

AGENDA

AMENDED SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION BOARD OF RETIREMENT FRIDAY, NOVEMBER 4, 2022 AT 9:00 AM

Location: SJCERA Board Room, 6 S. El Dorado Street, Suite 400, Stockton, California

The public may also attend the Board meeting live via Zoom by (1) clicking here https://us02web.zoom.us/j//84389113842 and following the prompts to enter your name and email, or (2) calling (669) 219-2599 or (669) 900-9128 and entering Meeting ID 84389113842#.

Persons who require disability-related accommodations should contact SJCERA at (209) 468 -9950 or ElainaP@sjcera.org at least forty-eight (48) hours prior to the scheduled meeting time.

- 1.0 ROLL CALL
- 2.0 PLEDGE OF ALLEGIANCE
- 3.0 APPROVAL OF MINUTES
 - **3.01** Minutes for the Board Meeting of October 5, 2022
 - **3.02** Minutes for the Special Board Meeting of October 6, 2022
 - **3.03** Board to consider and take possible action on minutes

4.0 PUBLIC COMMENT

4.01 The public is welcome to address the Board during this time on matters within the Board's jurisdiction, following the steps listed below. Speakers are limited to three minutes, and are expected to be civil and courteous. Public comment on items listed on the agenda may be heard at this time, or when the item is called, at the discretion of the Chair.

If joining via Zoom, Public Comment can be made in the following ways:

PC or Mac: select "Participants" in the toolbar at the bottom of your screen, then select the option to raise or lower your hand.

Mobile Device: select the "More" option in the toolbar at the bottom of your screen, then select the option to raise or lower your hand.

Tablet: select the icon labeled "Participants," typically located at the top right of your screen, then select the hand icon next to your device in the Participants column.

If dialing in from a phone for audio only, dial *9 to "raise your hand."

5

If attending in person, members of the public are encouraged to complete a Public Comment form, which can be found near the entry to the Board Room.

Except as otherwise permitted by the Ralph M. Brown Act (California Government Code Sections 54950 et seq.), no deliberation, discussion or action may be taken by the Board on items not listed on the agenda. Members of the Board may, but are not required to: (1) briefly respond to statements made or questions posed by persons addressing the Board; (2) ask a brief question for clarification; or (3) refer the matter to staff for further information.

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7.0 CL	LOSED SESSION		
7.01	Purchase or Sale of Per California Government (
7.02	Personnel Matters California Government (Employee Disability Ret	Code Section 54957 irement Application(s) (1)	
7.03	Conference with Real P Government Code Sect	roperty Negotiator - California ion 54956.8	
	01 Property:	6 S. El Dorado Street, Suite 400 Stockton, California 95202	
	Negotiating parties:	Johanna Shick, Chief Executive Officer, SJCERA Connie Hart, Assistant Director General Services, San Joaquin County	
	Under negotiation:	Lease price and terms	
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14.0 CAL	ENDAR	
14.01 A	dministrative Committee Meeting November 22, 2022, at 9:00 AM	
14.02 B	oard Meeting December 9, 2022 at 9:00 AM	
14.03 B	oard Meeting January 20, 2023 at 9:00 AM	
15.0 ADJ	OURNMENT	

MINUTES

BOARD MEETING SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION BOARD OF RETIREMENT WEDNESDAY, OCTOBER 5, 2022 AT 9:00 AM

Location: SJCERA Board Room, 6 S. El Dorado Street, Suite 400, Stockton, California

1.0 ROLL CALL

1.01 MEMBERS PRESENT: Emily Nicholas, Jennifer Goodman, Michael Duffy, Robert Rickman, Chanda Bassett, Steve Moore, Raymond McCray and Michael Restuccia, presiding.

MEMBERS ABSENT: Phonxay Keokham, JC Weydert

STAFF PRESENT: Chief Executive Officer Johanna Shick, Assistant Chief Executive Officer Brian McKelvey, Retirement Investment Officer Paris Ba (Via Zoom), Management Analyst III Greg Frank, Information Systems Analyst II Lolo Garza, Information Systems Specialist II Jordan Regevig, Administrative Secretary Elaina Petersen

OTHERS PRESENT: Deputy County Counsel Jason Morrish, David Sancewich and Mary Bates (Via Zoom) of Meketa

2.0 PLEDGE OF ALLEGIANCE

2.01 Led by Emily Nicholas

3.0 APPROVAL OF MINUTES

- **3.01** Minutes for the Board Meeting of September 9, 2022
- **3.02** The Board voted unanimously (8-0) to approve the Minutes of the Board Meeting of September 9, 2022. (Motion: Duffy; Second: Bassett)

4.0 PUBLIC COMMENT

4.01 There was no public comment

5.0 CONSENT ITEMS

- **5.01** Service Retirements (18)
- 5.02 General
 - 01 Proposed 2023 Board Meeting Calendar
- **5.03** The Board voted unanimously (8-0) to approve the Consent Calendar items. (Motion: Duffy; Second: Bassett)

6.0 INVESTMENT CONSULTANT REPORTS

- **6.01** Presentation by David Sancewich of Meketa Investment Group
 - 01 Monthly Investment Performance Updates
 - a Manager Performance Flash Report
 - b Economic and Market Update

02 Credit Asset Class Review

Including Mary Bates of Meketa via Zoom.

6.02 The Board received and filed reports

7.0 STAFF REPORTS

- **7.01** Trustee and Executive Staff Travel
 - 01 Conferences and Events Schedule
 - 02 Summary of Pending Trustee and Executive Staff Travel
 - 03 Summary of Completed Trustee and Executive Staff Travel
 - a Summary IREI Editorial Board Meeting
- **7.02** Board to consider and take possible action on any new travel request
- 7.03 Pending Accounts Receivable Third Quarter 2022
- 7.04 Errors or Omissions Report
- **7.05** Disability Quarterly Reports Statistics
- 7.06 Legislative Summary Report
- 7.07 CEO Report

In addition to the written report, CEO Shick reported: 1) Although the Board typically meets the second Friday of the month, the January, May, June and October 2023 meetings are exceptions to that pattern due to conflicts; 2) The 2023 Action Plan identifies the progress SJCERA plans to make in 2023 toward accomplishing our five-year Strategic Plan. The focus in 2023 will be on implementing our new asset allocation strategy, initiating development of the new pension administration system, improving member and employer communications, and continuing to train and develop staff.

