

CalPERS Trust Level Review

Investment Committee
February 15, 2022

Performance – Key Figures (as of December 31, 2021)



9.7%

PERF 10-yr
absolute return



+10 bps

PERF 5-yr
excess return



Returns of Affiliate Investment Program funds across all time periods were in-line with their respective asset allocations and reflect varying risk levels

Performance Summary (as of December 31, 2021)

Funds Managed	Ending Asset Value (MM)	20-Yr		10-Yr		5-Yr		3-Yr		1-Yr		FYTD	
		Net Return	Excess bps										
Public Employees' Retirement Fund	500,712	7.3%	(41)	9.7%	1	10.8%	10	14.3%	39	13.3%	120	5.9%	104
CalPERS Health Care Bond Fund	519	3.9%	7	3.2%	35	3.6%	2	4.8%	(1)	-1.6%	(7)	0.0%	(4)
CEPPT Strategy 1	51	-	-	-	-	-	-	-	-	8.6%	(1)	3.0%	(0)
CEPPT Strategy 2	22	-	-	-	-	-	-	-	-	3.6%	5	1.6%	(4)
CERBT Strategy 1	14,784	-	-	9.5%	32	11.2%	29	16.2%	21	13.7%	13	4.4%	5
CERBT Strategy 2	2,010	-	-	8.1%	30	9.6%	25	13.7%	14	10.1%	9	3.7%	2
CERBT Strategy 3	880	-	-	6.6%	27	7.9%	20	11.5%	11	7.7%	3	3.4%	(2)
Judges' Retirement Fund	57	1.4%	11	0.7%	6	1.2%	8	1.0%	2	0.1%	4	0.0%	1
Judges' Retirement System II Fund	2,523	7.1%	7	9.3%	28	10.8%	29	15.4%	27	12.3%	19	4.2%	5
Legislators' Retirement System Fund	123	6.3%	2	6.8%	31	8.0%	20	11.5%	14	7.7%	6	3.4%	(1)
Long-Term Care Fund	5,623	5.5%	11	5.8%	18	7.2%	9	10.7%	5	7.9%	45	3.3%	3
Terminated Agency Pool	229	-	-	-	-	6.7%	-	10.2%	-	3.3%	-	4.8%	-



All returns are net of investment expenses.

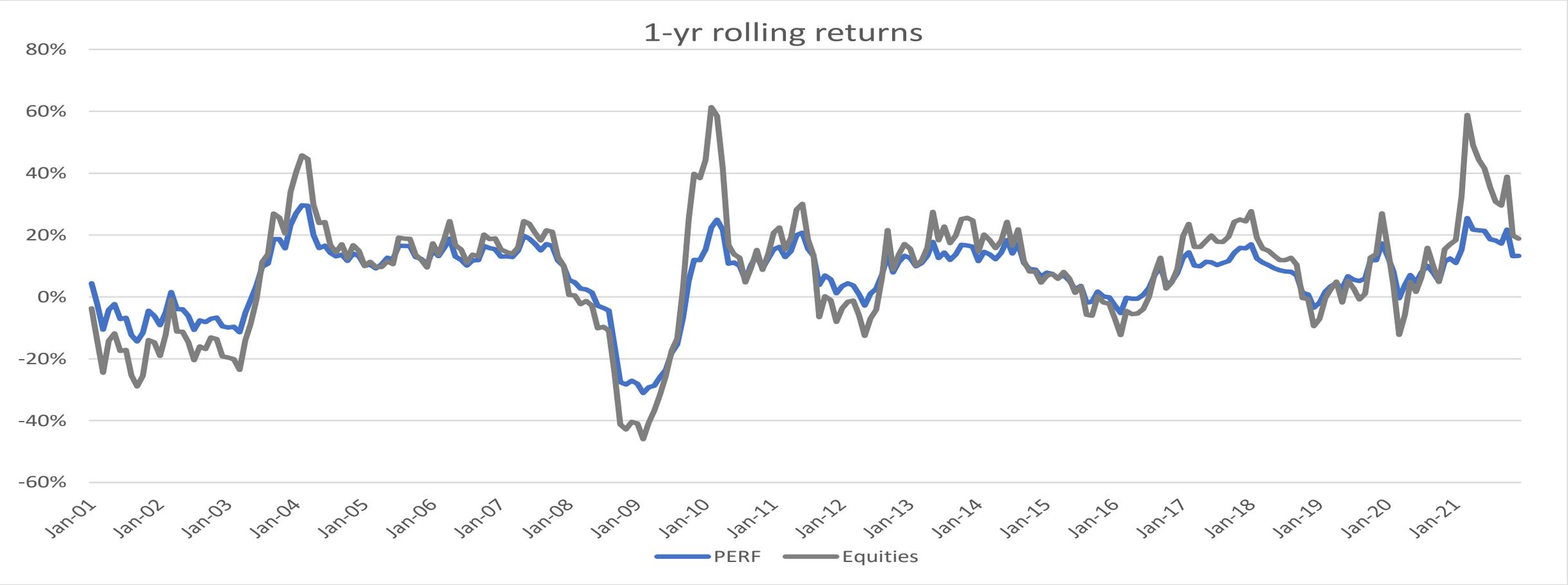
PERF Performance Summary (as of December 31, 2021)

