UNIVERSITY
OF
CALIFORNIA

Pension & Savings Program

September 30, 2022

UC INVESTMENTS

UC Investments Way

UC Retirement System: $106.5 Billion

INVESTMENT PRODUCTS

- Investing **Endowment** assets since 1933 (90 years)
- Investing **Blue & Gold** assets since 2019 (4 years)
- Investing **Pension** assets since 1961 (62 years)
- Investing **Retirement Savings** assets since 1967 (56 years)
- Investing **Working Capital** since 1976 (47 years)
  - Investing Total Return since 2008 (13 years)
  - Investing Short Term since 1976 (47 years)

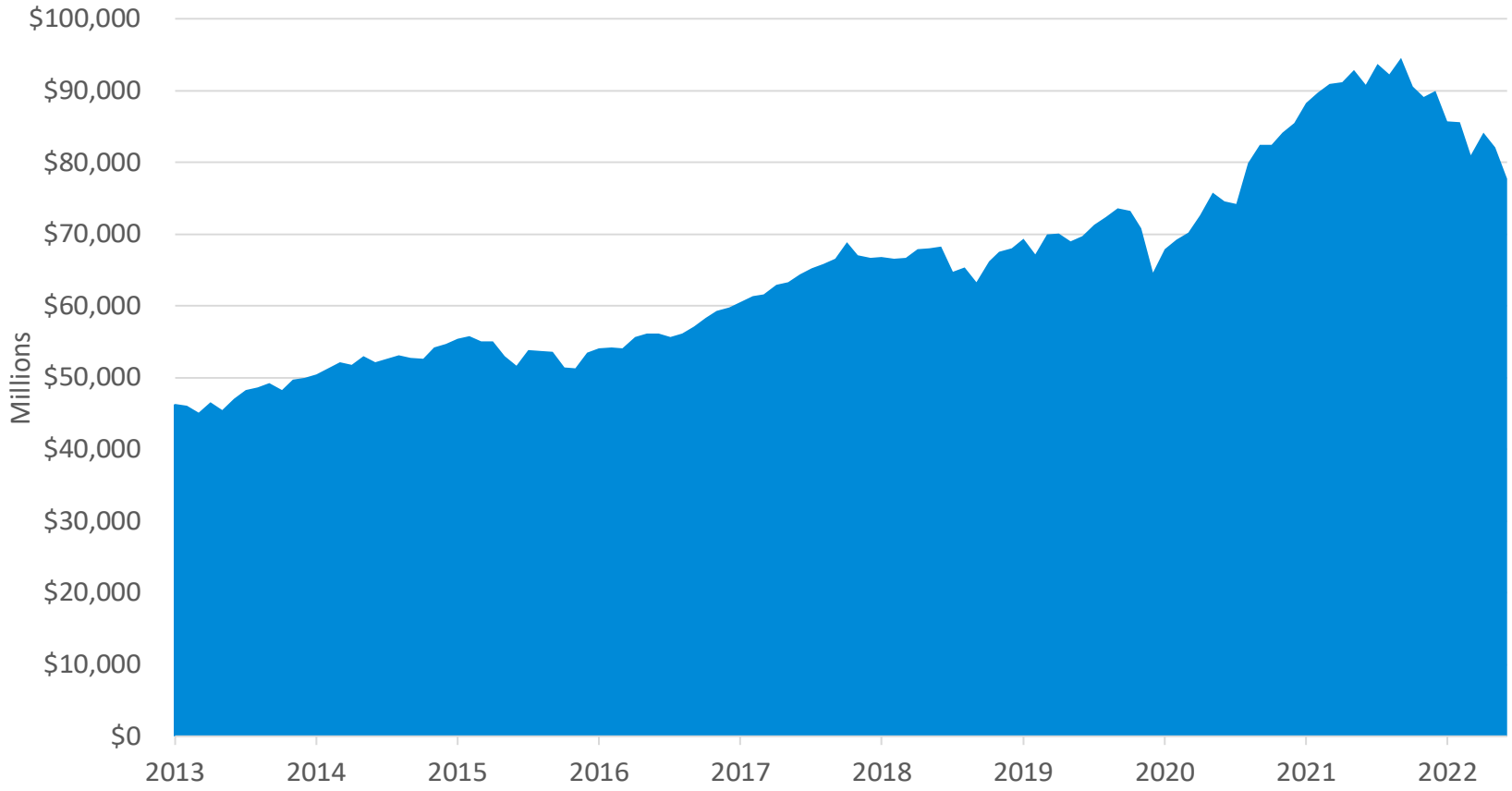
$146,503 MILLION ACROSS 6 PRODUCTS

	$ Million	(%)
Endowment	17,923	12
Blue & Gold	2,259	2
Pension	77,750	53
Retirement Savings	28,661	20
Working Capital	19,911	14
TRIP	11,883	8
STIP	8,028	5

Pension

Pension Assets Growth

PENSION ASSETS 2013 – 2022



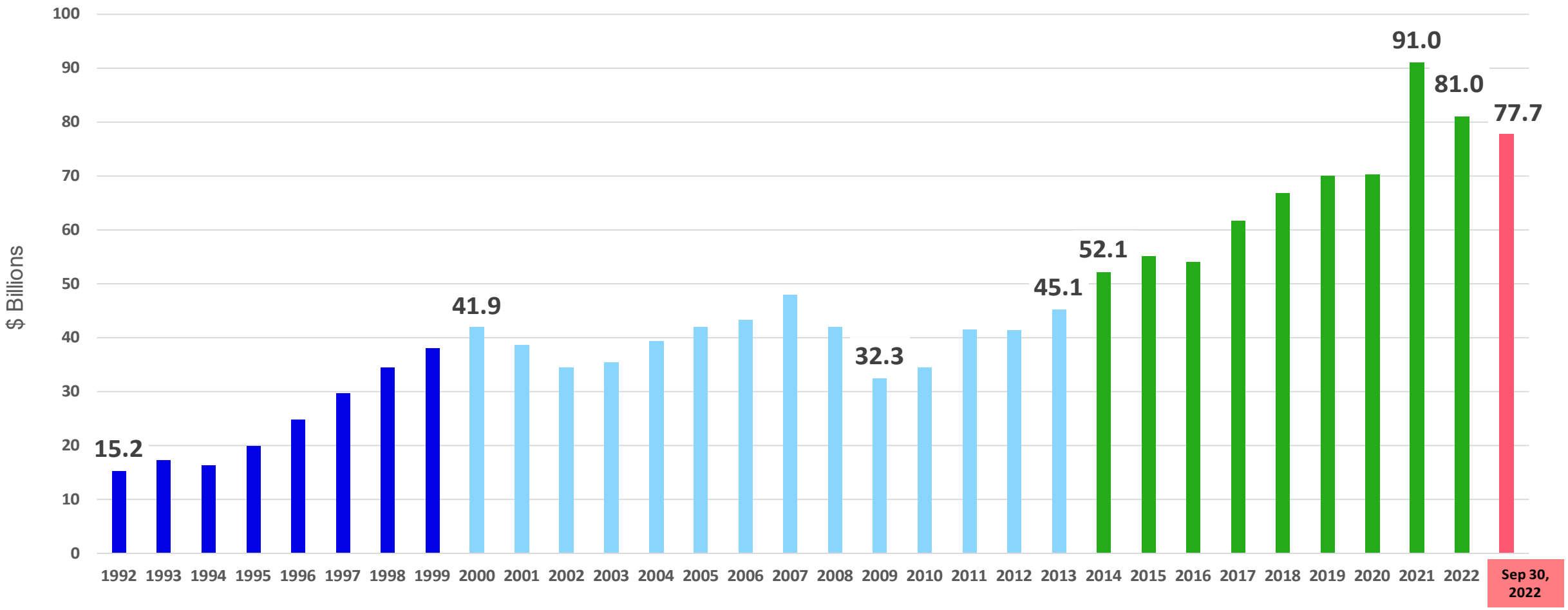
ASSET GROWTH

September 30, 2022

Today	$77,750M	Δ Change
1 Year Ago	$90,849M	-$13,099M
5 Years Ago	$64,378M	+$13,372M
9 Years Ago	$47,014M	+$30,736M
10 Years Ago	$43,094M	+$34,656M

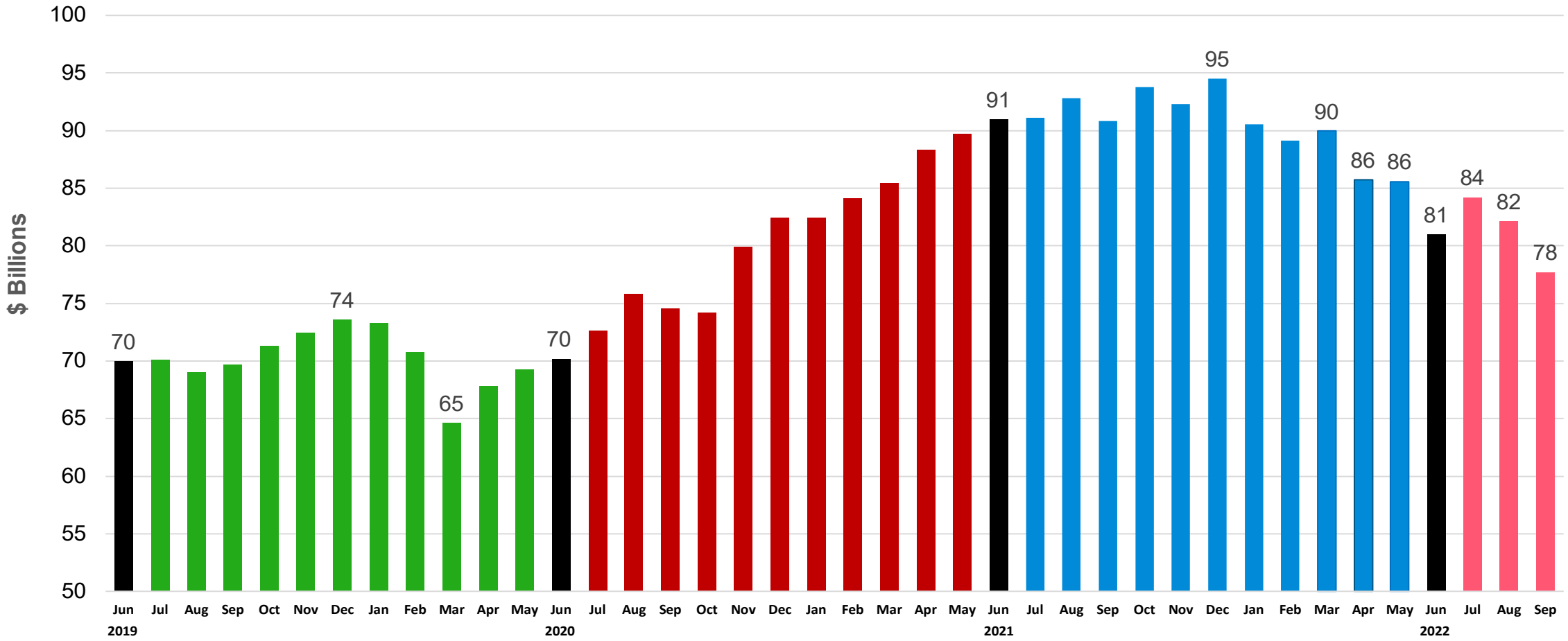
Pension Assets Growth: Market Dips Bring Rebound

30 Years (1992 – 2022)



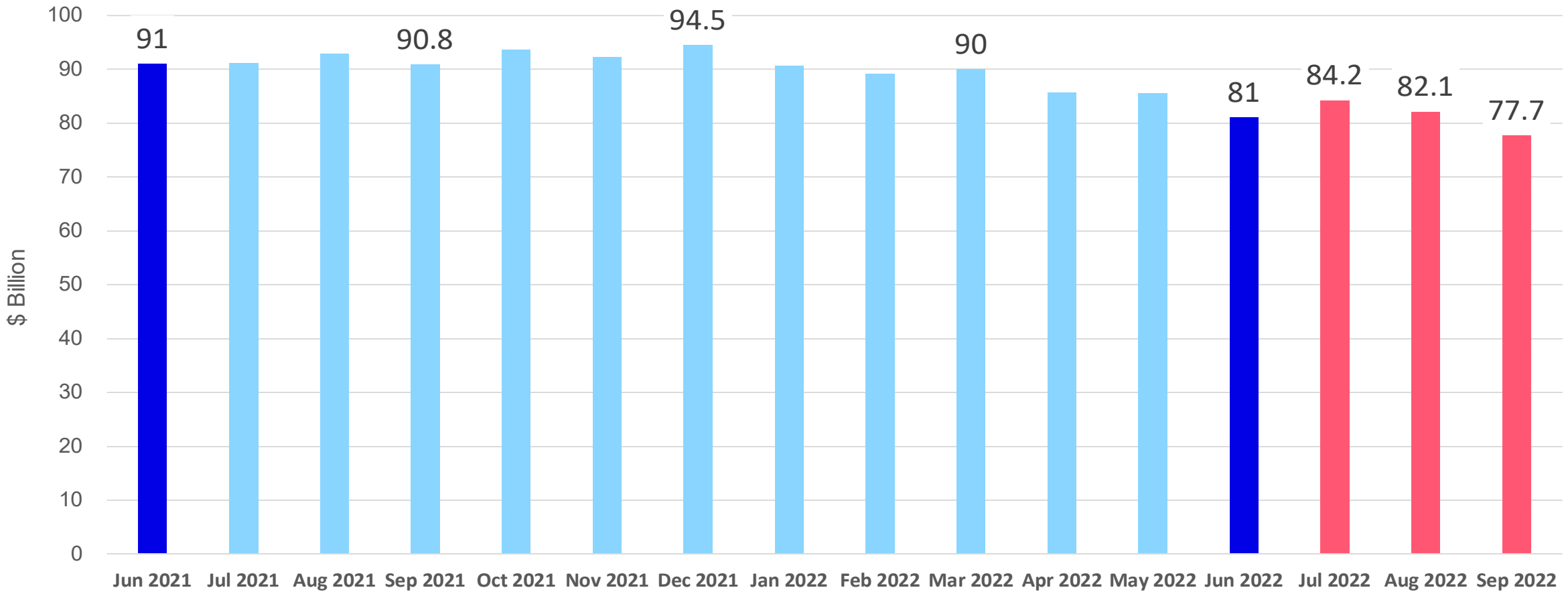
Pension Assets Growth: Market Dips Bring Rebound

