

SBCERA INVESTMENTS OVERVIEW

September 19, 2019

Agenda

Describe our portfolio

- Priorities
- Strategies

Describe our approach

- Working with managers
- Working with our advisors
- Working with the Board

Compare and contrast

- How we differ and where we align with more traditional funds
- Performance results



About SBCERA Investments

- \$10.7 Billion Trust Fund
- Primary Goal is earn a long-term rate of return in excess of the assumed rate as consistently as possible
 - Mission: Diversify to minimize loss
 - Mission: Maximize the rate of return
- Multiple Advisors
 - Investment Consultant
 - Outside Counsel
 - Operational Due Diligence
 - Investment Managers
- Investment Department
 - Mission: Strategically plan for the future
 - Operations and Investments
 - Relationships not asset classes



Describe our Portfolio

Asset Allocation Targets

- Global Core Fixed 3%
- Emerging Market Debt 8%
- Global Private Debt 24%
- Public Equity 28%
- Private Equity 16%
- Real Estate 7%
- Real Assets 5%
- Absolute Return 7%
- Cash 2%

Role of Broad Asset Ranges

Broad ranges around the asset classes allow the Staff to effectively manage the portfolio and take asset price into consideration

Role of Position Size

Modest allocations in conjunction with broad asset ranges allow SBCERA to allocate a meaningful amount when pricing is more appropriate, but to only maintain a nominal position when pricing is less attractive



Describe our Portfolio – Global Debt

Portfolio Role

- Receive contractual income from corporations and/or assets
- Receive some price appreciation
- Credit strategies comprise below investment grade debt
- Core fixed income uses government bond futures
- Non-US strategies have some currency exposure as well as credit risk



Describe our Portfolio – Global Debt

Representative Strategies

- Direct Lending loans from nonbank lenders to middle market borrowers; often asset-backed or secured by real estate
- Specialty Finance niche lending opportunities
- Non-Performing Loans purchase loan pools at a discount; renegotiate terms with borrowers and sell once re-performing
- Distressed purchasing discounted debt in a company in bankruptcy or other financial distress, with a view to converting to equity and/or recovering value above the purchase price
- Opportunistic/Special Situations niche opportunities involving unique dislocations; highly negotiated with custom structures
- Structured Credit mezzanine or equity positions in collateralized loan obligations (CLOs)
- Relative Value long/short credit and credit derivatives
- Regulatory Capital Relief Trades taking first-loss position in loan portfolios held on bank balance sheets



Describe our Portfolio – Global Debt

US Fixed Income 15%

	Core Fixed Income (2%)	Russell Investments (Bloomberg Barclays US Agg. Bond TR Index)
		Apollo Credit Strategies Fund LP (MCA)
		Beach Point Select Fund LP
		GoldenTree Credit Opportunities - Gold Coast X
me t)		GoldenTree Distressed Debt Fund 2010
Fixed Incom .5% Target)	Credit Strategies/ High Yield Strategies (13%)	GoldenTree Asset Management SMA - Gold Coast X
ed I 6 Ta		Halcyon Direct Portfolio (MCA)
S Fixe (15%		Halcyon Solutions Fund LP (MCA)
US I		MacKay Shields High Yield Bond Strategy - Gold Coast III
		Manulife Asset Management - Gold Coast IV
		Waterfall - Sutherland REIT Holdings LP (MCA)
		Waterfall Asset Management SMA (MCA)
		Waterfall Victoria Fund LP (MCA)



