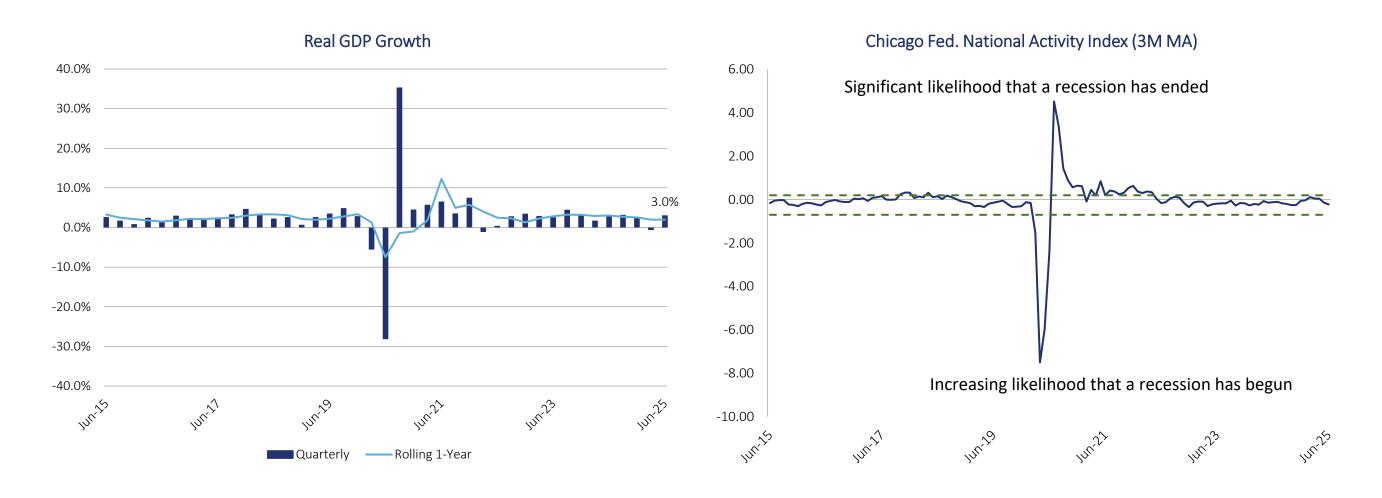
#### Wilshire

# California Public Employees' Retirement System

Performance Review

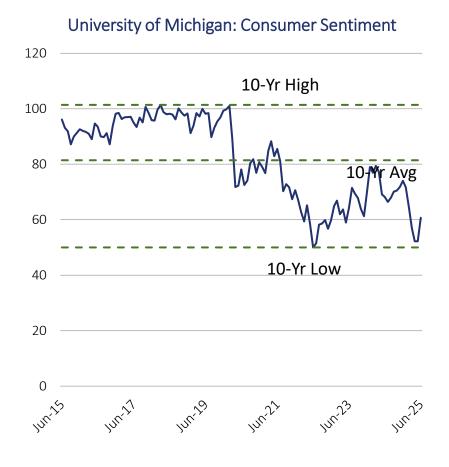
Second Quarter 2025

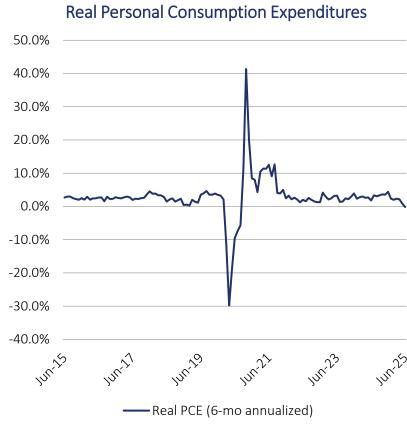
#### **Economic Growth**



Data Source: Bloomberg

## Consumer Activity

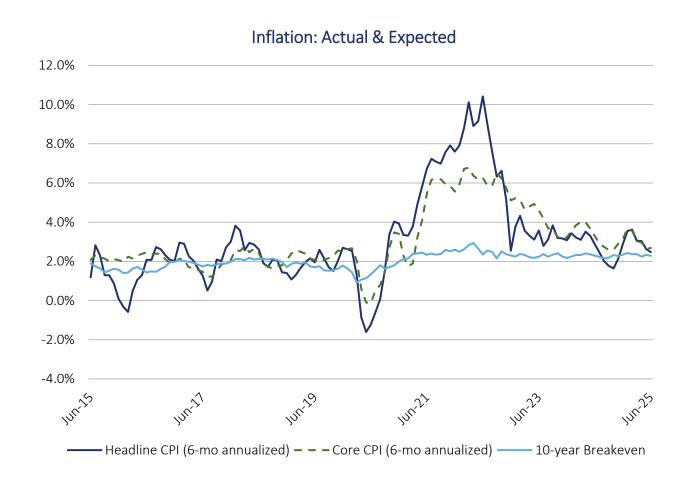


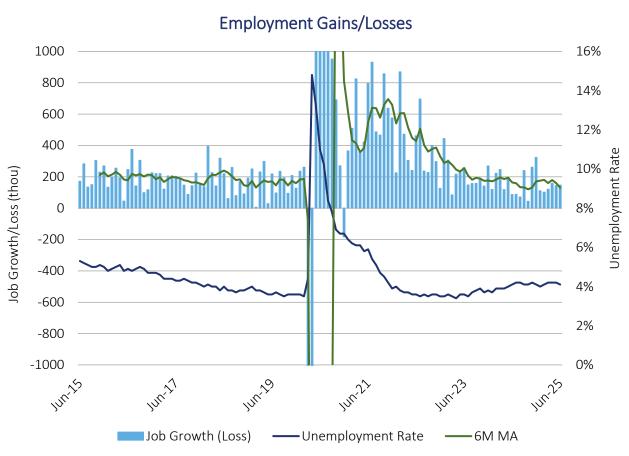




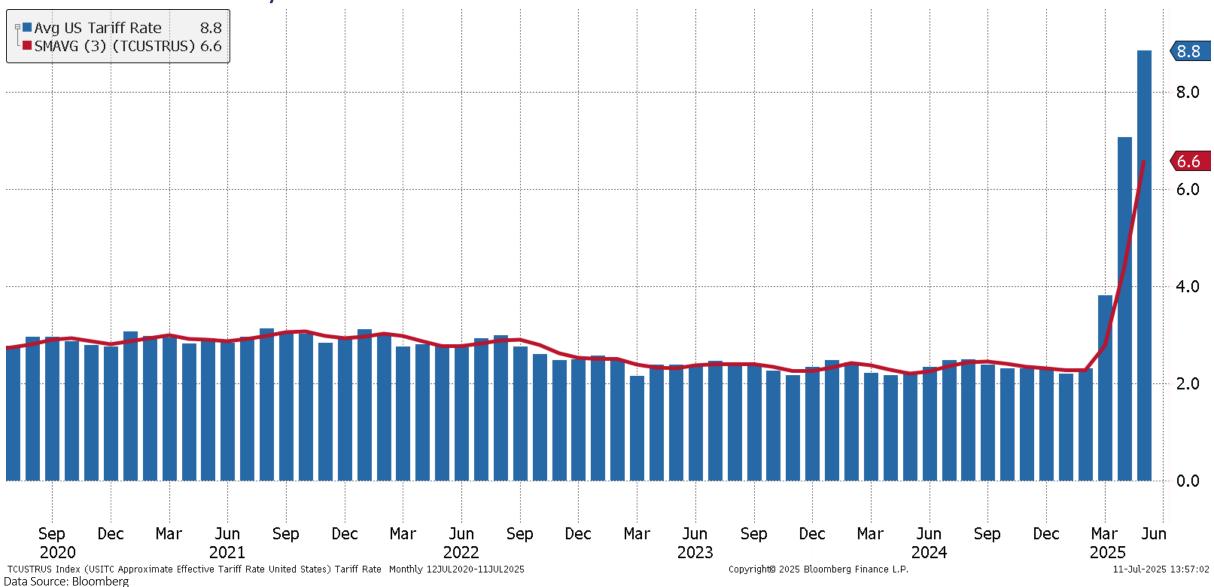
Data Source: Bloomberg

## Inflation and Employment

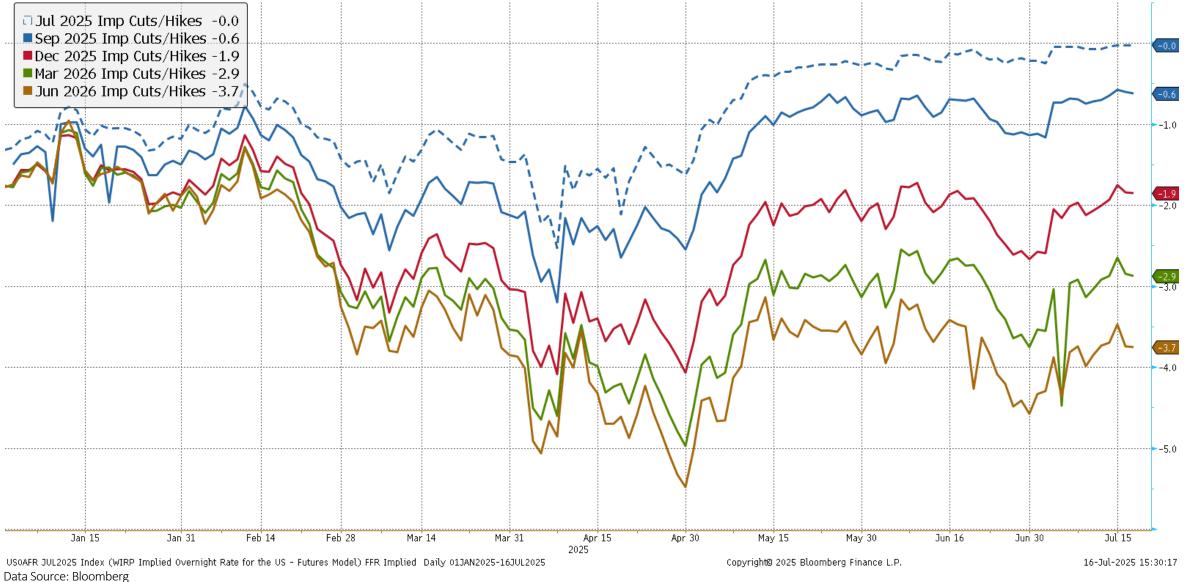




Data Source: Bloomberg



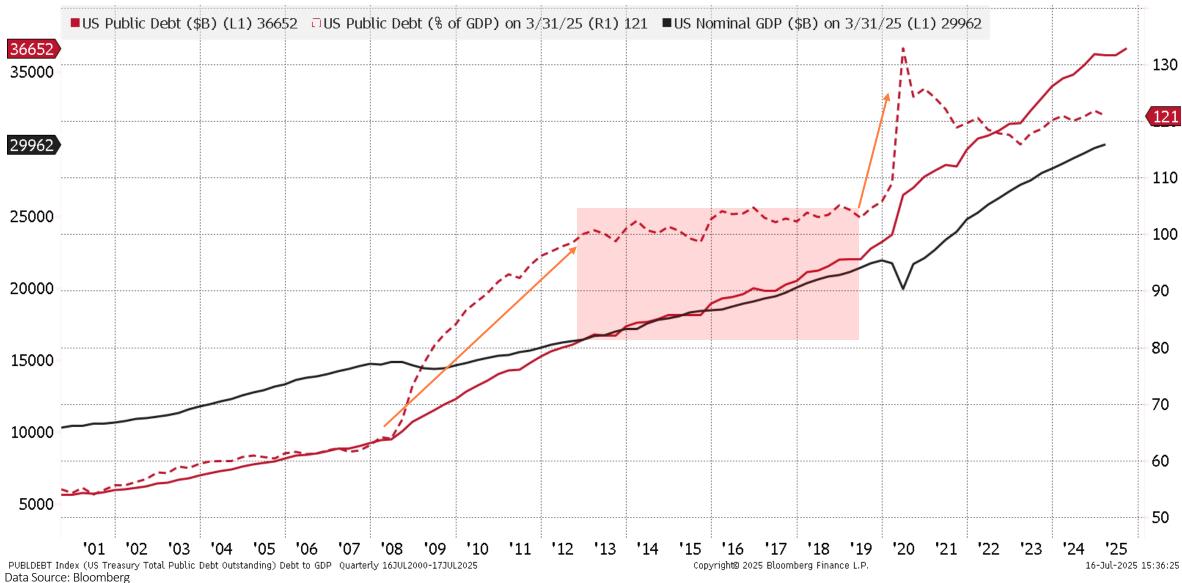




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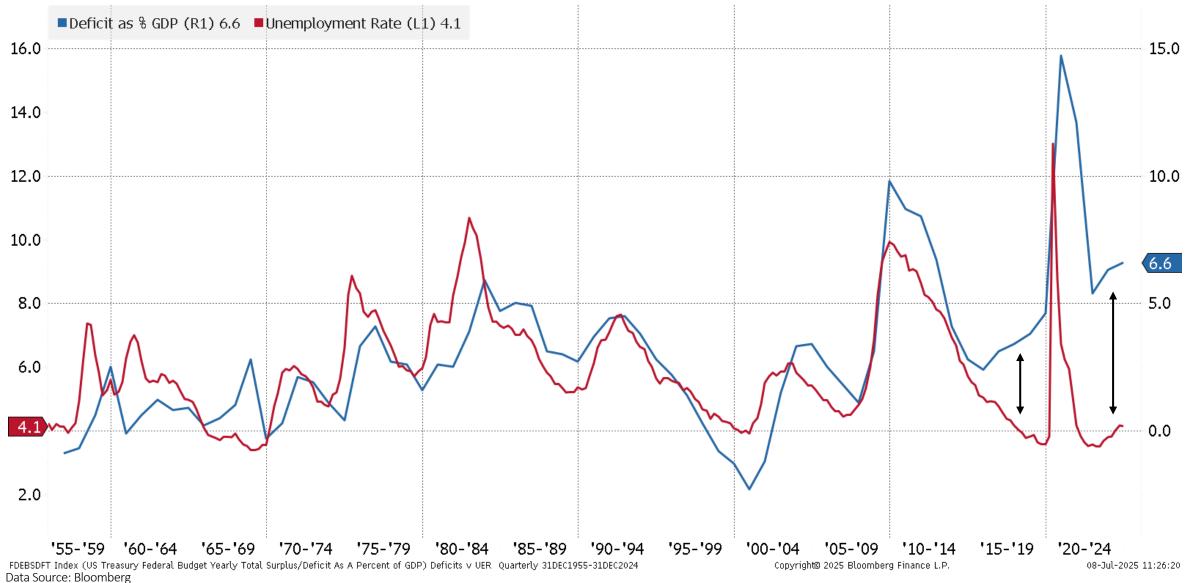
6