3 Years (2019 – 2022)



Pension Assets Growth: Market Dips Bring Rebound

1 Years (2021 – 2022)



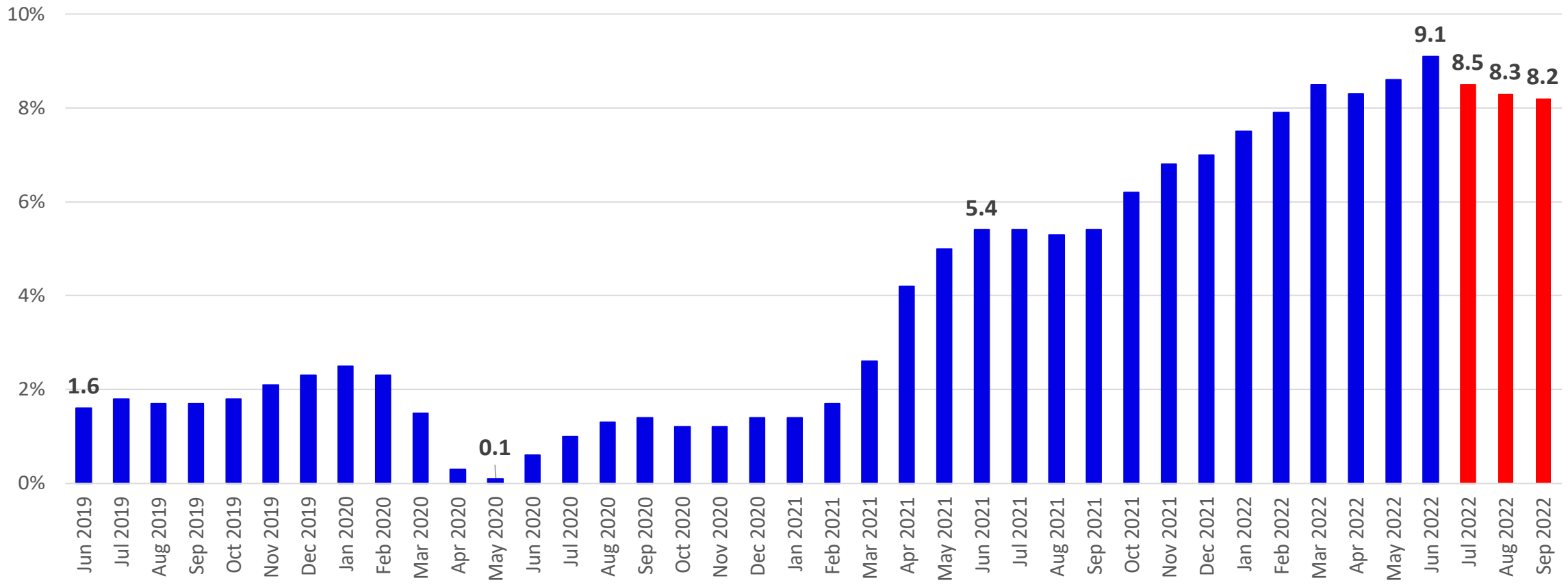
Assets Under Management

Quarter To Date (3 Months)	Market Value ($M)
June 30, 2022	80,984
Market Gains	(3,462)
Value Added	775
Net Cash Flow	(547)
September 30, 2022	77,750

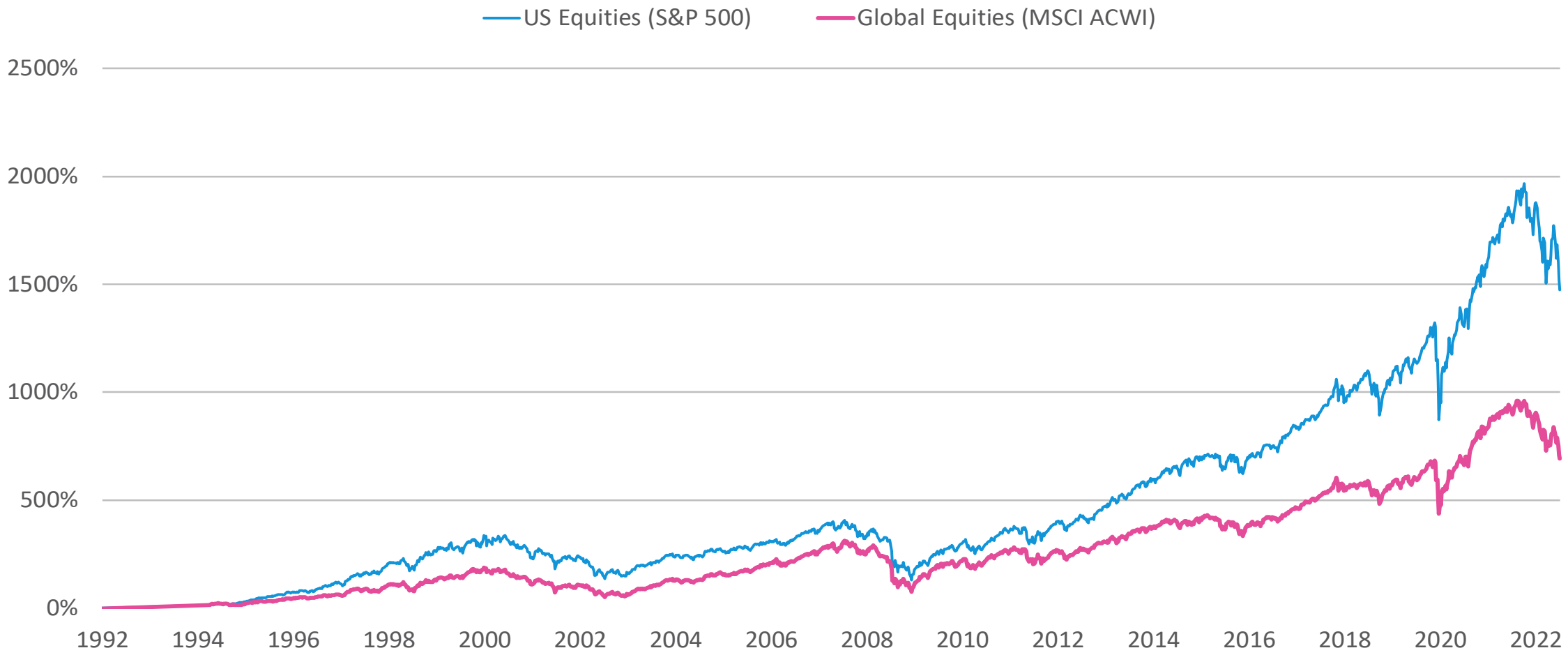
Pension Asset Allocation

As of September 30, 2022	Market Value ($M)	Weight (%)	Over/Underweight to Interim Policy (%)	Long-Term Target (%)
Public Equity	**37,982**	**48.9**	**(4.1)**	**53**
Active – Public Equity	10,589	13.6		
Passive – Public Equity	27,393	35.3		
Fixed Income	**12,380**	**15.9**	**(1.1)**	**17**
Private Markets	**23,123**	**29.8**	**(0.2)**	**30**
Private Equity	8,833	11.4	(0.6)	12
Absolute Return	2,864	3.7	0.2	3.5
Private Credit	2,390	3.1	(0.4)	3.5
Real Estate	5,552	7.1	0.1	7
Real Assets	3,483	4.5	0.5	4.0
Cash and Equivalent	**4,264**	**5.5**	**5.5**	**0**
Total	**$77,750M**	**100.0%**		**100.0%**

When Will Inflation Peak?

