aggregate Index** covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.
- **Bloomberg Barclays Global Aggregate ex. USD Indices** represent a broad-based measure of the global investment-grade fixed income markets. The two major components of this index are the Pan-European Aggregate and the Asian-Pacific Aggregate Indices. The index also includes Eurodollar and Euro-Yen corporate bonds and Canadian government, agency and corporate securities.
- **Bloomberg Barclays U.S. Corporate High Yield Index** covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included.
- **JP Morgan Government Bond Index-Emerging Market (GBI-EM) Index** is a comprehensive, global local emerging markets index, and consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure.
- **The S&P 500** is a capitalization-weighted index of 500 stocks designed to measure performance of the broad domestic economy through changes in the aggregate market value of 500 stocks representing all major industries.
- **The Dow Jones Industrial Index** is a price-weighted average of 30 blue-chip stocks that are generally the leaders in their industry.
- **The NASDAQ** is a broad-based capitalization-weighted index of stocks in all three NASDAQ tiers: Global Select, Global Market and Capital Market.
- **Russell 3000** is a market-cap-weighted index which consists of roughly 3,000 of the largest companies in the U.S. as determined by market capitalization. It represents nearly 98% of the investable U.S. equity market.
- **Russell 1000** consists of the largest 1000 companies in the Russell 3000 Index.
- **Russell 1000 Growth** measures the performance of those Russell 1000 companies with higher P/B ratios and higher forecasted growth values.
- **Russell 1000 Value** measures the performance of those Russell 1000 companies with lower P/B ratios and lower forecasted growth values.
- **Russell Mid Cap** measures the performance of the 800 smallest companies in the Russell 1000 Index.
- **Russell Mid Cap Growth** measures the performance of those Russell Mid Cap companies with higher P/B ratios and higher forecasted growth values.
- **Russell Mid Cap Value** measures the performance of those Russell Mid Cap companies with lower P/B ratios and lower forecasted growth values.
- **Russell 2000** consists of the 2,000 smallest U.S. companies in the Russell 3000 index.
- **Russell 2000 Growth** measures the performance of the Russell 2000 companies with higher P/B ratios and higher forecasted growth values.
- **Russell 2000 Value** measures the performance of those Russell 2000 companies with lower P/B ratios and lower forecasted growth values.
- **Russell 2500** consists of the 2,500 smallest U.S. companies in the Russell 3000 index.
- **Russell 2500 Growth** measures the performance of the Russell 2500 companies with higher P/B ratios and higher forecasted growth values.
- **Russell 2500 Value** measures the performance of those Russell 2500 companies with lower P/B ratios and lower forecasted growth values.
- **MSCI World** captures large and mid-cap representation across 23 Developed Markets countries. With 1,645 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- **MSCI ACWI (All Country World Index) ex. U.S. Index** captures large and mid-cap representation across 22 of 23 Developed Markets countries (excluding the United States) and 23 Emerging Markets countries. With 1,859 constituents, the index covers approximately 85% of the global equity opportunity set outside the US.
- **MSCI ACWI (All Country World Index) ex. U.S. Small Cap Index** captures small cap representation across 22 of 23 Developed Markets countries (excluding the US) and 23 Emerging Markets countries. With 4,368 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.
- **MSCI EAFE** is an equity index which captures large and mid-cap representation across Developed Markets countries around the world, excluding the US and Canada. With 930 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
- **MSCI EAFE Value** captures large and mid-cap securities exhibiting overall value style characteristics across Developed Markets countries around the world, excluding the US and Canada. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield. With 507 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- **MSCI EAFE Growth** captures large and mid-cap securities exhibiting overall growth style characteristics across Developed Markets countries around the world, excluding the US and Canada. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend. With 542 constituents, the index targets 50% coverage of the free float-adjusted market capitalization of the MSCI EAFE Index.
- **MSCI Emerging Markets** captures large and mid-cap representation across 23 Emerging Markets countries. With 836 constituents, the index covers approximately 85% of the free-float adjusted market capitalization in each country.
- **Consumer Price Index** is a measure of prices paid by consumers for a market basket of consumer goods and services. The yearly (or monthly) growth rates represent the inflation rate.
- **FTSE NAREIT Equity REITs Index** contains all Equity REITs not designed as Timber REITs or Infrastructure REITs.
- **S&P Developed World Property** defines and measures the investable universe of publicly traded property companies domiciled in developed markets. The companies in the index are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- **S&P Developed World Property x U.S.** defines and measures the investable universe of publicly traded property companies domiciled in developed countries outside of the U.S. The companies included are engaged in real estate related activities, such as property ownership, management, development, rental and investment.
- **Fund Specific Broad Real Asset Benchmarks:**
  - **DWS Real Assets:** 30%: Dow Jones Brookfield Infrastructure Index, 30%: FTSE EPRA/NAREIT Developed Index, 15%: Bloomberg Commodity Index, 15%: S&P Global Natural Resources Index, 10%: Barclays U.S. Treasury Inflation Notes Total Return Index
  - **PIMCO Inflation Response Multi Asset Fund:** 45% Barclays U.S. TIPS, 20% Bloomberg Commodity Index, 15% JP Morgan Emerging Local Markets Plus, 10% Dow Jones Select REIT, 10% Bloomberg Gold Subindex Total Return
  - **Principal Diversified Real Assets:** 35% BBgBarc U.S. Treasury TIPS Index, 20% S&P Global Infrastructure Index NTR, 20% S&P Global Natural Resources Index NTR, 15% Bloomberg Commodity Index, and 10% FTSE EPRA/NAREIT Developed Index NTR
  - **Wellington Diversified Inflation H:** 50% MSCI ACWI Commodity Producers Index, 25% Bloomberg Commodity Index, and 25% Bloomberg Barclays US TIPS 1 – 10 Year Index
- **Bloomberg Commodity Index** is calculated on an excess return basis and reflects commodity futures price movements. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production and weight-caps are applied at the commodity, sector and group level for diversification.
- **HFRI Fund Weighted Composite Index** is a global, equal-weighted index of over 2,000 single-manager funds that report to HFR Database. Constituent funds report monthly net of all fees performance in US Dollar and have a minimum of \$50 Million under management or a twelve (12) month track record of active performance. The HFRI Fund Weighted Composite Index does not include Funds of Hedge Funds.
- **The Alerian MLP Index** is the leading gauge of energy Master Limited Partnerships (MLPs). The float adjusted, capitalization-weighted index, whose constituents represent approximately 85% of total float-adjusted market capitalization, is disseminated real-time on a price-return basis (AMZ) and on a total-return basis.
- **The Adjusted Alerian MLP Index** is commensurate with 65% of the monthly returns of the Alerian MLP Index to incorporate the effect of deferred tax liabilities incurred by MLP entities.
- **Cambridge Associates U.S. Private Equity Index** is based on data compiled from more than 1,200 institutional-quality buyout, growth equity, private equity energy, and mezzanine funds formed between 1986 and 2015.