- 01 2023 Action Plan
- 7.08 The Board received and filed reports

8.0 CORRESPONDENCE

- **8.01** Letters Received (0)
- **8.02** Letters Sent (0)
- 8.03 Market Commentary/Newsletters/Articles
 - 01 Northern Trust
 Capital Market Assumptions
 Five-Year Outlook: 2023 Edition
 August 10, 2022
 - 02 Pensions & Investments SEC Chairman Backs CFTC Getting Some Crypto Authority September 8, 2022
 - 03 Pensions & Investments Investors in for rude awakening on alts returns September 19, 2022

- 04 Pensions & Investments Fed Hikes Interest Rates 75 Basis Points Now Targets Year-End Funds Rate of 4.4 percent September 21, 2022
- 05 NCPERS Monitor September 2022
- 06 Research Affiliates Necessary Trade-Offs: Climate vs. Investment Objectives September 2022

9.0 COMMENTS

9.01 There were no comments from the Board of Retirement

10.0 CLOSED SESSION

THE CHAIR CONVENED CLOSED SESSION AT 10:09 A.M. AND ADJOURNED CLOSED SESSION AND RECONVENED OPEN SESSION AT 10:52 A.M.

10.01 Purchase or Sale of Pension Fund Investments California Government Code Section 54956.81

County Counsel noted there was nothing to report out of Closed Session on this item.

10.02 Personnel Matters

California Government Code Section 54957 Employee Disability Retirement Application(s) (4)

01 Jose Alatorre Vasquez
Deputy Sheriff II
Nonservice-Connected Disability

The Board voted unanimously (7-0) to grant the application for nonservice-connected disability retirement. (Motion: Goodman; Second: Duffy; Abstain: Moore)

02 Ramiro Herrera Legal Process Clerk I Nonservice-Connected Disability

The Board voted unanimously (8-0) to grant the application for nonservice-connected disability retirement. (Motion: Duffy; Second: Goodman)

03 Paul Hoskins Sergeant Service-Connected Disability

The Board voted unanimously (8-0) to grant the application for nonservice-connected disability retirement. (Motion: Duffy; Second: Goodman)

04 Donald Jackson Tree Crew Worker Service-Connected Disability

The Board voted unanimously (8-0) to accept the findings and recommendation of the Administrative Law Judge and deny the application for service-connected disability retirement. (Motion: Duffy; Second: Goodman)

11.0 CALENDAR

- 11.01 Investment Round Table October 6, 2022, at 8:00 AM
- **11.02** Board Meeting November 4, 2022, at 9:00 AM

- 11.03 Administrative Committee Meeting November 22, 2022, at 9:00 AM
- 11.04 Board Meeting December 9, 2022, at 9:00 AM

2.0 AL	JOURNMENT
12.01	There being no further business the meeting was adjourned at 10:54 AM
	Respectfully Submitted:
	Michael Restuccia, Chair
	Attest:
	Raymond McCray, Secretary

MINUTES

SPECIAL MEETING SAN JOAQUIN COUNTY EMPLOYEES RETIREMENT ASSOCIATION BOARD OF RETIREMENT THURSDAY, OCTOBER 6, 2022 AT 8:04 AM

Location: Wine & Roses 2505 West Turner Road, Lodi, California

1.0 ROLL CALL

1.01 MEMBERS PRESENT: Emily Nicholas, Jennifer Goodman, Michael Duffy, Chanda Bassett, Steve Moore, Ray McCray (in at 9:23; out at 12:00), MIchael Restuccia presiding.

MEMBERS ABSENT: Phonxay Keokham, JC Weydert, Robert Rickman STAFF PRESENT: Chief Executive Officer Johanna Shick, Assistant Chief Executive Officer Brian McKelvey, Retirement Investment Officer Paris Ba, Management Analyst III Greg Frank, Administrative Secretary Elaina Petersen OTHERS PRESENT: Deputy County Counsel Jason Morrish, David Sancewich of Meketa Investment Group. Jay Wilverding, Sandra Regalo and Brenda Kiely of San Joaquin County, David Bramell and Larry Madoski of Lathrop/Manteca Fire Department, Sarah Ragsdale and Steve Pinkerton of Mountain House, Omar Khweiss of San Joaquin County Mosquito/Vector Control, Adele Campos and Denise Delgado-Estrada of the San Joaquin County Management Association

2.0 PLEDGE OF ALLEGIANCE

2.01 Led by Michael Restuccia

3.0 WELCOME AND INTRODUCTION OF PARTICIPANTS

3.01 Trustees and staff introduced themselves. Chair Restuccia provided information about the Board's role. CEO Shick summarized SJCERA's efforts and progress in improving funding. David Sancewich of Meketa Investment Group moderated the discussion.

4.0 OVERVIEW OF SJCERA - ASSET ALLOCATION, RETURN AND RISK

4.01 David Sancewich summarized SJCERA's portfolio and plan characteristics and outlined the challenges (funding and investments) facing SJCERA.

5.0 KEYNOTE SPEAKER - THE WORLD MARKETS IN 2022 AND BEYOND

5.01 Presentation by Tony Crescenzi of PIMCO

6.0 PRIVATE EQUITY - PRIVATE EQUITY, INFRASTRUCTURE - WHAT'S NEXT AND WHERE ARE THE MARKETS TODAY?

- **6.01** Presentation by Judy Chambers of Meketa, Jack Purcell of Ridgemont and Jeff Ennis of Ocean Avenue
- 7.0 INFLATION COST OF LIVING, COST OF INVESTING, SUPPLY SHORTAGES, FED RATES. WHERE IS THE WORLD TODAY AND WHAT IS GOING ON?
 - 7.01 Presentation by Lynne Royer of Loomis and Olumide Owolabi of Neuberger Berman
- 8.0 MANAGER DEBATE: CLASSIC DEBATE FORMAT VARIOUS TOPICS

8.01 Moderated by David Sancewich of Meketa, Managers: David Torchia of Stone Harbor, Jerry Prior of Mt. Lucas and Jim Dignan of Dodge & Cox.

9.0 REAL ESTATE - CAP RATES, AIRBNB, AFFORDABLE HOUSING. WHAT LIES AHEAD IN REAL ESTATE AND WHERE ARE THE OPPORTUNITIES?

9.01 Presentations by Brooks Monroe of Invesco, Darren Kleis of Principal, Jake Thibeault of Prologis

10.0 PRIVATE CREDIT - RISING RATES AND INVESTOR DEMAND. WHAT LIES AHEAD FOR PRIVATE CREDIT?

10.01 Presented by Raj Makam of Oaktree and Patrick Wolfe of Blackrock

11.0 OPEN DISCUSSION AND RECAP

- 11.01 Comments from the Board of Retirement None
- 11.02 Comments from the Public None
- **11.03** David Sancewich summarized the key discussion points of the roundtable. He also thanked the Board members, investment managers, and SJCERA staff for their attendance and participation in the roundtable.