## Between This (current debt levels, ~\$36T, ~120% of GDP)...



#### Wilshire

## And This (running large deficits during "good times")...



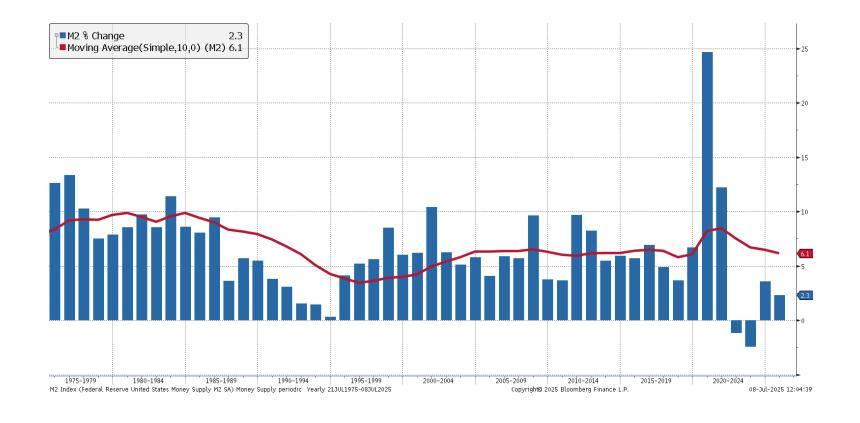
### Few Options Left but to Print

#### Options for dealing with debt:

- You/Me/Corporations
  - Pay it back (can be painful)
  - Default/Restructure (painful)
- Government
  - Pay it back (can be painful)
  - Default/Restructure (painful)
  - Print money (easy, at least in the short-term)

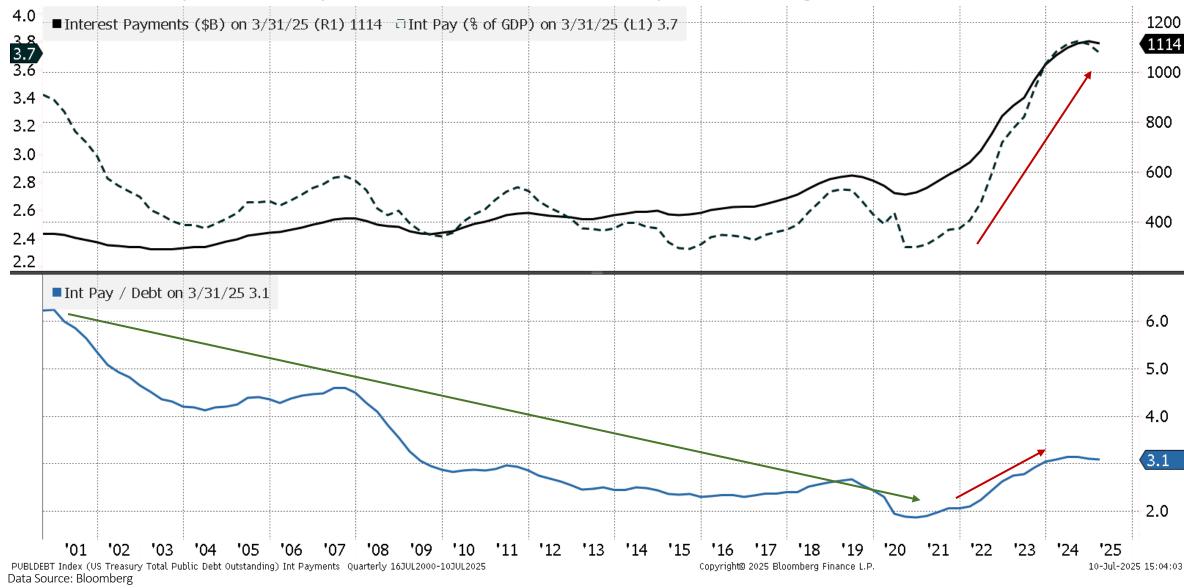
# History tells us that the "easy" way out will be the likely path

- Such a path benefits assets of limited supply
- This is likely to be a decade-plus asset allocation trend



Data Source: Bloomberg

### Interest Payment Dynamics: Vulnerability to Rising Rates



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## June 2025 Asset Class Assumptions

		Equity						Fixed Income						Real Assets					
	U.S. Stock	Dev ex-U.S. Stock	Emg Stock	Global ex-U.S. Stock	Global Stock	Private Equity	Cash	Core Bond	LT Core Bond	TIPS	High Yield	Private Credit	Dev ex- U.S. Bond (Hdg)	U.S. RES	Real Estate Global RES	Private RE	Cmdty	Real Assets	U.S. CPI
Compound Return (%)	4.30	5.30	5.55	5.65	4.85	6.20	3.55	5.05	5.25	4.45	6.30	7.70	3.05	5.65	5.80	6.45	4.80	6.85	2.30
Arithmetic Return (%)	5.65	6.80	8.55	7.30	6.20	9.95	3.55	5.15	5.70	4.60	6.75	8.45	3.15	7.05	7.05	7.35	6.00	7.60	2.30
Risk (%)	17.00	18.00	26.00	19.05	17.00	29.65	0.75	4.75	9.90	6.00	10.00	12.75	4.00	17.50	16.55	13.95	16.00	12.60	1.75
Yield (%)	1.25	2.95	2.40	2.80	1.75	0.00	3.55	5.75	5.80	5.05	9.90	4.90	4.30	3.95	3.95	2.90	3.55	3.75	0.00
Growth Factor Exposure	8.00	8.00	8.00	8.00	8.00	14.00	0.00	-0.95	-2.55	-3.00	4.00	5.10	-1.00	6.00	6.00	3.70	0.00	2.85	0.00
Inflation Factor Exposure	-3.00	-1.00	3.00	0.15	-1.95	-4.25	0.00	-2.60	-6.95	2.50	-1.00	-1.50	-3.00	1.00	1.65	1.00	12.00	5.20	1.00

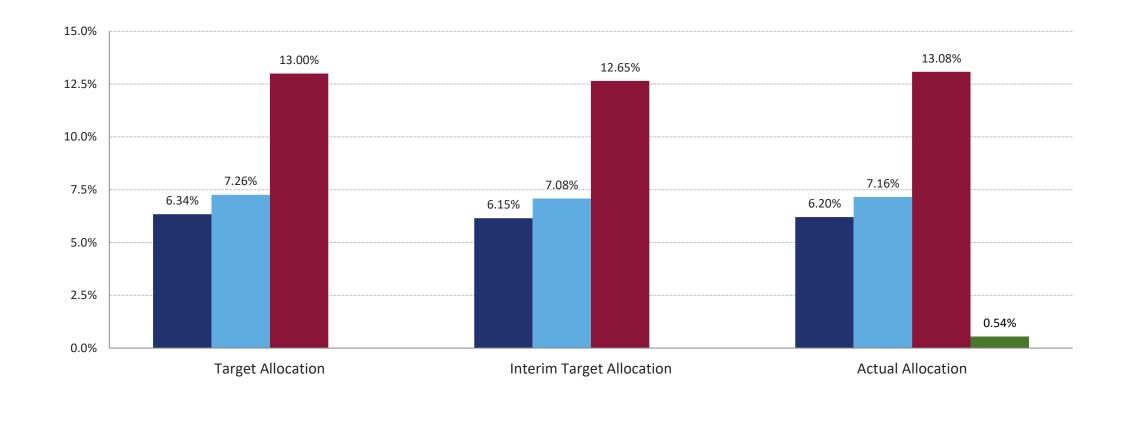
#### Correlations

U.S. Stock	1.00																		
Dev ex-U.S. Stock (USD)	0.81	1.00																	
Emerging Mkt Stock	0.74	0.74	1.00																
Global ex-U.S. Stock	0.84	0.96	0.89	1.00															
Global Stock	0.98	0.90	0.83	0.93	1.00														
Private Equity	0.72	0.63	0.61	0.66	0.73	1.00													
Cash Equivalents	-0.05	-0.09	-0.05	-0.08	-0.06	0.00	1.00												
Core Bond	0.27	0.13	0.00	0.08	0.21	0.30	0.18	1.00											
LT Core Bond	0.30	0.15	0.00	0.10	0.24	0.31	0.11	0.95	1.00										
TIPS	-0.05	0.00	0.15	0.06	-0.01	-0.03	0.20	0.60	0.47	1.00									
High Yield Bond	0.54	0.39	0.49	0.46	0.53	0.31	-0.10	0.24	0.32	0.05	1.00								
Private Credit	0.68	0.55	0.58	0.60	0.68	0.44	0.00	0.23	0.30	0.00	0.76	1.00							
Dev ex-U.S. Bond (Hdg)	0.16	0.25	-0.01	0.16	0.17	0.26	0.10	0.68	0.66	0.39	0.26	0.22	1.00						
U.S. RE Securities	0.57	0.47	0.44	0.49	0.56	0.49	-0.05	0.17	0.22	0.10	0.56	0.62	0.05	1.00					
Global RE Securities	0.62	0.55	0.52	0.58	0.63	0.54	-0.05	0.17	0.21	0.11	0.61	0.67	0.04	0.99	1.00				
Private Real Estate	0.55	0.45	0.45	0.48	0.55	0.50	-0.05	0.18	0.24	0.09	0.58	0.63	0.05	0.79	0.79	1.00			
Commodities	0.25	0.34	0.39	0.38	0.31	0.28	0.00	-0.03	-0.04	0.25	0.29	0.29	-0.10	0.25	0.28	0.25	1.00		
Real Assets	0.62	0.63	0.65	0.68	0.67	0.57	-0.03	0.24	0.25	0.32	0.64	0.69	0.06	0.79	0.83	0.77	0.63	1.00	
Inflation (CPI)	-0.10	-0.15	-0.13	-0.15	-0.12	-0.10	0.10	-0.12	-0.12	0.15	-0.08	0.00	-0.08	0.05	0.04	0.05	0.44	0.21	1.00

#### CalPERS PERF Expected Return and Risk Estimates

■ Expected Return - 10 Yr

As of June 30, 2025



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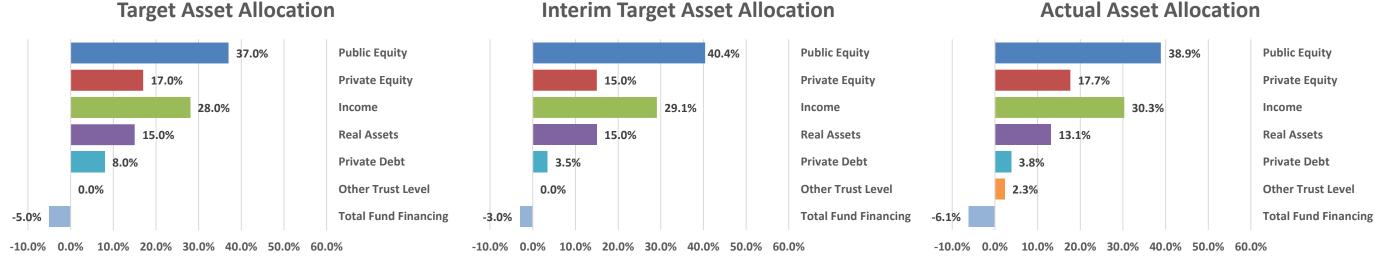
■ Expected Risk

■ Wilshire CMA Relative Risk

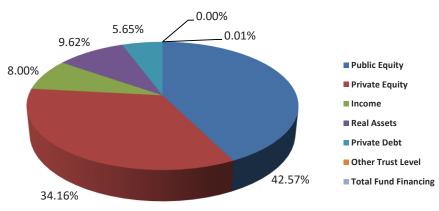
Expected Return - 30 Yr

#### CalPERS PERF Assets and Risk Allocation

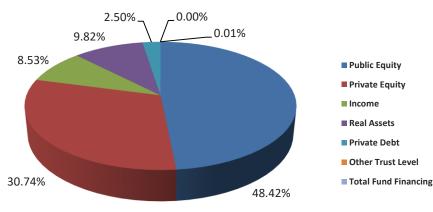
As of June 30, 2025

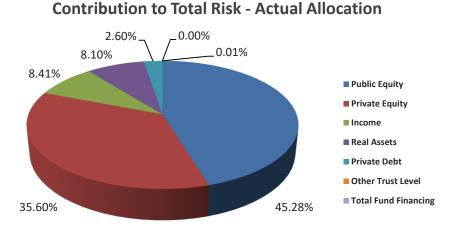






#### **Contribution to Total Risk - Interim Target**



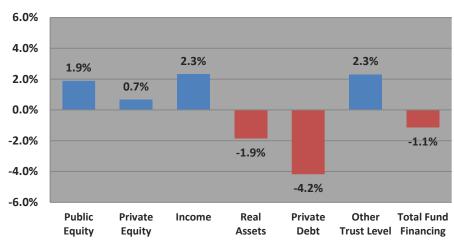


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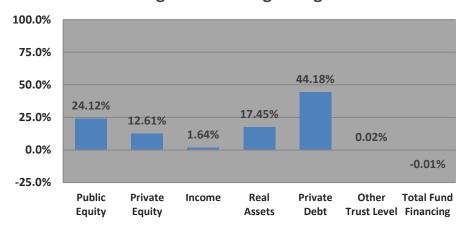
#### CalPERS PERF Drivers of Expected Excess Risk

As of June 30, 2025

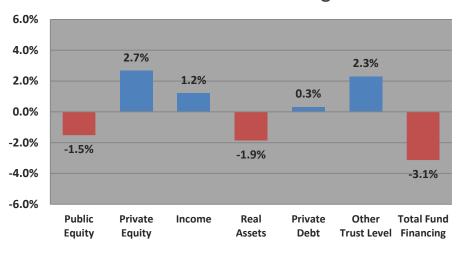
#### **Allocation vs. Long-Term Strategic Targets**



## Contribution to Tracking Error vs. Long-Term Strategic Targets



#### **Allocation vs. Interim Targets**



## Contribution to Tracking Error vs. Interim Targets



This excess risk forecast is based on asset.

allocation variance only.

 Other sources of risk (structural within asset classes, manager/program specific source of tracking error, covariance, etc.) are not considered here.