- **Cambridge Associates U.S. Venture Capital Index** is based on data compiled from over 1,600 institutional-quality venture capital funds formed between 1986 and 2015.
- **Vanguard Spliced Bloomberg Barclays US1-5Yr Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. 1–5 Year Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. 1–5 Year Government/Credit Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US5-10Yr Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. 5–10 Year Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. 5–10 Year Government/Credit Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US Agg Flt Adj Index:** Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009; Bloomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.
- **Vanguard Spliced Bloomberg Barclays US Long Gov/Cr Flt Adj Index:** Bloomberg Barclays U.S. Long Government/Credit Bond Index through December 31, 2009; Bloomberg Barclays U.S. Long Government/Credit Float Adjusted Index thereafter.
- **Vanguard Balanced Composite Index:** Made up of two unmanaged benchmarks, weighted 60% Dow Jones U.S. Total Stock Market Index (formerly the Dow Jones Wilshire 5000 Index) and 40% Bloomberg Barclays U.S. Aggregate Bond Index through May 31, 2005; 60% MSCI US Broad Market Index and 40% Bloomberg Barclays U.S. Aggregate Bond Index through December 31, 2009; 60% MSCI US Broad Market Index and 40% Bloomberg Barclays U.S. Aggregate Float Adjusted Index through January 14, 2013; and 60% CRSP US Total Market Index and 40% Bloomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.
- **Vanguard Spliced Intermediate-Term Tax-Exempt Index:** Bloomberg Barclays 1–15 Year Municipal Bond Index.
- **Vanguard Spliced Extended Market Index:** Dow Jones Wilshire 4500 Index through June 17, 2005; S&P Transitional Completion Index through September 16, 2005; S&P Completion Index thereafter.
- **Vanguard Spliced Value Index:** S&P 500 Value Index (formerly the S&P 500/Barra Value Index) through May 16, 2003; MSCI US Prime Market Value Index through April 16, 2013; CRSP US Large Cap Value Index thereafter.
- **Vanguard Spliced Large Cap Index:** Consists of MSCI US Prime Market 750 Index through January 30, 2013, and the CRSP US Large Cap Index thereafter.
- **Vanguard Spliced Growth Index:** S&P 500 Growth Index (formerly the S&P 500/Barra Growth Index) through May 16, 2003; MSCI US Prime Market Growth Index through April 16, 2013; CRSP US Large Cap Growth Index thereafter.
- **Vanguard Spliced Mid Cap Value Index:** MSCI US Mid Cap Value Index through April 16, 2013; CRSP US Mid Cap Value Index thereafter.
- **Vanguard Spliced Mid Cap Index:** S&P MidCap 400 Index through May 16, 2003; the MSCI US Mid Cap 450 Index through January 30, 2013; and the CRSP US Mid Cap Index thereafter.
- **Vanguard Spliced Mid Cap Growth Index:** MSCI US Mid Cap Growth Index through April 16, 2013; CRSP US Mid Cap Growth Index thereafter.
- **Vanguard Spliced Total Stock Market Index:** Dow Jones U.S. Total Stock Market Index (formerly known as the Dow Jones Wilshire 5000 Index) through April 22, 2005; MSCI US Broad Market Index through June 2, 2013; and CRSP US Total Market Index thereafter.
- **Vanguard Spliced Small Cap Value Index:** SmallCap 600 Value Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Value Index through April 16, 2013; CRSP US Small Cap Value Index thereafter.
- **Vanguard Spliced Small Cap Index:** Russell 2000 Index through May 16, 2003; the MSCI US Small Cap 1750 Index through January 30, 2013; and the CRSP US Small Cap Index thereafter.
- **Vanguard Spliced Small Cap Growth Index:** S&P SmallCap 600 Growth Index (formerly the S&P SmallCap 600/Barra Value Index) through May 16, 2003; MSCI US Small Cap Growth Index through April 16, 2013; CRSP US Small Cap Growth Index thereafter.
- **Vanguard Spliced Total International Stock Index:** Consists of the Total International Composite Index through August 31, 2006; the MSCI EAFE + Emerging Markets Index through December 15, 2010; the MSCI ACWI ex USA IMI Index through June 2, 2013; and FTSE Global All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard Spliced Developed Markets Index:** MSCI EAFE Index through May 28, 2013; FTSE Developed ex North America Index through December 20, 2015; FTSE Developed All Cap ex US Transition Index through May 31, 2016; FTSE Developed All Cap ex US Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard Spliced Emerging Markets Index:** Select Emerging Markets Index through August 23, 2006; MSCI Emerging Markets Index through January 9, 2013; FTSE Emerging Transition Index through June 27, 2013; FTSE Emerging Index through November 1, 2015; and FTSE Emerging Markets All Cap China A Transition Index thereafter. Benchmark returns are adjusted for withholding taxes.
- **Vanguard REIT Spliced Index:** MSCI US REIT Index adjusted to include a 2% cash position (Lipper Money Market Average) through April 30, 2009; MSCI US REIT Index through January 31, 2018; MSCI US Investable Market Real Estate 25/50 Transition Index through July 24, 2018; MSCI US Investable Market Real Estate 25/50 Index thereafter.