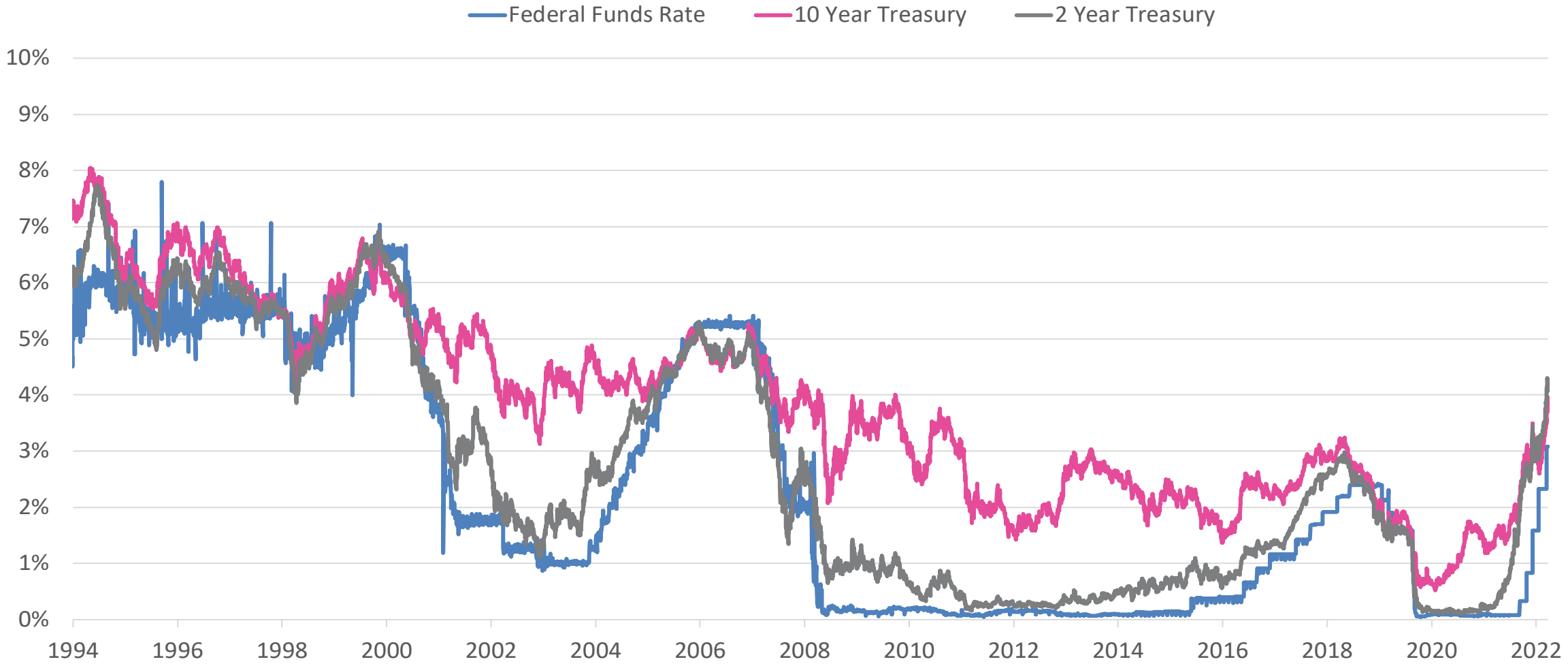


Don’t Underestimate United States



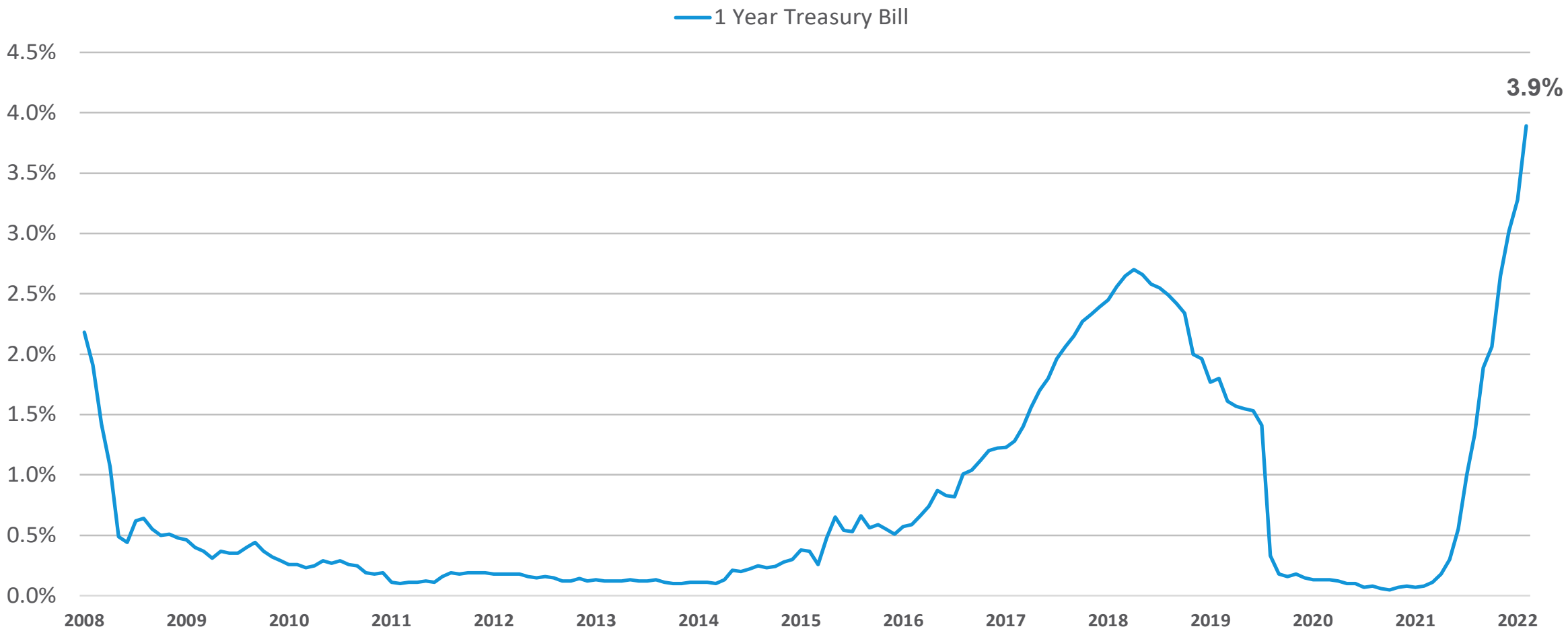
US Rates Headed Up

Treasury Yields Invert: 2-Year Higher Than 10-Year



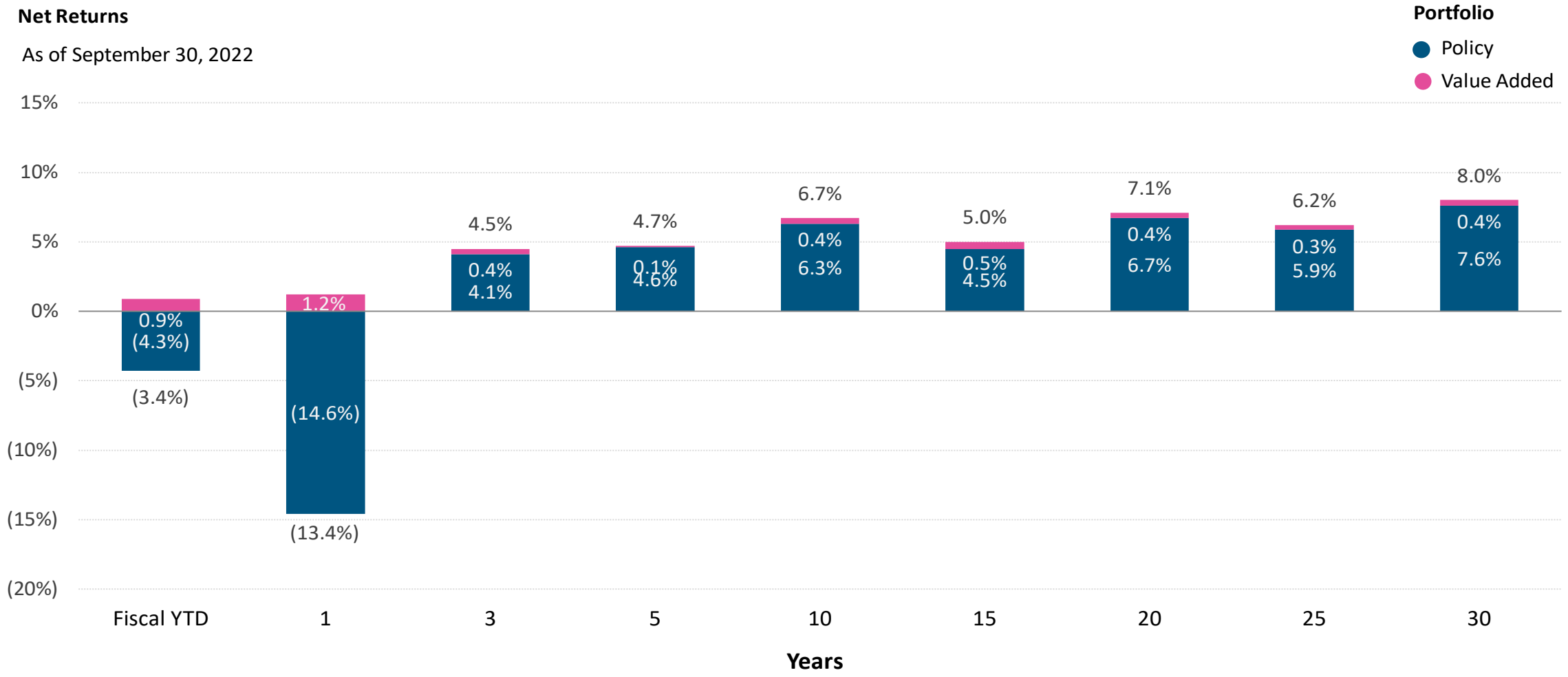
Source: Bloomberg, Federal Funds Rate, 10 Year Treasury, 2 Year Treasury

Cash Is Earning 3.9%



Source: Bloomberg

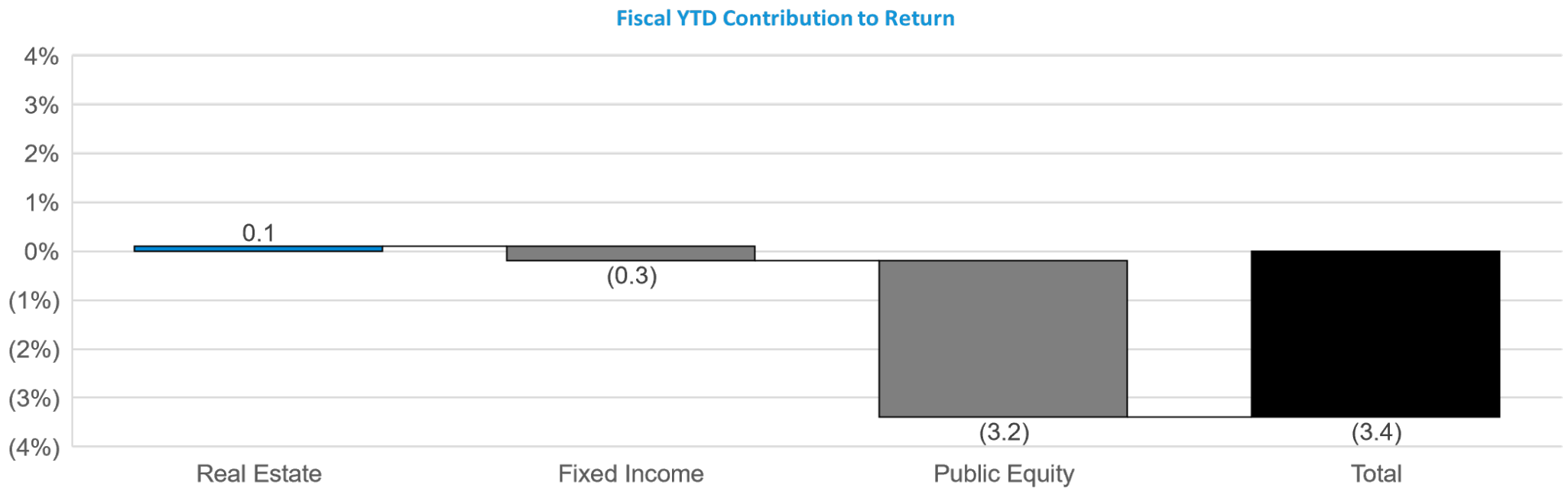
Pension Performance



Pension Performance

As of September 30, 2022 Net Returns (%)	Market Value ($M)	Fiscal YTD	1 Year	3 Year	5 Year	10 Year	15 Year	20 Year	25 Year	30 Year
			Annualized Returns							
UC Pension	77,750	(3.4)	(13.4)	4.5	4.7	6.7	5.0	7.1	6.2	8.0
Policy Benchmark*		(4.3)	(14.6)	4.6	4.6	6.3	4.5	6.7	5.9	7.6
Value Added		0.9	1.2	0.1	0.1	0.2	0.5	0.4	0.3	0.4

*The Policy Benchmark is a weighted average of investment policy targets.



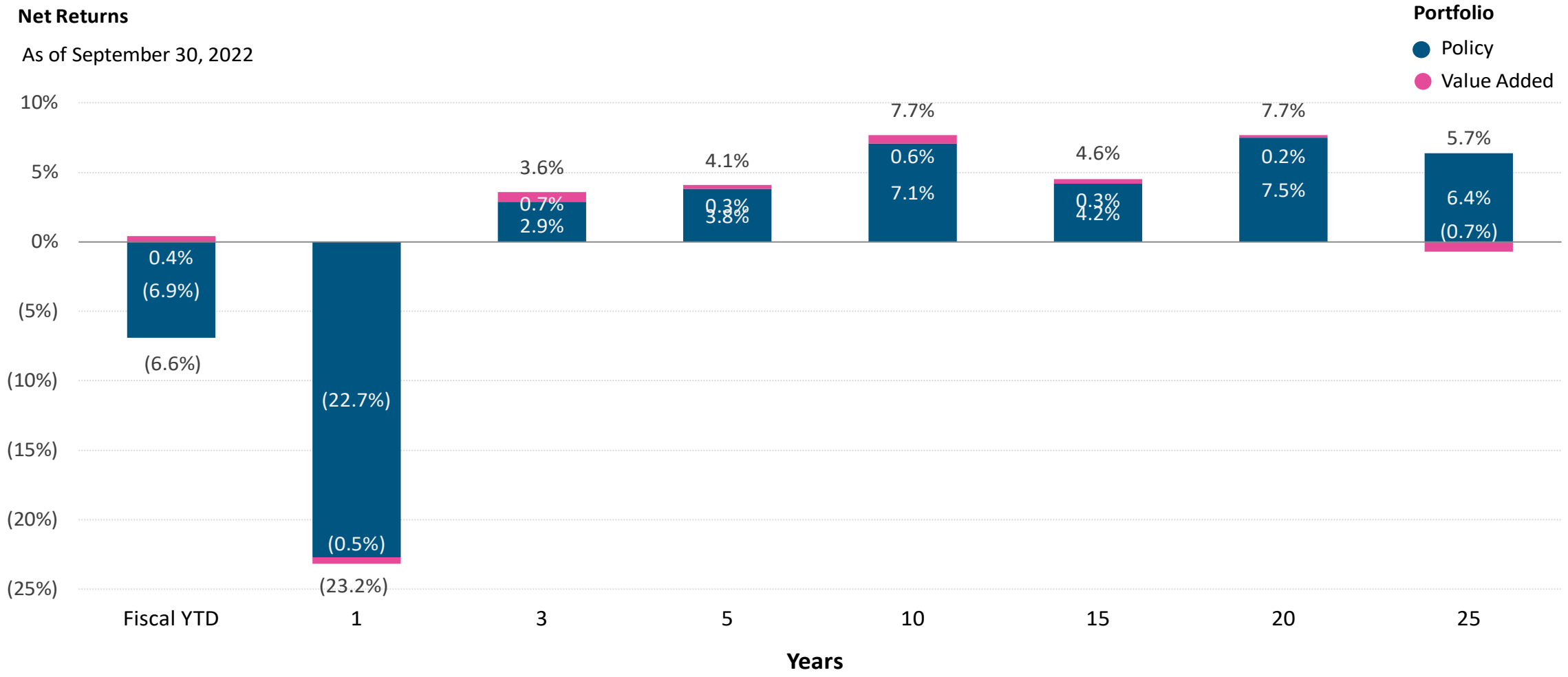
Pension Policy Benchmark

Asset Class	Policy Benchmark Component	Policy (%)	Allowable Ranges Min (%)	Allowable Ranges Max (%)
Public Equity	MSCI All Country World Index (ACWI) Investable Market Index (IMI) Tobacco and Fossil Fuel Free - Net Dividends	53.0	43.0	63.0
Total Fixed Income				
Core Fixed Income	Bloomberg Barclays 1-5 Year US Government/Credit Index	13.0	10.0	16.0
High Yield Fixed Income	Merrill Lynch High Yield Cash Pay Index Fossil Free	2.5	0.0	5.0
Emerging Market Fixed Income	JP Morgan Emerging Markets Bond Index Global Diversified FF	1.5	0.0	3.0
Private Assets				
Private Equity		12.0	7.0	17.0
Active Private Equity	Russell 3000 Index + 3%			
Passive Private Equity	Russell 3000 Tobacco and Fossil Fuel Free			
Absolute Return	HFRI Fund of Funds Composite	3.5	0.0	5.5
Real Estate	NCREIF ODCE Index	7.0	2.0	12.0
Real Assets	Actual Real Asset Portfolio Returns	4.0	0.0	8.0
Private Credit	75% Credit Suisse Leveraged Loan Total Return FF / 25% BofA/ML BB-B US High Yield Constrained Index FF + 1.5%	3.5	0.0	7.0
Cash	Bank of America 3-Month US Treasury Bill Index	0.0	0.0	5.0

Pension Attribution – Fiscal Year to Date

As of June 30, 2022	Contribution To Return	Portfolio Return	Benchmark Return	Allocation Attribution	Selection Attribution	Total Attribution
Public Equity	**(3.1)**	**(6.6)**	**(6.9)**	**0.1**	**0.2**	**0.3**
Fixed Income	**(0.3)**	**(1.8)**	**(2.2)**	**0.1**	**0.0**	**0.0**
Private Markets	**0.1**	**0.2**	**(1.2)**	**(0.1)**	**0.4**	**0.4**
Private Equity	0.0	0.0	(3.7)	0.0	0.4	0.4
Absolute Return	0.0	0.8	(0.7)	0.0	0.1	0.0
Real Estate	0.1	0.9	0.3	0.0	0.0	0.0
Real Assets	0.0	0.1	0.1	0.0	0.0	0.0
Private Credit	0.0	(0.7)	1.1	0.0	0.0	(0.1)
Cash	**0.0**	**0.3**	**0.0**	**0.3**	**0.0**	**0.3**
Total	**(3.4)**	**(3.4)**	**(4.3)**	**0.3**	**0.6**	**0.9**

Public Equity



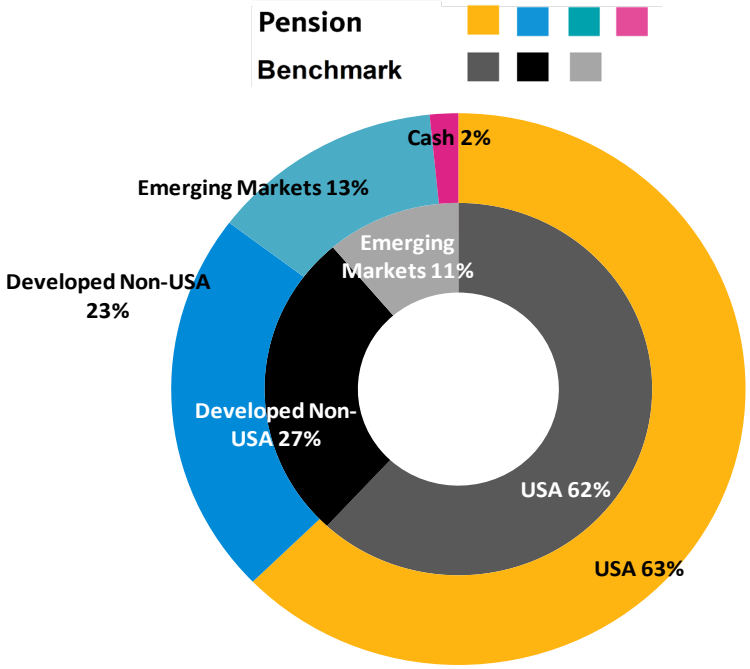
Public Equity

As of September 30, 2022 Net Returns (%)	Market Value ($M)	Weight (%)	Fiscal YTD 3 Months	Annualized Returns 1 Year	3 Year	5 Year	10 Year	15 Year	20 Year	25 Year
Public Equity	37,982	100	(6.6)	(23.2)	3.6	4.1	7.7	4.6	7.7	5.7
Policy Benchmark*			(6.9)	(22.7)	2.9	3.8	7.1	4.2	7.5	6.4
Value Added			0.4	(0.5)	0.7	0.3	0.6	0.3	0.2	(0.7)
Active	10,588	28	(6.3)	(25.8)	3.6	3.8	-	-	-	-
Passive	27,385	72	(6.7)	(22.1)	3.5	4.0	-	-	-	-