Describe our Portfolio – Global Debt

International Fixed Income 15%

International Core (1%)	Russell Investments (Barclays Global Aggregate ex US Unhedged)
	Alcentra Clareant European Direct Lending Fund - Kneiff Tower
	Alcentra Clareant Strategic Credit Fund - Kneiff Tower
	Alcentra Limited SMA - Kneiff Tower
	Alcentra Mezzanine III/Alcentra Capital Corp Kneiff Tower
	Alcentra Structured Credit Opportunity Fund III - Kneiff Tower
	Cairn Capital Limited SMA - Kneiff Tower
	Cairn European CLO Strategy - Kneiff Tower
	Cairn Loan Investments - Kneiff Tower
	Cairn Special Opportunities Credit Fund - Kneiff Tower
International	Cairn Strata Credit Fund - Kneiff Tower
Credit (11%)	Cairn Subordinated Financials Fund II - Kneiff Tower
Great (1170)	Halcyon European Credit Opportunities Fund Ltd. (MCA)
	Marathon Asset Management SMA - Gold Coast I
	Marathon CLO Equity Fund - Gold Coast I
	Marathon Distressed Debt Fund - Gold Coast I
	Marathon European Credit Opportunities Fund - Gold Coast I
	Marathon European Credit Opportunity Fund II - Gold Coast I
	Marathon European Credit Opportunity Fund III - Gold Coast I
	Marathon Loan Opportunities Fund - Gold Coast I
	Marathon Structured Product Strategies Fund - Gold Coast I
	York Global Credit Income Fund



Describe our Portfolio – Global Debt

Emerging Market Debt 8%

Ashmore Emerging Markets MCA
Gramercy Capital Solutions Fund (MCA)
Gramercy Distressed Argentina Fund III Private (MCA)
Gramercy Distressed Opportunity Fund II (MCA)

Emerging Market
Gramercy Distressed Opportunity Fund III (MCA)

Gramercy Emerging Markets Debt Allocation Fund (MCA)
Gramercy Separate Account (MCA)
Gramercy Venezuela Opportunity Fund (MCA)
Marathon Global Emerging Markets Fund - Gold Coast I
PGIM Emerging Market Debt Opportunities Fund



Describe our Portfolio – Public Equity

Public Equity 28%

0	Equities (Target)	Large Cap (8%)	Russell Investments (Russell1000 Index) StateStreet Global Advisors S&P500 Buy/Write Call Option Strategy TOBAM Anti-Benchmark US Equity Fund				
tfolio :)	US E (13%	Small Cap (2%)	Russell Investments (Russell2000 Index)				
c Equity Port (28% Target))	Volatility (3%)	Russell Investments (Russell1000 Index)				
Equity 8% Ta		Developed Markets (6%) Emerging Markets (6%)	Russell Investments (MSCI EAFE Index)				
c Eq.	national uities Target)		TOBAM Anti-Benchmark World ex-US Fund				
Public (2			Mondrian Emerging Markets Equity Fund LP				
٩	_ _ ~ ~		Russell Investments (MSCI EM Index)				
	Intel Ec (15%		TOBAM Anti-Benchmark EM Equity Fund				
		Volatility (3%)	Russell Investments (MSCI EAFE Index)				

Portfolio Role

Participation in the earnings of corporations globally. Volatility premiums either hedge equity or add differentiated equity exposure. Implementation of the equity allocation is a mixture of futures and physical exposure.

Describe our Portfolio – Private Equity

Representative Strategies

- Buyout Fund strategies mainly focus on private company growth through accretive acquisitions. The Diversified allocation are managers that either invest in other managers, or have a very broad mandate.
- Venture Capital, accesses innovative business models and high growth potential of companies.
- Secondary Funds are vehicles to purchase other LP interests in other private equity funds. Key characteristics are the timing of the secondary purchase which is after the fund has closed and usually have made initial investments that can be underwritten directly.
- Private credit strategies broadly reflect either income producing private financings, or distressed debt/re-org equity where creditor rights were enforced and the lenders are the new owners.
- Specialty funds are all part of broader mandates and have either significant income as part of the strategy or were a negotiated discount transaction.



Describe our Portfolio – Private Equity

Private Equity 16%

	Partners Group SMA (MCA)
	Pathway Capital SMA (MCA)
Diversified	Pathway PE Fund VII LLC
	SL Capital European Strategic Partners 2004
	SL Capital European Strategic Partners 2008
	Aurora Equity Partners IV
	Kayne Partners Fund IV LP (MCA)
Provent Funds	Partners Group Direct Equity 2016 (MCA)
Buyout Funds	Partners Group Direct Investments 2012 LP (MCA)
	Partners Group European Buyout 2005 (A) LP (MCA)
	Waterfall Sentinel Fund (MCA)



