



December 8, 2021



Alaska Permanent Fund Corporation

3rd Quarter 2021

**Capital Markets and
Performance Review**

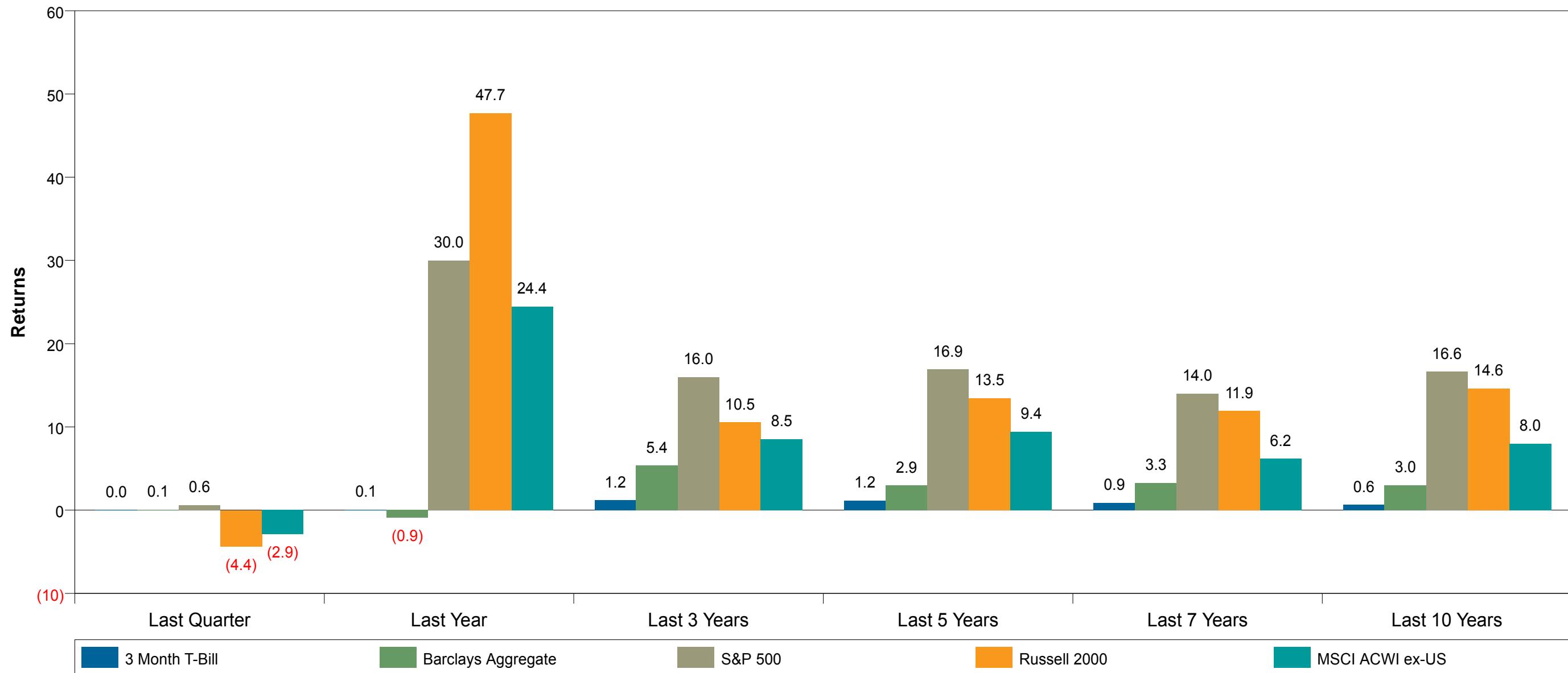
Greg Allen
CEO and Chief Research Officer

Steven Center, CFA
Senior Vice President

Chris Park, CFA
Vice President

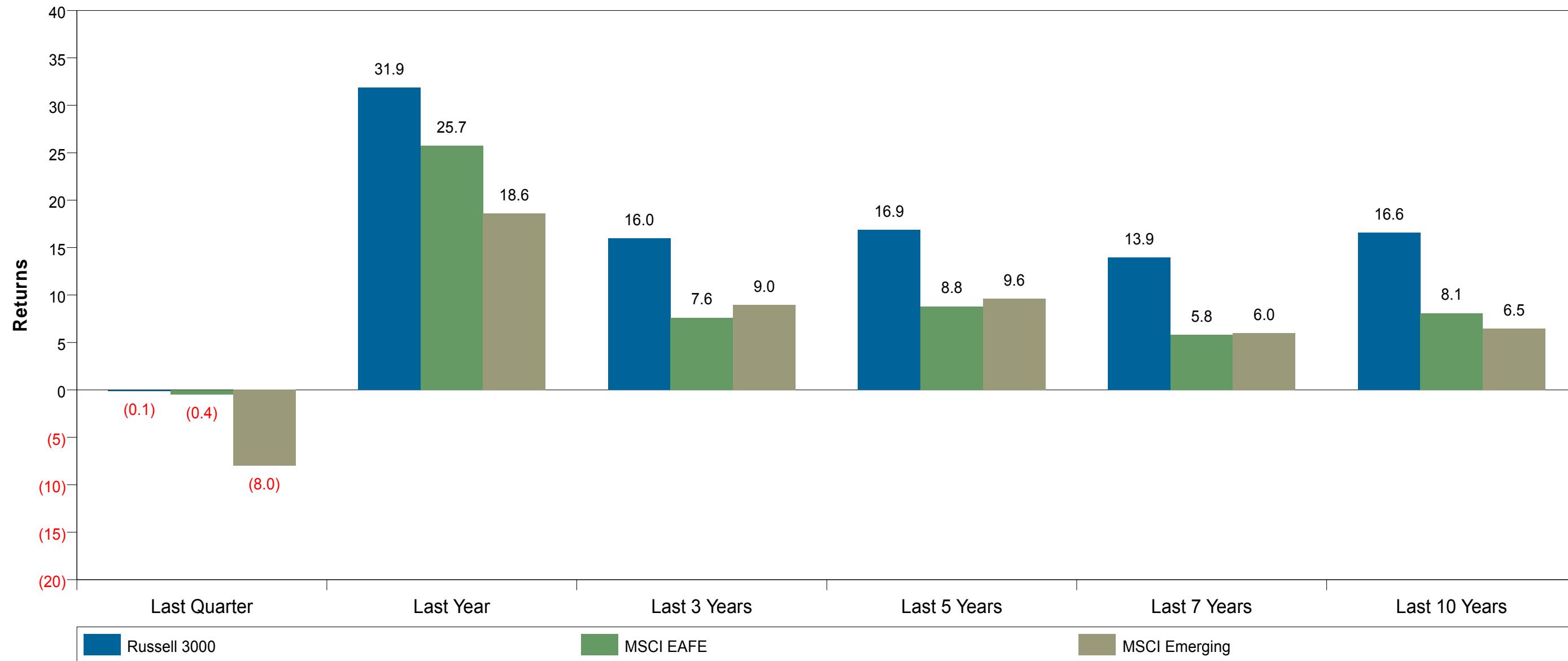
Broad Capital Market Performance

Periods Ended September 30, 2021



Public Equity Capital Market Performance

Periods Ended September 30, 2021



Callan Periodic Table of Investment Returns

Returns for Key Indices

2012	2013	2014	2015	2016	2017	2018	2019	2020	3 Qtrs. 2021
MSCI ACWI ex USA SC 18.52%	Russell 2000 38.82%	S&P 500 13.69%	MSCI ACWI ex USA SC 2.60%	Russell 2000 21.31%	MSCI Emerging Markets 37.28%	Bloomberg Barclays Aggregate 0.01%	S&P 500 31.49%	Russell 2000 19.96%	S&P 500 15.92%
MSCI Emerging Markets 18.23%	S&P 500 32.39%	Bloomberg Barclays Aggregate 5.97%	S&P 500 1.38%	Bloomberg Barclays Corp High Yield 17.13%	MSCI ACWI ex USA SC 31.65%	Bloomberg Barclays Corp High Yield -2.08%	Russell 2000 25.52%	S&P 500 18.40%	Russell 2000 12.41%
MSCI World ex USA 16.41%	MSCI World ex USA 21.02%	Russell 2000 4.89%	Bloomberg Barclays Aggregate 0.55%	S&P 500 11.96%	MSCI World ex USA 24.21%	Bloomberg Barclays Global Agg ex US -2.15%	MSCI World ex USA 22.49%	MSCI Emerging Markets 18.31%	MSCI ACWI ex USA SC 12.23%
Russell 2000 16.35%	MSCI ACWI ex USA SC 19.73%	Bloomberg Barclays Corp High Yield 2.45%	MSCI World ex USA -3.04%	MSCI Emerging Markets 11.19%	S&P 500 21.83%	S&P 500 -4.38%	MSCI ACWI ex USA SC 22.42%	MSCI ACWI ex USA SC 14.24%	MSCI World ex USA 9.19%
S&P 500 16.00%	Bloomberg Barclays Corp High Yield 7.44%	MSCI Emerging Markets -2.19%	Russell 2000 -4.41%	MSCI ACWI ex USA SC 3.91%	Russell 2000 14.65%	Russell 2000 -11.01%	MSCI Emerging Markets 18.44%	Bloomberg Barclays Global Agg ex US 10.11%	Bloomberg Barclays Corp High Yield 4.53%
Bloomberg Barclays Corp High Yield 15.81%	Bloomberg Barclays Aggregate -2.02%	Bloomberg Barclays Global Agg ex US -3.09%	Bloomberg Barclays Corp High Yield -4.47%	MSCI World ex USA 2.75%	Bloomberg Barclays Global Agg ex US 10.51%	MSCI World ex USA -14.09%	Bloomberg Barclays Corp High Yield 14.32%	MSCI World ex USA 7.59%	MSCI Emerging Markets -1.25%
Bloomberg Barclays Aggregate 4.21%	MSCI Emerging Markets -2.60%	MSCI ACWI ex USA SC -4.03%	Bloomberg Barclays Global Agg ex US -6.02%	Bloomberg Barclays Aggregate 2.65%	Bloomberg Barclays Corp High Yield 7.50%	MSCI Emerging Markets -14.57%	Bloomberg Barclays Aggregate 8.72%	Bloomberg Barclays Aggregate 7.51%	Bloomberg Barclays Aggregate -1.55%
Bloomberg Barclays Global Agg ex US 4.09%	Bloomberg Barclays Global Agg ex US -3.08%	MSCI World ex USA -4.32%	MSCI Emerging Markets -14.92%	Bloomberg Barclays Global Agg ex US 1.49%	Bloomberg Barclays Aggregate 3.54%	MSCI ACWI ex USA SC -18.20%	Bloomberg Barclays Global Agg ex US 5.09%	Bloomberg Barclays Corp High Yield 7.11%	Bloomberg Barclays Global Agg ex US -5.94%

Source: Bloomberg Barclays, FTSE Russell, MSCI, Standard & Poor's

Callan Periodic Table of Investment Returns

Returns for Key Indices

Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years	Last 20 Years
Bloomberg Barclays Corp High Yield 0.89%	Russell 2000 47.68%	S&P 500 15.99%	S&P 500 16.90%	S&P 500 14.01%	S&P 500 16.63%	MSCI Emerging Markets 10.97%
S&P 500 0.58%	MSCI ACWI ex USA SC 33.06%	Russell 2000 10.54%	Russell 2000 13.45%	Russell 2000 11.90%	Russell 2000 14.63%	MSCI ACWI ex USA SC 10.42%
Bloomberg Barclays Aggregate 0.05%	S&P 500 30.00%	MSCI ACWI ex USA SC 10.33%	MSCI ACWI ex USA SC 10.28%	MSCI ACWI ex USA SC 8.15%	MSCI ACWI ex USA SC 9.44%	Russell 2000 10.29%
MSCI ACWI ex USA SC 0.00%	MSCI World ex USA 26.50%	MSCI Emerging Markets 8.59%	MSCI Emerging Markets 9.23%	Bloomberg Barclays Corp High Yield 5.89%	MSCI World ex USA 7.88%	S&P 500 9.51%
MSCI World ex USA -0.66%	MSCI Emerging Markets 18.20%	MSCI World ex USA 7.87%	MSCI World ex USA 8.88%	MSCI World ex USA 5.69%	Bloomberg Barclays Corp High Yield 7.42%	Bloomberg Barclays Corp High Yield 8.10%
Bloomberg Barclays Global Agg ex US -1.59%	Bloomberg Barclays Corp High Yield 11.28%	Bloomberg Barclays Corp High Yield 6.91%	Bloomberg Barclays Corp High Yield 6.52%	MSCI Emerging Markets 5.62%	MSCI Emerging Markets 6.09%	MSCI World ex USA 6.68%
Russell 2000 -4.36%	Bloomberg Barclays Aggregate -0.90%	Bloomberg Barclays Aggregate 5.36%	Bloomberg Barclays Aggregate 2.94%	Bloomberg Barclays Aggregate 3.26%	Bloomberg Barclays Aggregate 3.01%	Bloomberg Barclays Aggregate 4.33%
MSCI Emerging Markets -8.09%	Bloomberg Barclays Global Agg ex US -1.15%	Bloomberg Barclays Global Agg ex US 3.17%	Bloomberg Barclays Global Agg ex US 1.10%	Bloomberg Barclays Global Agg ex US 1.23%	Bloomberg Barclays Global Agg ex US 0.90%	Bloomberg Barclays Global Agg ex US 4.32%

Source: Bloomberg Barclays, FTSE Russell, MSCI, Standard & Poor's

Market Environment

A Pause in Global Equity Markets in 3Q21

Global equity continued to surge in 3Q

- One-year returns from September 2020 are still eye-popping:
 - S&P 500: +30%
 - MSCI World ex-USA: +27%
 - Emerging Markets: +18%
 - U.S. Small Cap: +48%
- Economic data began to show signs of softening; consumer and business spending hit by the concern over the 3Q surge in the Delta variant of COVID-19.
- 3Q GDP growth dropped sharply to 2% from a robust 6.7% in 2Q, but the economic recovery is still solid. Supply chain issues and sentiment surrounding the end of fiscal stimulus, the Delta variant, and return to a Fed taper slowed economic activity in 3Q

Returns for Periods ended 9/30/21

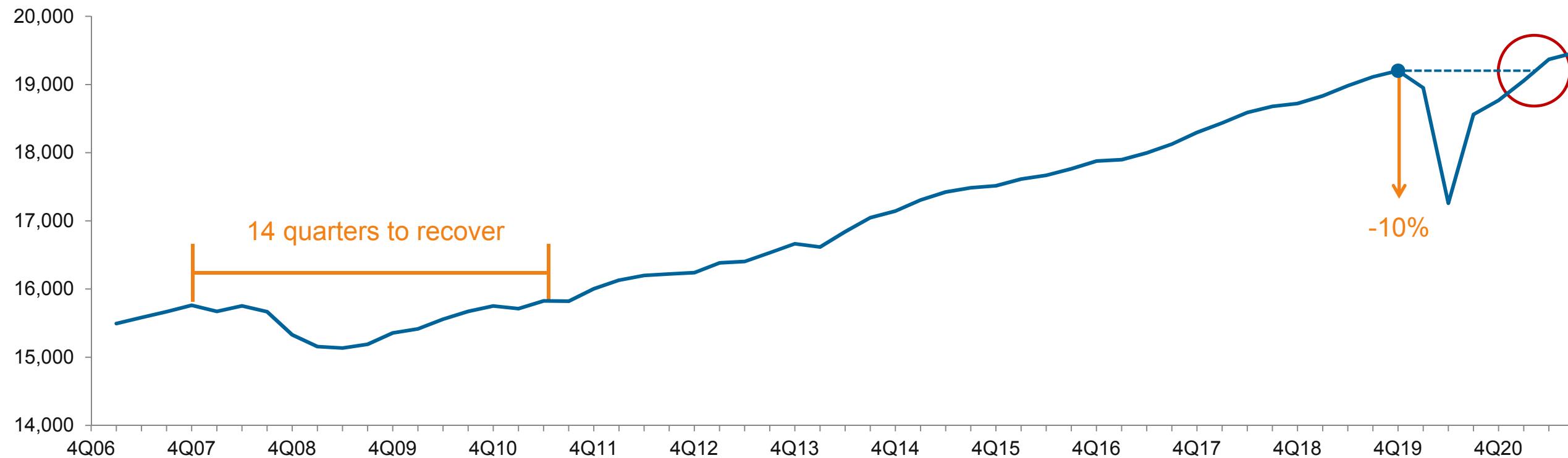
	1 Quarter	1 Year	5 Years	10 Years	25 Years
U.S. Equity					
Russell 3000	-0.10	31.88	16.85	16.60	9.74
S&P 500	0.58	30.00	16.90	16.63	9.65
Russell 2000	-4.36	47.68	13.45	14.63	9.12
Global ex-U.S. Equity					
MSCI World ex USA	-0.66	26.50	8.88	7.88	5.34
MSCI Emerging Markets	-8.09	18.20	9.23	6.09	--
MSCI ACWI ex USA Small Cap	0.00	33.06	10.28	9.44	6.77
Fixed Income					
Bloomberg Barclays Aggregate	0.05	-0.90	2.94	3.01	5.06
90-day T-Bill	0.01	0.07	1.16	0.63	2.11
Bloomberg Barclays Long Gov/Credit	0.07	-2.97	5.21	5.76	7.41
Bloomberg Barclays Global Agg ex-US	-1.59	-1.15	1.10	0.90	3.58
Real Estate					
NCREIF Property	5.23	12.15	6.84	8.99	9.23
FTSE Nareit Equity	0.98	37.39	6.83	11.27	9.99
Alternatives					
CS Hedge Fund	1.19	14.07	5.51	4.88	7.07
Cambridge Private Equity	11.52	56.87	20.98	15.81	15.61
Bloomberg Commodity	6.59	42.29	4.54	-2.66	1.41
Gold Spot Price	-0.82	-7.31	5.93	0.80	6.31
Inflation - CPI-U	0.96	5.39	2.59	1.92	2.23

*Cambridge PE data through 3/31/21

Sources: Bloomberg, Bloomberg Barclays, Callan, Cambridge, Credit Suisse, FTSE Russell, MSCI, NCREIF, S&P Dow Jones Indices

GDP Recovery After Deepest Drop in 75 Years

Seasonally Adjusted Real GDP in Billions of Dollars



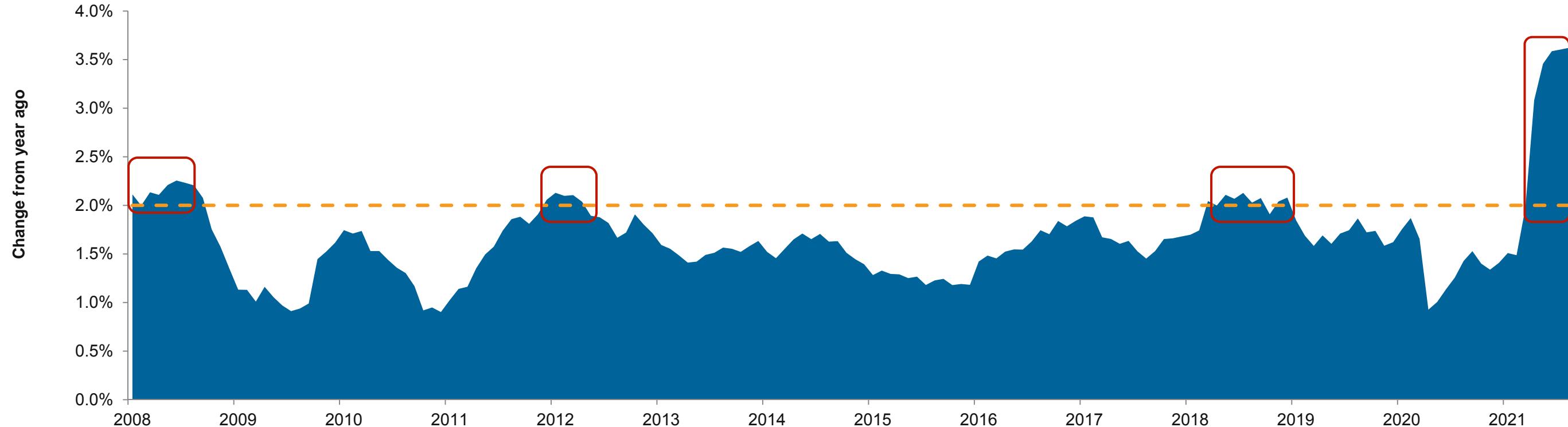
- After the Global Financial Crisis, it took 3.5 years before real GDP reclaimed its pre-recession highs.
- GFC peak to trough down 4%
- 2Q20 real GDP level was down over 10% from 4Q19; annual GDP declined 3.4% over 2019.
- Pre-pandemic peak level of GDP reached in 2Q21: \$19.368T vs. \$19.202T for 4Q19

Source: St. Louis FRED. 1Q21 is an estimate from IHS Markit

The Fed's New Inflation Framework

Targeting core personal consumption expenditures index

Personal Consumption Expenditures Excluding Food and Energy (Chain-Type Price Index)



- Inflation worries are in the headlines, but the data are not signaling a rise yet.
- Inflation has consistently undershot the Fed's 2% target, prompting a change in its inflation framework.
- Fed's aim is to achieve an average of 2% inflation over the medium term, which is not specifically defined.
- PCE is the Fed's target, different from and typically lower than CPI-U, which had a year-over-year gain of 5.4% in September 2021.

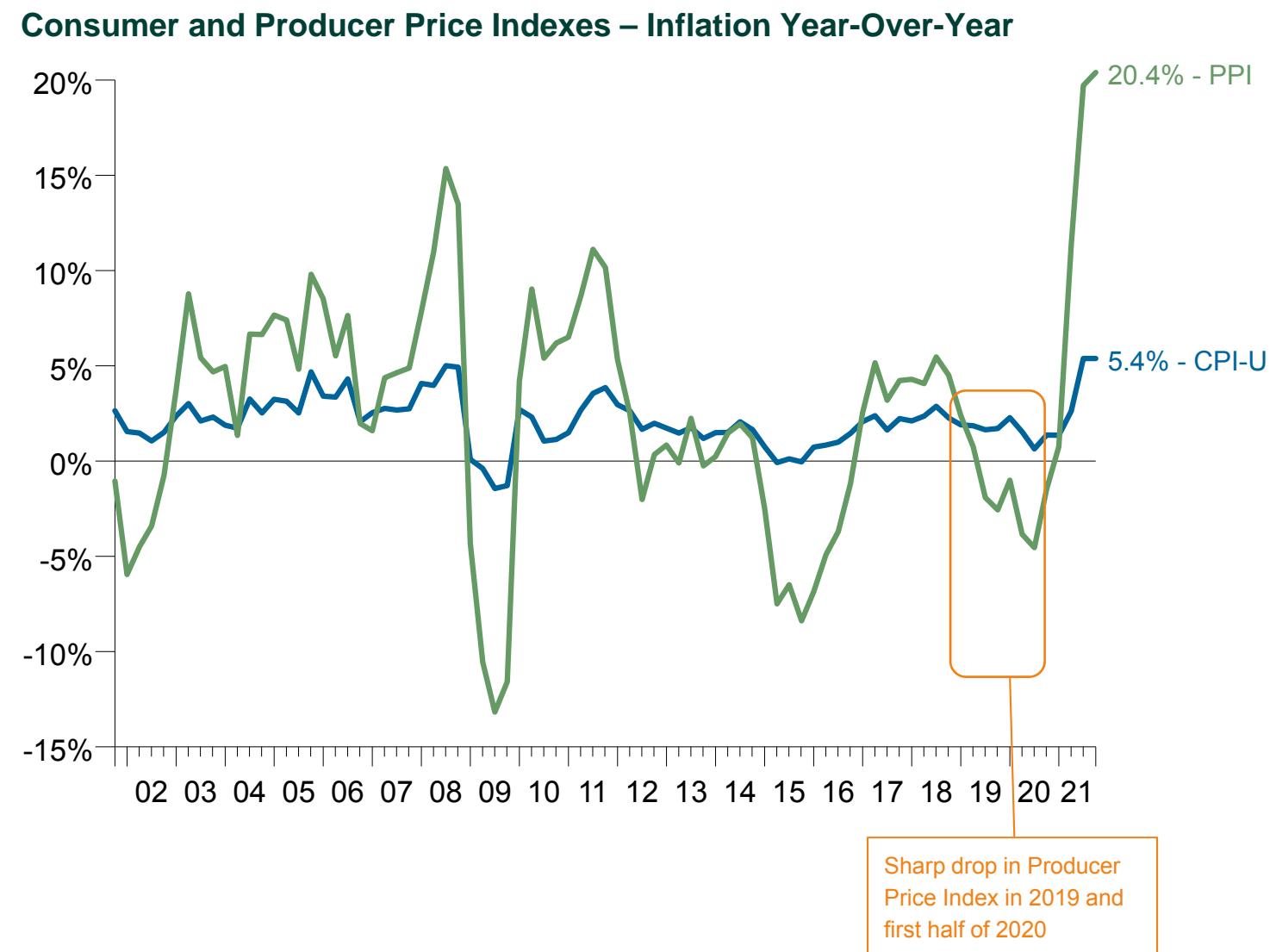
Sources: FRED, Federal Reserve Bank of St. Louis

Inflation Rebounds and Spurs Headline Concerns

CPI and PPI up sharply again in 3Q21

Inflation fell sharply at the onset of the pandemic, starting in February 2020.

- The recovery to pre-pandemic levels in the Consumer Price Index required a 2.6% year-over-year change.
- 5.4% jump in CPI-U represents kinks in supply chains and labor markets after a year of global economic disruption and shutdown.
- Producer prices had been tumbling for more than a year prior to the pandemic; recovery to 2018 price levels generated eye-popping year-over-year percent change through 2Q, and the sharp rise continued in 3Q.
- Driving the PPI's rise in 3Q were prices for energy and food.



Sources: FRED, Federal Reserve Bank of St. Louis

Contributors to Recent Inflation: Primary Categories

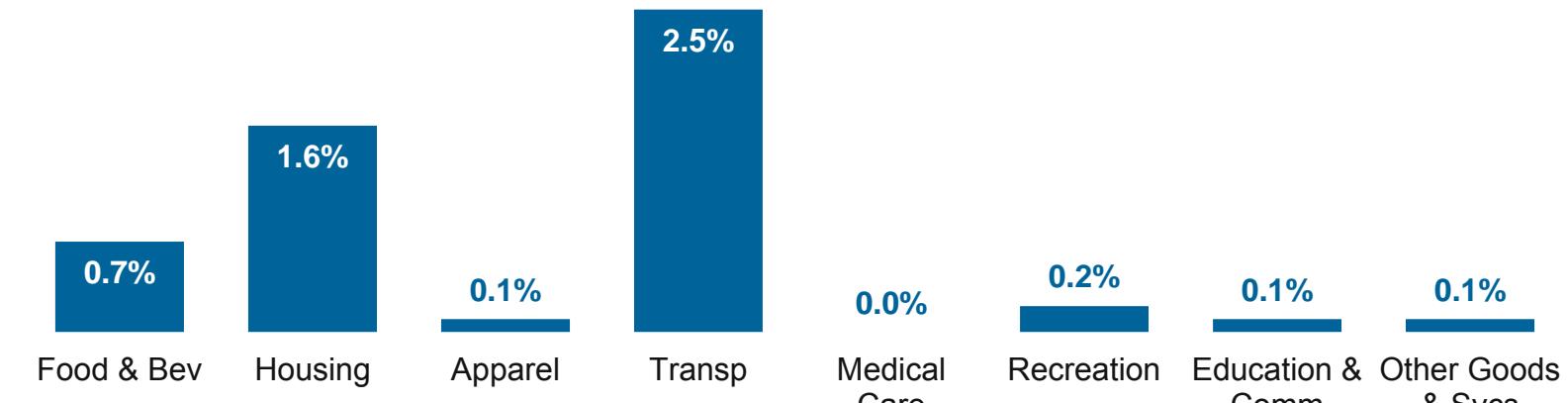
Transportation, including new and used cars, parts, and gasoline, has seen a spike in inflation with year-over-year prints that are more than three times higher than any other category.

With a meaningful 15% weight in the index, transportation makes a significant contribution to headline CPI.

Housing and food and beverage have also seen big inflation increases.

While inflation within these categories has been far lower than transportation, their large index weights make them meaningful contributors to overall inflation.