#### **Additional:**

- Equity sector returns are calculated by Russell and MSCI for domestic and international markets, respectively. MSCI sector definitions correspond to the MSCI GICS® classification (Global Industry Classification System); Russell uses its own sector and industry classifications.
- MSCI country returns are calculated by MSCI and are free float-adjusted market capitalization indices that are designed to measure equity market performance in each specific country.
- Currency returns are calculated using Bloomberg's historical spot rate indices and are calculated using the U.S. dollar as the base currency.
- The Index of Leading Economic Indicators, calculated by The Conference Board, is used as a barometer of economic activity over a range of three to six months. The index is used to determine the direction and stability of the economy. The composite index of leading indicators, which is derived from 10 leading indicators, helps to signal turning points in the economy and forecast economic cycles. The leading indicators are the following: average weekly hours, average weekly initial claims, manufacturers' new orders, both consumer and non-defense capital goods, vendor performance, building permits, stock prices, money supply (M2), the interest rate spread and the index of consumer expectations.
- S&P Target Date Indexes are constructed using a survey method of current target date investments with \$100 million or more in assets under management. Allocations for each vintage are comprised of exchange-traded funds that represent respective asset classes used in target date portfolios. The indexes are designed to represent a market consensus glide path.

#### **DEFINITION OF KEY STATISTICS AND TERMS**

- **Returns:** A percentage figure used when reporting historical average compounded rate of investment return. All returns are annualized if the period for which they are calculated exceeds one year.
- **Universe Comparison:** The universe compares the fund's returns to a group of other investment portfolios with similar investment strategies. The returns for the fund, the index and the universe percentiles are displayed. A percentile ranking of 1 is the best, while a percentile ranking of 100 is the worst. For example, a ranking of 50 indicates the fund outperformed half of the universe. A ranking of 25 indicates the fund was in the top 25% of the universe, outperforming 75%.
- **Returns In Up/Down Markets:** This measures how the fund performed in both up and down markets. The methodology is to segregate the performance for each time period into the quarters in which the market, as defined by the index, was positive and negative. Quarters with negative index returns are treated as down markets, and quarters with positive index returns are treated as up markets. Thus, in a 3 year or 12 quarter period, there might be 4 down quarters and 8 up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the up quarters. A simple arithmetic average of returns is calculated for the fund and the index based on the down quarters. The up market capture ratio is the ratio of the fund's return in up markets to the index. The down market capture ratio is the ratio of the fund's return in down markets to the index. Ideally, the fund would have a greater up market capture ratio than down market capture ratio.