Describe our Portfolio – Private Equity

Private Equity 16%

	Industry Ventures Direct LP (MCA)					
	Industry Ventures Fund V LP (MCA)					
	Industry Ventures Fund VI LP (MCA)					
	Industry Ventures MCA					
Venture Funds	Industry Ventures Partnership Holdings II LP (MCA)					
	Industry Ventures Partnership Holdings III LP (MCA)					
	Industry Ventures Partnership Holdings III-A LP (MCA)					
	Industry Ventures Partnership Holdings IV LP (MCA)					
	Industry Ventures Special Opportunities Fund II-A LP (MCA)					



Describe our Portfolio – Private Equity

Private Equity 16%

	Aberdeen Standard Secondary Opportunities Fund IV
	Industry Ventures Secondary VII LP (MCA)
	Industry Ventures Secondary VIII LP (MCA)
	Lexington Capital Partners VI
	Lexington Capital Partners VII
Secondary Funds	Lexington Middle Market Investors I
Secondary Funds	Lexington Middle Market Investors II
	Partners Group Secondary 2004 LP (MCA)
	Partners Group Secondary 2008 LP (MCA)
	SL Capital Secondary Opportunities Fund I
	SL Capital Secondary Opportunities Fund II
	SL Capital Secondary Opportunities Fund III



Describe our Portfolio – Private Equity

Private Assets 16%

Apollo Private Equity Fund VII

Ares European Loan Funding LP (MCA)

Ares ICOF II (MCA)

Ares ICOF III (MCA)

Catalyst Fund LP II

Ares SMA (MCA)

Ares Special Situations Fund IV (MCA)

Credit/Distressed/ Opportunistic/ Special Situations

Crestline Portfolio Financing Fund

Kayne Anderson Solutions Fund (MCA)

Sigular Guff Distressed Opportunity Fund III LP

Tennenbaum Co-Invest (MCA)

Tennenbaum Opportunities Fund V LLC (MCA)
Tennenbaum Opportunities Fund VI LLC (MCA)

Tennenbaum Special Situations Fund IX LLC (MCA)



Describe our Portfolio – Private Equity

Private Assets 16%

Sector Specific Funds	Kayne Anderson Energy Fund VII LP (MCA)				
Sect	or specific rulius	Tennenbaum Energy Opportunities Fund LP (MCA)			
		Ares Private Credit Solutions Fund (MCA)			
D	Pirect Lending	Tennenbaum Lending Fund VIII LLC (MCA)			
		Tennenbaum Waterman Fund LP (MCA)			



Describe our Portfolio – Real Estate

Real Estate 7%

Core Real Estate (3.5%)	Core Real Estate	PRISA II 348 West Hospitality Invesco Real Estate Asia Fund Kayne Anderson Real Estate Debt III (MCA) Marathon Real Estate Debt Fund Pramerica Real Estate Capital VI LP			
Non-Core Real Estate (3.5%)	Enhanced Real Estate/ High Return	Apollo Real Estate Fund II LP (MCA) Bryanston Retail Opportunity Fortress Japan Opportunity Fund II Kayne Anderson Real Estate Partners V LP (MCA) Morgan Stanley RE Fund V International Oaktree RE Opportunities Fund V PRISA III Starwood Global Opportunity Fund VII-A Starwood Opportunity Fund VII Walton Street Real Estate Fund V			
	Real Estate Secondaries	Partners Group Real Estate Secondary 2013 A LP (MCA) Partners Group Real Estate Secondary 2017 A LP (MCA)			

Portfolio Role

Receive contractual income from lease payments as the equity owner.

Receive debt payments for loans on assets as a lender, and transact in the secondary market for LP interests. Distributions accrue upon the sale of an asset.

Describe our Portfolio – Real Assets

Real Assets 5%

tfolio t)	Commodities (2% Target)	Energy Spectrum Partners VI LP Pinnacle Natural Resources LP Pinnacle Physicals & Financing LTD Starwood Energy Infrastructure Fund
Real Asset Portfolio (5% Target)	Infrastructure (1% Target)	Fortress Worldwide Transportation & Infrastructure LP Highstar Capital III Kayne Anderson MLP Strategy (MCA)
Re	Timber (2% Target)	Hancock Timberland VII & VIII LP Timbervest Crossover Partners II LP Timbervest Partners II LP

Portfolio Role

Participate in real economic activity as opposed to the financial markets. Timber is an allocation over time we expect to wind down.