CalPERS Total Fund Performance

#### CalPERS PERF – Performance

As of June 30, 2025

	Asso	et Value						١	<b>V</b> aR	5-Year	Ratios
	<u>(\$1</u>	Billion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>	<u>(\$B</u>	illion)	<u>Sharpe</u>	<u>Info</u>
CALPERS PERF CalPERS PERF Policy Benchmark Actuarial Rate	\$	556.3	<b>5.7% 4.1%</b> 1.7%	<b>11.6%</b> <b>9.9%</b> 6.8%	<b>8.9%</b> <b>8.6%</b> 6.8%	<b>8.0%</b> <b>7.7%</b> 6.8%	<b>7.1% 7.1%</b> 7.1%	\$	79.4	0.6 0.5	0.2 0.0
PUBLIC EQUITY*  Public Equity Policy Benchmark	\$	216.3	<b>10.2%</b> 10.1%	<b>16.8%</b> 16.4%	<b>16.1%</b> 15.8%	<b>13.2%</b> 12.9%	<b>9.8%</b> 9.7%	\$	43.4	0.7 0.7	1.1 0.0
PRIVATE EQUITY  Private Equity Policy Benchmark	\$	98.3	<b>6.2%</b> -1.1%	<b>14.3%</b> 8.3%	<b>7.4%</b> 8.5%	<b>16.6%</b> 17.4%	<b>11.5%</b> 11.3%	\$	38.1	1.9 0.9	0.0 0.0
INCOME* Income Blended Benchmark	\$	168.6	<b>1.6%</b> 1.5%	<b>6.5%</b> 6.3%	<b>3.4%</b> 3.3%	<b>-1.2%</b> -1.3%	<b>2.5%</b> 2.2%	\$	7.7	-0.4 -0.4	1.3 0.0
REAL ASSETS  Real Assets Policy Benchmark	\$	73.0	<b>0.9%</b> 0.9%	<b>2.8%</b> 1.2%	<b>-2.6%</b> -5.0%	<b>3.3%</b> 2.0%	<b>4.6%</b> 4.5%	\$	9.6	0.1 -0.1	0.2 0.0
PRIVATE DEBT Private Debt Policy Benchmark	\$	21.3	<b>4.6%</b> 0.8%	<b>12.8%</b> 8.4%	<b>12.0%</b> 8.5%	<b>%</b> %	<b>%</b> %	\$	2.7	N/A N/A	N/A N/A
OTHER TRUST LEVEL	\$	12.8								N/A	N/A
TOTAL FUND FINANCING	\$	(34.1)								N/A	N/A
TERMINATED AGENCY POOL	\$	0.2	-0.4%	3.7%	-0.1%	-2.4%	2.0%			N/A	N/A
Calpers Perf Plus TAP	\$	556.5	5.7%	11.6%	8.9%	8.0%	7.1%			N/A	N/A

<sup>\*</sup> The CalPERS PERF asset values shown include derivative exposure.

## CalPERS PERF – Attribution (Quarter)

As of June 30, 2025

, = = =	Actua	al (%)	Benchm	ark (%)	Differe	nce (%)	Total I	Fund Return Contributio	on (%)
Asset Class	Weight *	Return	Weight *	Return	Weight	Return	Actual Allocation	Active Management	Total
Public Equity	38.94	10.24	39.01	10.11	-0.08	0.13	0.06	0.05	0.11
Public Equity - Cap Weighted	29.50	11.75	28.94	11.64	0.55	0.10	0.05	0.03	0.08
Public Equity - Factor Weighted	9.44	5.06	10.07	4.81	-0.63	0.24	0.01	0.02	0.03
Private Equity	17.78	6.23	17.78	-1.46	0.00	7.68	0.00	1.33	1.33
Income	29.27	1.60	29.16	1.55	0.12	0.05	0.00	0.01	0.01
Treasury	7.28	-0.57	7.16	-0.57	0.12	0.00	0.00	0.00	0.00
Mortgage-Backed Securities	5.24	1.23	5.22	1.18	0.02	0.05	0.00	0.00	0.00
Investment Grade Credit	6.30	1.67	6.29	1.64	0.01	0.04	0.00	0.00	0.00
High Yield	5.24	3.58	5.25	3.48	-0.02	0.10	0.00	0.01	0.01
EM Sovereign	5.22	2.87	5.23	2.79	0.00	0.08	0.00	0.00	0.00
Real Assets	13.30	0.92	13.30	0.87	0.00	0.05	0.00	0.01	0.01
Private Debt	3.75	4.59	3.75	0.76	0.00	3.83	0.00	0.15	0.15
Other Trust Level	2.30	-	0.00	-	2.30	-	-0.07	0.01	-0.06
LLER	2.18	1.66	0.00	1.10	2.18	0.56	-0.07	0.01	-0.05
Opportunistic Strategies	0.04	-2.27	0.00	1.69	0.04	-3.96	0.00	0.00	0.00
Total Fund Income	0.00	-	0.00	-	0.00	-	0.00	0.00	0.00
Other PERF	0.03	-	0.00	-	0.03	-	0.00	0.00	0.00
TLPM	0.04	-	0.00	-	0.04	-	0.00	0.00	0.00
Total Fund Financing	-5.33	-	-2.99	-	-2.34	-	0.07	0.00	0.07
Monthly Linked Return	100.00	5.74	100.00	4.13		1.62	0.06	1.55	1.62
Residual		-0.05		-0.01		-0.03			-0.03
Total PERF		5.70		4.11		1.58			1.58

<sup>\*</sup> Average period weight displayed.

## CalPERS PERF – Attribution (Fiscal YTD)

As of June 30, 2025

	Actua	al (%)	Benchm	ark (%)	Differe	nce (%)	Total I	Fund Return Contributio	on (%)
Asset Class	Weight *	Return	Weight *	Return	Weight	Return	Actual Allocation	Active Management	Total
Public Equity	40.25	16.81	40.16	16.36	0.09	0.45	0.05	0.16	0.22
Public Equity - Cap Weighted	30.30	16.73	30.05	16.19	0.25	0.54	0.04	0.15	0.19
Public Equity - Factor Weighted	9.95	15.89	10.11	15.68	-0.16	0.21	0.01	0.02	0.03
Private Equity	16.76	14.26	16.76	6.70	0.00	7.56	0.00	1.02	1.02
Income	29.48	6.48	29.58	6.28	-0.10	0.21	0.00	0.06	0.06
Treasury	7.29	3.04	7.30	3.04	-0.01	0.00	-0.01	0.00	-0.01
Mortgage-Backed Securities	5.27	6.86	5.29	6.58	-0.02	0.28	0.00	0.02	0.02
Investment Grade Credit	6.36	6.48	6.40	6.17	-0.03	0.31	0.00	0.02	0.02
High Yield	5.29	9.33	5.30	9.15	-0.02	0.18	0.00	0.01	0.01
EM Sovereign	5.27	7.88	5.29	7.56	-0.02	0.32	0.00	0.02	0.02
Real Assets	13.12	2.78	13.12	1.25	0.00	1.53	0.00	0.21	0.21
Private Debt	3.38	12.76	3.38	8.38	0.00	4.38	0.00	0.15	0.15
Other Trust Level	2.31	-	0.00	-	2.31	-	-0.12	0.03	-0.09
LLER	2.17	6.51	0.00	4.79	2.17	1.72	-0.11	0.04	-0.08
Opportunistic Strategies	0.04	3.43	0.00	7.02	0.04	-3.59	0.00	0.00	0.00
Total Fund Income	0.03	3.77	0.00	5.25	0.03	-1.48	-0.01	0.00	-0.01
Other PERF	0.03	-	0.00	-	0.03	-	0.00	0.00	0.00
TLPM	0.03	-	0.00	-	0.03	-	0.00	0.00	0.00
Total Fund Financing	-5.29	-	-2.99	-	-2.29	-	0.12	0.00	0.12
Monthly Linked Return	100.00	11.65	100.00	9.96		1.69	0.05	1.65	1.69
Residual		-0.01		-0.03		0.02			0.02
Total PERF		11.64		9.93		1.71			1.71

<sup>\*</sup> Average period weight displayed.

## CalPERS PERF – Attribution (Calendar YTD)

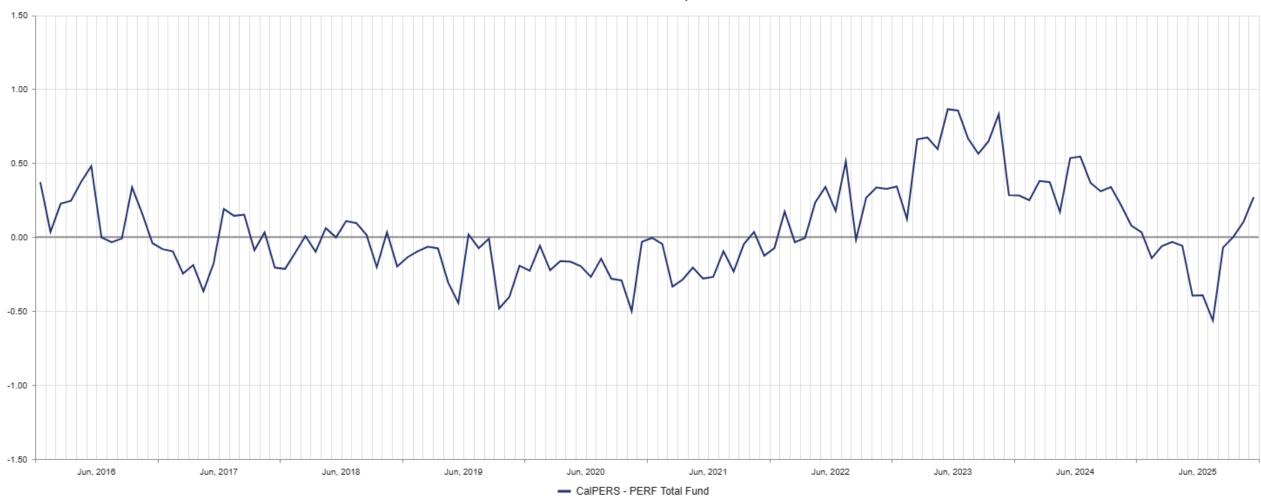
As of June 30, 2025

	Actua	al (%)	Benchm	ark (%)	Differe	nce (%)	Total F	und Return Contributio	n (%)
Asset Class	Weight *	Return	Weight *	Return	Weight	Return	Actual Allocation	Active Management	Total
ublic Equity	39.29	10.77	39.27	10.26	0.02	0.51	0.05	0.19	0.24
Public Equity - Cap Weighted	29.48	10.64	29.16	10.02	0.32	0.62	0.04	0.18	0.22
Public Equity - Factor Weighted	9.80	10.09	10.11	9.87	-0.30	0.22	0.01	0.02	0.03
rivate Equity	17.39	8.13	17.39	-2.60	0.00	10.73	0.00	1.82	1.82
ncome	29.35	4.45	29.35	4.37	0.00	0.08	-0.01	0.02	0.02
Treasury	7.28	3.80	7.25	3.80	0.02	0.00	-0.01	0.00	-0.01
Mortgage-Backed Securities	5.25	4.30	5.24	4.22	0.01	0.07	0.00	0.00	0.00
Investment Grade Credit	6.33	4.34	6.34	4.14	-0.01	0.20	0.00	0.01	0.01
High Yield	5.25	4.74	5.26	4.58	-0.01	0.16	0.00	0.01	0.01
EM Sovereign	5.24	5.28	5.25	5.29	-0.01	-0.01	0.00	0.00	0.00
eal Assets	13.28	1.34	13.28	1.86	0.00	-0.52	0.00	-0.07	-0.07
rivate Debt	3.69	6.34	3.69	3.58	0.00	2.76	0.00	0.10	0.10
ther Trust Level	2.32	-	0.00	-	2.32	-	-0.07	0.01	-0.06
LLER	2.20	2.87	0.00	2.19	2.20	0.67	-0.07	0.02	-0.05
Opportunistic Strategies	0.04	0.09	0.00	3.40	0.04	-3.32	0.00	0.00	0.00
Total Fund Income	0.00	-	0.00	-	0.00	-	0.00	0.00	0.00
Other PERF	0.03	-	0.00	-	0.03	-	0.00	0.00	0.00
TLPM	0.04	-	0.00	-	0.04	-	0.00	0.00	0.00
otal Fund Financing	-5.32	-	-2.98	-	-2.34	-	0.07	0.00	0.07
Ionthly Linked Return	100.00	7.25	100.00	5.12		2.13	0.04	2.08	2.13
esidual		-0.03		-0.01		-0.02			-0.02
otal PERF		7.22		5.11		2.11			2.11

<sup>\*</sup> Average period weight displayed.

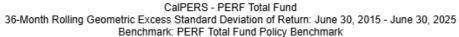
### CalPERS PERF – Rolling Excess Return

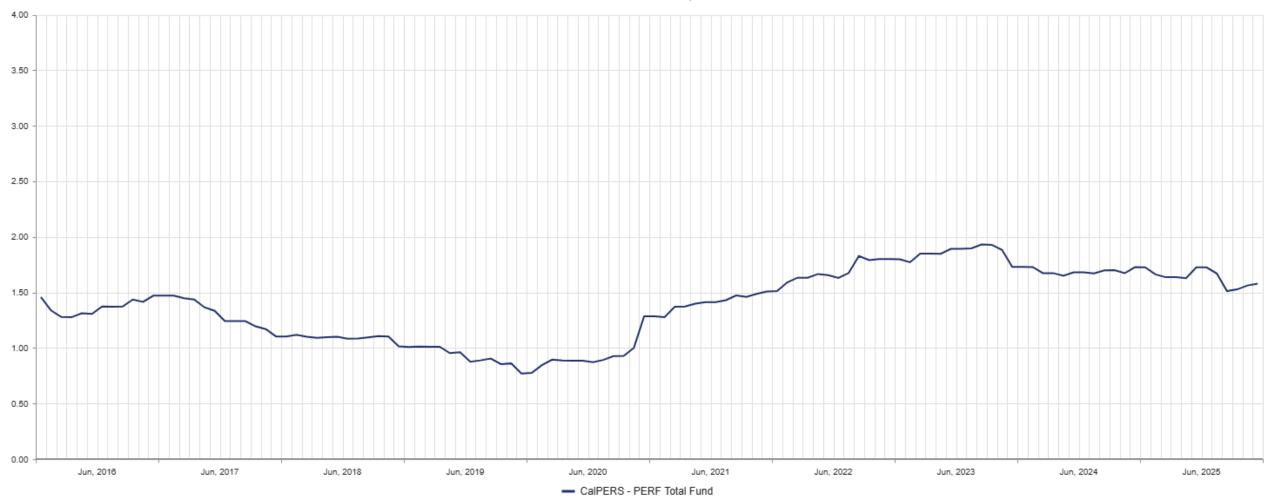
CalPERS - PERF Total Fund 36-Month Rolling Geometric Excess Return: June 30, 2015 - June 30, 2025 Benchmark: PERF Total Fund Policy Benchmark