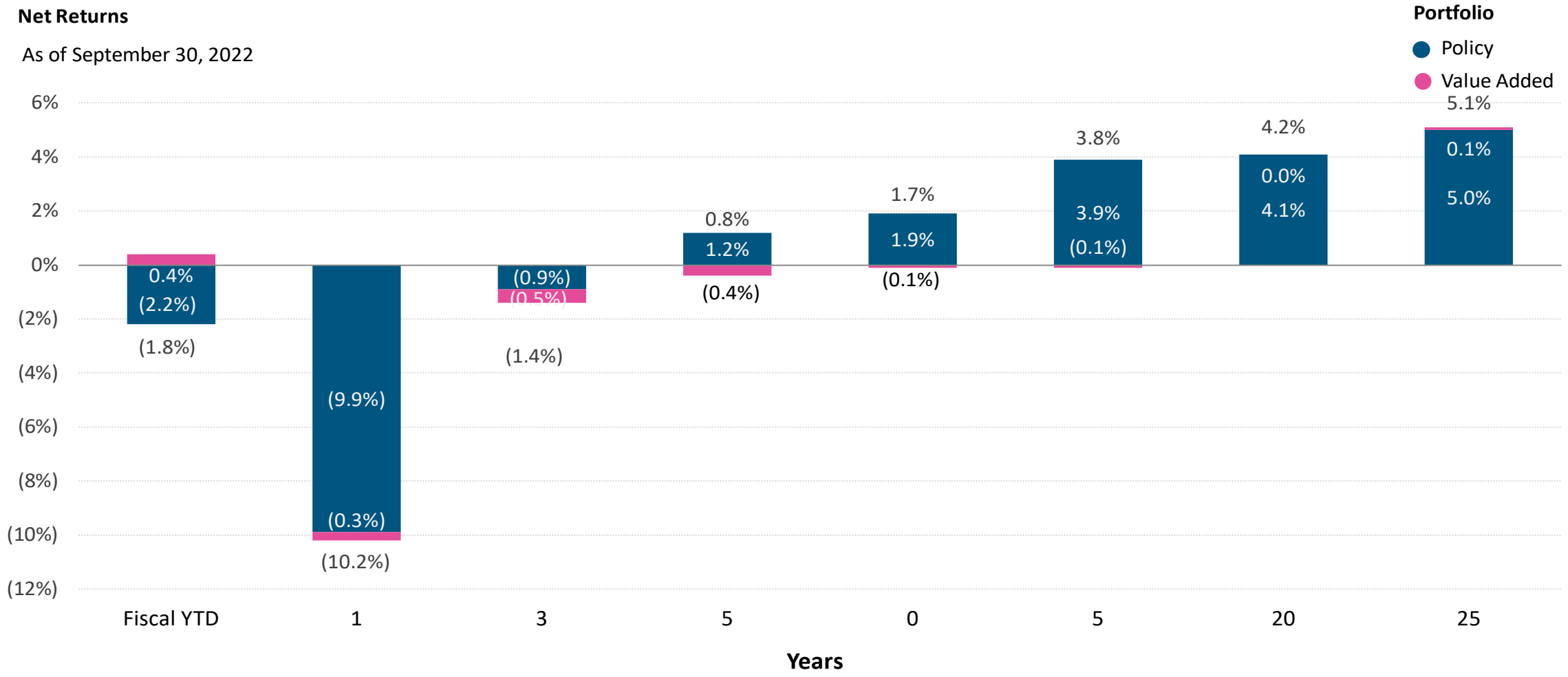
* From July 1, 2020 the public equity benchmark is the MSCI ACWI IMI Tobacco and Fossil Fuel Free Index.
From July 1, 2016 to June 30, 2020 the total public equity benchmark the MSCI ACWI IMI Tobacco Free Index.
Prior to July 1, 2016, the total public equity benchmark was an aggregate of benchmarks for underlying equity portfolios.

Active Managers	# of funds	Weight
Global Generalist	4	12.7%
USA	5	7.7%
Developed Non-USA	2	1.4%
Global Sector Specialist	1	1.2%
Emerging Markets	6	4.3%
	18	**27.3%**

Geographic Exposure



Fixed Income

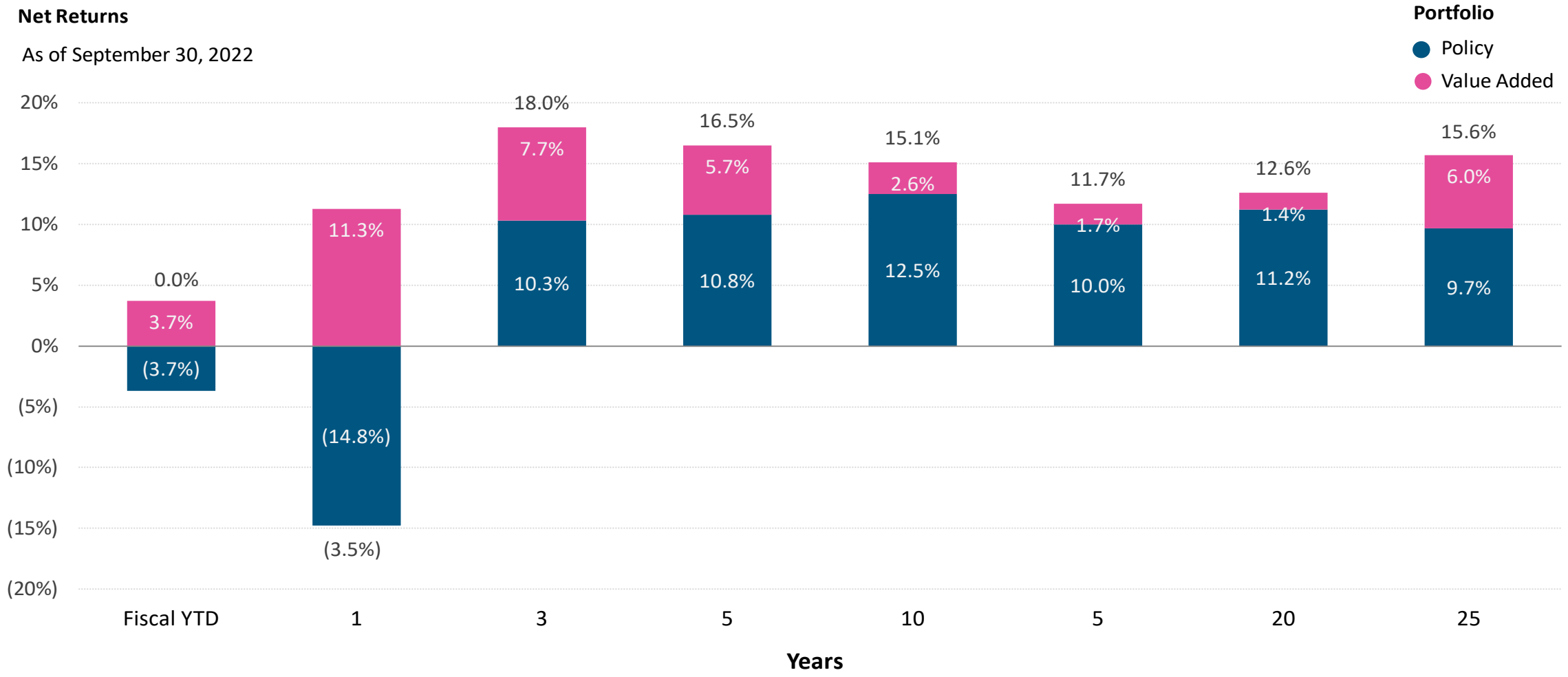


Fixed Income

As of September 30, 2022 Net Returns (%)	Market Value ($M)	Weight (%)	Fiscal YTD 3 Months	Annualized Returns 1 Year	3 Year	5 Year	10 Year	15 Year	20 Year	25 Year
Fixed Income	12,380	100	(1.8)	(10.2)	(1.4)	0.8	1.7	3.8	4.2	5.1
Policy Benchmark*			(2.2)	(9.9)	(0.9)	1.2	1.9	3.8	4.1	5.0
Value Added			0.4	(0.3)	(0.5)	(0.4)	(0.1)	-0.1	-	0.1
Core Fixed Income	9,090	73	(2.2)	(7.3)	(0.9)	1.1	1.8	3.4	3.8	4.8
Policy Benchmark			(2.2)	(7.3)	(0.3)	1.5	1.8	3.5	3.8	4.8
Value Added			-	-	(0.6)	(0.4)	-	0	-	-
High Yield	2,376	72	(0.5)	(13.8)	(0.6)	1.4	3.9	0.1	-	-
Policy Benchmark			(0.8)	(14.2)	(1.0)	1.2	3.7	5.5	-	-
Value Added			0.3	0.4	0.4	0.2	0.2	0	-	-
Emerging Market Debt	914	28	(4.9)	(24.1)	(7.1)	(2.6)	0.2	3.2	-	-
Policy Benchmark**			(4.6)	(24.3)	(7.2)	(2.6)	1.1	3.9	-	-
Value Added			(0.3)	0.2	0.1	-	(0.9)	-0.7	-	-

* Total fixed income policy benchmark is an aggregate of underlying portfolio benchmarks.
** Emerging Market Debt: Passive Since May 2017.

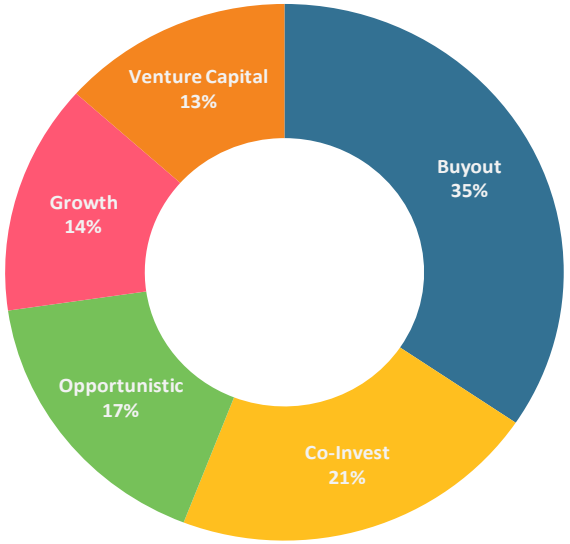
Private Equity



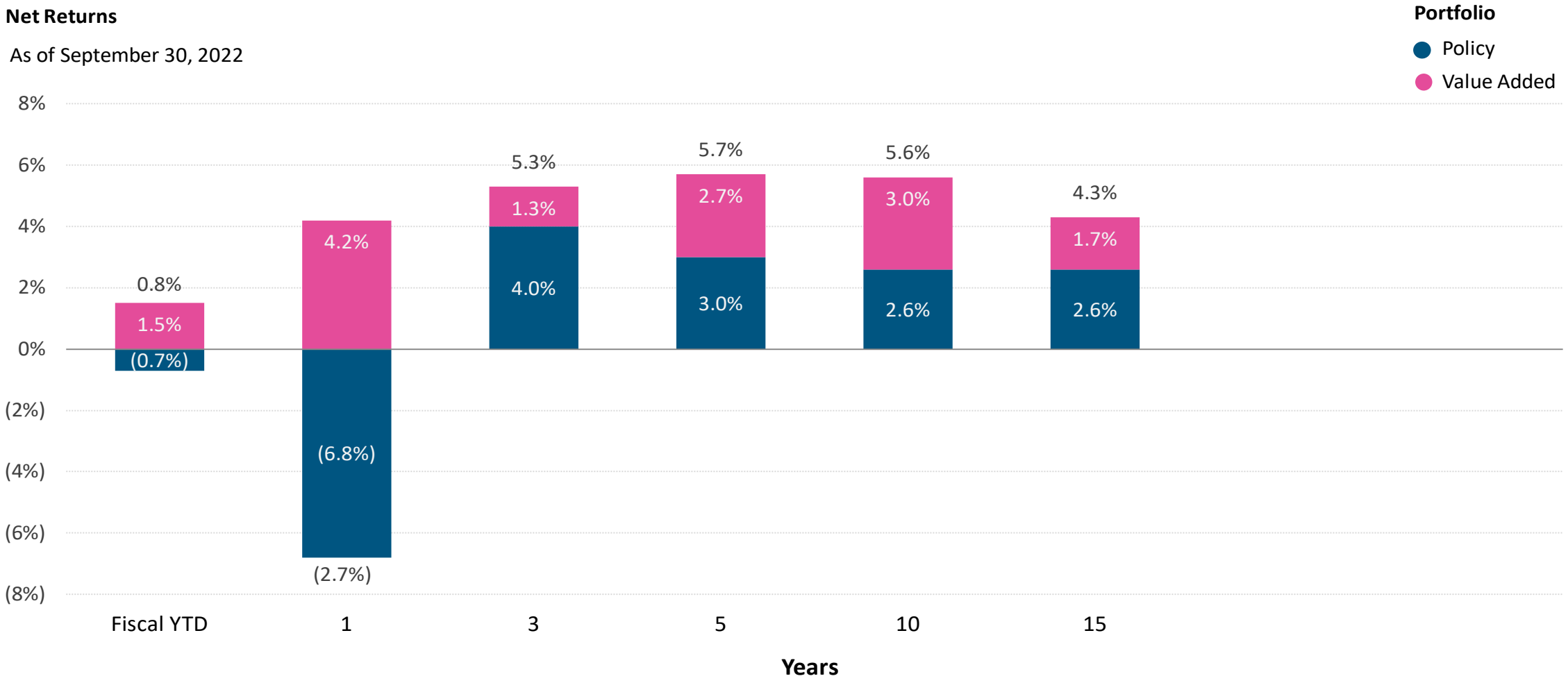
Private Equity

As of September 30, 2022 Net Returns (%)	Market Value ($M)	Weight (%)	Fiscal YTD 3 Months	1 Year	3 Year	5 Year	10 Year	15 Year	20 Year	25 Year
				Annualized Returns						
Active Private Equity	8,833	100	0.0	0.2	19.9	17.6	15.7	12.1	12.8	15.9
Policy Benchmark*			(3.7)	(14.8)	10.3	10.8	12.5	10	11.2	9.7
Value Added			3.7	15.0	9.6	6.8	3.2	2.1	1.6	6.2
Buyout	3,044	34	(0.3)	7.0	21.4	15.5	15.1	11.6	11.8	-
Co-Invest	1,890	21	0.4	(5.5)	27.1	27.5	31.9	-	-	-
Opportunistic	1,487	17	2.4	(2.9)	17.9	15.8	17.3	12.4	12.9	10.2
Growth	1,226	14	2.3	2.3	14.0	13.1	11.3	9.4	0.3	(3.0)
Venture Capital	1,183	13	(4.9)	0.4	20.5	19.9	16.9	12.2	15.9	-

* As of July 1, 2021, the Private Equity policy benchmark is the Russell 3000 Index +3%.
From July 1, 2020 to June 30, 2021, the Private Equity policy benchmark is the Russell 3000 Index +2.5%.
From July 1, 2019 to June 30, 2020, the Private Equity policy benchmark was the Russell 3000 Index +2.0%.
From July 1, 2017 to June 30, 2019, the Private Equity policy benchmark was the Russell 3000 Index +1.5%.
From March 2005 to June 2017, the Private Equity benchmark was the actual private equity return.
From January 2001 to February 2005, the Private Equity benchmark was Russell 3000 Index + 3% lagged one quarter.
Prior to that, it was the S&P 500 Index + 5% lagged by a quarter.