Contribution to September 2021 YoY Inflation



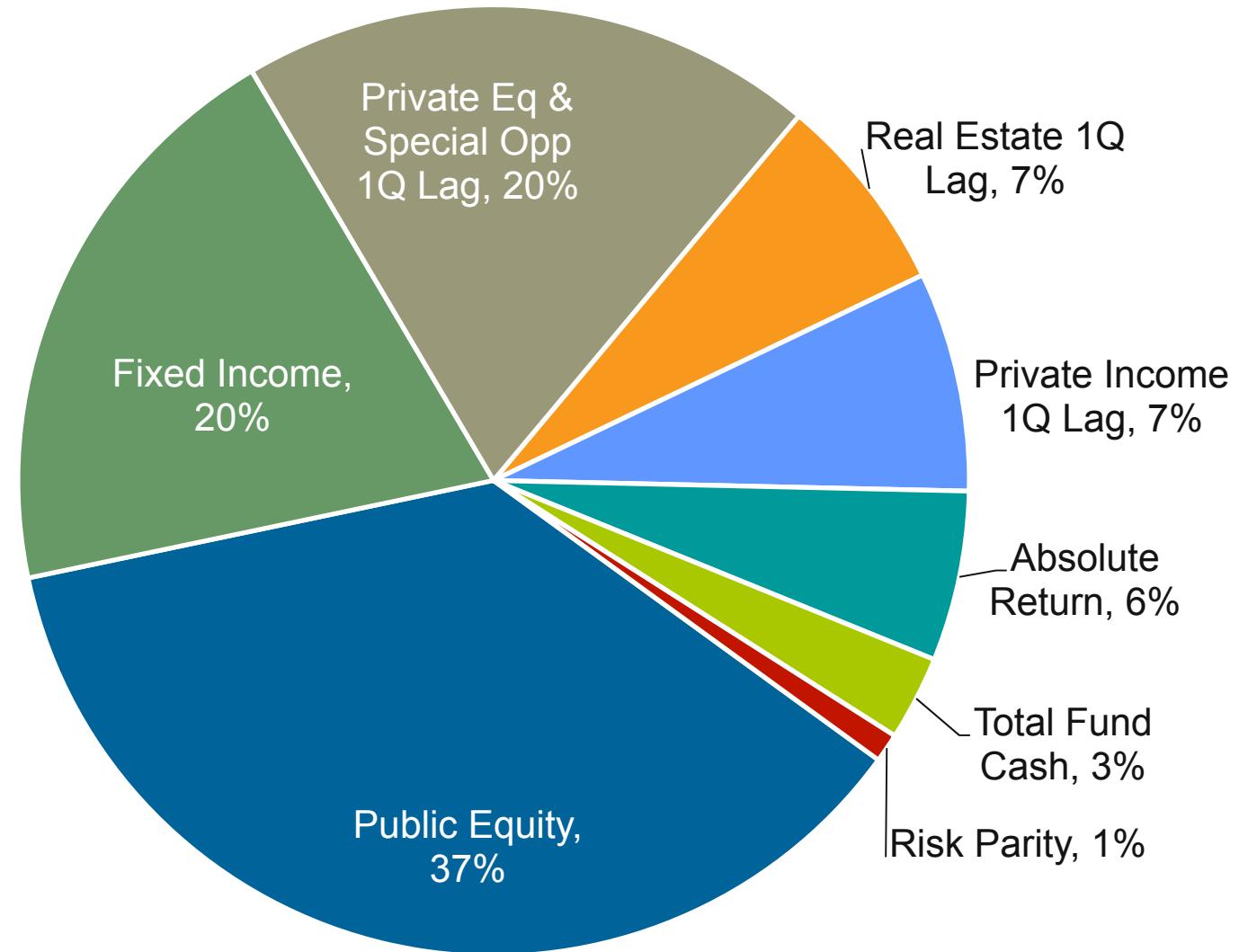
Primary Category	Primary Category Weight	Year-over-Year Change									
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
All Items	100.0%	1.4%	1.7%	2.6%	4.2%	4.9%	5.3%	5.3%	5.2%	5.4%	
Food & Bev	15.2%	3.7%	3.5%	3.4%	2.3%	2.1%	2.4%	3.4%	3.7%	4.5%	
Housing	42.4%	1.8%	1.8%	2.1%	2.6%	2.9%	3.1%	3.3%	3.5%	3.9%	
Apparel	2.7%	-2.6%	-3.6%	-2.5%	1.9%	5.6%	4.9%	4.2%	4.2%	3.4%	
Transportation	15.2%	-1.4%	0.6%	5.9%	14.8%	19.7%	21.2%	19.1%	17.6%	16.5%	
Medical Care	8.9%	1.9%	2.0%	1.8%	1.5%	0.9%	0.4%	0.3%	0.4%	0.4%	
Recreation	5.8%	0.1%	0.8%	1.1%	2.1%	1.6%	2.4%	3.5%	3.4%	3.5%	
Education & Communication	6.8%	1.7%	1.7%	1.5%	1.7%	1.9%	2.1%	1.1%	1.2%	1.7%	
Other Goods & Svcs	3.2%	2.1%	2.1%	2.4%	2.7%	2.7%	2.5%	2.9%	3.5%	3.4%	

Source: U.S. Bureau of Labor Statistics

Total Fund Asset Allocation

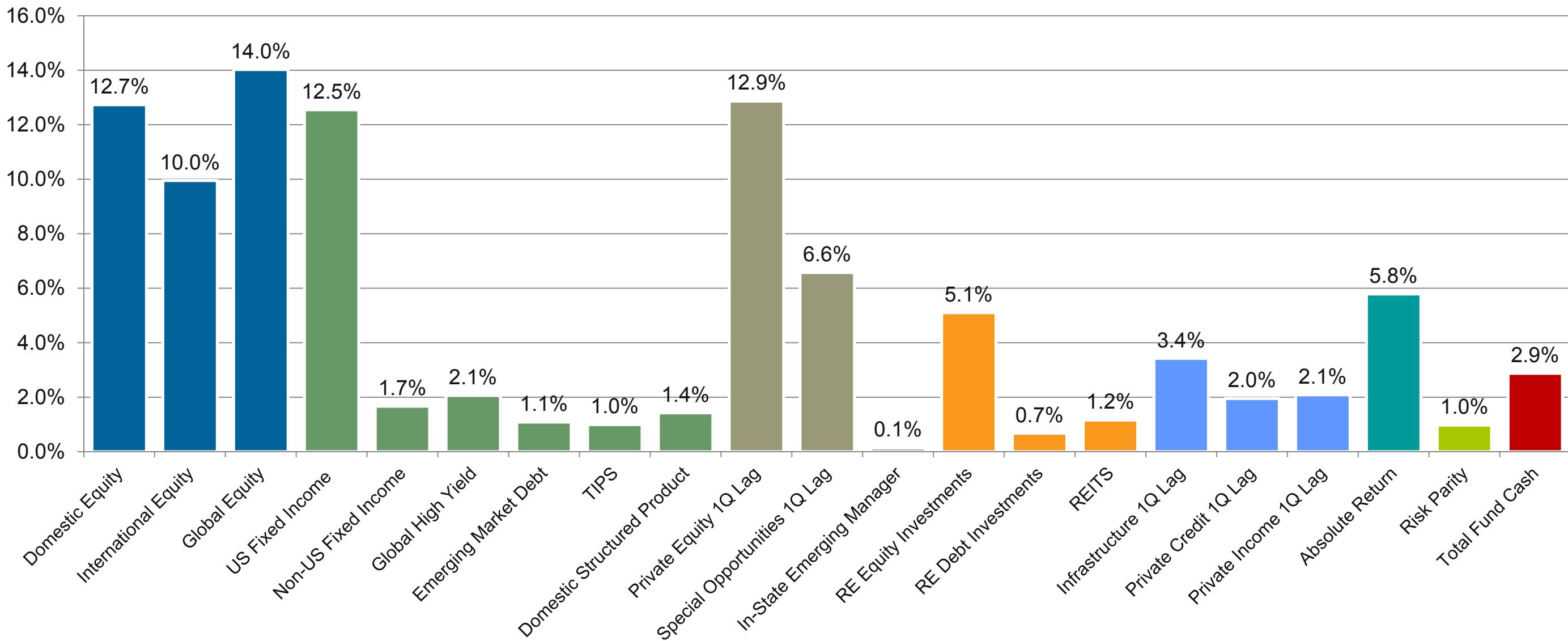
As of September 30, 2021: \$82.66B

- APFC portfolio is well diversified across all major asset classes employed by institutional investors.
- Using institutional standard asset class definitions, the portfolio is currently allocated 37% to public equity, 20% to fixed income, and 43% to alternative investments.
- Compared to allocations in the second quarter, weights to public equity and fixed income decreased, and alternatives increased.
- Alternatives include private equity, special opportunities, real estate, private infrastructure, private credit, private income, absolute return, and risk parity.
- Private Equity & Special Opportunities, Real Estate, and Infrastructure & Private Income are reported on a one-quarter lag.



Total Fund Asset Allocation

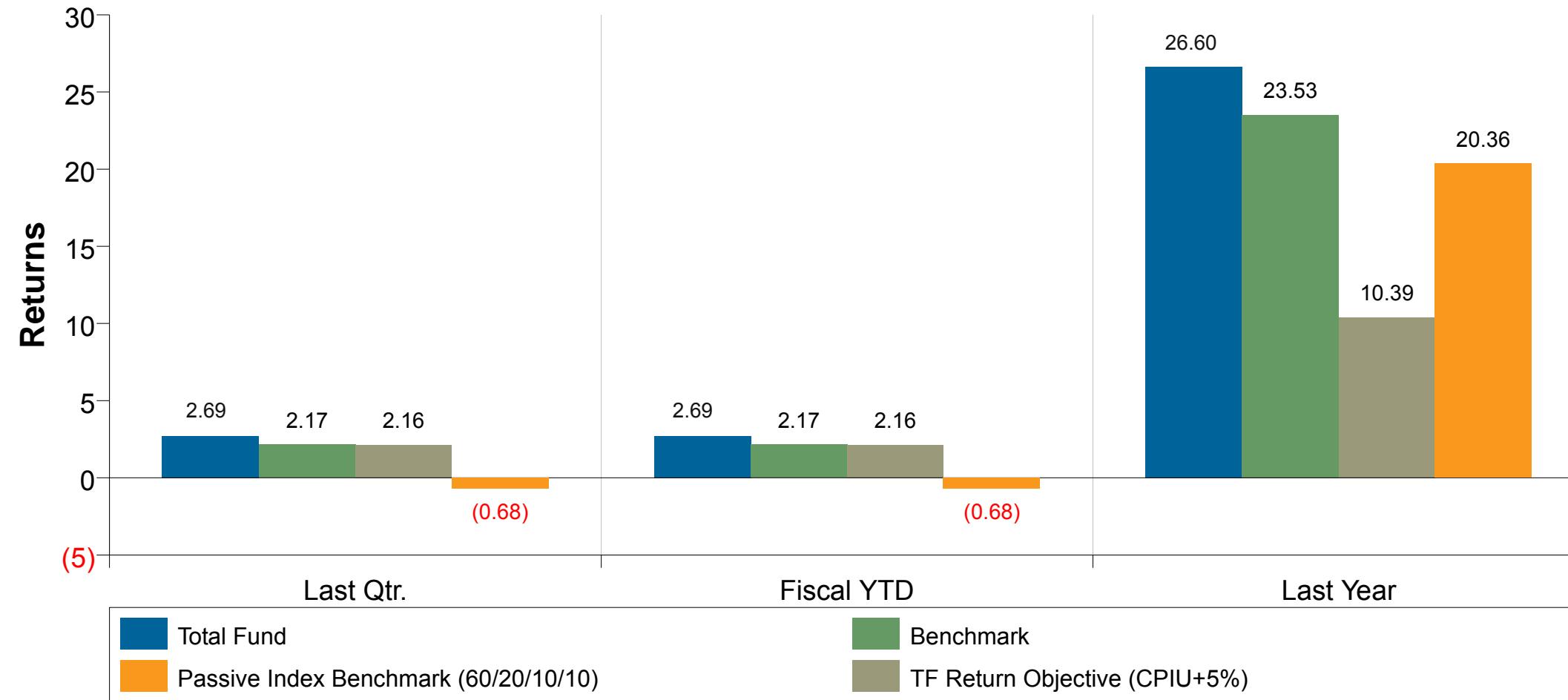
As of September 30, 2021



APFC Total Fund Cumulative Returns

Total Fund versus Total Fund Targets

Returns for Periods Ending September 30, 2021

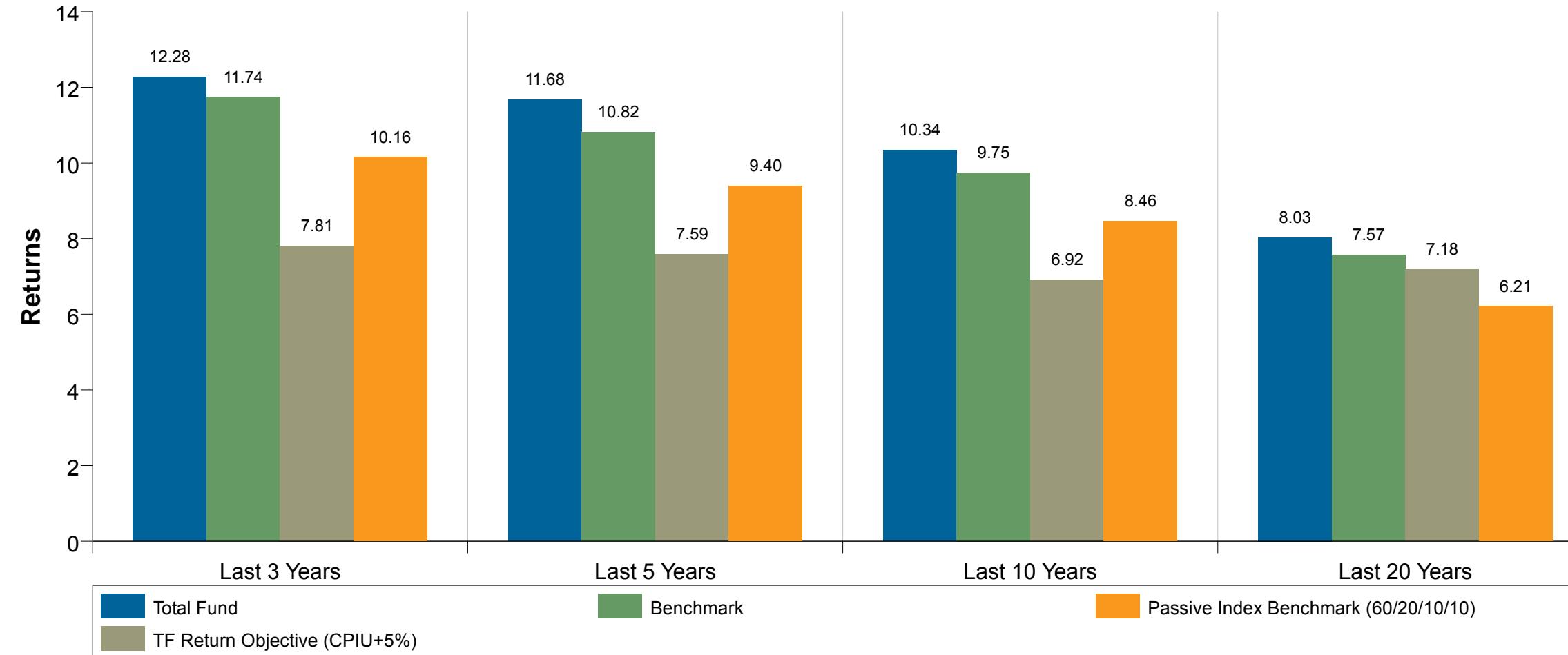


- Benchmark (FY21-FY22) = 38% MSCI ACWI IMI, 1.0% 90 Day T-Bills, 1.0% BB US TIPS, 5.5% BB Agg, 5.5% BB Corp IG, 2.0% BB Global Treasury ex-US Hedged, 0.5% JPM EMBI Global Diversified, 0.5% JPM GBI-EM Global Diversified TR, 2.0% BB US High Yield 2% Issuer Cap, 2.0% BB US Securitized, 16% Cambridge PE (lagged), 6.8% NCREIF Total Index (lagged), 1.2% MSCI US REIT (lagged), 5.4% Cambridge Global Pvt. Infrastructure (lagged), 3.6% Cambridge Pvt Credit (lagged), 6% HFRI Total HFOF Universe (weighted), 2% 90 Day T-Bills, 1% HFR Risk Parity Vol 12% Institutional Index.

APFC Total Fund Cumulative Returns

Total Fund versus Total Fund Targets

Returns for Periods Ending September 30, 2021



- Benchmark (FY21-FY22) = 38% MSCI ACWI IMI, 1.0% 90 Day T-Bills, 1.0% BB US TIPS, 5.5% BB Agg, 5.5% BB Corp IG, 2.0% BB Global Treasury ex-US Hedged, 0.5% JPM EMBI Global Diversified, 0.5% JPM GBI-EM Global Diversified TR, 2.0% BB US High Yield 2% Issuer Cap, 2.0% BB US Securitized, 16% Cambridge PE (lagged), 6.8% NCREIF Total Index (lagged), 1.2% MSCI US REIT (lagged), 5.4% Cambridge Global Pvt. Infrastructure (lagged), 3.6% Cambridge Pvt Credit (lagged), 6% HFRI Total HFOF Universe (weighted), 2% 90 Day T-Bills, 1% HFR Risk Parity Vol 12% Institutional Index.

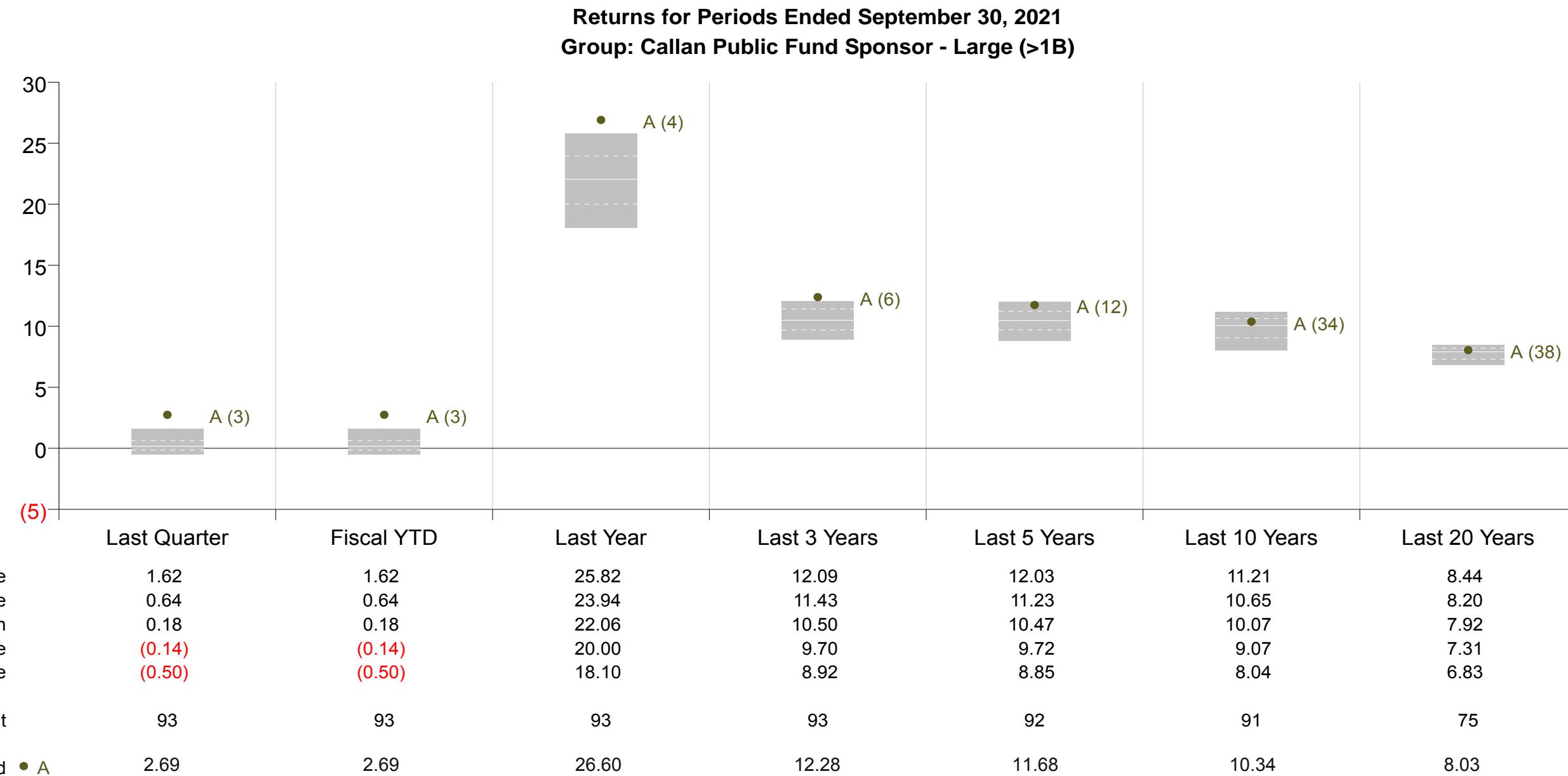
APFC Total Fund Attribution

For One Quarter Ended September 30, 2021

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Public Equity	38%	38%	(0.55%)	(1.11%)	0.21%	(0.00%)	0.21%
Fixed Income	20%	20%	0.09%	0.11%	(0.01%)	(0.01%)	(0.01%)
Private Eq & Special Opp	19%	16%	11.30%	11.52%	(0.04%)	0.24%	0.20%
Real Estate	7%	8%	4.22%	4.84%	(0.04%)	(0.04%)	(0.08%)
Private Income	7%	9%	5.66%	4.44%	0.09%	(0.04%)	0.04%
Absolute Return	6%	6%	2.21%	(0.39%)	0.15%	0.01%	0.16%
Total Fund Cash	3%	2%	0.05%	0.01%	0.00%	(0.01%)	(0.01%)
Risk Parity	1%	1%	0.58%	(0.12%)	0.01%	(0.00%)	0.01%
Total			2.69% = 2.17% + 0.37% + 0.15%				0.53%

- In the third quarter, the Total Fund outperformed the Performance Benchmark by 53 basis points.
- Manager performance in Public Equity, Private Income and Absolute Return drove relative return. Asset Allocation added to relative performance with an overweight to Private Equity.
- In aggregate, active management added 37 basis points to relative performance, while deviations from the Policy Target added 15 basis points.

APFC Total Fund Relative to Callan's Large Public Fund Database



APFC Total Fund Relative to Callan's Large Endowment / Foundation Database

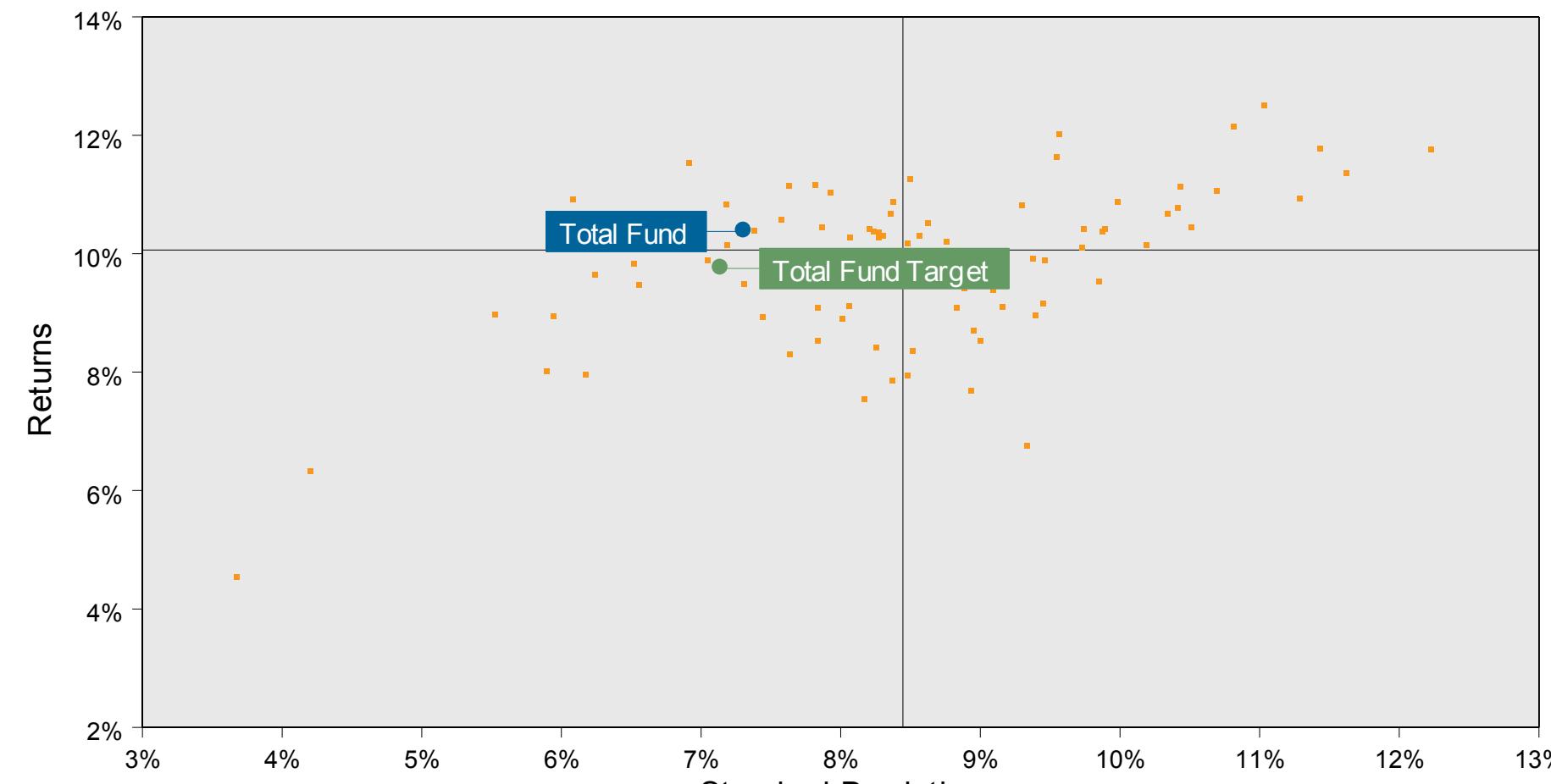
Returns for Periods Ended September 30, 2021
 Group: Callan Endow/Foundation - Large (>1B)



APFC Total Fund Return versus Standard Deviations

Relative to Callan's Large Public Fund Database

Ten Year Annualized Risk vs Return

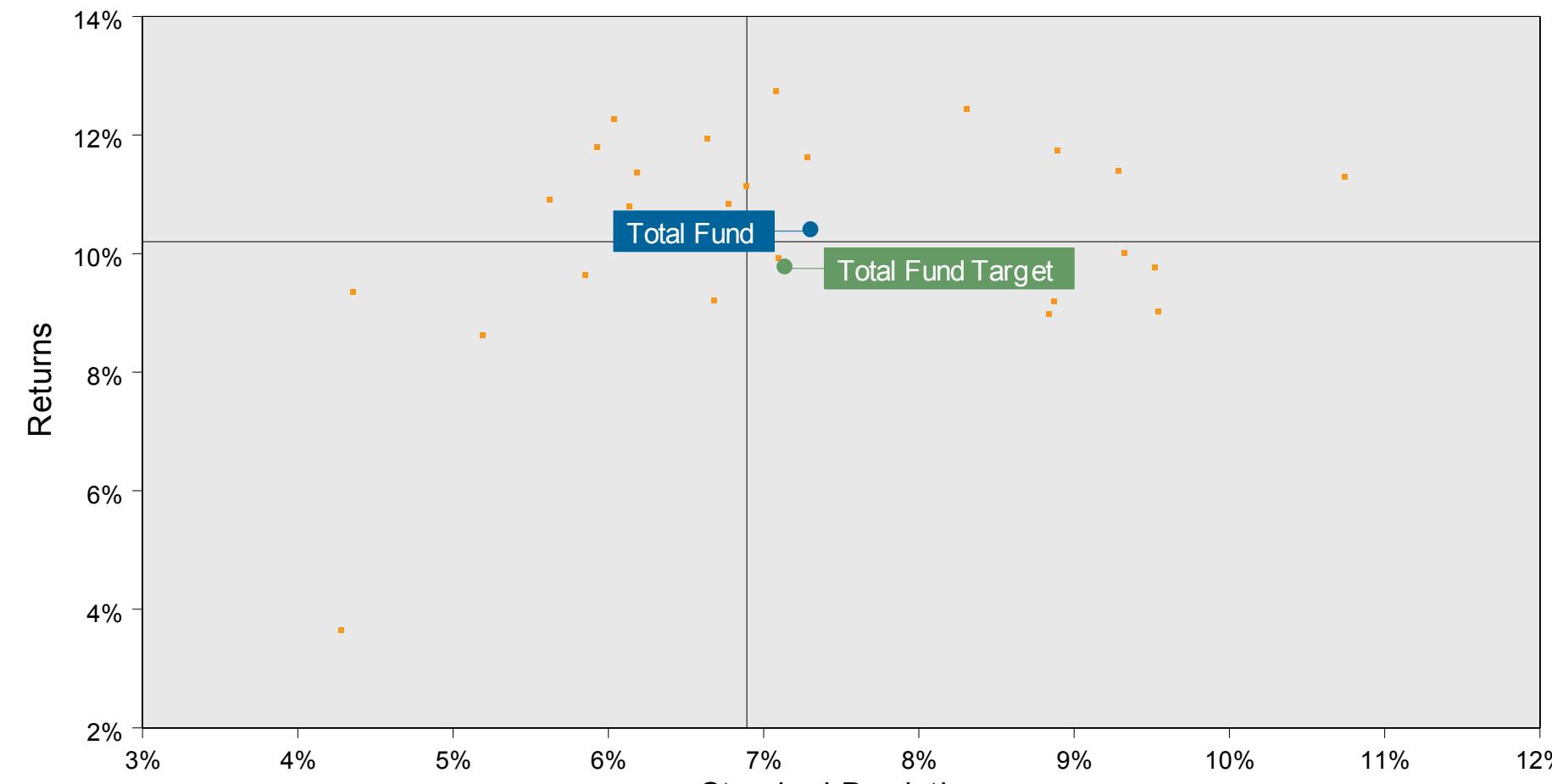


Squares represent membership of the Callan Public Fund Spons - Large (>1B)

APFC Total Fund Return versus Standard Deviations

Relative to Callan's Large Endowment / Foundation Database

Ten Year Annualized Risk vs Return

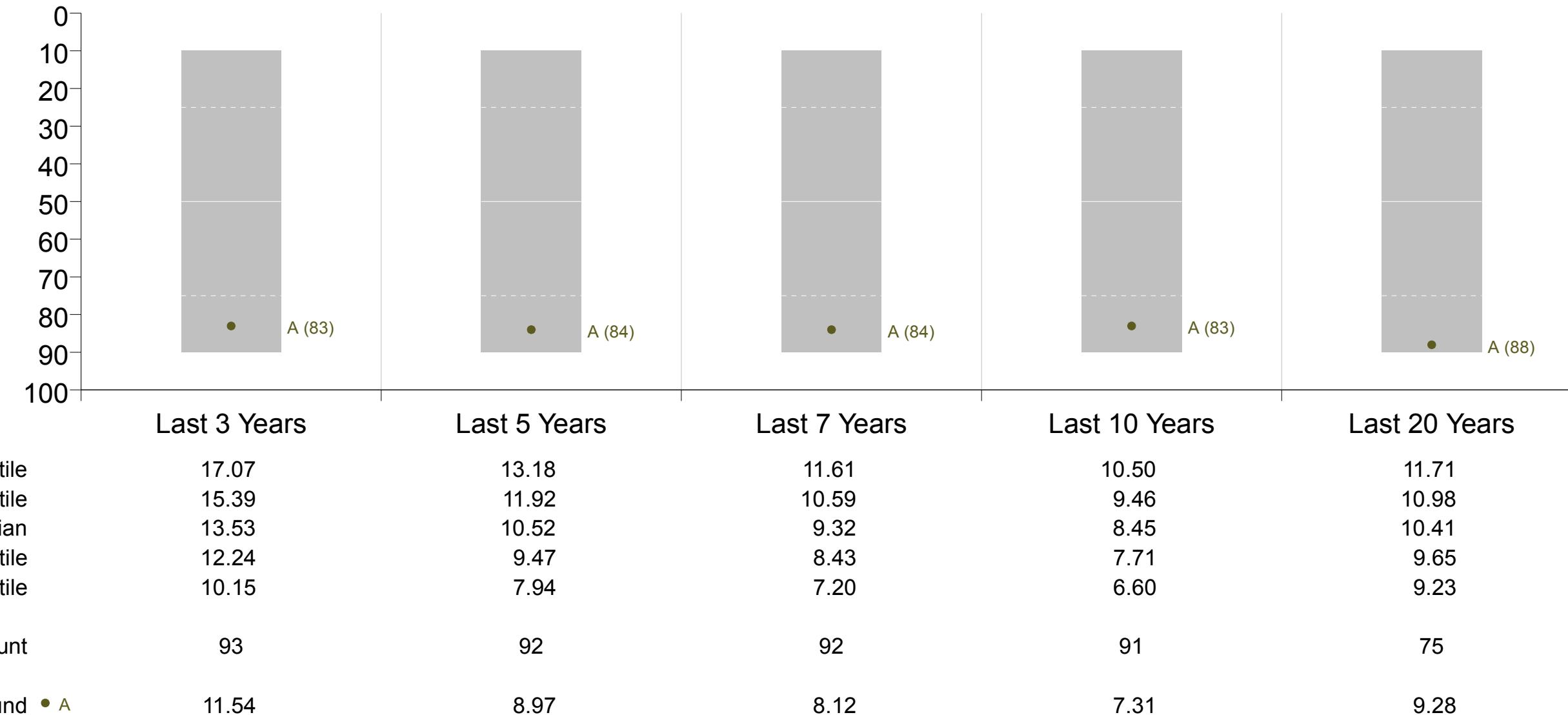


Squares represent membership of the Callan Endow/Foundation - Large (>1B)

APFC Total Fund Standard Deviation Relative to Callan's Large Public Fund Database

Standard Deviation for Periods Ended September 30, 2021

Group: Callan Public Fund Sponsor - Large (>1B)



APFC Total Fund Standard Deviation Relative to Callan's Large Endowment/Foundation Database

