

# SB cera

# QUARTERLY PERFORMANCE REPORT

SAN BERNARDINO COUNTY EMPLOYEES' RETIREMENT ASSOCIATION



JUNE 30, 2024

Sam Austin, Partner Christian McCormick, Senior Consultant Thao Nguyen, Senior Consulting Specialist



### **MARKET ENVIRONMENT**

### Q2 2024 OVERVIEW

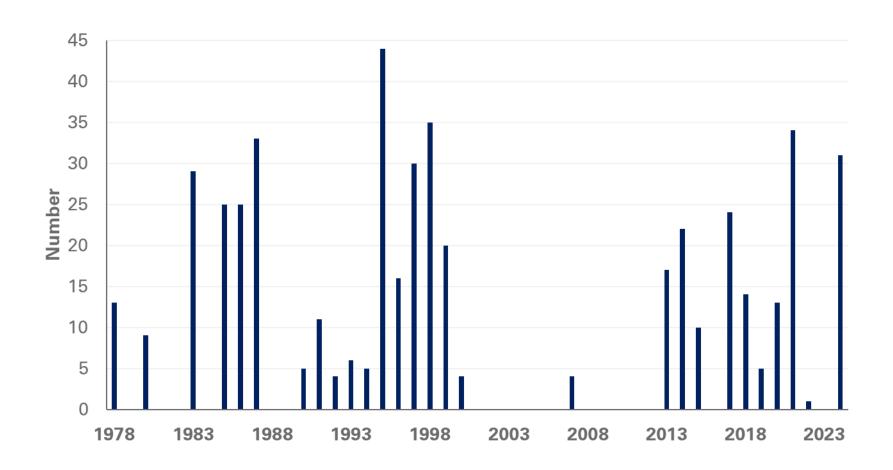
MSCI ACWI IMI (Net) World with Small Cap 2,38%   18,40%   4,70%   10,30%   8,17%   MSCI ACWI IMI (SD) World WIO Small Cap 2,28%   10,20%   5,43%   10,70%   8,43%   MCI ACWI IMI (SD)   World (Local Currency)   3,35%   20,70%   7,24%   11,70%   9,22%   MCI ACWI IMI (SD)   MCI ACWI IMI (S			Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.							
MSCI ACM IM (Net)  Morid With Small Cap 2.38% 18.40% 4.70% 10.38% 8.17% MSCI ACM IN (USD)  World QLOcal Currency) 3.38% 20.70% 7.24% 11.70% 9.22% MSCI ACM IN (Local)  World QLOcal Currency) 3.38% 20.70% 7.24% 11.70% 9.22%  Russell 3000  Domestic Fall (Dap 2.22% 23.12% 8.05% 14.14% 12.86% Russell 1000  Large Core 4.28% 24.56% 10.01% 15.04% 12.86% Russell 1000  Large Core 4.28% 24.56% 10.01% 15.04% 12.86% Russell 1000 Growth  Large Corewth 5.35% 33.46% 11.28% 14.461% 12.51% Russell 2000 Growth  Large Growth 5.35% 33.46% 11.28% 14.461% 12.51% Russell 2000 Growth  Small Core 3.25% 10.06% 5.25% 9.01% 8.23% Russell 2000 Russell 2000 Small Core 4.22% 11.28% 10.06% 15.07% 12.06% Russell 2000 Growth  Small Growth 2.92% 91.41% 7.78% 18.21% 16.07% Russell 2000 Growth  Small Core 5.40% 10.01% 18.21% 10.07% Russell 2000 Russe	World Equity Benchmarks							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	-		-	-	- !	$\neg$
MSCI ACWI (Local) World (Local Currency) 3.35% 25.7% 19.38% 5.43% 10.78% 8.45% MSCI ACWI (Local) World (Local Currency) 3.35% 25.12% 8.05% 11.12% 11.15% 8.25% 8.45% MSCI ACWI (Local) World (Local Currency) 4.26% 24.56% 10.01% 15.04% 12.86% 8.05% 11.28% 8.05% 11.00% 12.86% 8.05% 11.00% 15.04% 12.86% 8.05% 11.00% 15.04% 12.86% 8.05% 11.00% 10.00% 12.86% 8.05% 11.00% 15.04% 12.86% 8.05% 11.00% 10.00% 12.86% 10.01% 15.04% 12.86% 10.01% 15.04% 12.86% 8.05% 11.00% 10.00% 1	MSCI ACWI IMI (Net)	World with Small Cap	2.38%	18.40%	4.70%	10.36%	8.17%	, ,		-	-			
No.   Activity   Co.	MSCI ACWI Net (USD)	World W/O Small Cap	2.87%	19.38%	5.43%	10.76%	8.43%	MSCI ACWI Net (USD)			-			
Russell 1000   Domestic All Cap   3.22%   23.12%   8.65%   14.14%   12.15%   12.65%   12.66	MSCI ACWI (Local)	World (Local Currency)	3.35%	20.70%	7.24%	11.70%	9.82%	MSCI ACWI (Local)		_	_			
Russell 1000   Large Core   4.28%   24.59%   10.01%   15.04%   12.86%   1	Domestic Equity Benchmarks	· · · · · · · · · · · · · · · · · · ·						Russell 3000						
Russell 1000	Russell 3000	Domestic All Cap	3.22%	23.12%	8.05%	14.14%	12.15%	S&P 500		1				
Russell 1000 Growth Large Growth 8.33% 33.4%, 11.29%, 19.34%, 16.33% Russell 2000 Small Core - 3.20% 10.09% 5.25% 9.01% 8.23% Russell 2000 Small Core - 3.20% 10.09% 5.25% 6.34% 7.00% Russell 2000 Value Small Value - 3.46% 10.09% 4.86% 6.17% 7.39% Russell 2000 Value Small Value - 3.46% 10.09% 4.86% 6.17% 7.39% Russell 2000 Value Small Value - 3.46% 10.09% - 4.86% 6.17% 7.39% Russell 2000 Value Russell 2000 Value Small Value - 3.46% 10.09% - 4.86% 6.17% 7.39% Russell 2000 Value Russell 2000 Value Russell 2000 Value Small Value - 3.46% 10.09% - 4.86% 6.17% 7.39% Russell 2000 Value Russell 2000 Valu	S&P 500	Large Core	4.28%	24.56%	10.01%	15.04%	12.86%	Russell 1000						
Russell 1000 Growth Large Growth 8.33% 33.48% 11.28% 19.34% 16.33% Russell 1000 Value Large Value 2.217% 13.06% 2.52% 9.01% 8.23% Russell 1000 Value Russell 2000 Small Core 3.28% 10.06% 2.58% 6.44% 7.00% 6.23% 7.00% 6.23% 7.00% 7.39% 6.23% 7.00% 7.39% 6.23% 7.00% 7.39%	Russell 1000	Large Core	3.57%	23.88%	8.74%	14.61%	12.51%	Russell 1000 Growth						
Russell 2000 Small Core 3.38% 10.06% 5.52% 9.01% 8.23% Russell 2000 Small Core 3.38% 10.06% 5.52% 9.01% 7.07% 7.39% Russell 2000 Small Core 3.38% 10.06% 10.05% 10.05% 7.07% 7	Russell 1000 Growth	Large Growth	8.33%	33.48%	11.28%	19.34%	16.33%				- 1			
Russell 2000 Growth Small Core	Russell 1000 Value	Large Value	-2.17%	13.06%	5.52%	9.01%	8.23%					·		
Russell 2000 Growth Small Growth - 2-92% 9-14% - 4-86% 6-17% 7-39% 7-39% 8-18-21% 10-90% - 0-55% 7-70% 6-23% 8-18-21% 16-07% 16-	Russell 2000	Small Core	-3.28%	10.06%	-2.58%	6.94%	7.00%							
NASDAQ Composite   Small value   Small value   S.6-8"   10.90"   10.90"   10.25"   10.90"   10.25"   10.90"   10.25"   10.90"   10.25"   10.90"   10.25"   10.90"   10.25"   10.90"   10.25"   10.90"   1.90"   1	Russell 2000 Growth	Small Growth	-2.92%	9.14%	-4.86%	6.17%	7.39%							
International Equity Benchmarks  MSCI ACWI Ex USA  MSCI ACWI Ex USA  MSCI Exercit (USD)  Int'l Developed  -0.42% -11.54% -2.89% -6.46% -4.33% -6.46% -4.33% -6.46% -4.33% -6.46% -4.33% -6.46% -4.33% -6.46% -4.33% -6.46% -4.33% -7.40% -7.40% -7.78% -7.35% -7.40% -7.78% -7.27% -7.78% -7.35% -7.40% -7.78% -7.40% -7.78% -7.25% -7.40% -7.78% -7.25%	Russell 2000 Value	Small Value	-3.64%	10.90%	-0.53%	7.07%	6.23%	Russell 2000 Value			$\Rightarrow$			
MSCI ACWI Ex USA World ex-US 0.96% 11.62% 0.46% 5.55% 3.84% MSCI EAFE Net (USD) Int'l Developed 4 0.42% 11.54% 2.89% 6.46% 4.33% MSCI EAFE (Local) Int'l Developed (Local Currency) 1.09% 15.80% 5.07% 3.35% 4.19% 4.299% MSCI EAFE (Local) MSCI EAFE (Local) MSCI EAFE (Local) Int'l Developed (Local Currency) 1.09% 15.80% 5.07% 3.35% 4.19% 4.299% MSCI EAFE (Local) MSCI EAFE Small Cap Small Cap Int'l 1.84% 7.78% 3.35% 4.19% 4.299% MSCI EAFE (Local) MSCI EAFE Small Cap Small Cap Int'l 1.84% 7.78% 3.35% 4.19% 4.29% MSCI EAFE Small Cap MSCI EAFE Small Cap Small Cap Int'l 1.09% 10.44% 1.66% 3.92% 4.31% MSCI EAFE Small Cap MSCI Emerging Markets Bloomberg Aggregate Bardays US High Yield 1.09% 10.44% 1.66% 3.92% 4.31% MSCI EAFE MSCI EMERGING MSCI EMERGING MSCI EAFE Small Cap MSCI EAFE Smal	NASDAQ Composite	Large Growth	8.47%	29.61%	7.78%	18.21%	16.07%	NASDAQ Composite						
MSCI EAFE Net (USD)	International Equity Benchmarks							MSCI ACWI Ex USA		1	-			
MSCI EAFE (Local)  Int'l Developed (Local Currency)  1.00%  15.08%  8.10%  8.98%  7.40%  MSCI EAFE Small Cap  Small Cap int'l  1.84%  7.78%  3.35%  4.19%  4.29%  MSCI EAFE Small Cap  MSCI EAFE Small Cap  MSCI Emerging Markets  Emerging Equity  5.00%  12.55%  5.07%  3.10%  2.79%  MSCI Emerging Markets  Bloomberg Aggregate  Core Bonds  0.07%  2.63%  -3.02%  -3.02%  1.35%  4.31%  6.59%  4.31%  6.59%  4.31%  6.59%  4.31%  6.59%  6.41%  MSCI Emerging Markets  Bloomberg Aggregate  Bardays US High Yield  High Yield  1.09%  11.04%  5.97%  5.30%  4.61%  5.97%  5.30%  4.61%  5.97%  5.30%  4.61%  Bloomberg Aggregate  Bradays US High Yield and Shark Loans  Brada ML US 3-Month T-Bill  Cash  1.32%  5.40%  3.03%  2.16%  1.51%  Bloomberg US TIPS 1-10 Yr  Inflation  1.12%  4.26%  0.40%  2.67%  2.05%  5.09%  5.49%  -2.02%  -0.42%  5.00%  5.65%  7.20%  5.08%  6.6bal Credit  JPM EBIE-  Em. Mkt. Bonds  1.10%  0.93%  -5.69%  -3.27%  -1.29%  0.84%  1.84%  1.84%  1.82%  1.34%  1.84%  1.84%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.34%  1.82%  1.84%  1.82%  1.84%  1.82%  1.84%  1.82%  1.84%  1.85%  1.84%  1.85%	MSCI ACWI Ex USA	World ex-US	0.96%	11.62%	0.46%	5.55%	3.84%	MSCI EAFE Net (USD)						
MSCI EAFE (Local) Int'l Developed (Local Currency) 1.00% 15.08% 8.10% 8.98% 7.40% 4.29% MSCI EAFE Small Cap Small Cap Int'l 1.84% 7.78% 3.35% 4.19% 4.29% MSCI Emerging Markets Emerging Equity 5.00% 12.55% 5.07% 3.10% 2.79% MSCI Emerging Markets Bloomberg Aggregate Core Bonds 0.07% 2.63% -3.02% 0.23% 1.35% Barclays US High Yield 1.09% 10.44% 1.64% 3.92% 4.31% CSFB Levered Loans Bank Loans 1.87% 11.04% 5.97% 5.36% 4.61% 0.57% 2.05% 0.40% 2.67% 2.05% 0.67% 1.51% 0.60 MIL US 3-Month T-Bill Cash 1.32% 5.40% 3.03% 2.16% 1.51% 0.60 MIL US 3-Month T-Bill Bloomberg US TIPS 1-10 Yr Inflation 1.12% 4.26% 0.40% 2.67% 2.05% 0.40% 2.05% 0.40% 0.40% 0.67% 0.40%	MSCI EAFE Net (USD)	Int'l Developed	-0.42%	11.54%	2.89%	6.46%	4.33%	MSCLEAFE (Local)				_		
MSCI EAFE Small Cap   Small Cap Int'l   -1,84%   7.78%   -3.35%   4.19%   4.29%   MSCI Emerging Markets   Emerging Equity   5.00%   12.55%   -5.07%   3.10%   2.79%    Domestic Fixed Income Benchmarks  Bloomberg Aggregate   Core Bonds   0.07%   2.63%   -3.02%   -0.23%   1.35%   Barclays US High Yield   High Yield   1.09%   10.44%   1.64%   3.92%   4.31%   Boffa ML US 3-Month T-Bill   Cash   1.32%   5.40%   3.03%   2.16%   1.51%   Bloomberg US TIPS 1-10 Yr   Inflation   1.12%   4.26%   0.40%   2.67%   2.05%   Barclays Global Aggregate   Global Core Bonds   -1.10%   0.93%   -5.49%   -2.02%   -0.42%   Barclays Global Aggregate   Global Core Bonds   -1.10%   0.93%   -5.49%   -2.02%   -0.42%   Barclays Global Aggregate   Global Core Bonds   -1.58%   -0.63%   -6.92%   -3.20%   -1.20%   Barclays Global Aggregate   Global Core Bonds   -1.58%   -0.63%   -6.92%   -3.20%   -1.20%   Barclays Global Core Bonds   -1.58%   -0.63%   -6.92%   -3.20%   -1.20%   Barclays Global Aggregate   Global Core Bonds   -1.58%   -0.63%   -6.92%   -3.20%   -1.20%   Barclays Global Aggregate   Global Core Bonds   -1.58%   -0.63%   -6.92%   -3.20%   -1.20%   Barclays Global Aggregate   Global Core Bonds   -1.58%   -0.63%   -6.92%   -3.20%   -1.20%   Barclays Global Aggregate   Global Core Bonds   -1.10%   0.93%   -5.69%   -2.43%   0.84%   Barclays Global Aggregate   FISE WGBI   Biomberg Commodity Index   FISE MGBI   Biomberg Commodity Index   Bloomberg Commodity Index   Em. Mkt. Bonds   0.12%   9.36%   -5.69%   -2.43%   0.84%   Bloomberg Commodity Index   Em. Mkt. Bonds   0.44%   8.50%   2.06%   4.78%   3.48%   Bloomberg Commodity Index   Em. Mkt. Bonds   0.44%   8.50%   2.06%   4.78%   3.48%   Bloomberg Commodity Index   Em. Mkt. Bonds   0.44%   8.50%   2.06%   4.78%   3.48%   Bloomberg Commodity Index   Em. Mkt. Bonds   0.44%   8.50%   2.06%   4.78%   3.48%   Bloomberg Commodity Index   Em. Mkt. Bonds   0.44%   8.50%   2.06%   4.78%   3.48%   Bloomberg Commodity Index   Em. Mkt. Bonds   0.44%   8.50%   2.06%   4.78%   3.48%   Bloomberg Commod	MSCI EAFE (Local)	Int'l Developed (Local Currency)	1.00%	15.08%	8.10%	8.98%	7.40%					-		
MSCI Emerging Markets	MSCI EAFE Small Cap	Small Cap Int'l	-1.84%	7.78%	-3.35%	4.19%	4.29%	· ·		-				
Bloomberg Aggregate   Core Bonds   0.07%   2.63%   -3.02%   -0.23%   1.35%	MSCI Emerging Markets	Emerging Equity	5.00%	12.55%	-5.07%	3.10%	2.79%				÷			
Barclays SL High Yield  Lash	Domestic Fixed Income Benchmarks							0 00 0						
Cash   1.87%   1.04%   5.97%   5.36%   4.61%	Bloomberg Aggregate	Core Bonds	0.07%	2.63%	-3.02%	-0.23%	1.35%	Barclays US High Yield				_		
BofA ML US 3-Month T-Bill Cash 1.32% 5.40% 3.03% 2.16% 1.51% Bloomberg US TIPS 1-10 Yr Inflation 1.12% 4.26% 0.40% 2.67% 2.05% Global Fixed Income Benchmarks  Barclays Global Aggregate Global Core Bonds -1.10% 0.93% -5.49% -2.02% -0.42% FTSE WGBI World Gov. Bonds -0.19% 4.50% -3.97% -0.36% 0.87% JPM GBI-EM Glob. Diversified Global Bonds 0.12% 9.36% -5.69% -2.43% 0.84% Alternative Benchmarks  Bloomberg Commodity Index Em. Mkt. Bonds (Local Currency) -1.63% 0.67% -3.27% -1.29% -0.87% JPM EMBI+ Em. Mkt. Bonds 0.12% 9.36% -5.69% -2.43% 0.84% Alternative Benchmarks  Bloomberg Commodity Index Composite Index Fund of Hedge Funds 0.44% 8.50% 2.06% 4.78% 3.48% 0.84% 0.84% 0.84% 0.85% 0.44% 0.850% 0.44% 0.850% 0.44% 0.850% 0.44% 0.850% 0.85% 0.	Barclays US High Yield	High Yield	1.09%	10.44%	1.64%	3.92%	4.31%	CSFB Levered Loans					Quart	er
Bloomberg US TIPS 1-10 Yr Inflation 1.12% 4.26% 0.40% 2.67% 2.05% 1.37% 1.0 Yr Inflation 1.12% 4.26% 0.40% 2.67% 2.05% 1.0 Yr Barclays Global Aggregate Global Core Bonds -1.10% 0.93% -5.49% -2.02% -0.42% 1.20%	CSFB Levered Loans	Bank Loans	1.87%	11.04%	5.97%	5.36%	4.61%	BofA ML US 3-Month T-Bill		1	-			
Second   Fixed   Income Benchmarks   Second	BofA ML US 3-Month T-Bill	Cash	1.32%	5.40%	3.03%	2.16%	1.51%	Bloomberg US TIPS 1-10 Yr					■ 1 Yr	
Silvad Income Benchmarks   Global Core Bonds   1.10%   0.93%   -5.49%   -2.02%   -0.42%	Bloomberg US TIPS 1-10 Yr	Inflation	1.12%	4.26%	0.40%	2.67%	2.05%	Barclays Global Aggregate		- (	•	-		
Barclays Global Aggregate Global Core Bonds -1.10% 0.93% -5.49% -2.02% -0.42% FTSE WGBI World Gov. Bonds -1.58% -0.63% -6.92% -3.20% -1.20% BC Global Credit Global Bonds -0.19% 4.50% -3.97% -0.36% 0.87% JPM GBI-EM Glob. Diversified Em. Mkt. Bonds (Local Currency) -1.63% 0.67% -3.27% -1.29% -0.87% JPM EMBI+ Em. Mkt. Bonds 0.12% 9.36% -5.69% -2.43% 0.84% Alternative Benchmarks  Bloomberg Commodity Index Commodities 2.89% 5.00% 5.65% 7.25% -1.29% HFRI Fund of Funds Composite Index Cambridge PE Lagged* Private Equity 2.07% 7.27% 11.24% 14.82% 13.34% NCREIF ODCE Net Lagged* Real Estate -2.58% -12.00% 2.47% 2.56% 5.82% FTSE NAREIT All Equity REITs REIT -0.90% 5.78% -1.63% 3.40% 6.11%	Global Fixed Income Benchmarks									4				
## FTSE WGBI World Gov. Bonds	Barclays Global Aggregate	Global Core Bonds	-1.10%	0.93%	-5.49%	-2.02%	-0.42%			1				
Section   Global Bonds   -0.19%   4.50%   -3.97%   -0.86%   0.87%	FTSE WGBI	World Gov. Bonds	-1.58%	-0.63%	-6.92%	-3.20%	-1.20%			_				
Second Control of Second Con	BC Global Credit	Global Bonds	-0.19%	4.50%	-3.97%	-0.36%	0.87%	JPM GBI-EM Glob. Diversified		•				
Alternative Benchmarks  Bloomberg Commodity Index	JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local Currency)	-1.63%	0.67%	-3.27%	-1.29%	-0.87%	JPM EMBI+						
Bloomberg Commodity Index	JPM EMBI+	Em. Mkt. Bonds	0.12%	9.36%	-5.69%	-2.43%	0.84%	Bloomberg Commodity Index						
HFRI Fund of Funds Composite Index	Alternative Benchmarks							HFRI Fund of Funds Composite Index		1				
HFRI Fund of Funds Composite Index         Fund of Hedge Funds         0.44%         8.50%         2.06%         4.78%         3.48%           Cambridge PE Lagged*         Private Equity         2.07%         7.27%         11.24%         14.82%         13.34%           NCREIF ODCE Net Lagged*         Real Estate         -2.58%         -12.00%         2.47%         2.56%         5.82%           FTSE NAREIT All Equity REITS         REIT         -0.90%         5.78%         -1.63%         3.40%         6.11%	Bloomberg Commodity Index	Commodities	2.89%	5.00%	5.65%	7.25%	-1.29%	Cambridge PE Lagged*						
Cambridge PE Lagged*         Private Equity         2.07%         7.27%         11.24%         14.82%         13.34%           NCREIF ODCE Net Lagged*         Real Estate         -2.58%         -12.00%         2.47%         2.56%         5.82%           FTSE NAREIT All Equity REITS         REIT         -0.90%         5.78%         -1.63%         3.40%         6.11%	HFRI Fund of Funds Composite Index	Fund of Hedge Funds	0.44%	8.50%	2.06%	4.78%	3.48%	0 00	<u> </u>		_			
NCREIF ODCE Net Lagged*  Real Estate  -2.58% -12.00% 2.47% 2.56% 5.82%  FTSE NAREIT All Equity REITs  REIT  -0.90% 5.78% -1.63% 3.40% 6.11%  -2.0% -1.0% 0% 10% 20% 30% 4	Cambridge PE Lagged*	Private Equity	2.07%	7.27%	11.24%	14.82%	13.34%	55						
FTSE NAREIT All Equity REITS REIT -0.90% 5.78% -1.63% 3.40% 6.11%	NCREIF ODCE Net Lagged*	Real Estate	-2.58%	-12.00%	2.47%	2.56%	5.82%	' '						
CPI + 2% Inflation/Real Assets 0.76% 5.04% 7.07% 6.25% 4.87%	FTSE NAREIT All Equity REITs	REIT	-0.90%	5.78%	-1.63%	3.40%	6.11%	-20	0% -10%	6 0%	10%	20%	30%	40
	CPI + 2%	Inflation/Real Assets	0.76%	5.04%	7.07%	6.25%	4.87%							