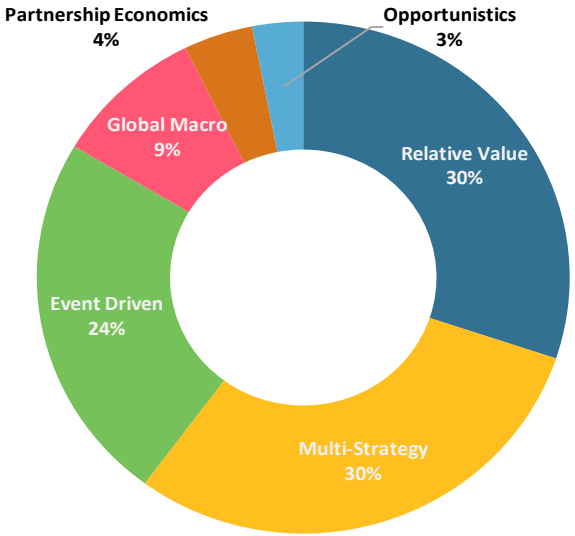
Absolute Return



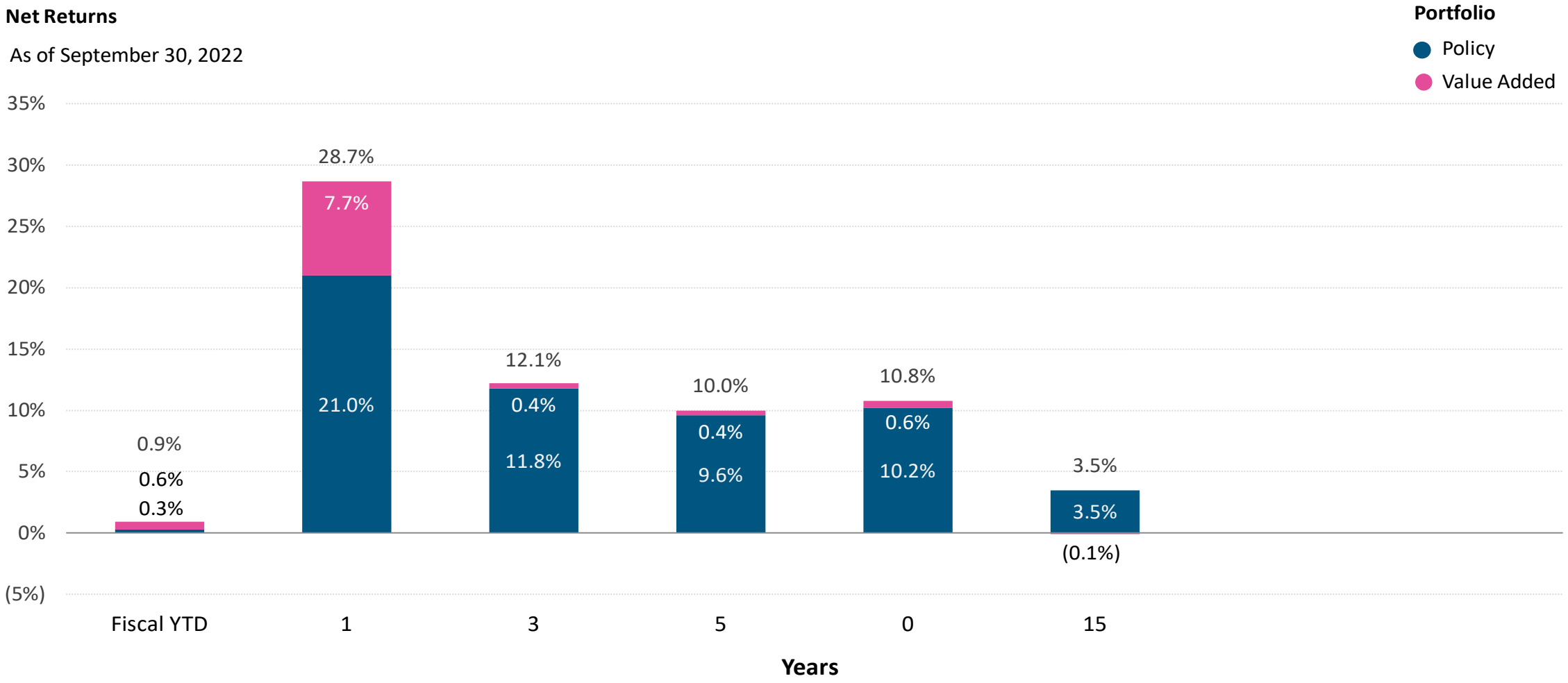
Absolute Return

As of September 30, 2022 Net Returns (%)	Market Value ($M)	Weight (%)	Fiscal YTD 3 Months	Annualized Returns 1 Year	3 Year	5 Year	10 Year	15 Year
Absolute Return	2,864	100	0.8	(2.7)	5.3	5.7	5.6	4.3
Policy Benchmark*			(0.7)	(6.8)	4.0	3.0	2.6	-2 re
Value Added			1.5	4.2	1.3	2.7	3.0	1.7
Relative Value	859	30	(2.1)	(0.2)	6.0	6.5	6.8	5.9
Multi-Strategy	856	30	3.2	(3.8)	(2.6)	1.0	-	0
Event Driven	668	23	1.5	(1.9)	12.7	10.4	8.5	6.5
Global Macro	261	9	4.3	(3.7)	(0.5)	0.6	0.5	0
Partnership Economics	120	4	(5.3)	(14.5)	73.0	78.1	-	0
Opportunistic	88	3	(1.1)	(3.1)	(9.7)	(1.4)	-	0
Fund of Funds	11	0	(0.7)	12.1	9.4	6.6	4.4	1.1

* As of July 1, 2017, the benchmark is HFRI Fund of Funds Composite.
From March 1, 2016 to June 1, 2017, the benchmark was the HFRX Absolute Return.
From April 1, 2009 to February 1, 2016, the benchmark was 50% HFRX Absolute Return/50% HFRX Market Directional.
Prior to that, benchmark was 1 Month T-Bill+4.5%.



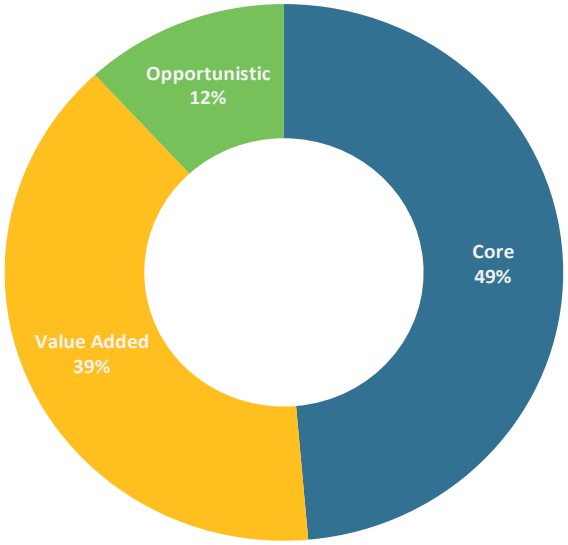
Real Estate


Net Returns
As of September 30, 2022
Portfolio
Policy
Value Added
35%
30%
25%
20%
15%
10%
5%
0%
(5%)
0.9%
0.6%
0.3%
28.7%
7.7%
21.0%
12.1%
0.4%
11.8%
10.0%
0.4%
9.6%
10.8%
0.6%
10.2%
3.5%
3.5%
(0.1%)
Fiscal YTD
1
3
5
0
15
Years

Real Estate

As of September 30, 2022 Net Returns (%)	Market Value ($M)	Weight (%)	Fiscal YTD 3 Months	Annualized Returns 1 Year	3 Year	5 Year	10 Year	15 Year
Real Estate	5,552	100	0.9	28.7	12.1	10.0	10.8	3.5
Policy Benchmark*			0.3	21.0	11.8	9.6	10.2	3.5
Value Added			0.6	7.7	0.4	0.4	0.6	-0.1
Core	2,696	49	1.7	30.0	16.1	12.7	12.0	-100
Value Added	2,194	40	0.5	30.4	9.3	7.8	9.1	-1.6
Opportunistic	656	12	(0.5)	19.7	6.8	7.1	8.4	-15.2

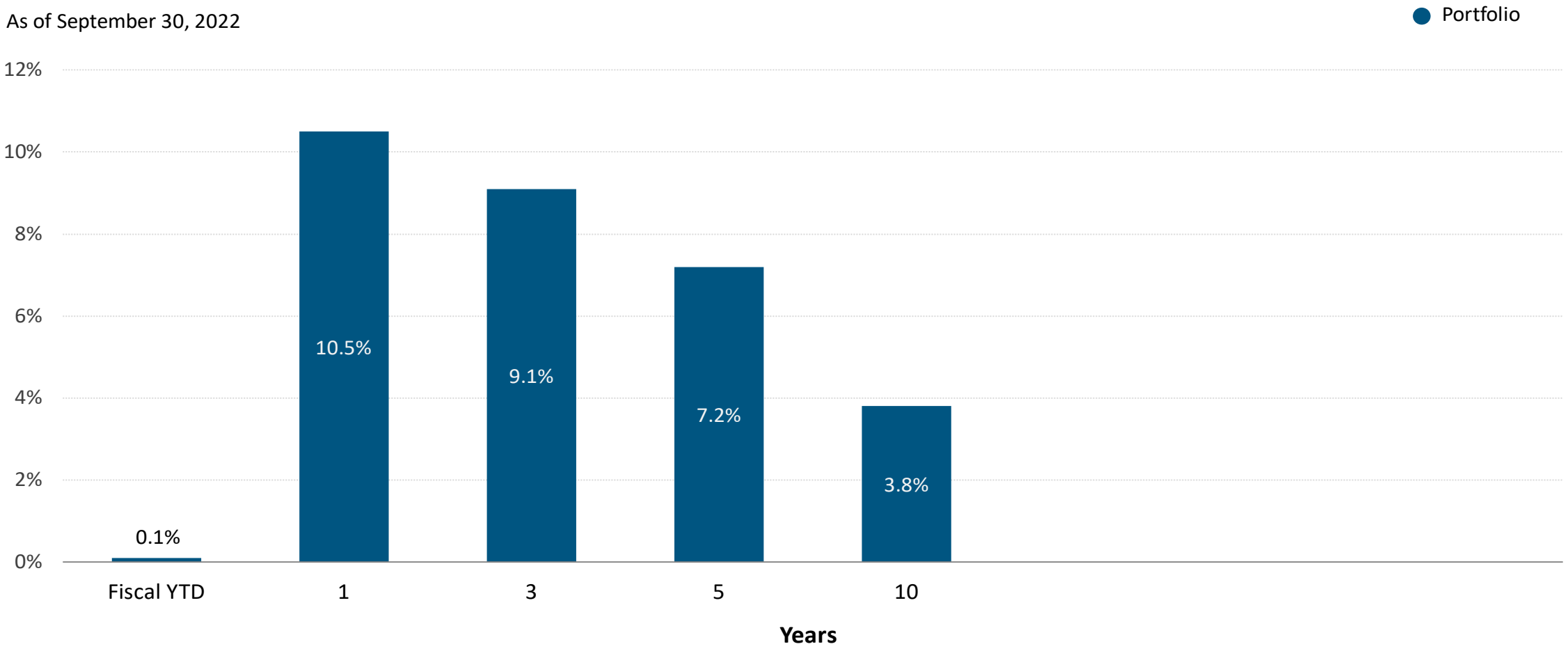
* As of July 1, 2020, the Real Estate policy benchmark is the NCREIF ODCE Index (unlagged 3 months).
From April 1, 2011 to June 30, 2020, the Real Estate policy benchmark was the NCREIF ODCE Index (lagged 3 months).