- **Standard Deviation:** Standard deviation is a statistical measure of the range of performance within which the total returns of a fund fall. When a fund has a high standard deviation, the range of performance is very wide, meaning there is a greater volatility. Approximately 68% of the time, the total return of any given fund will differ from the average total return by no more than plus or minus the standard deviation figure. Ninety-five percent of the time, a fund's total return will be within a range of plus or minus two times the standard deviation from the average total return. If the quarterly or monthly returns are all the same the standard deviation will be zero. The more they vary from one another, the higher the standard deviation. Standard deviation can be misleading as a risk indicator for funds with high total returns because large positive deviations will increase the standard deviation without a corresponding increase in the risk of the fund. While positive volatility is welcome, negative is not.
- **R-Squared:** This reflects the percentage of a fund's movements that are explained by movements in its benchmark index. An R-squared of 100 means that all movements of a fund are completely explained by movements in the index. Conversely, a low R-squared indicates very few of the fund's movements are explained by movements in the benchmark index. R-squared can also be used to ascertain the significance of a particular beta. Generally, a higher R-squared will indicate a more reliable beta figure. If the R-squared is lower, then the beta is less relevant to the fund's performance. A measure of diversification, R-squared indicates the extent to which fluctuations in portfolio returns are explained by market. An R-squared = 0.70 implies that 70% of the fluctuation in a portfolio's return is explained by the fluctuation in the market. In this instance, overweighting or underweighting of industry groups or individual securities is responsible for 30% of the fund's movement.
- **Beta:** This is a measure of a fund's market risk. The beta of the market is 1.00. Accordingly, a fund with a 1.10 beta is expected to perform 10% better than the market in up markets and 10% worse than the market in down markets. It is important to note, however, a low fund beta does not imply the fund has a low level of volatility; rather, a low beta means only that the fund's market-related risk is low. Because beta analyzes the market risk of a fund by showing how responsive the fund is to the market, its usefulness depends on the degree to which the markets determine the fund's total risk (indicated by R-squared).
- **Alpha:** The Alpha is the nonsystematic return, or the return that can't be attributed to the market. It can be thought of as how the manager performed if the market's return was zero. A positive alpha implies the manager added value to the return of the portfolio over that of the market. A negative alpha implies the manager did not contribute any value over the performance of the market.
- **Sharpe Ratio:** The Sharpe ratio is the excess return per unit of total risk as measured by standard deviation. Higher numbers are better, indicating more return for the level of risk experienced. The ratio is a fund's return minus the risk-free rate of return (30-day T-Bill rate) divided by the fund's standard deviation. The higher the Sharpe ratio, the more reward you are receiving per unit of total risk. This measure can be used to rank the performance of mutual funds or other portfolios.
- **Treynor Ratio:** The Treynor ratio measures returns earned in excess of that which could have been earned on a riskless investment per each unit of market risk. The ratio relates excess return over the risk-free rate to the additional risk taken; however, systematic risk is used instead of total risk. The Treynor ratio is similar to the Sharpe ratio, except in the fact that it uses the beta to evaluate the returns rather than the standard deviation of portfolio returns. High values mean better return for risk taken.
- **Tracking Error:** Tracking error measures the volatility of the difference in annual returns between the manager and the index. This value is calculated by measuring the standard deviation of the difference between the manager and index returns. For example, a tracking error of +/- 5 would mean there is about a 68% chance (1 standard deviation event) that the manager's returns will fall within +/- 5% of the benchmark's annual return.