Describe our Portfolio – Absolute Return

Absolute Return 7%

Absolute Return (Alpha Pool) (7% Target) Apollo Accord Fund (MCA)
Apollo Global SMA (MCA)
Apollo MicCap Financial Holdings Trust (MCA)
Apollo Offshore Credit Fund LTD (MCA)
Ares Enhanced Credit Opportunites Master Fund II, LTD (MCA)

Core & Credit
Birch Grove Credit Strategies Fund
Corrum Capital Global Credit Opportunities Fund
Corrum Capital GCO Co-Invest Fund
StateStreet Global Advisors Short Term Treasury Strategy SMA
Zais Group SMA
Zais Opportunity Fund, LTD
Zais Zephyr A-6, LP

Portfolio Role

These assets are credit and income focused and are one part of the collateral for the SBCERA overlay program to implement the broader asset allocation.

Describe our Portfolio – Cash

Cash 2%

Cash (2%)

State Street Short Term Investment Fund

Portfolio Role

Cash has operational value to facilitate transactions, and allows SBCERA to be a liquidity provider when assets become priced more attractively.



Describe our Approach

We are opportunistic value-oriented investors

- Prefer investments where investment returns are derived more from cash flow rather than market price change
- Assets have a portfolio wide opportunity cost and are not evaluated only in relation to a specific asset class
- Work with managers on best ideas to allow us to size positions for a \$10b pension plan
- Focus on assets versus funds



Describe our Approach

We prefer broad investment platforms

- Collaborative, hands-on relationship for asset-level discussion
- Allow for tactical allocation of capital between and among strategies
- Senior-level, whole platform focused portfolio manager is necessary
- Ensure alignment of interest through a unified fee structure, based on invested capital, with a hurdle aligned to the plan's assumed rate



Describe our Approach

Fiduciary relationship

- Manager recommends investments
- Single fee and master account level terms for better alignment of interest
- Transparency is absolutely required: SBCERA engages a CPA firm for operational due diligence, fee and expense review, and contractual compliance
- Engage a single investment consultant to reinforce a total plan focus



Describe our Approach - Governance

Actuary
Evaluate Funding Adequacy

Board

Administrative Oversight Approval of Strategic Asset Allocation Approve Recommendations

<u>Consultant</u> Provide Independent Advice

Investment Committee
Review Policy
Make Recommendations

Investment Staff
Policy and Program
Implementation
Assist Committee and
Board



Compare and Contrast

SBCERA – Principles

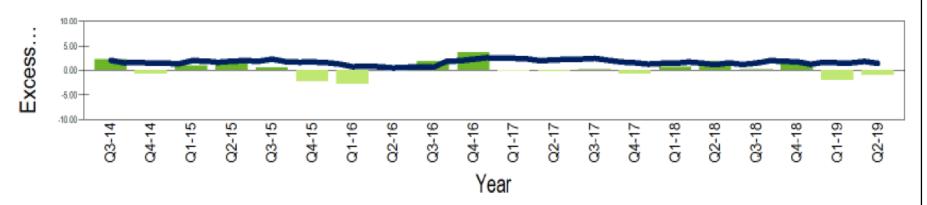
- We are opportunistic value-oriented investors
 - Focus more on income, and less on price change as return driver
 - · Realized gains and income are worth more than unrealized gains and accrued income
 - Relying on Mr. Market for liquidity is added risk; being a forced seller is terrible
 - Losses hurt more than gains help
 - Concentrate to size positions for our portfolio
 - · Hold small allocations until pricing improves when allocations can meaningfully increase
 - · Cash has option value
 - All assets must compete for an allocation
 - The value of an asset is the present value of future cash flows, hence what you pay for the asset determines your outcome
 - Diversification is the least compelling reason to invest in an asset



Compare and Contrast - Performance

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
Total Fund	\$10,459,614,886	2.3%	84	7.2%	99	5.1%	53	9.2%	33	6.2%	36	8.9%	71
Policy Index		3.3%	20	10.3%	58	6.2%	26	7.0%	95	4.9%	94	8.0%	93
S&P 500		4.3%	1	18.5%	1	10.4%	1	14.2%	1	10.7%	1	14.7%	1
BBgBarc US Aggregate TR		3.1%	32	6.1%	99	7.9%	5	2.3%	99	2.9%	99	3.9%	99
60% MSCI ACWI (Net) / 40% FTSE WGBI		3.7%	9	12.0%	21	6.0%	27	7.4%	94	4.2%	97	7.1%	95
InvMetrics Public DB > \$1B Gross Median		2.7%		10.5%		5.2%		9.0%		6.0%		9.2%	