\* Monthly data; Net of Investment Management Fees

#### CalPERS PERF – Rolling Tracking Error





<sup>\*</sup> Monthly data; Net of Investment Management Fees

#### CalPERS Affiliate Investment Programs – Performance

As of June 30, 2025

	set Value Million)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>
Judges I ICE BofA US 3-Month Treasury Bill Index	\$ 65.7	<b>1.1%</b> 1.0%	<b>4.9%</b> 4.7%	<b>4.9%</b> 4.6%	<b>3.0%</b> 2.8%	<b>2.2%</b> 2.0%
Judges II Weighted Policy Benchmark	\$ 2,968.3	<b>6.3%</b> 6.3%	<b>11.7%</b> 11.4%	<b>10.0%</b> 9.7%	<b>7.5%</b> 7.3%	<b>6.7%</b> 6.5%
<b>Legislators' Retirement System</b> Weighted Policy Benchmark	\$ 91.1	<b>2.0%</b> 2.0%	<b>7.2%</b> 7.2%	<b>4.4%</b> 4.4%	<b>2.9%</b> 2.9%	<b>4.1%</b> 4.0%
Long-Term Care ("LTC") Weighted Policy Benchmark	\$ 4,659.8	<b>3.9%</b> 4.0%	<b>9.5%</b> 10.1%	<b>5.8%</b> 6.1%	<b>3.8%</b> 3.8%	<b>4.2%</b> 4.2%
CERBT Strategy 1 CERBT Strategy 1 Policy Benchmark	\$ 22,009.4	<b>7.0%</b> 6.9%	<b>12.3%</b> 12.0%	<b>9.9%</b> 9.6%	<b>7.9%</b> 7.7%	<b>6.9%</b> 6.6%
CERBT Strategy 2 CERBT Strategy 2 Policy Benchmark	\$ 2,262.9	<b>5.3%</b> 5.3%	<b>10.6%</b> 10.3%	<b>7.4%</b> 7.3%	<b>5.3%</b> 5.2%	<b>5.5%</b> 5.3%
CERBT Strategy 3 CERBT Strategy 3 Policy Benchmark	\$ 917.1	<b>4.1%</b> 4.0%	<b>9.3%</b> 9.1%	<b>5.7%</b> 5.5%	<b>3.6%</b> 3.5%	<b>4.5%</b> 4.3%
CEPPT Strategy 1 CEPPT Strategy 1 Policy Benchmark	\$ 235.4	<b>5.5%</b> 5.5%	<b>10.6%</b> 10.6%	<b>8.1%</b> 8.1%	<b>5.5%</b> 5.4%	<b>%</b> %
CEPPT Strategy 2 CEPPT Strategy 2 Policy Benchmark	\$ 77.1	<b>3.6%</b> 3.6%	<b>8.8%</b> 8.7%	<b>5.7%</b> 5.7%	<b>2.6%</b> 2.5%	<b>%</b> %
Health Care Fund Health Care Fund Policy Benchmark	\$ 77.1	<b>1.1%</b> 1.0%	<b>4.8%</b> 4.7%	<b>2.1%</b> 2.1%	<b>-1.0%</b> -1.0%	<b>1.6%</b> 1.6%
Supplemental Contribution Plan	\$ 120.9	NM	NM	NM	NM	NM
457 Program	\$ 2,757.0	NM	NM	NM	NM	NM

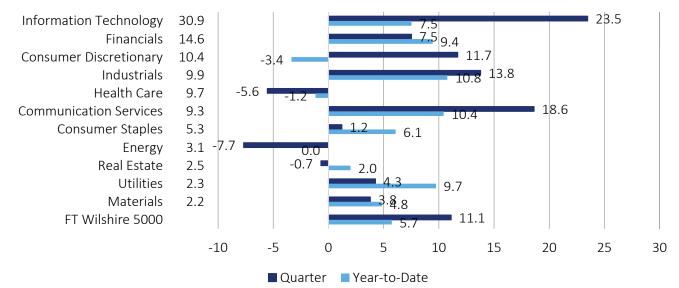
Appendix:

Asset Class Performance Detail

#### U.S. Equity Market

As of 6/30/2025	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
FT Wilshire 5000	11.1	5.7	15.2	19.1	16.2	13.2
FT Wilshire U.S. Large Cap	11.7	6.6	16.0	20.2	16.7	13.8
FT Wilshire U.S. Small Cap	7.0	-0.1	10.1	12.5	12.4	8.9
FT Wilshire U.S. Large Growth	19.5	7.0	18.1	27.0	18.5	n/a
FT Wilshire U.S. Large Value	4.3	6.6	14.0	13.5	14.6	n/a
FT Wilshire U.S. Small Growth	9.3	-0.3	10.8	13.1	9.2	n/a
FT Wilshire U.S. Small Value	4.7	0.1	9.3	11.9	15.5	n/a
Wilshire REIT Index	-1.2	-0.2	9.1	5.7	8.7	6.3
MSCI USA Min. Vol. Index	0.6	6.5	13.8	12.1	11.0	11.0
FTSE RAFI U.S. 1000 Index	4.5	5.3	13.1	14.9	16.7	11.4

#### U.S. Sector Weight and Return (%)



Data Sources: Bloomberg, Wilshire Atlas





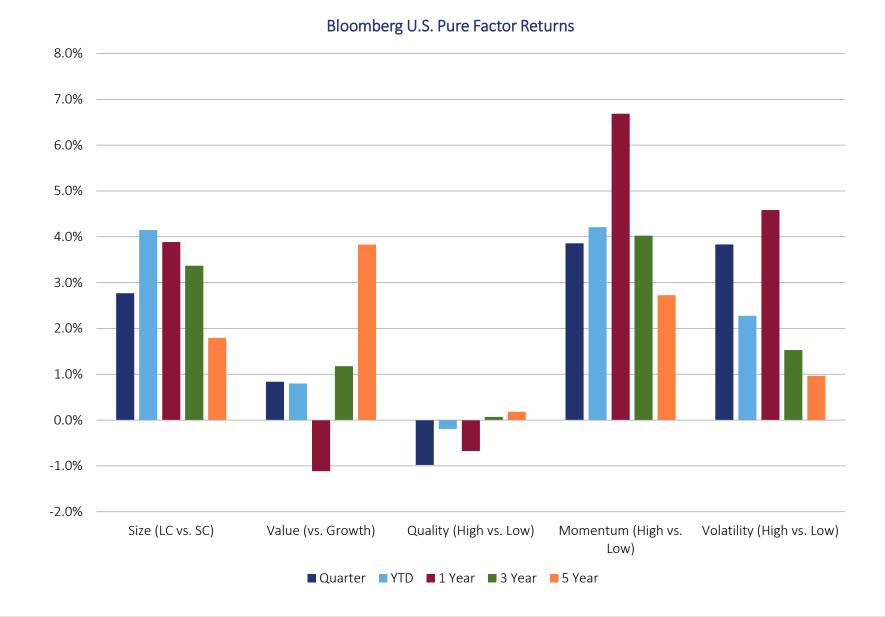
#### Large Growth vs Large Value



#### U.S. Factor Returns

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

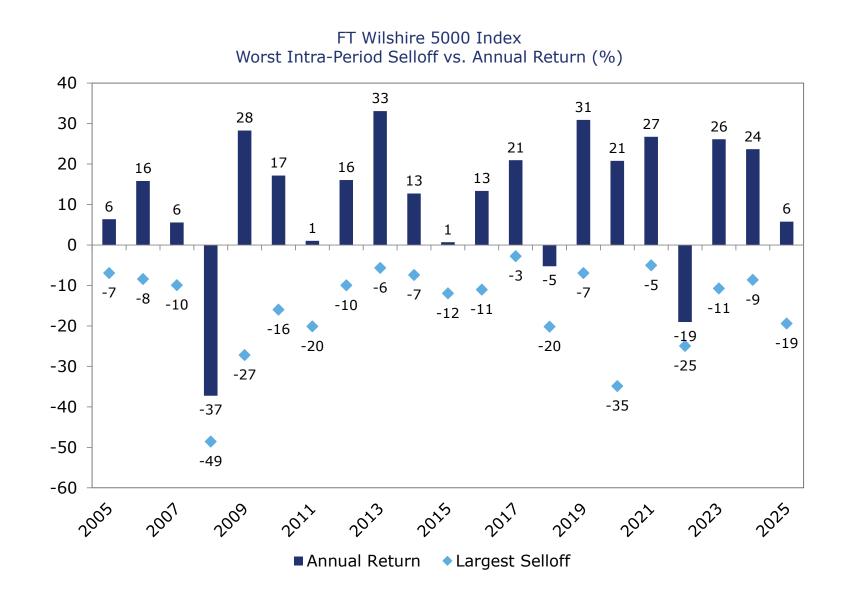
Size contributed to returns during the quarter while quality was a detractor



Data Source: Bloomberg

### Annual Equity Market Selloffs

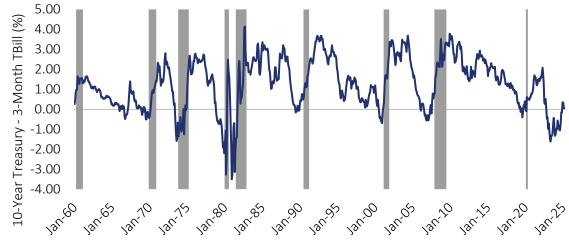
U.S. equity initially reached correction territory in mid-March and then worsened into April; strong recovery in May and June



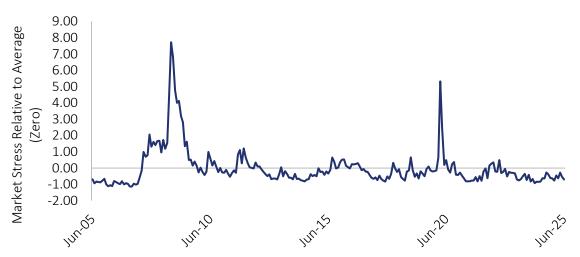
Data Sources: Wilshire Web, Bloomberg

#### Risk Monitor



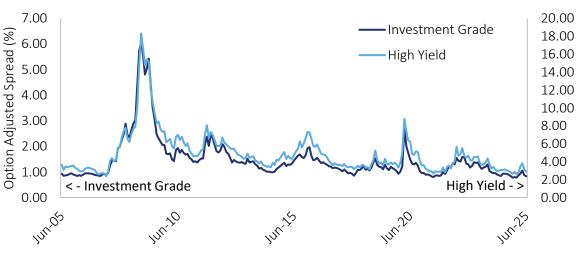


St. Louis Fed. Financial Stress Index

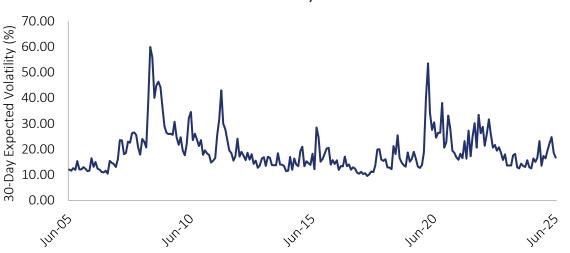


Data Source: Bloomberg

**Bloomberg Credit Indexes** 



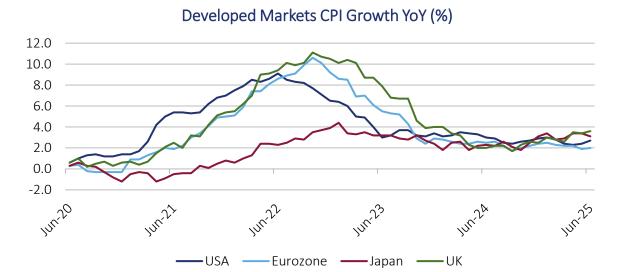
**CBOE Volatility Index** 



#### Non-U.S. Growth and Inflation









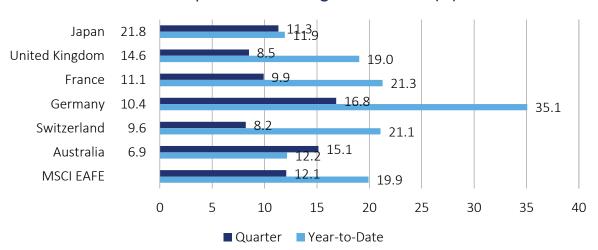
Data Source: Bloomberg

#### Non-U.S. Equity Market

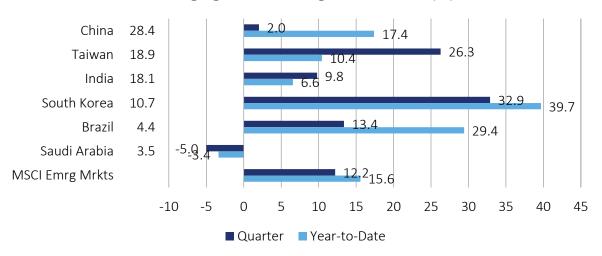
As of 6/30/2025	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
MSCI ACWI ex-US (\$G)	12.3	18.3	18.4	14.6	10.7	6.6
MSCI EAFE (\$G)	12.1	19.9	18.3	16.6	11.7	7.0
MSCI Emerging Markets (\$G)	12.2	15.6	16.0	10.2	7.3	5.2
MSCI Frontier Markets (\$G)	11.0	18.7	22.3	12.5	8.5	2.9
MSCI ACWI ex-US Growth (\$G)	) 13.8	16.2	14.5	12.8	7.4	6.7
MSCI ACWI ex-US Value (\$G)	11.4	20.2	22.0	16.3	13.9	6.5
MSCI ACWI ex-US Small (\$G)	17.2	18.0	18.9	14.0	11.3	7.0
MSCI All Country World Index	11.7	10.3	16.7	17.9	14.2	10.5
MSCI ACWI Minimum Volatilit	3.1	9.6	16.5	10.8	9.0	8.3
MSCI EAFE Minimum Volatility	/ 10.3	21.0	25.5	13.7	8.2	6.1
FTSE RAFI Developed ex-US	11.8	21.9	21.8	17.3	14.8	7.2
MSCI EAFE LC (G)	5.1	8.3	8.6	14.1	12.2	7.6
MSCI Emerging Markets LC (G)	8.1	11.1	13.6	11.0	8.4	6.9

Data Source: Bloomberg

#### Developed Markets Weight and Return (%)



#### Emerging Markets Weight and Return (%)



## CalPERS PERF Public Equity – Performance

As of June 30, 2025

	Ass	et Value		,	VaR	5-Year Ratios					
	<u>(\$1</u>	Billion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>	<u>(\$E</u>	illion)	<u>Sharpe</u>	<u>Info</u>
PUBLIC EQUITY*  Public Equity Policy Benchmark	\$	216.3	<b>10.2%</b> 10.1%	<b>16.8%</b> 16.4%	<b>16.1%</b> 15.8%	<b>13.2%</b> 12.9%	<b>9.8%</b> 9.7%	\$	43.4	0.7 0.7	1.1 0.0
Public Equity - Cap Weighted*  CalPERS Custom FTSE Global Benchmark	\$	175.6	<b>11.7%</b> 11.6%	<b>16.7%</b> 16.2%	<b>17.7%</b> 17.4%	<b>14.3%</b> 14.0%	<b>10.4%</b> 10.2%	\$	38.2	0.7 0.7	1.1 0.0
Public Equity - Factor Weighted  CalPERS FTSE Factor Wtd Blend Benchmark	\$	40.8	<b>5.1%</b> 4.8%	<b>15.9%</b> 15.7%	<b>11.5%</b> 11.4%	<b>9.6%</b> 9.6%	<b>%</b> %	\$	6.6	0.6 0.6	0.4 0.0