\* As of 3/31/2024

### THE S&P 500 HIT NEW ALL-TIME HIGHS

NUMBER OF RECORD HIGHS HIT IN FIRST 6 MONTHS OF YEAR

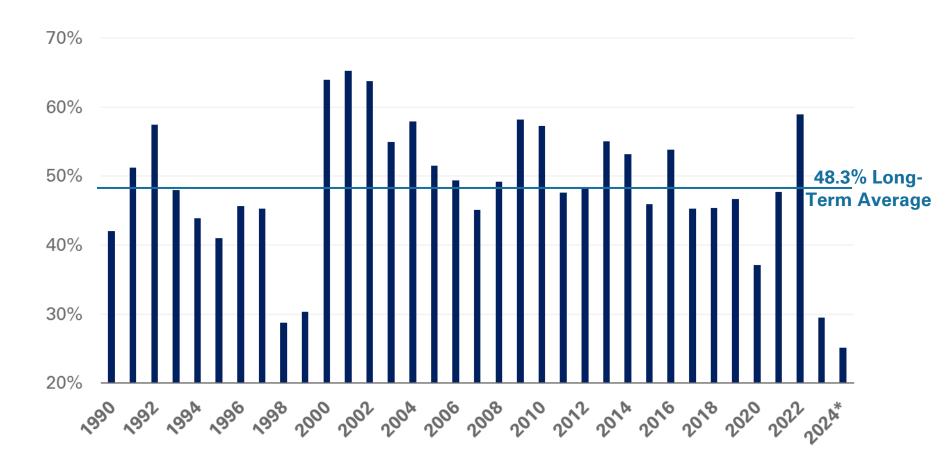




Sources: S&P, FactSet

### **EQUITY MARKET BREADTH REMAINS LIMITED**

S&P 500 INDEX: % OF STOCKS OUTPERFORMING THE INDEX

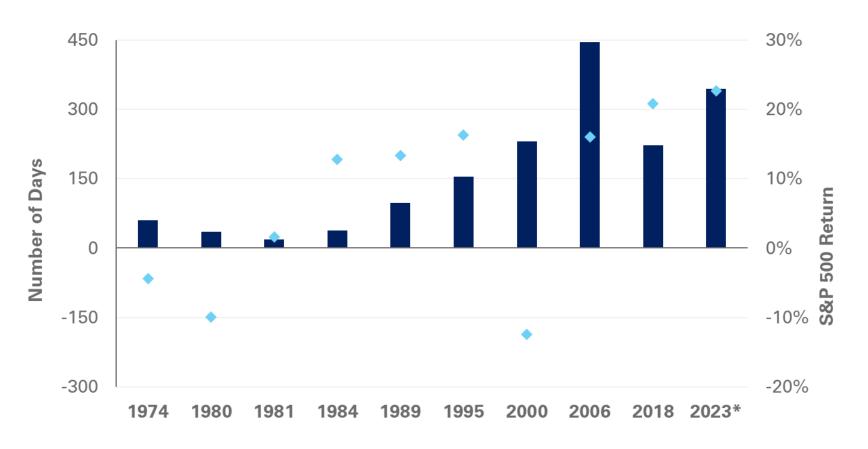




Note: \*2024 reflects year-to-date returns through 06/30/2024. Data reflects price returns Sources: S&P, FactSet

### FED PAUSES TEND TO BE FAVORABLE FOR STOCKS

THE S&P 500 DURING FED PAUSES



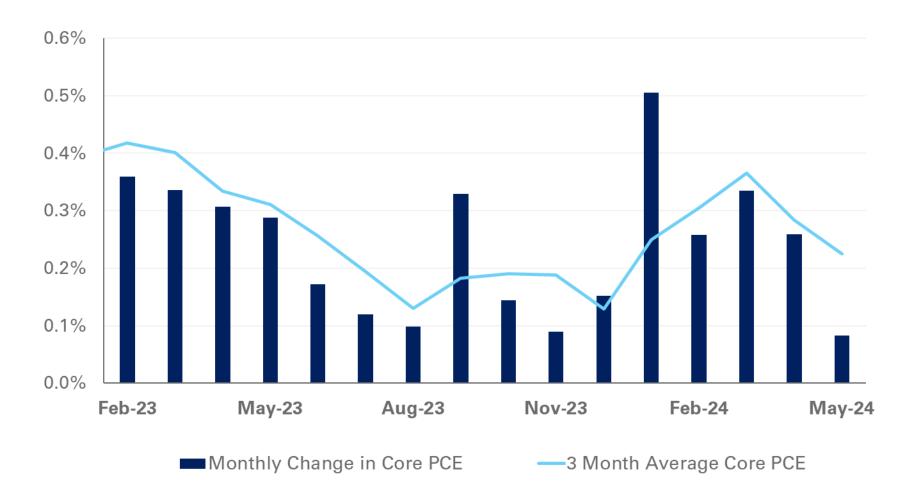
■ Length of Fed Pause (LHS) ◆ S&P 500 Performance During the Fed Pause (RHS)



Note: \*2023 reflects data through 06/30/2024. Fed "pauses" reflect the length of time between the last Fed hike and the first Fed rate cut Sources: Federal Reserve, S&P, FactSet

### INFLATION PRESSURES BROADLY SOFTENED

#### U.S. CORE PCE PRICE INDEX

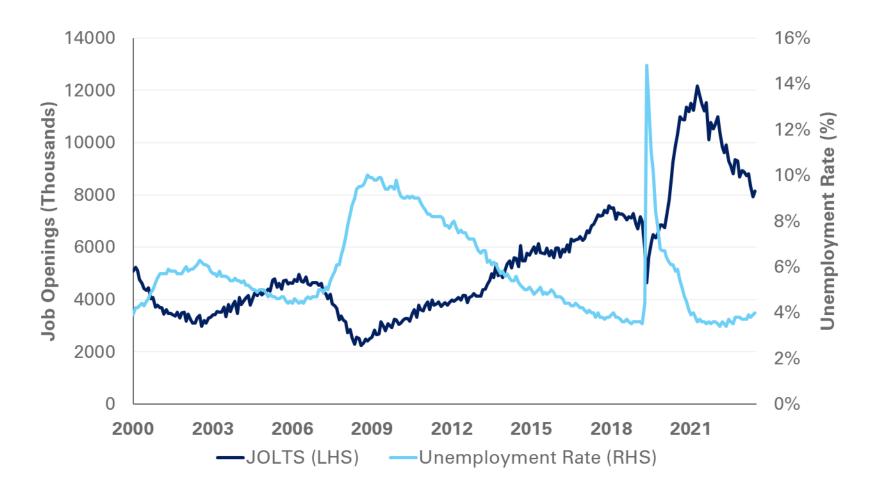




Sources: Bureau of Economic Analysis, FactSet

### THE LABOR MARKET IS IN BETTER BALANCE

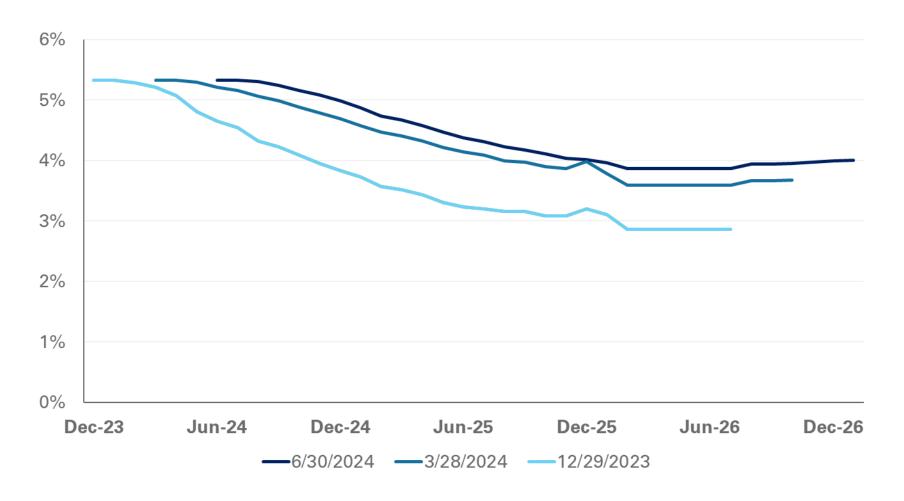
#### U.S. JOLTS VERSUS THE UNEMPLOYMENT RATE





### RATE CUT EXPECTATIONS HAVE BEEN PUSHED OUT

### FED FUNDS FUTURES EXPECTATIONS

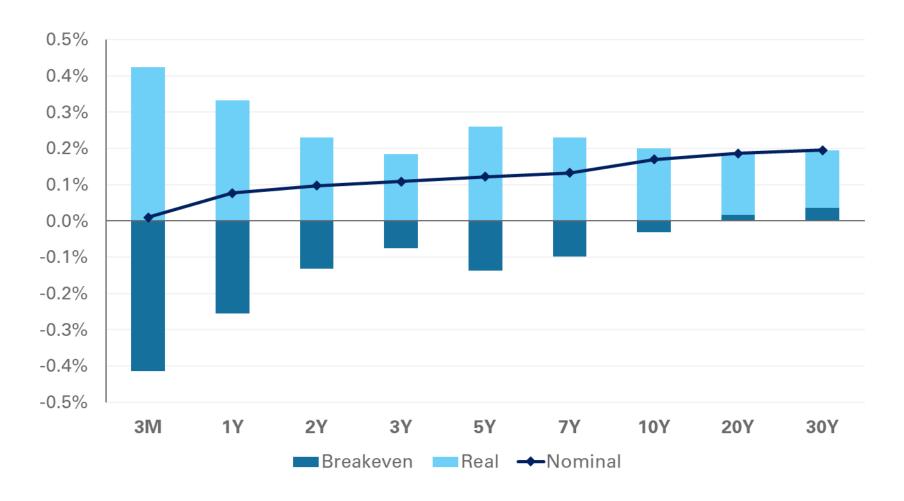




Source: FactSet

### REAL YIELDS DROVE THE CURVE HIGHER

### QUARTERLY CHANGE IN THE U.S. YIELD CURVE

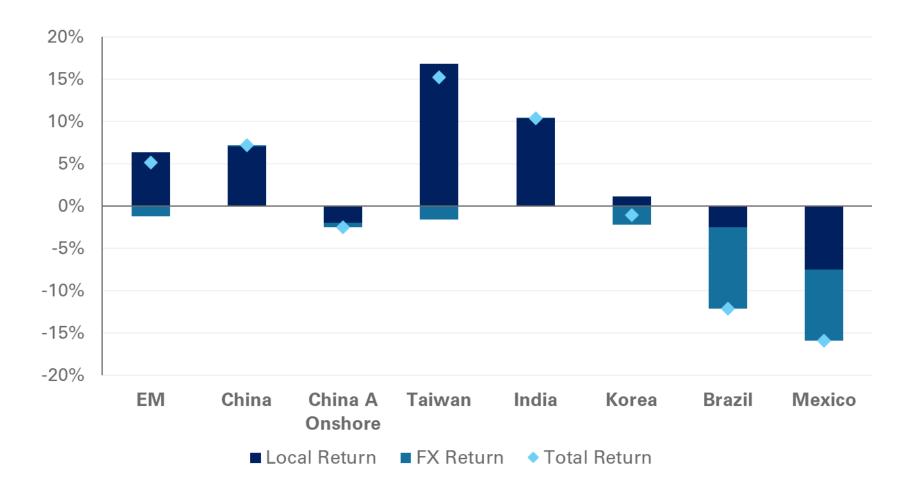




Source: FactSet

### **ASIAN EQUITIES BOLSTERED EM RETURNS**

### QUARTERLY TOTAL RETURNS





Sources: MSCI, FactSet



# TOTAL FUND PERFORMANCE SUMMARY

### NET OF FEES

	Allocation	Performance (%)					
	Market Value (\$)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Fund	15,201,103,116	2.1 (1)	4.4 (67)	9.3 (46)	4.7 (7)	8.2 (9)	7.1 (16)
Policy Index		1.0 (45)	4.6 (55)	10.3 (25)	1.6 (92)	5.4 (100)	5.1 (100)
S&P 500 Index		4.3 (1)	15.3 (1)	24.6 (1)	10.0 (1)	15.0 (1)	12.9 (1)
Blmbg. U.S. Aggregate Index		0.1 (98)	-0.7 (100)	2.6 (100)	-3.0 (100)	-0.2 (100)	1.3 (100)
60% MSCI World/40% FTSE WGBI		1.0 (40)	5.4 (26)	11.8 (3)	1.6 (92)	6.1 (85)	5.5 (94)
InvMetrics Public DB > \$1 Billion Median		0.9	4.8	9.3	2.9	6.8	6.3

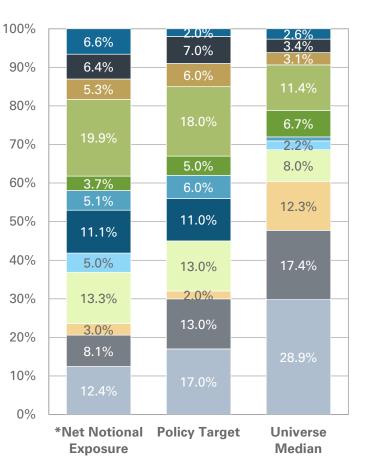
3 Years Ending June 30, 2024								
Return Standard Sharpe Sortino Deviation Ratio Ratio								
Total Fund	4.68 (7)	5.32 (1)	0.33 (4)	0.45 (4)				
Policy Index	1.61 (92)	11.06 (80)	-0.07 (87)	-0.10 (87)				
InvMetrics Public DB > \$1 Billion Median	2.87	9.64	0.04	0.05				

5 Years Ending June 30, 2024							
Return Standard Sharpe Sortino Deviation Ratio Ratio							
Total Fund	8.15 (9)	7.44 (1)	0.79 (2)	1.21 (2)			
Policy Index	5.42 (100)	10.50 (42)	0.35 (99)	0.51 (95)			
InvMetrics Public DB > \$1 Billion Median	6.82	10.70	0.47	0.69			

10 Years Ending June 30, 2024							
Return Standard Sharpe Sortino Deviation Ratio Ratio							
Total Fund	7.06 (16)	5.86 (1)	0.93 (1)	1.45 (1)			
Policy Index	5.14 (100)	8.45 (36)	0.46 (100)	0.68 (98)			
InvMetrics Public DB > \$1 Billion Median	6.29	9.00	0.56	0.82			



### **ASSET ALLOCATION COMPLIANCE**



Asset Class	*Net Notional Exposure	Net Notional Exposure	Policy Target	Difference	Policy Ranges	Within Range
US Equities	1,892,284	12.4%	17.0%	-4.6%	10%-27%	Yes
Int'l Equities	1,234,434	8.1%	13.0%	-4.9%	8%-18%	Yes
US Core Fixed Income	455,810	3.0%	2.0%	1.0%	-3%-7%	Yes
US Credit	2,018,971	13.3%	13.0%	0.3%	8%-18%	Yes
Non-US Core Fixed Income	760,055	5.0%	0.0%	5.0%	-5%-5%	Yes
Non-US Credit	1,690,669	11.1%	11.0%	0.1%	6%-16%	Yes
<b>Emerging Market Debt</b>	772,287	5.1%	6.0%	-0.9%	1%-10%	Yes
Real Estate	568,991	3.7%	5.0%	-1.3%	0%-10%	Yes
Private Equity	3,017,982	19.9%	18.0%	1.9%	6%-23%	Yes
Real Assets	810,446	5.3%	6.0%	-0.7%	0%-10%	Yes
Absolute Return	979,695	6.4%	7.0%	-0.6%	0%-12%	Yes
Cash	999,478	6.6%	2.0%	4.6%	0%-10%	Yes
	-					
Total	15,201,103	100.00%	100.00%			

US Equities	■ Int'l Equities
U.S. Core	US Credit
■ Non-US Core Fixed Income	■ Non-US Credit
Emerging Market Debt	■ Real Estate
■ Private Equity	Real Assets
■ Absolute Return	■ Cash





### **INVESTMENT EXPOSURE SUMMARY**

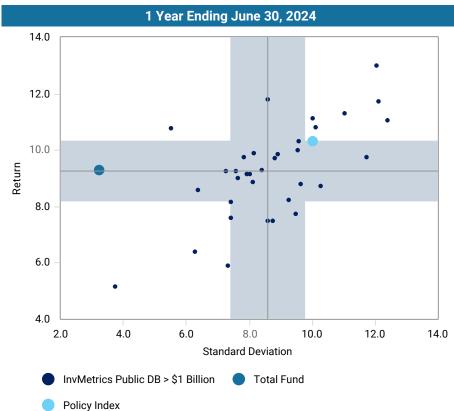
OVERLAY AS OF JUNE 30, 2024

Delta Adjusted_										
Asset Class	Physical E	xposure	Synthetic E	<u>xposure</u>	Net Po	<u>sition</u>	<u>Overlay</u>	<u>Target</u>	Policy Ta	irget
Total Market Value	15,431.3	100.0%	0.0	0.0%	15,431.3	100.0%	15,431.3	100.0%	15,431.3	100.00%
Cash	1,999.6	13.0%	-2,204.9	-14.3%	-205.3	-1.3%	0.0	0.0%	0.0	0.00%
Cash	1,999.6	13.0%	-2,204.9	-14.3%	-205.3	-1.3%	0.0	0.0%	0.0	0.00%
Equity	2,653.6	17.2%	475.1	3.1%	3,128.7	20.3%	3,124.9	20.3%	3,124.8	20.25%
Emerging Markets	399.0	2.6%	219.5	1.4%	618.6	4.0%	617.3	4.0%	617.3	4.00%
International Developed	461.5	3.0%	154.4	1.0%	615.8	4.0%	617.3	4.0%	617.3	4.00%
US Large Cap	1,792.8	11.6%	-59.9	-0.4%	1,733.0	11.2%	1,736.1	11.3%	1,736.0	11.25%
US Small Cap	0.3	0.0%	161.1	1.0%	161.3	1.0%	154.3	1.0%	154.3	1.00%
Fixed	3,919.1	25.4%	1,729.8	11.2%	5,648.9	36.6%	5,447.4	35.3%	5,447.2	35.30%
Global ex US Fixed Income	1,904.5	12.3%	1,274.0	8.3%	3,178.6	20.6%	3,178.9	20.6%	3,178.8	20.60%
High Yield	1,667.1	10.8%	0.0	0.0%	1,667.1	10.8%	1,466.0	9.5%	1,466.0	9.50%
US Fixed Income	347.4	2.3%	455.8	3.0%	803.2	5.2%	802.4	5.2%	802.4	5.20%
Other	6,859.0	44.4%	0.0	0.0%	6,859.0	44.4%	6,859.0	44.4%	6,859.2	44.45%
Alternatives	3.7	0.0%	0.0	0.0%	3.7	0.0%	3.7	0.0%	0.0	0.00%
Commodities	666.9	4.3%	0.0	0.0%	666.9	4.3%	666.9	4.3%	679.0	4.40%
Infrastructure	167.3	1.1%	0.0	0.0%	167.3	1.1%	167.3	1.1%	138.9	0.90%
Private Equity	2,976.4	19.3%	0.0	0.0%	2,976.4	19.3%	2,976.4	19.3%	3,009.1	19.50%
Real Estate	568.0	3.7%	0.0	0.0%	568.0	3.7%	568.0	3.7%	555.5	3.60%
Tactical Cash	2,476.7	16.0%	0.0	0.0%	2,476.7	16.0%	2,476.7	16.0%	2,476.7	16.05%