Real Assets

Net Returns

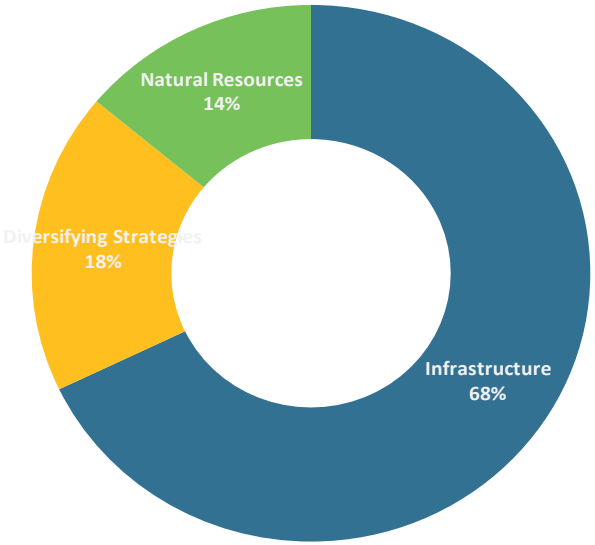
As of September 30, 2022



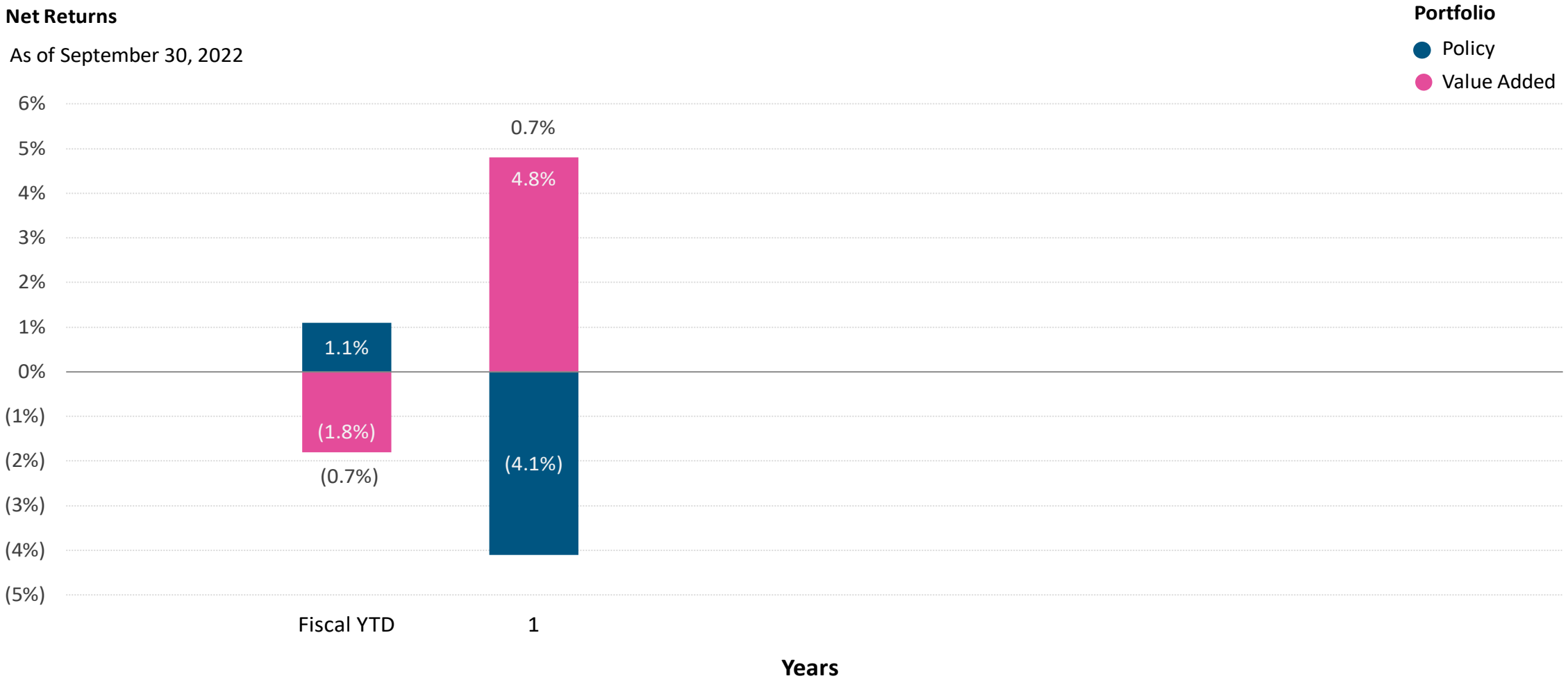
Real Assets

As of September 30, 2022 Net Returns (%)	Market Value ($M)	Weight (%)	Fiscal YTD 3 Months	Annualized Returns 1 Year	3 Year	5 Year	10 Year
Real Assets	3,483	100	0.1	10.5	9.1	7.2	3.8
Infrastructure	2,363	68	0.6	12.4	12.9	11.4	13.4
Diversifying Strategies	633	18	(0.6)	10.9	9.4	9.0	6.0
Natural Resources	485	14	(1.5)	1.6	(0.8)	(1.4)	(3.4)

* Inception date for Real Assets is April 1, 2010.
The Real Assets policy benchmark is itself, the Real Assets portfolio.



Private Credit



Private Credit

As of September 30, 2022 Net Returns (%)	Market Value ($M)	Weight (%)	Fiscal YTD 3 Months	1 Year
Private Credit	2,390	100	(0.7)	0.7
Policy Benchmark			1.1	(4.1)
Value Added			(1.8)	4.8

* Inception date for Private Credit is July 1, 2020.

Cash

As of September 30, 2022 Net Returns (%)	Market Value ($M)	Weight (%)	Fiscal YTD 3 Months	1 Year
Cash	4,264	100	0.3	1.1
Policy Benchmark*			0.5	0.6
Value Added			(0.1)	0.5

* As of July 1, 2020, the Cash policy benchmark is the Bank of America 3-Month US Treasury Bill Index. Table showing cash returns since establishment of the formal policy benchmark.

What Keeps Us Up at Night?

JUNE 2021	JUNE 2022	SEPTEMBER 2022
Climate Change	Market Volatility / Liquidity	**High Inflation**
Technology Companies	War / Russia / Ukraine	**Recession?**
Inflation	Interest Rates / Fed	
COVID “New Variants”	Inflation / Energy Prices	
Fed Action	Recession	
	Supply Chain Disruption	
	De-Globalization	
	Technology / Valuations	
	China / Geopolitics / US	
	COVID	
	Climate Change / ESG	

Risk 1.0 : Risk Measurement

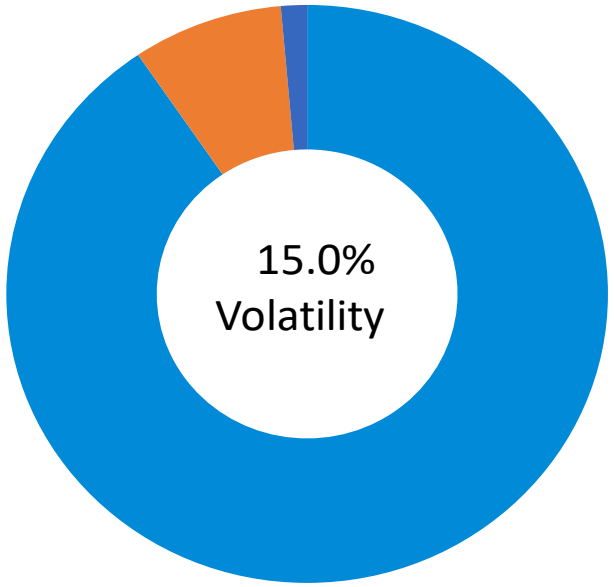
Portfolio and benchmark volatility decrease despite selloff as drawdown has been orderly and public equity allocation has decreased. Tracking error decreases as well as overweight to public equity has been reduced.

			Portfolio Risk (%)		Benchmark Risk (%)		Active Risk (%)	
Portfolio	Benchmark	Weight (%)	Standalone Volatility	QoQ Change	Standalone Volatility	QoQ Change	Tracking Error	QoQ Change
Pension	Policy (Blend)	100	15.0	(1.8)	15.2	(0.2)	1.2	(0.7)
Public Equity	MSCI ACWI IMI TF FF	49	19.2	(0.6)	19.4	(0.2)	0.7	(0.1)
Fixed Income	Policy (Blend)	16	4.0	(0.0)	3.7	0.3	0.6	(0.3)
Absolute Return	HFRI FOF	4	6.2	0.2	5.4	(0.4)	5.9	(0.3)
Private Equity	Russell 3000	11	28.2	(5.3)	22.3	(1.0)	10.4	(3.3)
Real Estate	NFI-ODCE	7	15.9	0.0	12.7	0.0	4.8	0.0
Real Assets	Real Assets	4	24.9	(0.8)	24.9	(0.8)	0.0	0.0
Private Credit	CS LL / ML HY BB-B	3	5.5	0.2	5.6	0.2	2.5	(0.3)
Cash	BofA 3mo Treasury Bill	5	0.1	0.1	0.2	0.0	0.2	0.0

Macroeconomic Risk Factors

Portfolio systematic risk generally dominated by “Economic Growth” risk. Within Economic Growth, “Consumption” dominates.

Retirement Plan
Portfolio Standalone Risk Factor Decomposition



- **Economic Growth 90%**
  Consumption 57
  Financials/Other 21
  Production 11
- **Residual 8%***
- **Other 2%**

Factor Name	Factor Description
Economic Growth	Proxied by broad, developed market equity index returns
Real Rates	Inflation-linked bond returns
Inflation	Return of long nominal bonds, short inflation-linked bonds portfolio
Credit	Return of long corporate bonds, short nominal bonds portfolio
Commodity	Weighted GSCI Commodity index returns
Emerging Markets (EM)	Equally weighted basket of EM Assets

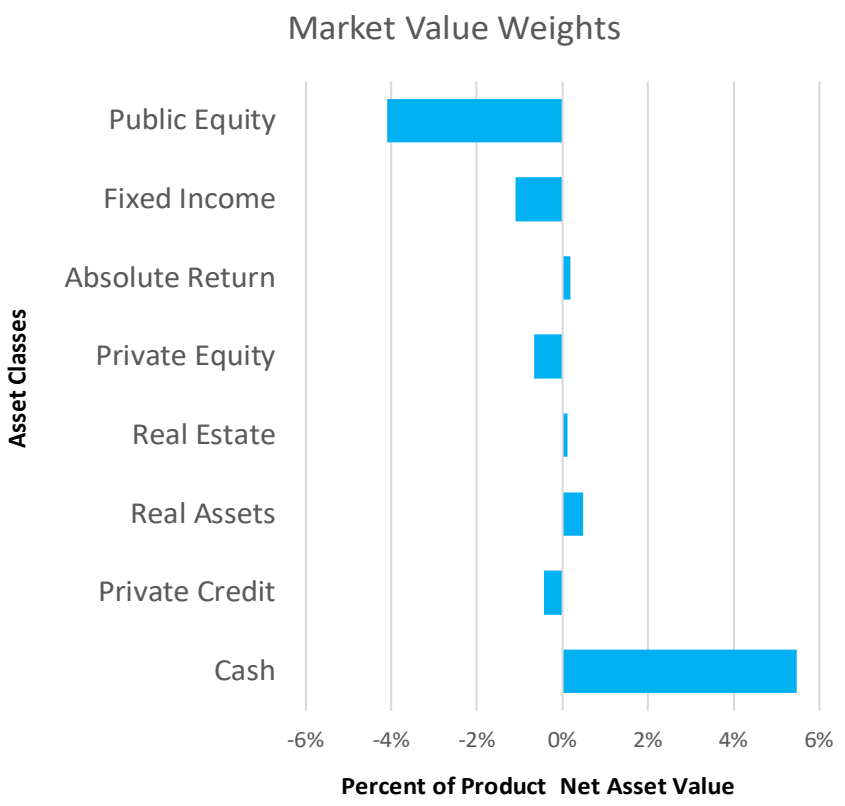
** Residual Risk is any risk which is not one of the six macro economic factors or FX risk*

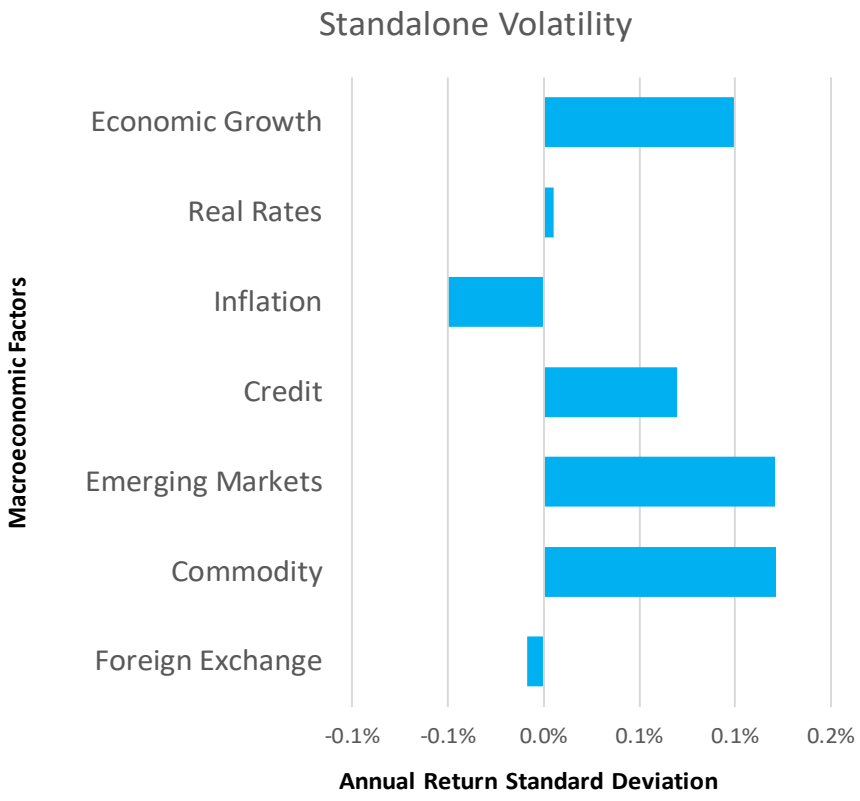
Risk 1.0: Two Views of Risk
Asset Classes versus Macroeconomic Factors

Economic growth risk has declined substantially since the prior quarter as the overweight to public equities has reduced from redemptions and market decline. Portfolio now underweight public equities and overweight cash.

Retirement Plan Active Exposures

Reference scale: active risk (tracking error) : 1.2%





Risk 2.0: Scenario Analysis

US Scenarios
- Federal Reserve Rate Regimes
- Fiscal Policy Stance
- Tax Reform

European Scenarios
- Brexit Negotiations
- Europe Fragmentation/Breakup
- Eurozone Populist Elections

Emerging Markets /Asia Scenarios
- US-China Trade Relations
- Abenomics- Helicopter Money
- North Korea Tensions