12.0 ADJOURNMENT

12.01	There being no further business the meeting was adjourned at 4:52 PM		
	Respectfully Submitted:		
	Michael Restuccia, Chair		
	Attest:		
	Raymond McCray, Secretary		





San Joaquin County Employees Retirement Association

November 2022

5.01 Service Retirement

Consent

01 LESLIE A BARTOSCH

Sr Info & Assistance Spec Aging - Community Services

Member Type: General Years of Service: 06y 06m 20d

Retirement Date: 8/29/2022

Comments: Tier 2 member. Eligible to retire with 5 years of service.

02 ROSALINDA C CABRAL

Juvenile Detention Unit Suprv Juvenile Detention

Member Type: Safety

Years of Service: 20y 00m 04d Retirement Date: 9/9/2022

03 EARLEEN L CHAMBERS

Deferred Member

N/A

Member Type: General Years of Service: 26y 04m 26d

Retirement Date: 9/25/2022

Comments: Deferred from SJCERA since July 2022.

04 HECTOR F GUERRERO

Crafts Worker III Facilities Management

Member Type: General Years of Service: 26y 07m 28d Retirement Date: 9/17/2022

05 RON P MCINNIS

Employment Training Spec II Employment - Economic Developm

Member Type: General Years of Service: 32y 03m 17d Retirement Date: 9/24/2022

06 JAMES M MYLES

County Counsel County Counsel

Member Type: General Years of Service: 28y 07m 28d Retirement Date: 9/24/2022

07 TONYA L NELSON

Deferred Member

N/A

Member Type: General

Years of Service: 19y 03m 20d Retirement Date: 9/1/2022

Comments: Deferred from SJCERA since September 2013. Outgoing reciprocity and concurrent retirement with

CalPERS.

08 JULIE A SCHUMACHER

Information Systems Anlyst III Information Systems Div - ISF

Member Type: General Years of Service: 18y 07m 07d Retirement Date: 9/23/2022

09 KATHLEEN E SERNA

Pretrial Sr Program Specialist Prob-Pretrial Svs-Assessments

Member Type: General Years of Service: 06y 04m 12d

Retirement Date: 9/12/2022

Comments: Tier 2 member. Eligible to retire with 5 years of service.

10/17/2022 11:43:01 AM Page: 1





San Joaquin County Employees Retirement Association

November 2022

10 KIM W WONG **Deferred Member** N/A

Member Type: Safety Years of Service: 05y 08m 16d Retirement Date: 9/15/2022

Comments: Deferred from SJCERA since October 2000. Outgoing reciprocity and concurrent retirement with

CalPERS.



Board of Retirement Meeting

San Joaquin County Employees' Retirement Association

Agenda Item 5.02-01

October 31, 2022

SUBJECT: Retired Member Returning to Active Membership

SUBMITTED FOR: X CONSENT ___ ACTION ___ INFORMATION

RECOMMENDATION

Approve the Application to Return to Active Membership for Maria Alcala effective on the first day of the first full pay period following Board of Retirement approval.

PURPOSE

To provide an opportunity for a Retired member to return to Active membership.

DISCUSSION

San Joaquin County has made a conditional offer of full-time benefited employment to Ms. Alcala. Ms. Alcala is currently a Retired member of SJCERA and wishes to return to Active Membership.

Government Code Sections 31680.4 and 31680.5 allow for a retiree to suspend their retirement, and return to work full time in an SJCERA-covered position as an Active member.

Pursuant to statute, (a) the member must apply to the Board of Retirement for reinstatement (b) the Board of Retirement must determine, based on medical examination that the member is not incapacitated for the duties assigned of the position and (c) the other conditions for membership (working in a full-time, permanent position with San Joaquin County or another SJCERA-participating employer) must be met.

The member's Application to Return to Active Membership, signed medical evaluation letter, and Job Description are provided for the Board's review. Based on the information in these documents, staff recommends approving Ms. Alcala's return to Active membership.

If approved to re-enter Active membership, the employment may begin. Ms. Alcala will be a Tier 2 member for this period of employment, and her retirement benefit payments will be suspended. When Ms. Alcala retires again, the original retirement benefit (increased by any cost-of-living adjustments), will resume and the additional benefit (based on the second period of employment) will be paid as a separate benefit.

ATTACHMENT

Application to Return to Active Membership Medical Evaluation
Job Description

Brian McKelvey

Assistant Chief Executive Officer



San Joaquin County Employees' Retirement Association

Return to Active Membership Application for Retired Members

INSTRUCTIONS				
employment from the County	of San Joaquin (or other partic	ave received a conditional offer of sipating employer) into a position that is sources must complete the last section		
MEMBER INFORMATION				
Full Name	Employee ID	E-mail		
Maria A. Alcala	157546	a Ica la 0856@gmail.com		
Department	Original Retirement Date	Date of Re-employment		
OAPI	06/19/2019	10/24/2022		
MEMBER ACKNOWLEDGN	MENT			
I hereby apply for reinstatement as an Active Member of SJCERA. I understand the Board of Retirement will determine my eligibility for Membership based on the position for which I am hired, my application and whether the pre-employment medical examination results indicate that I am not incapacitated for the duties assigned to me. I understand my retirement benefit will be suspended on the effective date of my re-employment and will resume only when I subsequently terminate employment. I also understand that I must return any overpayment of my retirement benefit made to me after the effective date of my re-employment. Member's Signature Mallala Date 10/27/202				
HUMAN RESOURCES AUTHO NOTE: THIS SECTION MUST I certify that the Member named and (is) (is not) incapacitated for	BE COMPLETED BY A HR RE l above has successfully comple	PRESENTATIVE ted a pre-employment medical exam		
HR Representative's Full Name Telephone Number				
Rachel Novetzke (209) 8-9555				
HR Representative's Title	E-mail			
Principal Personnel Analyst rnovetzke@sjgov.org				
HR Representative's Signature	******	e.I.		
Rachel Novetzke		Date10/31/22		



SGMF-PRIMARY CARE FAMILY MEDICINE - STOCKTON 2505 W HAMMER LANE STOCKTON CA 95209 Phone 209-957-7050 Fax 209-473-9359

October 28, 2022

To Whom It May Concern:

Maria A Alcala has been seen at the Sutter Stockton Family Medicine clinic by Dherain Patel, MD on 10/28/22. Maria A Alcala has been cleared to participate in her job duties based on review of the job description.. If you have any questions or concerns please contact the office at the number listed below.