Source: Russell Investments

### **RISK VS. RETURN**



1 Year Ending June 30, 2024 Standard SI

**Deviation** 

3.2 (1)

10.0 (78)

34

Return

9.3 (46)

10.3 (25)

34

Sharpe

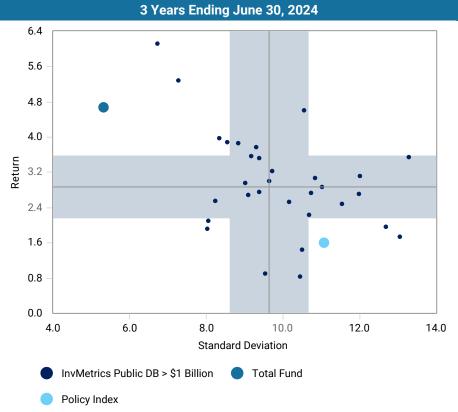
Ratio

1.1 (1)

0.5 (39)

34





3 Years Ending June 30, 2024								
	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio				
Total Fund	4.7 (7)	5.3 (1)	0.3 (4)	0.5 (4)				
Policy Index	1.6 (92)	11.1 (80)	-0.1 (87)	-0.1 (87)				
Population	31	31	31	31				

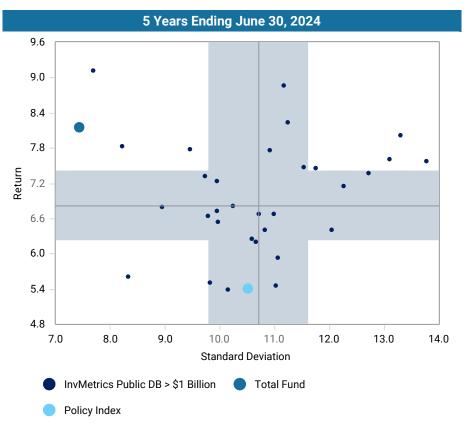


**Total Fund** 

Policy Index

Population

### **RISK VS. RETURN**



	8.5							
	0.5							
	8.0 -						•	
	7.5 -			•			•	
Return	7.0 –	•			•			
Re	6.5 –			•	•	•••		• •
	6.0 –			•		• • '		•
	5.5 –			•			••	
	5.0							
	5.	4	6.3	7.2	8.1	9.	.0	9.9
					Sta	andard I	Deviatio	n
	•	InvM	letrics P	ublic DB > S	\$1 Billior	n	Total F	und
		Dolic	y Index					
		FUIL	y muex					

5 Years Ending June 30, 2024								
	Return	Deviation		Sortino Ratio				
Total Fund	8.2 (9)	7.4 (1)	0.8 (2)	1.2 (2)				
Policy Index	5.4 (100)	10.5 (42)	0.4 (99)	0.5 (95)				
Population	31	31	31	31				

10 Years Ending June 30, 2024								
	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio				
Total Fund	7.1 (16)	5.9 (1)	0.9 (1)	1.5 (1)				
Policy Index	5.1 (100)	8.5 (36)	0.5 (100)	0.7 (98)				
Population	31	31	31	31				

10.8

11.7

12.6

10 Years Ending June 30, 2024



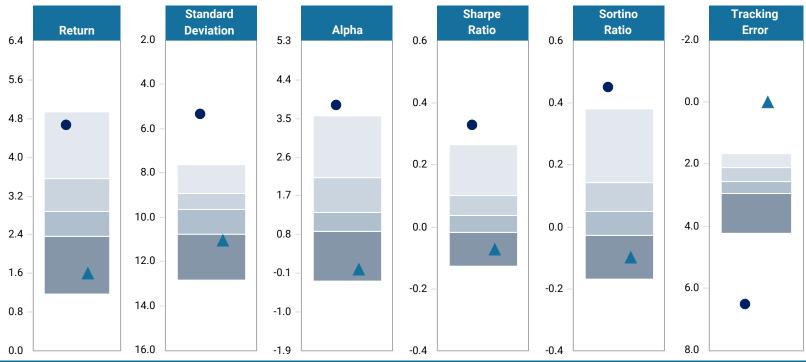
### **RISK STATISTICS VS. PEER UNIVERSE**



	1 Yr (%)	1 Yr (%)	1 Yr (%)	1 Yr (%)	1 Yr (%)	1 Yr (%)
<ul><li>Total Fund</li></ul>	9.3 (46)	3.2 (1)	5.9 (1)	1.1 (1)	2.3 (1)	6.9 (100)
Policy Index	10.3 (25)	10.0 (78)	0.0 (70)	0.5 (39)	0.8 (37)	0.0 (1)
5th Percentile	11.8	6.0	2.3	0.7	1.1	1.1
1st Quartile	10.2	7.6	1.1	0.5	0.9	1.6
Median	9.3 8.6 8.3 9.6	8.6	0.5	0.5 0.4	0.8 0.6	2.1
3rd Quartile		9.6	-0.9			2.9
95th Percentile	6.2	12.1	-1.7	0.2	0.2	4.5
Population	34	34	34	34	34	34



### **RISK STATISTICS VS. PEER UNIVERSE**



	3 Yrs (%)					
<ul><li>Total Fund</li></ul>	4.7 (7)	5.3 (1)	3.8 (5)	0.3 (4)	0.5 (4)	6.5 (100)
▲ Policy Index	1.6 (92)	11.1 (80)	0.0 (91)	-0.1 (87)	-0.1 (87)	0.0 (1)
5th Percentile	4.9	7.6	3.6	0.3	0.4	1.7
1st Quartile	3.6	8.9	2.1	0.1	0.1	2.1
Median	2.9	9.6	1.3	0.0	0.1	2.6
3rd Quartile	2.4	10.8	0.9	0.0	0.0	2.9
95th Percentile	1.2	12.8	-0.3	-0.1	-0.2	4.2
Population	31	31	31	31	31	31



### **RISK STATISTICS VS. PEER UNIVERSE**



	5 Yrs (%)					
<ul><li>Total Fund</li></ul>	8.2 (9)	7.4 (1)	4.8 (1)	0.8 (2)	1.2 (2)	5.9 (100)
▲ Policy Index	5.4 (100)	10.5 (42)	0.0 (100)	0.4 (99)	0.5 (95)	0.0 (1)
5th Percentile	8.6	8.3	3.4	0.7	1.0	2.3
1st Quartile	7.6	9.9	2.2	0.5	0.8	2.6
Median	6.8	10.7	1.4	0.5	0.7	3.0
3rd Quartile	6.4	11.4	1.0	0.4	0.6	3.6
95th Percentile	5.5	13.2	0.4	0.4	0.5	4.0
Population	31	31	31	31	31	31



### **RISK STATISTICS VS. PEER UNIVERSE**



	10 Yrs (%)					
<ul><li>Total Fund</li></ul>	7.1 (16)	5.9 (1)	4.0 (1)	0.9 (1)	1.5 (1)	4.8 (100)
▲ Policy Index	5.1 (100)	8.5 (36)	0.0 (96)	0.5 (100)	0.7 (98)	0.0 (1)
5th Percentile	7.6	7.0	2.5	0.7	1.1	2.1
1st Quartile	6.7	8.2	1.6	0.6	0.9	2.4
Median	6.3	9.0	0.9	0.6	0.8	2.7
3rd Quartile	5.8	9.5	0.5	0.5	0.7	2.9
95th Percentile	5.4	11.1	0.1	0.5	0.7	3.6
Population	31	31	31	31	31	31



1 Years Ending June 30, 2024								
	Return	Standard Deviation	Tracking Error	Information Ratio				
Domestic Equity With Beta Overlay	20.6	14.1	1.7	-1.3				
Russell 3000 Index	23.1	15.2	0.0					
International Equity With Beta Overlay	8.3	12.6	2.3	-1.6				
MSCI AC World ex USA index	12.2	14.3	0.0					
Global Fixed Income With Beta Overlay	7.5	1.6	7.2	0.8				
Blmbg. Global Aggregate	0.9	8.5	0.0					
U.S. Credit Strategies	9.8	1.6	3.3	-0.2				
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	10.6	3.5	0.0					
Non-U.S. Credit Composite	16.3	2.7	8.3	0.8				
ICE BofA Euro High Yield Constrained TR	8.7	8.7	0.0					
Emerging Markets Debt Composite	4.5	2.1	8.7	-0.1				
50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified	4.9	9.0	0.0					
Alpha Pool Composite	12.7	1.7	1.7	2.2				
91 Day T-Bill + 3%	8.6	0.1	0.0					
Private Equity Composite	7.2	2.9	4.1	0.6				
C A Global All PE (Qtr Lag)	4.5	2.8	0.0					
Real Estate Composite	-7.3	2.9	5.6	0.0				
NCREIF Property Index 1 Qtr. Lag	-7.2	3.5	0.0					
Real Assets Composite	9.0	4.4	8.9	-0.3				
Real Assets Custom Blend	11.1	9.5	0.0					



3 Years Ending June 30, 2024								
	Return	Standard Deviation	Tracking Error	Information Ratio				
Domestic Equity With Beta Overlay	4.9	16.9	2.5	-1.2				
Russell 3000 Index	8.1	18.1	0.0					
International Equity With Beta Overlay	-0.2	12.9	4.1	-0.4				
MSCI AC World ex USA index	1.0	16.4	0.0					
Global Fixed Income With Beta Overlay	4.5	3.4	7.2	1.4				
Blmbg. Global Aggregate	-5.5	8.8	0.0					
U.S. Credit Strategies	5.3	3.5	4.3	0.3				
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	3.8	5.6	0.0					
Non-U.S. Credit Composite	11.4	6.6	11.7	1.1				
ICE BofA Euro High Yield Constrained TR	-2.5	12.4	0.0					
Emerging Markets Debt Composite	0.6	4.4	9.4	0.3				
50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified	-2.9	10.4	0.0					
Alpha Pool Composite	5.9	3.8	3.6	0.0				
91 Day T-Bill + 3%	6.1	0.7	0.0					
Private Equity Composite	9.6	5.7	7.8	0.3				
C A Global All PE (Qtr Lag)	7.0	8.6	0.0					
Real Estate Composite	4.0	5.2	8.8	0.0				
NCREIF Property Index 1 Qtr. Lag	3.6	7.1	0.0					
Real Assets Composite	11.5	4.6	10.7	0.6				
Real Assets Custom Blend	4.5	11.8	0.0					



5 Years Ending June 30, 2024							
	Return	Standard Deviation	Tracking Error	Information Ratio			
Domestic Equity With Beta Overlay	11.2	18.5	2.8	-1.0			
Russell 3000 Index	14.1	18.6	0.0				
International Equity With Beta Overlay	4.7	14.9	3.7	-0.4			
MSCI AC World ex USA index	6.1	17.2	0.0				
Global Fixed Income With Beta Overlay	6.1	6.3	7.9	1.0			
Blmbg. Global Aggregate	-2.0	7.5	0.0				
U.S. Credit Strategies	7.8	6.8	5.8	0.5			
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	4.5	7.6	0.0				
Non-U.S. Credit Composite	8.4	8.6	11.9	0.5			
ICE BofA Euro High Yield Constrained TR	1.1	13.3	0.0				
Emerging Markets Debt Composite	0.5	6.1	9.5	0.1			
50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified	-0.6	11.1	0.0				
Alpha Pool Composite	5.3	6.2	6.2	0.0			
91 Day T-Bill + 3%	5.2	0.6	0.0				
Private Equity Composite	14.9	8.3	12.5	0.1			
C A Global All PE (Qtr Lag)	13.2	12.7	0.0				
Real Estate Composite	4.6	4.3	7.2	0.1			
NCREIF Property Index 1 Qtr. Lag	3.8	5.6	0.0				
Real Assets Composite	11.6	9.4	10.6	0.4			
Real Assets Custom Blend	6.4	11.7	0.0				



10 Years Ending June 30, 2024								
	Return	Standard Deviation	Tracking Error	Information Ratio				
Domestic Equity	7.4	13.6	7.9	-0.6				
Russell 3000 Index	12.1	15.8	0.0					
International Equity	1.8	15.8	8.4	-0.7				
MSCI AC World Index (Net)	8.4	14.8	0.0					
International Emerging	0.5	15.2	5.3	-0.5				
MSCI Emerging Markets (Net)	2.8	17.2	0.0					
U.S. Credit Strategies	6.7	5.3	5.0	0.4				
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	4.4	6.0	0.0					
Non-U.S. Credit Composite	7.1	6.6	11.0	0.5				
ICE BofA Euro High Yield Constrained TR	0.7	11.6	0.0					
Emerging Markets Debt Composite	1.9	5.7	7.9	0.1				
50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified	0.9	9.6	0.0					
Alpha Pool Composite	4.9	5.0	5.0	0.1				
91 Day T-Bill + 3%	4.5	0.5	0.0					
Private Equity Composite	13.6	6.5	10.1	0.1				
C A Global All PE (Qtr Lag)	12.2	9.9	0.0					
Real Estate Composite	6.6	3.7	6.3	0.0				
NCREIF Property Index 1 Qtr. Lag	6.4	4.9	0.0					
Real Assets Composite	6.3	7.9	8.5	0.5				
Real Assets Custom Blend	2.0	9.3	0.0					



### **INVESTMENT MANAGER TOP 10**

### ASSETS UNDER MANAGEMENT AS OF JUNE 30, 2024

Manager	Market Value	Portfolio %
SSgA	\$2,478,856,114.86	16.31%
Pathway	\$817,677,602.62	5.38%
Alcentra	\$813,647,494.20	5.35%
Russell	\$798,969,870.14	5.26%
Zais	\$769,154,135.66	5.06%
GoldenTree	\$758,026,366.60	4.99%
Ares	\$733,144,154.07	4.82%
Apollo	\$701,291,872.30	4.61%
Pinnacle	\$667,273,903.79	4.39%
Partners Group	\$631,928,396.25	4.16%
Total	\$9,169,969,910.49	60.32%



### **PUBLIC EQUITY PORTFOLIO**

		ies (		Russell Investments Russell 1000 Index	Overlay exposure to an index of largest 1,000 stocks (by market cap) in the Russell 3000
_		quit I7% rget	Large Cap (14.5%)	SSGA S&P500 Index Fund	Index of 500 of the largest US publicly-traded companies in US
흥	- 1	1 E		TOBAM Anti-Benchmark US Equity Fund	Rules-based index focused on a more efficiently diversified benchmark vs. MSCI US
ŧ.	<u>۽</u> اڇ	S '	Small Cap (2.5%)	Russell Investments Russell 2000 Index	Overlay exposure to an index of smallest 2,000 stocks (by market cap) in the Russell 3000
P0	rge			Russell Investments MSCI EAFE Index	Overlay exposure to an index of large/mid-cap stocks across 21 developed markets ex-US/Canada
Ę.	<u>-</u>	<u>a</u> ±	Developed Markets (7%)	SSGA MSCI World ex-USA Index Fund	Index of publicly-traded large-cap and mid-cap equities in 22 developed countries ex-US
뮵	<b>%</b>   .	ies ies rge		TOBAM Anti-Benchmark World ex-US Fund	Rules-based index focused on a more efficiently diversified benchmark vs. MSCI World ex-US
_i <u>≘</u> .	<u>.</u>	nat Ta		Russell Investments MSCI EM Index	Overlay exposure to an index of large/mid-cap stocks across 27 emerging markets
Puk		ter Eq.	Emerging Markets (6%)	TOBAM Anti-Benchmark EM Equity Fund	Rules-based index focused on a more efficiently diversified benchmark vs. MSCI Emerging Markets
		= =		William Blair EM Growth Fund	Diversified, all-cap portfolio investing in high quality growth companies in emerging markets
				Wasatch EM Select Fund	Concentrated portfolio investing in emerging market opportunities over a 3-5 year investment horizon



#### **San Bernardino County Employees' Retirement Association**

### **GLOBAL EQUITY STRATEGIES - NET**

	Allocatio	n			Performa	nce (%)		
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Total Equity	2,651,619,844	17.4	2.7	10.7	17.0	2.9	8.6	6.0
MSCI AC World Index (Net)			<u>2.9</u>	<u>11.3</u>	<u> 19.4</u>	<u>5.4</u>	<u>10.8</u>	<u>8.4</u>
Over/Under			-0.2	-0.6	-2.4	-2.5	-2.2	-2.4
Domestic Equity With Beta Overlay	1,892,284,166	12.4	2.7	13.0	20.6	4.9	11.2	
Russell 3000 Index			<u>3.2</u>	<u>13.6</u>	<u>23.1</u>	<u>8.1</u>	<u>14.1</u>	
Over/Under			-0.5	-0.6	-2.5	-3.2	-2.9	
Domestic Equity	1,791,083,185	11.8	3.6	14.1	21.1	6.8	12.2	7.4
Russell 3000 Index			<u>3.2</u>	<u>13.6</u>	<u>23.1</u>	<u>8.1</u>	<u>14.1</u>	<u>12.1</u>
Over/Under			0.4	0.5	-2.0	-1.3	-1.9	-4.7
Large Cap Equity	1,791,083,185	11.8	4.3 (14)	15.3 (17)	24.6 (20)	9.9 (13)	14.6 (19)	9.3 (51)
S&P 500 Index			<u>4.3</u> (15)	<u>15.3</u> (18)	<u>24.6</u> (20)	<u>10.0</u> (12)	<u>15.0</u> (15)	<u>12.9</u> (15)
Over/Under			0.0	0.0	0.0	-0.1	-0.4	-3.6
SSgA S&P500	1,791,083,185	11.8	4.4 (14)	15.4 (17)	24.6 (20)	9.9 (13)	15.0 (17)	10.9 (33)
S&P 500 Index			<u>4.3</u> (15)	<u>15.3</u> (18)	<u>24.6</u> (20)	<u>10.0</u> (12)	<u>15.0</u> (15)	<u>12.9</u> (15)
Over/Under			0.1	0.1	0.0	-0.1	0.0	-2.0



June 30, 2024

### **GLOBAL EQUITY STRATEGIES - NET**

	Allocatio	n		Performance (%)				
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
International Equity With Beta Overlay	1,234,434,092	8.1	1.4	4.2	8.3	-0.2	4.7	
MSCI AC World ex USA index			<u>1.2</u>	<u>6.0</u>	<u>12.2</u>	<u>1.0</u>	<u>6.1</u>	
Over/Under			0.2	-1.8	-3.9	-1.2	-1.4	
International Equity	860,536,659	5.7	1.1	3.9	8.8	-4.8	1.5	1.8
MSCI AC World Index (Net)			<u>2.9</u>	<u>11.3</u>	<u> 19.4</u>	<u>5.4</u>	<u>10.8</u>	<u>8.4</u>
Over/Under			-1.8	-7.4	-10.6	-10.2	-9.3	-6.6
International Developed	461,506,902	3.0	-0.3	4.0	8.7	-0.9	2.5	2.2
MSCI EAFE (Net)			<u>-0.4</u>	<u>5.3</u>	<u>11.5</u>	<u>2.9</u>	<u>6.5</u>	<u>4.3</u>
Over/Under			0.1	-1.3	-2.8	-3.8	-4.0	-2.1
SSGA MSCI World Ex-US Equity	461,506,902	3.0	-0.4 (66)	5.2 (51)	11.6 (43)			
MSCI World ex U.S.			<u>-0.4</u> (66)	<u>5.4</u> (50)	<u>11.8</u> (41)			
Over/Under			0.0	-0.2	-0.2			
International Emerging	399,029,757	2.6	2.5	3.4	8.6	-7.1	0.2	0.5
MSCI Emerging Markets (Net)			<u>5.0</u>	<u>7.5</u>	<u>12.5</u>	<u>-5.1</u>	<u>3.1</u>	<u>2.8</u>
Over/Under			-2.5	-4.1	-3.9	-2.0	-2.9	-2.3
Wasatch EM Select	221,646,424	1.5	2.3	-1.2	6.9			
MSCI Emerging Markets (Net)			<u>5.0</u>	<u>7.5</u>	<u>12.5</u>			
Over/Under			-2.7	-8.7	-5.6			
William Blair EM Growth	177,383,333	1.2	5.7	10.4	15.8			
MSCI Emerging Markets (Net)			<u>5.0</u>	<u>7.5</u>	<u>12.5</u>			
Over/Under			0.7	2.9	3.3			