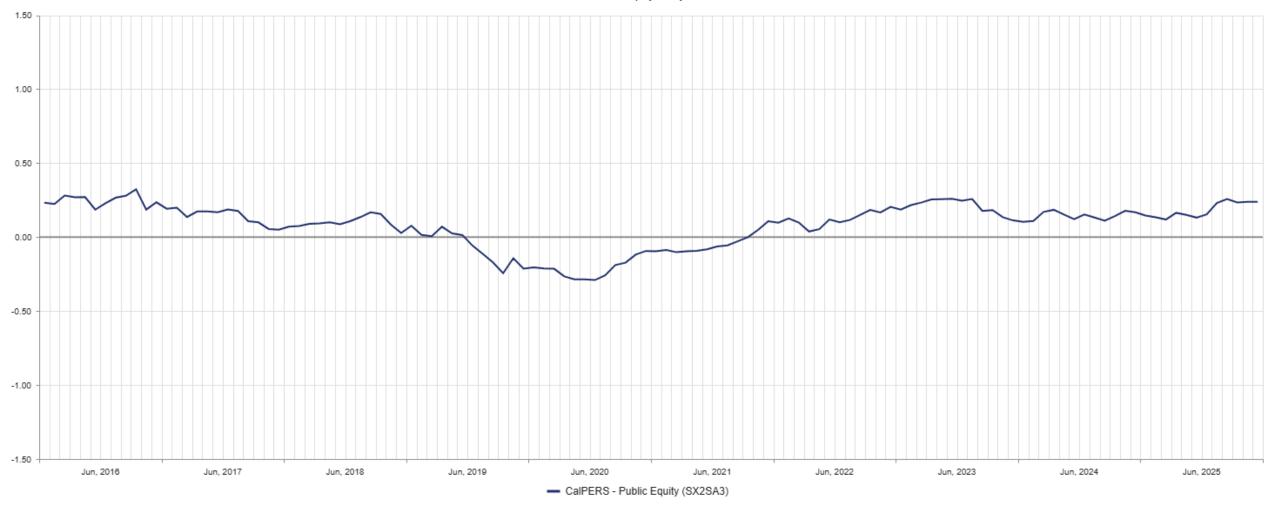
<sup>\*</sup> The CalPERS asset values shown include derivative exposure.

## CalPERS PERF Public Equity – Rolling Excess Return

CalPERS - Public Equity (SX2SA3)

36-Month Rolling Geometric Excess Return: June 30, 2015 - June 30, 2025

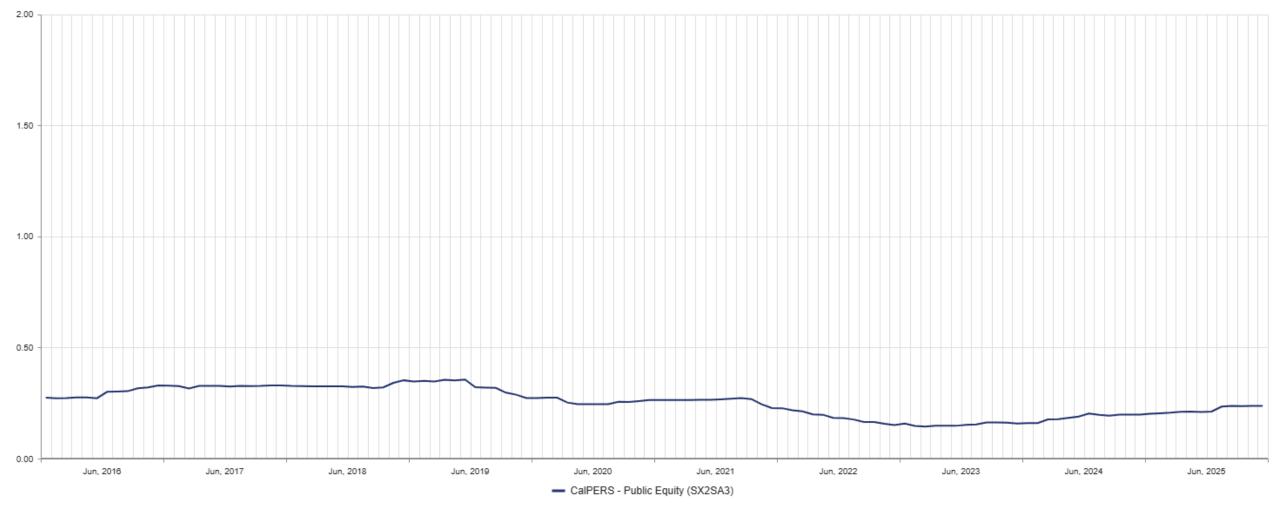
Benchmark: Public Equity Policy Benchmark



<sup>\*</sup> Monthly data; Net of Investment Management Fees

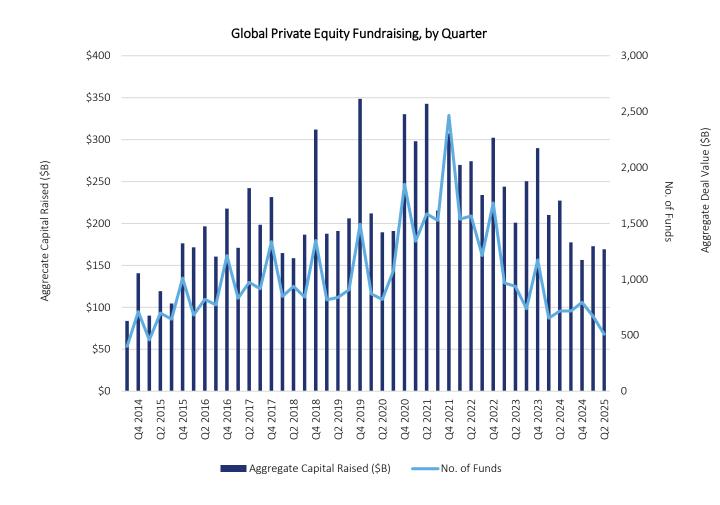
## CalPERS PERF Public Equity – Rolling Tracking Error

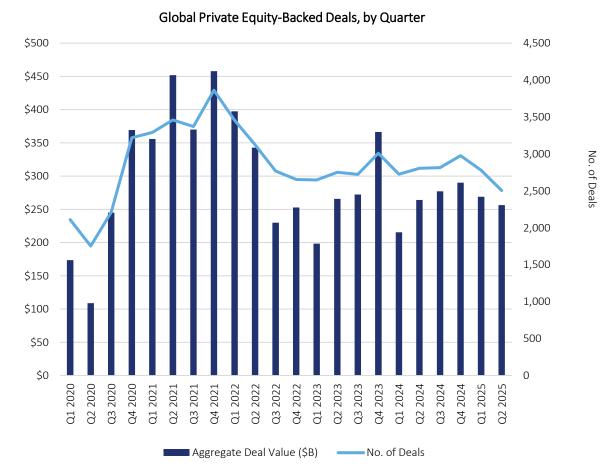
CalPERS - Public Equity (SX2SA3)
36-Month Rolling Geometric Excess Standard Deviation of Return: June 30, 2015 - June 30, 2025
Benchmark: Public Equity Policy Benchmark



<sup>\*</sup> Monthly data; Net of Investment Management Fees

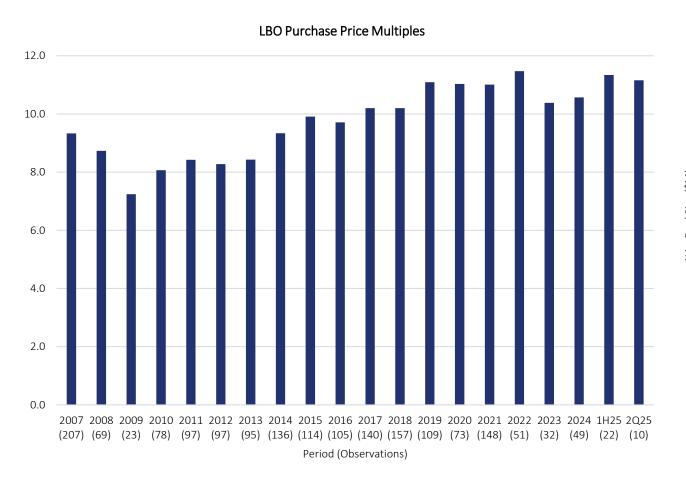
#### Private Equity – Fundraising & Investment Activity

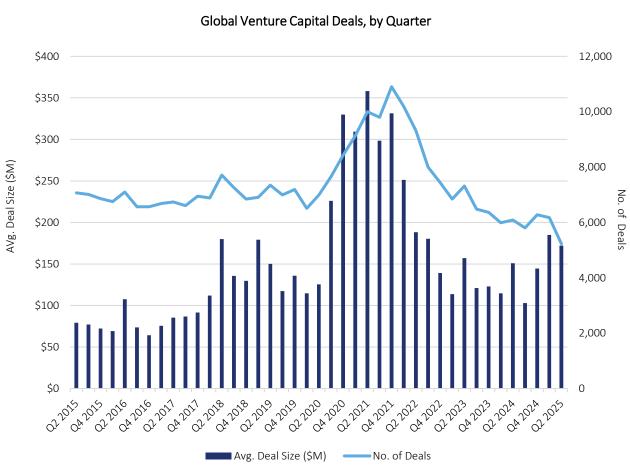




Source: Preqin as of August 13, 2025.

## Private Equity – Pricing & Valuations

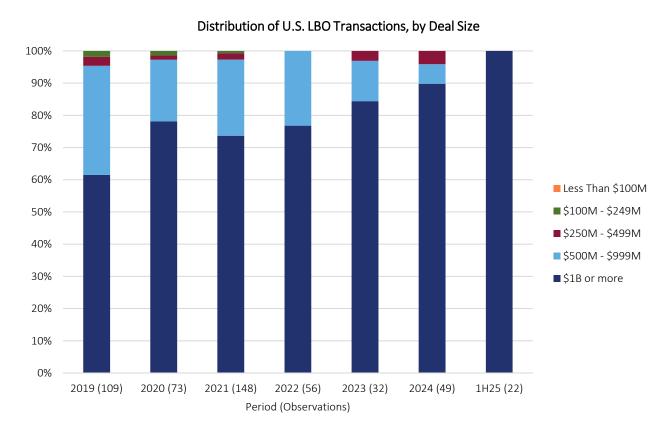


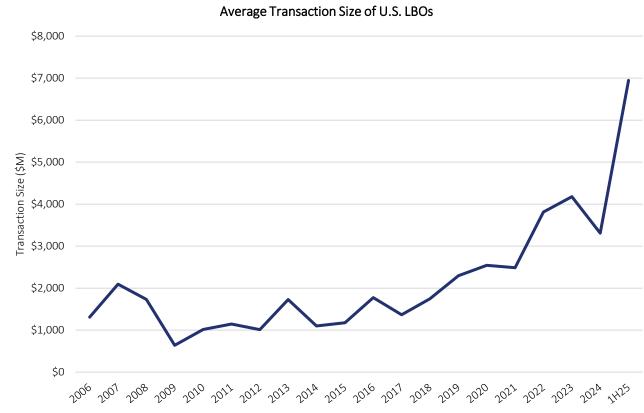


Source: S&P LCD Q2 2025 Report; Preqin as of August 13, 2025.

#### U.S. Investment Activity by Deal Size

- Deal volume in Q1 was generally consistent with 2024 but has not returned to pre-COVID levels, though a majority of deals stay in the upper, large cap market.
- Average LBO transaction size increased in H1 2025 with an increase in the number of LBO transactions in the large cap market.

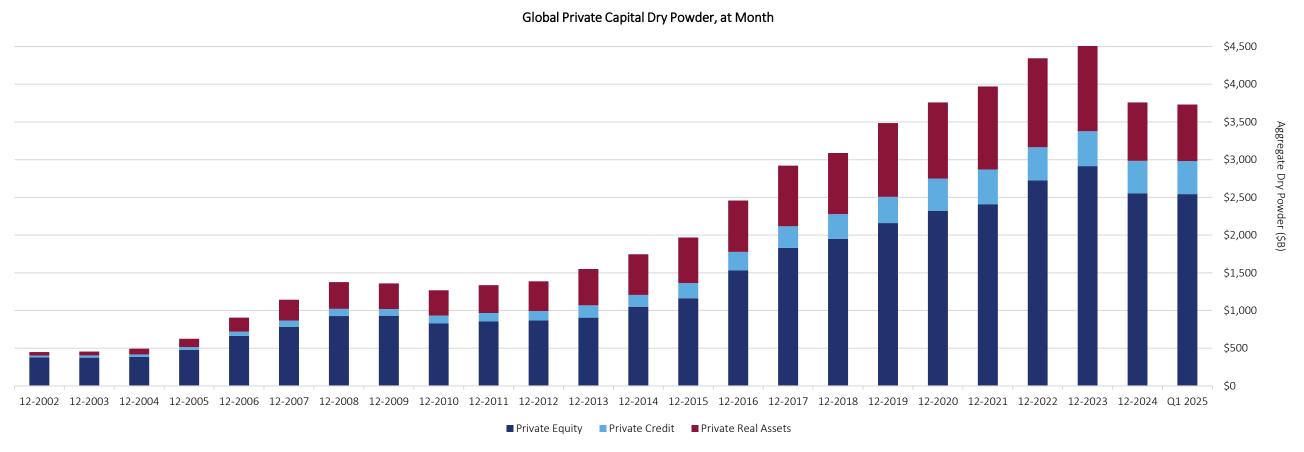




Source: S&P LCD Q2 2025 Report.