Global Scenarios
- Central Bank Policy
- Pandemic Recession
- Fall 2008 Crash

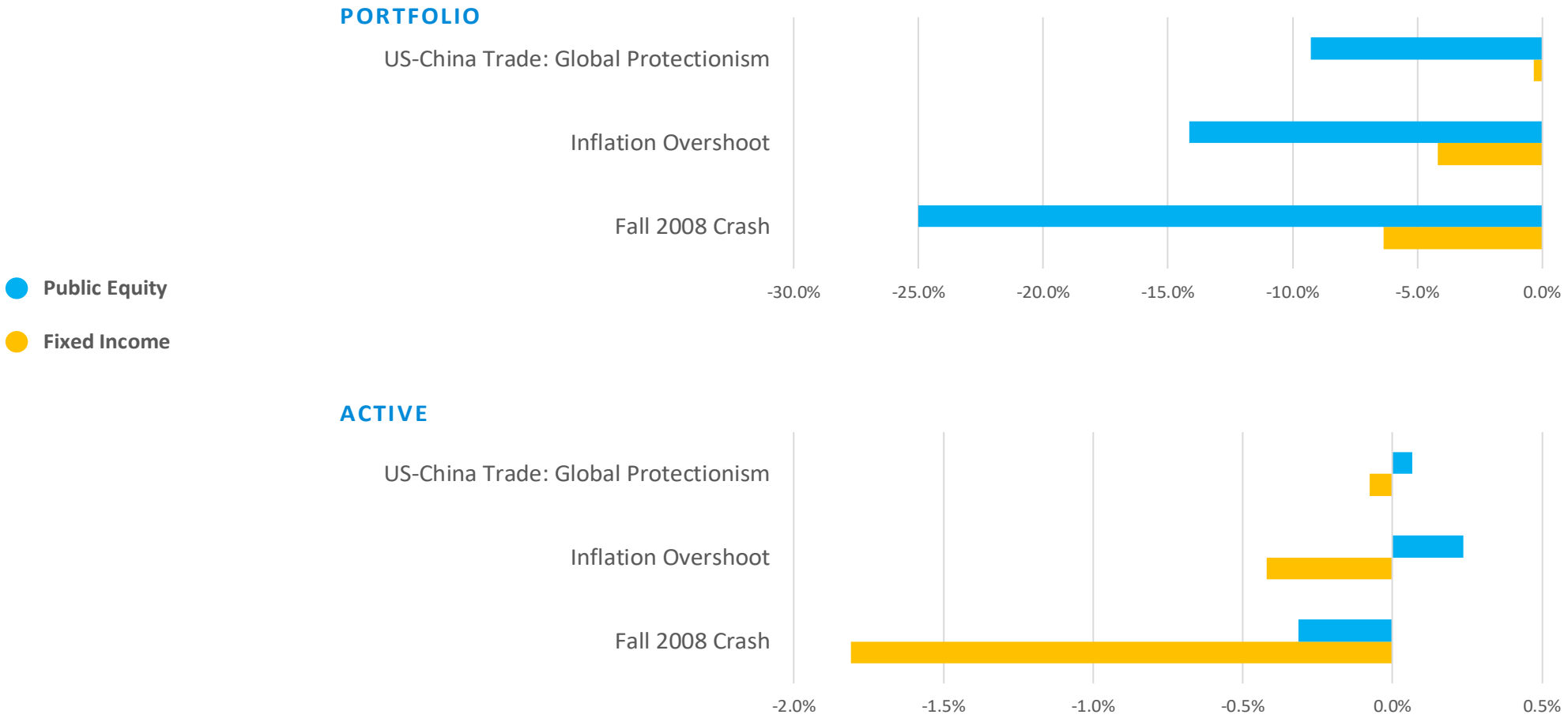
Interest Rate Scenarios
- US Rates Paradigm Shift
- Reflation – Deflation
- Inflation Overshoot

Market Technical Scenarios
- Volatility Regime Change
- Tech Calamity
- Value Reversal

Source: BlackRock

Risk 2.0: Scenario Analysis

Indicative stressed P&L for public markets investments



As of Sep 2022 Reference scale: volatility = 15.0%, tracking error 1.2%

Savings Program

Plan Highlights

Key plan observations and 1-year growth:

- Total assets: $28.7 billion (-$6.1 billion)
- Assets in Target Date Fund: $11.7 billion (-$2.0 billion)
- Assets in UC Savings: $3.8 billion (no change)

Performance review

- Target Date Fund Pathway vintages tracked their policy benchmark for quarter and one year
- UC Growth Company, UC Diversified International and Savings Funds outperformed over the long term (3, 5, 10 year)
- Index Funds tracked their benchmark tightly

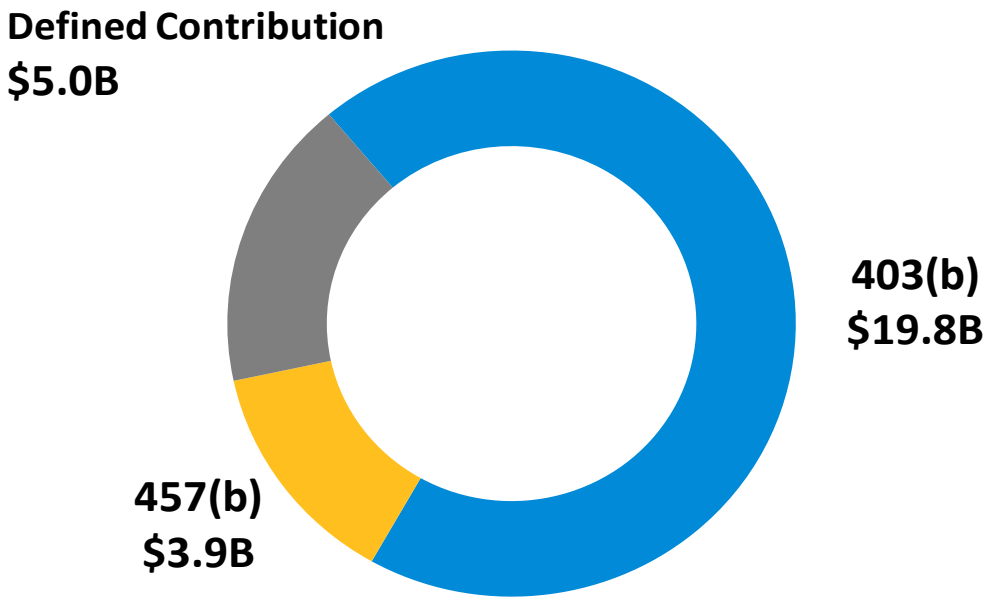
Product Enhancements

- 10% increase in equity allocation of Pathway started 6/30/22; implemented over the coming year in 4 tranches
- Sold Fossil Fuel names from all UCRSP funds as of 6/30/22, selling $1.15 billion in assets
- Deferred Lifetime Income launched, and second window successfully executed
    - Won P&I Innovation Award for QLAC implementation and communication
- Launched UC Global Equity ex Fossil Fuel Fund, assets at $11 million as of 9/30/22

UC Retirement Savings

As of September 30, 2022

3 PLANS $28.7B



INVESTMENT STRUCTURE

TARGET DATE FUND $11.7B	13 CORE OPTIONS $15.1B	BROKERAGE WINDOW $1.9B
TIER I	TIER II	TIER III

0.05% INVESTMENT MANAGEMENT FEE

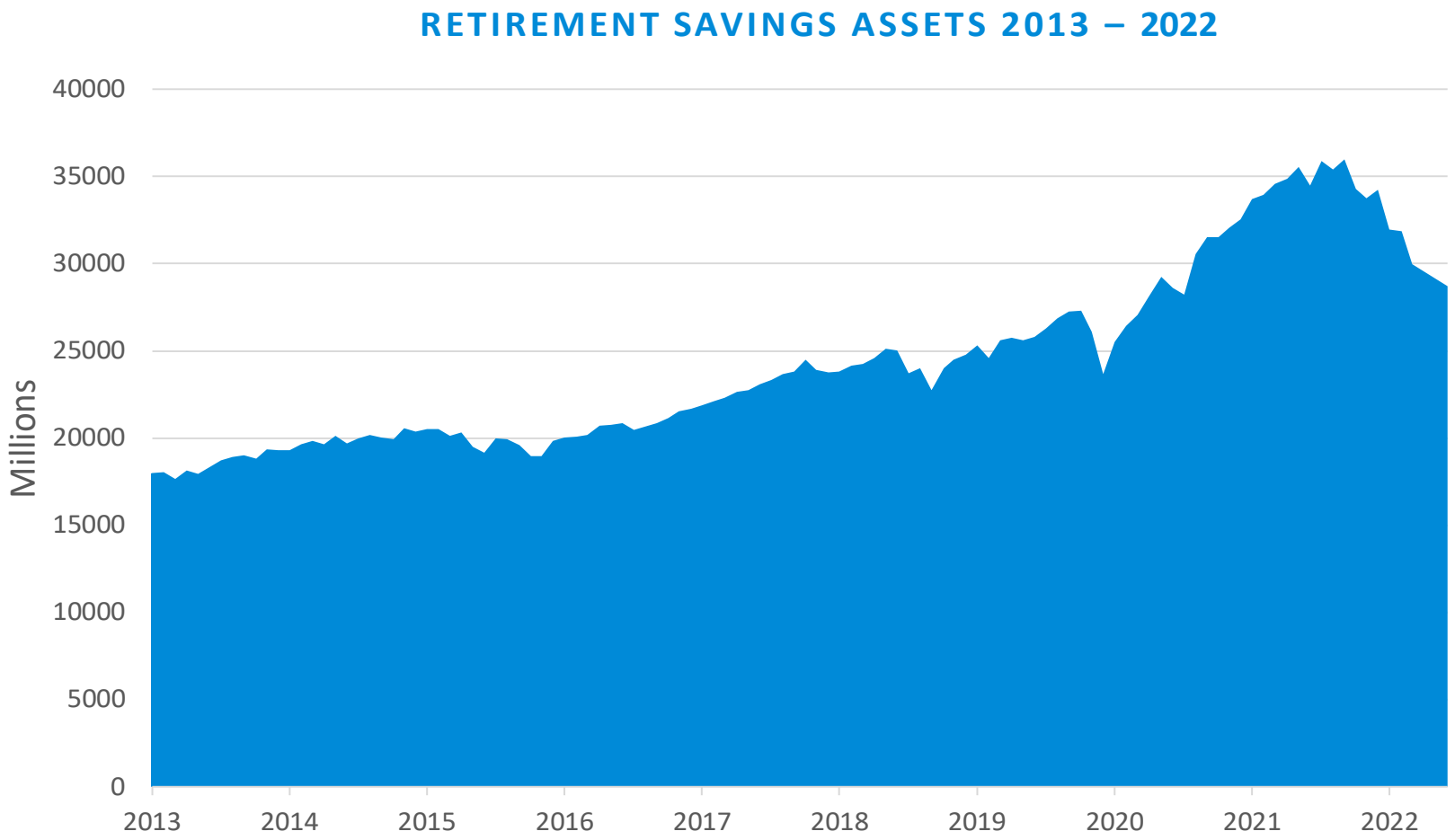
Highlights

As of September 30, 2022

	2014	2022
Participants	301,000	320,000
Assets	$19.8B	$28.7B
Default	UC Savings Fund	UC Pathway
Target Date Assets	$3.1B	$11.7B
Investment Choices	75	14
Management Fee	0.14%	0.05%
Management Fee	$26M	$14M

UC Retirement Savings

$28.7 Billion in Assets as of September 30, 2022



7 YEAR EVOLUTION

2022

Moved UCRSP Fossil Fuel Free

2021

Launched Deferred Lifetime Income

Launched UC Global ex Fossil Fuel Fund

2020

Moved 4 fixed income funds to passive

2019

Launched of Pathway 2065

2018

3rd Party manager for Pathway

2017

White labeled Funds

Moved to Institutional Vehicles

2015

Reduced funds from 64 to 16

Investment Options at a Glance

TARGET DATE FUNDS - $11.7 billion
UC Pathway Funds

UC Pathway Income Fund	UC Pathway Fund 2035	UC Pathway Fund 2055
UC Pathway Fund 2020	UC Pathway Fund 2040	UC Pathway Fund 2060
UC Pathway Fund 2025	UC Pathway Fund 2045	UC Pathway Fund 2065
UC Pathway Fund 2030	UC Pathway Fund 2050	

CORE FUNDS - $15.1 billion
Bond and Stock Investments

Bond Investments	**Domestic Stock**	**Foreign Stock**
Short-Term	*Large Cap*	*Developed Markets*
UC Savings Fund	UC Growth Company Fund	UC International Equity Index Fund
		UC Diversified International Fund
Intermediate-Term	*Small Cap*	
UC Bond Fund	UC Domestic Small Cap Equity Fund	*Emerging Markets*
		UC Emerging Markets Equity Fund
Inflation-Protected	*Broad Cap*	
UC Short Term TIPS Fund	UC Domestic Equity Index Fund	*Global Markets*
UC TIPS Fund		UC Global Equity Fund
		Specialty Stock
		UC Real Estate Fund
		UC Social Equity Fund

BROKERAGE WINDOW - $1.9 billion
Fidelity BROKERAGELINK®

Core Funds Assets

CORE FUNDS - $15.1 Billion

Bond and Stock Investments

Bond Investments - $5,350

Short-Term

UC Savings Fund - $3,756

Intermediate-Term

UC Bond Fund - $1,113

Inflation-Protected

UC Short Term TIPS Fund - $155

UC TIPS Fund - $326

Domestic Stock - $7,741

Large Cap

UC Growth Company Fund - $1,624

Small Cap

UC Domestic Small Cap Equity Fund - $509

Broad Cap

UC Domestic Equity Index Fund - $5,608

Foreign/Global Stock - $1,139

Developed Markets

UC International Equity Index Fund - $811

UC Diversified International Fund - $141

Emerging Markets

UC Emerging Markets Equity Fund - $187

Specialty Stock - $842

UC Real Estate Fund - $262

UC Social Equity Fund - $569

UC Global Equity ex Fossil Fuel Fund – 11

Target Date Funds (Pathway) Performance

Three-month performance – June 30, 2022 to September 30, 2022

Net of fee returns (%)

	Pathway Income	Pathway 2020	Pathway 2025	Pathway 2030	Pathway 2035	Pathway 2040	Pathway 2045	Pathway 2050	Pathway 2055	Pathway 2060	Pathway 2065
Fund Return	-4.58	-4.90	-5.90	-6.30	-6.53	-6.77	-6.82	-6.85	-6.85	-6.85	-6.85
Policy Benchmark Return	-4.43	-4.79	-5.87	-6.28	-6.50	-6.74	-6.80	-6.84	-6.84	-6.84	-6.84
Value Added	**-0.15**	**-0.11**	**-0.03**	**-0.02**	**-0.03**	**-0.03**	**-0.02**	**-0.01**	**-0.01**	**-0.01**	**-0.01**

One-year performance

Net of fee returns (%) - 9/30/2021-9/30/2022

	Pathway Income	Pathway 2020	Pathway 2025	Pathway 2030	Pathway 2035	Pathway 2040	Pathway 2045	Pathway 2050	Pathway 2055	Pathway 2060	Pathway 2065
Fund Return	-11.40	-12.83	-16.95	-19.33	-20.18	-20.84	-21.31	-21.72	-21.72	-21.72	-21.72
Policy Benchmark Return	-11.42	-12.93	-17.18	-19.56	-20.38	-20.98	-21.45	-21.86	-21.86	-21.86	-21.86
Value Added	**0.02**	**0.10**	**0.23**	**0.23**	**0.20**	**0.14**	**0.14**	**0.14**	**0.14**	**0.14**	**0.14**

Target Date Funds (Pathway) Performance

Three-year performance

Net of fee returns (%)

	Pathway Income	Pathway 2020	Pathway 2025	Pathway 2030	Pathway 2035	Pathway 2040	Pathway 2045	Pathway 2050	Pathway 2055	Pathway 2060	Pathway 2065
Fund Return	1.55	2.27	2.03	2.00	2.21	2.46	2.72	2.82	2.82	2.82	n/a
Policy Benchmark Return	1.64	2.40	2.09	2.02	2.23	2.48	2.72	2.82	2.82	2.82	n/a
Value Added	-0.09	-0.13	-0.06	-0.02	-0.02	-0.02	0.00	0.00	0.00	0.00	**n/a**

Five-year performance

Net of fee returns (%)