# GLOBAL DEBT STRATEGIES Exhibit A: Page 30

		Core Fixed Income (2%)	Russell Investments Bloomberg Barclays US Agg Bond TR Index	Broad-based bond market index of intermediate-term investment grade bonds in US						
			Apollo Atlas Warehouse Co (MCA)	Global lending franchise (formerly CSFB securitized products group) originating warehouse assets						
			Apollo Asset-Backed Finance Fund (MCA)	Diversified portoflio of asset-backed products across consumer finance, resi/commercial, and hard/financial assets						
			Apollo Credit Strategies Fund LP (MCA)	Long/short credit fund focused on capital structure arbitrage, defensive credit, stressed credit and distressed credit						
			Apollo Offshore Credit Fund LTD (MCA)	Global credit fund focused on bank loans, structured credit, and bonds						
			Bardin Hill Direct Portfolio (MCA)	Co-investments in event-driven/special situation and mispriced credit opportunities						
	a <del>c</del>		Bardin Hill Opportunistic Credit Fund (MCA)	Investments in quality, stable businesses trading at discounts and/or creative structured situations						
	get	Credit Strategies/ High Yield Strategies (13%)	Bardin Hill Opportunistic Credit Fund II (MCA)	Investments in quality, stable businesses trading at discounts and/or creative structured situations						
	Tar Tar		Bardin Hill Solutions Fund LP (MCA)	Credit fund with focus on event-driven/special situations						
	ixe 5%		Beach Point Select Fund LP	Credit fund with focus on mispriced credit opportunities						
	US Fixed Income (15% Target)		GoldenTree Distressed Debt Fund 2010	Fund focused on global distressed, restructuring and turnaround opportunities						
	)		GoldenTree Asset Management SMA	SMA with opportunistic relative-value approach to bonds, loans, structured credit, distressted debt and emerging markets						
			Kayne Anderson BDC (MCA)	BDC investing in third-party and secondary market CLO opportunities						
			Waterfall Ready Capital Corp. (MCA)	Publicly traded REIT specializing in small balance commercial real estate loans						
			Waterfall Asset Management SMA (MCA)	Separate account focused on multi-sector high yield loans and bonds						
			Waterfall Mortgage Loan Opportunity Fund (MCA)	Fund investing in assets sold by non-bank mortgage companies given interest rate-related liquidity stress						
			Waterfall Victoria Fund LP (MCA)	Fund investing in ABS, primarily residential whole loans originated on a primary or secondary basis						
		International Core (0%)	Russell Investments (Barclays Global Aggregate ex-US Unhedged)	Broad-based bond market index of investment grade debt from 24 local currency markets ex-USD						
			Alcentra Limited SMA	SMA investing in European and US performing and non-performing bonds/loans, and CLO equity						
		International Credit (11%)	Alcentra European Direct Lending Fund	2013 fund investing in European direct lending opportunities						
<u>e</u> .			Alcentra Strategic Credit Fund	2015 fund investing in European CLOs and stressed/distressed credit opportunities						
teg			Alcentra Structured Credit Opportunity Fund III	2017 fund investing in European CLO opportunities						
tra			Alcentra Viaduct Fund LP	2018 fund investing in European CLO opportunities including CLO warehousing, risk retention, and equity						
ot S Tai			Cairn Capital Limited SMA	SMA focused on opportunistic European credit, private asset backed, regulatory risk transfer, European CLOs						
al Debt Strate (32% Target)			Cairn Capstone Special Opportunities Fund	Fund focused on cash-flow oriented regulatory risk transfer, private asset backed loans, and structured credit						
(3 ga			Cairn Loan Investments	European CLO Risk Retention vehicle						
Global Debt Strategies (32% Target)			Cairn Loan Investments II	European CLO Risk Retention vehicle						
			Cairn Pathfinder I	Barclays regulatory capital risk transfer on UK mid cap corporate RCF						
	0		Cairn Pathfinder III	Barclays regulatory capital risk transfer on global (70% US) large cap corporate RCF						
	Ĕ		Marathon Asset Management SMA	SMA focused on opportunistic global stressed and distressed credit, restructured real estate, and credit-related real assets						
	nco ;et)		Marathon CLO Equity Fund	Legacy risk retention vehicle that maintains an economic interest in Marathon issued CLO equity						
	arg		Marathon European Credit Opportunity Fund III	Fund focused on European commercial real estate credit						
	oal Fixed Inco (17% Target)		Marathon Structured Product Strategies Fund II	Fund focused on private asset-backed secured debt across mulitple sectors						
	Global Fixed Income (17% Target)		Marathon Structured Product Strategies Fund III	Fund focused on private asset-backed secured debt across mulitple sectors (transports, real estate, healthcare, etc.)						
	Š		Finisterre EM Debt Total Return Fund	Fund focused on an all-weather strategy across the cycle in emerging markets						
			Gramercy Capital Solutions Fund (MCA)	2018 fund engaged in emerging markets corporate direct lending						
			Gramercy Capital Solutions Fund II (MCA)	2021 fund engaged in emerging markets corporate direct lending						
			Gramercy Distressed Argentina Fund III Private (MCA)	Fund engaged in Argentina-focused corporate direct lending						
			Gramercy Distressed Argentina Fund IV Private (MCA)	Fund engaged in opportunistic Argentina focused sovereign positions						
		Emorging Market	Gramercy Distressed Opportunity Fund II (MCA)	Diversified emerging markets hedge fund						
		Emerging Market	Gramercy Distressed Opportunity Fund III (MCA)	Diversified emerging markets hedge fund						
		Debt (6%)	Gramercy Separate Account (MCA)	Stressed and distressed emerging market credit investments in public and private assets.						
			Gramercy Venezuela Opportunity Fund (MCA)	Venezuelan sovereign-focused fund						
			Gramercy Emerging Markets Dynamic Credit Fund (MCA)	Performing and opportunistic credit in public and private markets weighted with a top-down view						
			Gramercy Venezuela Opportunity Fund II (MCA)	OFAC-compliant distressed credit related to Venezuela						
			Gramercy Venezuela Special Situations Fund (MCA)	Litigation financing (e.g. ICSID claims) related to Venezuela						
			PGIM Emerging Market Debt Opportunities Fund	Fund investing in sovereign bonds, local bonds, corporate bonds and currencies in emerging economies.						
			PGIM Emerging Market Debt Opportunities Fund	Fund investing in sovereign bonds, local bonds, corporate bonds and currencies in emerging economies.						



#### **San Bernardino County Employees' Retirement Association**

#### June 30, 2024

### **GLOBAL DEBT STRATEGIES - NET**

	Allocation			Performance (%)				
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Global Fixed Income With Beta Overlay	5,700,035,701	37.5	1.9	3.1	7.5	4.5	6.1	
Blmbg. Global Aggregate			<u>-1.1</u>	<u>-3.2</u>	<u>0.9</u>	<u>-5.5</u>	<u>-2.0</u>	
Over/Under			3.0	6.3	6.6	10.0	8.1	
Total Fixed	4,028,310,743	26.5	3.3	5.5	10.8	5.3	5.6	5.3
Blmbg. U.S. Aggregate Index			<u>0.1</u>	<u>-0.7</u>	<u>2.6</u>	<u>-3.0</u>	<u>-0.2</u>	<u>1.3</u>
Over/Under			3.2	6.2	8.2	8.3	5.8	4.0
Apollo AP Grange Holdings, LLC	85,000,000	0.6						
U.S. Credit Strategies	1,795,816,936	11.8	1.5 (3)	3.7 (4)	9.8 (6)	5.3 (1)	7.8 (1)	6.7 (1)
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>1.5</u> (3)	<u>3.5</u> (4)	<u>10.6</u> (6)	<u>3.8</u> (1)	<u>4.5</u> (3)	<u>4.4</u> (1)
Over/Under			0.0	0.2	-0.8	1.5	3.3	2.3
Stone Tower Offshore Credit (Apollo)	180,282,820	1.2	2.2	5.4	12.1	5.9	6.4	5.7
Beach Point Capital (Formerly Post)	321,533,283	2.1	1.5	4.8	9.0	4.8	7.9	7.2
Mackay / Gold Coast		0.0						
Stone Tower Credit (Apollo)	147,881,113	1.0	2.0	4.0	6.3	5.4	9.3	7.3
Gold Coast Capital IV	105,426	0.0	-9.9	-41.3	-38.7	-15.8	-7.7	
Waterfall Asset Management	51,176,398	0.3	-5.1	-10.0	-10.9	-3.7	3.8	
Waterfall Victoria	71,723,264	0.5	3.5	2.5	-4.1	-2.2	1.3	
KAYNE ANDERSON BDC, LLC	81,018,219	0.5	-0.4	2.8	23.4	13.9		
Apollo Asset Backed Finance Fund	50,614,750	0.3	1.2					
Apollo Atlas Warehouse CO	7,498,355	0.0	2.7					
Golden Tree Asset Management	751,364,044	4.9	1.6	3.7	12.0	6.7	10.5	9.7



### **GLOBAL DEBT STRATEGIES - NET**

	Allocatio							
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Non-U.S. Fixed Income Composite	2,147,493,807	14.1	4.9	7.0	11.8	7.0	5.1	5.0
Blmbg. Global Aggregate Ex USD			<u>-2.1</u>	<u>-5.3</u>	<u>-0.7</u>	<u>-7.5</u>	<u>-3.6</u>	<u>-1.9</u>
Over/Under			7.0	12.3	12.5	14.5	8.7	6.9
Non-U.S. Credit Composite	1,375,207,236	9.0	7.0	9.4	16.3	11.4	8.4	7.1
ICE BofA Euro High Yield Constrained TR			<u>0.7</u>	<u>0.1</u>	<u>8.7</u>	<u>-2.5</u>	<u>1.1</u>	<u>0.7</u>
Over/Under			6.3	9.3	7.6	13.9	7.3	6.4
Marathon/Gold Coast	235,913,114	1.6	4.0	4.0	4.3	5.3	6.7	7.3
ICE BofA Euro High Yield Constrained TR			<u>0.7</u>	<u>0.1</u>	<u>8.7</u>	<u>-2.5</u>	<u>1.1</u>	<u>0.7</u>
Over/Under			3.3	3.9	-4.4	7.8	5.6	6.6
Halcyon Asset Management	214,439,807	1.4	3.0 (1)	2.0 (9)	3.6 (92)	10.5 (1)	4.6 (3)	
ICE BofA Euro High Yield Constrained TR			<u>0.7</u> (15)	<u>0.1</u> (72)	<u>8.7</u> (11)	<u>-2.5</u> (55)	<u>1.1</u> (50)	
Over/Under			2.3	1.9	-5.1	13.0	3.5	
Cairn Composite	111,206,820	0.7	5.9 (1)	5.6 (3)	18.6 (2)	11.8 (1)	9.7 (1)	7.0 (1)
ICE BofA Euro High Yield Constrained TR			<u>0.7</u> (15)	<u>0.1</u> (72)	<u>8.7</u> (11)	<u>-2.5</u> (55)	<u>1.1</u> (50)	<u>0.7</u> (81)
Over/Under			5.2	5.5	9.9	14.3	8.6	6.3
Alcentra - KT1	689,913,342	4.5	8.2	13.4	23.0	13.6	9.8	
ICE BofA Euro High Yield Constrained TR			<u>0.7</u>	<u>0.1</u>	<u>8.7</u>	<u>-2.5</u>	<u>1.1</u>	
Over/Under			7.5	13.3	14.3	16.1	8.7	
Alcentra SP2 - KT1	13,157,468	0.1	-1.1	-7.4	-4.9	8.0	-3.9	
ICE BofA Euro High Yield Constrained TR			<u>0.7</u>	<u>0.1</u>	<u>8.7</u>	<u>-2.5</u>	<u>1.1</u>	
Over/Under			-1.8	-7.5	-13.6	3.3	-5.0	
Alcentra SP4 - KT1	110,576,685	0.7	19.1	29.5	34.4	19.2	15.5	
ICE BofA Euro High Yield Constrained TR			<u>0.7</u>	<u>0.1</u>	<u>8.7</u>	<u>-2.5</u>	<u>1.1</u>	
Over/Under			18.4	29.4	25.7	21.7	14.4	



#### **San Bernardino County Employees' Retirement Association**

### **GLOBAL DEBT STRATEGIES - NET**

	Allocation			Performance (%)					
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	
Emerging Markets Debt Composite	772,286,570	5.1	1.4 (15)	3.0 (35)	4.5 (76)	0.6 (11)	0.5 (60)	1.9 (59)	
50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified			<u>-0.7</u> (72)	<u>-0.7</u> (76)	<u>4.9</u> (75)	<u>-2.9</u> (84)	<u>-0.6</u> (86)	<u>0.9</u> (74)	
Over/Under			2.1	3.7	-0.4	3.5	1.1	1.0	
Gramercy Funds Management LLC	540,046,570	3.6	2.1 (4)	3.9 (21)	4.1 (78)	3.2 (3)	1.4 (33)	3.1 (18)	
JP Morgan ELMI+ TR USD			<u>-0.3</u> (64)	<u>-1.4</u> (79)	<u>2.9</u> (80)	<u>-1.1</u> (39)	<u>-0.1</u> (75)	<u>-0.4</u> (86)	
Over/Under			2.4	5.3	1.2	4.3	1.5	3.5	
PGIM Fixed Income	114,391,200	0.8	0.0 (60)	1.3 (63)	7.6 (55)	-2.4 (74)	2.6 (12)	3.1 (19)	
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified			<u>-0.7</u> (72)	<u>-0.7</u> (76)	<u>4.9</u> (75)	<u>-2.9</u> (84)	<u>-0.6</u> (86)	<u>0.9</u> (74)	
Over/Under			0.7	2.0	2.7	0.5	3.2	2.2	
Finisterre EM Debt Total Return Fund	117,848,800	0.8	-0.7	0.2	4.1				
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified			<u>-0.7</u>	<u>-0.7</u>	<u>4.9</u>				
Over/Under			0.0	0.9	-0.8				



### **ABSOLUTE RETURN (ALPHA POOL)**

		Apollo Global SMA (MCA)	Credit focused separate account investing in bespoke credit opportunities
		Apollo Accord+ (MCA)	2021 credit fund focused on opportunities across structured credits, special situations, performing credit and origination
_		Ares ECO Master Fund II, LTD (MCA)	Corporate debt investments in non-investment grade companies, with a focus on senior bank debt
n		Birch Grove Credit Strategies Fund	All-weather approach to credit/portfolio construction across capital structure and across all market cycles
Retur Pool) rget)	Core & Credit	Corrum Capital Global Credit Opportunities Fund	Yield-paying principal-protected transactions with collateralization by hard and soft assets
Tal	Strategies (7%)	Corrum Capital GCO Co-Invest Fund	Yield-paying principal-protected transactions with collateralization by hard and soft assets
osolute (Alpha (7% Ta	Strategies (7%)	SSGA Short-Term Treasury Strategy SMA	Short term treasury vehicle
sq v		Zais Group SMA	Long only structured credit SMA that focuses on stable cash flows and low duration, includes student housing
		Zais Opportunity Fund, LTD	Diversified structured credit fund with the abilty to use hedges and derivative strategies
		Zais Zephyr A-8, LP	Closed-end fund focused on CLO equity post risk retention requirements
		Zais Zephyr A-9, LP	2022 closed-end fund focused on CLO equity post risk retention requirements



### **ALPHA POOL STRATEGIES - NET**

	Allocation			Performance (%)					
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	
Alpha Pool Composite	2,343,477,106	15.4	3.2	7.0	12.7	5.9	5.3	4.9	
91 Day T-Bill + 3%			<u>2.1</u>	<u>4.2</u>	<u>8.6</u>	<u>6.1</u>	<u>5.2</u>	<u>4.5</u>	
Over/Under			1.1	2.8	4.1	-0.2	0.1	0.4	
Alpha Liquidity (Ssga)	226,266,027	1.5	1.3	2.6	5.5	3.0	2.3	1.7	
Apollo Global Management	2,418,078	0.0							
Ares Eco Master Fund II	612,193,259	4.0	1.8	4.7	10.8	3.8	5.3		
Birch Grove Credit Strategies	271,435,219	1.8	2.7	6.2	15.0	3.2	6.0	5.8	
Corrum Capital	288,506,974	1.9	1.2	3.4	-0.3	5.0	-0.8	2.8	
Zais	155,821,457	1.0	2.2	6.9	15.4	3.9	2.4	3.8	
Zais Group Invest Advisors	513,280,137	3.4	3.4	11.9	23.7	12.2	10.0	8.9	
Zais Zephyr 8	46,513,341	0.3	42.7	49.5	63.7	18.4	15.5		
Zais Zephyr 9	53,539,200	0.4	1.4	-0.8	-1.6				
Apollo Accord+	173,503,414	1.1	8.4	8.4	16.0				



### **PRIVATE ASSETS**

### Exhibit A: Page 36

				,
			Adams Street SMA (MCA)	Global investment opportunities in venture, growth equity, buyout, and private credit
			Industry Ventures Arrowhead LP (MCA)	Fund investing in direct and secondary co-investments across the venture and buyout sectors
		Diversified	Partners Group SMA (MCA)	Global SMA in private markets; primarily in private equity but also includes infrastructure and real estate
			Pathway Capital SMA (MCA)	Private equity investments in primary/secondary funds and co-investment opportunities
			Pathway PE Fund VII LLC	Fund of funds focused on mid/large buyout funds in the US
			SL Capital European Strategic Partners 2008	2008 fund of funds investing in European-focused primary funds
			Industry Ventures Tech Buyout, LP (MCA)	2018 fund investing in small high growth tech companies
			Industry Ventures Tech Buyout II, LP (MCA)	2022 fund investing in small high growth tech companies
			Kayne Partners Fund IV LP (MCA)	2016 fund investing in middle market growth equity opportunities in US companies
		Buyout Funds	Kayne Partners Fund V LP (MCA)  Kayne Growth Co-Investments (MCA)	2020 fund investing in middle market growth equity opportunities in US companies  Co-investment commitments (2022 and later) invested alongside Kayne Partners Funds
			Partners Group Direct Equity 2016 (MCA)	Global portfolio of direct private equity deals
			Partners Group Direct Equity 2010 (MCA)	Global portfolio of direct private equity deals (previously Direct Equity 2019)
			Partners Group Direct Equity Fund V (MCA)	Global portfolio of direct private equity deals (2024)
			Partners Group Direct Investments 2012 LP (MCA)	Global portfolio of direct private equity deals
			Waterfall PE Co-Investments (MCA)	Co-investment opportunities in US lower middle market specialty finance companies
			Waterfall Sentinel Fund (MCA)	2019 fund investing in US lower middle market specialty finance focused companies
			Industry Ventures Direct LP (MCA)	2016 fund investing in venture capital opportunities
	_		Industry Ventures Direct II LP (MCA)	2019 fund investing in venture capital opportunities
	Ę.		Industry Ventures Direct III LP (MCA)	2021 fund investing in venture capital opportunities
	Eq		Industry Ventures Fund V LP (MCA)	Fund of funds focused on small but well-established US venture capital funds
	Private Equity		Industry Ventures Fund VI LP (MCA)	Fund of funds focused on small but well-established US venture capital funds
	۲. ۲.		Industry Ventures Partnership Holdings II LP (MCA)	2011 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments
		Venture Funds	Industry Ventures Partnership Holdings III LP (MCA)	2013 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments
			Industry Ventures Partnership Holdings III-A LP (MCA)	2014 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments
Private Assets (18% Target)			Industry Ventures Partnership Holdings IV LP (MCA)	2016 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments
			Industry Ventures Partnership Holdings V LP (MCA)	2019 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments
			Industry Ventures Partnership Holdings VI LP (MCA)	2021 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments
			Industry Ventures Partnership Holdings VII LP (MCA)	2024 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments
		Cd		2016 fund investing in venture capital opportunistic transactions in the secondary market
<b>%</b>		Secondary Funds	Aberdeen Standard Secondary Opportunities Fund IV	2020 fund investing in secondary purchases of PE fund of funds and other complex transactions
s(1			Industry Ventures Secondary VII LP (MCA) Industry Ventures Secondary VIII LP (MCA)	2013 fund investing in secondary transactions in venture capital opportunities 2017 fund investing in secondary transactions in venture capital opportunities
set			Industry Ventures Secondary VIII LP (MCA)	2017 fund investing in secondary transactions in venture capital opportunities 2021 fund investing in secondary transactions in venture capital opportunities
As			Industry Ventures Secondary X LP (MCA)	2023 fund investing in secondary transactions in venture capital opportunities 2023 fund investing in secondary transactions in venture capital opportunities
ate			Lexington Capital Partners VII	Fund of funds focused mainly on buyout funds in US and Western Europe
r.			Lexington Middle Market Investors II	Fund of funds focused on secondary interest in US middle-market buyouts
_			SL Capital Secondary Opportunities Fund III	Fund of funds focused on secondary purchase of mid and large-cap buyout funds in Europe
			Kayne Anderson Energy Fund VII LP	2017 fund investing in US upstream energy companies with a focus on growing enterprise value
		Sector Specific Funds	Kayne Anderson Private Energy Income Fund II (MCA)	2018 fund investing in US upstream energy companies, focused on income from large asset acq/development
			Kayne Anderson Private Energy Income Fund III (MCA)	2023 fund investing in US upstream energy companies, focused on income from large asset acq/development
			Tennenbaum Energy Opportunities Fund LP (MCA)	2015 fund investing in senior secured notes and first/second lien debt of US companies in the energy sector
			Ares Private Credit Solutions Fund (MCA)	Junior debt investments in large private companies
			Ares Private Credit Solutions Fund 2 (MCA)	Junior debt investments in large private companies
			Ares Senior Direct Lending Fund III (MCA)	Senior secured 1L loans to primarily sponsor-backed private companies
		Direct Lending	Irradiant Renewables Opportunities Partners	2020 fund investing in the equity and debt of renewable power generating companies
			Tennenbaum Direct Lending Fund VIII, LLC (MCA)	Privately-originated, performing senior secured debt in mid-market (100mm-1.5bn) companies in NA (levered share class)
			Tennenbaum Direct Lending Fund IX, LLC	Privately-originated, performing senior secured debt in mid-market (100mm-1.5bn) companies in NA (unlevered share class)
			Tennenbaum Waterman Fund LP (MCA)	Senior 1L loans to middle-market companies, primarily in the US
			Ares ICOF II (MCA)	Structured credit in CLO vehicles and private asset-backed credits
			Ares ICOF III (MCA)	Structured credit in CLO vehicles and private asset-backed credits
	spt		Ares SMA (MCA)	Separate account in liquid credit and income-focused opportunities
	ğ		Ares Special Situations Fund IV (MCA)	Global distressed debt and special situations
	Private Debt		Catalyst Fund LP II Crestline Portfolio Financing Fund	2006 fund investing in Canadian stressed/distressed investment opportunities Financing to late-stage private equity funds and GPs
	Pri			
		Credit/Distressed/	Crestline Portfolio Financing Fund II Irradiant CLO Partners II (MCA)	Financing to late-stage private equity funds and GPs 2020 fund investing in CLOs issued by Irradiant
		Opportunistic/	Irradiant CLO Partners II (MCA)	2020 fund investing in CLOs issued by Irradiant 2023 fund investing in CLOs issued by Irradiant
		Special Situations	Irradiant CLO Partners III (MCA)  Irradiant Partners Climate Co (MCA)	2023 fund investing in CLOs issued by irradiant 2023 fund investing in climate-oriented solutions focused on energy transition opporutnity
			Irradiant Solutions Fund (MCA)	2017 fund investing in special situation opportunities in US credit
			Irradiant Solutions Fund II (MCA)	2023 fund investing in special situation opportunities in US credit
			LuminArx Opportunistic Alternative Solutions Fund	Hybrid fund investing in capital solutions opportunities globally, with a focus on the US
			Siguler Guff Distressed Opportunity Fund III LP	2009 fund of funds investing in US and International opportunistic credit funds and co-investments
			Tennenbaum Co-Investments (MCA)	Co-investment opportunities driven from Tennenbaum funds
			Tennenbaum Special Situations Fund IX LLC (MCA)	Distressed and rescue-financing in mid-market companies in NA