- **Information Ratio:** The information ratio is a measure of the consistency of excess return. This value is determined by taking the annualized excess return over a benchmark (style benchmark by default) and dividing it by the standard deviation of excess return.
- **Consistency:** Consistency shows the percent of the periods the fund has beaten the index and the percent of the periods the index has beat the fund. A high average for the fund (e.g., over 50) is desirable, indicating the fund has beaten the index frequently.
- **Downside Risk:** Downside risk is a measure similar to standard deviation but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative quarterly set of returns. The higher the factor, the riskier the product.
- **M-Squared:** M-squared, or the Modigliani risk-adjusted performance measure is used to characterize how well a portfolio's return rewards an investor for the amount of risk taken, relative to that of some benchmark portfolio and to the risk-free rate.

## DEFINITION OF KEY PRIVATE EQUITY TERMS

- **PIC (Paid in Capital):** The amount of committed capital that has been transferred from the limited partner to the general partner.
- **TVPI (Total Value to Paid in Capital):** Money returned to limited partners plus the fund's unrealized investments, divided by money paid-in to the partnership. The TVPI should equal RVPI plus DPI.
- **DPI (Distribution to Paid In Capital):** Money returned (distributions) to limited partners divided by money paid in to the partnership. Also called cash-on-cash multiple.
- **RVPI (Residual Value to Paid In Capital):** The value of a fund's unrealized investments divided by money paid-in to the partnership.
- **Internal rate of return (IRR):** This is the most appropriate performance benchmark for private equity investments. It is a time-weighted return expressed as a percentage. IRR uses the present sum of cash drawdowns (money invested), the present value of distributions (money returned from investments) and the current value of unrealized investments and applies a discount.
- **Commitment:** Every investor in a private equity fund commits to investing a specified sum of money in the fund partnership over a specified period of time. The fund records this as the limited partnership's capital commitment. The sum of capital commitments is equal to the size of the fund.
- **Capital Distribution:** These are the returns that an investor in a private equity fund receives. It is the income and capital realized from investments less expenses and liabilities. Once a limited partner has had their cost of investment returned, further distributions are actual profit. The partnership agreement determines the timing of distributions to the limited partner. It will also determine how profits are divided among the limited partners and general partner.
- **Carried Interest:** The share of profits that the fund manager is due once it has returned the cost of investment to investors. Carried interest is normally expressed as a percentage of the total profits of the fund.
- **Co-Investment:** Co-Investments are minority investments made alongside a private equity investor in an LBO, a recapitalization, or an expansion capital transaction. It is a passive, non-controlling investment, as the private equity firm involved will typically exercise control and perform monitoring functions.
- **General Partner (GP):** This can refer to the top-ranking partners at a private equity firm as well as the firm managing the private equity fund.
- **GP Commitments:** It is normal practice for the GP managing a private equity fund to also make a financial commitment to the fund on the same basis as the LPs in the fund, and this is seen as an important factor driving the alignment of GP and LP interests. The historic benchmark for GP commitments has been 1% of the total fund size, but this is by no means universal, and many GPs commit significantly larger amounts. Furthermore, there has been a marked trend towards GPs making larger commitments to their funds over recent years.
- **Leveraged Buy-Out (LBO):** The acquisition of a company using debt and equity finance.
- **Limited Partner (LP):** Institutions or high-net-worth individuals/sophisticated investors that contribute capital to a private equity fund.
- **Public Market Equivalent (PME):** Performance measure used to evaluate performance relative to the market. It is calculated as the ratio of the discounted value of the LP's inflows divided by the discounted value of outflows, with the discounting performed using realized market returns.
- **Primaries:** An original investment vehicle that invests directly into a company or asset.