Thank you,

Dherain Patel MD

2505 W Hammer Lane

Stockton, CA 95209

209-957-7050

PSYCHIATRIC TECHNICIAN

DEFINITION:

Under general supervision, performs para-professional psychiatric nursing services in the care and treatment of mentally ill or emotionally disturbed patients; and does related or other work as required in accordance with Rule 3, Section 3 of the Civil Service Rules.

CLASS CHARACTERISTICS:

This is the entry-level class in the Psychiatric Technician series. An employee in this class is responsible for participating as member of a treatment team providing physical and psychiatric care for Mental Health patients in a variety of treatment programs. Supervision is received from professional medical, clinical, or nursing staff. This class is distinguished from Senior Psychiatric Technician in that incumbents of the latter class perform more complex tasks requiring more experience and skill.

TYPICAL DUTIES:

- 1. Participates as a member of a treatment team in developing and implementing individual and group treatment programs for patients.
- 2. Provides professional general and psychiatric nursing care to patients; monitors patient activities; assists patients to follow prescribed treatment plans.
- 3. Observes patients' physical conditions and behavior; evaluates patient progress; reports significant changes to professional staff; records clinical notes on patients.
- Assists patients with feeding, habit training; keeps living areas clean; protects
 patients from personal injury; motivates patients to develop self-reliance in daily
 living.
- 5. Monitors and administers medications and treatment, including hypodermic injections, catheterizations, enemas and oral medications; takes and charts temperatures, pulse and respiration; assists families and care providers in monitoring and administering medications.
- 6. Admits and orients patients to inpatient facilities; acts as Court liaison through and admission process.
- 7. Counsels family; explains patient's illness, medications and treatment; assists family to prepare for patient's discharge.
- 8. Orders supplies, keeps records, and prepares reports.
- 9. Participates in in-service training programs.

MINIMUM QUALIFICATIONS:

<u>License</u>: Completion of an accredited training program for Psychiatric Technician is required for entrance to testing. Possession of a valid license as a Psychiatric Technician issued by the Board of Vocational Nurse and Psychiatric Technician examiners of the State of California is required prior to employment.

<u>Special Requirement</u>: The Psychiatric Health Facility will perform a background investigation on prospective employees to include criminal background information from State and Federal information banks.

<u>Knowledge of:</u> Basic concepts of mental illness and mental health; the physical, emotional and social needs of emotionally disordered individuals; fundamentals of psychiatric terminology; principles and techniques involved in the care and treatment of individual or groups of mentally ill, or emotionally disturbed patients.

Ability to: Apply routine psychiatric nursing care to mentally ill or emotionally disturbed patients; recognize symptoms indicative of adverse patient reactions; analyze situations accurately and take effective action; participate in treatment programs for patients; understand and follow written and oral directions; express ideas clearly and concisely, orally and in writing; establish and maintain effective working relationships with others.

Physical and Mental Requirements: Mobility; Occasional operation of computers, sitting for long periods of time and driving; frequent walking, pushing/pulling and bending/squatting; Lifting; Ability to constantly lift 5 pounds or less and frequently up to 70 pounds; Vision; Constant overall vision, color/depth and eye hand coordination and peripheral vision; frequent reading and close-up work; Dexterity; Constant repetitive motion, writing, holding, reaching, grasping and writing; Hearing/Talking; Constant hearing normal speech, talking in person, talking on the telephone/radio; Emotional/Special Conditions; Constant decision making, public contact, concentration, working weekends/nights or overtime, exposure to trauma, grief and death; frequent working alone; Environment conditions; Constant exposure to noise, dirt, dust, smoke, fumes, poor ventilation, cold, heat and hazardous materials; Special Requirement; Constant exposure to assaultive behavior.

Adopted: 11/18/1981

Amended & Re-titled: 10/9/1985

Amended: 3/12/1986 Amended: 9/11/1991 Amended: 5/10/2000 Amended: 1/16/2003 Renumbered: 07/03



San Joaquin County Employees' Retirement Association

An Introduction to Long Arc Capital

November 4, 2022

On Excellence

In his seminal paper, *The Mundanity of Excellence*, Daniel Chambliss observed hundreds of swimmers at every level of ability over some half dozen years to analyze what causes "excellence," which he defines as, "the consistent superiority of performance." He writes:

Excellence is mundane. Superlative performance is really a confluence of dozens of small skills or activities, each one learned or stumbled upon, which have been carefully drilled into habit and then are fitted together in a synthesized whole. There is nothing extraordinary or superhuman in any one of those actions; only the fact that they are done consistently and correctly, and all together, produce excellence.

Our mission at Long Arc Capital is to deliver excellence in growth equity to our Limited Partners. We believe the continual refinement of the seemingly "ordinary" or "simple" aspects of our investment and ownership processes will compound over time, leading to extraordinary performance.



Who We Are

The F	ïrm	 A private equity firm founded in 2016, headquartered in New York with a satellite office in London 2016-2019: Operated as an independent sponsor Invested \$120M buying controlling stakes in 3 businesses 2020: Launched LAC Fund I \$180M raised to date Completed 6 investments in Fund I
The S	itrategy	 Growth Equity investments targeting: Majority equity stakes in Businesses that have demonstrated product-market fit (i.e., are clearly past the venture stage), that We believe we can scale 3-5x in revenues under our ownership Investment focus on businesses: That create technology or leverage technologies to disrupt traditional business models in our target sectors With \$5-15M in revenues (enterprise values of \$25-50M) Located in North America or in Europe but with a significant market opportunity in North America
The T	eam	 Founded by 6 partners, each an industry veteran with 25 years of investing or operating experience Partners have previously served as CEOs, CFOs, COOs, advisors, consultants, bankers, entrepreneurs Have an array of skills and experiences that allow us to engage directly across all aspects of the investment and ownership life cycle Led by Gaurav Bhandari, a 26-year veteran of Goldman Sachs responsible for the private equity business of Goldman Sachs Investment Partners Partners self-funded Long Arc, have operated as an integrated unit since Jan 2017, and have worked together to complete all 7 of our investments Fully built out team of 18 full time employees and a distinguished Advisory Board