# **REAL ESTATE PORTFOLIO**

			348 West Hospitality Lane	SBCERA headquarters
	(%		Invesco Real Estate Asia Fund	Asia-focused open-ended core real estate fund
	(2.5		Kayne Anderson Real Estate Debt III (MCA)	2018 fund investing in first-lien US residential mortgage debt
	te (		Kayne Anderson Real Estate Debt IV (MCA)	2020 fund investing in first-lien US residential mortgage debt
_	sta	Core Real Estate	Kayne Anderson Commercial Real Estate Debt (MCA)	Open-ended fund investing in direct loan origination and Freddie-Mac structured products
rget)	ä	Core Real Estate	Marathon Real Estate Debt Fund	Fund investing in senior secured first mortgage loans in the US
Tar	Rea		PGIM Real Estate Capital VI LP	European (UK and Germany focused) mezzanine lending fund for value-add real estate projects
. %5)	- e		PGIM Real Estate Capital VII LP	European (UK and Germany focused) mezzanine lending fund for value-add real estate projects
	ပိ		PRISA II	US core-plus open-ended real estate equity fund with low leverage
tfolio			TPG Angelo Gordon Essential Housing Fund III	2024 fund providing homebuilders with off-balance sheet financing for short duration, close-to-production land
ort	5%)		Apollo Real Estate Fund II LP (MCA)	2015 fund investing in value-add US real estate opportunities
e P	2.5%		Apollo Real Estate Fund III LP (MCA)	2020 fund investing in value-add US real estate opportunities
tat	e (2		Fortress Japan Opportunity Fund II	2011 fund investing in value-add Japanese real estate opportunities
l Est	tat	Enhanced Real Estate/	Invesco US Real Estate VI	2020 fund investing in value-add US real estate opportunities
\ea	l Es	High Return	Kayne Anderson Real Estate Partners V LP (MCA)	2017 fund investing in value-add US real estate opportunities
	ea		Kayne Anderson Real Estate Partners VI LP (MCA)	2021 fund investing in value-add US real estate opportunities
	re F		Morgan Stanley RE Fund V International	2005 fund investing in value-add International real estate opportunities
	Ş		PRISA III	Value-add US real estate equity fund
	-io	Real Estate Secondaries	Partners Group Real Estate Secondary 2013 A LP (MCA)	Global private real estate fund interests purchased on the secondary market at discounts to intrinsic value
	Z	near Estate Secondaries	Partners Group Real Estate Secondary 2017 A LP (MCA)	Global private real estate fund interests purchased on the secondary market at discounts to intrinsic value



# **REAL ASSETS PORTFOLIO**

	Commodities	Pinnacle Natural Resources LP	Commodity fund of funds with both directional and relative value exposure across multiple commodities
Real Asset	(4% Target)	Pinnacle Physicals & Financing LTD	Multi-manager fund focused on physical commodities (livestock, metals, energy and agriculture)
Portfolio	Infrastructure		
(6% Target)	(2%)	Kayne Anderson MLP Strategy (MCA)	Separate account opportunistically investing in publicly traded US MLP securities
	Timber (0% Target)	Domain Environmental Investors II	Fund focused on acquiring, developing, and operating a variety of environmental assets (wetlands, fisheries, restorations)



#### **San Bernardino County Employees' Retirement Association**

June 30, 2024

### **ALTERNATIVES - NET**

	Allocation				Perform	ance (%)		
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
Private Equity Composite	3,017,981,837	19.9	2.1	2.6	7.2	9.6	14.9	13.6
C A Global All PE (Qtr Lag)			<u>1.3</u>	<u>3.7</u>	<u>4.5</u>	<u>7.0</u>	<u>13.2</u>	<u>12.2</u>
Over/Under			8.0	-1.1	2.7	2.6	1.7	1.4
Russell 3000 Index			<u>3.2</u>	<u>13.6</u>	<u>23.1</u>	<u>8.1</u>	<u>14.1</u>	<u>12.1</u>
Over/Under			-1.1	-11.0	-15.9	1.5	0.8	1.5
C A US All PE (1 Qtr Lag)			<u>2.1</u>	<u>4.8</u>	<u>8.1</u>	<u>11.5</u>	<u>15.0</u>	<u>13.4</u>
Over/Under			0.0	-2.2	-0.9	-1.9	-0.1	0.2
Real Estate Composite	568,991,480	3.7	-2.4	-5.1	-7.3	4.0	4.6	6.6
NCREIF Property Index 1 Qtr. Lag			<u>-1.0</u>	<u>-4.0</u>	<u>-7.2</u>	<u>3.6</u>	<u>3.8</u>	<u>6.4</u>
Over/Under			-1.4	-1.1	-0.1	0.4	0.8	0.2
Real Assets Composite	810,446,422	5.3	-0.8	5.9	9.0	11.5	11.6	6.3
Real Assets Custom Blend			<u>0.7</u>	<u>7.6</u>	<u>11.1</u>	<u>4.5</u>	<u>6.4</u>	<u>2.0</u>
Over/Under			-1.5	-1.7	-2.1	7.0	5.2	4.3
Infrastructure	139,102,341	0.9	-10.0	3.8	13.3	11.3	13.5	9.1
Real Assets Custom Blend			<u>0.7</u>	<u>7.6</u>	<u>11.1</u>	<u>4.5</u>	<u>6.4</u>	<u>2.0</u>
Over/Under			-10.7	-3.8	2.2	6.8	7.1	7.1
Commodities	667,693,814	4.4	0.9	6.4	8.7	11.9	12.7	7.4
S&P GSCI Composite TR Index			<u>0.7</u>	<u>11.1</u>	<u>15.0</u>	<u>12.7</u>	<u>8.3</u>	<u>-3.1</u>
Over/Under			0.2	-4.7	-6.3	-0.8	4.4	10.5





# APPENDIX: PERFORMANCE SUMMARY

Real Estate
Real Assets
Private Equity

### **REAL ESTATE PERFORMANCE**

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	TVPI Ratio	IRR
American Realty Advisors	1996	128,009,773	128,009,773	(	0	278,446,295	0	278,446,295	2.18	6.89%
Tuckerman Multi-Family Development Fund III	2002	10,000,000	10,219,311	(	0	16,939,699	0	16,939,699	1.66	26.67%
CBRE Strategic Partners III	2003	10,000,000	10,000,000	(	0	12,698,783	0	12,698,783	1.27	8.02%
Prudential PRISA III	2003	75,000,000	81,872,124	-6,872,124	3,778,589	73,250,112	81,496,069	154,746,181	1.81	16.57%
Walton Street Real Estate Fund IV, LP	2003	10,000,000	9,770,890	(	0	15,987,617	0	15,987,617	1.64	
Bryanston Retail Opportunity Fund, L.P.	2004	20,000,000	8,228,165	11,771,83	5 0	39,932,161	117,280	40,049,441	4.87	70.73%
Prudential PRISA II	2004	140,000,000	140,000,000	(	6,102,942	70,118,109	172,355,323	242,473,432		6.44%
RREEF America REIT III	2004	20,000,000	20,539,309		0	23,658,675	0	23,658,675	1.15	
BlackRock Diamond Property Fund	2005	25,000,000	25,000,000	(	,	15,233,347	0	15,233,347		
CBRE Strategic Partners IV	2005	40,000,000	40,000,000	(	•	2,609,685	0	2,609,685		
INVESCO Real Estate Fund I	2005	10,000,000	9,248,390	(	,	10,015,656	0	10,015,656		
LaSalle Income & Growth Fund IV	2005	20,000,000	19,469,417	(	,	13,482,024	0	13,482,024		
North Haven Real Estate Fund V International	2005	27,500,000	27,377,414	(	00,0	33,395,867	0	33,395,867		
Prologis Japan Fund	2005	25,290,819	25,290,819	(	,	33,126,118	0	33,126,118		
Tri Continental Capital VII	2005	23,000,000	22,277,928	722,072		3,168,198	471,594	3,639,792		
American Realty Value Add	2006	13,125,215	13,125,215	(	,	32,080,321	0	32,080,321		
Beacon Capital Strategic Partners IV, L.P.	2006	38,000,000	38,000,000	(	,	31,424,699	0	31,424,699		
Fillmore East Fund	2006	25,000,000	31,403,818	(	,	20,777,177	0	20,777,177		
Starwood Capital Hospitality Fund I-2	2006	30,000,000	30,000,000	(	•	27,879,087	2,574,428	30,453,515		
Starwood Opportunity Fund VII - A	2006	25,000,000	25,000,000	(		19,601,350	468,445	20,069,795		
Walton Street Real Estate Fund V, LP	2006	40,000,000	40,000,000	(	,	27,760,957	798,441	28,559,398		
Beacon Capital Strategic Partners V, L.P.	2007	18,000,000	18,000,000	(	,	11,174,695	0	11,174,695		
Invesco Asian Real Estate Partners II (USD), LP	2007	20,000,000	8,412,833	(	,	11,465,147	0	11,465,147		
Invesco High Yield Debt Fund I	2007	20,000,000	20,000,000	(	,	8,567,605	0	8,567,605		
Square Mile Partners II	2007	19,831,232	19,831,232	(	,	5,311,330	0	5,311,330		
Fillmore West Fund	2008	20,000,000	19,561,557	(	,	21,175,799	0	21,175,799		
Square Mile Partners III LP	2008	20,000,000	19,730,190	(	,	28,873,622	0	28,873,622		
Starwood Debt Fund II, LP	2008	20,000,000	17,599,882	(	,	21,912,511	0	21,912,511		
Structured Real Estate III, LP (Guggenheim)	2008	20,000,000	20,000,000	(	•	16,320,664	0	16,320,664		
Bryanston Real Estate Opportunity Fund II, L.P.	2009	20,000,000	8,589,256	4.050.04	•	11,851,333	0	11,851,333		
Fortress Japan Opportunity Fund II	2012	5,472,095	1,212,284	4,259,81		25,644,920	1,266,831	26,911,751		
Oaktree Real Estate Opportunities V	2012	25,000,000	25,000,000	(		39,431,074	190,399	39,621,473		
Invesco Real Estate Asia Fund	2014	51,732,500	51,732,500	,	_,00.,00.	16,908,082	63,427,517	80,335,600		
Partners Group RE Secondary 2013 (USD) A Apollo US Real Estate Fund II	2014 2015	65,000,000 20,000,000	49,541,590	15,458,410 2,806,487		37,986,927 8,828,347	27,370,446 14,773,441	65,357,373		
Pramerica Real Estate Capital VI	2015	24,890,077	17,193,513 22,583,937	2,306,46		14,775,416	6,137,183	23,601,788 20,912,600		
Kayne Anderson Real Estate Fund V, L.P.	2010	20,000,000	19,272,676	727,324		14,775,416	17,384,055	31,432,647		
Partners Group RE Secondary 2017 (USD) A	2017	75,000,000	45,821,280	29,178,720		753,447	59,331,845	60,085,292		
Kayne Anderson Real Estate Debt III	2017	20,000,000	19,947,473	29,170,720	,	25,318,141	09,331,045	25,318,141		
Apollo US Real Estate Fund III	2016	50,000,000	28,214,251	21,785,749		5,330,711	33,981,139	39,311,850		
Kayne Anderson Real Estate Debt IV	2021	30,000,000	27,540,157	2,459,843		9,808,509	21,497,521	31,306,030		
Kayne Anderson Real Estate Fund VI	2021	20,000,000	10,077,049	9,922,95		350,000	11,606,921	11,956,921	1.14	
Pramerica Real Estate Capital VII	2021	55,182,939	29,204,077	25,978,862		7,980,888	21,555,470	29,536,357		
Total: San Bernardino	2021	1,395,034,651	1,253,898,311	120,506,079		1,145,403,699	536,804,349	1,682,208,048		



### **REAL ASSETS PERFORMANCE**

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	TVPI Ratio	IRR
Hancock Timberland VII	2005	90,000,000	90,000,000	C	0	101,142,900	0	101,142,900	1.12	1.02%
Hancock Timberland VIII	2006	40,000,000	40,000,000	C	200	45,947,325	0	45,947,325	1.15	1.11%
Highstar Capital III, L.P.	2007	60,000,000	59,119,119	C	0	63,302,361	0	63,302,361	1.07	0.87%
RREEF North American Infrastructure Fund	2007	50,000,000	50,000,000	C	846,289	55,238,754	0	55,238,754	1.09	12.09%
Timbervest Partners II, L.P.	2007	50,000,000	50,000,000	C	0	51,855,967	0	51,855,967	1.04	0.38%
Pinnacle Natural Resources Offshore Fund Ltd.	2008	135,000,000	135,000,000	C	0	0	272,421,305	272,421,305	2.02	8.23%
Timbervest Environmental Investments II, L.P.	2008	30,000,000	30,000,000	C	50,548	21,494,831	3,587,292	25,082,123	0.83	-2.34%
Pinnacle Physicals and Financing Master, Ltd	2009	205,800,000	205,800,000	C	15,984	2,018,221	353,485,968	355,504,189	1.73	8.32%
Fortress Transportation Infrastructure LLC	2015	45,403,354	45,403,354	C	0	41,902,882	0	41,902,882	0.92	-1.99%
Total: San Bernardino		706,203,354	705,322,473	0	913,021	382,903,241	629,494,565	1,012,397,806	1.43	4.33%



### PRIVATE EQUITY PERFORMANCE

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	TVPI Ratio	IRR
European Strategic Partners 2004	2004	238,688,631	222,037,366	16,651,266	88,078	280,950,879	191,765	281,142,644	1.27	3.95%
Partners Group MCA	2004	1,000,000,000	1,009,041,456	-9,041,456	0	900,591,871	650,709,214	1,551,301,085	1.54	8.86%
Pathway Private Equity Fund VII, L.P.	2004	904,500,000	863,586,961	40,913,039	0	1,504,827,241	177,572,602	1,682,399,843	1.95	11.53%
Aurora Equity Partners III, L.P.	2005	25,000,000	23,544,536	0	1,422,824	41,738,196	0	41,738,196	1.67	13.61%
Lexington Middle Market I	2005	25,000,000	24,771,942	228,058	0	40,464,141	52,179	40,516,320	1.64	11.38%
NB Secondary Opportunities I, LP	2005	20,000,000	18,500,843	0	0	24,330,105	0	24,330,105	1.32	6.49%
Lexington Capital Partners VI-B	2006	25,000,000	24,591,319	408,681	3,012	35,008,201	128,591	35,136,792	1.43	6.86%
Siguler Guff DOF II	2006	30,000,000	30,000,000	0	-43,638	42,440,278	0	42,440,278	1.42	8.64%
TCW/Crescent Mezzanine IV, L.P.	2006	40,000,000	39,590,976	0	-81,547	45,049,090	0	45,049,090	1.14	3.03%
Catalyst Fund II, L.P.	2007	10,000,000	9,956,944	43,056	65,604	3,859,103	21,489,981	25,349,084	2.53	7.95%
Energy Spectrum Partners V, LP	2007	15,000,000	13,840,666	0	12,744	25,811,900	0	25,811,900	1.86	31.80%
Tennenbaum Opportunities Fund V, L.P.	2007	10,000,000	10,000,000	0	0	14,435,464	610,649	15,046,113	1.50	5.57%
Apollo Investment Fund VII, L.P.	2008	10,000,000	8,789,116	1,210,884	-15,638	17,866,793	62,380	17,929,173	2.04	22.79%
Aurora Resurgence Fund, L.P.	2008	15,000,000	5,653,009	0	40,630	10,350,965	0	10,350,965	1.82	17.60%
Industry Ventures Fund V	2008	10,000,000	9,500,000	0	0	27,399,602	0	27,399,602	2.88	29.29%
Lexington Middle Market II - Offshore	2008	10,000,000	9,773,736	226,264	40,771	16,136,880	1,950,734	18,087,614	1.84	14.43%
NB Secondary Opportunities II, LP	2008	20,000,000	17,080,642	0	430,639	26,888,038	0	26,888,038	1.54	14.40%
Siguler Guff DOF III	2008	10,000,000	9,700,000	300,000	-234	14,733,073	1,057,785	15,790,858	1.63	10.31%
TCW/Crescent Mezzanine V, L.P.	2008	20,000,000	19,949,723	50,277	-51,494	27,450,244	0	27,450,244	1.38	9.80%
Apollo European Principal Finance Fund (Feeder), LP	2009	53,001,432	46,434,825	6,566,607	13,022	69,417,013	116,728	69,533,742	1.50	11.81%
DRI II, L.P.	2009	20,000,000	19,917,669	0	-100,096	26,302,807	0	26,302,807	1.33	19.64%
Starwood Energy Infrastructure Fund	2009	15,000,000	14,750,000	0	93,463	20,239,979	0	20,239,979	1.36	7.88%
Apollo PCPL Webb V	2010	4,844,398	4,844,398	0	0	5,196,757	0	5,196,757	1.07	6.04%
Apollo PCPL Webb VIII	2010	4,734,303	4,734,303	0	32	12,146,258	0	12,146,258	2.57	46.47%
Energy Spectrum Partners VI, LP	2010	20,000,000	17,240,577	2,759,423	288	20,849,798	406,660	21,256,458	1.23	5.82%
European Strategic Partners 2008	2010	31,220,786	29,704,596	1,516,190	160,998	40,518,100	2,119,687	42,637,787	1.43	7.88%
Industry Ventures Fund VI	2011	20,000,000	18,400,000	1,600,000	0	24,850,771	265,817	25,116,588	1.37	7.99%
Lexington Capital Partners VII (Offshore)	2011	25,000,000	20,465,470	4,534,530	118,325	31,794,115	2,603,327	34,397,442	1.67	14.53%
Tennenbaum Opportunities Fund VI, L.P.	2011	20,000,000	7,882,885	12,117,115	0	16,804,926	81,276	16,886,202	2.14	8.06%
Aurora Equity Partners IV, L.P.	2012	20,000,000	17,262,661	2,737,339	2,654,902	40,094,037	483,901	40,577,938	2.04	18.09%
BNY Mellon - Alcentra Mezzanine III	2012	25,000,000	23,254,658	0	0	26,736,979	0	26,736,979	1.15	12.73%
Industry Ventures Partnership Holdings Fund II, L.P.	2012	25,000,000	23,500,000	1,500,000	0	58,975,714	44,613,604	103,589,318	4.41	22.18%
Tennenbaum Waterman Fund, LP	2012	70,000,000	70,000,000	0	1,152	73,463,734	60,397,413	133,861,147	1.91	10.00%
Industry Ventures Partnership Holdings Fund III, L.P.	2013	25,000,000	23,277,042	1,722,958	0	42,503,590	32,064,124	74,567,714	3.20	21.79%
Industry Ventures Secondary VII, L.P.	2013	25,000,000	23,175,000	1,825,000	0	38,456,740	6,178,904	44,635,644	1.93	15.88%
Industry Ventures Partnership Holdings Fund III-A, L.P.	2014	12,500,000	11,162,500	1,337,500	0	7,375,723	4,454,092	11,829,815	1.06	1.16%