Performance Summary	Ending Asset Value (bil)	Current Allocation (%)	Policy Target Weight (%)	20-Yr		10-Yr		5-Yr		3-Yr		1-Yr		FYTD	
				Net Return	Excess bps										
Public Equity	\$ 246.7	49.3%	50.0%	8.0%	(13)	12.1%	12	13.7%	(7)	19.0%	14	17.9%	26	5.7%	3
Cap Wtd.	\$ 171.6	34.3%	35.0%	8.2%	(13)	12.6%	12	14.7%	(7)	21.0%	14	19.1%	32	5.3%	3
Factor Wtd.	\$ 75.1	15.0%	15.0%	-	-	-	-	-	-	13.7%	5	14.7%	12	6.6%	3
Private Equity	\$ 49.0	9.8%	8.0%	11.4%	(14)	13.9%	(220)	16.5%	55	17.3%	267	39.3%	792	16.7%	979
Income	\$ 141.5	28.3%	28.0%	6.2%	60	4.4%	69	5.5%	42	7.5%	37	(1.4%)	15	1.3%	2
Long Spread	\$ 72.6	14.5%	15.0%	-	-	-	-	-	-	7.0%	67	(0.6%)	28	0.4%	8
Long Treasury	\$ 46.4	9.3%	10.0%	-	-	3.6%	(4)	5.2%	(6)	7.2%	(14)	(4.1%)	0	2.5%	(0)
Total Fund Income	\$ 7.5	1.5%	-	-	-	-	-	-	-	-	-	(4.3%)	(19)	2.1%	(38)
High Yield	\$ 15.0	3.0%	3.0%	-	-	-	-	-	-	8.2%	14	4.6%	8	1.7%	(1)
Real Assets	\$ 55.1	11.0%	13.0%	5.8%	(262)	9.0%	53	6.8%	44	7.1%	116	15.8%	242	11.5%	134
Total Fund	\$ 19.6	3.9%	-	-	-	-	-	-	-	-	-	15.2%	820	4.9%	141
Opportunistic	\$ 5.0	1.0%	-	-	-	-	-	-	-	-	-	15.2%	820	4.9%	141
LLER	\$ 7.6	1.5%	-	-	-	-	-	2.8%	192	2.8%	214	1.8%	174	0.7%	68
Other	\$ 7.0	1.4%	-	-	-	-	-	-	-	-	-	-	-	-	-
Financing & Liquidity	\$ (11.2)	-2.2%	-	-	-	-	-	-	-	-	-	(0.1%)	-	(0.1%)	-
Trust Level Financing	\$ (22.8)	-4.6%	-	-	-	-	-	-	-	-	-	(0.1%)	-	(0.1%)	-
Liquidity	\$ 11.6	2.3%	1.0%	1.8%	5	0.9%	(1)	1.3%	28	1.0%	21	0.1%	5	0.1%	3
Total PERF	\$ 500.7	100.0%	100.0%	7.3%	(41)	9.7%	1	10.8%	10	14.3%	39	13.3%	120	5.9%	104



All returns are net of investment expenses.

PERF Returns Closely Tied to Equity Markets



PERF Risk – Key Figures (as of January 4, 2022)



98%

Contribution to
PERF Volatility from
Assets Sensitive to
Economic Growth*



19 bps

Total Fund
Actionable
Tracking Error



2.4x

Liquidity
Coverage Ratio
for 30-Day Stress
Scenario

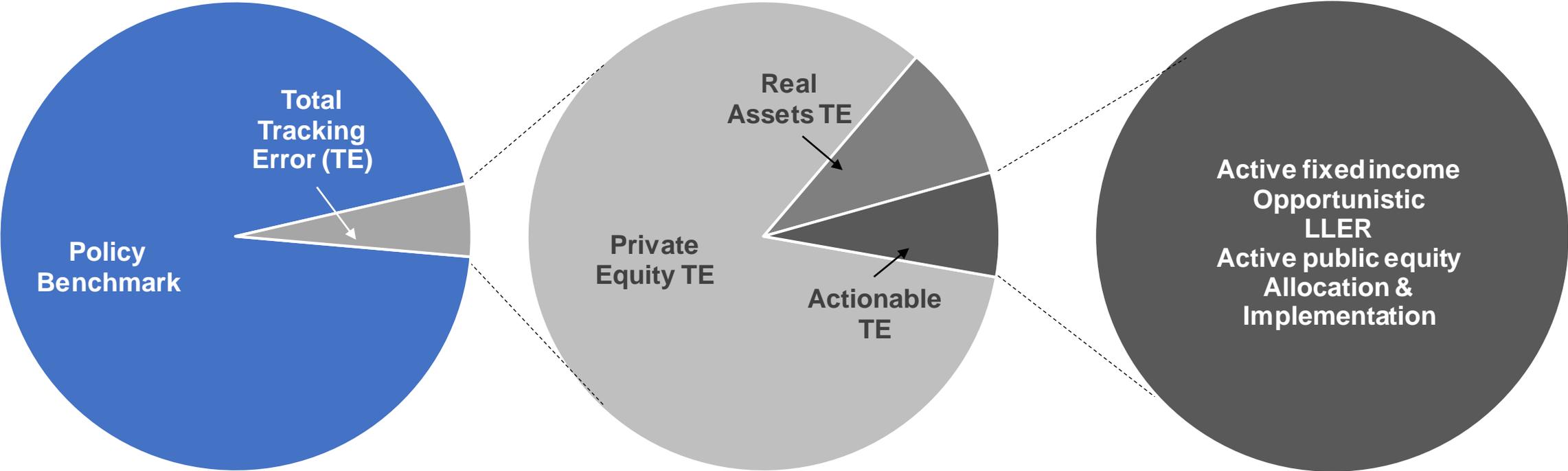
* Risk model estimated sensitivity of PERF returns to stock market

PERF Tracking Error in Total Fund Context (as of January 4, 2022)

Total Volatility = 10.6%

Total Tracking Error = 139 bps

Actionable Tracking Error = 19 bps



Investment Office Operating Model

Total INVO
Operational
Risk Score
4

Functions		Sub-Functions					
Industry Aligned	Trust Level Management	Policy & Governance	Strategic & Dynamic Asset Allocations	Liquidity & Leverage	Risk Management	Fund Structure & Business Model	Controls Environment
	Portfolio Construction, Management & Trading	Portfolio Construction - Public Markets	Securities Trading - Public Markets	Private Asset Strategy & Transactions	Manager/ Partner Selection & Oversight		
	Investment Operations & Data	Trade Operations	Private Market Analysis & Operations	Valuation / Pricing	Investment Accounting & Custody	Performance, Attribution & Risk Reporting	Data Management
	Investment Technology & Support Services	Technology Management & Information Security	Vendor Utilization & Management	Business Continuity / Disaster Recovery	Resource Management	Financial Management	
CaIPERS	Engagement	Manager & Industry Peer Engagement	ESG Advocacy & Integration	Stakeholder Engagement			



Scale			
Low	Medium	Med-High	High
1-3	4-5	6-7	8-10



Economic Update | Review

Excess demand in activity as it normalizes

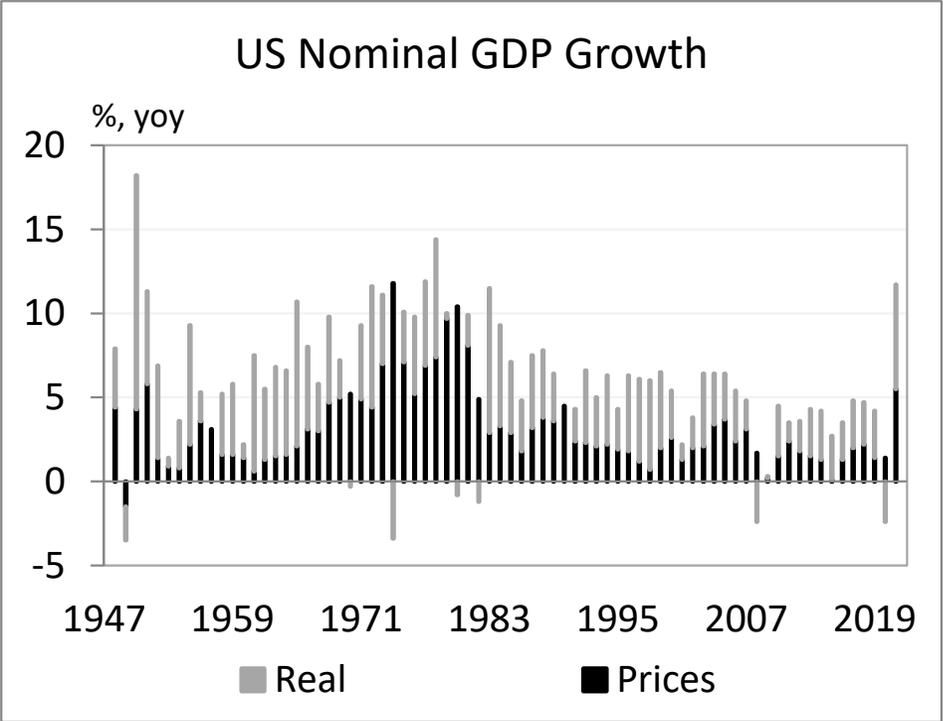
Underlying activity largely robust

Labor supply remains below pre-pandemic levels

Capacity pressures dissipating slowly

Result: excess demand in activity

Analysts' adjusting expectations for wage and price pressure



Economic Update | Future outlook

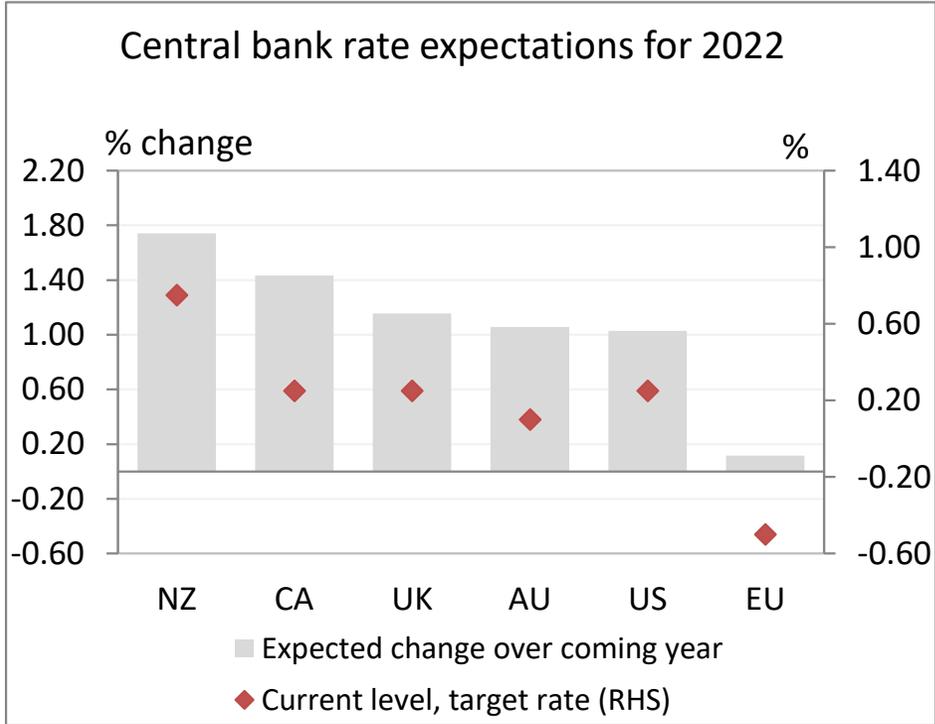
Policy setting and event risk a focus for 2022

Central banks are re-assessing the degree of policy accommodation

Fiscal policy less stimulative

Global recovery uneven

Both upside and downside risks to economic outlook



Appendix

Chief Investment Officer (332)

Strategy & Research



Implement



Monitor, Review, & Assess

Board Governance & Sustainability (BGS)

Global Equity (GE)

Investment Controls & Operational Risk (ICOR)

Global Fixed Income (GFI)

Investment Servicing Division (ISD)

Opportunistic Strategies (OS)

Investment Risk & Performance (IRP)

Private Equity (PE)

Real Assets (RA)

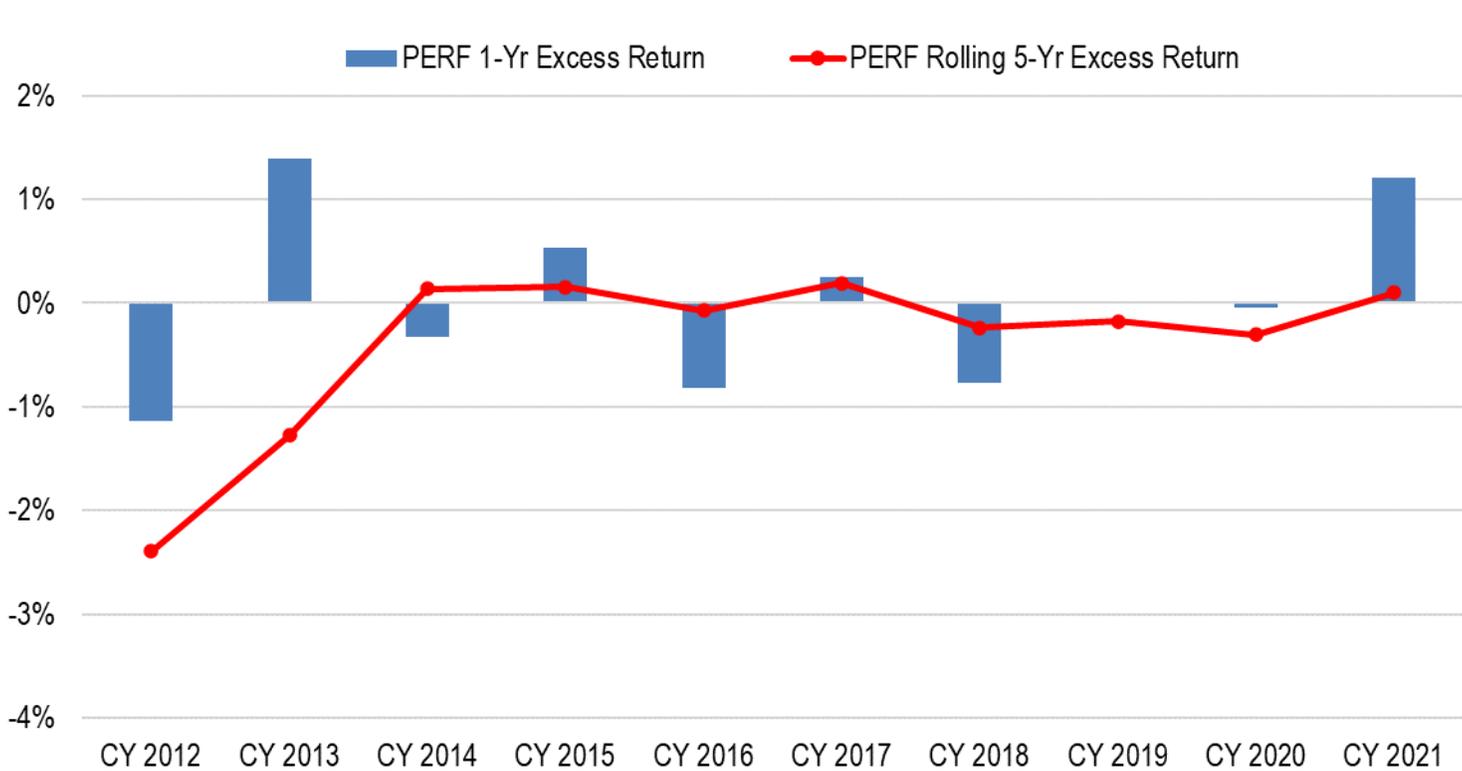
Trust Level Portfolio Management & Implementation (TLPMI)