Standard Deviation for Periods Ended September 30, 2021

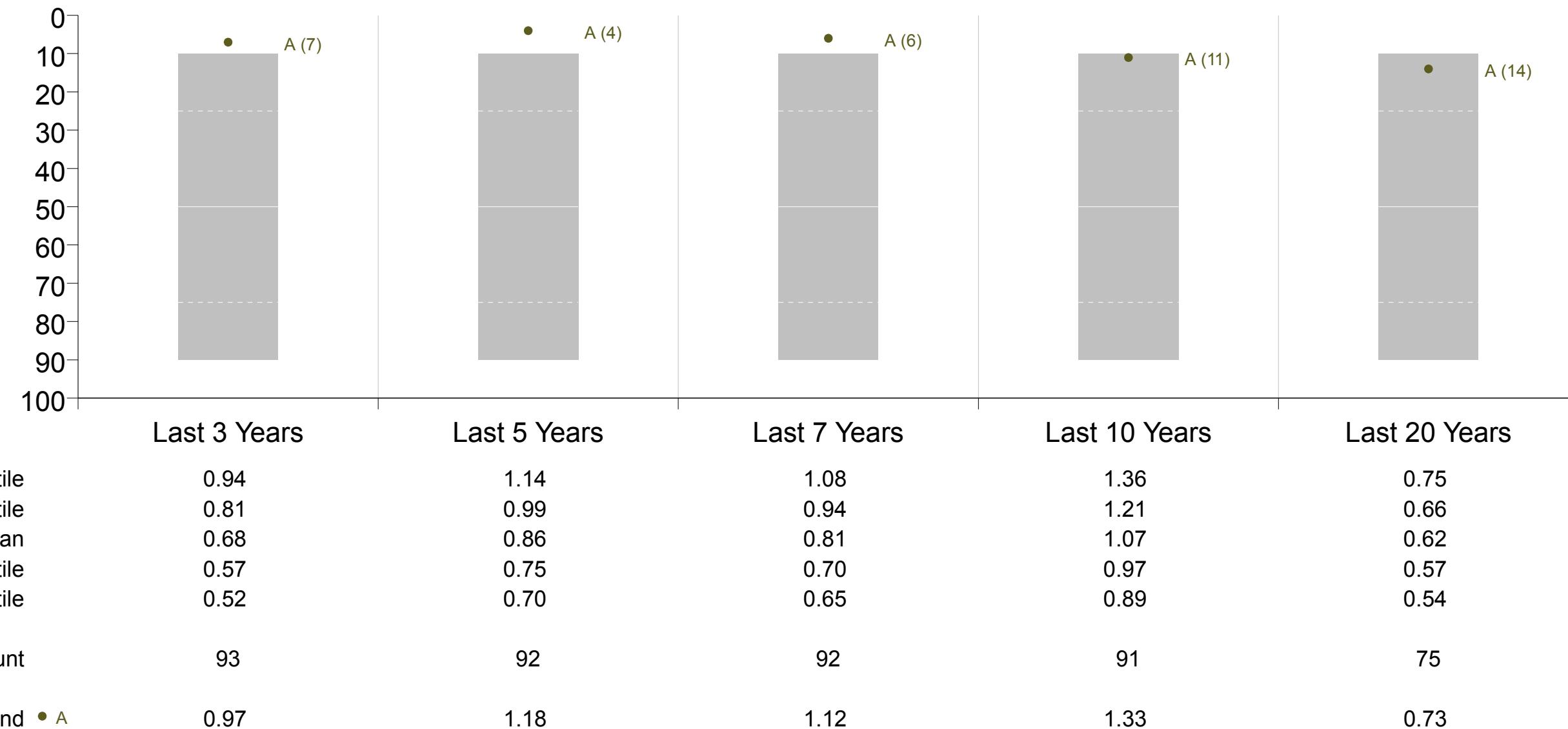
Group: Callan Endow/Foundation - Large (>1B)



APFC Total Fund Sharpe Ratio Relative to Callan's Large Public Fund Database

Sharpe Ratio for Periods Ended September 30, 2021

Group: Callan Public Fund Sponsor - Large (>1B)



APFC Total Fund Sharpe Ratio Relative to Callan's Large Endowment/Foundation Database

Sharpe Ratio for Periods Ended September 30, 2021

Group: Callan Endow/Foundation - Large (>1B)



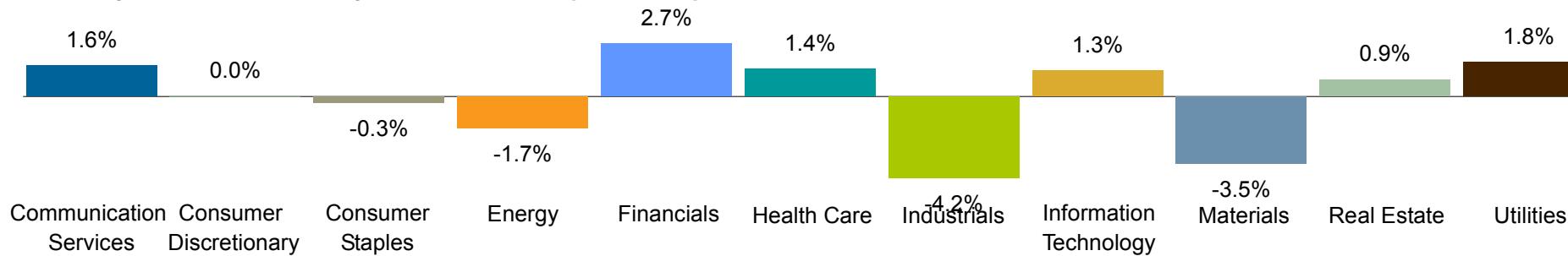
U.S. Equity Performance

Third Quarter 2021

Returns compress over mounting concerns

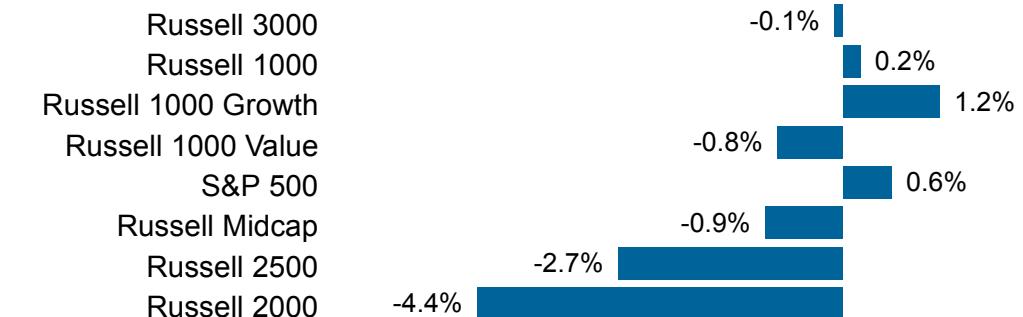
- S&P 500 rose a modest 0.6% in 3Q21, and smaller cap growth indices posted their first negative quarter since the March 2020 low.
- Slowing economic growth, supply chain disruptions, and inflationary pressure, as well as uncertainty around monetary policy, decreased investors' risk appetite.
- In general, high quality topped lower quality in large cap.
- Economically sensitive sectors such as Industrials (-4.2%) and Materials (-3.5%) lagged; Financials (+2.7%) benefited.
- Growth outperformed value in large cap, and value outperformed growth in small cap.
- YTD, small value outperformed small growth by a whopping 2,000 bps (RUS2V 22.9% vs. RUS2G 2.8%), a stark reversal from the prior year and a pattern seen during periods of robust economic growth.

Industry Sector Quarterly Performance (S&P 500)



Sources: FTSE Russell, Standard & Poor's

U.S. Equity: Quarterly Returns



U.S. Equity: One-Year Returns

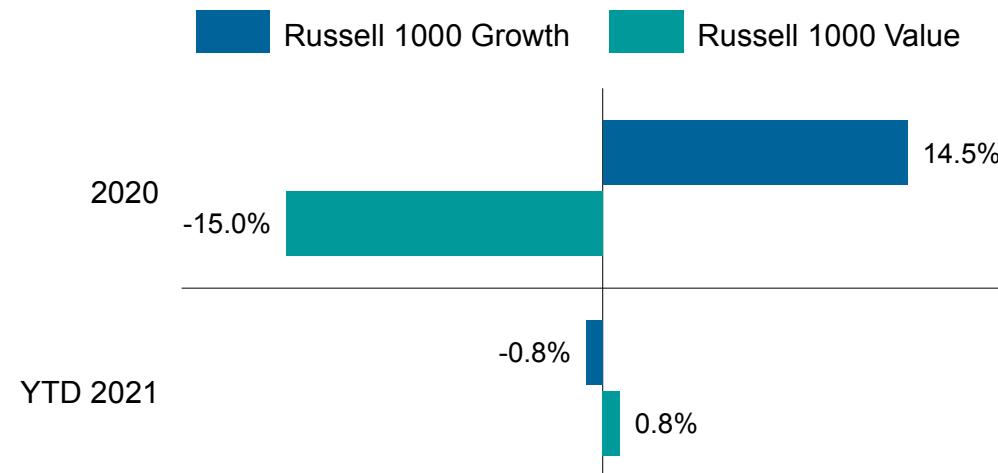


Equity Market Whipsaw Effect

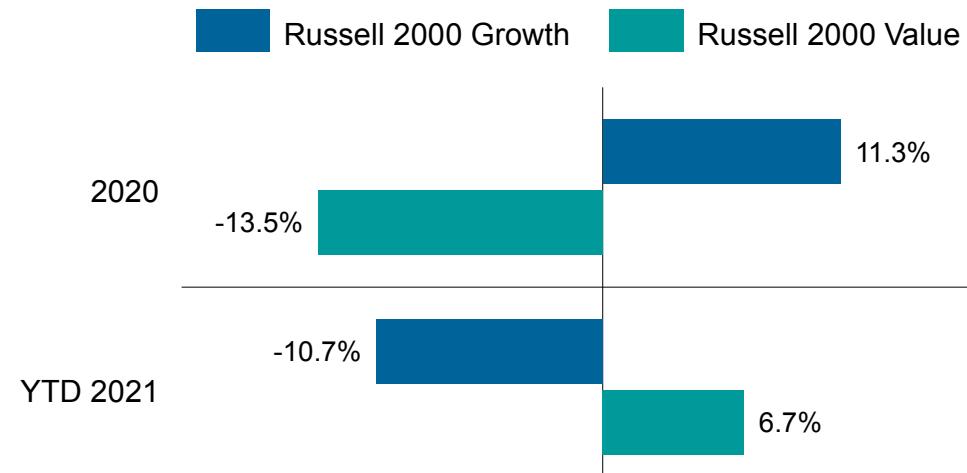
Diversification and rebalancing are best defense

- Few if any pockets of opportunity remain in the equity markets as valuations have hit or exceeded long-term averages given the recent market run.
- Investors are grappling with exposures to risk assets: What to do? Where to go?
- The whipsaw effect over the last two years illustrates the need to remain committed to a long-term plan that emphasizes diversification and disciplined rebalancing.

Relative Returns



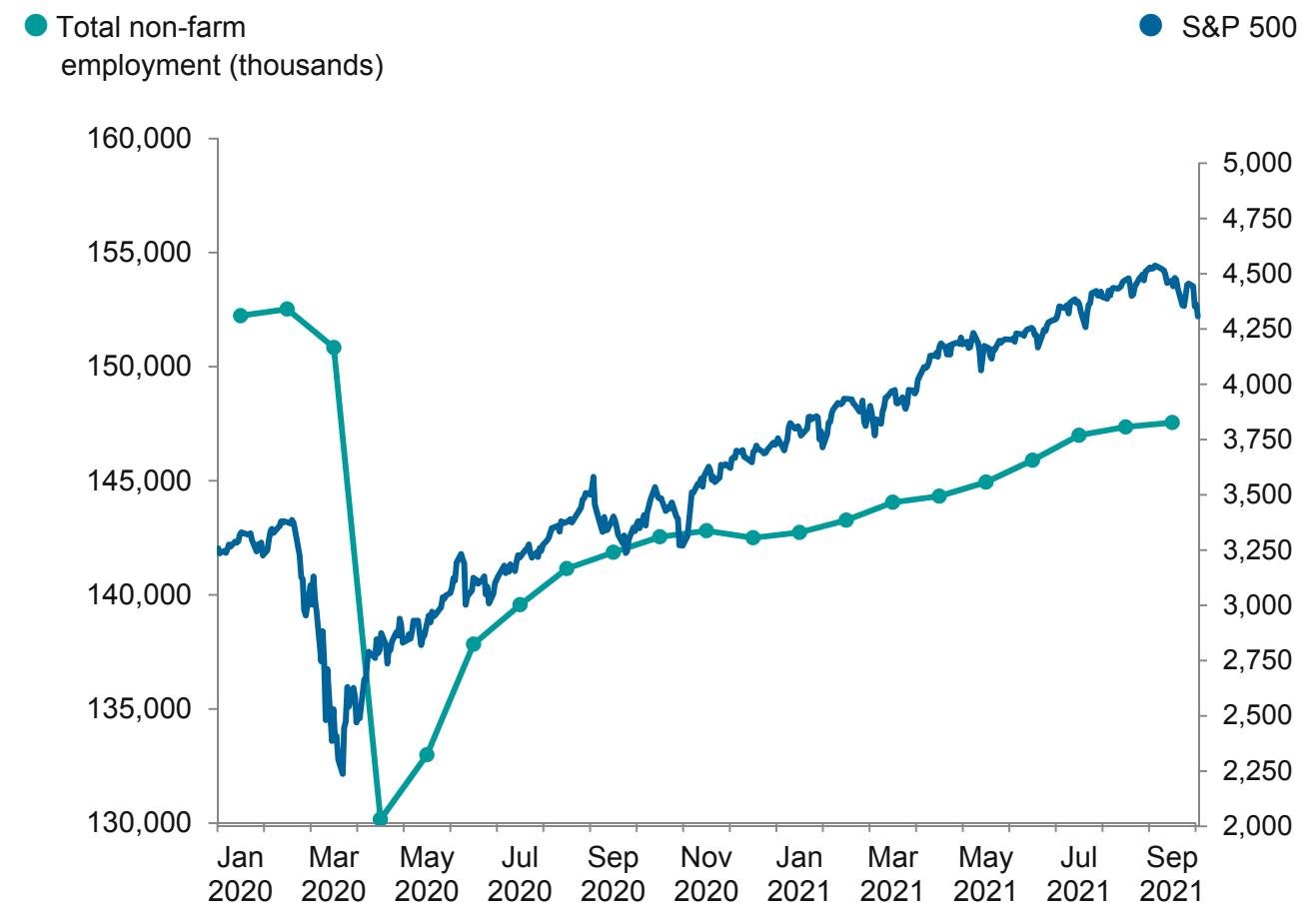
Relative Returns



Sources: Callan, FTSE Russell

Stock Market Is Not the Economy

- U.S. equity market has already recovered from the March 2020 plunge. Large cap (S&P 500) is up 97% from the bottom.
- U.S. job market created 22.8 million jobs from Feb 2010 – Feb 2020. The job market lost over 22.4 million jobs in March and April and has recovered 17.4 million since the April low.
- GDP regained its pre-pandemic peak in June 2021, just 16 months.
- Steep structural challenges face many job-laden sectors that are underrepresented in the current stock market valuation.
- Containment of COVID-19 and continued increase in the vaccination rate are key to retaining confidence in the recovery.



Sources: St. Louis FRED, S&P Dow Jones Indices

Global ex-U.S. Equity Performance

Third Quarter 2021

Fears of stagflation stoke market volatility

- Delta variant flare-ups and slowdown in China weighed on the global recovery.
- COVID-driven supply chain disruption continues to push inflation higher.
- Small cap outpaced large as global recovery concerns disproportionately punished large cap companies.
- Emerging markets struggled relative to developed markets as growth prospects were under pressure for China and Brazil.

Market pivots to cyclicals

- Energy crunch fueled the sector to the highest return in the quarter as demand outstripped supply.
- Financials outperformed; Real Estate and Utilities generally underperformed with higher interest rate expectations.
- Sentiment and momentum signals added value in developed markets but not in emerging markets.

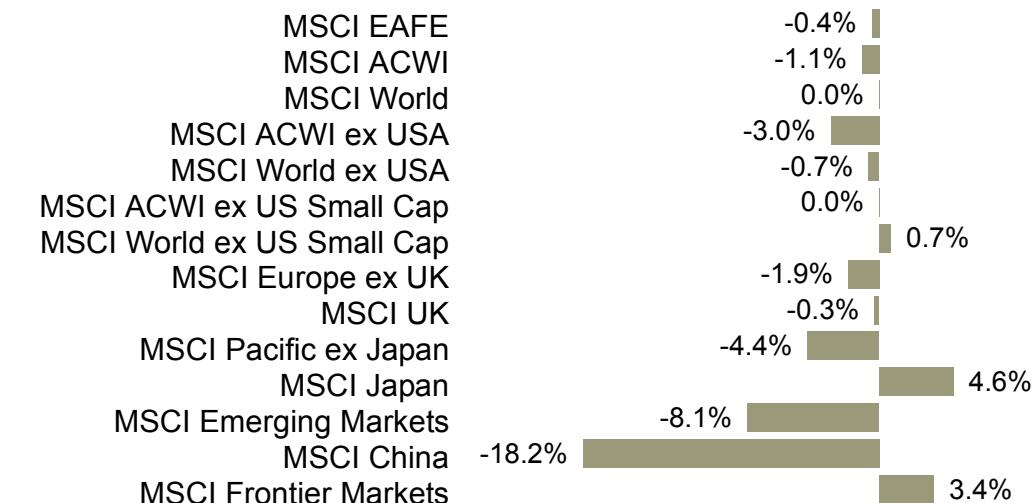
U.S. dollar vs. other currencies

- The U.S. dollar rose against other major currencies as the Fed signaled tapering is imminent, which notably detracted from global ex-U.S. results.

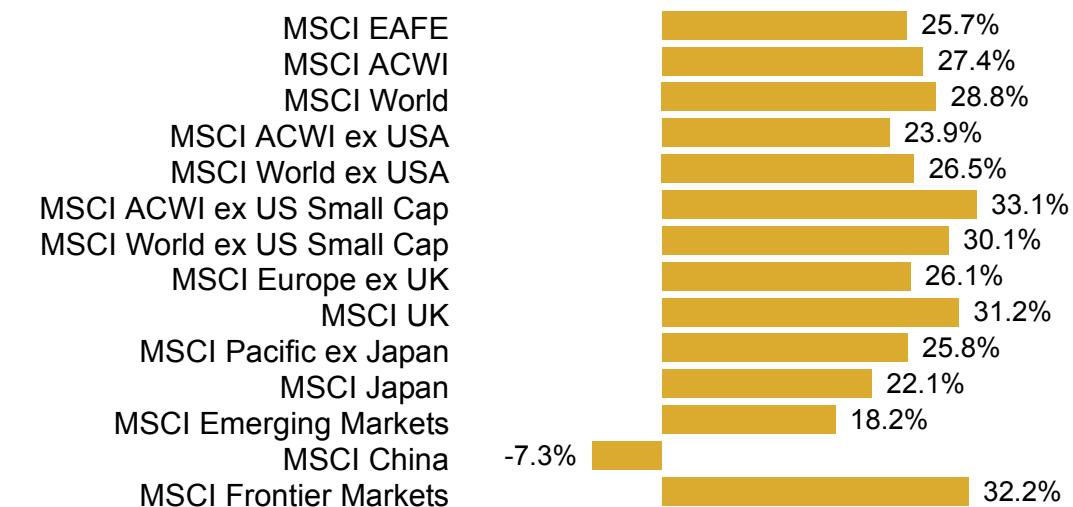
Growth vs. value

- Value outpaced growth in emerging markets due to the Energy rally, while both were relatively flat in developed markets.

Global Equity: Quarterly Returns



Global Equity: Annual Returns

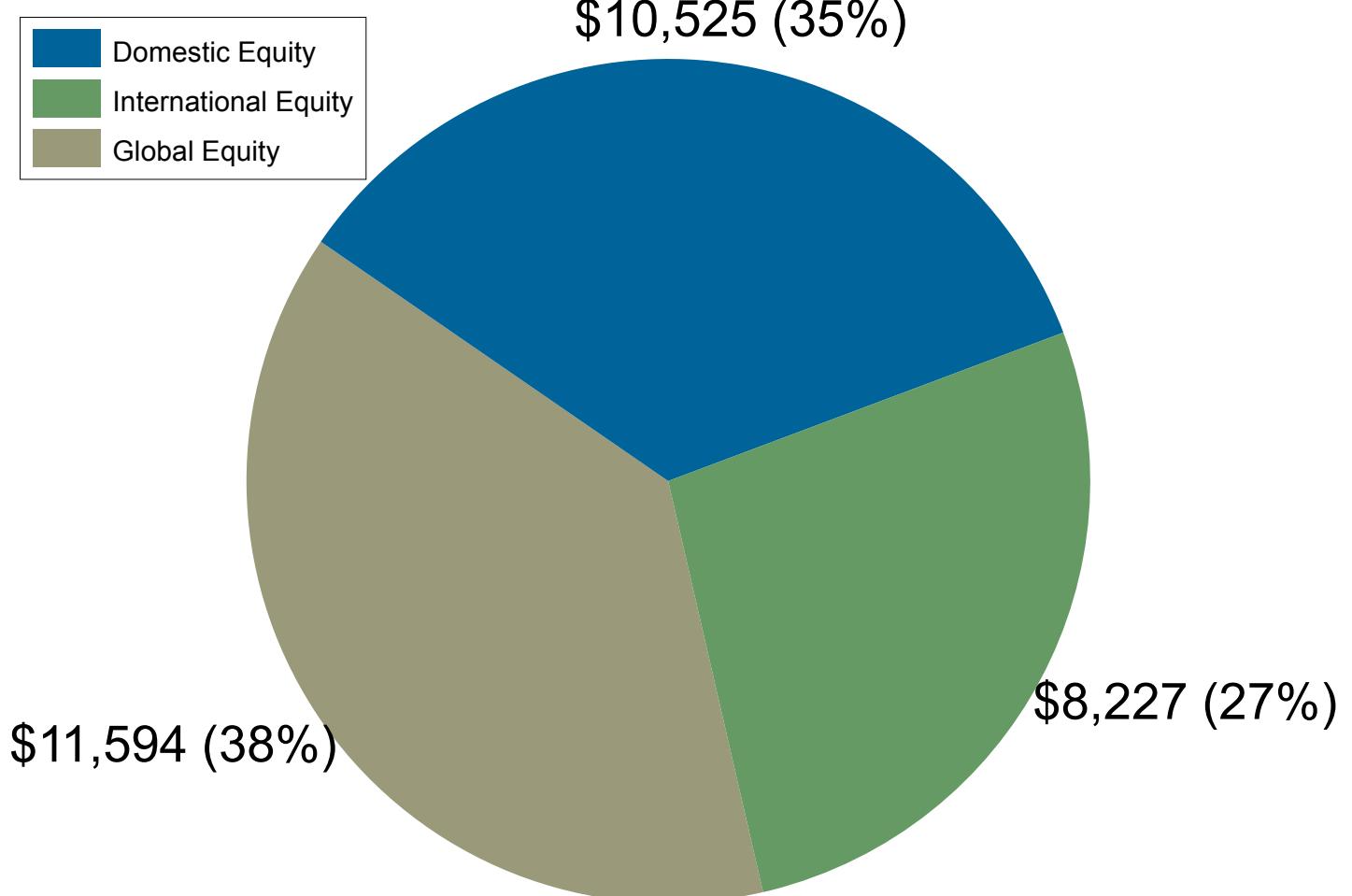


Source: MSCI

APFC Public Equity Structure

As of September 30, 2021

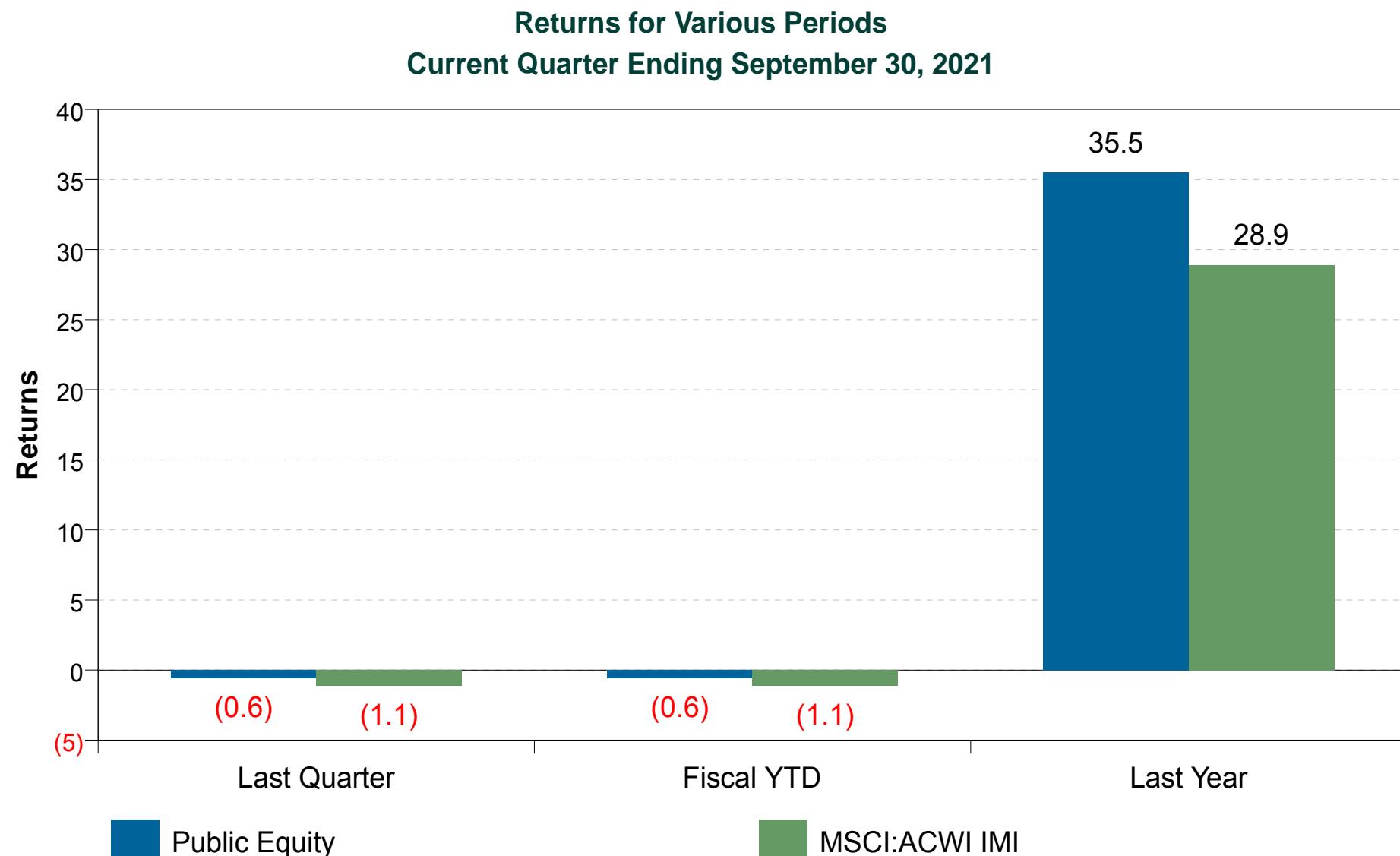
- APFC Public Equity portfolio has a weighting of roughly 58% in US equity, and 42% in non-US equity.
- The MSCI ACWI IMI benchmark has a weighting of roughly 59% in US equity, and 41% in non-US equity.
- The median allocation to US equity across public equity portfolios in Callan's Large Public Fund Sponsor database is roughly 58%.



APFC Public Equity vs. MSCI ACWI-IMI

Periods Ended September 30, 2021

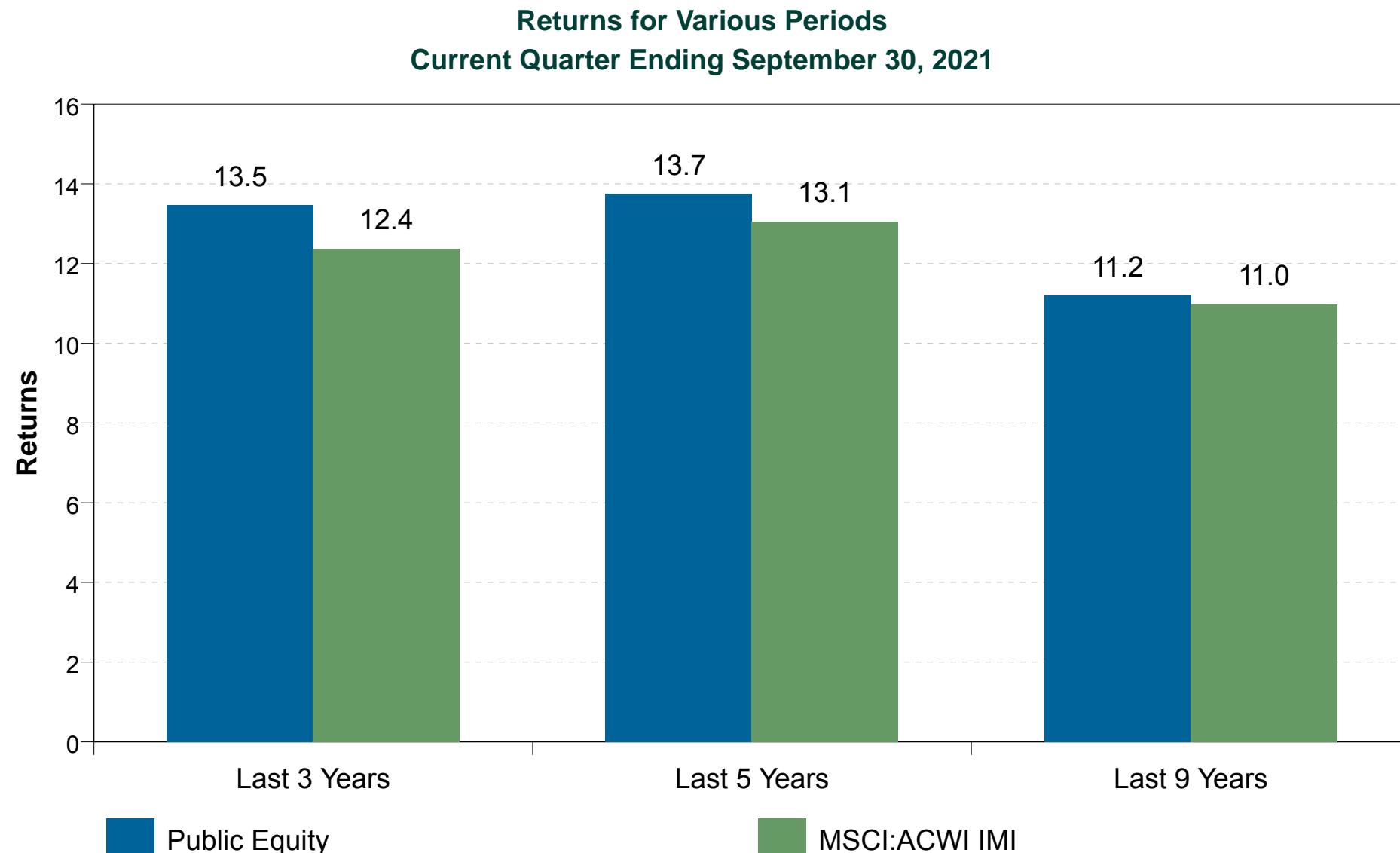
- APFC Public Equity portfolio outperformed the MSCI ACWI IMI index for the recent quarter and trailing one-year period.
- Domestic and Global Equity composites ended ahead of their respective benchmarks in the latest quarter, while International Equity trailed its benchmark. All composites outperformed over the last year.



APFC Public Equities Performance vs. MSCI ACWI-IMI

Periods Ended September 30, 2021

- Public Equities exceeded the benchmark over the intermediate and long-term. Domestic Equity lagged the most within Public Equities.
- Overall, the portfolio is well diversified across regions, countries, and underlying strategies.