## **VALUATION POLICY**

Fiducient Advisors does not engage an independent third-party pricing service to value securities. Our reports are generated using the security prices provided by custodians used by our clients. Our custodial pricing hierarchy is available upon request. If a client holds a security not reported by the first custodian within the hierarchy, the valuation is generated from the next custodian within the hierarchy, and so forth. Each custodian uses pricing services from outside vendors, where the vendors may generate nominally different prices. Therefore, this report can reflect minor valuation differences from those contained in a custodian's report. In rare instances where Fiducient Advisors overrides a custodial price, prices are taken from Bloomberg.

## **REPORTING POLICY**

This report is intended for the exclusive use of the client listed within the report. Content is privileged and confidential. Any dissemination or distribution is strictly prohibited. Information has been obtained from a variety of sources believed to be reliable though not independently verified. Any forecast represents median expectations and actual returns, volatilities and correlations will differ from forecasts. Please note each client has customized investment objectives and constraints and the investment strategy for each portfolio is based on a client-specific asset allocation model. Past performance does not indicate future performance and there is a possibility of a loss. Performance calculated net of investment fees. Certain portfolios presented may be gross of Fiducient Advisors' fees and actual performance would be reduced by investment advisory fees. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice.

Custodian reports are the reports that govern the account. There will be different account values between Fiducient Advisors' reports and the custodian reports based on whether the report utilizes trade date or settlement date to calculate value. Additionally, difference between values contained on reports may be caused by different accrued income values. Any forecasts represent future expectations and actual returns, volatilities and correlations will differ from forecasts. This report does not represent a specific investment recommendation. Please consult with your advisor, attorney, and accountant, as appropriate, regarding specific advice. Past performance does not indicate future performance and there is a possibility of a loss.

Manager performance for mutual funds and ETFs is based on NAV and provided by Lipper. Performance for non-mutual fund or ETF investments is based on the returns provided by managers, calculations based on a manager statement, or calculations based on a statement or data from the client's custodian. Unless specified otherwise, all returns are net of individual manager fees, represent total returns and are annualized for periods greater than one year. The deduction of fees produces a compounding effect that reduces the total rate of return over time. As an example, the effect of investment management fees on the total value of a client's portfolio assuming (a) quarterly fee assessment, (b) \$1,000,000 investment, (c) portfolio return of 8% a year, and (d) 0.50% annual investment advisory fee would be \$5,228 in the first year, and cumulative effects of \$30,342 over five years and \$73,826 over ten years. Additional information on advisory fees charged by Fiducient Advisors are described in Part 2 of the Form ADV.

## **OTHER**

By regulation, closed-end funds utilizing debt for leverage must report their interest expense, as well as their income tax expense, as part of their total expense ratio. To make for a useful comparison between closed-end funds and both open-end funds and exchange-traded funds, adjusted expense ratios excluding interest and income tax expenses are utilized for closed-end funds within this report. See disclosure on closed-end fund fact sheets for information regarding the total expense ratio of each closed-end fund.

Please advise us of any changes in your objectives or circumstances.

## **CUSTODIAN STATEMENTS**

Please remember to review the periodic statements you receive from you custodian. If you do not receive periodic statements from your custodian or notice issues with the activity reported in those statements, please contact Fiducient Advisors or your custodian immediately.