Rolling 5 Year Annualized Excess Return





Compare and Contrast – Risk Adjusted Performance

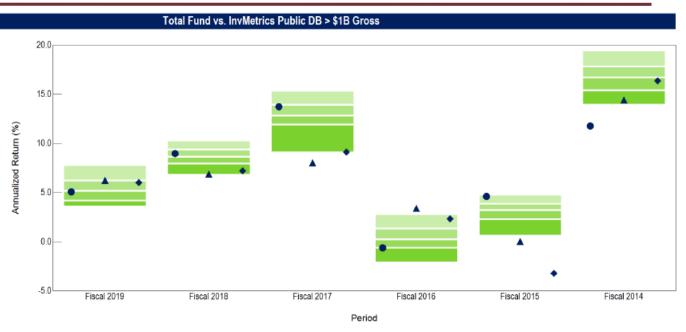
3 Years Ending June 30, 2019							
Sharpe Ratio Sharpe Ratio Sortino Ratio Sortino Rank							
Total Fund	2.3	1	3.0	1			
InvMetrics Public DB > \$1B Gross Median	1.2		1.6				

5 Years Ending June 30, 2019							
Sharpe Ratio Sharpe Ratio Sortino Ratio Sortino Rank							
Total Fund	1.4	1	2.5	1			
InvMetrics Public DB > \$1B Gross Median	0.7		1.2				

Statistics Summary										
8 Years 6 Months Ending June 30, 2019										
	Sharpe Ratio	Sharpe Ratio Rank	Sortino Ratio	Sortino Ratio Rank						
Total Fund	1.8	1	2.4	1						
InvMetrics Public DB > \$1B Gross Median	1.0	-	1.4							



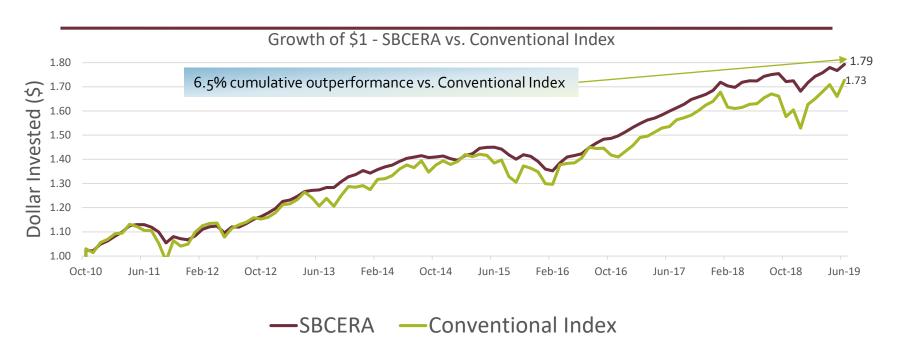
Compare and Contrast – Fiscal Years



	Return (Rank)						
5th Percentile	7.8	10.3	15.3	2.8	4.8	19.4	
25th Percentile	6.2	9.4	14.0	1.4	3.9	17.8	
Median	5.2	8.7	12.9	0.3	3.2	16.7	
75th Percentile	4.2	8.0	11.9	-0.6	2.3	15.4	
95th Percentile	3.6	6.8	9.1	-2.1	0.6	13.9	
# of Portfolios	26	62	108	91	92	65	
Total Fund	5.1	(53) 9.0	(38) 13.7	(29) -0.6	(77) 4.6	(7) 11.8	(99)
▲ Policy Index	6.2	(26) 6.9	(94) 8.0	(97) 3.4	(3) 0.0	(97) 14.4	(87)
♦ 60% MSCI ACWI (Net) / 40% FTSE WGBI	6.0	(27) 7.2	(90) 9.1	(95) 2.3	(11) -3.2	(99) 16.4	(58)