Total Fund Business & Analytical Services (TFBAS)

Supplemental Income Plan Performance (as of December 31, 2021)

Funds Managed	Ending Asset Value (MM)	20-Yr		10-Yr		5-Yr		3-Yr		1-Yr		FYTD	
		Net Return	Excess bps										
Target Income Fund	122	-	-	5.4%	21	6.7%	14	10.2%	15	5.3%	(2)	1.8%	(2)
Target 2015 Fund	100	-	-	6.1%	13	6.8%	14	10.7%	15	5.5%	(2)	1.8%	(2)
Target 2020 Fund	188	-	-	7.0%	15	7.8%	16	12.7%	19	7.9%	1	2.4%	(1)
Target 2025 Fund	235	-	-	8.1%	14	9.2%	17	14.6%	22	10.3%	3	2.9%	(0)
Target 2030 Fund	226	-	-	9.0%	9	10.3%	10	16.4%	11	12.7%	6	3.5%	1
Target 2035 Fund	144	-	-	9.9%	7	11.5%	12	18.2%	15	15.1%	10	4.1%	2
Target 2040 Fund	135	-	-	10.7%	7	12.6%	11	19.5%	15	17.3%	12	4.7%	3
Target 2045 Fund	77	-	-	11.0%	6	13.1%	11	19.5%	15	17.3%	12	4.7%	3
Target 2050 Fund	44	-	-	11.0%	6	13.1%	11	19.5%	14	17.3%	12	4.7%	3
Target 2055 Fund	16	-	-	-	-	13.1%	11	19.5%	14	17.3%	12	4.7%	3
Target 2060 Fund	9	-	-	-	-	-	-	19.4%	10	17.3%	12	4.7%	3
SSgA STIF	108	-	-	0.7%	9	1.3%	14	1.0%	4	0.1%	4	0.0%	1
SIP US ST Bond Core	38	-	-	-	-	1.8%	(8)	2.2%	(6)	-0.5%	(6)	-0.5%	(3)
SIP US Bond Core	63	-	-	-	-	3.6%	2	4.8%	2	-1.6%	(9)	0.0%	(5)
SIP Real Asset Core	14	-	-	-	-	7.4%	5	12.4%	14	21.0%	(13)	6.8%	(4)
SIP Russell All Cap Core	757	-	-	-	-	18.0%	(2)	25.8%	(1)	25.8%	10	9.2%	4
SIP Gbl All Cap EX-US	78	-	-	-	-	10.1%	22	13.9%	24	8.7%	20	-0.9%	5

PERF Excess Returns | Rolling 5-Year (as of December 31, 2021)



1 Year (+120 bps excess return)

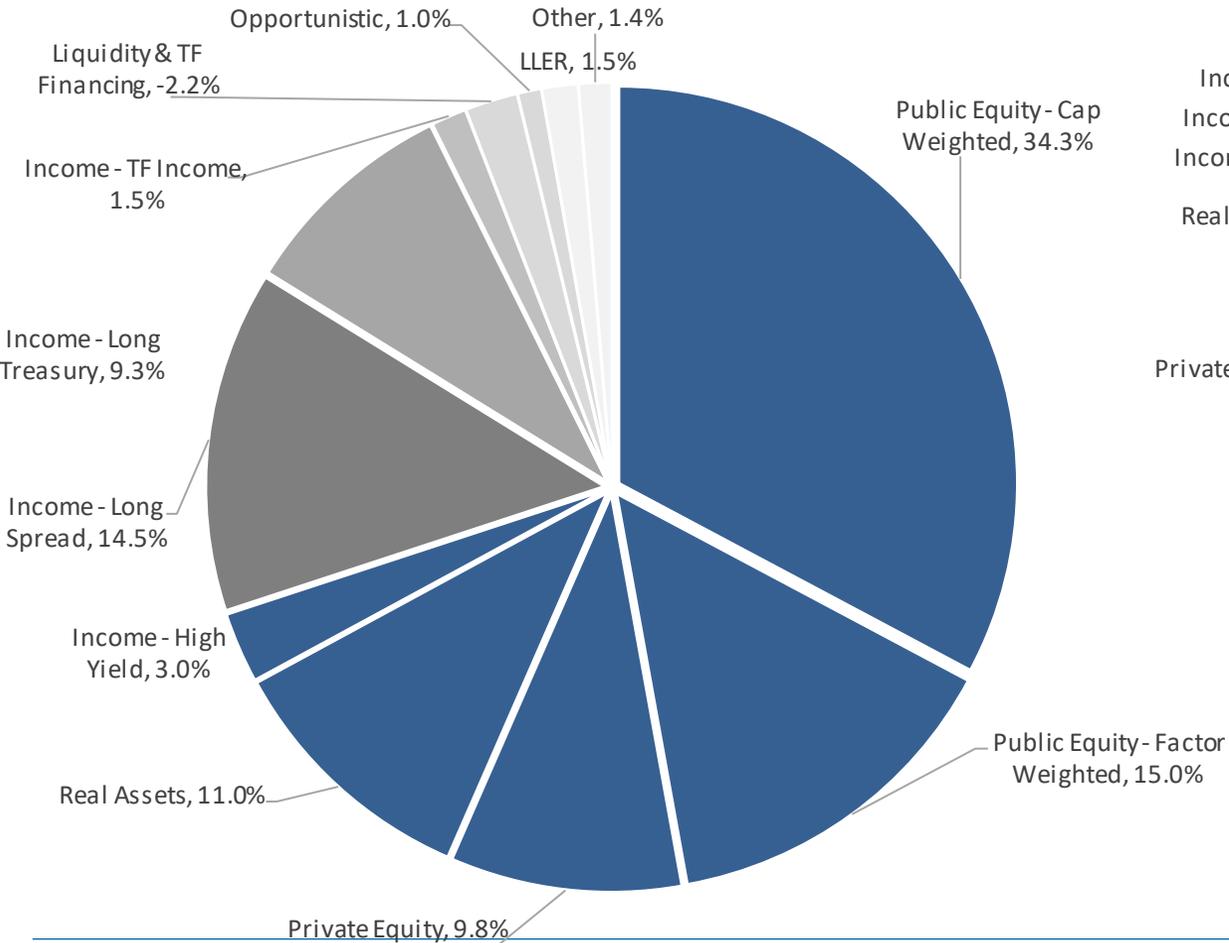
- + Primary Contributors
 - Private Equity (+61 bps)
 - Real Assets (+25 bps)
 - Public Equity – Cap Weighted (+12 bps)
 - Allocation (+7 bps)