Our Investment Focus

Technology driven businesses that are disrupting traditional business models

Businesses that create technology or leverage technologies

Financial services, business services, technology, telecommunications, and media

Businesses that have achieved product-market fit

Revenues from customers with strong unit economics

Strong value proposition, accelerating customer adoption, low customer churn

Small businesses where our ownership can have a large impact

Revenues of \$5-15M and enterprise values of \$25-50M

Founder-built, generally outside the VC ecosystem

Meet our "four key underwriting criteria"

Competitively distinct, with large TAM, attractive unit economics, and strong core team

See a clear path to scaling revenues 3-5x

Via our Ownership Playbook

Ability to buy controlling stake

Align on incentives, strategy, and operating plan









ROBERTSON **STEPHENS®**





companies in Fund I

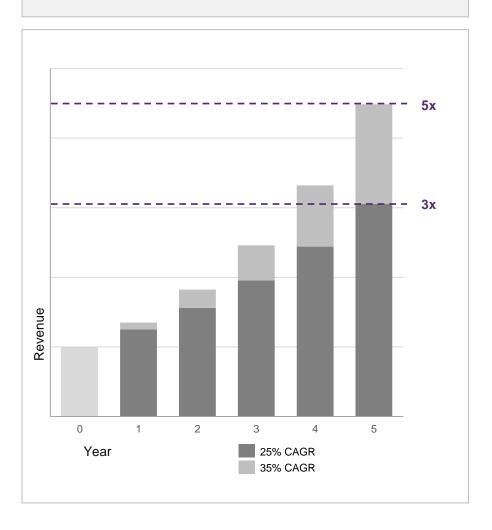


LAC Value Creation

Qualitative improvements....

Ountestip Initiatives Convene an outstanding team allocation discipline LEY UIW CRITERY Competitive Distinction Economics Achieve execution Achieve excellence Down & find Large Strong Core **TAM** Team Build a sales organization

... yield quantitative results.



Projected rates of return are hypothetical and for illustrative purposes only. Accordingly, no assumptions or comparisons should be made based upon these returns. While we believe that our assumptions are reasonable, we caution that it is very difficult to predict the impact of known factors, and, of course, it is impossible for us to anticipate all factors that could affect our actual results. Future events may differ from such assumptions. Such returns are subject to inherent limitations. Such projections should not be regarded as a representation, warranty or prediction that any specific deal will reflect any particular performance or achieve any particular result without avoiding losses, including total losses of an investment. These returns should not be considered as indicative of the skills of the investment adviser.



The Lifecycle of a LAC Investment: Sourcing to Exit



1. Thesis
Development &
Target
Identification

- Research driven investing: identify powerful tech-driven trends disrupting traditional business models
- Extensive relationship networks, but not hesitant to "cold call" suitable targets
- Target founder-built businesses outside VC ecosystem, where management is seeking a value-add partner
- Patience and discipline to take an ~18 month journey to complete an investment



2. Pricing & Structuring

- Invest at fair valuations, generally below market comparables
- Often able to take advantage of market dislocations
- Embedded in pricing are "premiums" for:
 - Control
 - Structural downside protection
 - Security type (participating preferred)



3. Ownership Initiatives

- Before investing: develop Ownership Plan in collaboration with management
- After investing: relentless application of 6-part Ownership Playbook
- Refine strategy, convene talent, enhance financial discipline, invest in product roadmap, build sales & marketing, execute using OKR framework
 - Work with portfolio companies on a near daily basis
 - Weekly Ownership Committee
- VeArc: LAC's India-based entity established to provide LAC portfolio companies with access to cost-efficient, quality-controlled, offshore software development talent



4. Value Creation

- At exit, plan for business to demonstrate:
 - Category winning strategy
- Exciting product roadmap
- ✓ Best-in-industry team
- √ Successful sales & marketing org, and
- √ Capital allocation discipline
- Across-the-board execution excellence
- 3-5x larger on top-line, cash flow +, 25%+ EBITDA margins, CAGR of 25%+
- Multiplicity of exit options (sale to a strategic or financial sponsor, IPO)



Our Portfolio of Investments

The Long Arc Signature

- All control investments, structured for downside protection
- All reflect our underwriting criteria
 - ✓ Competitively distinct, large addressable market, attractive unit economics, strong core team
- All proprietarily sourced with no VC in the cap table
- All being scaled through a relentless application of our 6-part Ownership Playbook



CircleBlack

An enterprise software company providing an easy to implement open-architecture container software and data aggregation technology platform for registered investment advisors and their clients



Concertiv

A procurement & spend management services platform providing preferred pricing and contract management for professional services firms (e.g., asset managers, investment banks, law firms)



Renaissance Alliance

A tech-enabled insurance brokerage alliance who offers its members higher commissions, improved carrier access, and a set of services that support growth and enhance profitability



Robertson Stephens

A tech-enabled independent wealth management firm providing comprehensive financial solutions to high net worth individuals and family offices on an innovative digital platform



Skaleet

A SaaS provider of a next-gen core banking system (the mission critical, back-end system that enables processing of transactions, payments, book-, and record-keeping) serving retail banks globally



Tinubu

An enterprise software company digitizing the full workflow (risk management, claims management, underwriting) of specialty lines insurers, including trade credit and bonding & surety