Compare and Contrast - Performance



	10/1/2010 - 6/30/2019								
	Return	Sharpe Ratio	Sharpe Ratio Rank	Sortino Ratio	Sortino Ratio Rank				
SBCERA Total Fund	7.9%	1.8	1	2.4	1				
Conventional Index	7.4%	0.8	88	1.2	87				
SBCERA Policy Index	6.5%	1.0	51	1.6	22				
InvestorForce Public DB > \$1B Gross Median	7.4%	1.0		1.4					

Note: Conventional index is 30% Russell 3000, 15% REIT, 15% EAFE, 10% EM Equity, 15% US TIPS, 15% US Bonds Growth of \$1 assumes 0.15% monthly benefit payment expense.



Compare and Contrast – Asset Allocation: The Key Investment Decision

	Current Target	Public 60/40	Public Fund >\$1B Median
Cash	2%	0%	2%
US Equities	13%	33%	27%
Int'l Equities (Unhedged)	15%	27%	23%
Private Equity	16%	0%	10%
Total Equity	44%	60%	60%
US Core Bonds	2%	40%	20%
Non-US Bonds	1%	0%	4%
US Credit*	13%	0%	0%
Non- US Credit*	11%	0%	0%
Emerging Market Debt	8%	0%	1%
Total Fixed Income	35%	40%	25%
Real Assets (Liquid)	0%	0%	2%
Core Real Estate	4%	0%	7%
Non-Core Real Estate*	4%	0%	0%
Private Real Assets - Energy/Metals	5%	0%	0%
Total Real Assets	12%	0%	9%
Absolute Return	7%	0%	4%

Expected Return 5-7 yrs	7.8%	5.7%	6.3%
Expected Return 30 yrs	8.6%	7.0%	7.5%
Standard Dev Accounting	11.0%	10.9%	12.2%
Sharpe Ratio (5-7 years)	0.39	0.29	0.31

Probability of 1-Year Return Under 0%	28.1%	30.1%	30.2%
Probability of 6-Year Return Under 0%	7.8%	10.1%	10.2%
Probability of 6-Year Return Under 7.25%	46.1%	63.5%	57.4%
Probability of 30-Year Return Under 7.25%	28.9%	55.2%	45.0%



^{*} Modeled using private assets and therefore difficult to compare to median public fund. Median public fund assumes only core private real estate.

Exhibit A: Page 31

Compare and Contrast – Asset Allocation: The Key Investment Decision

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	2002	2003	2005	2007	2008	2009	2010	2012	2013	2014	2017	2019
Domestic Equity	43%	33%	32%	29%	20%	10%	11%	13%	13%	13%	13%	13%
International Equity	18%	13%	13%	14%	11%	7%	7%	8%	9%	9%	9%	9%
Emerging Market Equity		3%	3%	4%	4%	3%	4%	5%	6%	6%	6%	6%
Private Equity		6%	6%	9%	12%	16%	16%	16%	16%	16%	16%	16%
Total Equity	61%	55%	54%	56%	47%	36%	38%	42%	44%	44%	44%	44%
Domestic Fixed	28%	17%	14%	10%	8%	8%	6%	3%	2%	2%	2%	2%
Domestic Credit		8%	8%	4%	8%	13%	13%	14%	13%	13%	13%	13%
International Core/Credit	5%	5%	5%	3%	8%	9%	10%	10%	11%	12%	12%	12%
Emerging Market Debt		2%	2%	4%	4%	4%	6%	6%	6%	6%	6%	8%
Cash					2%	2%	2%	2%	2%	2%	2%	2%
Total Debt	33%	32%	29%	21%	30%	36%	37%	35%	34%	35%	35%	37%
Real Estate	6%	8%	8%	8%	8%	10%	9%	9%	9%	9%	9%	7%
Timber	070	070	2%	4%	3%	3%	3.5%	3%	3%	2%	2%	2%
Infrastructure & Energy			2,0	2%	2%	2%	2%	1%	1%	1%	1%	1%
Commodities				2%	3%	3%	3.5%	3%	2%	2%	2%	2%
Totel Real Assets	6%	8%	10%	16%	16%	18%	18%	16%	15%	14%	14%	12%
Absolute Return		5%	7%	7%	7%	10%	7%	7%	7%	7%	7%	7%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