APFC US Equity Performance vs. Fund Sponsor US Equity

Periods Ended September 30, 2021

- The universe is comprised of total domestic equity portfolios of large institutional investors in Callan's Fund Sponsor Database.
- APFC US Equity portfolio ended the recent quarter and year ahead its benchmark.
- When compared to US Equity portfolios of other large institutional investors, APFC's US Equity composite ranked above median in the quarter, 1-, 3- and 10-year periods and ranked near median in other standard periods.

Performance vs Fund Spnsor - Domestic Equity (Gross)



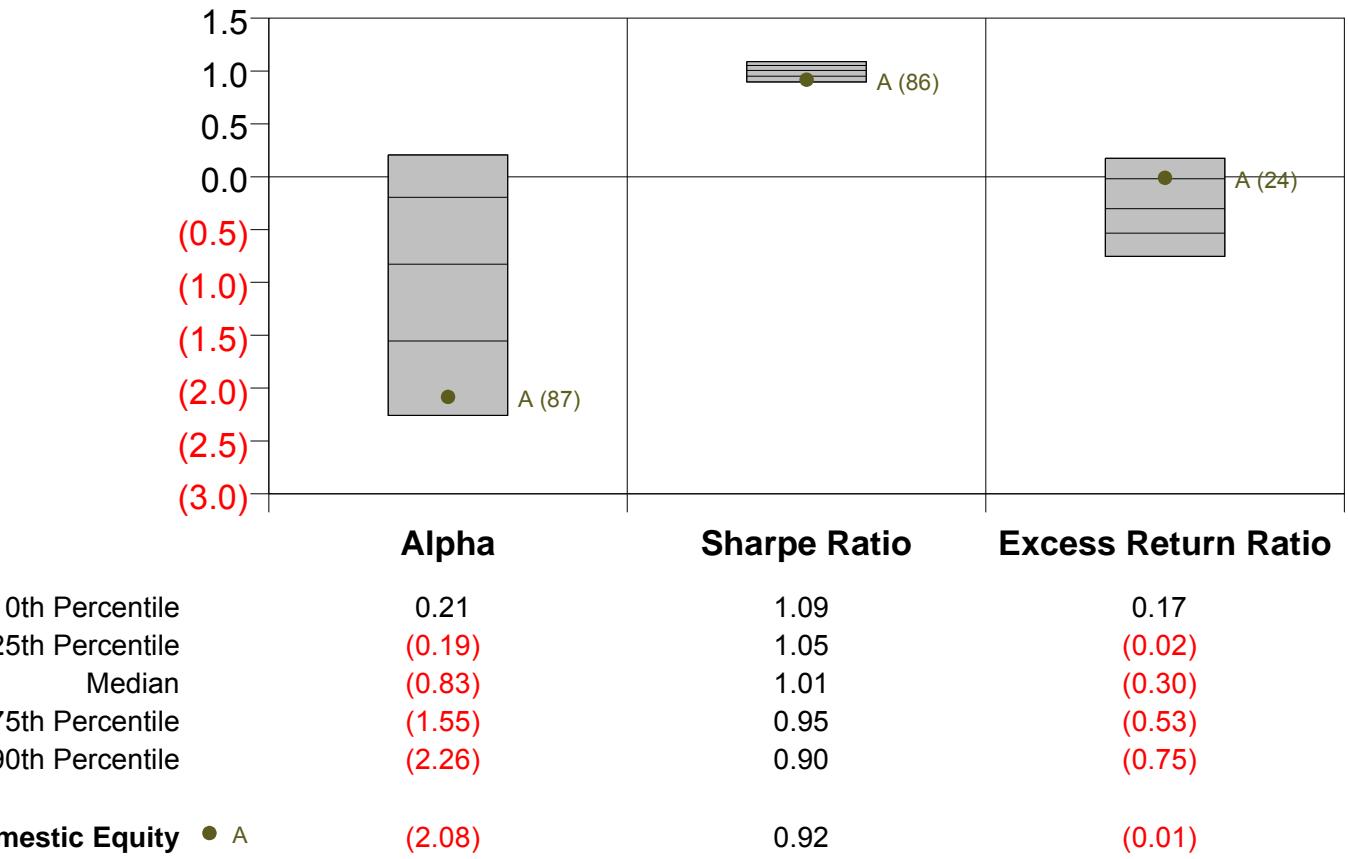
	10th Percentile	25th Percentile	Median	75th Percentile	90th Percentile	Domestic Equity	Russell 3000 Index
10th Percentile	0.56	3.86	16.66	17.71	18.00	14.46	16.97
25th Percentile	0.06	35.08	15.95	16.93	18.00	14.00	16.57
Median	(0.26)	33.11	15.03	16.26	18.00	13.41	16.03
75th Percentile	(0.62)	31.80	14.03	15.33	18.00	12.74	15.37
90th Percentile	(1.02)	29.99	12.81	14.34	18.00	11.87	14.68
Domestic Equity	0.86	44.29	15.33	16.08	18.00	13.39	16.33
Russell 3000 Index	(0.10)	31.88	16.00	16.85	18.00	13.93	16.60

APFC US Equity Portfolio Risk Adjusted Return Rankings

Ten Years Ended September 30, 2021

- The universe is comprised of total domestic equity portfolios of large institutional investors in Callan's Fund Sponsor Domestic Equity Database.
- For the trailing ten-year period, APFC portfolio ranked below median for alpha and Sharpe ratio, and above median for excess return ratio.
 - Alpha measures contribution to performance – portfolio's return above index adjusted for risk.
 - Sharpe Ratio represents return gained per unit of risk taken (return/risk).
 - Excess Return Ratio measures alpha (return above benchmark) divided by tracking error (risk versus benchmark).

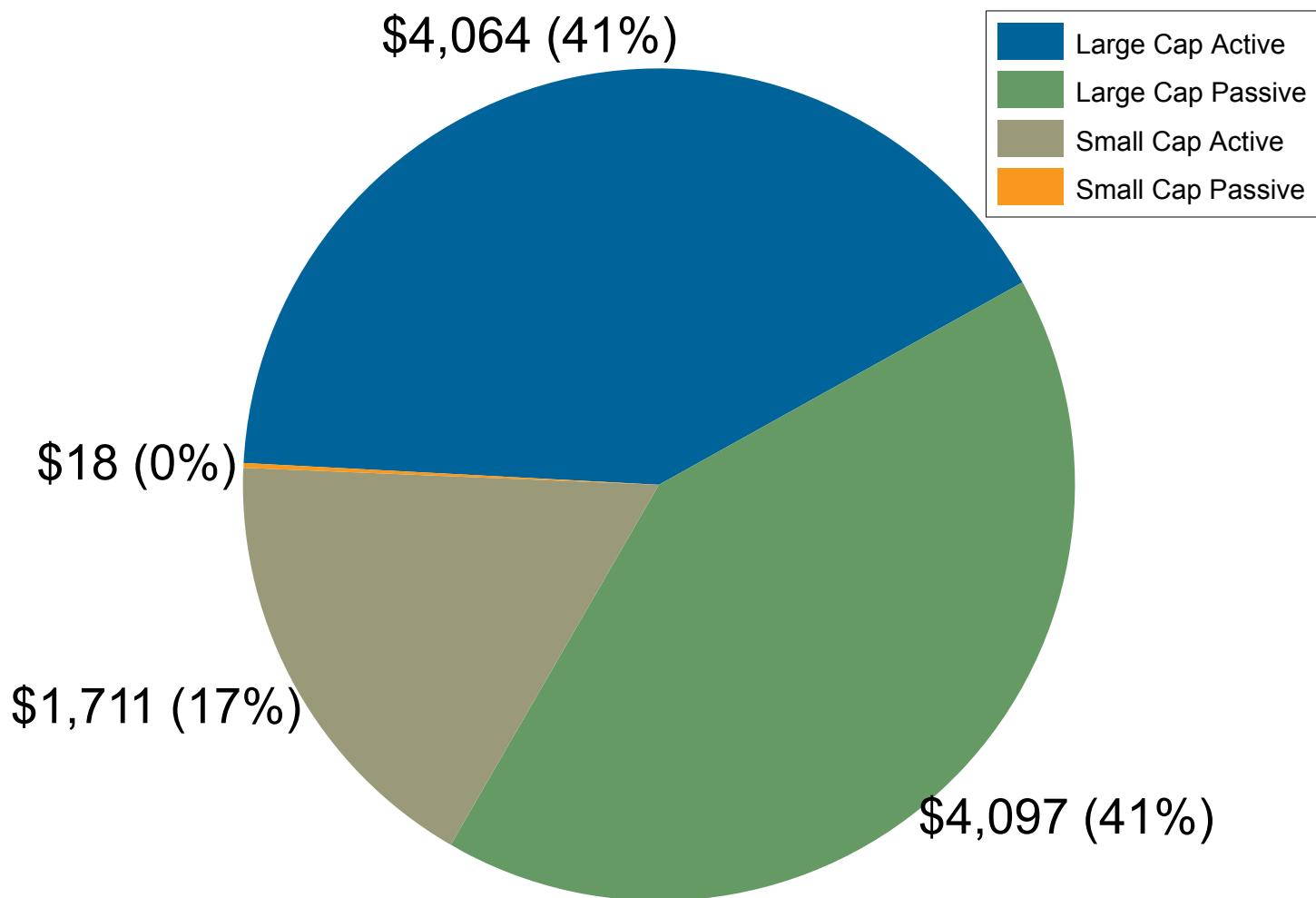
Risk Adjusted Return Measures vs Russell 3000 Index
Rankings Against Fund Sponsor Domestic Equity Database



APFC US Equity Structure

As of September 30, 2021

- US equity portfolio is roughly 58% actively managed and 42% passive (or quasi-passive).
- Roughly 50% of the large cap allocation is actively managed while 99% of the small cap allocation is actively managed.

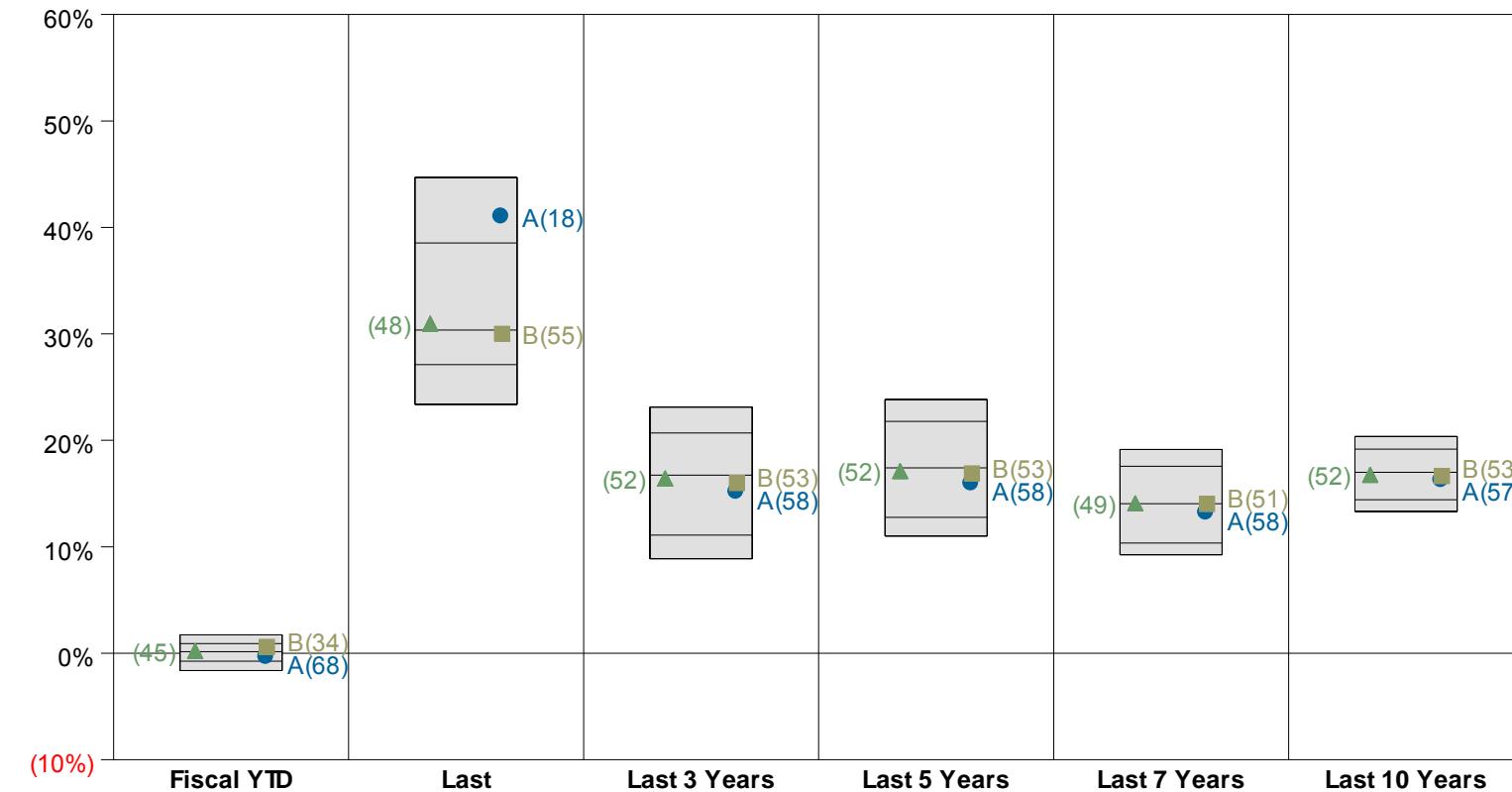


APFC Large Cap Equity Relative to Large Cap Universe

Periods Ended September 30, 2021

- APFC's Large Cap portfolio underperformed its benchmark in the third quarter and outperformed over the one year.
- Outside of the one year period, the portfolio ranked below median within the large cap universe.
- Large cap composite has a small/mid cap size bias relative to the index, which detracted from relative performance during the quarter.

Performance vs Callan Large Capitalization (Gross)



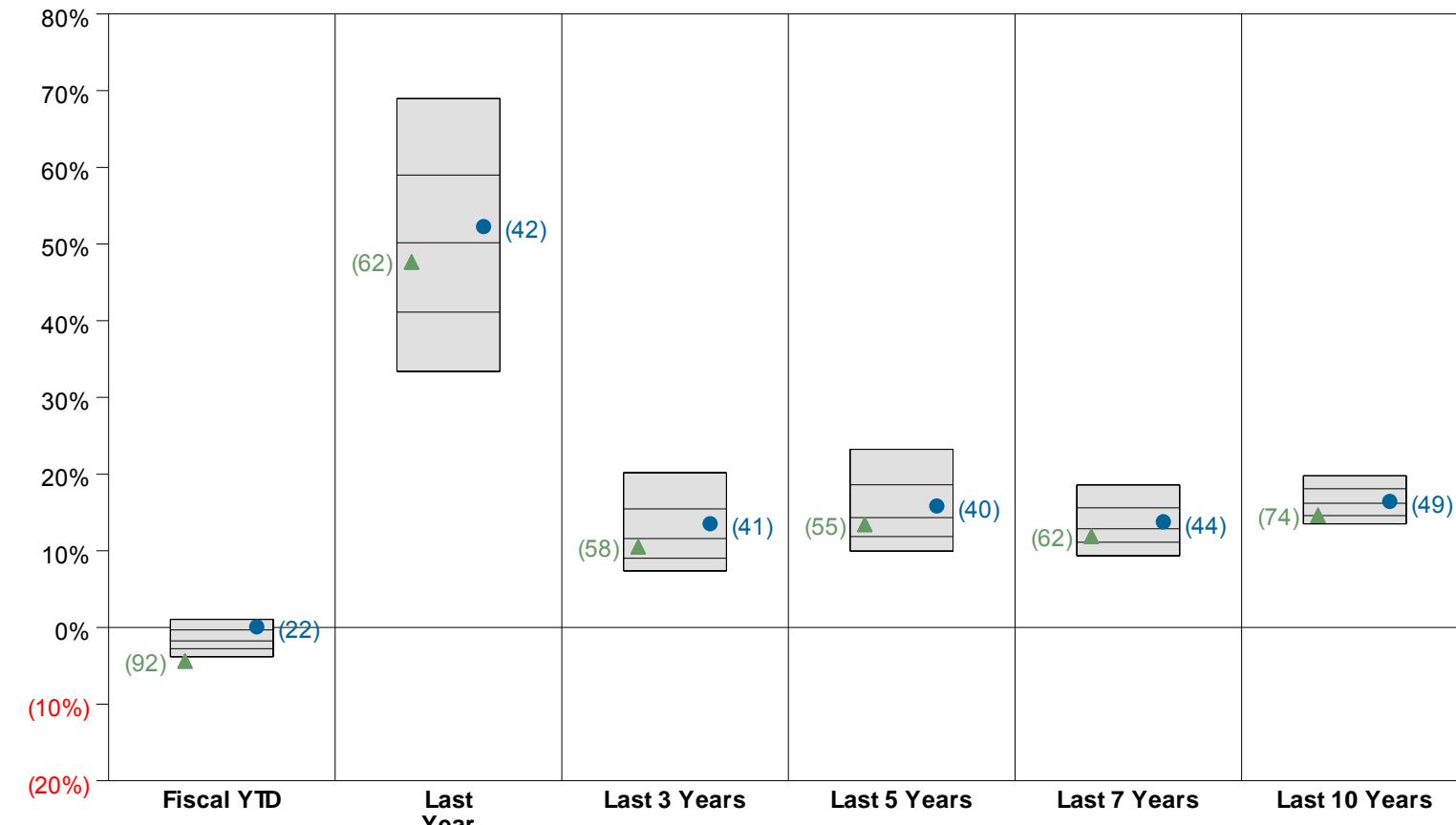
	10th Percentile	25th Percentile	Median	75th Percentile	90th Percentile				
Large Cap Equity	1.72	44.69	23.12	23.83	19.15	20.37			
Standard & Poor's 500	0.91	38.53	20.69	21.78	17.57	19.18			
Russell 1000 Index	0.15	30.35	16.73	17.41	14.05	17.00			
	(0.75)	27.10	11.09	12.77	10.35	14.41			
	(1.63)	23.37	8.87	11.01	9.26	13.32			
Large Cap Equity	● A	(0.43)		40.95	15.09	15.87	13.13	16.18	
Standard & Poor's 500	■ B	0.58		30.00	15.99	16.90	14.01	16.63	
Russell 1000 Index	▲	0.21		30.96	16.43	17.11	14.09	16.76	

APFC Small Cap Equity Relative to Small Cap Universe

Periods Ended September 30, 2021

- APFC small cap portfolio posted positive relative returns for the quarter and ranked in the top quartile of peers.
- In all other standard time periods, the portfolio ranked above median in the small cap universe and was ahead of the benchmark.

Performance vs Callan Small Capitalization (Gross)

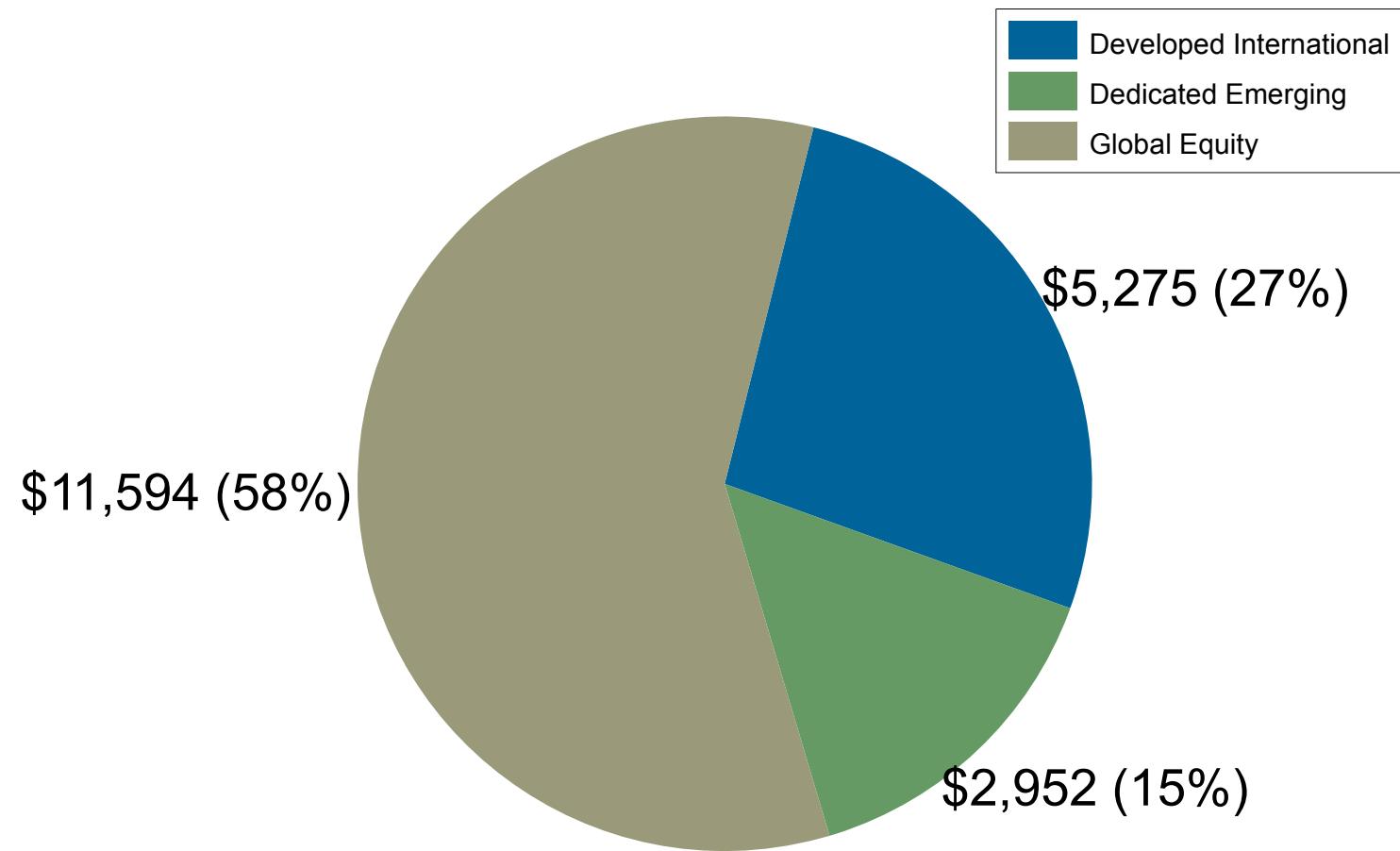


	10th Percentile	25th Percentile	Median	75th Percentile	90th Percentile			
Small Cap Equity	1.07	(0.31)	(1.75)	(2.77)	(3.82)	(0.14)	52.07	13.32
Russell 2000 Index	1.07	(0.31)	(1.75)	(2.77)	(3.82)	(0.14)	47.68	10.54

APFC Non-US and Global Equity Structure

As of September 30, 2021

- Portfolio is divided between global, non-US, and emerging markets mandates.
- Both global and non-US equity managers invest in emerging markets.
- Global managers invest in US markets as part of their mandate.

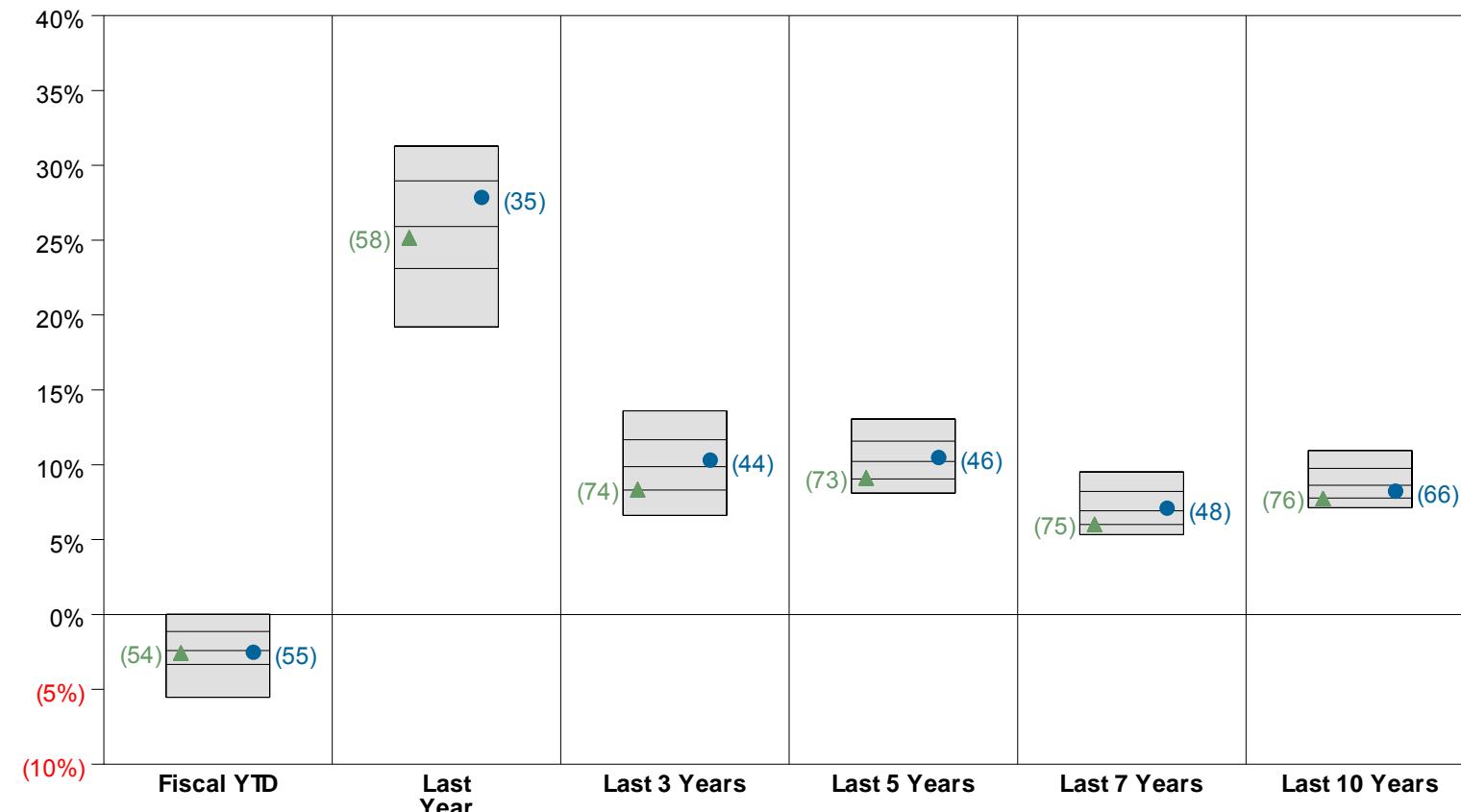


APFC International Equity Relative to Fund Sponsor Universe

Periods Ended September 30, 2021

- International Equity ended the quarter behind its benchmark and peer group median.
- The portfolio outperformed its benchmark over all other periods.
- Relative to other fund sponsor portfolios, International Equity ranked above median over the short- and intermediate-term periods and below median over the 10-year period.

Performance vs Fund Spnsor - International Equity (Gross)

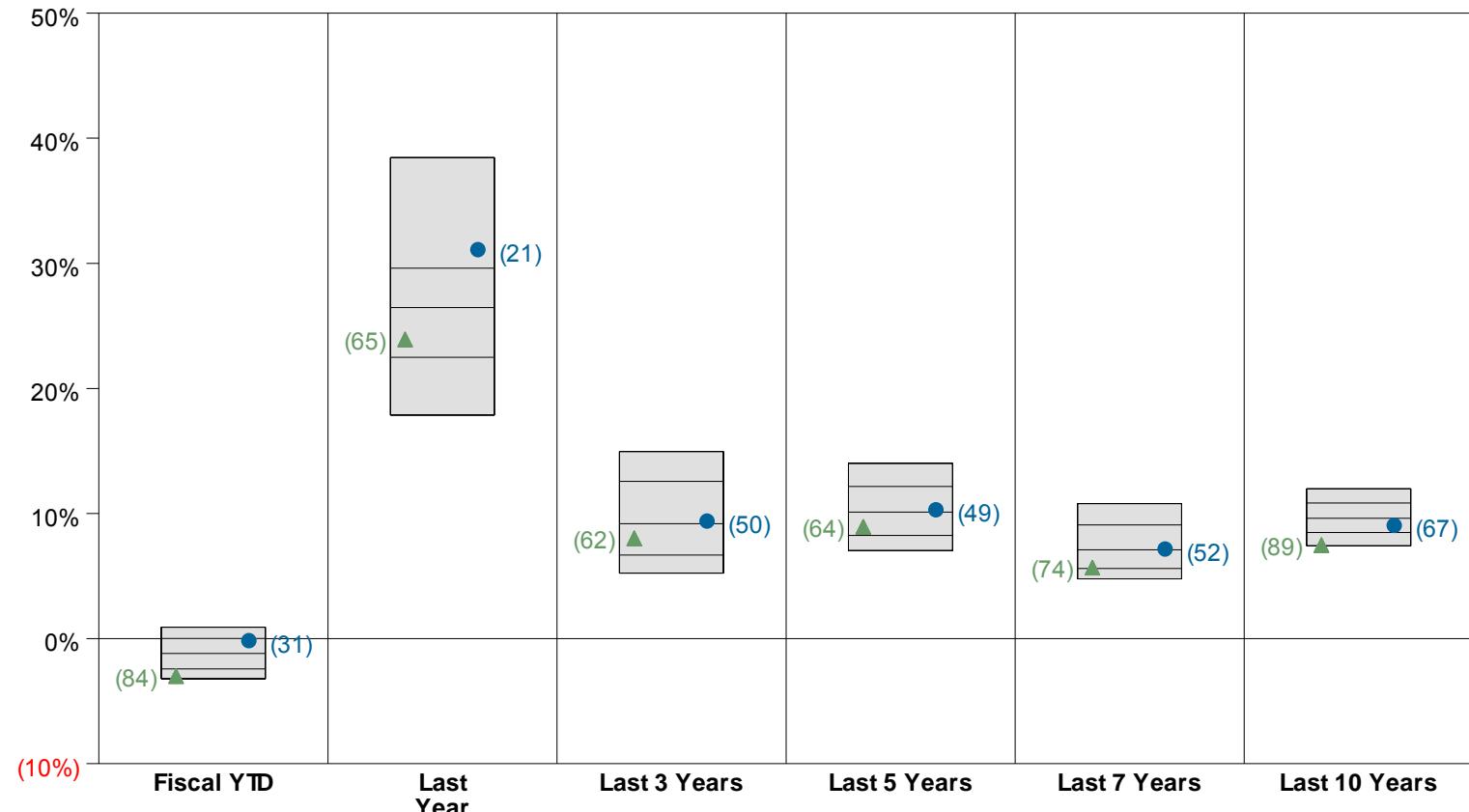


APFC Int'l Developed Equity Relative to Non-US Equity Universe

Periods September 30, 2021

- The International Developed portfolio decreased 0.3% versus the benchmark decrease of 3.0%. The portfolio continued to show strong performance relative to its benchmark across all time periods.
- The portfolio ranked near-median for most longer-term time periods.

Performance vs Callan Non-US Equity (Gross)



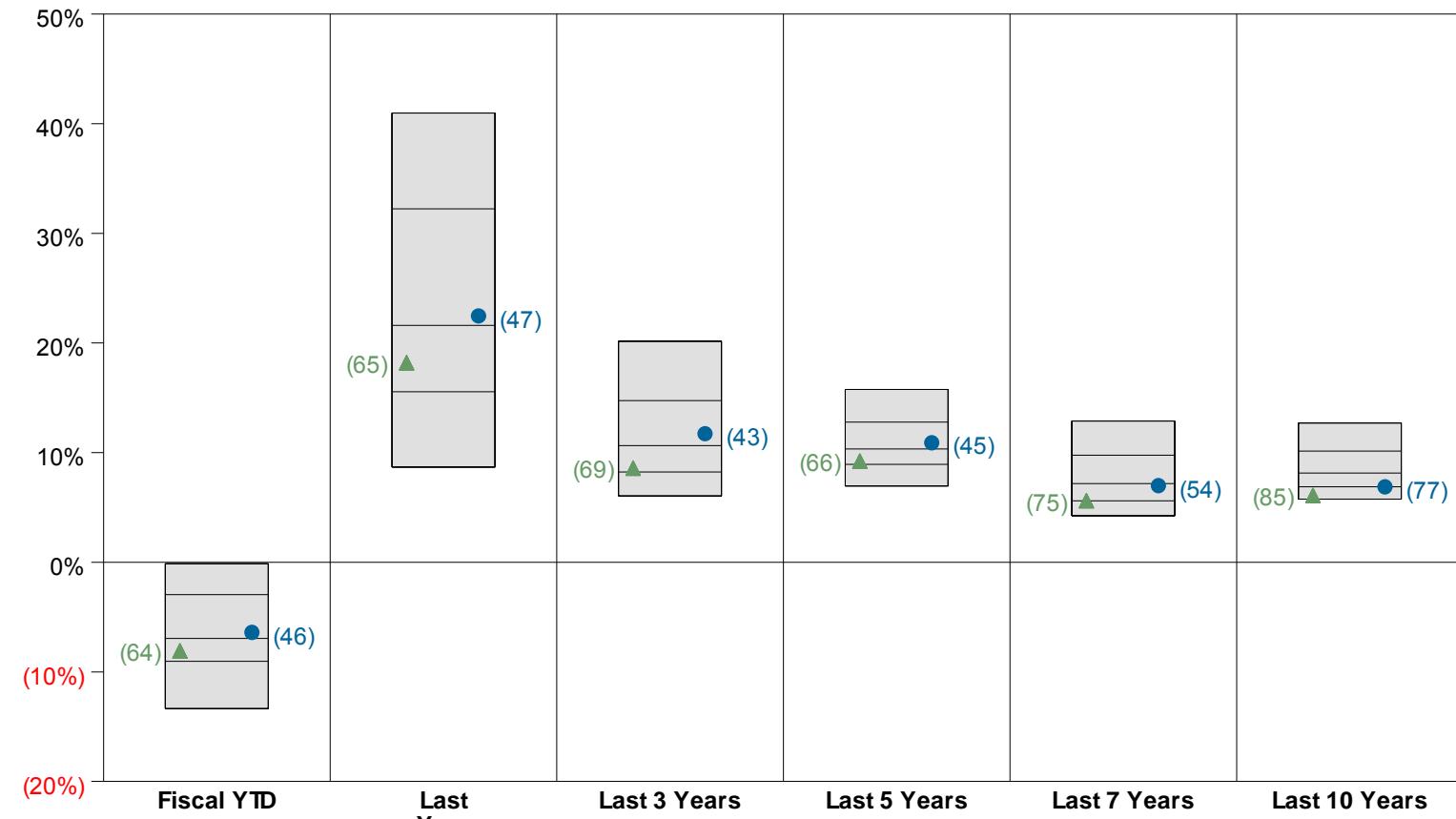
10th Percentile	0.91	38.45	14.95	14.02	10.80	11.98
25th Percentile	0.01	29.61	12.57	12.16	9.09	10.85
Median	(1.19)	26.46	9.18	10.11	7.11	9.62
75th Percentile	(2.41)	22.48	6.69	8.25	5.62	8.49
90th Percentile	(3.21)	17.87	5.24	7.04	4.78	7.43
International Developed	• (0.29)	30.97	9.26	10.16	7.03	8.92
MSCI ACWI ex US	▲ (2.99)	23.92	8.03	8.94	5.69	7.48

APFC Emerging Markets Equity Relative to EM Universe

Periods September 30, 2021

- APFC Emerging Markets Equity portfolio experienced a shallower decline than its benchmark over the quarter and ended ahead over the trailing year.
- The portfolio leads its benchmark across all other standard periods.
- Over the short- and intermediate-term, the portfolio sits above the median while over longer-term periods ranks below the median.

Performance vs Emerging Markets Equity DB (Gross)



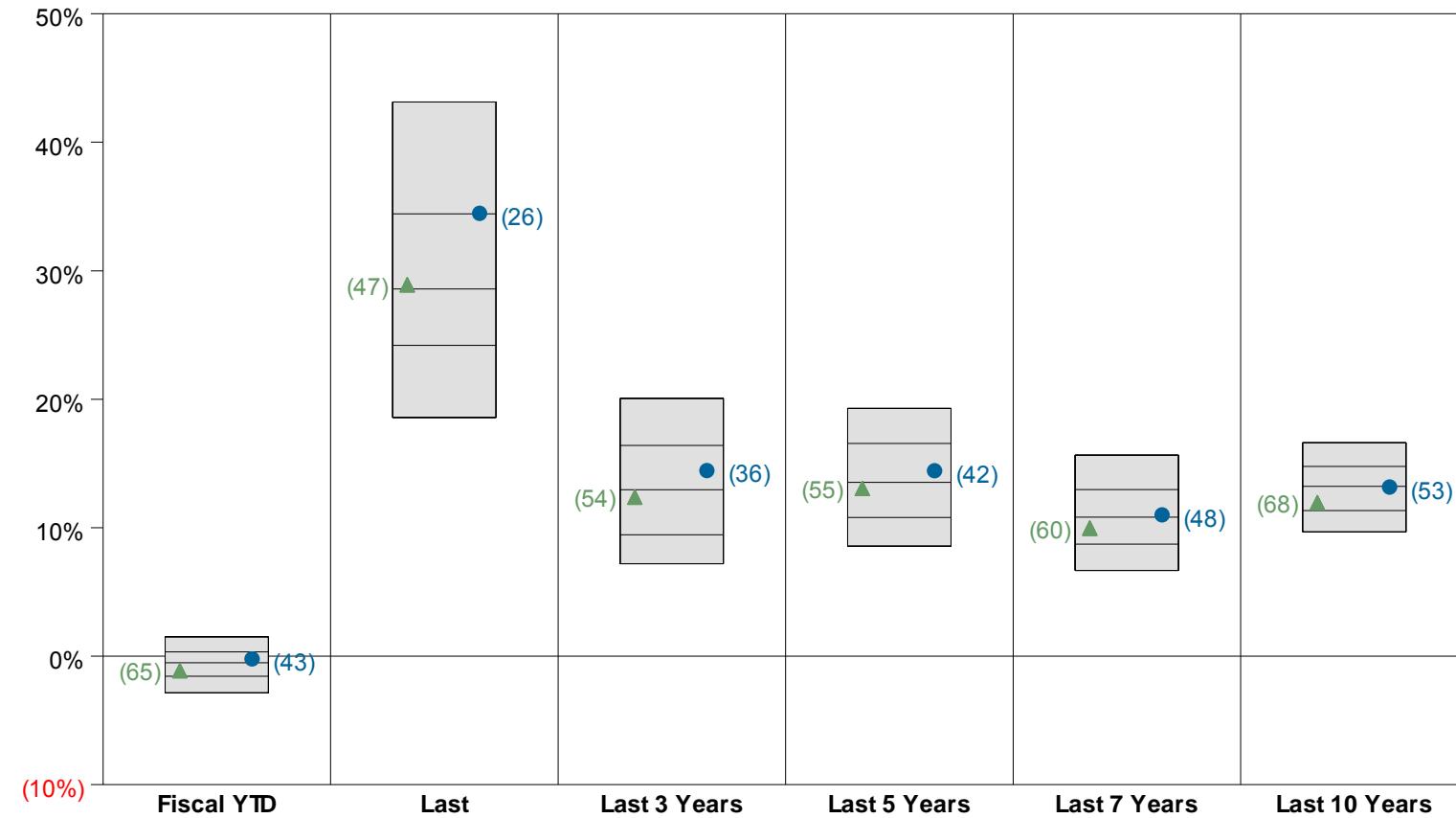
10th Percentile	(0.13)	40.98	20.16	15.75	12.88	12.70
25th Percentile	(2.96)	32.24	14.75	12.78	9.77	10.14
Median	(6.94)	21.60	10.63	10.34	7.16	8.13
75th Percentile	(9.04)	15.55	8.23	8.92	5.60	6.87
90th Percentile	(13.34)	8.68	6.05	6.95	4.24	5.76
Emerging Markets	●	(6.56)	22.32	11.59	10.75	6.82
MSCI EM	▲	(8.09)	18.20	8.59	9.23	5.62
						6.09

APFC Global Equity Relative to Global Universe

Periods Ended September 30, 2021

- APFC Global Equity portfolio produced stronger returns relative to its benchmark in the third quarter.
- The portfolio was ahead of its benchmark over all other time periods and ranked above or near median for all time periods.
- Performance from the APFC Tactical Tilts portfolio positively impacted performance over the quarter, 1-, 3-, and 5-year.

Performance vs Global Equity Database (Gross)



	10th Percentile	25th Percentile	Median	75th Percentile	90th Percentile	Global Equity	MSCI ACWI IMI
10th Percentile	1.51	43.14	20.06	19.29	15.66	16.62	
25th Percentile	0.33	34.43	16.40	16.56	12.96	14.77	
Median	(0.51)	28.58	12.96	13.53	10.82	13.22	
75th Percentile	(1.55)	24.20	9.45	10.80	8.72	11.33	
90th Percentile	(2.85)	18.57	7.18	8.56	6.67	9.68	
Global Equity	●	(0.35)	34.34	14.32	14.30	10.88	13.04
MSCI ACWI IMI	▲	(1.11)	28.92	12.38	13.06	9.97	11.96

U.S. Fixed Income Performance

Third Quarter 2021

Treasury yields largely unchanged from 2Q21

- Yields ended a volatile quarter only slightly higher after the Fed signaled it may soon begin tapering its bond buying program.
- 2-year and 10-year Treasury yields rose 3 and 7 bps, respectively.
- TIPS outperformed nominal Treasuries, and 10-year breakeven spreads widened 5 bps to 2.37%.

Bloomberg Aggregate flat as spreads widen

- Minor gains in Treasuries and agency MBS were offset by declines in government-related, CMBS, and corporates.
- IG corporates trailed Treasuries by 15 bps (duration-adjusted) as spreads widened within long bonds.

High yield and leveraged loans continue rally

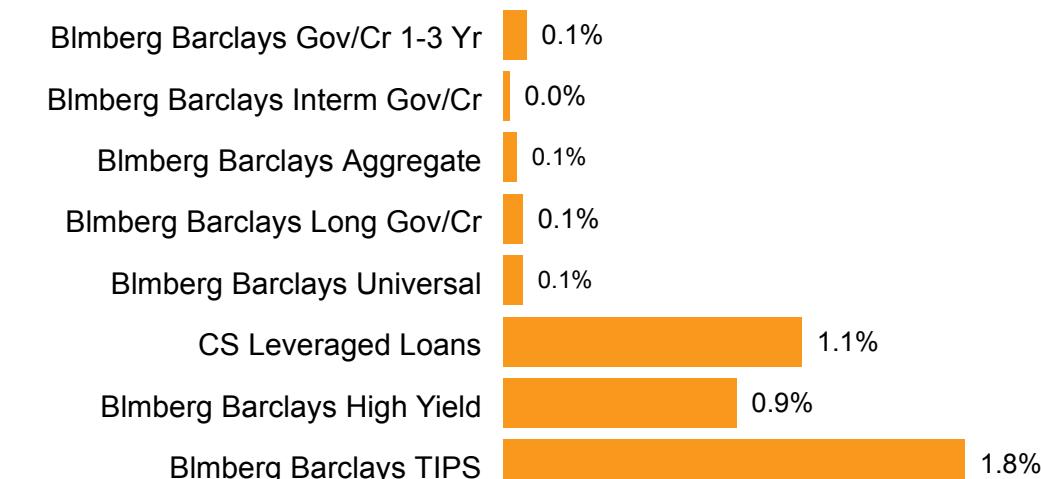
- Leveraged loans (+1.1%) outperformed high yield, driven by favorable supply/demand dynamics.
- High yield issuers' default rate declined to 0.9% in September, the lowest since March 2014.

Munis underperform Treasuries

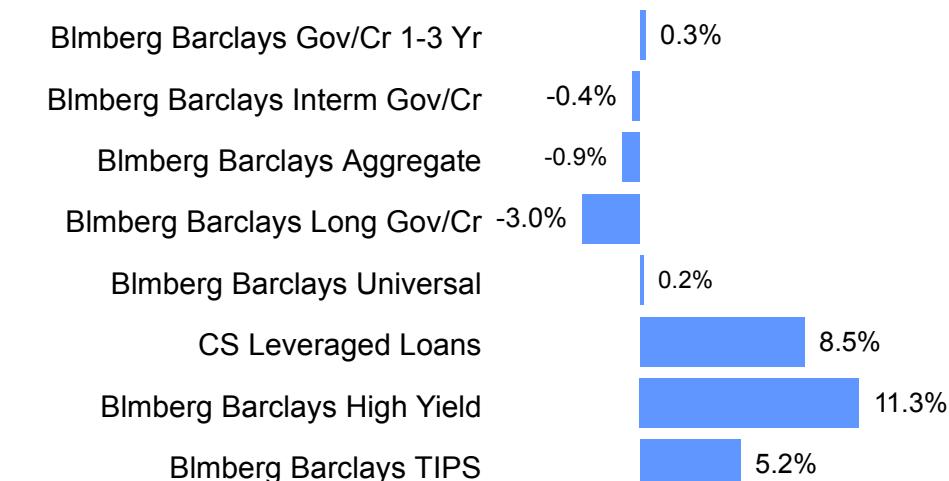
- Supply was modest and demand was fueled by expectations for higher tax rates and strong credit fundamentals.
- Lower-quality bonds continued their trend of outperformance as investors sought yield.

Sources: Bloomberg Barclays,

U.S. Fixed Income: Quarterly Returns

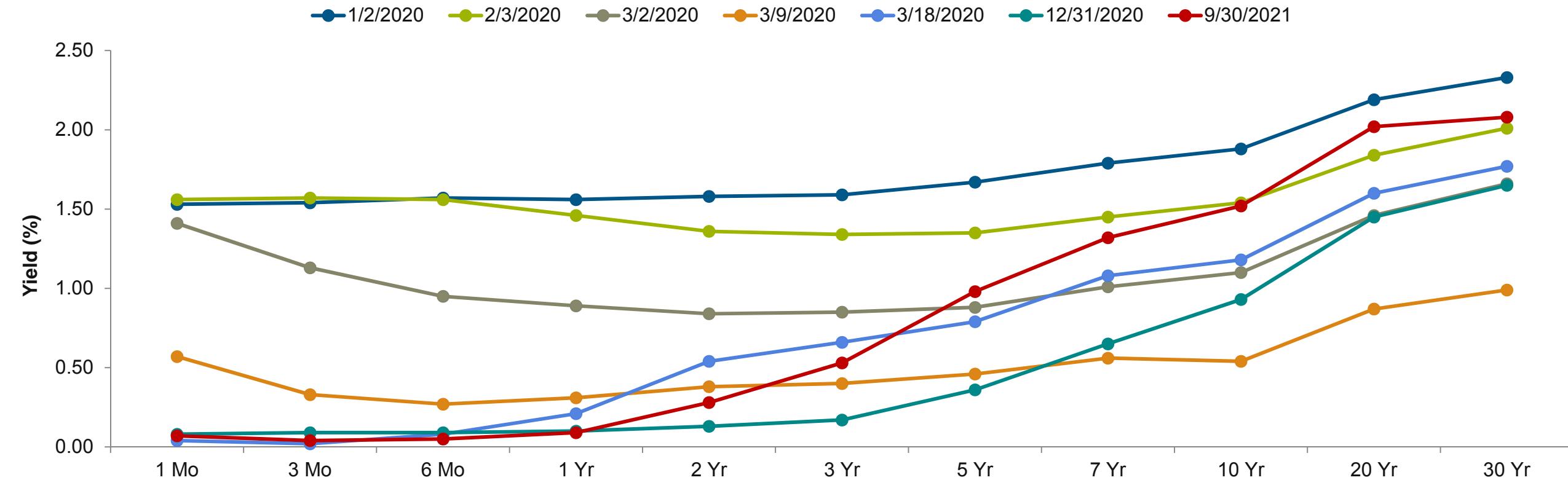


U.S. Fixed Income: Annual Returns



Impact on Financial Markets

Treasury yield curve steepened dramatically since Jan. 1, 2021



The Treasury yield curve contains an implicit broad economic forecast.

—Steeper yield curves (long-term rates higher than short-term rates) suggest stronger anticipated growth.

The shape of the Treasury yield curve has varied quickly and substantially since the beginning of 2020.

—Curve shifted down dramatically early in crisis.

—Current yield curve still low on the short end but substantially steeper than at the start of 2021

Source: U.S. Department of Treasury

Global Fixed Income Performance

Third Quarter 2021

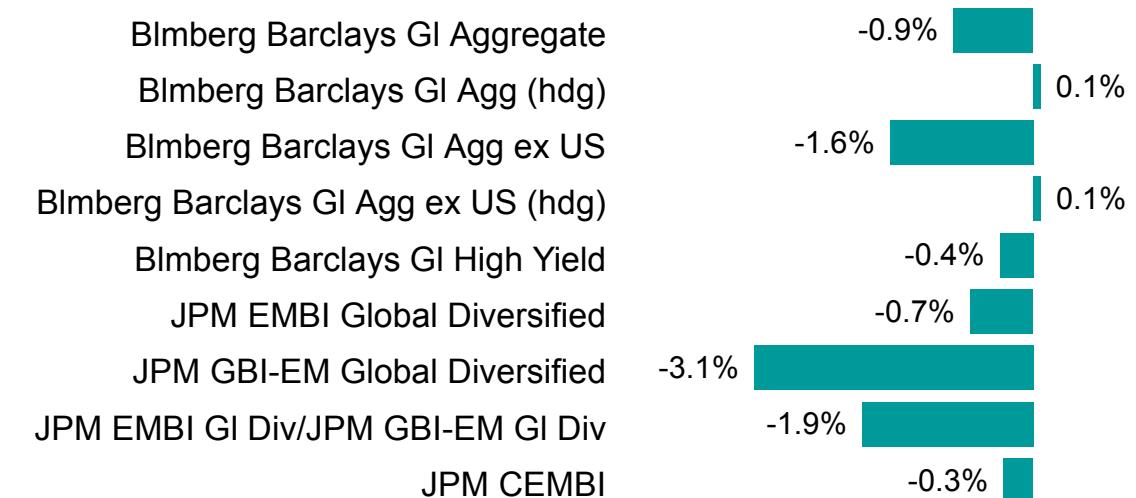
Global fixed income flat on a hedged basis

- Returns were muted for hedged U.S. investors.
- U.S. dollar strength hindered performance for unhedged U.S. investors.
- The dollar gained roughly 2% vs. a basket of developed market currencies.

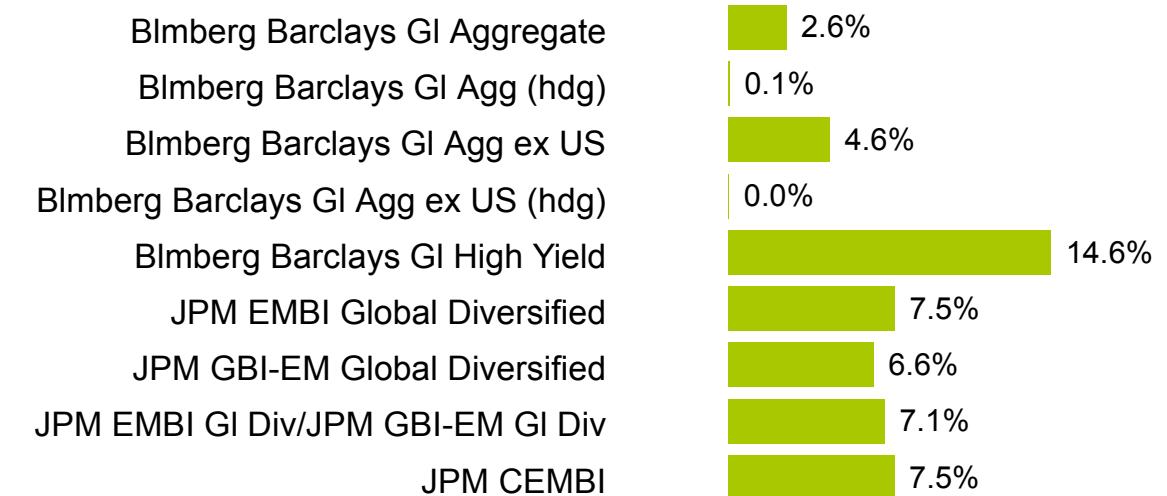
Emerging market debt falls

- The U.S. dollar-denominated index (EMBI Global Diversified) fell as the Delta variant in some countries raised concerns, and the local index (JPM GBI-EM Global Diversified) lost ground due to currency depreciation.
- Most emerging market currencies depreciated versus the dollar. Notables included the Brazil real (-7.9%) and the South Africa rand (-5.1%).
- EM corporates fared better amid improving corporate fundamentals and the global economic recovery.

Global Fixed Income: Quarterly Returns



Global Fixed Income: Annual Returns

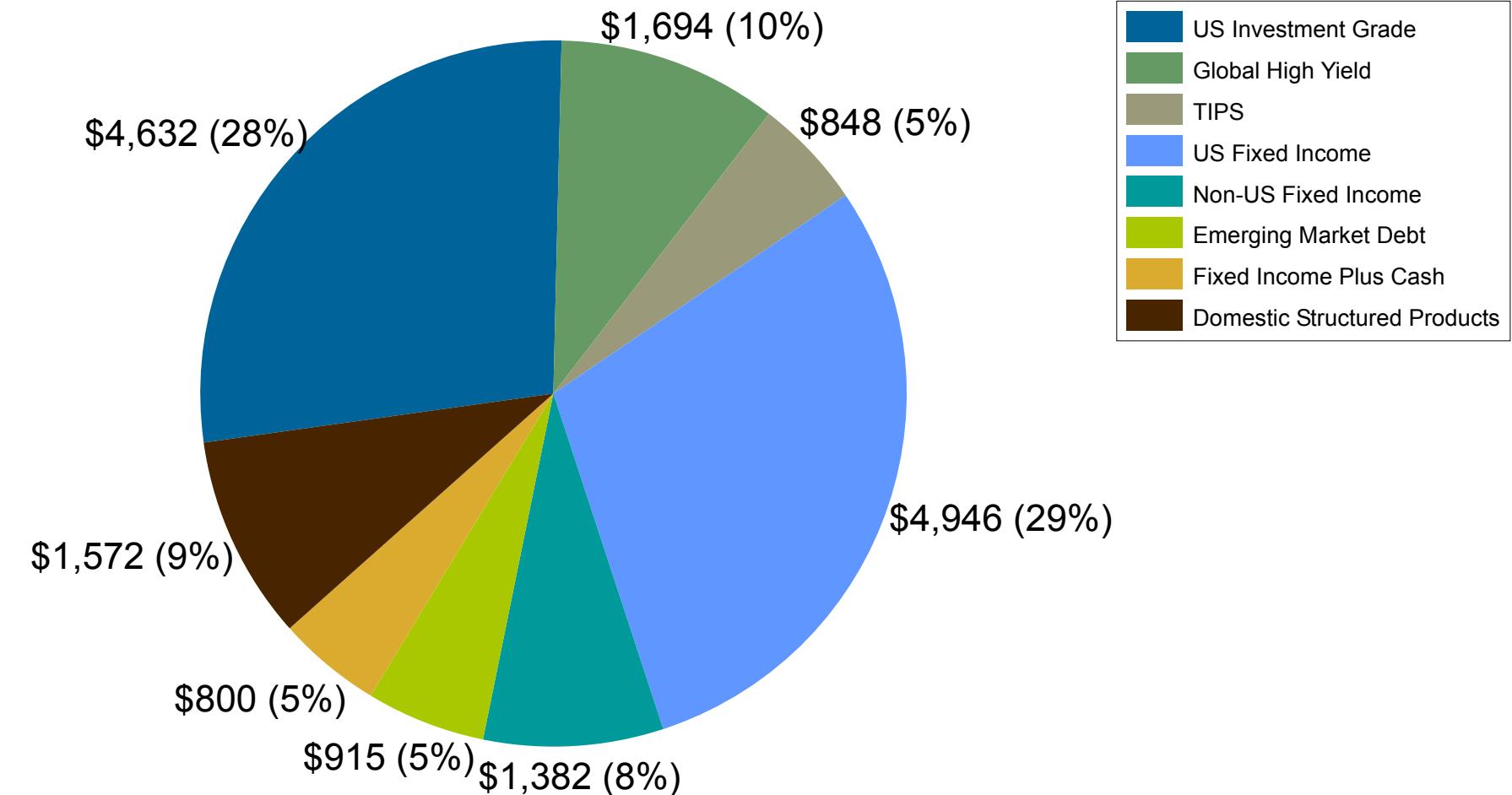


Sources: Bloomberg Barclays, J.P.Morgan

APFC Fixed Income Structure

As of September 30, 2021

- Approximately 75% of the fixed income plus portfolio is managed internally, including allocations within Fixed Income Plus Cash, US Fixed Income Aggregate, US Investment Grade Corporate, Non-US Fixed Income, Structured Products and TIPS.
- External mandates are focused in specialty areas including Non-US Fixed Income, Global High Yield, and Emerging Market Debt.
- The APF Domestic Structured Products portfolio was funded in the Q3 2020.
- REITS and Listed Infrastructure transferred out on 7/1/2020

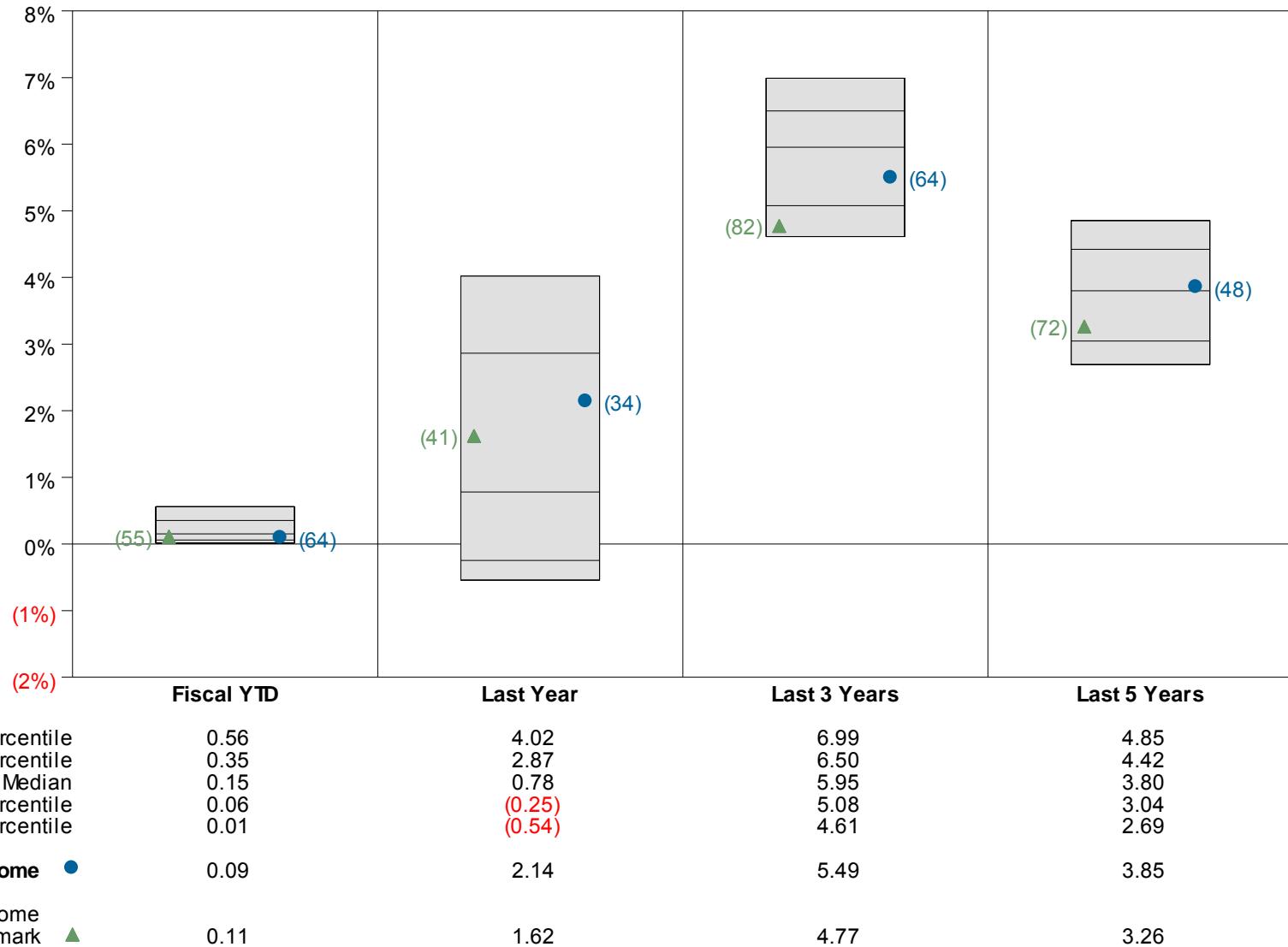


Fixed Income Relative to Public Fixed Income Funds

Periods Ended September 30, 2021

- The APFC Total Fixed Income portfolio ended the quarter slightly behind its benchmark.
- The portfolio ranked above median over the 1- and 5-year periods.
- As a reminder, Total Fixed Income included REITs and Listed Infrastructure up to the end of the second quarter of 2020.

Performance vs Public Fund - Domestic Fixed (Gross)

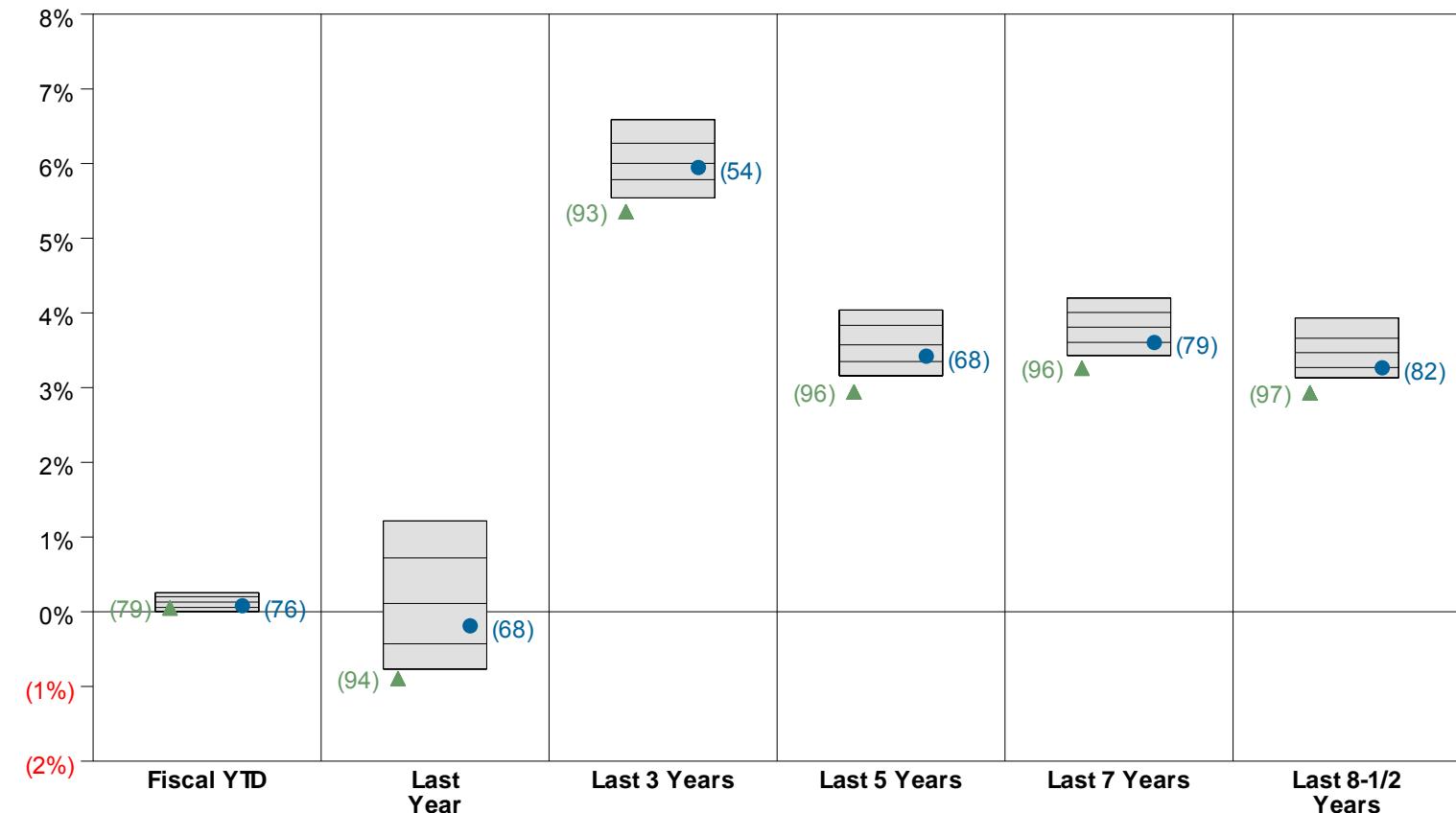


US Fixed Income Aggregate Relative to Core Bond Funds

Periods Ended September 30, 2021

- APFC US Fixed Income Aggregate portfolio ended the quarter ahead of the Bloomberg Aggregate over all standard performance periods.
- Peer ranks were less favorable and below median over all standard periods.

Performance vs Callan Core Bond Fixed Income (Gross)



	10th Percentile	25th Percentile	Median	75th Percentile	90th Percentile	US Fixed Income Aggregate	Bloomberg Aggregate
10th Percentile	0.25	1.22	6.59	4.04	4.20	3.93	
25th Percentile	0.20	0.72	6.27	3.83	4.01	3.66	
Median	0.13	0.11	6.00	3.57	3.81	3.47	
75th Percentile	0.06	(0.43)	5.79	3.35	3.61	3.27	
90th Percentile	0.00	(0.77)	5.54	3.16	3.43	3.13	
US Fixed Income Aggregate	0.06	(0.21)	5.92	3.40	3.58	3.24	
Bloomberg Aggregate	0.05	(0.90)	5.36	2.94	3.26	2.93	

US Investment Grade Corp Relative to Investment Grade Funds

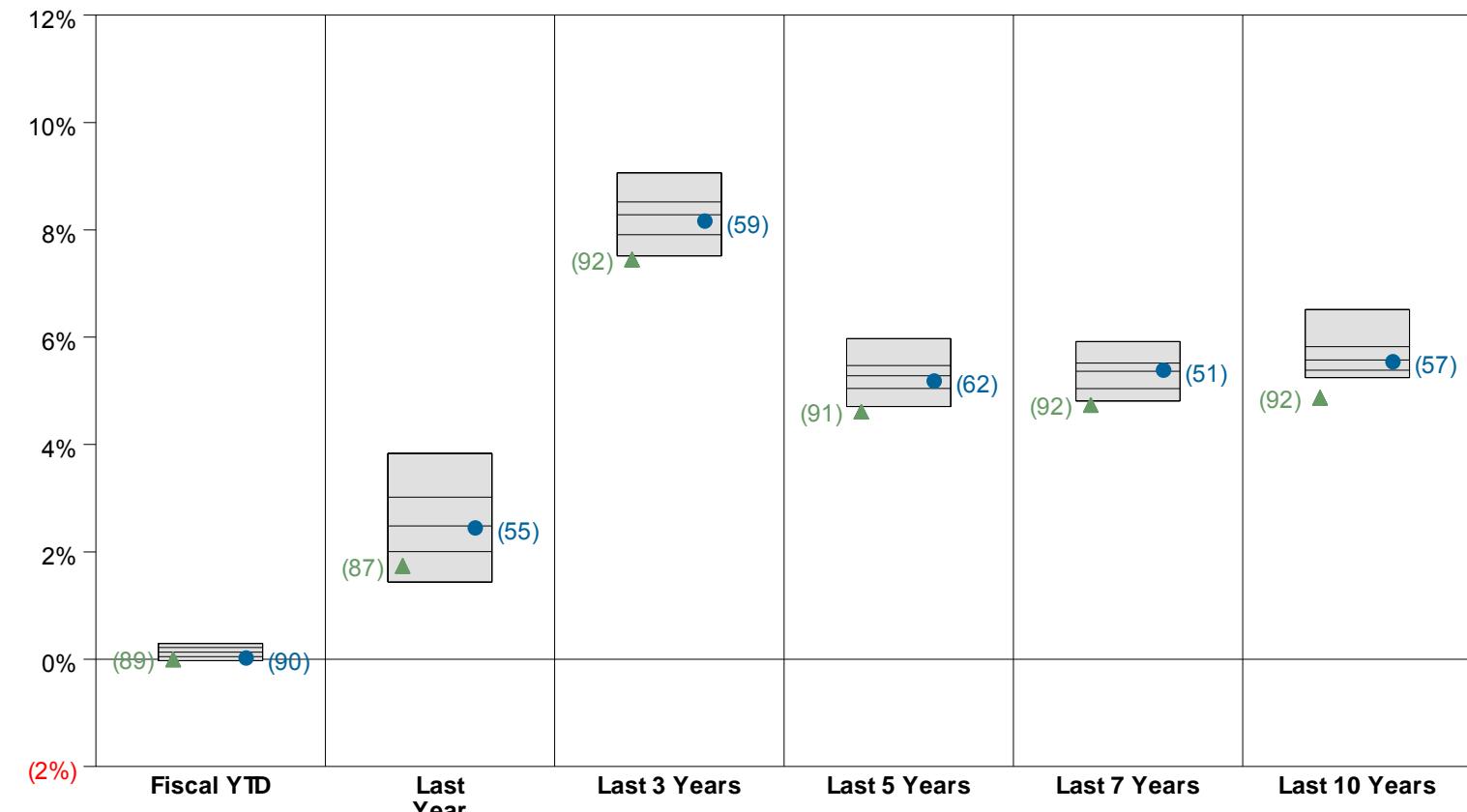
Periods Ended September 30, 2021

- APFC US Investment Grade

Corporate was nearly inline with its benchmark for the quarter, but was ahead the Bloomberg Corporate benchmark over all other periods.

- The Investment Grade Corporate composite mostly ranked near the peer group median.

Performance vs Callan Investment Grade Credit Fixed Inc (Gross)



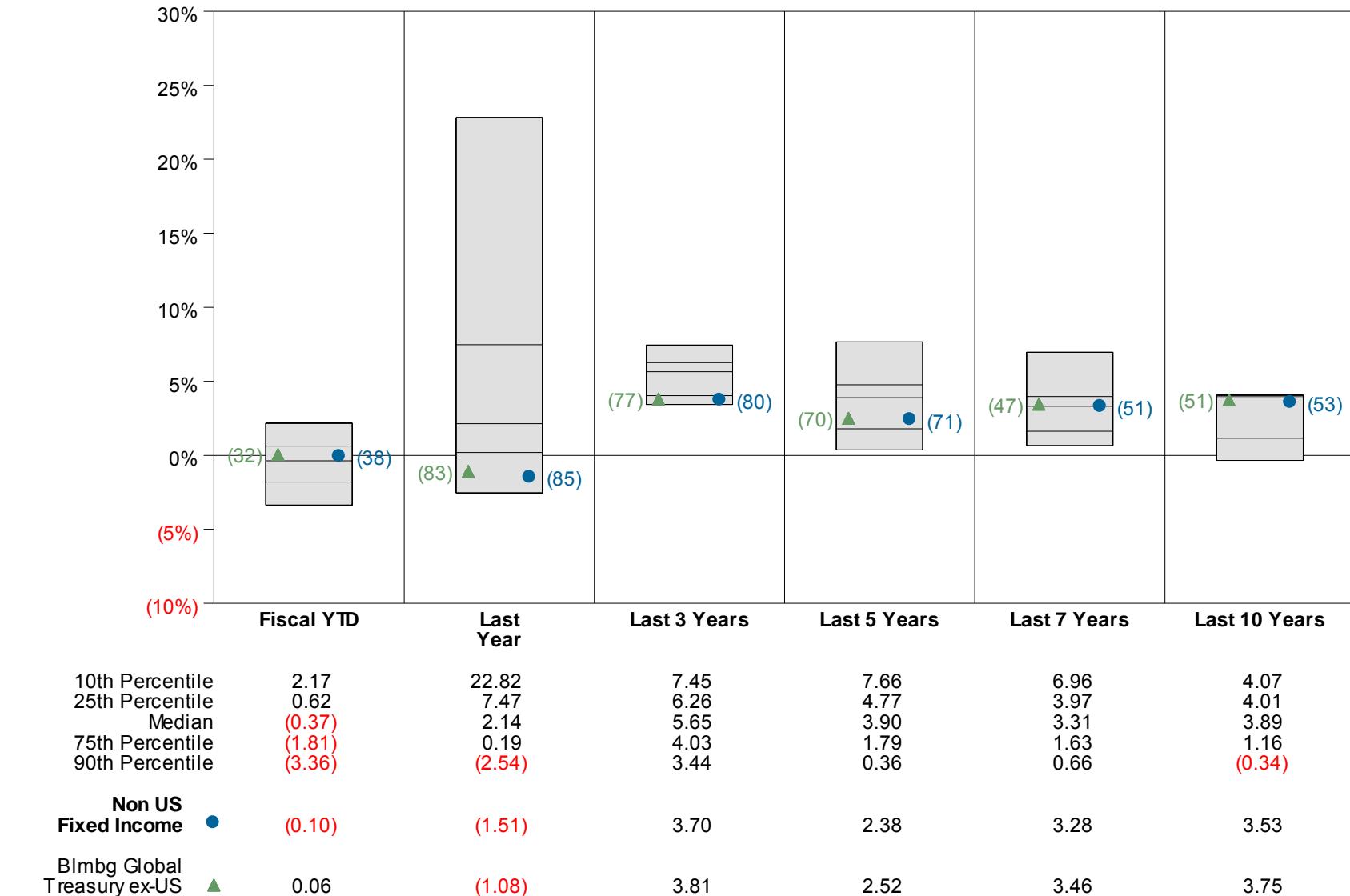
	Fiscal YTD	Last Year	Last 3 Years	Last 5 Years	Last 7 Years	Last 10 Years
10th Percentile	0.29	3.84	9.06	5.97	5.92	6.51
25th Percentile	0.22	3.02	8.52	5.47	5.52	5.82
Median	0.13	2.48	8.28	5.28	5.36	5.57
75th Percentile	0.05	2.01	7.91	5.04	5.04	5.38
90th Percentile	(0.02)	1.44	7.52	4.71	4.81	5.24
US Investment Grade Corporate	(0.01)	2.41	8.13	5.15	5.35	5.51
Bloomberg Corporate	(0.00)	1.74	7.45	4.61	4.74	4.87

Non-U.S. Fixed Income Relative to International Fixed Income Funds

Periods Ended September 30, 2021

- The APFC Non-U.S. Fixed Income portfolio ended the quarter and year behind the benchmark.
- Compared to peers, the portfolio ranks were mixed, however, were near median over the longer term 7-year and since inception periods.
- The composite included allocations to Rogge Asset and an In House Global Gov't Bonds mandate.

Performance vs Public Fund - International Fixed (Gross)

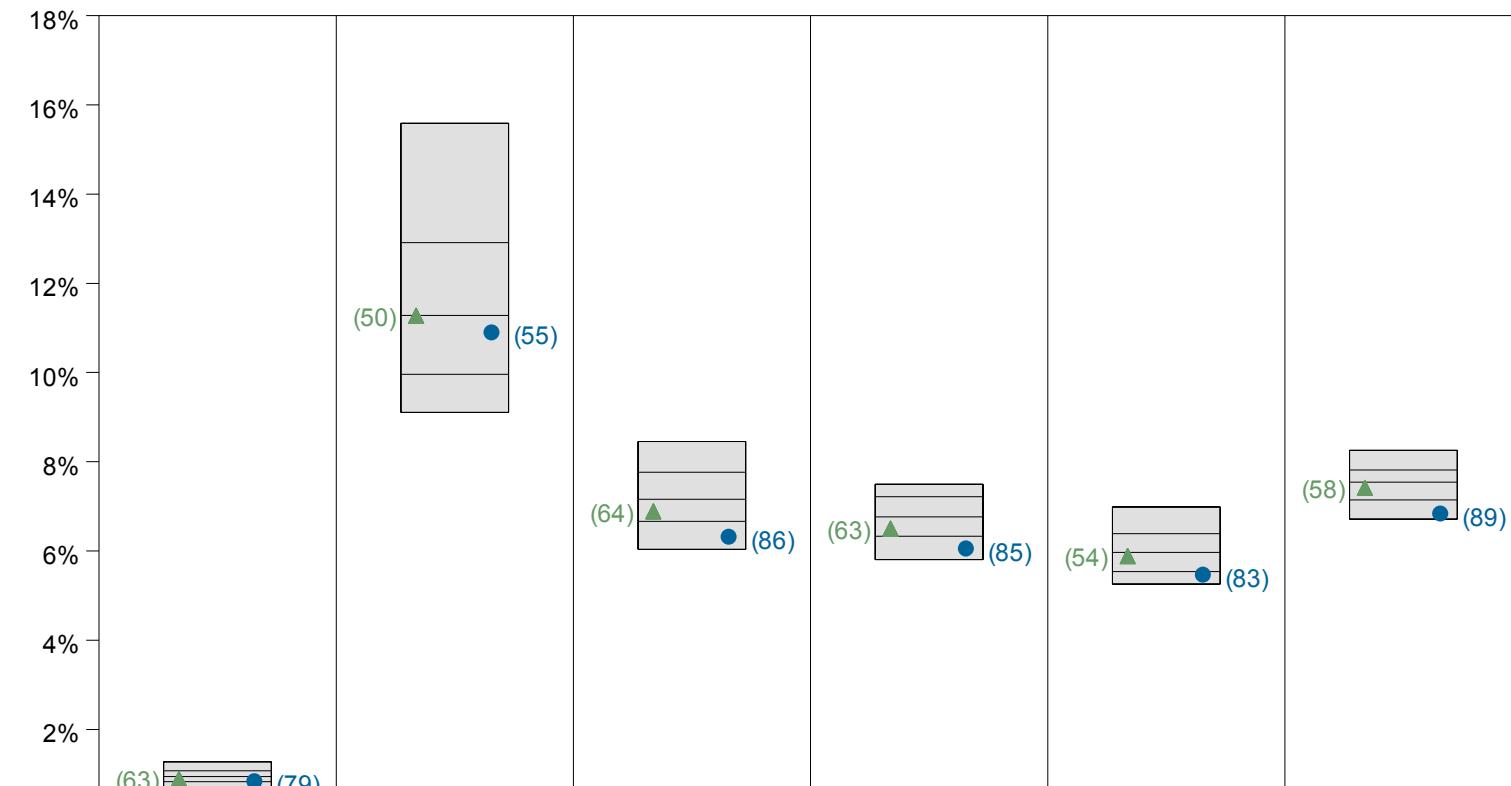


Global High Yield Relative to High Yield Funds

Periods Ended September 30, 2021

- APFC Global High Yield portfolio lagged its benchmark in the quarter.
- The portfolio ranked below median for all reported periods.
- The composite included allocations to Oaktree, Capital Guardian, and an iShares ETF.

Performance vs Callan High Yield Fixed Income (Gross)



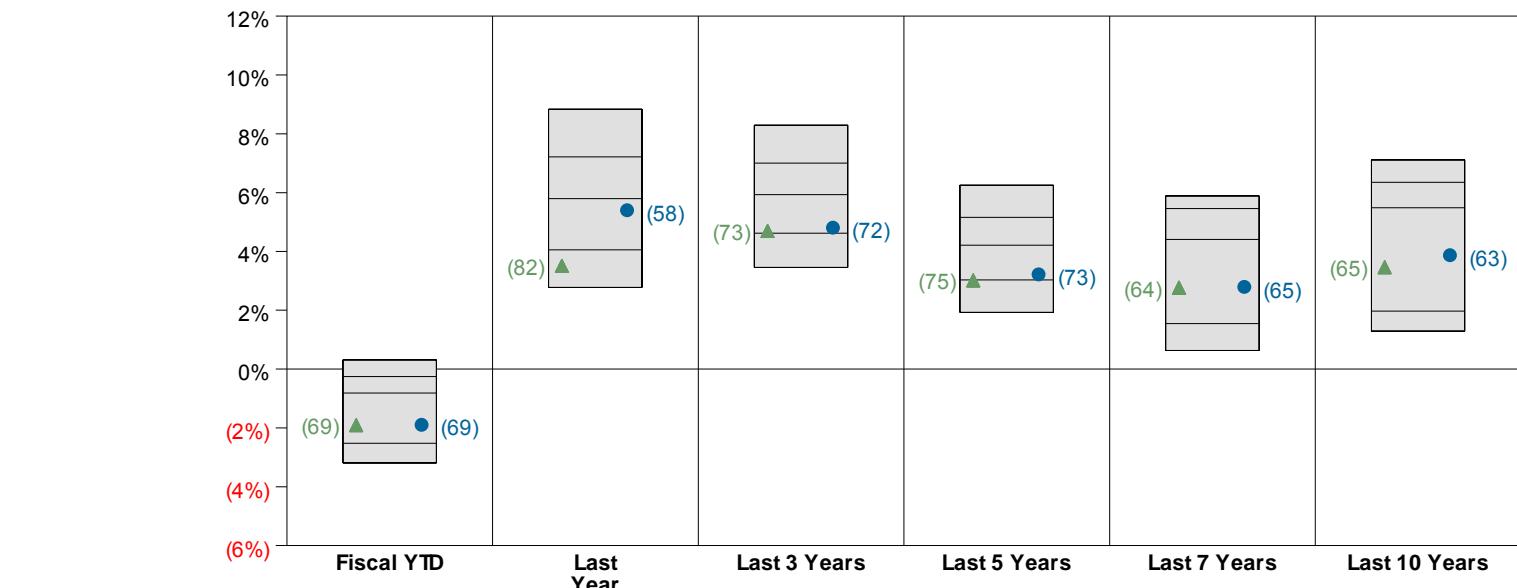
	10th Percentile	25th Percentile	Median	75th Percentile	90th Percentile	
Global High Yield	1.27	1.07	0.94	0.83	0.68	0.80
B1mbg HY 2% Iss Cap	15.59	12.91	11.28	9.96	9.11	10.86
	8.45	7.77	7.16	6.66	6.04	6.28
	7.50	7.22	6.76	6.33	5.81	6.02
	6.99	6.39	5.97	5.54	5.26	5.43
	8.26	7.82	7.54	7.15	6.71	6.80

Emerging Market Debt Relative to EMD Funds

Periods Ended September 30, 2021

- APFC Emerging Market Debt portfolio ended behind its benchmark for the quarter, but outperformed over the year.
- Relative to peers, the portfolio ranked below median over all periods exhibited except the quarter.

Performance vs Emerging Debt Database (Gross)



10th Percentile	0.31	8.83	8.29	6.25	5.89	7.11
25th Percentile	(0.26)	7.22	7.00	5.16	5.46	6.35
Median	(0.81)	5.79	5.93	4.21	4.41	5.48
75th Percentile	(2.52)	4.06	4.62	3.03	1.55	1.97
90th Percentile	(3.20)	2.77	3.45	1.93	0.63	1.29

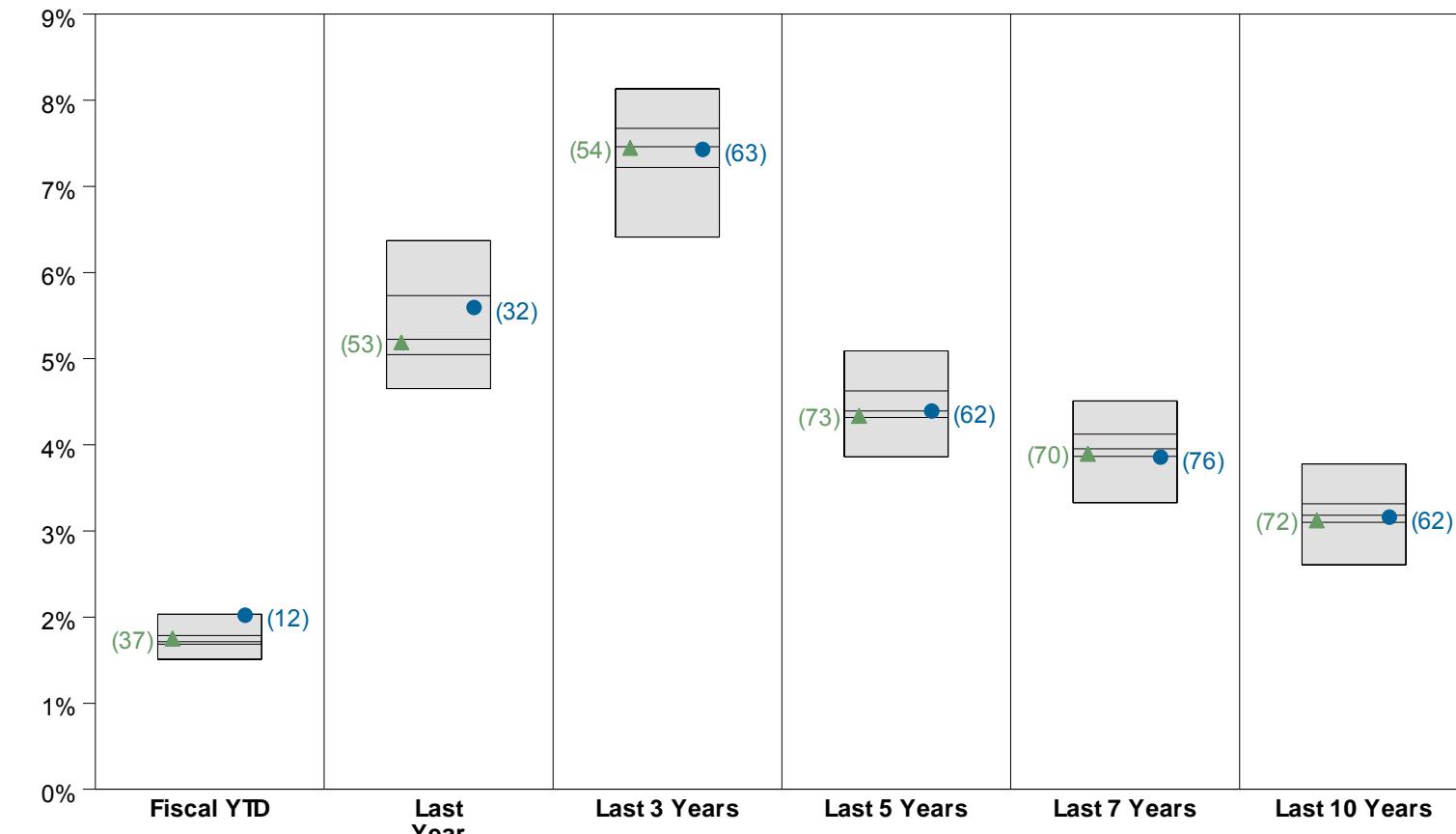
Emerging Market Debt	●	(1.95)	5.35	4.75	3.17	2.74	3.82
EMD Benchmark	▲	(1.91)	3.51	4.70	3.02	2.77	3.47

TIPS Relative to Callan's Inflation Linked Bonds database

Periods Ended September 30, 2021

- APFC TIPS portfolio exceeded the Bloomberg US TIPS Index for the quarter and year.
- The TIPS composite ranked below median in Callan's Inflation Linked Bonds peer universe over time periods outside of a year.
- The TIPS allocation includes APCM and an In House TIPS portfolio.

Performance vs Callan Inflation Linked Bonds (Gross)



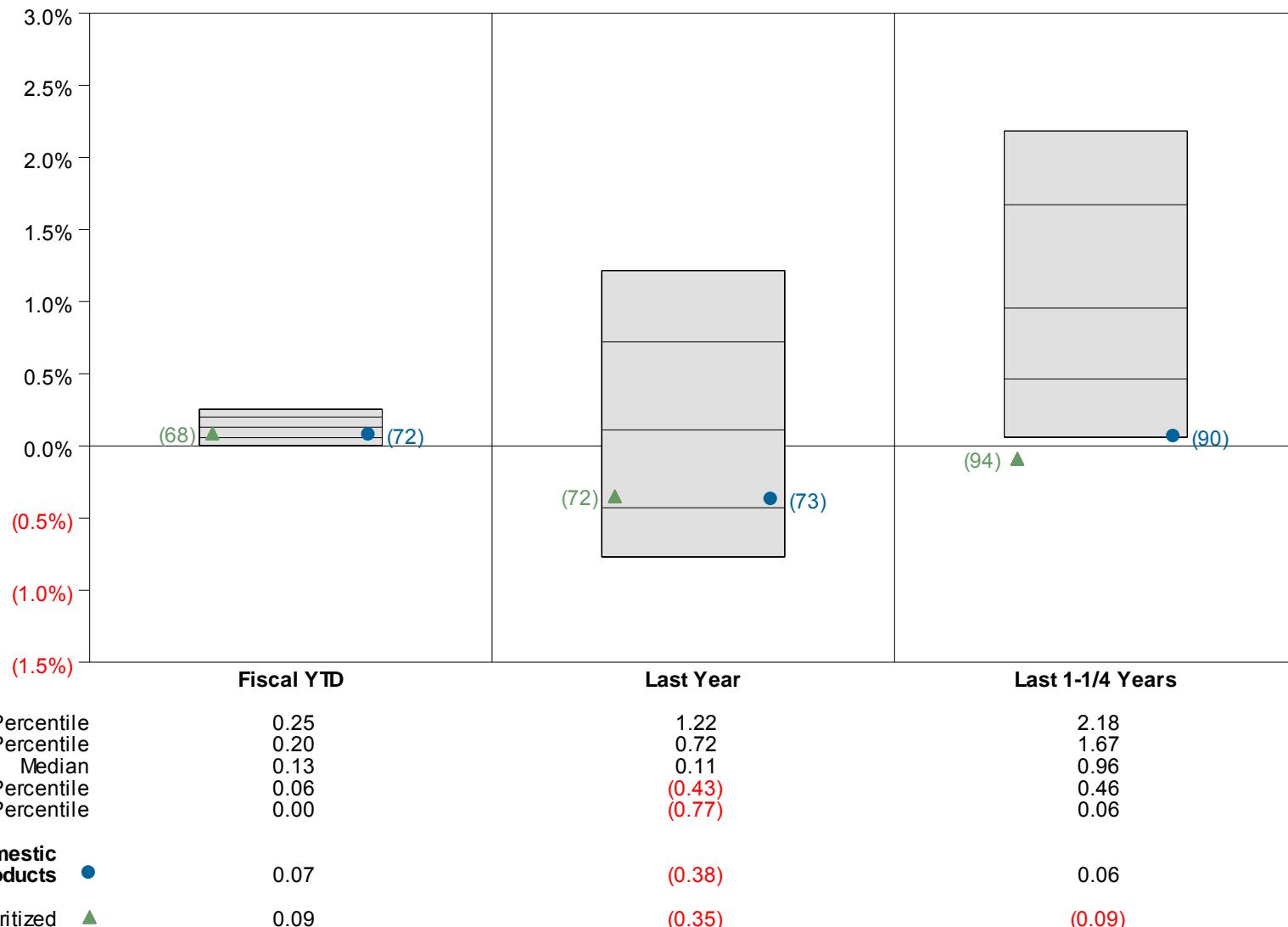
	10th Percentile	25th Percentile	Median	75th Percentile	90th Percentile	TIPS	Bloomberg TIPS
Fiscal YTD	2.03	1.79	1.72	1.69	1.51	2.00	1.75
Last Year	6.37	5.73	5.22	5.05	4.65	5.57	5.19
Last 3 Years	8.13	7.67	7.46	7.22	6.41	7.41	7.45
Last 5 Years	5.09	4.62	4.39	4.32	3.86	4.37	4.34
Last 7 Years	4.51	4.12	3.95	3.86	3.33	3.84	3.90
Last 10 Years	3.78	3.32	3.18	3.10	2.61	3.14	3.12

Domestic Structured Product to Callan's Core Bond database

Periods Ended September 30, 2021

- The Domestic Structured Product portfolio was funded at the end of the second quarter of 2020.
- The portfolio was 2 bps behind its benchmark over the quarter, and 3 bps behind over the year.
- The portfolio ranked below the median of the Core Bond Fixed Income peer group, though benchmark-relative performance is far more applicable.

Performance vs Callan Core Bond Fixed Income (Gross)



Real Estate Market

Second Quarter 2021

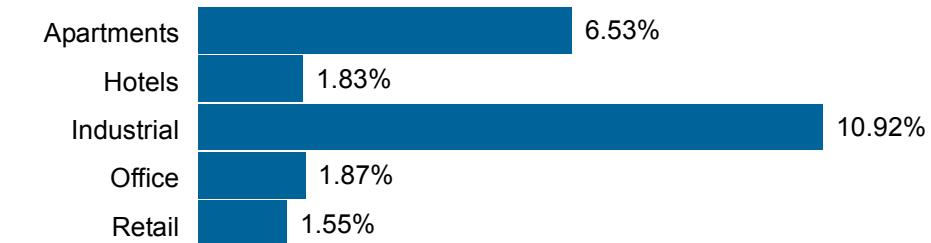
U.S. Private Real Assets	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 15 Years
Real Estate ODCE Style	3.16	10.47	11.49	6.25	6.94	9.06	5.56
NFI-ODCE (value weight net)	6.41	12.41	13.64	6.13	6.56	8.92	5.55
NCREF Property	5.23	10.88	12.15	6.72	6.84	8.99	7.09
NCREF Farmland	1.51	3.89	5.54	4.90	5.53	10.19	11.09
NCREF Timberland	1.89	4.41	5.01	2.42	2.90	4.89	5.20
Public Real Estate							
Global Real Estate Style	-0.15	16.05	29.07	9.50	7.64	10.63	5.63
EPRA/NAREIT Developed	-0.90	14.46	29.64	6.18	4.53	8.34	3.77
Global ex-U.S. Real Estate Style	-2.15	7.39	22.34	8.43	6.86	10.29	4.91
EPRA/NAREIT Developed ex US	-2.60	6.56	21.50	4.88	4.97	7.66	3.36
U.S. REIT Style	1.25	22.80	34.83	12.51	8.43	12.33	7.39
NAREIT Equity REITs	0.98	23.15	37.39	10.01	6.83	11.27	6.51

Strongest gains for ODCE in history

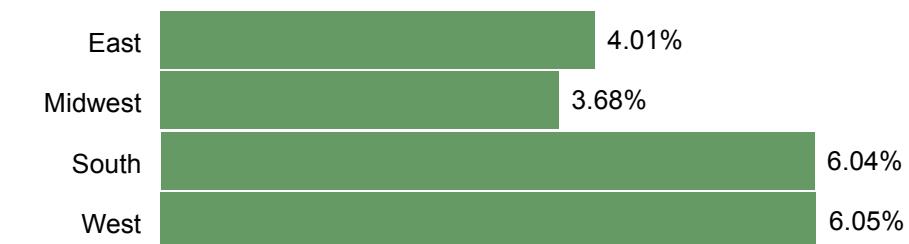
- ODCE posted best return ever in 3Q21; Industrial the best performer.
- Income returns were positive except in Hotel and Retail sectors.
- Appraisers are pricing in a recovery due to strong fundamentals in Industrial and Multifamily.
- Return dispersion by manager within the ODCE Index was due to the composition of underlying portfolios.
- Niche sectors self-storage and life sciences continued to be accretive.