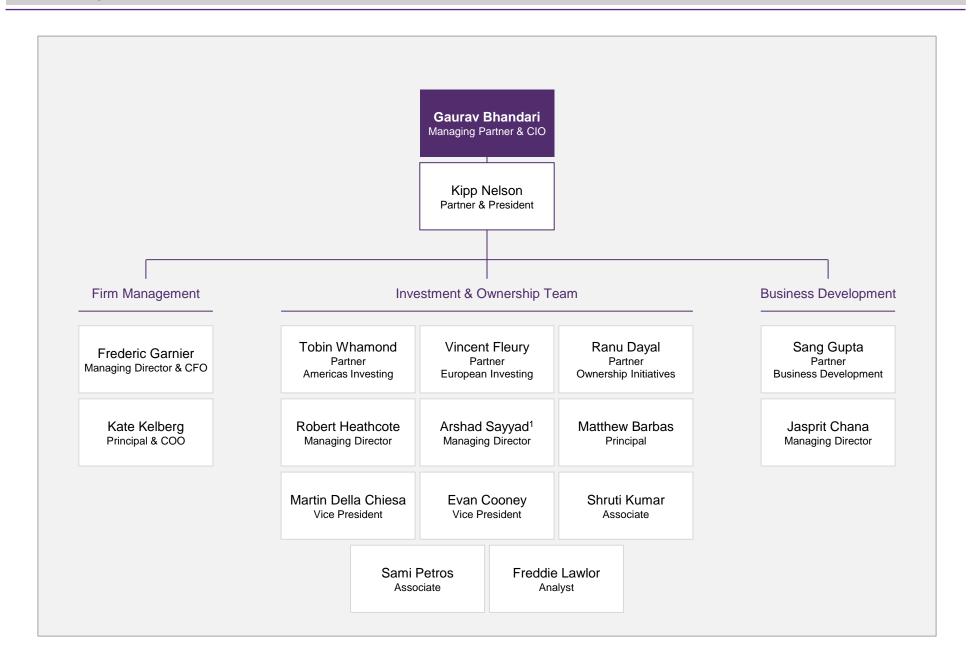
Agile Frameworks

A SaaS provider of a cloud-based software solution to digitize engineering services firms' testing and inspection workflow for architecture and construction, thus enabling increased productivity and cost savings

As of December 2021.



The Long Arc Team



¹ Arshad Sayyad is both a Managing Director of Long Arc Capital and the Head of VeArc, an operating support group and affiliate of Long Arc Capital based in India formed to provide value-add services to LAC portfolio companies across technology (particularly software development) and operations.



Managing Partner Background

Prior to founding Long Arc Capital, Gaurav spent 26 years at Goldman Sachs working as a quantitative strategist, an investment banker, and for his last 12 years at Goldman, a proprietary investor and fund manger.

Goldman Sachs (1990 – 2016)

Fund Manager (2008 – 2016)

Managing Director, Goldman Sachs Investment Partners | Investment Management Division

- Ran a global growth equity portfolio
- \$4B+ invested in 50+ companies through a dedicated PE fund (Global Private Opportunities Partners I), hedge fund side pocket and coinvestment vehicles
- Served on 15+ boards of investee companies
- Led the firm's investment in Facebook and Uber

Proprietary Investor (2004 – 2008)

Managing Director, Goldman Sachs Principal Strategies | Equities Division

- Built an on-balance-sheet private equity investing business
- Ran a \$1B+ global investment portfolio
 - Built GSPS energy investing franchise by leading investments into Copano, Atlas, Lightfoot and Leor
 - Developed the firmwide property reinsurance business, Arrow Reinsurance
 - Take-private then IPO of James River, a leading U.S. E&S insurer
 - Started GSPS' India investing business

Investment Banker

(1995 - 2004)

Vice President, Risk Markets Group | Investment Banking Division

- Co-founded the Risk Markets Group to create Goldman's marketplace for insurance-linked securities (catastrophe bonds)
- Advised on financings and LBOs of energy and power assets
- "Most Innovative Transaction of the Year" award

Quantitative Strategist

(1990 - 1995)

Associate, Liability Management Group | Fixed Income Currency & Commodities Division

- Developed proprietary simulation software to price and manage risk for liability management purposes
- Advised sovereign and multinational clients on interest rate, currency and commodity price risk management

Select Investments & Board Representations

Media & Internet

- Facebook (social media)
- Media Rights Capital (film & TV production)
- iCrossing (digital advertising)
- Networked Insights (advertising tech)

Tech & Telecomm

- Uber (transportation)
- Compass (real estate brokerage)
- NextNav (indoor GPS and location)
- Tikona (wireless home broadband)

Financial Services

- James River (E&S insurance)
- Arrow Re (property catastrophe reinsurer)
- IndoStar (non-banking financial company)
- Revolution Money (payments)

Consumer

- Zappos (shoe e-commerce)
- Dale & Thomas (branded snack food)

Nat. Resources, Energy & Infrastructure

- Leor Energy (natural gas exploration)
- Lightfoot (coal mining & terminal)
- Layline (enhanced oil recovery)
- Copano (pipeline and processing)

Healthcare

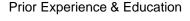
- Drug Royalty Inc. (pharmaceutical royalties)
- Globus (spine orthopedics)



The Long Arc Capital Partners

Our Partnership is comprised of individuals with significant accomplishments, diverse experiences, and complementary skill sets.

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Gaurav Bhandari Managing Partner & CIO

- Former Head of Goldman Sachs Investment Partners' private equity business
- 26 years at Goldman, including building its on-balance-sheet PE investing business
- Columbia University (B.S.)



Kipp Nelson President

- Former co-Head of Goldman Sachs European Derivatives, co-Head of Goldman Sachs Fixed Income Division in Asia, co-PM of Goldman Sachs' Asia distressed debt fund
- Founding Partner of Flashlight Films
- University of Colorado (B.S.)



Tobin Whamond North American Investments

- Former Managing Director of Goldman Sachs Investment Partners' private equity business
- InsVest co-Founder; HCC Insurance CFO & COO; Head of Financial Inst. M&A at Wachovia Wells Fargo
- Georgetown University (B.S.B.A.)



Vincent Fleury European Investments

- Former Global Head of Structured Finance at Credit Agricole
- Founder and co-CEO of Strategic Risk Solutions (SRS) a Bermudian (Re)insurance company
- HEC Paris



Ranu Dayal Ownership Initiatives

- Former Senior Partner and Fellow of Boston Consulting Group (BCG)
- Taught Economics at the University of Oxford, the Kobe Institute, and Delhi University
- Oxford (D.Phil), St. Stephen's College, Delhi (B.A.)



Sang Gupta Business Development

- Former Managing Director of CLSA, a subsidiary of Credit Agricole CIB (CA-CIB), focused on Asian Equities Distribution
- University of South Carolina (B.S.)

Each Partner is an industry leader with an average 25 years of investing and/or operating experience.

Each Partner has known Gaurav Bhandari, Managing Partner, for at least 15 years.

The Partners have been together since firm inception, self-funded the business, and have made a significant GP commitment to Fund I.



The Long Arc Team

Long Arc has 11 other professionals – each with experience from successful franchises – and is fully staffed to execute on its strategy.