	Pathway Income	Pathway 2020	Pathway 2025	Pathway 2030	Pathway 2035	Pathway 2040	Pathway 2045	Pathway 2050	Pathway 2055	Pathway 2060	Pathway 2065
Fund Return	2.40	3.90	4.24	4.62	5.04	5.47	5.89	6.27	6.52	6.71	n/a
Policy Benchmark Return	2.27	3.81	4.16	4.55	4.98	5.41	5.84	6.21	6.45	6.64	n/a
Value Added	0.13	0.09	0.08	0.07	0.06	0.06	0.05	0.06	0.07	0.07	**n/a**

Core Funds Performance – Equities

			Annualized Total Return (%)				
US Large Equity	**Market Value ($M)**	**% of Program**	**3 Months**	**One Year**	**Three Year**	**Five Year**	**Ten Year**
UC Domestic Equity Index Fund	$5,608	19.54%	-4.72	-17.90	7.65	8.78	11.52
Russell 3000 ex Fossil Fuels ex Tobacco			-4.75	-17.97	7.58	8.64	11.40
Value Added			0.03	0.07	0.07	0.14	0.12
UC Social Index Fund	$569	1.98%	-5.13	-19.93	7.81	9.42	12.71
FTSE4Good US Select Index			-5.15	-20.02	7.80	9.43	12.78
Value Added			0.02	0.09	0.01	-0.01	-0.07
US Small/Mid Cap Equity							
UC Domestic Small Cap Index Fund	$509	1.77%	-2.26	-23.54	4.48	4.03	8.88
Russell 2000 ex Fossil Fuels ex Tobacco			-2.37	-23.68	4.22	3.77	8.73
Value Added			0.11	0.14	0.26	0.26	0.15
Global/World ex-US Equity							
UC International Equity Index Fund	$811	2.82%	-9.51	-25.48	-1.21	-0.26	3.85
MSCI World ex-US IMI ex Fossil Fuels ex Tobacco			-9.51	-25.41	-1.40	-0.56	3.54
Value Added			0.00	-0.07	0.19	0.30	0.31

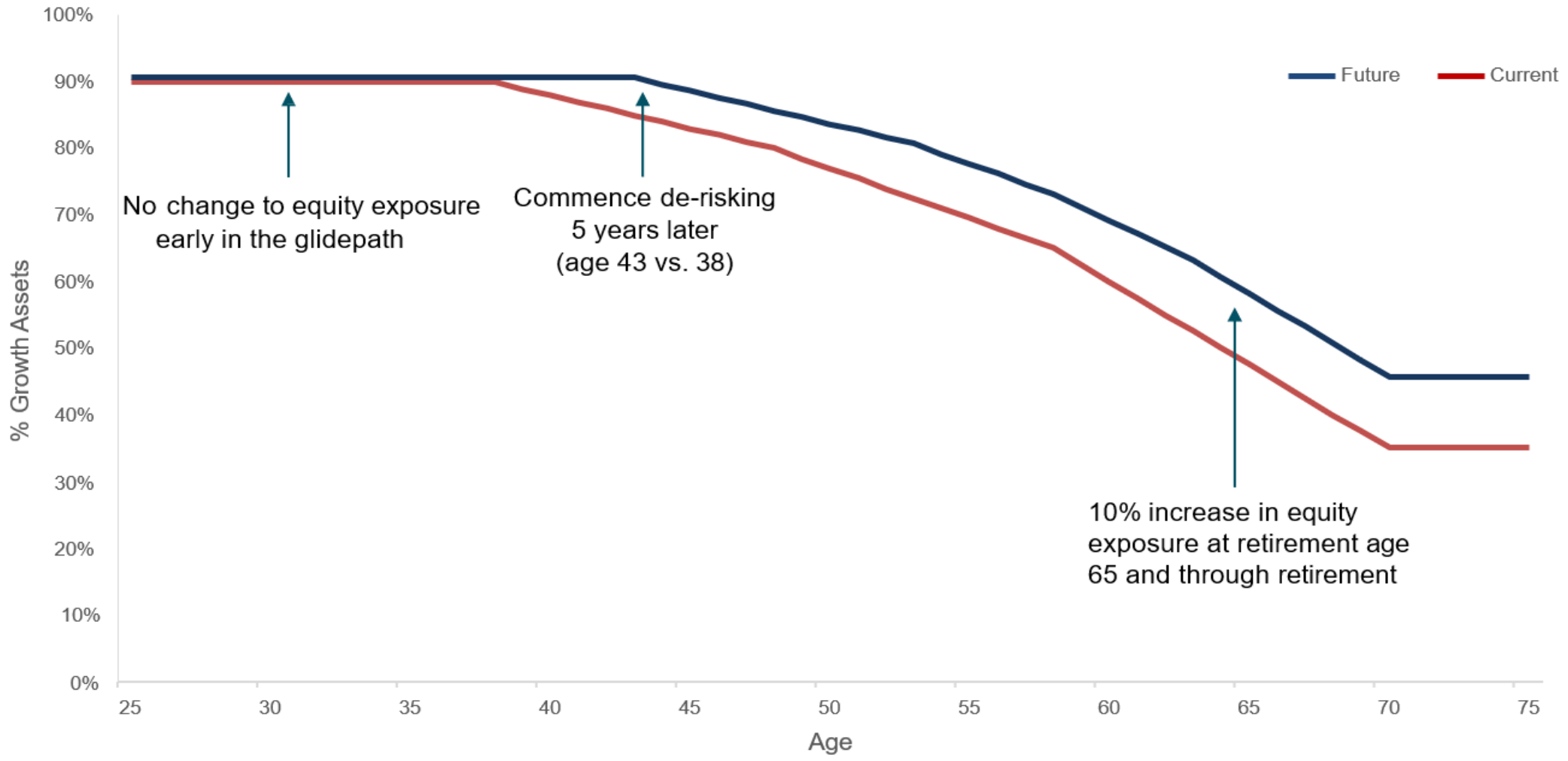
Core Funds Performance – Equities

			Annualized Total Return (%)				
Growth Large Equity	**Market Value ($M)**	**% of Program**	**3 Months**	**One Year**	**Three Year**	**Five Year**	**Ten Year**
UC Growth Company Fund	$1,624	5.66%	-2.56	-30.70	15.76	14.05	15.86
Russell 3000 Growth			-3.37	-23.01	10.16	11.57	13.36
Value Added			0.81	-7.69	5.60	2.48	2.50
World ex-US Equity							
UC Diversified Intl. Fund	$141	0.49%	-8.68	-30.45	-0.08	0.72	4.89
MSCI EAFE			-9.36	-25.13	-1.83	-0.84	3.75
Value Added			0.68	-5.32	1.75	1.56	1.14
UC Emerging Markets Fund	$187	0.65%	-11.29	-26.99	-2.71	-2.25	0.86
MSCI Emerging Markets IMI ex Fossil Fuels ex Tobacco			-11.57	-28.11	-2.07	-1.81	1.05
Value Added			0.28	1.12	-0.64	-0.44	-0.19
Global Equity							
UC Global Equity Fund	$11	0.04%	-6.83	-22.24	-	-	-
MSCI ACWI IMI ex Fossil Fuels ex Tobacco			-6.91	-22.70	-	-	-
Value Added			0.08	0.46	-	-	-
Real Estate							
UC Real Estate Fund	$262	0.91%	-9.94	-16.49	-1.88	2.70	6.05
MSCI US REIT			-9.96	-16.56	-2.00	2.59	6.02
Value Added			0.02	0.07	0.12	0.11	0.03

Core Funds Performance – Fixed Income

			Annualized Total Return (%)				
Capital Preservation	**Market Value ($M)**	**% of Program**	**3 Months**	**One Year**	**Three Year**	**Five Year**	**Ten Year**
UC Savings Fund	$3,756	13.08%	0.16	0.60	0.88	1.18	1.17
Two-Year U.S. Treasury Notes Income Return			0.78	1.73	0.92	1.45	1.03
Value Added			-0.62	-1.13	-0.04	-0.27	0.14
Inflation Sensitive							
UC Short Term TIPS Fund	$155	0.54%	-2.39	-1.46	2.64	2.50	
Barclays 1-3 Year U.S. TIPS Index			-2.44	-1.56	2.53	2.34	
Value Added			0.05	0.10	0.11	0.16	
UC TIPS Fund	$326	1.13%	-5.55	-11.48	0.79	2.00	1.16
Barclays US TIPS Index			-5.14	-11.57	0.79	1.95	0.98
Value Added			-0.41	0.09	0.00	0.05	0.18
Diversified Fixed Income							
UC Bond Fund	$1,113	3.88%	-4.90	-14.46	-3.35	-0.27	1.07
Bloomberg MSCI US Aggregate ex Fossil Fuels ex Tobacco			-4.75	-14.59	-3.25	-0.27	0.89
Value Added			-0.15	0.13	-0.10	0.00	0.18

Pathway Glidepath: adding $1 billion in equities over the next year



Moved Savings Program to Fossil Fuel Free as of 6/30/22

Trading: $1.15 billion of fossil fuel equites and fixed income sold

- $700 million in US equities, $420 million in international equities and $30 million in US high yield

Communication: Successful collaboration with Fidelity HR team

- Over 300,000 emails and 20,000 letters sent to participants
- FAQs, updated website pages on myucretirement.com and netbenefits
- Dozens of socialization initiatives across the UC: Regents, UCRS Advisory Board, OGC, Academic Senate, RSPAC
- 24 new fund descriptions went live online on July 1, 2022
- 24 new fact sheets to be posted with the 3rd quarter rollout
- Working on an impact disclosure factsheet to highlight the carbon footprint reduction of the fossil fuel free portfolio

Operations and Legal: Successful operational implementation without any operating errors

- Obtained outside legal opinion around fiduciary risk from Groom Law
- Created 7 new benchmarks with Bloomberg, FTSE Russell and MSCI
- Close to 10 contracts needed to get legally vetted and executed

Launched Global Equity ex Fossil Fuels Fund

Assets: $11 million

Exposure: US, Developed and Emerging Market Equities (Large, Mid and Small Cap)

Benchmark: MSCI ACWI IMI ex Fossil Fuel ex Tobacco

Constituents: 8,300 companies covering 99% of global market cap

Implementation Approach: Indexed

Manger: SSGA

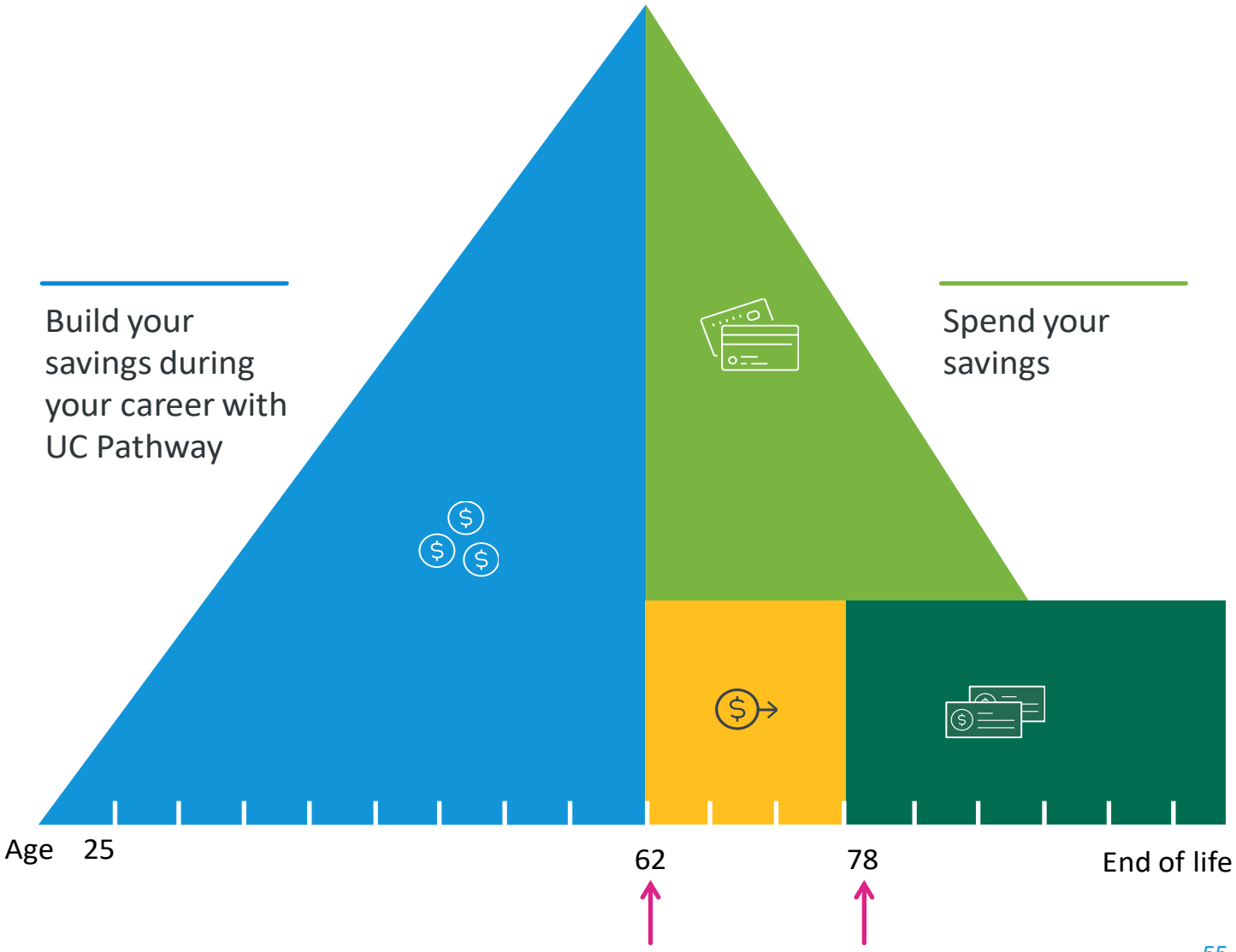
Launch Date: 3/31/2021

Cost: 0.01%

Implemented Deferred Lifetime Income

- $8 million in total QLACs written
- 2nd election window was open September 2022
- Held live webinar
- Sent educational brochure to over 18,000 participants
- Created and launched custom educational web module and calculator
- Created and launched custom election site

Introducing the Pathway Lifetime Income Option

Imbed a lifetime income stream

- Option to purchase Lifetime Income option (QLAC) using up to 25% of account balance introduced at age 62 for all participants including active, retired and former employees
- Payments start at age 78 and continue through participant's lifetime
- Includes pre-selected features such as spousal option, death benefit, Cost-of-Living Adjustment