### PRIVATE EQUITY PERFORMANCE

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	TVPI Ratio	IRR
Pathway SBCERA MCA	2014	350,000,000	318,037,181	31,962,819	0	110,909,445	665,485,450	776,394,895	2.44	19.76%
SL Capital SOF I LP	2014	25,000,000	21,408,596	3,591,404	0	27,610,595	1,700,353	29,310,948	3 1.37	9.54%
ARES European Loan Opp Fund	2015	15,000,000	8,413,136	0	0	7,613,498	0	7,613,498	0.90	-6.02%
Ares Special Situations Fund IV, LP	2015	50,000,000	47,686,469	2,313,531	0	37,362,661	35,810,367	73,173,028	1.53	8.08%
Tennenbaum Special Situations Fund IX	2015	50,000,000	32,057,933	17,942,067	85,183	32,877,330	19,048,692	51,926,022	1.62	9.59%
Industry Ventures Direct, LP	2016	25,000,000	23,920,425	1,079,575	0	11,577,501	35,181,946	46,759,447	1.95	16.02%
Industry Ventures Partnership Holdings IV, LP	2016	25,000,000	22,750,000	2,250,000	0	8,419,172	41,143,785	49,562,957	2.18	18.22%
Industry Ventures Special Opportunities II-A	2016	12,500,000	1,694,029	10,805,971	0	3,589,133	1,529,641	5,118,774	3.02	37.87%
TCP Direct Lending Fund VIII-L, LLC	2016	40,000,000	21,606,919	18,393,081	148,810	18,468,239	16,208,236	34,676,475	1.59	7.86%
Tennenbaum Energy Opportunities Fund, LP	2016	20,000,000	1,567,938	18,432,062	0	6,620,045	1,557,104	8,177,149	5.22	10.97%
Apollo Accord Fund, LP	2017	30,000,000	7,500,000	0	-7,580	8,310,474	0	8,310,474	1.11	7.44%
Industry Ventures Secondary VIII	2017	25,000,000	22,525,000	2,475,000	0	24,439,690	19,191,512	43,631,202	1.94	25.00%
Kayne Anderson Energy Fund VII, L.P.	2017	10,000,000	8,638,804	1,361,196	0	1,411,891	5,503,180	6,915,071	0.80	-3.67%
Kayne Partners Fund IV (QP), LP	2017	20,000,000	19,700,828	299,172	127,793	17,322,762	20,880,954	38,203,716	1.93	20.22%
Kayne SBCERA MLP	2017	130,000,000	126,225,037	3,774,963	0	71,201,400	77,911,974	149,113,374	1.18	3.50%
SL Capital SOF III LP	2017	25,000,000	17,774,188	7,225,812	-440	18,781,230	18,091,599	36,872,830	2.07	21.11%
Crestline Portfolio Financing Fund	2018	50,000,000	33,107,629	16,892,371	0	21,639,887	25,639,286	47,279,173	3 1.43	10.51%
Industry Ventures Partnership Holdings V, LP	2018	25,000,000	23,000,000	2,000,000	0	626,933	40,957,577	41,584,510	1.81	20.98%
Industry Ventures Tech Buyout LP	2018	50,000,000	45,553,986	4,446,014	0	0	60,337,615	60,337,615	1.32	11.58%
Kayne Anderson Private Energy Income Fund II, L.P.	2018	20,000,000	18,895,116	1,104,884	0	9,524,695	25,079,779	34,604,474	1.83	38.12%
Kayne Flywheel Co-investment LLC	2018	8,000,000	6,600,000	1,400,000	0	11,215,154	10,087,949	21,303,103	3.23	37.74%
Kayne SBCERA (D.I.)	2018	45,000,000	40,660,422	4,339,578	0	48,925,348	0	48,925,348	3 1.20	16.24%
Kayne Solutions Fund LP	2018	20,000,000	9,809,659	0	19,174	10,797,587	0	10,797,587	7 1.10	9.14%
Industry Ventures Direct II, LP	2019	50,000,000	45,034,012	4,965,988	0	0	66,175,992	66,175,992	2 1.47	15.54%
Kayne Renewable Opportnities Partners (TE), LP	2019	100,000,000	20,704,033	0	0	27,857,425	0	27,857,425	1.35	21.72%
Waterfall Sentinel Co-Investments	2019	30,000,000	24,810,848	5,189,153	140,580	60,209,500	4,464,608	64,674,108	3 2.59	29.40%
Waterfall Sentinel Fund	2019	30,000,000	25,664,698	4,335,302	0	30,136,240	11,793,362	41,929,602	1.63	15.24%
Adams Street SBCERA	2020	150,000,000	136,775,298	13,224,702	0	19,168,594	150,772,507	169,941,101	1.24	14.13%
Kayne Anderson FRG	2020	30,000,000	30,000,000	0	0	45,283,966	0	45,283,966	1.51	44.79%
Kayne CLO Partners II, LP	2020	50,000,000	44,721,625	0	-97,167	52,848,194	0	52,848,194	1.18	13.44%
Industry Ventures Partnership Holdings VI, LP	2021	40,000,000	20,815,991	19,184,009	0	305,308	22,706,870	23,012,178	3 1.11	8.92%
Industry Ventures Secondary IX, LP	2021	50,000,000	45,054,461	4,945,539	-578	1,091,888	54,881,529	55,973,417	7 1.24	15.35%
Industry Ventures Direct III, L.P.	2022	40,000,000	8,254,527	31,745,473	-1,408	0	6,786,852	6,786,852	0.82	-20.05%
Industry Ventures IV Arrowhead, L.P.	2022	30,000,000	23,099,190	6,900,810	0	334,379	22,597,255	22,931,634	0.99	-1.61%
Industry Ventures Tech Buyout II, L.P.	2022	100,000,000	31,033,556	68,966,444	-181,108	0	34,095,558	34,095,558	3 1.11	15.60%
Adams Street SBCERA 2	2023	80,000,000	15,720,000	64,280,000		0	15,720,000	15,720,000	1.10	11.32%
Total: San Bernardino		4,704,989,550	4,096,737,350	465,033,652	5,087,096	4,402,539,267	2,518,952,945	6,921,492,212	2 1.69	10.79%





Exhibit A: Page 46

# **POLICY INDEX COMPOSITION**

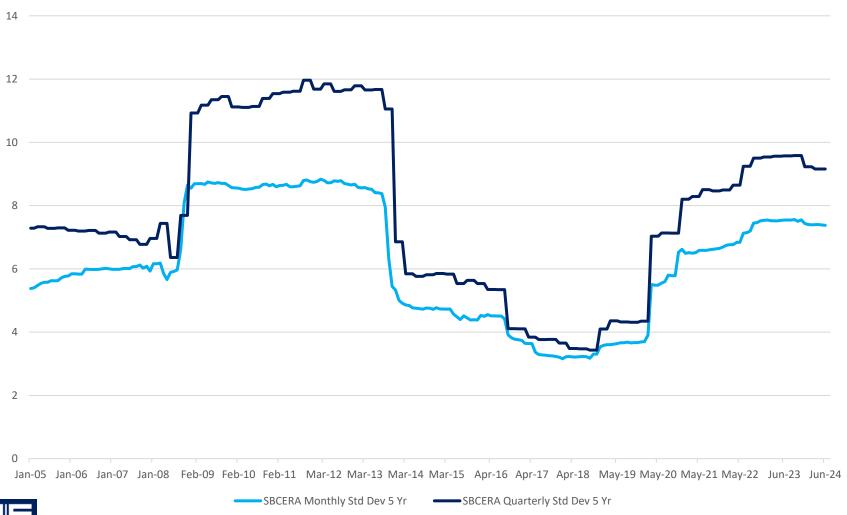
Index	7/1/ 2022	7/1/ 2021	7/1/ 2019	7/1/ 2018	7/1/ 2014	7/1/ 2012	6/1/ 2012	6/1/ 2010	6/1/ 2009	6/1/ 2008	9/1/ 2006	7/1/ 2005	4/1/ 2004	6/1/ 2002
Russell 3000 Index	35	31	29	29	29	30	29	29	28	34	38	38	43	43
MSCI ACWI ex USA Index	13	15	15	15	15	13	7	7	7	11	13	13	18	18
MSCI Emerging Markets Index							4	4	3	4	3	3		
Bloomberg US Aggregate Bond Index	22	22	22	22	22	24	13	13	18	15	21	21	18	26
Bloomberg Global Aggregate Bond ex US Index	17	19	20	20	18	16	10	10	9	8	5			
Bloomberg Global Aggregate Bond Index Hedged												5	5	5
Merrill Lynch High Yield Master II Index							13	13	13	8	8	8	8	
JP Morgan EMBI Global Diversified Index							6	6	4	4	2	2		
NCREIF Property Index	5	5	7	7	9	9	12.5	12.5	13	11	10	10	8	8
67% S&P GSCI + 33% BBG US TIPS Index	6													
67% Bloomberg Commodity Index+ 33% BBG US TIPS Index		6	5											
NCREIF Timberland 1Q Lag				2.5	2.5	3								
Bloomberg Commodity Index				2.5	2.5	3	3.5	3.5	3	3				
91 Day T-Bill Index	2	2	2	2	2	2	2	2	2	2				



### **5 YEAR STANDARD DEVIATION**

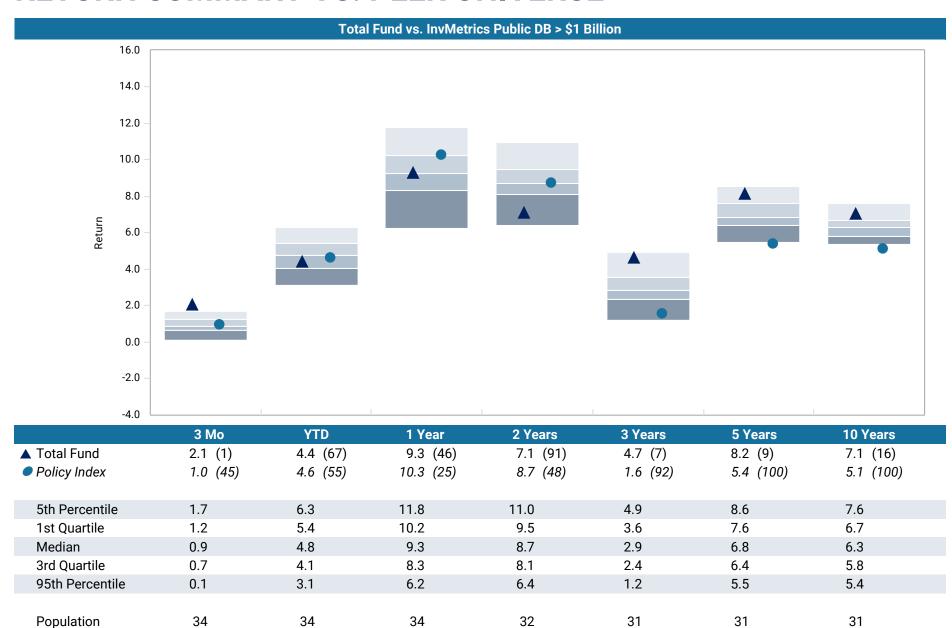
#### MONTHLY TIME SERIES VS. QUARTERLY TIME SERIES

Standard Deviation Rolling 5 Yr





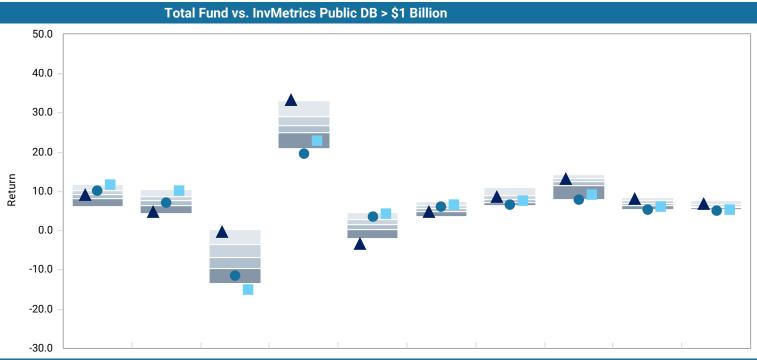
#### **RETURN SUMMARY VS. PEER UNIVERSE**





June 30, 2024

### **RETURN SUMMARY VS. PEER UNIVERSE**



	Fiscal 2024 (%)	Fiscal 2023 (%)	Fiscal 2022 (%)	Fiscal 2021 (%)	Fiscal 2020 (%)	Fiscal 2019 (%)	Fiscal 2018 (%)	Fiscal 2017 (%)	5 Yrs (%)	10 Yrs (%)
▲ Total Fund	9.3 (46)	5.0 (91)	-0.1 (6)	33.3 (5)	-3.2 (97)	4.8 (78)	8.8 (33)	13.3 (29)	8.2 (9)	7.1 (16)
Policy Index	10.3 (25)	7.2 (61)	-11.3 (89)	19.7 (97)	3.7 (12)	6.2 (32)	6.8 (91)	8.0 (96)	5.4 (100)	5.1 (100)
■ 60% MSCI World/40% FTSE WGBI	11.8 (3)	10.2 (6)	-14.9 (98)	23.0 (91)	4.4 (7)	6.7 (20)	7.8 (61)	9.2 (95)	6.1 (85)	5.5 (94)
5th Percentile	11.8	10.5	0.2	33.1	4.6	7.3	10.9	14.4	8.6	7.6
1st Quartile	10.2	8.7	-3.6	29.1	2.9	6.5	9.1	13.4	7.6	6.7
Median	9.3	7.6	-6.7	26.9	1.6	5.8	8.1	12.5	6.8	6.3
3rd Quartile	8.3	6.4	-9.5	25.1	0.3	4.9	7.2	11.5	6.4	5.8
95th Percentile	6.2	4.3	-13.5	20.9	-2.0	3.6	6.5	8.0	5.5	5.4
Population	34	172	169	211	192	162	141	135	31	31

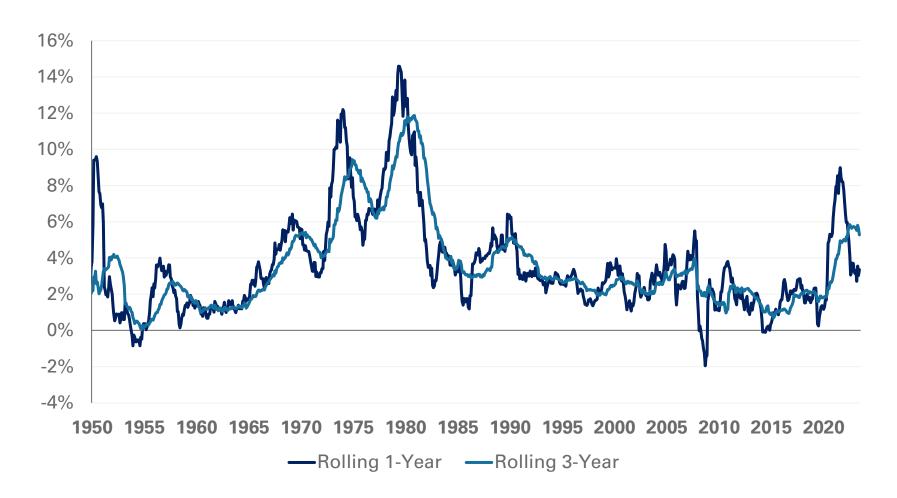




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### **INFLATION**

#### U.S. CONSUMER PRICE INDEX

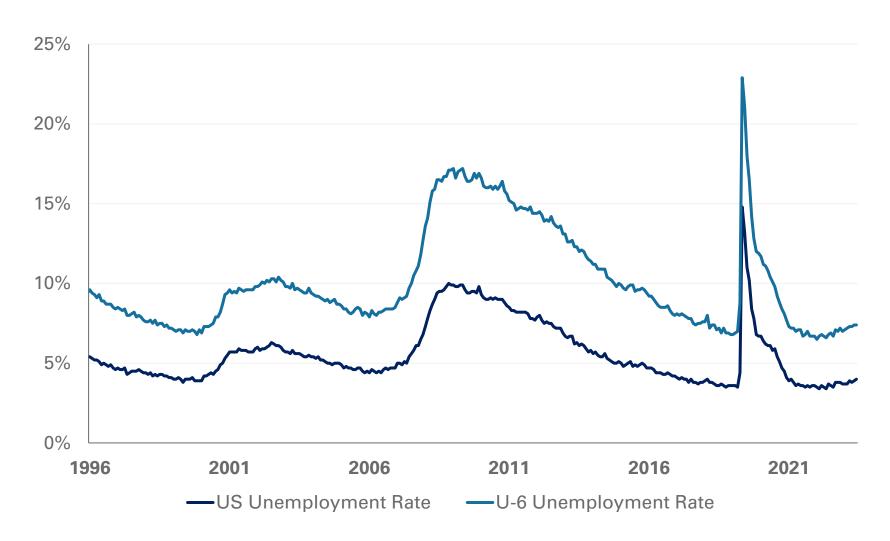




Source: Bureau of Labor Statistics, FactSet

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# **U.S. UNEMPLOYMENT RATES**



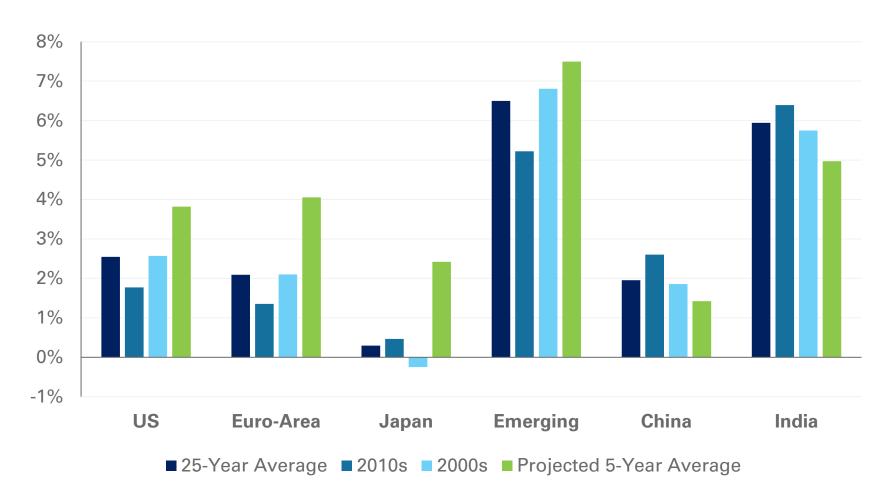


Source: FactSet

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### **HISTORICAL INFLATION**

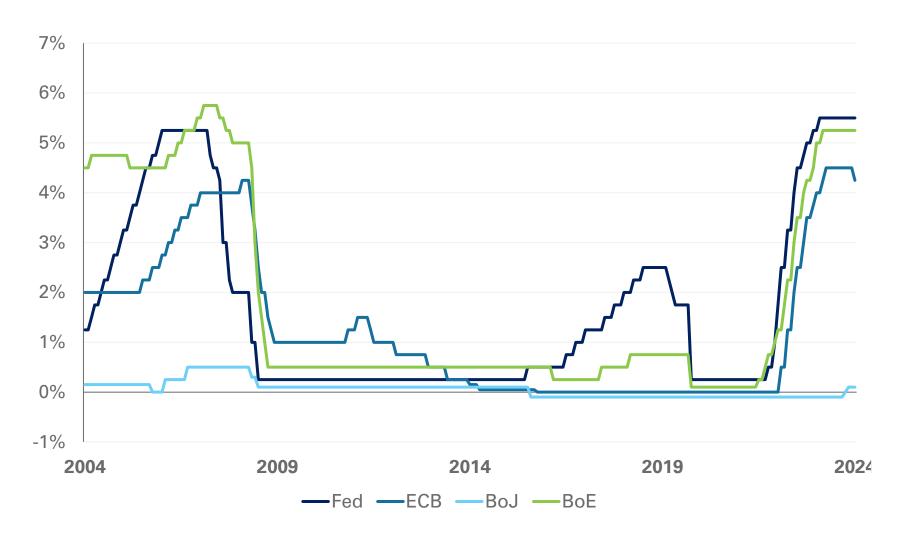
#### **IMF PROJECTIONS**





Source: IMF, FactSet

# **CENTRAL BANK POLICY RATES**

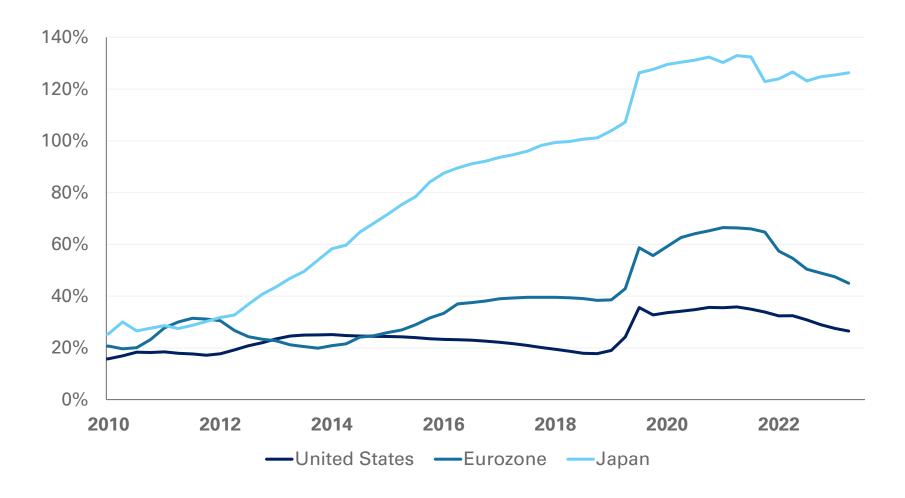




Source: Federal Reserve, ECB, Bank of Japan, Bank of England, FactSet

### **CENTRAL BANK BALANCE SHEETS**

#### AS A PERCENTAGE OF GDP





Source: FactSet

# **CURRENCIES**

#### RELATIVE TO THE U.S. DOLLAR

Currencies	Spot	1 Month	YTD	1 Year
Euro	1.07	-1.3%	-3.0%	-1.7%
British Pound	1.26	-0.7%	-0.8%	0.2%
Japanese Yen	160.86	-2.3%	-12.4%	-10.1%
Swiss Franc	0.90	0.4%	-6.3%	-0.1%
Australian Dollar	0.67	0.4%	-2.1%	1.2%
New Zealand Dollar	1.64	-0.8%	-3.8%	0.2%
Canadian Dollar	1.37	-0.4%	-3.6%	-3.1%
Chinese Yuan	7.27	-0.3%	-2.4%	-0.3%
Taiwanese Dollar	32.44	-0.1%	-5.4%	-4.2%
Korean Won	1377	0.6%	-6.4%	-5.0%
Vietnamese Dong	25455	0.0%	-4.7%	-7.5%
Thai Baht	36.70	0.3%	-7.0%	-2.9%
Philippines Peso	58.61	-0.2%	-5.5%	-5.6%
Indian Rupee	83.39	0.1%	-0.2%	-1.6%
Russian Ruble	86.25	4.8%	3.7%	0.4%
Mexican Peso	18.29	-6.7%	-7.4%	-6.5%
Brazilian Real	5.55	-5.4%	-12.5%	-12.6%
Chilean Peso	0.03	-3.6%	-5.4%	-12.8%
Argentine Peso	912.00	-1.8%	-11.3%	-71.9%
South African Rand	18.26	3.1%	0.2%	2.6%