5 Year (+10 bps/yr excess return)

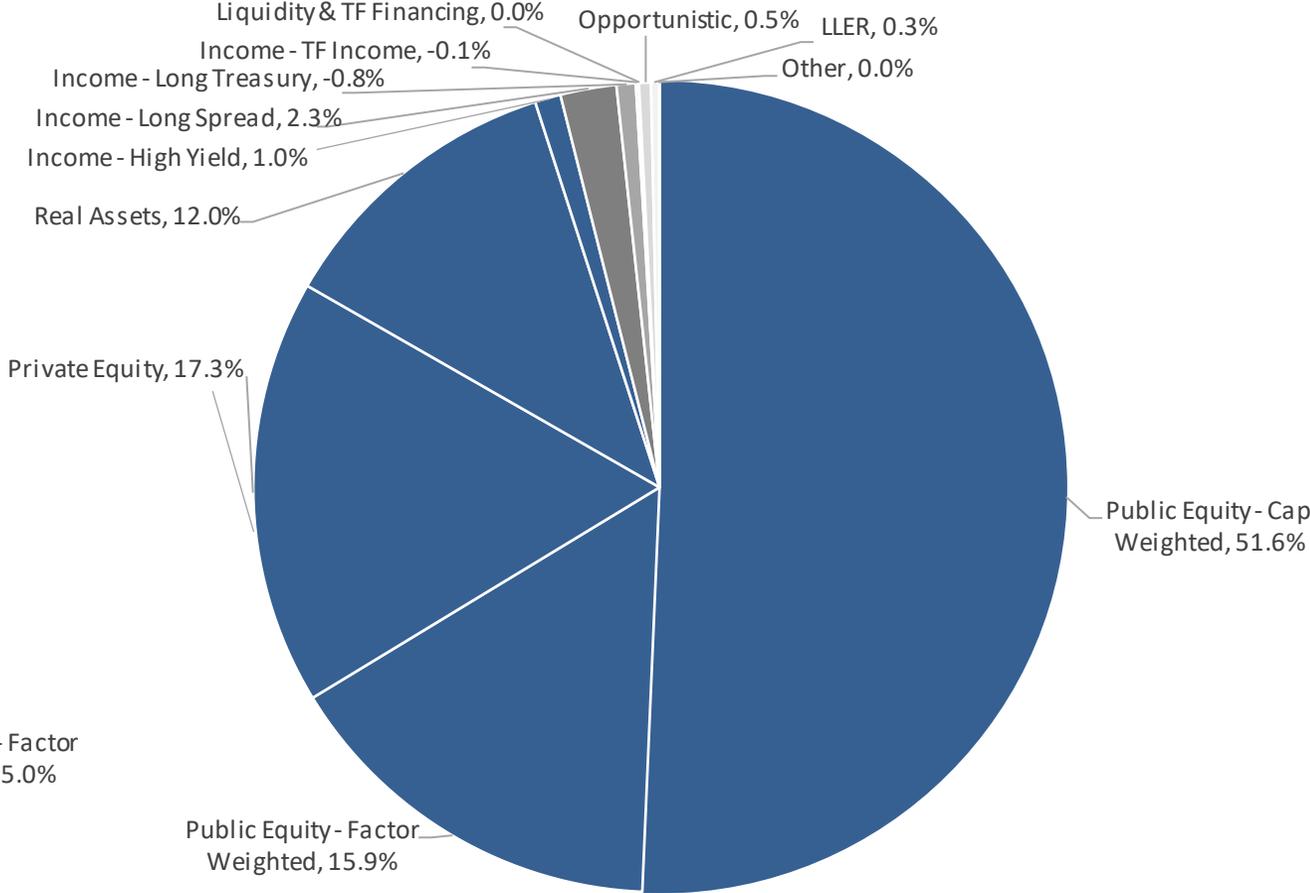
- + Primary Contributor
 - Income – Spread (+9 bps)
- Primary Detractors
 - Public Equity – Cap Weighted (-7 bps)
 - Private Equity (-4 bps)

Assets Sensitive to Economic Growth Dominate Risk

Asset Allocation (as of 12/31/2021)



Risk Contribution by Asset Class (as of 1/4/2022)



Legend