Team	Name & Title	Prior Experience & Education
	Robert Heathcote Managing Director	 UBS, Goldman Sachs, Credit Suisse Financial Products/CSFB University of Oxford (M.A. Oxon)
	Arshad Sayyed Managing Director	 Fidelity, Accenture, Wipro, Cap Gemini, Cognizant Carnegie Mellon, Tepper School of Business (MBA), Bombay University (C.S.)
	Matthew Barbas Principal	 North Star Investor Group, Adakin Capital, Audax Group, Oliver Wyman Wharton School of Business (M.B.A.), Northwestern University (B.S.)
Investment &	Martin Della Chiesa Vice President	Accuracy, BPCE-NatixisSciences Po Strasbourg (M.Sc.)
Ownership Team	Evan Cooney Vice President	 Boston Consulting Group (BCG), Voyager Capital, Motricity, Duff & Phelps Kellogg School of Management (M.B.A.), Seattle Pacific University (B.A)
	Shruti Kumar Associate	 GlossGenius, Citi Investment Banking NYU Stern School of Business (B.S.)
	Sami Petros Associate	TAP AdvisorsUniversity of Pennsylvania (B.Sc., B.A.)
	Freddie Lawlor Analyst	Brandon CentreUniversity of Cambridge (B.A)
	Jasprit Chana Managing Director	Goldman Sachs, CQSUniversity College London (B.Sc.)
Firm Management & Investor Relations	Frederic Garnier Managing Director & CFO	Tishman Speyer, Morgan Stanley, PricewaterhouseCoopersUniversity Paris IX Dauphine
	Kate Kelberg Principal & COO	BlackRock, Goldman SachsJohns Hopkins University (B.A.)



Long Arc Capital's Advisory Board

Our Firm's Board of Advisors includes world-renowned industry leaders with expertise in investing and operating businesses.

Name	Experience
Michael Boskin	 Professor of Economics and Senior Fellow of Stanford University's Hoover Institution Former Chairman of the President's Council of Economic Advisers (CEA) Frequent advisor to governments and businesses globally
Pete Briger	 Principal and co-Chief Executive Officer of Fortress Investment Group Former Partner of Goldman Sachs Former member of the Council on Foreign Relations
Hans-Paul Bürkner	 Current Chairman and former CEO of BCG Former head of BCG's global Financial Services practice
Carsten Kengeter	 Former CEO of Deutsche Boerse Group in Frankfurt Former Chairman and CEO of UBS Investment Bank Former Partner of Goldman Sachs
Stephen Poss	 Former Senior Partner at Goodwin Procter Chair of Securities Litigation, co-Chair of SEC Enforcement Practice Key member of Private Equity, Tech/Life Sciences, Fin Services, and REITS practices
Jeffrey Rayport	 Faculty member of Harvard Business School where he teaches a course on scaling technology ventures Former Senior Partner of Monitor Deloitte HARVARD BUSINESS SCHOOL MONITOR Deloitte.
Yves de Talhouët	 Former CEO of Hewlett-Packard, EMEA; Chairman and CEO of Hewlett-Packard, France Former Chairman and CEO of Oracle, France

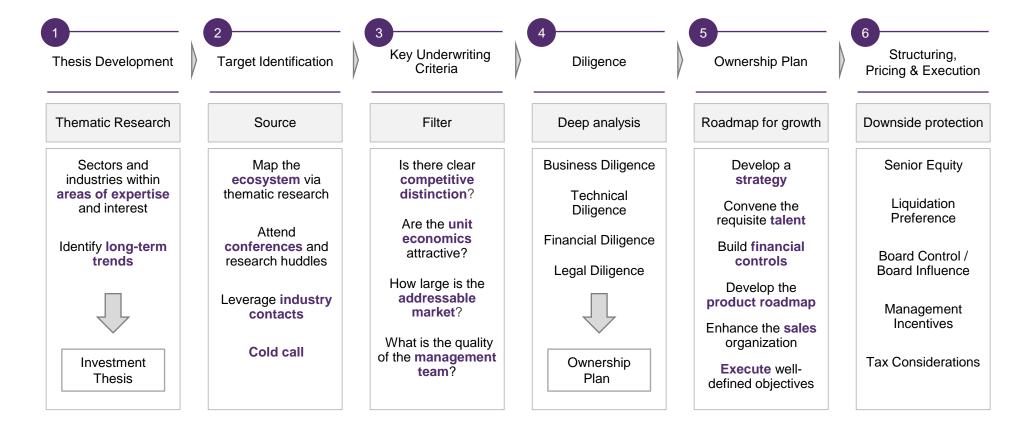
LAC's Advisors have played a critical role in shaping the investment industry, led major organizations, managed thousands of employees, and undertaken investments on a global scale.

Our Advisors provide valuable advice on macroeconomic and business issues, which we leverage regularly.



Investment Process

Our process is based on decades of private equity, operating and consulting experience across business cycles and company stages. It reflects learnings from both our successes and our failures.



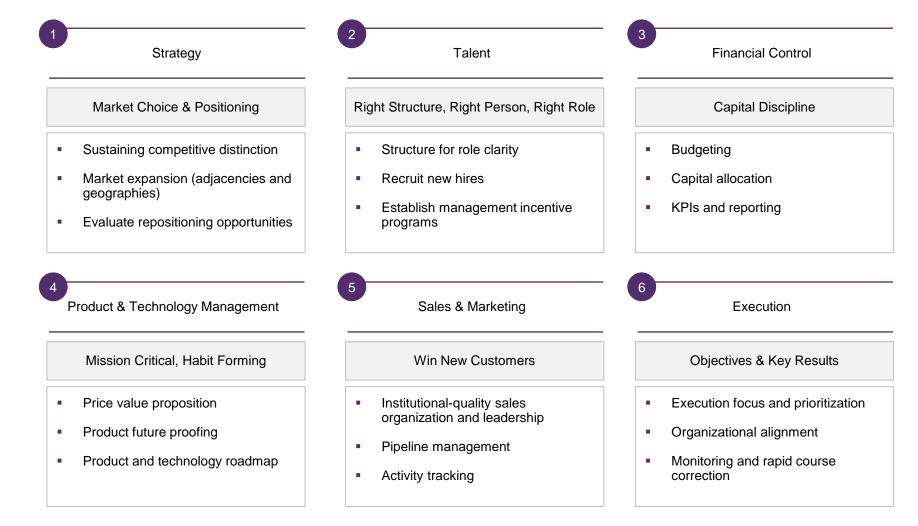
We are research-driven, thematic investors.

Our investment process, from idea generation to funding, typically takes 12-18 months.



Ownership Playbook

We believe our ownership initiatives generate as much alpha as our investment selection. The Long Arc Ownership Playbook focuses on six key areas to help our businesses grow.



Our Ownership Playbook reflects decades of advising, operating and investing in businesses poised for growth across sectors and industries.