Sources: Callan, FTSE Russell, NAREIT, NCREF

Sector Quarterly Returns by Property Type



Sector Quarterly Returns by Region



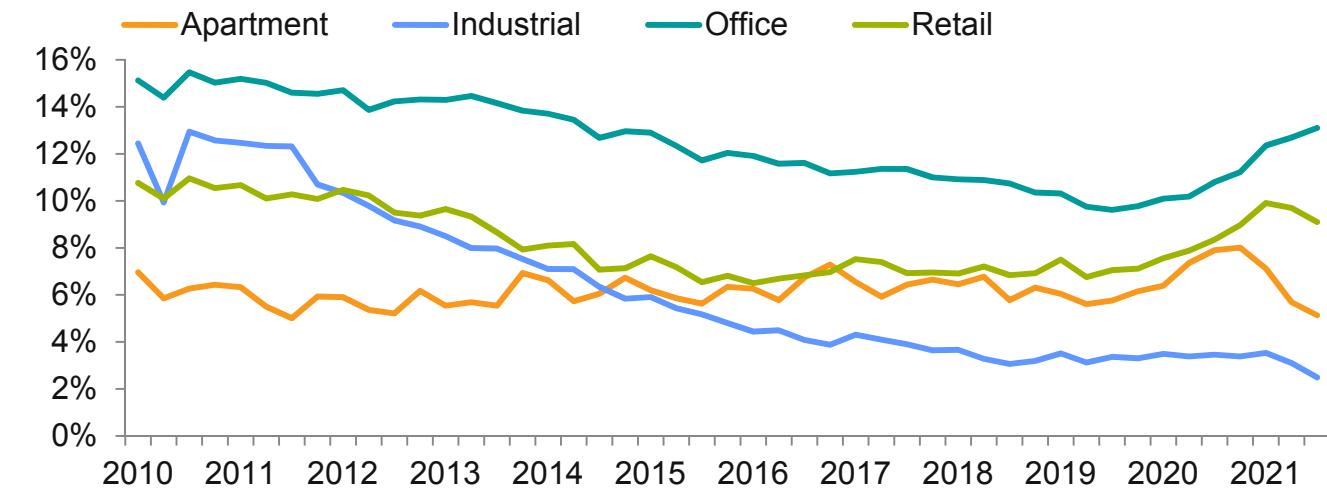
Real Estate Market

Second Quarter 2021

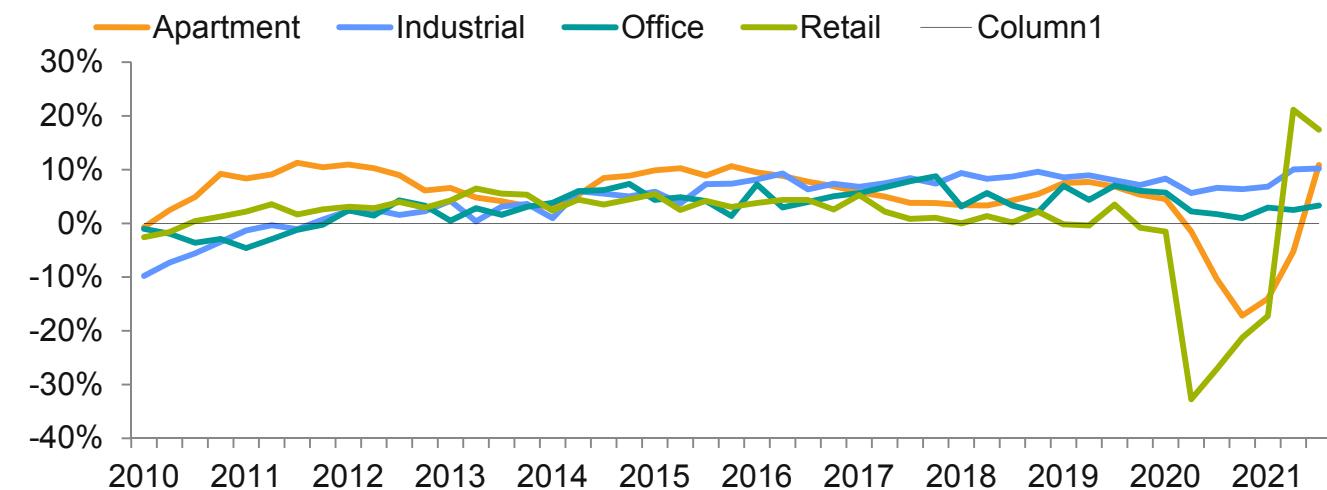
Compression in vacancy rates

- Vacancy rates kept compressing in Industrial and Multifamily as demand continued.
- Net operating income remained negative for Retail but the recovery continue; pent-up demand was evident through foot traffic in retail centers.
- 3Q21 rent collections have stabilized across all sectors.
- Demand outpaced supply as new construction of preleased Industrial and Multifamily occurred.

Vacancy by Property Type



Rolling 4-Quarter NOI Growth by Property Type

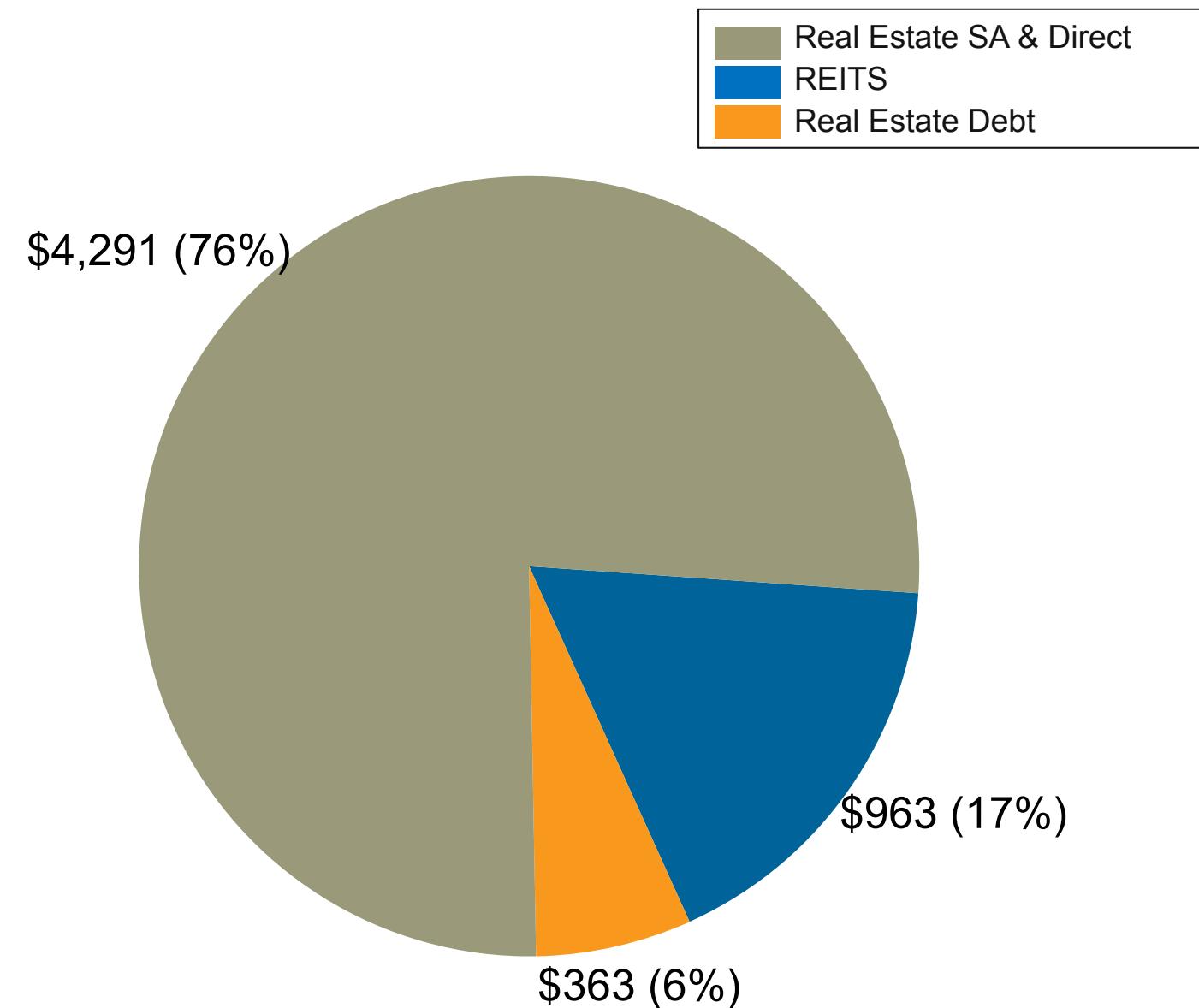


Sources: NCREIF

APFC Real Estate Structure (1Q LAG)

As of September 30, 2021

- The real estate portfolio is comprised of Real Estate Separate Accounts and Direct Investments, REITS, and Real Estate Debt Investments.
- Real Estate Debt Funds moved from Real Estate Separate Accounts and Direct Investments, and REITS from Fixed Income Plus.

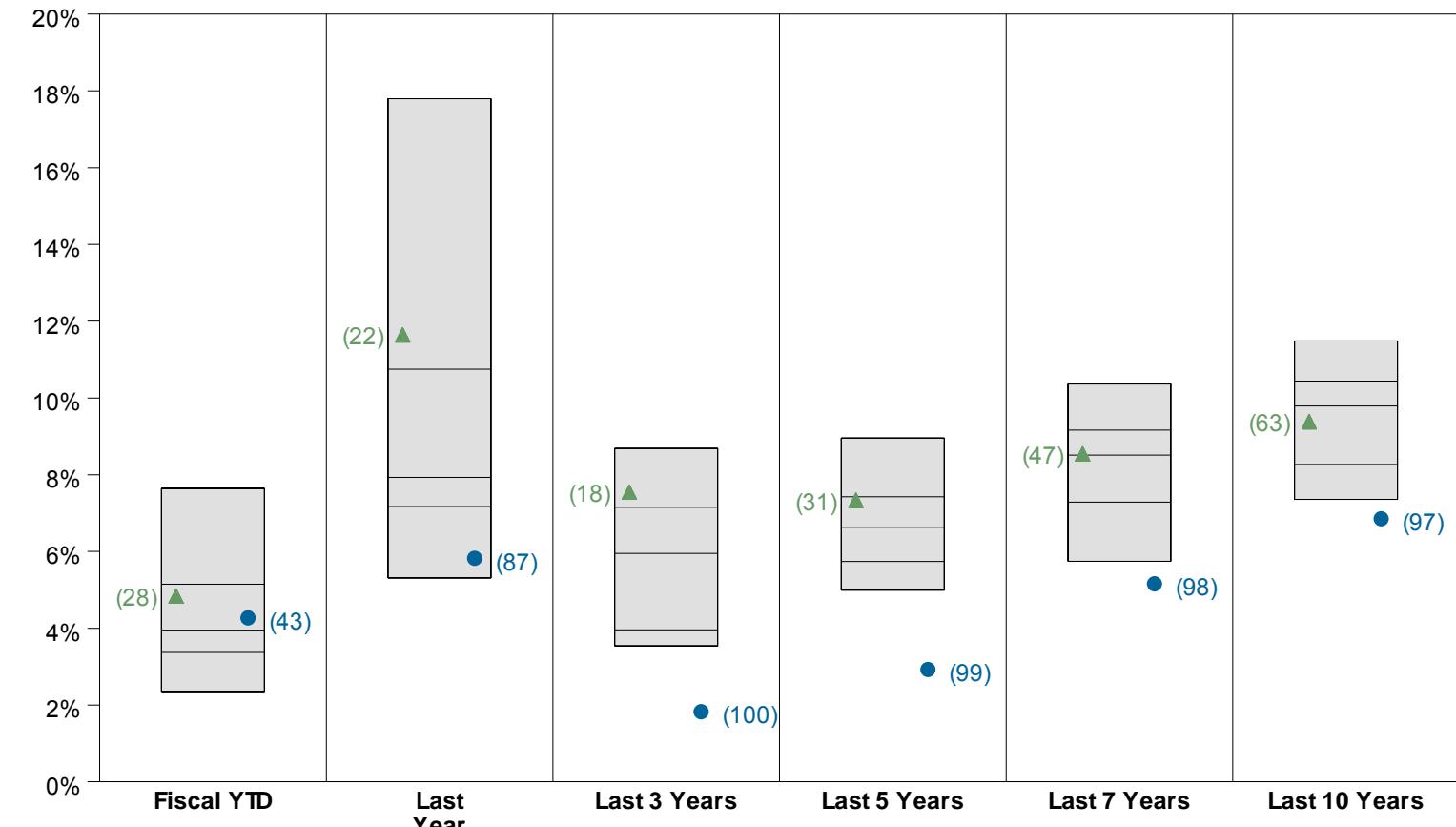


Real Estate Relative to Callan's Total Real Estate Database (1Q LAG)

Periods Ended September 30, 2021

- APFC Real Estate portfolio performance is shown net of fees for all investments.
- The real estate portfolio ended the quarter behind of its benchmark, and outside of the quarter, continued to lag and rank below the peer group median over all standard reporting periods.

Performance vs Public Fund - Real Estate (Gross)



	10th Percentile	25th Percentile	Median	75th Percentile	90th Percentile	Real Estate	Real Estate Target
10th Percentile	7.64	5.15	3.95	3.37	2.35	4.22	4.84
25th Percentile	17.79	10.75	7.93	7.17	5.31	5.78	11.65
Median	8.69	7.15	5.95	3.96	3.54	1.78	7.55
75th Percentile	8.96	7.42	6.63	5.74	4.99	2.88	7.33
90th Percentile	10.36	9.16	8.51	7.29	5.74	5.12	8.55
Real Estate	11.49	10.44	9.79	8.27	7.36	6.81	9.39
Real Estate Target							

Real Estate Performance (1Q LAG)

Periods Ended September 30, 2021

	Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years
RE Equity Investments	2.30%	-0.05%	-	-	-
RE Separate Accts & Direct	1.81%	-1.81%	-2.26%	0.41%	5.52%
RE EQ Funds & Co-Invest	5.07%	22.24%	-	-	-
RE Debt Investments	3.34%	11.93%	-	-	-
<i>NCREIF Total Index</i>	3.59%	7.37%	5.50%	6.13%	8.79%
REITS	14.04%	37.56%	9.60%	7.15%	8.23%
<i>MSCI US REIT Index</i>	12.00%	38.05%	10.14%	6.32%	9.38%
Real Estate Composite	4.22%	5.78%	1.78%	2.88%	6.81%
<i>Real Estate Custom</i>	4.84%	11.65%	7.55%	7.36%	9.42%

- APFC's Real Estate Equity and Debt underperformed the NCREIF benchmark for the quarter. REITS exceeded its benchmark over the quarter.
- Overall, the Real Estate Composite underperformed its custom benchmark over the quarter and continued to lagged over all other periods.

Private Credit Market Environment: 3Q21

Strong demand due to focus on yield and income

Benefiting from low-yield environment

- Yield and income-generating characteristics remain attractive in a low-rate environment.
- Alpha generation can be magnified through strategies that extract a complexity premium.
- Strong execution around early liquid credit opportunity

Direct lending pricing back to pre-COVID levels

- Direct lending portfolios proved resilient during the COVID dislocation due to liquidity injected into the economy.
- While pricing widened in the early stages of the dislocation, pricing and structures are back to pre-pandemic levels.
- Direct lending portfolio valuations back to 2019 levels

Distressed cycle muted

- Liquidity flowing into U.S. economy has limited U.S. corporate stress and has muted the corporate distressed opportunity set.

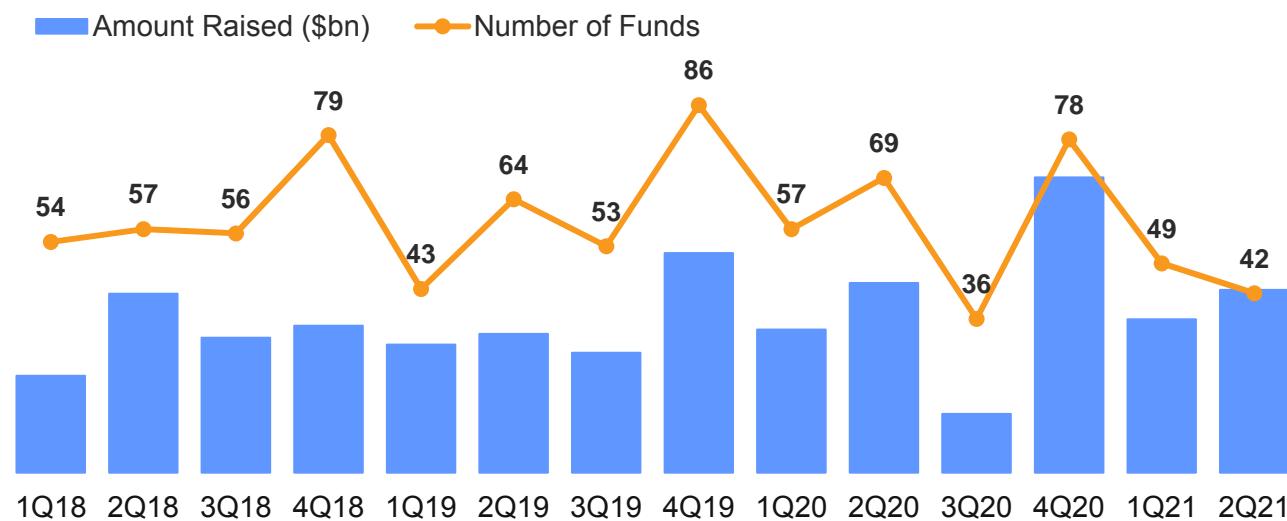
Continued evolution of pockets of opportunity

- Areas of opportunity include those that offer diversification through differentiated collateral and/or areas of low correlation to public markets, including specialty finance, asset-backed lending, and niche areas (life science lending and AI).

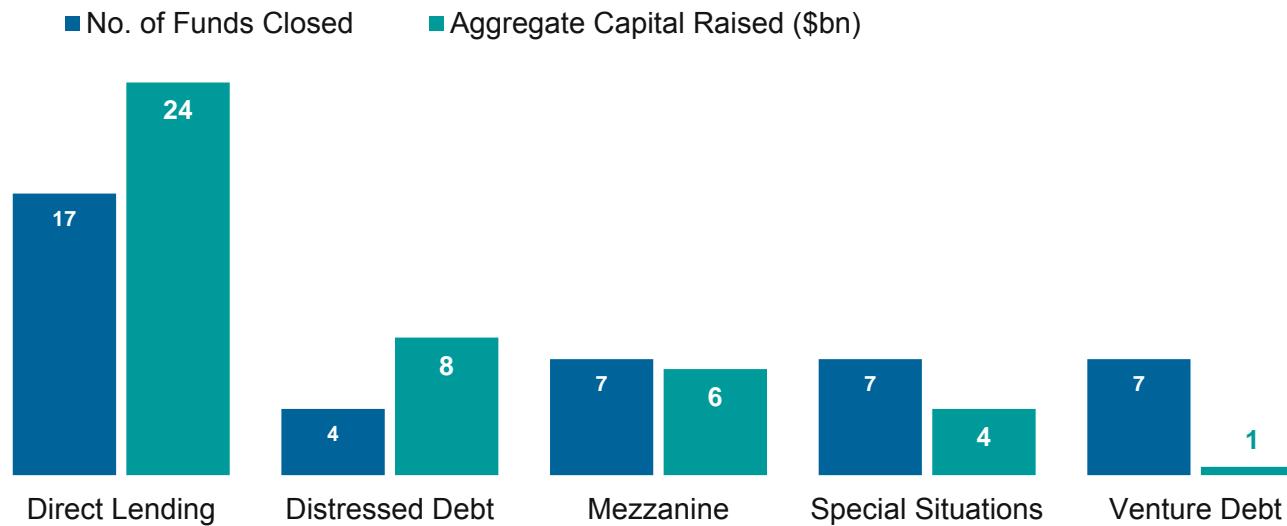
Source: Callan

Knowledge. Experience. Integrity.

Private Debt Funds Raised 2018 to 2021 YTD



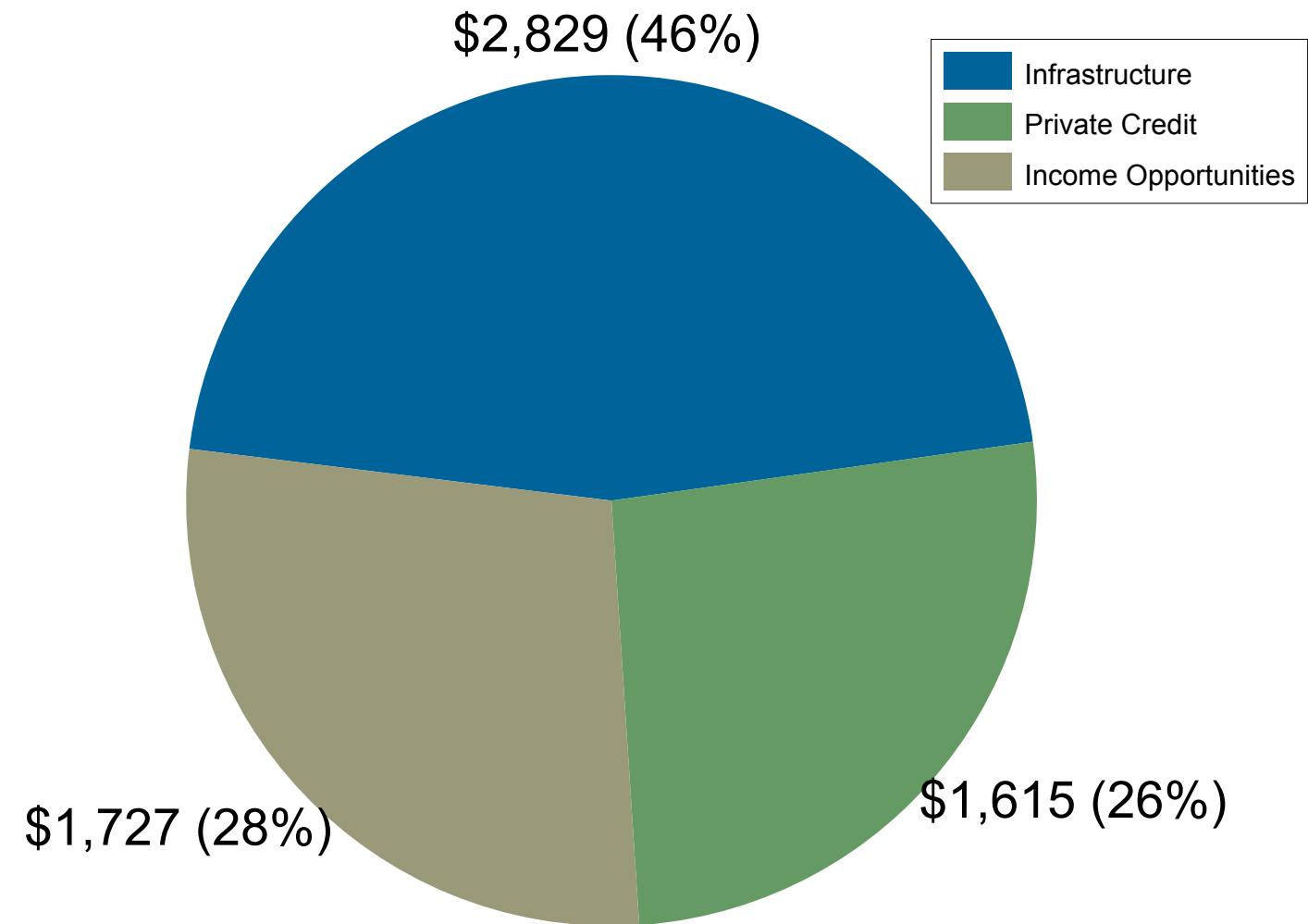
Private Debt Fundraising in 2Q21 by Fund Type



APFC Private Income Structure (1Q LAG)

As of September 30, 2021

- 46% of the structure is invested in infrastructure funds, which includes a diversified portfolio of infrastructure, energy, and generation assets. Listed Infrastructure was moved into this category from Fixed Income Plus.
- 26% of the structure was invested in private credit mandates including mezzanine debt, opportunistic credit, and direct lending strategies.
- 28% of the structure was invested in income opportunities including structured credit, alternative credit, AH4R2, and timber.



Private Income Performance (1Q LAG)

As of September 30, 2021

	Quarter	Last Year	Last 3 Years	Last 5 Years
Infrastructure	5.90%	25.81%	11.61%	13.96%
Cambridge Global Private Infrastructure	3.78%	16.78%	7.77%	7.74%
Private Credit	6.07%	20.37%	8.46%	8.54%
Cambridge Private Credit	5.44%	22.02%	7.61%	7.58%
Income Opportunities	4.88%	17.82%	9.75%	7.54%
Private Income Custom	4.45%	18.86%	7.74%	7.72%
Private Income Composite	5.66%	21.91%	10.39%	11.66%
Private Income Custom	4.45%	18.86%	7.74%	7.72%

- APFC's Private Income composite outperformed in the benchmark (60% FTSE Dev Core Infr and 40% BB US Corp HY 2%) in the quarter and 1-year period.
- Infrastructure outperformed in the quarter and one year periods while Private Credit and Income Opportunities outperformed in the quarter, but underperformed over the one year.

Hedge Fund and MAC Industry Trends

Market uncertainty settles down

- Selling vol became attractive at quarter-end when it spiked above its long-term average as capital flowed out of large tech companies.
- Equity tail risk protection remained expensive as equity indices stay close to all-time highs.
- Within MACs, the value factor had a strong September, topping growth and momentum.

Intra-market dispersion increases

- Relative value opportunities opened up at the end of 3Q as volatility returned following China's crackdown on tech companies.

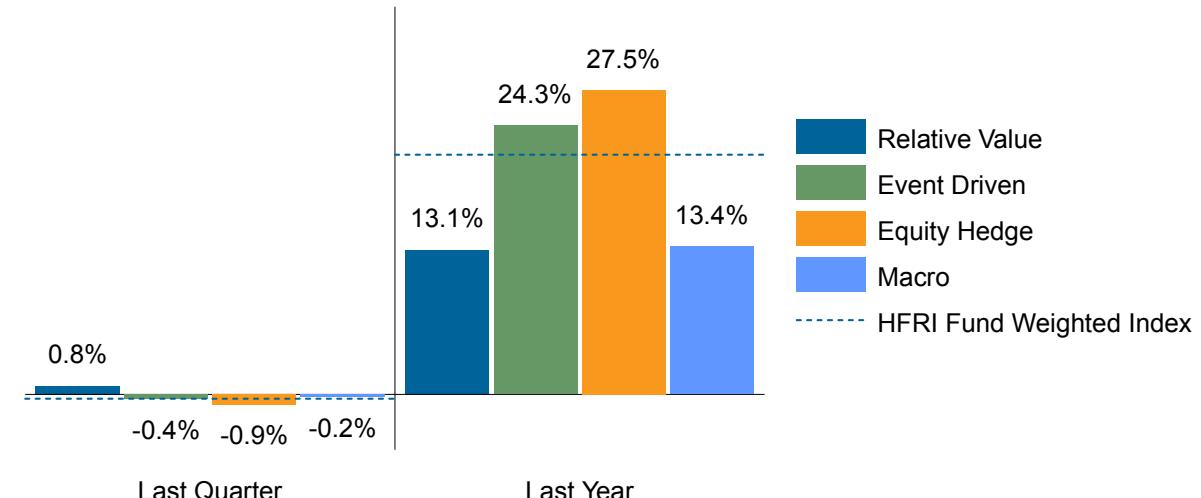
Interest rates start rising

- Rates rose toward the end of 3Q on the Fed's plan to begin bond tapering later this year.

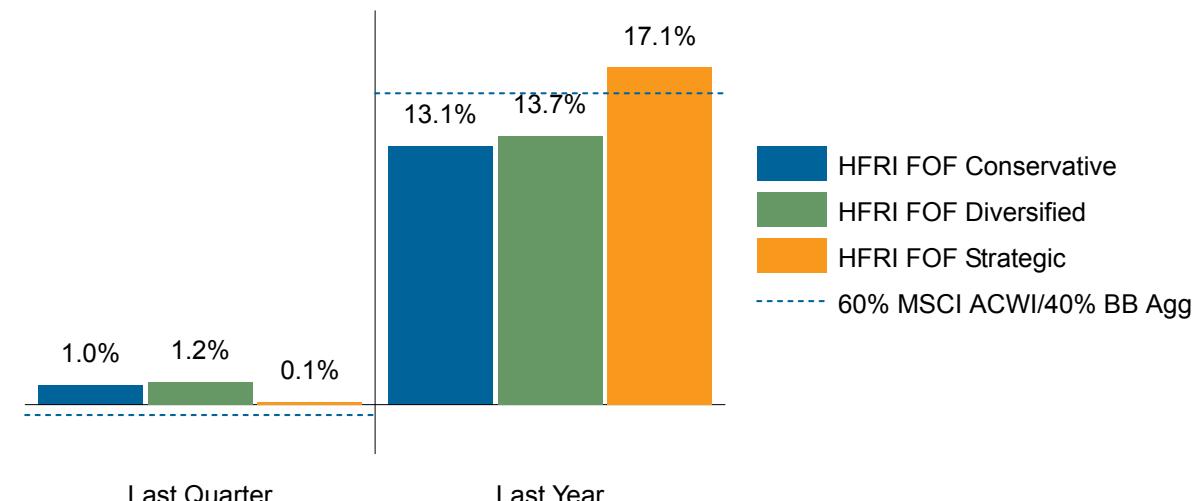
Optimistic outlook for hedge funds

- Despite trailing the equity rebound, HFs remain positioned for increased volatility.