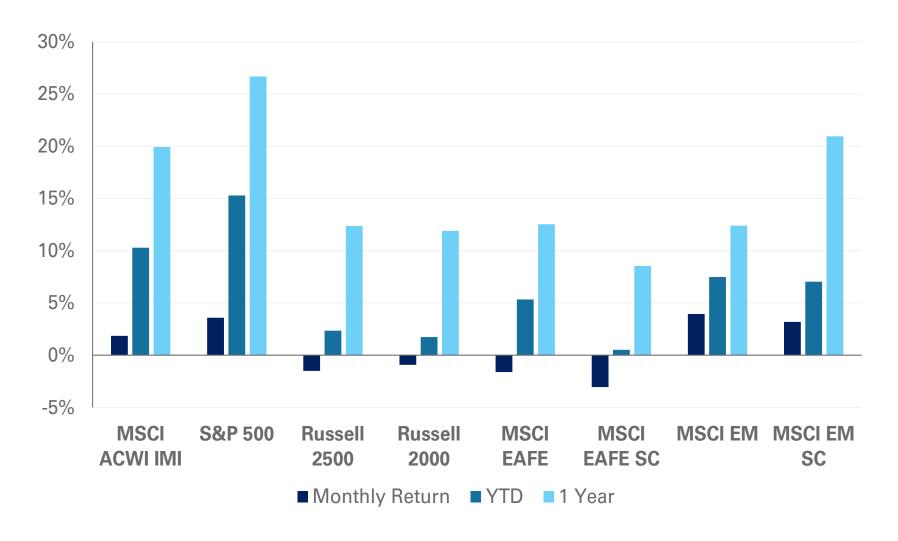


Source: FactSet



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### **EQUITY INDEX PERFORMANCE**

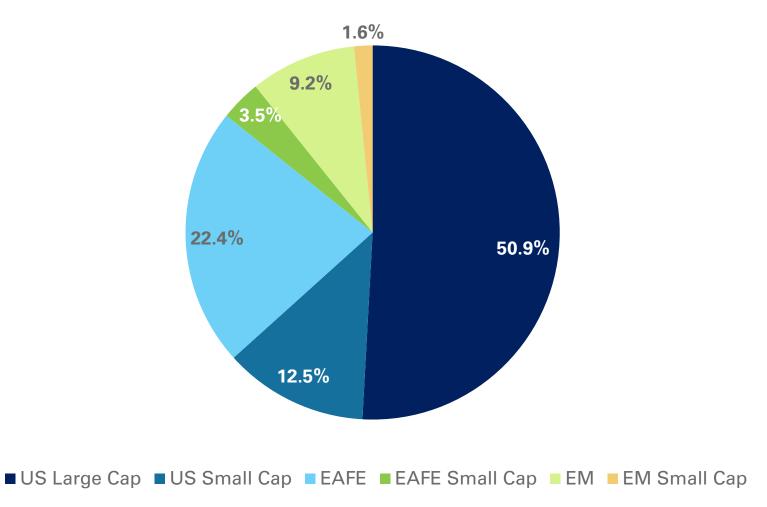




Source: MSCI, S&P, Russell, FactSet

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### **MSCI ACWI IMI WEIGHTS**

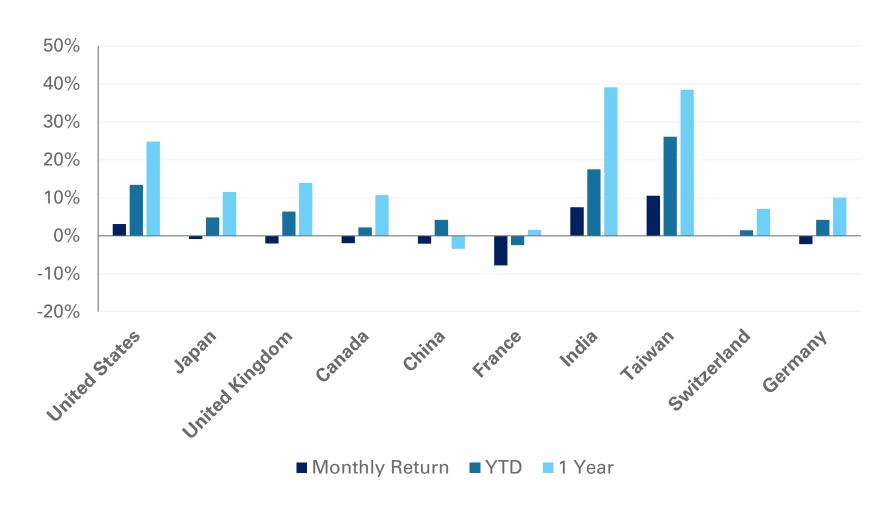




Source: MSCI, FactSet

### **EQUITY INDEX PERFORMANCE**

TOP 10 COUNTRIES BY MARKET CAP IN MSCI ACWI IMI INDEX

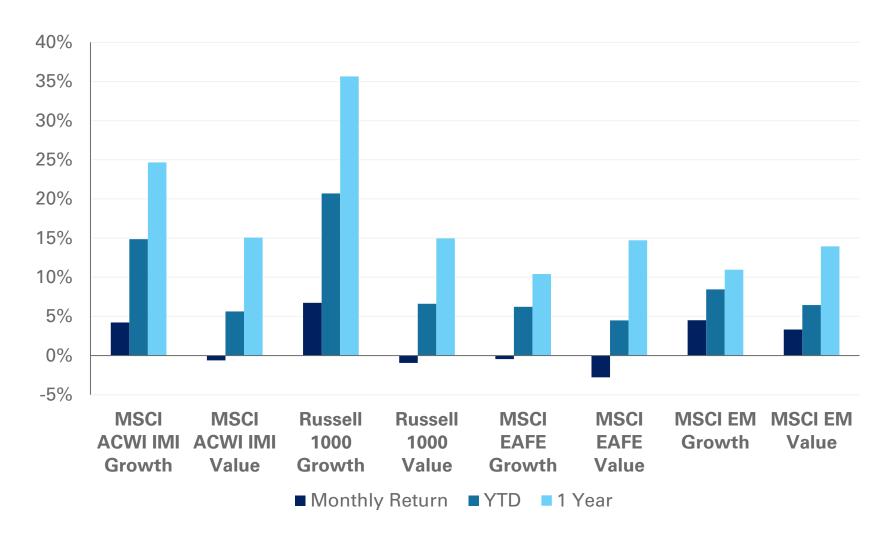




Source: MSCI, FactSet

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### STYLE INDEX PERFORMANCE





Source: MSCI, Russell, FactSet

# **SECTOR INDEX PERFORMANCE**

	Monthly Return	YTD	1 Year	Index Weight
MSCI ACWI IMI	1.9%	10.3%	19.9%	100.0%
Communication Services	3.6%	19.2%	30.6%	7.4%
Consumer Discretionary	1.5%	3.8%	10.0%	10.7%
Consumer Staples	-1.3%	2.5%	2.8%	6.1%
Energy	-1.8%	8.6%	19.2%	4.4%
Financials	-0.6%	8.8%	24.1%	15.4%
Health Care	1.8%	6.7%	11.1%	10.7%
Industrials	-1.8%	6.9%	16.1%	11.3%
Information Technology	8.7%	23.5%	38.4%	24.4%
Materials	-3.6%	-1.2%	7.7%	4.4%
Real Estate	-0.1%	-4.3%	4.8%	2.6%
Utilities	-4.1%	4.8%	6.6%	2.5%

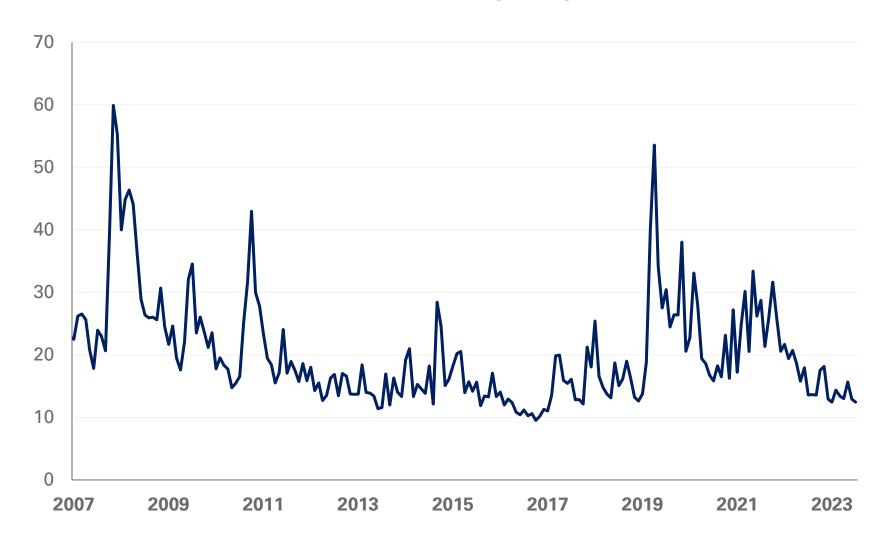
	Monthly Return	YTD	1 Year	Index Weight
S&P 500	3.6%	15.3%	26.7%	100.0%
Communication Services	4.8%	26.7%	45.4%	9.3%
Consumer Discretionary	4.9%	5.7%	14.7%	10.0%
Consumer Staples	-0.2%	9.0%	9.0%	5.8%
Energy	-1.3%	10.9%	17.9%	3.6%
Financials	-0.9%	10.2%	27.5%	12.4%
Health Care	1.9%	7.8%	13.6%	11.7%
Industrials	-0.9%	7.8%	17.7%	8.1%
Information Technology	9.3%	28.2%	44.5%	32.4%
Materials	-3.0%	4.0%	11.2%	2.2%
Real Estate	2.0%	-2.4%	7.2%	2.2%
Utilities	-5.5%	9.4%	9.1%	2.3%



Source (Top): MSCI, FactSet Source (Bottom: S&P, FactSet

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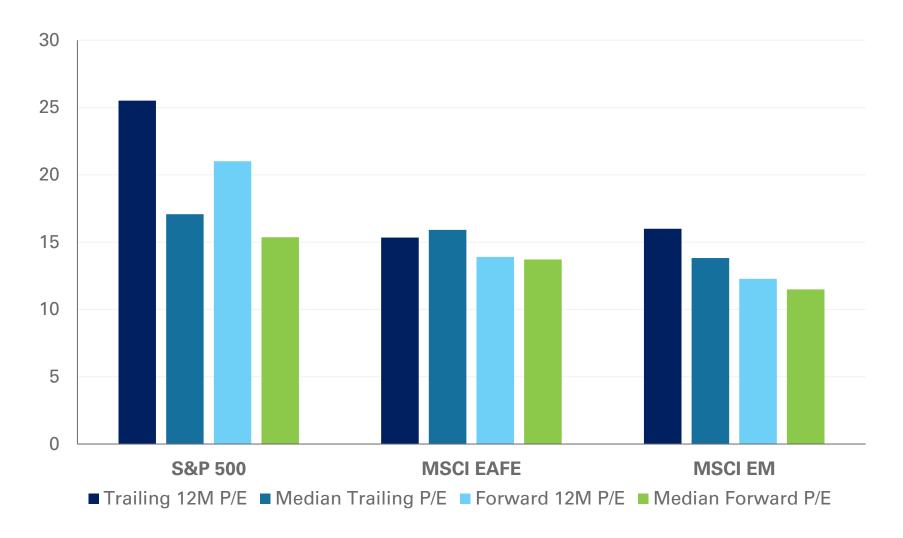
# **EQUITY VOLATILITY INDEX (VIX)**





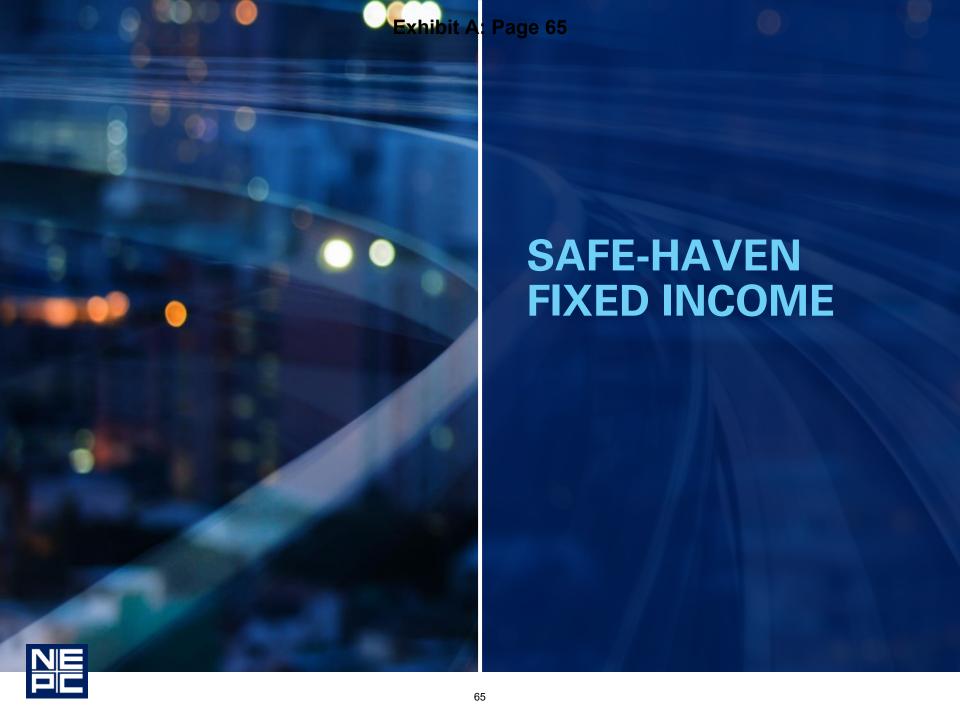
Source: CBOE, FactSet

### **GLOBAL EQUITY VALUATIONS**

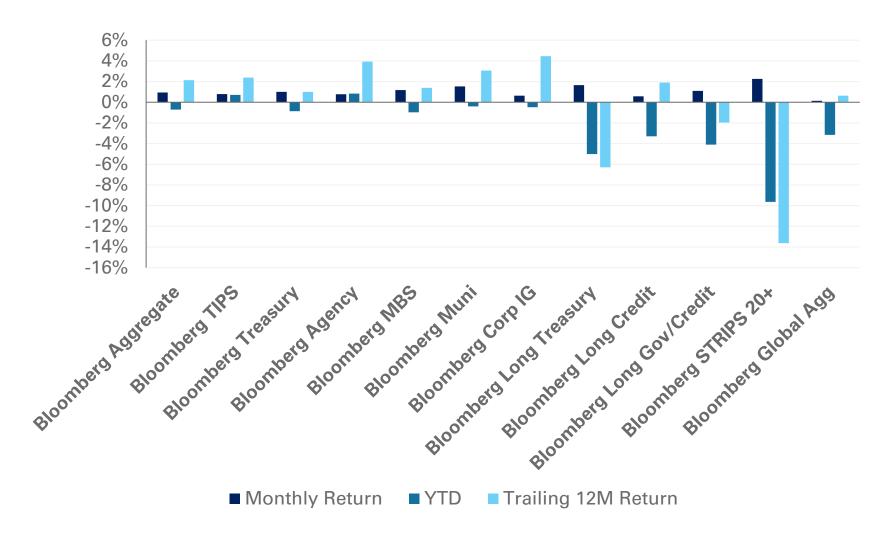




Median calculated based on 20-year monthly data Source: S&P, MSCI, FactSet



### SAFE-HAVEN FIXED INCOME PERFORMANCE





Source: Bloomberg, FactSet

# **FIXED INCOME CHARACTERISTICS**

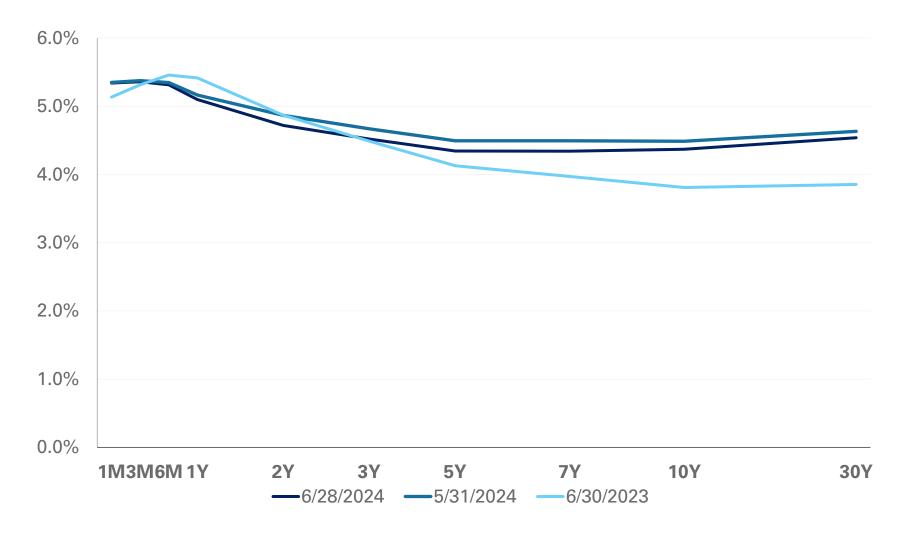
	Yield to Worst	Spread (bps)	Duration (Years)	
Bloomberg Aggregate	5.00%	39	6.1	
Bloomberg TIPS	4.77%	-	4.9	
Bloomberg Treasury	4.57%	-	5.9	
Bloomberg Agency	4.95%	13	3.0	
Bloomberg MBS	5.22%	48	6.1	
Bloomberg Muni	3.72%	-	6.0	
Bloomberg Corp IG	5.48%	94	6.9	
Bloomberg Long Treasury	4.61%	-	15.1	
Bloomberg Long Credit	5.71%	115	12.6	
Bloomberg Long Gov/Credit	5.17%	60	13.8	
Bloomberg STRIPS 20+	4.62%	-	25.1	
Bloomberg Global Agg	3.90%	41	6.6	



Source: Bloomberg, FactSet

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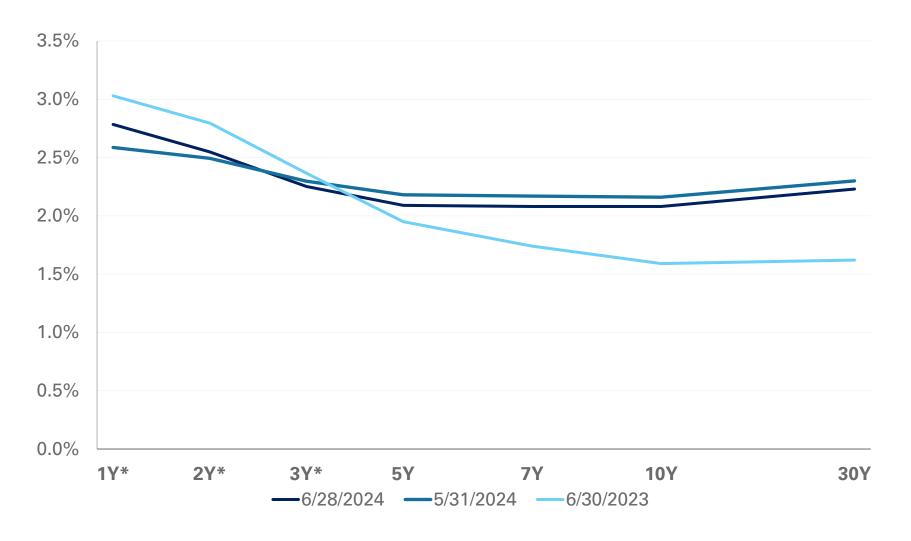
# **US TREASURY YIELD CURVE**