## Private Capital Dry Powder

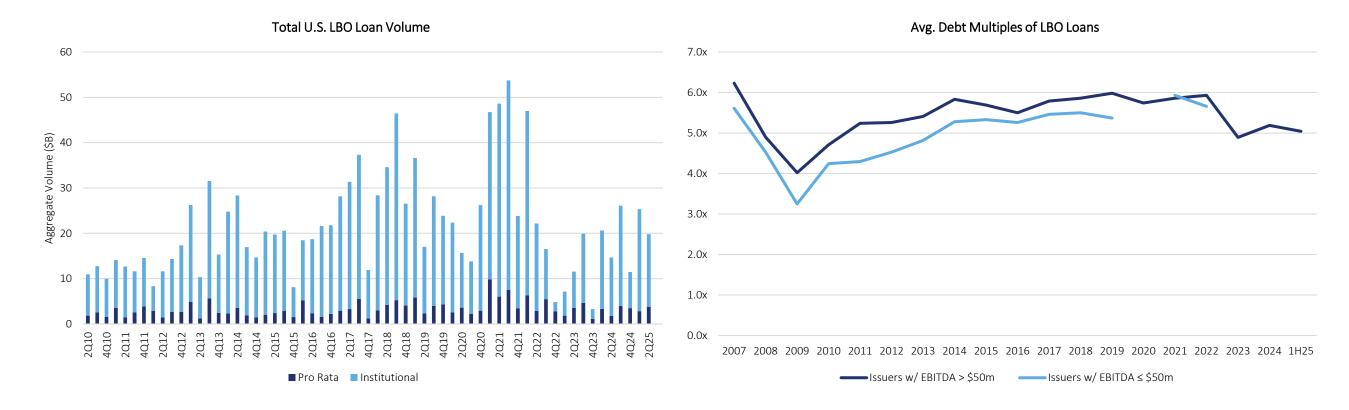
- Global private equity and real assets dry powder has decreased from peak at the end of 2023 but global private capital dry powder remains elevated.
- Private equity comprises approximately 68% of total dry powder as of February 13, 2025, and continues to drive heightened levels of dry powder.



Source: Preqin as of February 13, 2025.

## Private Equity – U.S. Debt Markets

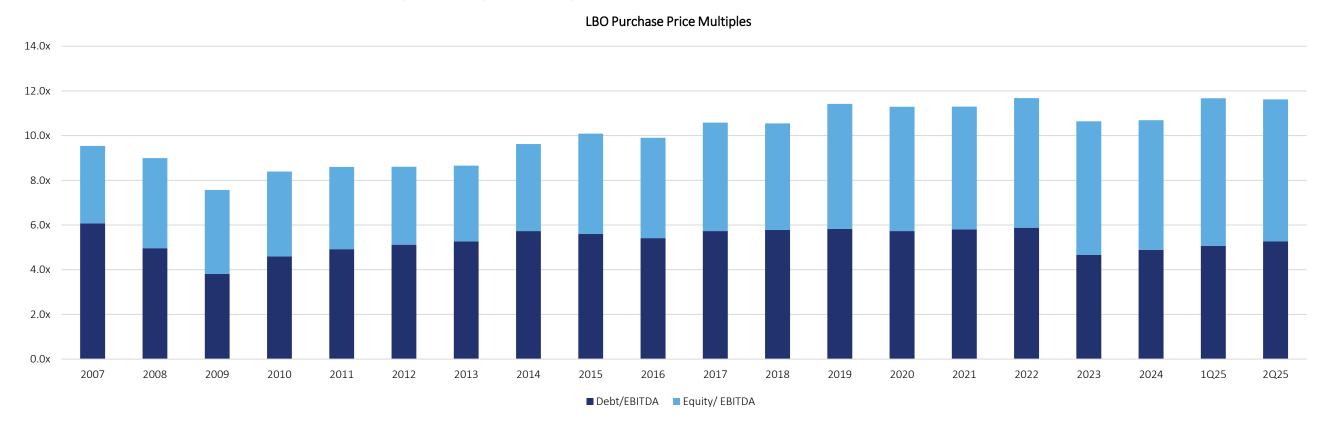
- Q2 2025 saw ~19.8 billion in supporting loan issuance, continuing the rebound since record low levels in 2023.
- Debt multiples of sponsor-backed, large corporate loans stay approximately the same as 2023 for 2024 in total at ~5.0x, lower than recent years with debt multiples just under 6.0x.



Source: S&P LCD Q2 2025 Report.

## Private Equity – U.S. LBO Purchase Price Multiples

- All in purchase price multiples for Q1 2025 are slightly higher than 2024 purchase price multiples, with equity continuing to contribute a majority of capital.
- Debt contributions in Q4 2024 are 42% of purchase price multiples.



Source: S&P LCD Q2 2025 Report.

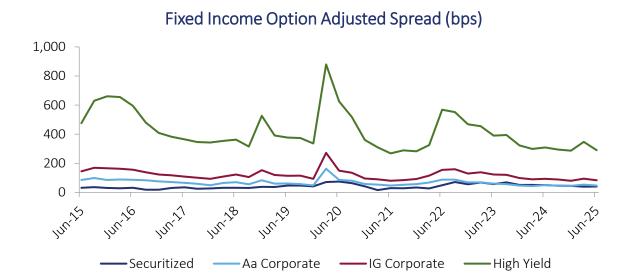
## CalPERS PERF Private Equity – Performance

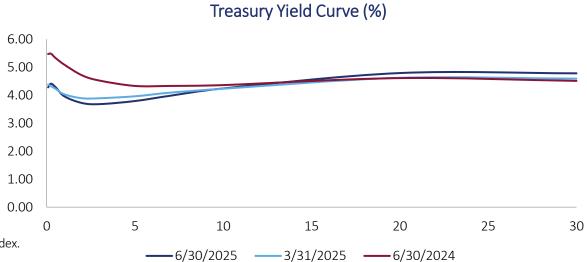
As of June 30, 2025

	Asse	Asset Value								5-Year	Ratios
	<u>(\$B</u>	<u>sillion)</u>	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>	<u>(\$B</u>	<u>sillion)</u>	<u>Sharpe</u>	<u>Info</u>
PRIVATE EQUITY Private Equity Policy Benchmark	\$	98.3	<b>6.2%</b> -1.1%	<b>14.3%</b> 8.3%	<b>7.4%</b> 8.5%	<b>16.6%</b> 17.4%	<b>11.5%</b> 11.3%	\$	38.1	1.9 0.9	0.0 0.0
Private Equity Partnership Investments	\$	98.3	6.2%	14.3%	7.4%	16.7%	11.6%			N/A	N/A
Private Equity Distribution Stock	\$	0.0	44.5%	-8.3%	-12.4%	-29.7%	-18.6%			N/A	N/A

### U.S. Fixed Income

As of 6/30/2025	YTW	Dur.	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg Aggregate	4.5	6.1	1.2	4.0	6.1	2.5	-0.7	1.8
Bloomberg Treasury	4.0	5.9	0.8	3.8	5.3	1.5	-1.6	1.2
Bloomberg Gov't-Rel.	4.5	5.3	1.7	4.4	6.2	3.2	0.1	2.0
Bloomberg Securitized	4.9	5.8	1.2	4.2	6.6	2.4	-0.5	1.4
Bloomberg Corporate	5.0	6.8	1.8	4.2	6.9	4.3	0.1	2.9
Bloomberg LT Gov't/Credit	5.2	13.7	-0.2	3.4	3.3	-0.3	-4.9	1.8
Bloomberg LT Treasury	4.8	14.7	-1.5	3.1	1.6	-3.7	-8.2	0.1
Bloomberg LT Gov't-Rel.	5.8	11.5	1.4	4.7	4.6	2.2	-2.3	2.3
Bloomberg LT Corporate	5.7	12.7	1.2	3.6	5.2	2.8	-2.3	3.1
Bloomberg U.S. TIPS*	4.0	6.1	0.5	4.7	5.8	2.3	1.6	2.7
Bloomberg High Yield	7.1	2.8	3.5	4.6	10.3	9.9	6.0	5.4
S&P/LSTA Leveraged Loan	7.8	0.3	2.3	2.8	7.3	9.7	7.5	5.1
Treasury Bills	4.3	0.3	1.1	2.1	4.8	4.6	2.8	2.0





<sup>\*</sup>Yield and Duration statistics are for a proxy index based on similar maturity, the Bloomberg Barclays U.S. Treasury 5-10 Year Index. Data Source: Bloomberg

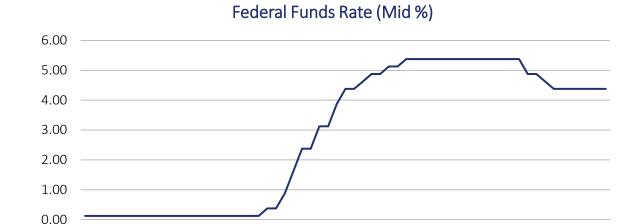
#### Federal Reserve

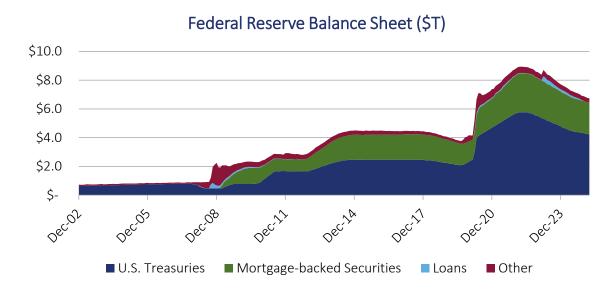
The Federal Open Market Committee left their overnight rate unchanged during Q2

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

The Fed's current balance sheet is roughly equal to its level following the COVID spike

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



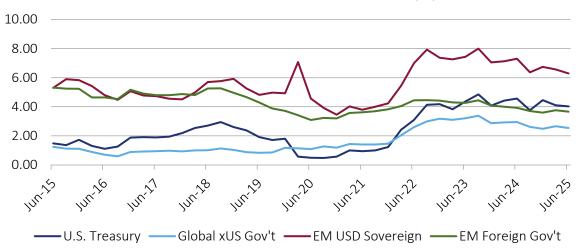


Data Source: Bloomberg

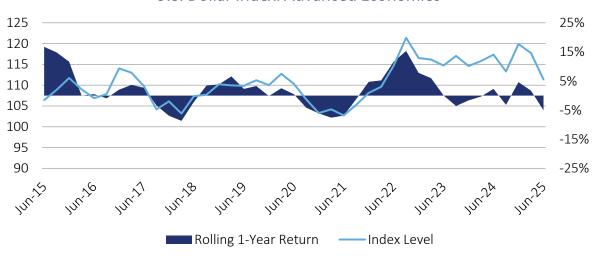
#### Non-U.S. Fixed Income

As of 6/30/2025	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
Developed Markets						
Bloomberg Global Aggregate xUS	7.3	10.0	11.2	2.7	-1.6	0.6
Bloomberg Global Aggregate xUS*	1.9	1.8	6.1	4.3	0.9	2.7
Bloomberg Global Inflation Linked xUS	8.5	11.6	8.1	0.2	-2.8	-0.1
Bloomberg Global Inflation Linked xUS*	1.7	1.0	0.8	-1.4	-2.7	1.8
Emerging Markets (Hard Currency)						
Bloomberg EM USD Aggregate	2.5	4.9	9.4	7.7	1.7	3.4
Emerging Markets (Foreign Currency	/)					
Bloomberg EM Local Currency Gov't	5.4	7.1	10.3	5.4	2.7	2.7
Bloomberg EM Local Currency Gov't*	2.3	3.2	8.7	7.9	3.3	3.8
Euro vs. Dollar	9.0	13.8	10.0	4.0	1.0	0.6
Yen vs. Dollar	4.1	9.1	11.7	-2.0	-5.6	-1.6
Pound vs. Dollar	6.3	9.7	8.6	4.1	2.1	-1.3

#### Global Fixed Income Yield to Worst (%)



#### U.S. Dollar Index: Advanced Economies

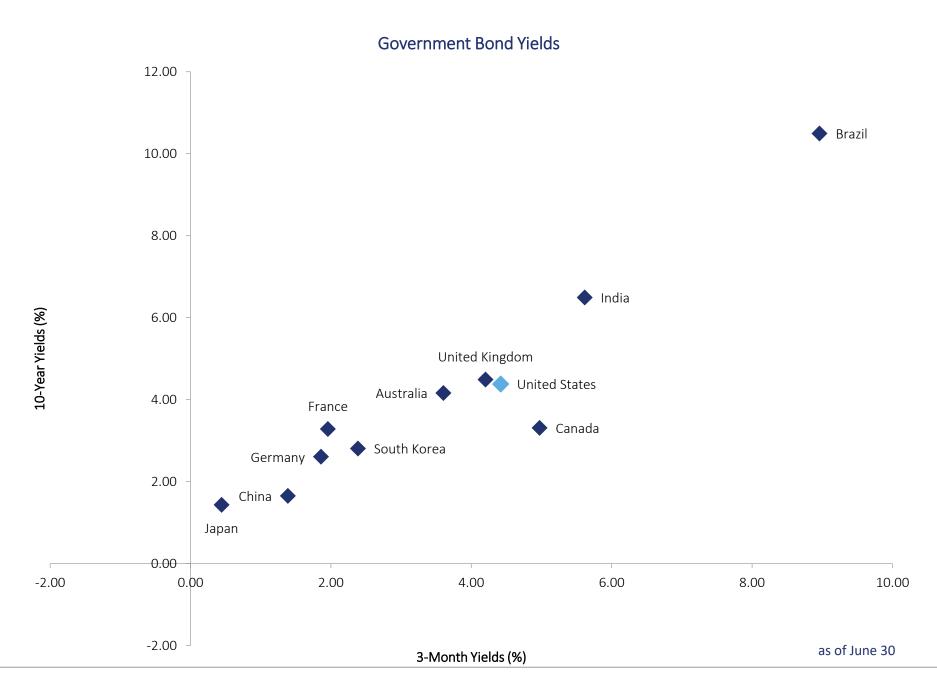


<sup>\*</sup>Returns are reported in terms of local market investors, which removes currency effects. Data Source: Bloomberg

### Global Interest Rates

Short-term rates remain positive across the globe; longer-term rates above 4.0% in the U.S., U.K. and Australia

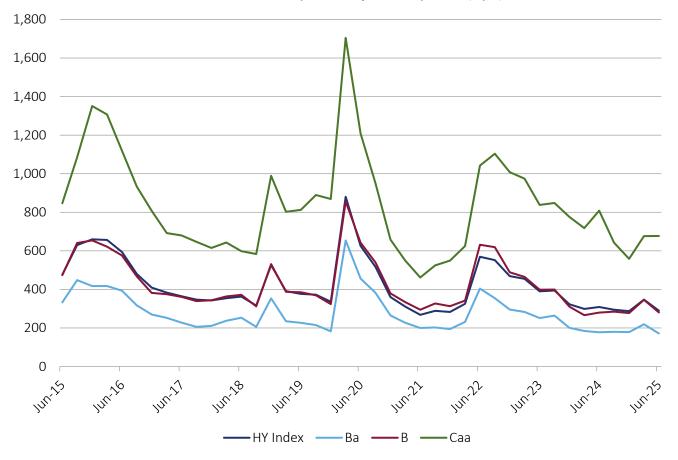
Data Source: Bloomberg



# High Yield Bond Market

As of 6/30/2025	Weight	YTW	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg High Yield		7.1	3.5	4.6	10.3	9.9	6.0	5.4
S&P LSTA Leveraged Loan		7.8	2.8	3.2	7.8	10.1	6.9	4.9
High Yield Quality Distribution								
Ba U.S. High Yield	51.3%	5.9	3.4	5.0	8.9	8.9	5.0	5.4
B U.S. High Yield	35.7%	7.0	3.6	4.4	9.5	10.0	5.8	5.0
Caa U.S. High Yield	11.6%	10.8	4.0	3.5	16.7	12.6	8.9	5.7
Ca to D U.S. High Yield	1.4%	20.8	0.6	2.2	27.9	24.9	20.5	7.6

#### Fixed Income Option Adjusted Spread (bps)



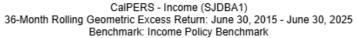
Data Source: Bloomberg

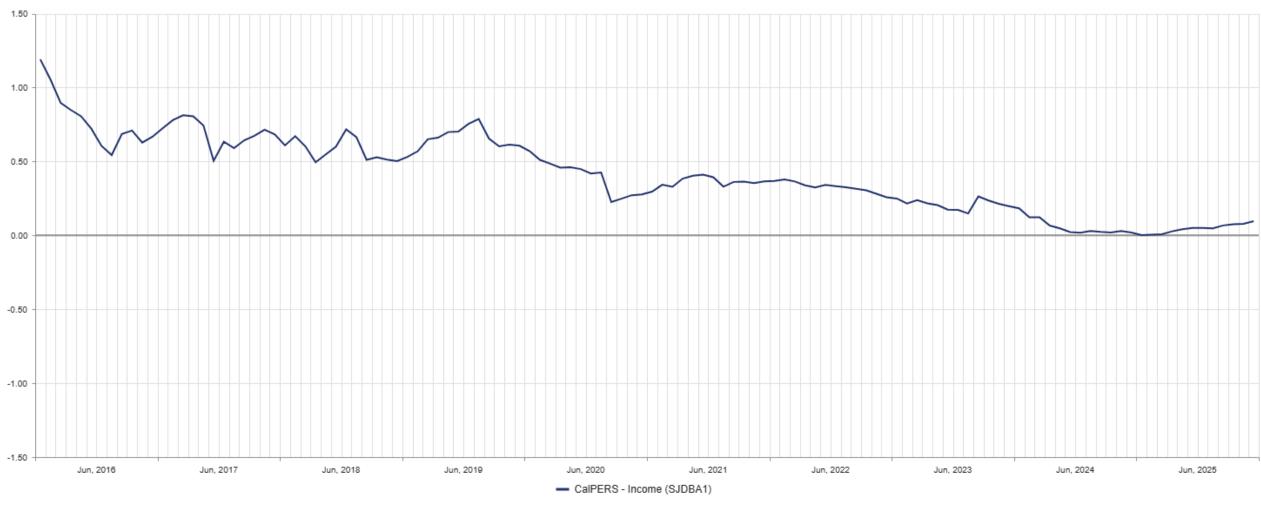
### CalPERS PERF Income – Performance

As of June 30, 2025

	Asse	et Value						١	/aR	5-Year	Ratios
	<u>(\$E</u>	<u>sillion)</u>	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>	<u>(\$B</u>	illion)	<u>Sharpe</u>	<u>Info</u>
INCOME Income Policy Benchmark	\$	168.6	<b>1.6%</b> 1.5%	<b>6.5%</b> 6.3%	<b>3.4%</b> 3.3%	<b>-1.2%</b> -1.3%	<b>2.5%</b> 2.2%	\$	7.7	-0.4 -0.4	1.3 0.0
<b>Treasury</b> <i>Custom Bloomberg Government</i>	\$	43.9	<b>-0.6%</b> -0.6%	<b>3.0%</b> 3.0%	<b>-2.1%</b> -2.1%	<b>-6.4%</b> -6.4%	<b>0.3%</b> 0.3%	\$	4.6	-0.8 -0.8	0.7 0.0
Mortgage-Backed Securities Custom Bloomberg Mortgage	\$	32.0	<b>1.2%</b> 1.2%	<b>6.9%</b> 6.6%	<b>2.7%</b> 2.4%	<b>-0.3%</b> -0.5%	<b>1.7%</b> 1.4%	\$	0.1	-0.4 -0.5	0.7 0.0
Investment Grade Credit  Custom Bloomberg Corp ex Sov	\$	34.0	<b>1.7%</b> 1.6%	<b>6.5%</b> 6.2%	<b>3.4%</b> 3.5%	<b>-1.4%</b> -1.4%	<b>3.3%</b> 3.0%	\$	3.3	-0.3 -0.3	0.0 0.0
High Yield Custom Bloomberg High Yield	\$	29.3	<b>3.6%</b> 3.5%	<b>9.3%</b> 9.1%	<b>9.4%</b> 9.3%	<b>5.6%</b> 5.5%	<b>%</b> %	\$	2.8	0.4 0.4	0.5 0.0
EM Sovereign Custom JPM EMBIG Diversified	\$	29.4	<b>2.9%</b> 2.8%	<b>7.9%</b> 7.6%	<b>%</b> %	<b>%</b> %	<b>%</b> %	\$	1.6	N/A N/A	N/A N/A

## CalPERS PERF Income – Rolling Excess Return

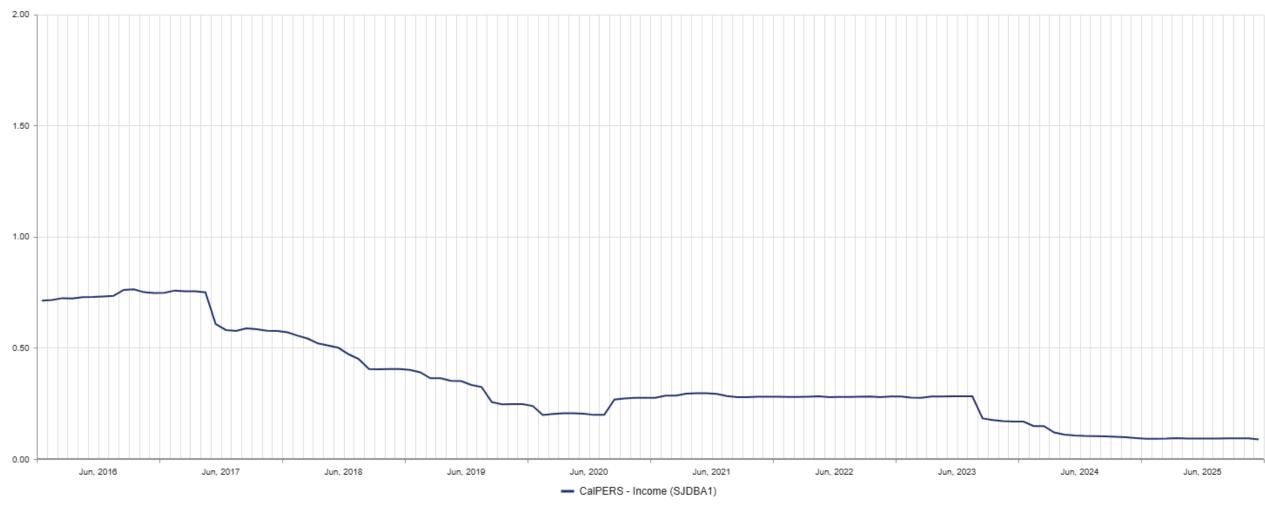




<sup>\*</sup> Monthly data; Net of Investment Management Fees

## CalPERS PERF Income – Rolling Tracking Error

CalPERS - Income (SJDBA1)
36-Month Rolling Geometric Excess Standard Deviation of Return: June 30, 2015 - June 30, 2025
Benchmark: Income Policy Benchmark



<sup>\*</sup> Monthly data; Net of Investment Management Fees

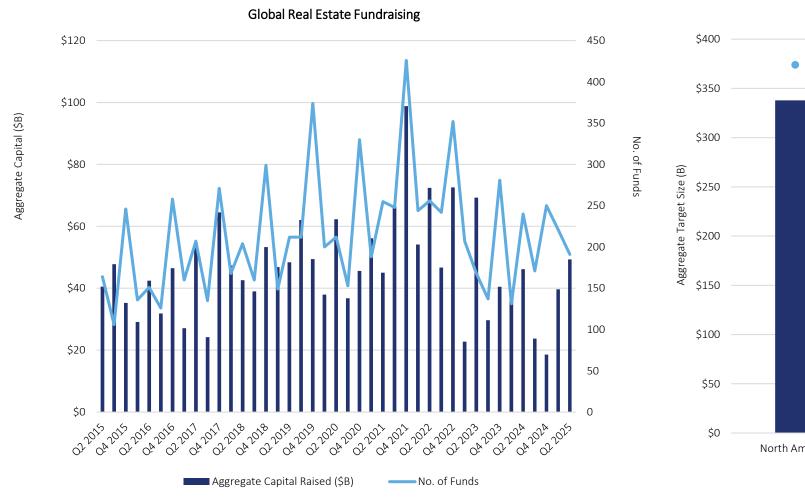
### Real Assets

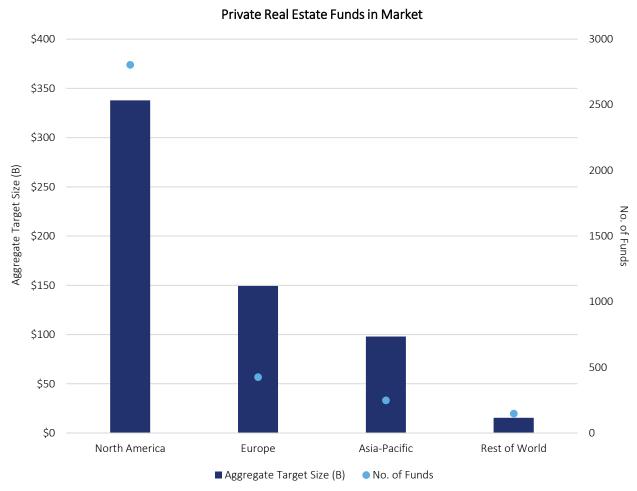
As of 6/30/2025	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg U.S. TIPS	0.5	4.7	5.8	2.3	1.6	2.7
Bloomberg Commodity Index	-3.1	5.5	5.8	0.1	12.7	2.0
Bloomberg Gold Index	5.2	24.4	39.8	21.4	11.8	9.9
Wilshire Global RESI Index	1.8	4.4	11.5	6.1	7.9	5.2
NCREIF ODCE Fund Index	1.0	2.1	3.5	-5.4	3.4	5.3
NCREIF Timberland Index	1.4	2.3	5.3	8.7	8.2	5.4
FTSE Global Core Infrastructure	4.6	9.8	18.0	7.6	9.0	7.7
Alerian Midstream Energy	-1.2	5.1	30.8	22.9	26.0	7.7
Bitcoin	30.6	14.8	73.8	79.1	63.7	82.6



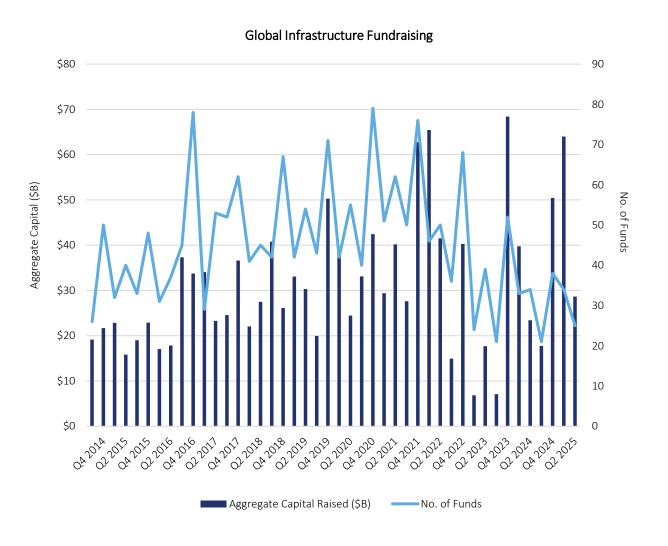
Data Sources: Bloomberg, National Council of Real Estate Investment Fiduciaries

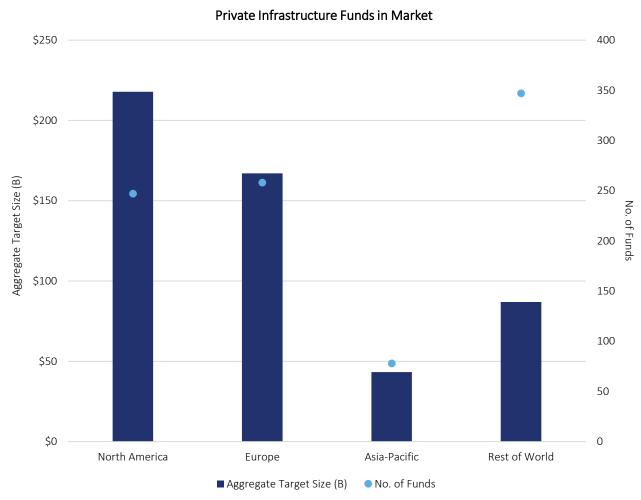
## Private Real Assets – Real Estate Fundraising Activity





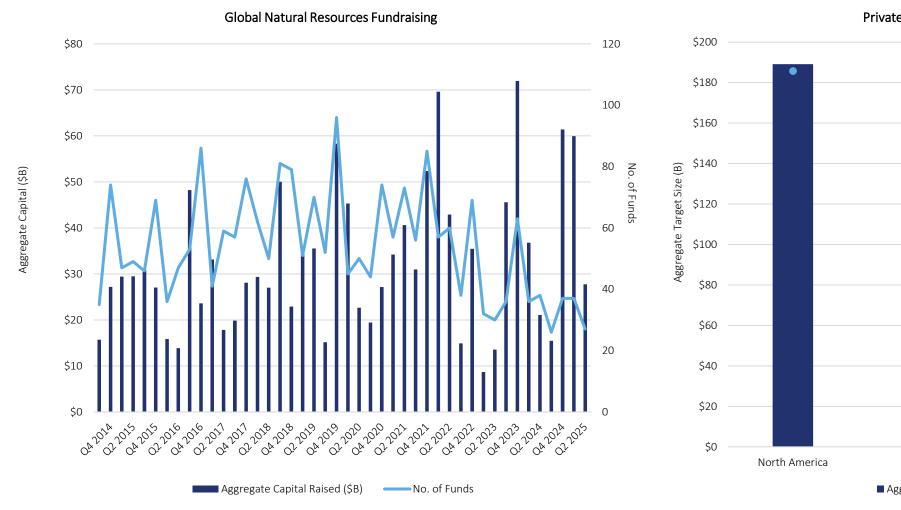
Source: Preqin as of August 13, 2025.