HFRI Strategy Index Returns vs. Broad Hedge Fund Universe



HFRI Fund-of-Fund Returns vs. 60% Stock/40% Bond Mix



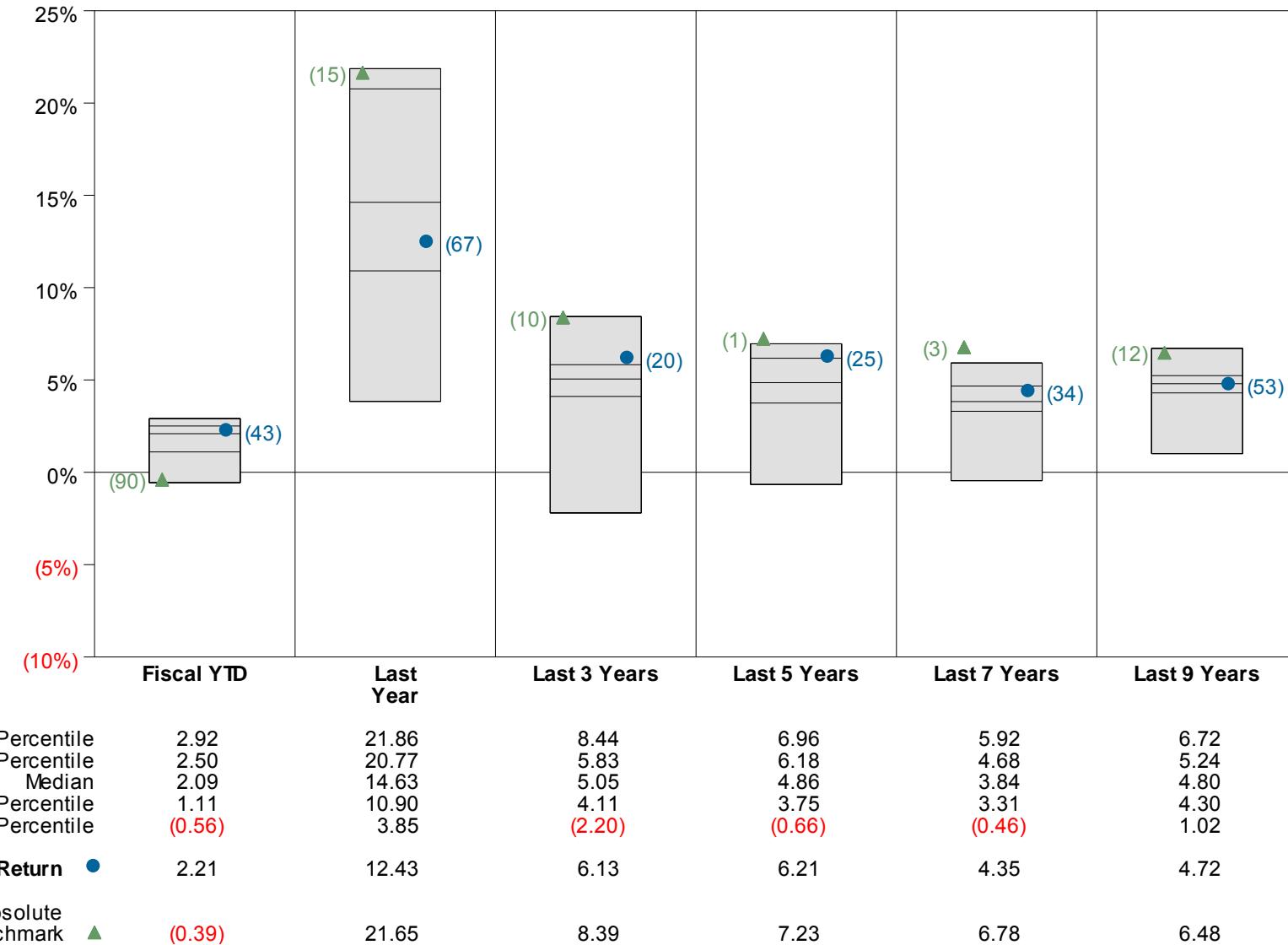
Source: Hedge Fund Research (www.hedgefundresearch.com)

Absolute Return Portfolio Relative to HFOF Universe

Periods Ended September 30, 2021

- In the third quarter, the Absolute Return portfolio exceeded its custom benchmark.
- The portfolio ranked above median for the 3-, 5-, and 7-year periods.

Performance vs Callan Absolute Rtn Hedge Fund of Funds (Net)

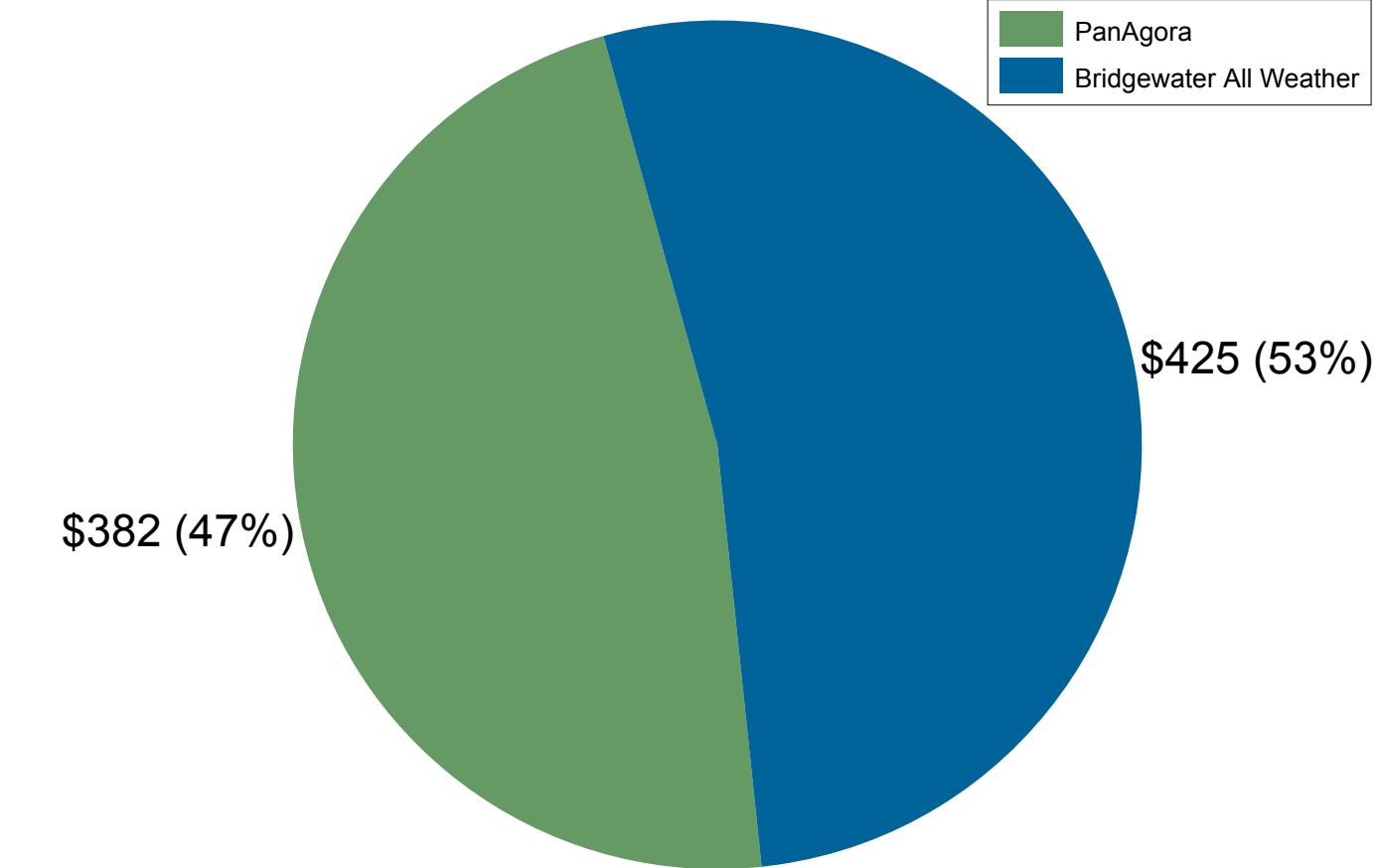


Absolute Return Benchmark is LIBOR + 4% through 6/30/13, LIBOR + 6% through 6/30/15, LIBOR + 5% through 9/30/16, and HFRI Total HFOF Universe thereafter.

APFC Risk Parity Structure and Performance

As of September 30, 2021

- Roughly \$808 million distributed across two mandates.
- Multi asset class portfolios, limited use of illiquid assets. Leverage is used to amplify the impact of asset classes and/or strategies in an effort to optimize performance vis-à-vis overall portfolio risk.
- PanAgora underperformed in the third quarter and over the one year period; Bridgewater outperformed in the quarter, but underperformed over the one year.
- BlackRock was liquidated and reallocated to the remaining managers earlier in the year.

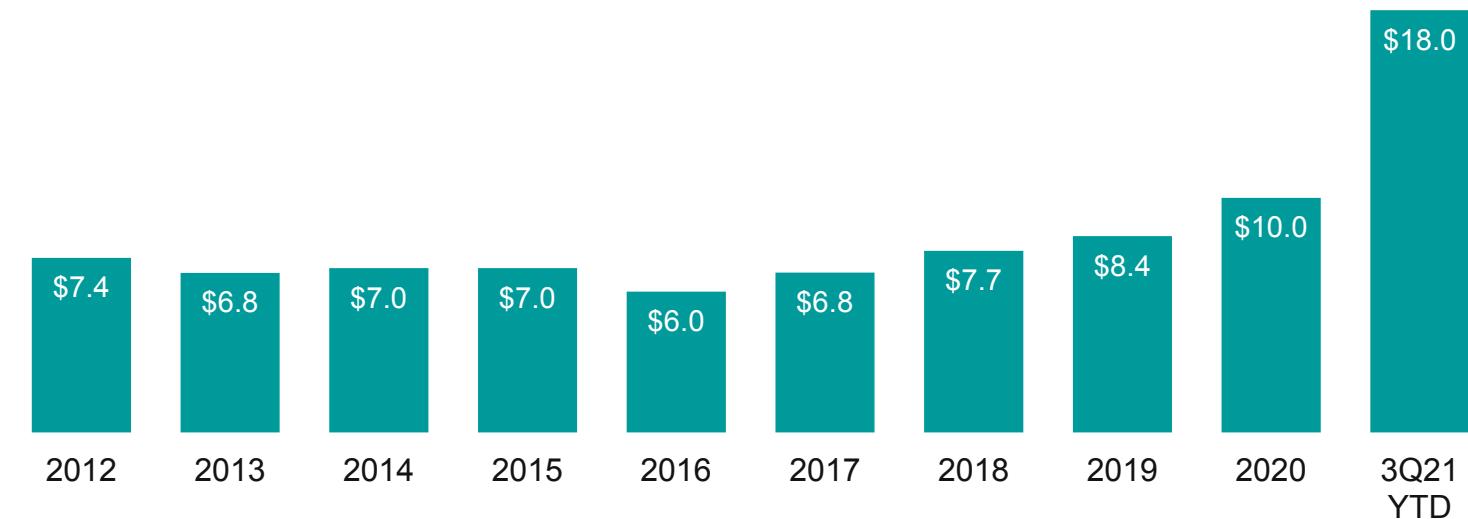


	Last Quarter	Last Year
PanAgora	-0.03	17.05
Bridgewater All Weather	1.28	18.92
HFR Risk Parity Vol 12 Inst'l Idx	-0.12	19.14

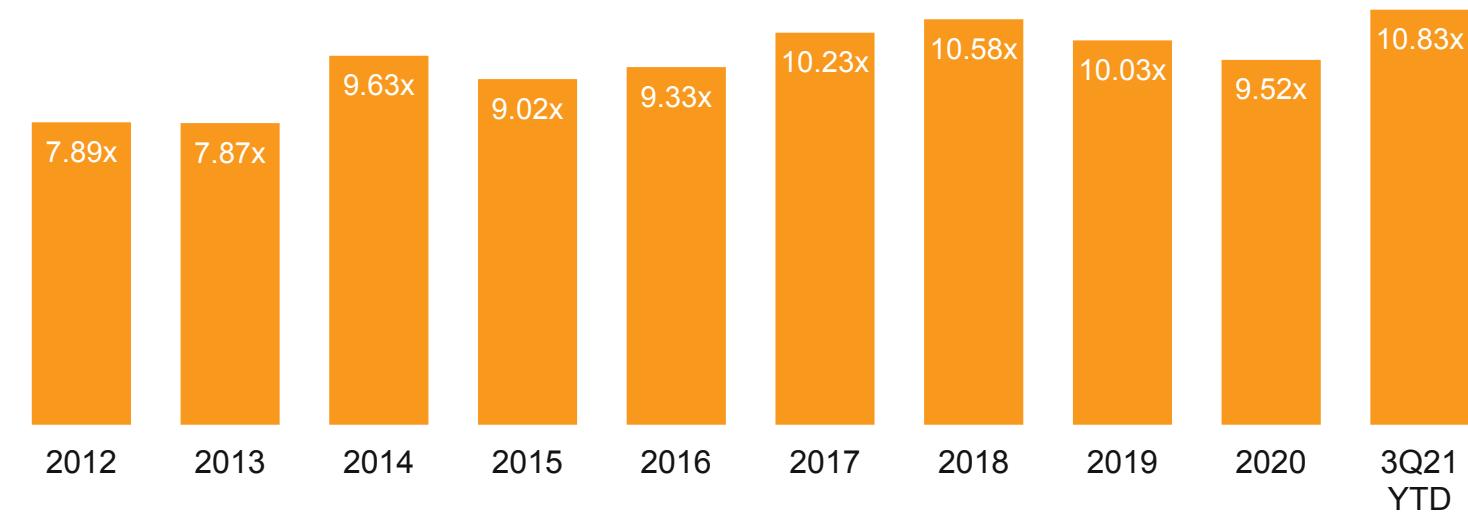
Private Equity Company Valuations and Leverage

- Rise in buyout purchase prices in 2021 with several large transactions, including Sydney Airport (Australia), RealPage, and Proofpoints
- Venture capital and growth equity surged in 2021, driven by large investments in Asia such as ByteDance (China), Flipkart (India), XingSheng Selected (China), and Northvolt (Sweden).

Median Pre-Money Valuation – Global Venture Capital/Growth Equity (\$mm)



Median EV/EBITDA – Global Buyouts

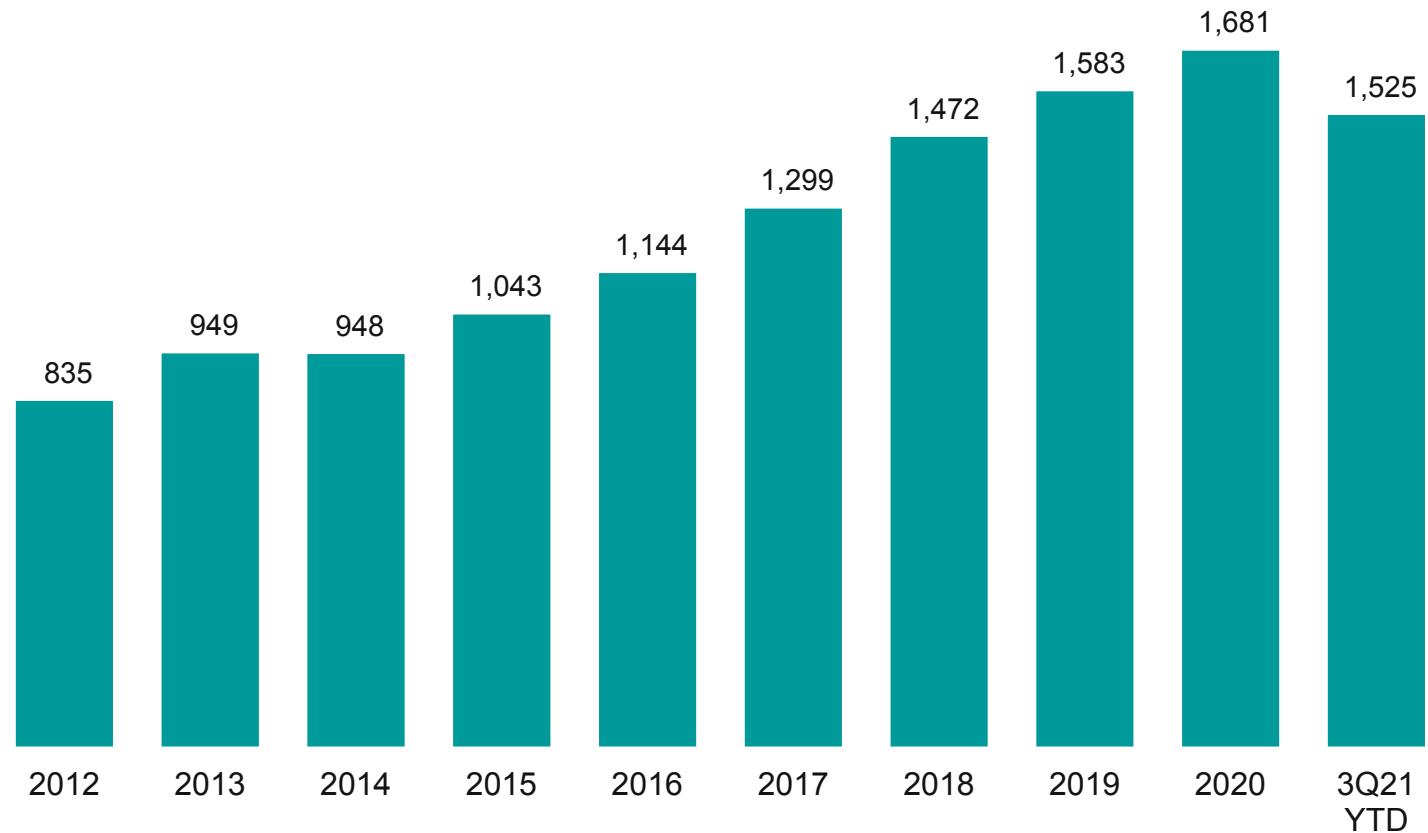


Source: S&P LCD

Private Equity Dry Powder Falls

- 2020 reached new high in terms of dry powder, exceeding the prior year by \$100 billion.
- Dry powder may reach a new peak in 2021 given strong fundraising so far this year.

Dry Powder (\$bn)
Cumulative as of Year-end

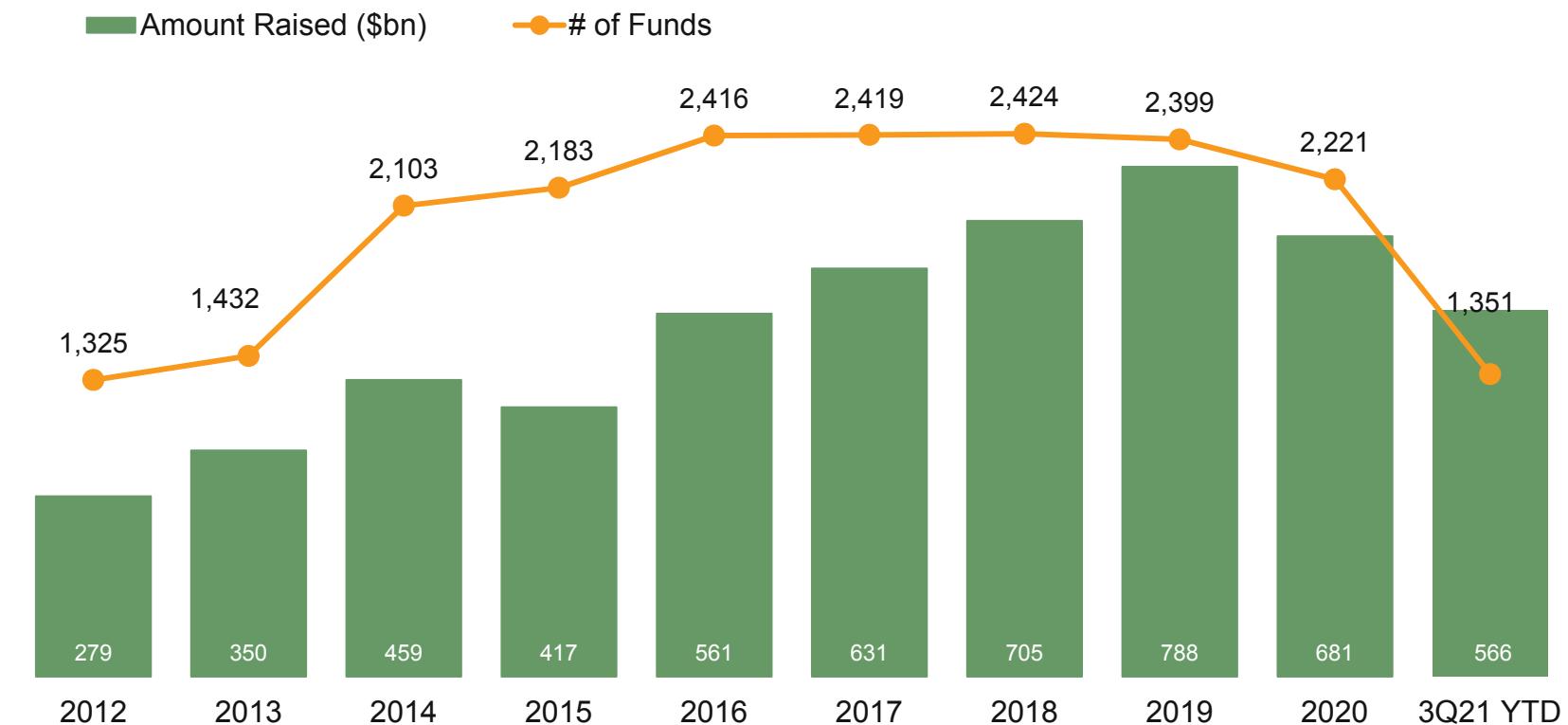


Source: Pitchbook; global, includes private equity and private debt

Global Fundraising

- Fundraising reached a new high YTD through 3Q21, exceeding the same time periods in both 2020 and 2019 by ~30%.
- The accelerated pace of capital deployment in the first half of the year resulted in many funds coming back to market more quickly than expected.
- Fundraising is expected to jump in 1Q22 given many final closes were pushed out to accommodate LP capital budgeting issues as yearend approaches.

Annual Fundraising

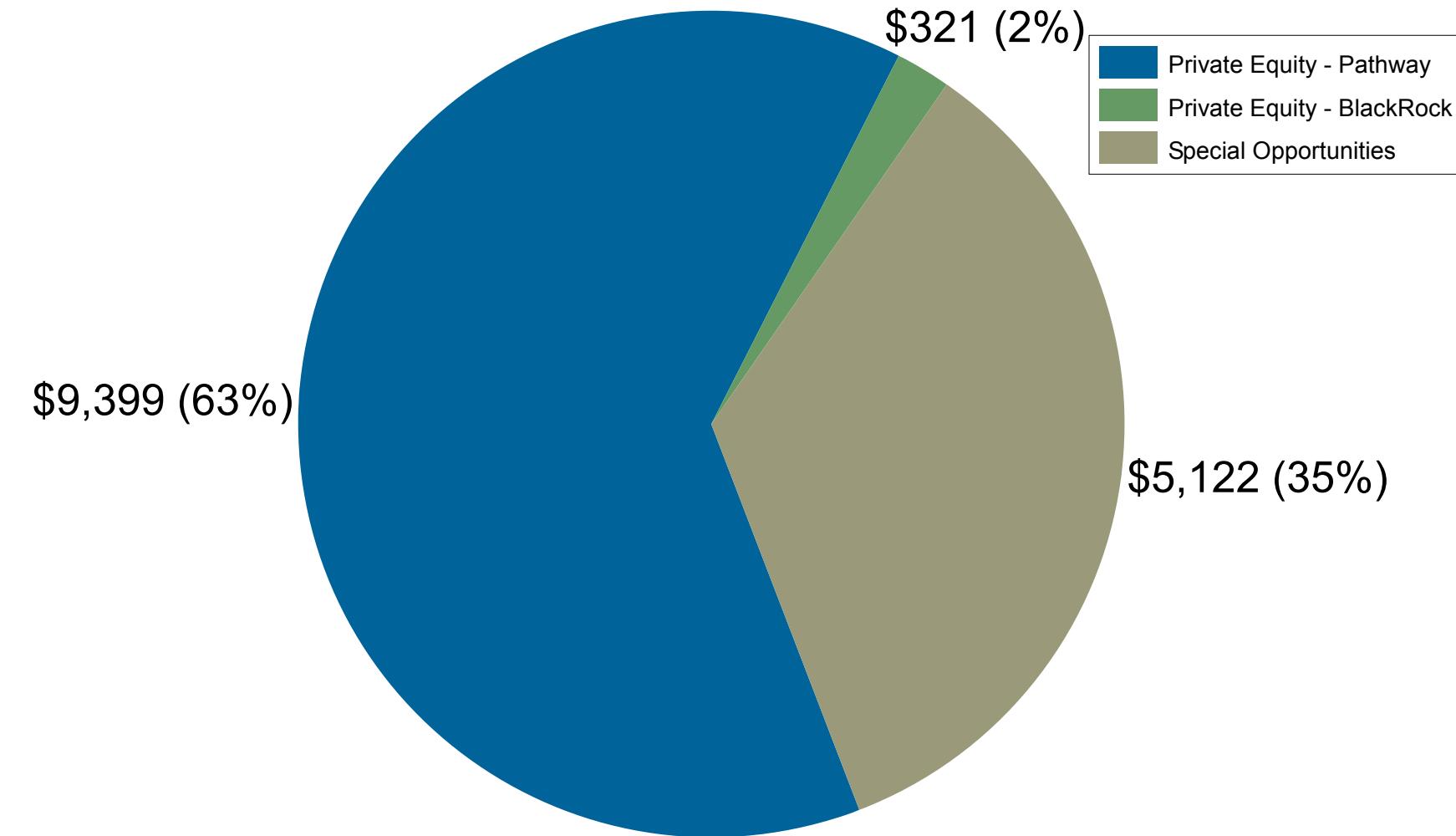


Source: Pitchbook

APFC Private Equity and Special Opportunities Structure (1Q LAG)

As of September 30, 2021

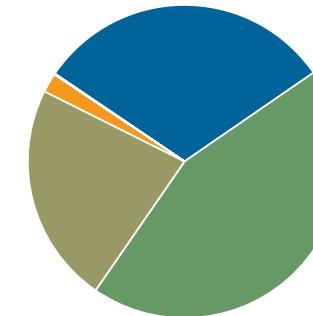
- 63% of the structure was invested in private equity.
- The legacy HarbourVest investments were transferred to Pathway for oversight management.
- The Pathway portfolio also includes direct investments overseen by Pathway.
- 37% of the structure was invested in special opportunities.



Private Equity Portfolio Positioning (1Q LAG)

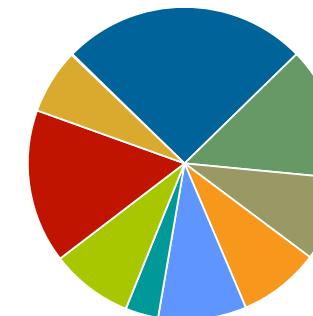
As of September 30, 2021

- APFC's Total Private Equity Portfolio continued to be well-diversified by strategy, geography, and industry.
- Buyouts, Venture Capital and Special Situations remained the largest strategy allocations.
- The largest non-U.S. geographic exposure was Europe. The largest industry exposure was in Technology.



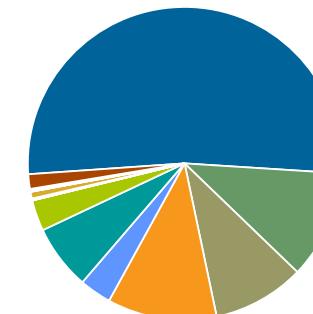
Strategy Mix by Net Asset Value

Venture Capital	30.92%
Buyout	44.22%
Special Situations	22.80%
Distressed for Control	1.98%
Secondary Interest	0.04%
Mezzanine	0.05%



Geographic Mix by Net Asset Value

West/Pacific Northwest	25.37%
North Atlantic	13.82%
Mid-West	8.72%
Southeast	8.42%
Southwest/Rockies	9.13%
Mid-Atlantic	3.39%
Asia/Pacific	8.50%
Europe	15.93%
Other	6.71%



Industry Mix by Net Asset Value

Technology	52.06%
Health Care	11.19%
Financial	9.47%
Consumer Discretionary	11.32%
Energy	3.32%
Industrials	6.71%
Communication Services	3.22%
Utilities	0.23%
Materials	0.66%
Consumer Staples	0.29%
Other/Misc	1.52%

APFC Private Equity and Special Opportunities Performance (1Q LAG)

As of September 30, 2021

	Last Quarter	FYTD	Last Year	Last 3 Years	Last 5 Years
Private Equity and Special Opportunities	11.30	62.33	63.24	27.85	26.34
Cambridge Private Equity	11.52	54.75	56.87	23.79	20.97

- APFC's Private Equity and Special Opportunities composite underperformed the Cambridge Private Equity benchmark in the third quarter and outperformed over all other standard time periods.
- In the last reported quarter, Private Equity was up 12.5% and Special Opportunities was up 8.8%.

Closing Remarks

- Total Fund ended the third quarter of 2021 with \$82.7 billion in assets, increasing 1.6% for the quarter. Compared with the prior year ended September 30, the Fund increased by 22.4%. The trailing quarter performance placed the Total Fund above median relative to other large public funds and below median relative to a large endowments/foundations peer group.
- For the quarter, the Total Fund outperformed the Performance Benchmark, CPIU+5% return target, and Passive Benchmark. Over the 1-, 3-, 5-, and 10-year periods, the Fund outperformed and was ahead of all three targets.
- The Public Equity portfolio outperformed its index during the quarter. Domestic and Global Equity composites ended the quarter ahead of their respective benchmarks, while International Equity trailed its benchmark. All composites outperformed over the last year.
- The Fixed Income portfolio ended the quarter slightly behind its benchmark. Most sub-strategies were nearly inline with their benchmarks.
- In the Alternatives portfolio, Private Equity & Special Opportunities and Real Estate underperformed their respective benchmarks in the third quarter; Private Income and Absolute Return outperformed.
- Prudent asset allocation with appropriate levels of diversification and a long-term perspective remain Callan's recommended course.

Callan



Published Research Highlights from 3Q21

Comparing Actuarial and Consultant Rates of Return



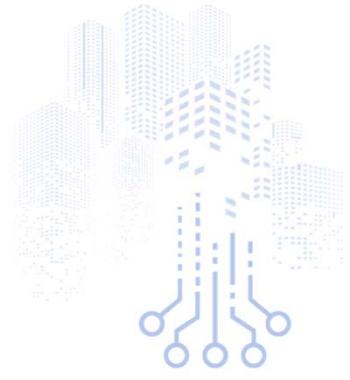
The Role of Target Date Funds in Retirement



Infrastructure and Real Estate Debt in Portfolios



Research Café: Property Technology



Recent Blog Posts

GPs Take 'Credit' for Higher IRRs
Jonathan Farr

Seeking Yield in All the Right Places
Nathan Wong

PCE vs. CPI: What's the Difference?
Fanglue Zhou

Additional Reading

Private Equity Trends quarterly newsletter
Active vs. Passive quarterly charts
Capital Markets Review quarterly newsletter
Monthly Updates to the Periodic Table
Market Pulse Flipbook quarterly markets update

Callan Institute Events

Upcoming Conferences, Workshops, and Webinars

Callan College

Intro to Investments - Learn the Fundamentals

This course is for institutional investors, including trustees and staff members of nonprofits, and public and corporate funds. This session familiarizes trustees and staff with basic investment theory, terminology, and practices.

Join our next LIVE session in Chicago (1.5-day session):

December 1-2, 2021

Introductory Workshop for DC Plan Fiduciaries

This one-day workshop centers on the fundamentals of administering a defined contribution (DC) plan. Designed primarily for ERISA fiduciaries and supporting staff members, attendees will gain a better understanding of the key responsibilities of an ERISA fiduciary and best practices for executing those responsibilities.

Join our LIVE session in San Francisco:

March 23, 2022

Webinars

Research Café: DOL Cybersecurity Tips

Nov. 10, 2021 – 9:30am (PT)

Research Café: Dissecting the Overlap Between Listed Real Assets Categories and Benchmarks

Dec. 8, 2021 – 9:30am (PT)

Market Intelligence

Jan. 22, 2022 – 9:30am (PT)

Fall Regional Workshops

2022 National Conference

April 25-27, 2022, in San Francisco

Palace Hotel

2 New Montgomery St, San Francisco, CA 94105

Watch your email for further details and an invitation.

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