Source: FactSet

### **US TREASURY REAL YIELD CURVE**

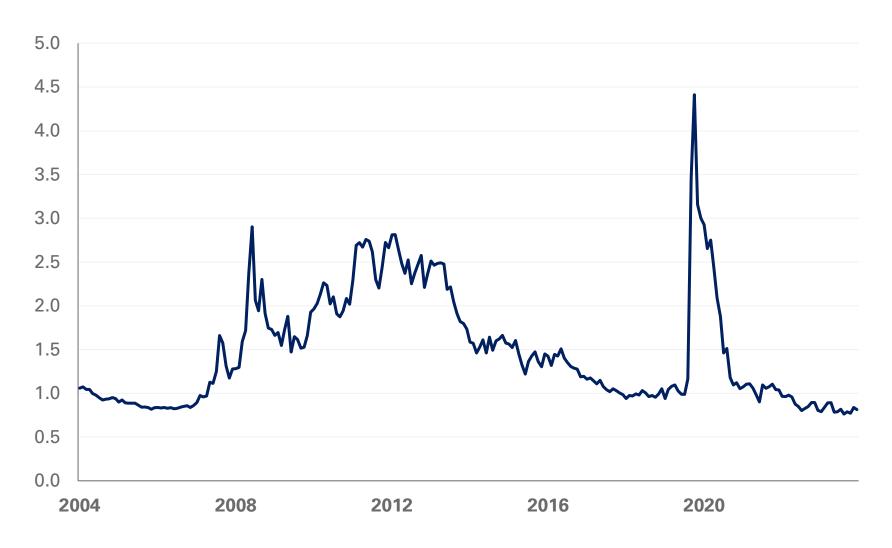




Notes: \*Real yields are calculated based on a weighted average of select off-the-run TIPS yields Source: NEPC, Bloomberg, FactSet

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# **MUNI-TO-TREASURY RATIO**

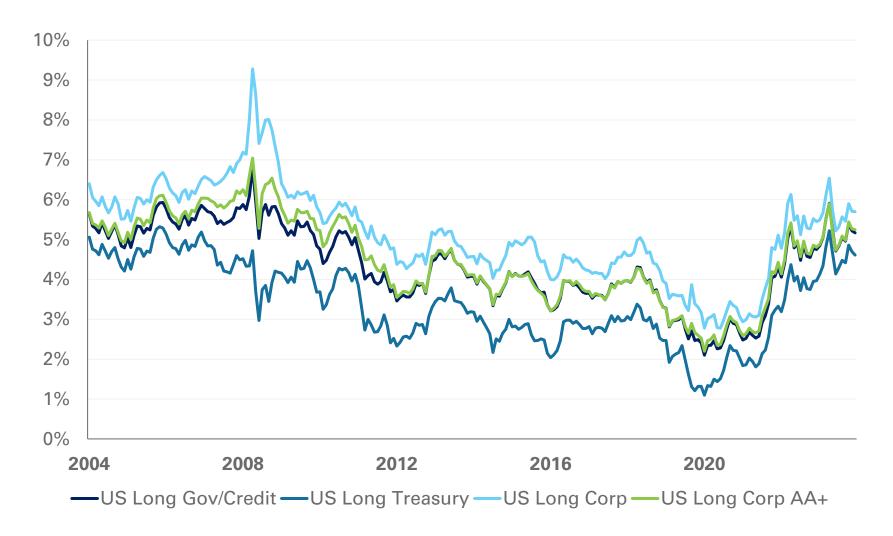




Numerator represents yield-to-worst for municipal bonds Source: Bloomberg, FactSet

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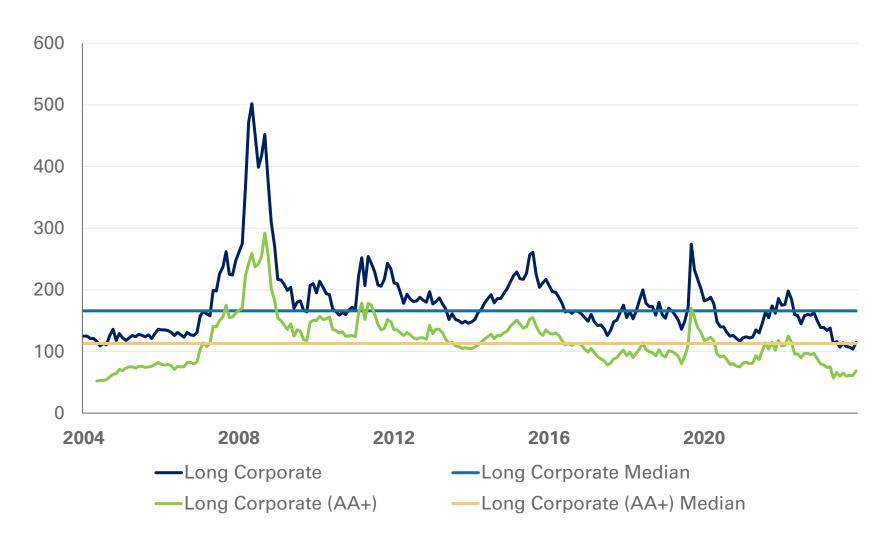
### **LONG DURATION YIELDS**





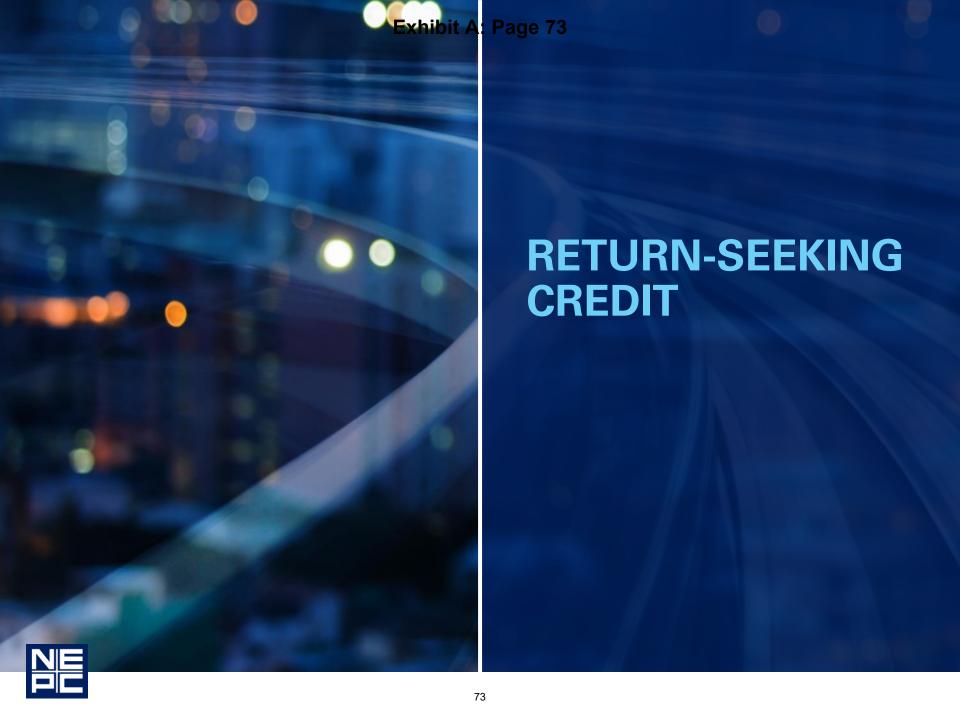
Source: Bloomberg, FactSet

### LONG DURATION CORPORATE SPREADS

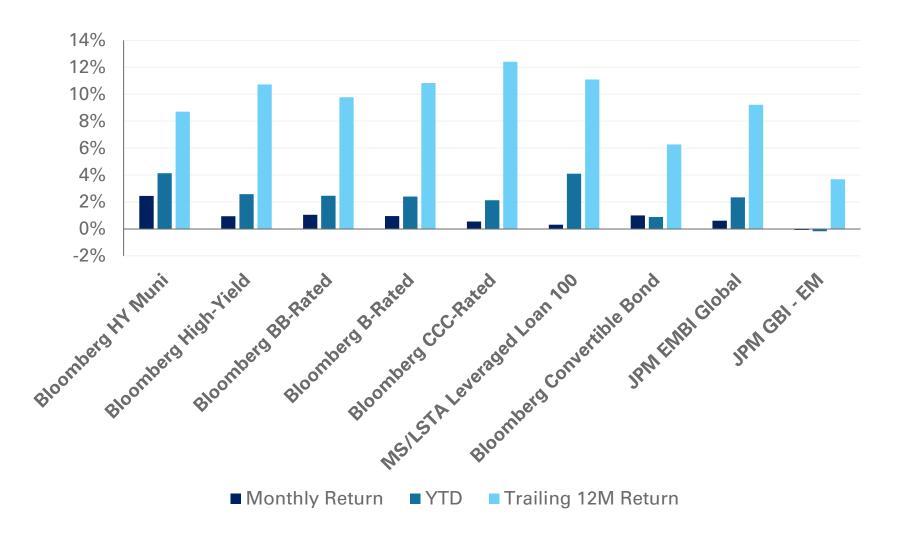




Median calculated based on 20-year of monthly data Source: Bloomberg, FactSet



### RETURN-SEEKING CREDIT INDEX PERFORMANCE





Source: Bloomberg, S&P, JPM, FactSet

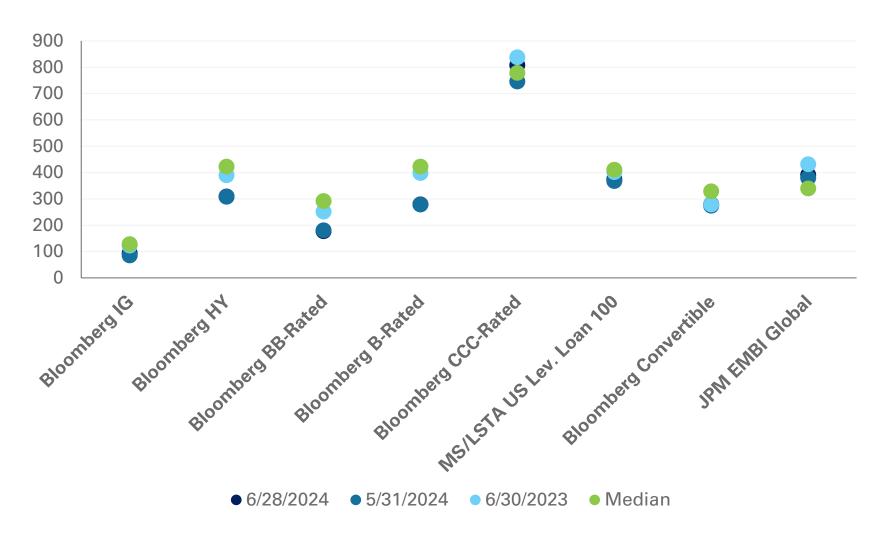
# **RETURN-SEEKING CREDIT CHARACTERISTICS**

	Yield to Worst	Spread (bps)	Duration (Years)
Bloomberg HY Muni	5.43%	-	6.6
Bloomberg High-Yield	7.91%	309	3.1
Bloomberg BB-Rated	6.58%	177	3.4
Bloomberg B-Rated	7.67%	279	2.8
Bloomberg CCC-Rated	12.82%	808	2.9
MS/LSTA Leveraged Loan 100	9.33%	375	-
Bloomberg Convertible Bond	0.81%	280	1.9
JPM EMBI Global	8.42%	391	6.6
JPM GBI - EM	4.20%	-	5.6



Source: Bloomberg, S&P, JPM, FactSet

### **CREDIT SPREADS**

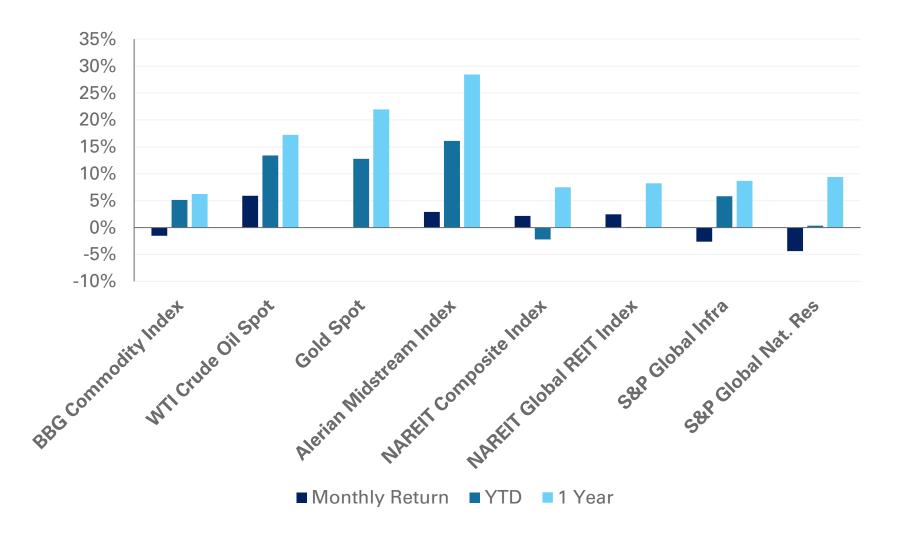




Median calculated based on 20-year of monthly data Source: Bloomberg, S&P, JPM, FactSet



### REAL ASSETS INDEX PERFORMANCE





Source: Bloomberg, Alerian, NAREIT, S&P, FactSet

# **REAL ASSETS INDEX PERFORMANCE**

Index	1 Month	3 Month	YTD	1 Year	3 Year	5 Year
Bloomberg Commodity Index	-1.5%	2.9%	5.1%	5.0%	5.6%	7.2%
Bloomberg Sub Agriculture Index	-5.9%	-3.4%	-6.3%	-9.6%	2.9%	8.9%
Coffee	2.2%	22.6%	27.2%	58.3%	19.5%	15.5%
Corn	-9.2%	-9.9%	-16.8%	-22.1%	-6.5%	2.4%
Cotton	-3.9%	-20.7%	-10.0%	-9.8%	5.1%	6.4%
Soybean	-5.8%	-4.9%	-12.0%	-15.1%	2.9%	10.8%
Soybean Oil	-4.2%	-9.2%	-9.4%	-22.9%	-4.2%	15.3%
Sugar	11.6%	-6.9%	6.4%	-2.3%	13.2%	13.6%
Wheat	-17.8%	-2.1%	-12.0%	-19.5%	-11.5%	-3.5%
Bloomberg Sub Energy	4.1%	3.0%	8.0%	5.7%	6.6%	0.3%
Brent Crude	5.5%	1.3%	17.1%	26.8%	22.2%	15.2%
Heating Oil	6.1%	-2.4%	10.3%	28.7%	31.9%	16.7%
Natural Gas	-0.8%	13.9%	-18.8%	-44.4%	-31.5%	-27.2%
Unleaded Gas	4.4%	-4.2%	13.7%	15.3%	27.6%	18.2%
WTI Crude Oil	6.3%	1.2%	19.1%	29.5%	15.6%	4.3%
Bloomberg Sub Industrial Metals	-5.3%	9.8%	9.0%	13.0%	2.3%	8.4%
Aluminum	-5.4%	7.4%	5.0%	15.5%	-0.8%	4.9%
Copper	-4.1%	10.6%	14.7%	19.6%	2.8%	10.9%
Nickel	-12.4%	3.2%	4.0%	-15.9%	-0.9%	6.6%
Zinc	-1.5%	20.4%	9.9%	24.6%	3.4%	5.4%
Bloomberg Sub Precious Metals	-0.8%	7.9%	15.0%	22.5%	7.9%	10.2%
Gold	0.1%	4.9%	12.7%	20.6%	9.1%	9.4%
Silver	-3.5%	17.8%	22.3%	27.6%	3.6%	12.6%
Bloomberg Sub Livestock	0.9%	-1.2%	9.6%	2.4%	4.8%	-0.6%
Lean Hogs	-4.2%	-10.5%	2.9%	-5.2%	-3.8%	-7.3%
Live Cattle	4.3%	5.6%	15.1%	7.9%	10.2%	3.4%

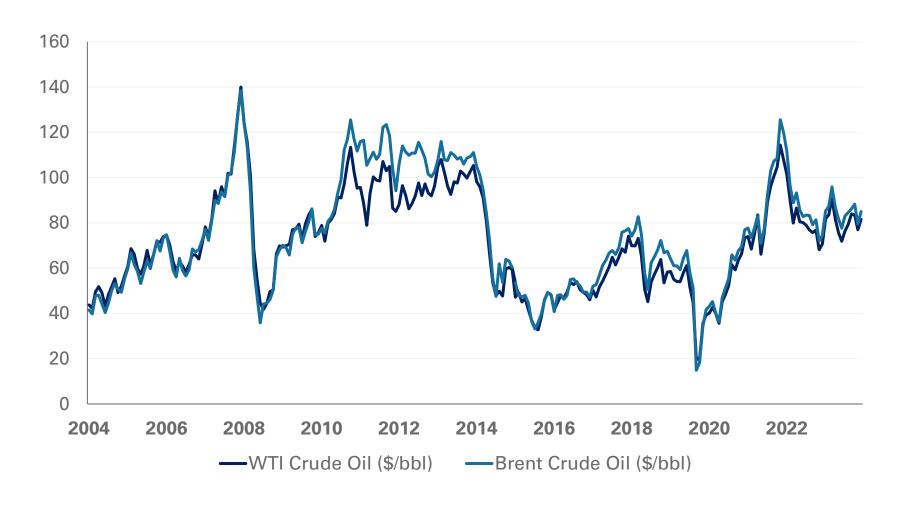


Source: Bloomberg, FactSet

**Exhibit A: Page 80** 

### **OIL MARKETS**

#### WTI VERSUS BRENT CRUDE SPOT PRICES





Source: WTI, Brent, FactSet

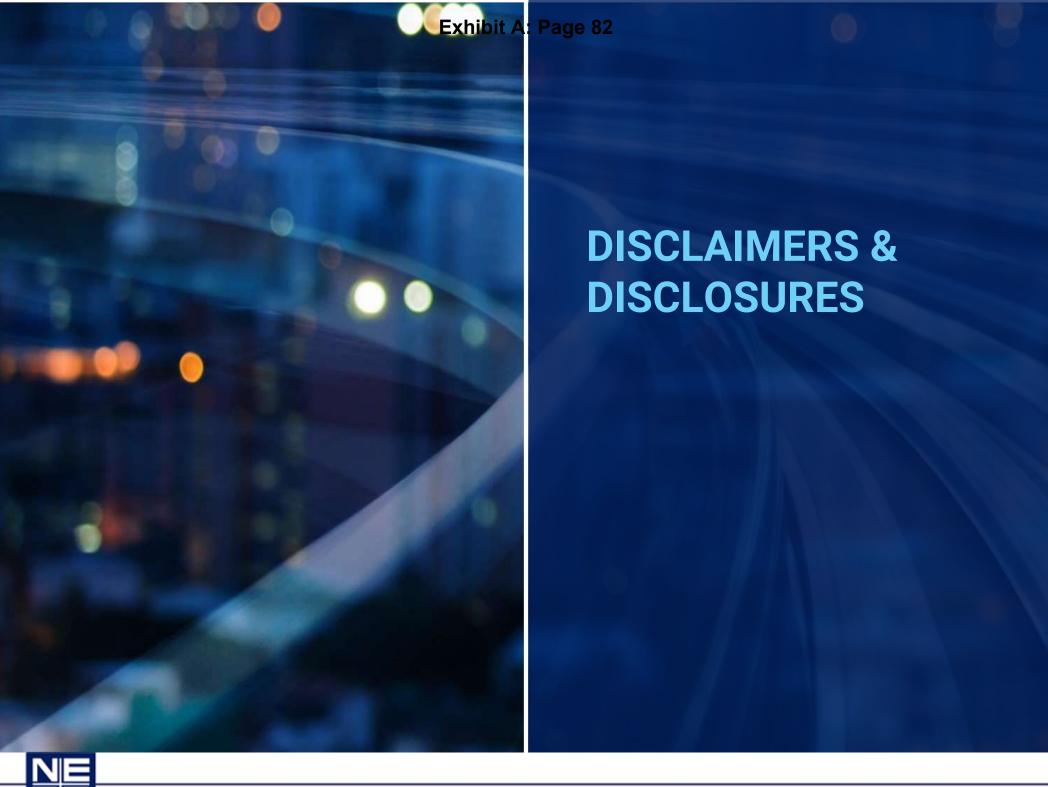
Exhibit A: Page 81

# **GOLD SPOT PRICE**





Source: FactSet





#### **DISCLAIMERS & DISCLOSURES**

Past performance is no guarantee of future results.

Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.

A "since inception" return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.

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Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv