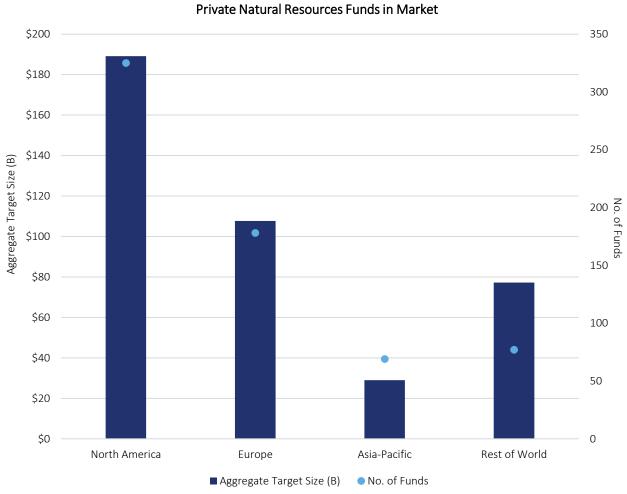




Source: Preqin as of August 13, 2025.

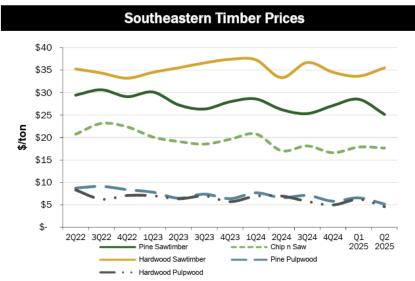
## Private Real Assets – Natural Resources Fundraising



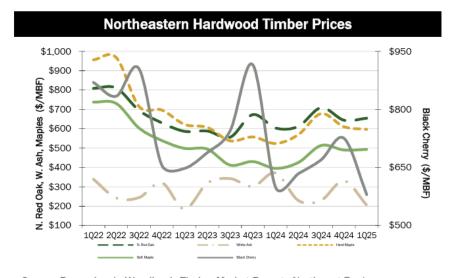


Source: Pregin as of August 13, 2025.

#### Timber Investments



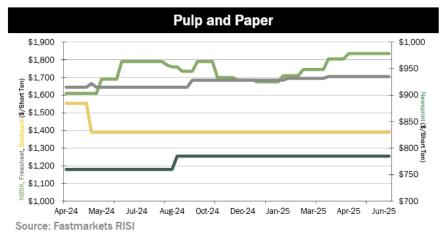
Source: Forest2Market®



Source: Pennsylvania Woodlands Timber Market Report - Northwest Region



Data Sources: Forest Investment Associates

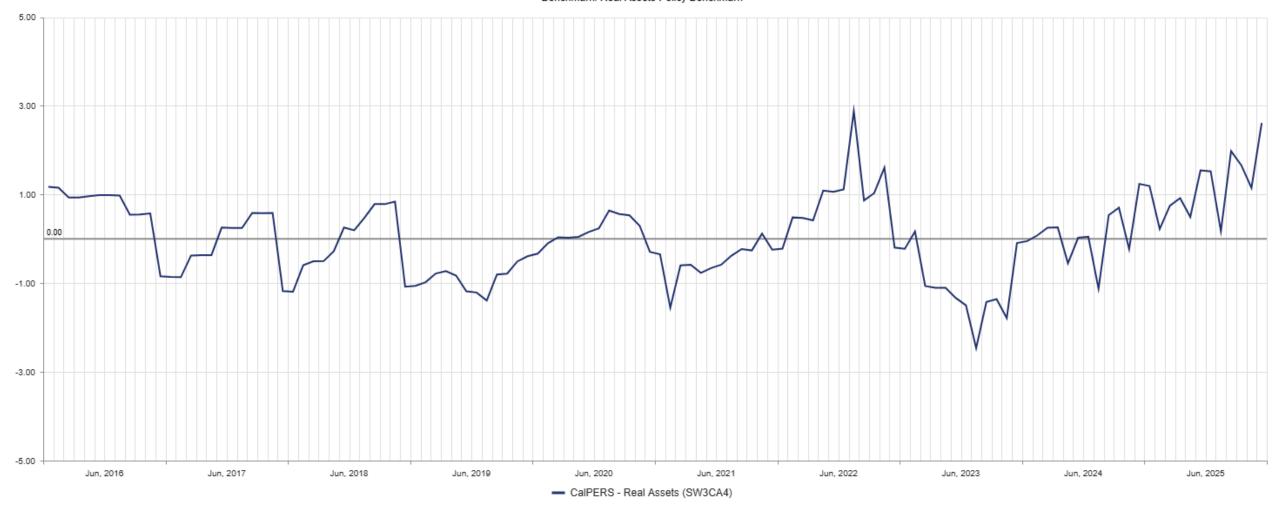


### CalPERS PERF Real Assets - Performance

As of June 30, 2025

	Asset Value										Ratios
	<u>(</u> \$B	Billion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>	<u>(</u> \$Bi	llion)	<u>Sharpe</u>	<u>Info</u>
REAL ASSETS  Real Assets Policy Benchmark	\$	73.0	<b>0.9%</b> 0.9%	<b>2.8%</b> 1.2%	<b>-2.6%</b> -5.0%	<b>3.3%</b> 2.0%	<b>4.6%</b> 4.5%	\$	9.6	0.1 -0.1	0.2 0.0
Real Estate  CalPERS Custom Real Estate Benchmark	\$	51.6	<b>1.1%</b> 0.9%	<b>1.1%</b> 1.2%	<b>-5.0%</b> -5.0%	<b>2.0%</b> 2.0%	<b>4.0%</b> 4.7%	\$	6.8	-0.1 -0.1	0.0 0.0
Infrastructure CalPERS Custom Infrastructure Benchmark	\$	21.1	<b>0.6%</b> 0.9%	<b>7.5%</b> 1.2%	<b>6.1%</b> -5.0%	<b>8.0%</b> 2.0%	<b>9.0%</b> 3.8%	\$	2.8	1.1 -0.1	0.7 0.0
Forestland  CalPERS Custom Forestland Benchmark	\$	0.3	<b>-0.9%</b> 0.9%	<b>10.7%</b> 1.2%	<b>8.6%</b> -5.0%	<b>6.0%</b> 2.0%	<b>1.1%</b> 3.1%	\$	0.0	0.4 -0.1	0.4 0.0

CalPERS - Real Assets (SW3CA4)
36-Month Rolling Geometric Excess Return: June 30, 2015 - June 30, 2025
Benchmark: Real Assets Policy Benchmark



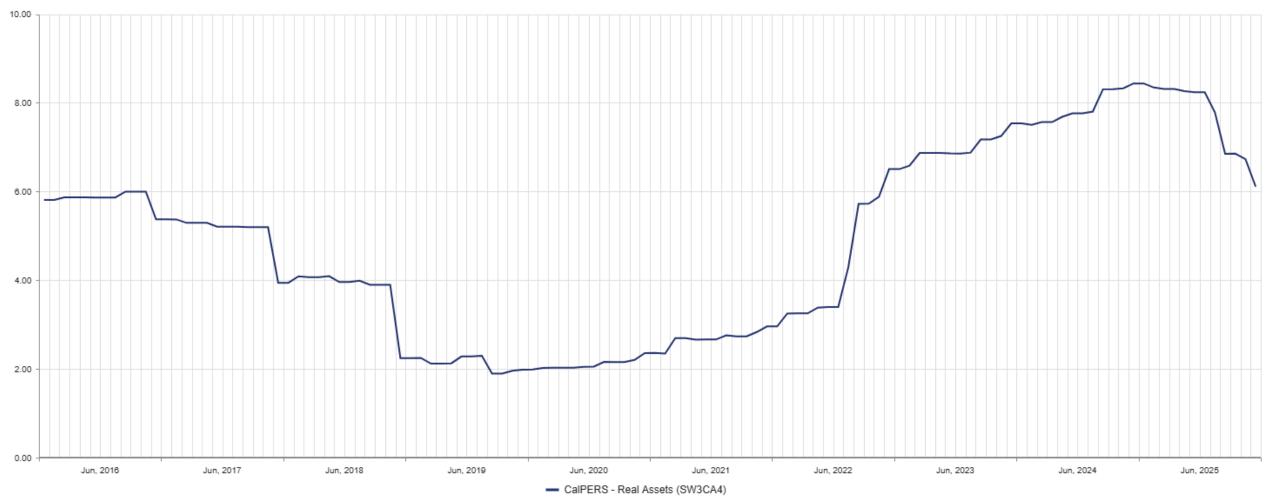
<sup>\*</sup> Monthly data; Net of Investment Management Fees

## CalPERS PERF Real Assets – Rolling Tracking Error

CalPERS - Real Assets (SW3CA4)

36-Month Rolling Geometric Excess Standard Deviation of Return: June 30, 2015 - June 30, 2025

Benchmark: Real Assets Policy Benchmark



<sup>\*</sup> Monthly data; Net of Investment Management Fees

NM

N/A

N/A

## CalPERS PERF Private Debt, Other Trust Level – Performance

0.2

NM

As of June 30, 2025

Other Perf

	Asse	et Value						\	/aR	5-Year	Ratios
	<u>(\$E</u>	<u>Billion)</u>	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>	<u>(\$B</u>	illion)	<u>Sharpe</u>	<u>Info</u>
PRIVATE DEBT Private Debt Policy Benchmark	\$	21.3	<b>4.6%</b> 0.8%	<b>12.8%</b> 8.4%	<b>12.0%</b> 8.5%	<b>%</b> %	<b>%</b> %	\$	2.7	N/A N/A	N/A N/A
	Asse	et Value						١	/aR	5-Year	Ratios
	<u>(\$E</u>	Billion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>	<u>(\$B</u>	illion)	<u>Sharpe</u>	<u>Info</u>
OTHER TRUST LEVEL	\$	12.8									
LLER Custom LLER Benchmark	\$	11.9	<b>1.7%</b> 1.1%	<b>6.5%</b> 4.8%	<b>7.3%</b> 4.8%	<b>4.9%</b> 3.0%	<b>3.7%</b> 2.1%	\$	0.0	1.3 0.3	1.4 0.0
<b>Opportunistic Strategies</b> Custom Opportunistic Strategies Benchmark	\$	0.5	<b>-2.3%</b> 1.7%	<b>3.4%</b> 7.0%	<b>4.2%</b> 7.0%	<b>6.8%</b> 7.0%	<b>%</b> %	\$	0.0	0.7 2.2	0.3 0.0
Trust Level Portfolio Management	\$	0.2	NM	NM	NM	NM	NM			N/A	N/A

NM

NM

NM

## CalPERS PERF Total Fund Financing — Performance

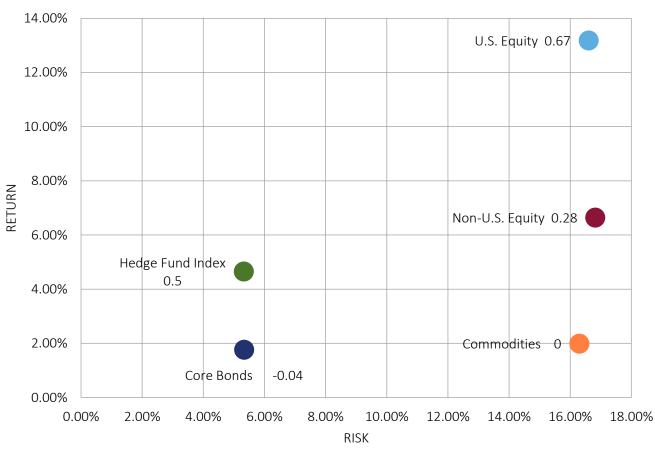
As of June 30, 2025

	Asset Value										
	<u>(\$1</u>	Billion)	<u>Quarter</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u> 10-Year</u>	(\$Billion)	<u>Sharpe</u>	<u>Info</u>	
TOTAL FUND FINANCING	\$	(34.1)	%	%	%	%	%		N/A	N/A	
Strategic Active	\$ \$	(21.3) (12.8)	% %	% %	% %	% %	% %		N/A N/A	N/A N/A	

# Hedge Fund Performance

As of 6/30/2025	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
Credit Suisse Hedge Fund Inde	2.2	4.3	7.2	7.1	7.8	4.7
Event Driven	3.0	3.7	10.8	9.0	9.3	4.2
Global Macro	-0.4	3.1	4.7	0.5	7.7	4.7
Long/Short Equity	6.2	6.9	11.1	11.8	9.0	5.8
Multi-Strategy	0.6	4.1	5.9	7.9	7.5	5.2
FT Wilshire 5000	11.1	5.7	15.2	19.1	16.2	13.2
MSCI ACWI ex-US (\$G)	12.3	18.3	18.4	14.6	10.7	6.6
Bloomberg Aggregate	1.2	4.0	6.1	2.5	-0.7	1.8
Bloomberg Commodity Index	-3.1	5.5	5.8	0.1	12.7	2.0

#### 10-Year Risk/Return



Note: Sharpe Ratio is included for each market segment

Data Sources: Bloomberg

#### Asset Class Performance

#### Asset Class Returns - Best to Worst

2020	2021	2022	2023	2024	2025 YTD
U.S. Equity	REITs	Commodities	U.S. Equity	U.S. Equity	Developed
20.8%	46.2%	16.1%	26.1%	23.8%	19.9%
Emrg Mrkts	Commodities	T-Bills	Developed	REITs	Emrg Mrkts
18.7%	27.1%	1.3%	18.9%	9.1%	15.6%
U.S. TIPS	U.S. Equity	High Yield	REITs	High Yield	U.S. Equity
11.0%	26.7%	-11.2%	16.1%	8.2%	5.7%
Developed	Developed	U.S. TIPS	High Yield	Emrg Mrkts	Commodities
8.3%	11.8%	-11.8%	13.4%	8.1%	5.5%
Core Bond	U.S. TIPS	Core Bond	Emrg Mrkts	Commodities	U.S. TIPS
7.5%	6.0%	-13.0%	10.3%	5.4%	4.7%
High Yield	High Yield	Developed	Core Bond	T-Bills	High Yield
7.1%	5.3%	-14.0%	5.5%	5.3%	4.6%
T-Bills	T-Bills	U.S. Equity	T-Bills	Developed	Core Bond
0.7%	0.0%	-19.0%	5.1%	4.3%	4.0%
Commodities	Core Bond	Emrg Mrkts	U.S. TIPS	U.S. TIPS	T-Bills
-3.1%	-1.5%	-19.7%	3.9%	1.8%	2.1%
REITs	Emrg Mrkts	REITs	Commodities	Core Bond	REITs
-7.9%	-2.2%	-26.8%	-1.3%	1.3%	-0.2%

**Annualized** 5-Year as of 6/25 U.S. Equity 16.2% Commodities 12.7% Developed 11.7% REITs 8.7% Emrg Mrkts 7.3% T-Bills 2.8% U.S. TIPS 1.6% Core Bond -0.7%

Data Sources: Bloomberg

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