Collaborating with company management through this process also creates a strong alignment between us and our entrepreneurs, critical to our investment's ultimate success.



Portfolio Construction

We are targeting a portfolio with the following characteristics for Fund I.

Strategy	 Growth equity Control¹
Geography	 70%: North America 30%: Western Europe (businesses based in Europe with a significant focus on North America)
Sectors	 Technology Media Telecom Financial Services Business Services No sector expected be more than 30% of Fund I
Leverage	 No fund leverage Minimal leverage employed at portfolio company level
Typical Investment Size / Ownership	 \$25 - 50M 50 - 70% ownership stakes in portfolio companies
Target Return ²	2 - 5x gross MOIC25% net IRR
Expected Number of Investments	 ~8 portfolio companies in Fund I 3 - 4 investments per year

¹ May include shared control with a like-minded investor. ² The figures shown above represent the return profile of the types of investments Long Arc will target. There can be no assurances that Long Arc will identify and make investments with this return profile and any target returns presented herein should not be relied upon as an indication of actual or future performance of Fund I.



Our Competitive Differentiation

Differentiated Market Positioning

- Focus on an underserved market:
 - Buying control of relatively small businesses with an intent to scale 3-5x
 - Generally encumbered with some complexity
- Differentiated approach (control):
 - Most sub-\$500M growth equity funds make minority investments
 very few GPs target this market opportunity the way we do
 - Of those making control investments, very few if any has the breadth and depth of experience of the LAC Partnership¹
- Each of the companies we have invested in had no VC in the cap table and we have never faced competition from the same private equity firm more than once

Proven Processes

- \$300M+ deployed to buy control of 7 businesses since 2017
 - Each proprietarily sourced and done on a privately negotiated basis
 - Each meets our underwriting criteria
 - Each was structured for downside protection
 - Each had an Ownership Plan to help scale the business 3 5x
- As a result of our ownership initiatives, 3 "aged" (pre-fund) investments have scaled recurring revenues 3x to 7x²
- Our pipeline of new investments follows the same, repeatable investment and ownership processes

A Firm Designed to Specialize in Growth Equity

- 6 partners, each with an average of 25 years of experience investing in, building, and managing businesses
 - Partners have previously served as CEOs, CFOs, COOs, advisors, consultants, bankers, entrepreneurs
 - Array of skills and experiences allow us to engage directly across all aspects of the investment and ownership life cycle
- Our investment and ownership processes are a distillation of our learnings from decades of private equity, consulting, and operating experience
- Fully built out team of 18 professionals
- VeArc provides LAC portfolio companies with access to costefficient, quality-controlled talent in India

Attractive Fund I Offering with ~50% of Portfolio Identified

- Fund has a target of ~8 portfolio companies
 - 6 investments completed
 - More than half the Fund investments already identified
- First investment (Tinubu) warehoused for Fund and transferred at cost³ despite significant growth
- Have generated co-investment opportunities for LPs in each investment
 - Expect to continue to do so

¹Source: Pregin. ² Past performance is not indicative of future performance. ³ Cost accrued at 8% annually.



Fund Terms

Fund Size	~\$350M target
Structure	Luxembourg / Delaware
Commitment Period	4 years (with one 1-year optional extension)
Fund Life	10 years (with two 1-year optional extensions)
GP Commitment	2.5% of Fund commitments
Management Fees	2% of committed capital during commitment period; 2% of invested capital thereafter
Performance Fees	20% over 8% preferred return with 100% GP catch-up
Minimum Investment	\$1M ¹
Co-Investments	50% of fund size expected to be made available via co-investment opportunities
Legal Counsel	Greenberg Traurig, LLP
Administrator	Gen II Fund Services, LLC
Auditor	Grant Thornton LLP

¹ May be waived at GP's discretion.



Appendix



Overview

Scaling an enterprise software business that dominates its vertical.

Thesis development & sourcing

Enterprise software companies that dominate a vertical are attractive businesses to own as they typically have attractive unit economics, sticky client relationships and the leading company gets a very large market share

 LAC identified Tinubu as the dominant software provider to Trade Credit Insurers (a ~\$2.5T industry) through industry research and relationship with a company board member

Company description (at time of investment)

- Tinubu is an enterprise software business that provides a cloud based end-to-end software solution for underwriting, risk monitoring and claims management for the Trade Credit Insurance industry
- Tinubu has over 100 employees, is headquartered in Paris and has satellite offices in New York, London, Montreal and Singapore supporting global sales

Key Terms

- Initial Investment: September 2017
- Total Invested: \$68M¹
- Ownership: 57% on fully diluted basis¹
- Security: Participating preferred with seniority in waterfall for capital invested
- LAC controls the Board



Investment Thesis

- 1. Market leading product with important reference customers (e.g., QBE, EDC)
- 2. Limited competition and significant barriers to entry
 - Only available turnkey solution, developed over 5+ years by team of credit insurance experts with €40M+ in development costs)
- 3. Established pipeline could triple revenue
- 4. Attractive unit economics (75% gross margins)
- 5. Existence of additional end markets with similar lack of competition and strong overlap of clients

Ownership Plan

- Build Sales effort
 - Recruit Head of Sales and additional sales professionals
 - Execute on existing pipeline and augment sales team to drive new opportunities
- Evaluate and pursue additional product extensions and new verticals (e.g., Bonding & Surety, Political Risk)
- Strengthen technology foundation
- Transform Tinubu into a truly global company

Information provided as of Long Arc's initial investment in the company in September 2017. ¹ Includes subsequent follow-ons and investments held in LAC Fund I and LAC SPVs.



Renaissance Alliance

Harnessing the distribution power of independent insurance agents.

Overview

Thesis development & sourcing

- In certain industries where a product is "sold" not "bought," intermediaries play a critical role and are unlikely to be displaced by d2c initiatives. The sales process in these industries can be significantly improved via tech enablement
- LAC Partners had successfully executed on this thesis investing in Compass, a real estate brokerage business. We identified P&C insurance distribution as the next iteration of the thesis
- LAC evaluated multiple P&C insurance agencies and alliance organizations before identifying Renaissance Alliance as the appropriate target for our investment and cold called for an introduction

Company description (at time of investment)

- RAIS is one of the largest alliance organizations, providing carrier access and other support services to independent P&C agencies in the New England region
- 81 member agencies generating \$600M of premium

Key Terms

- Initial Investment: June 2018
- Total Invested: \$57M¹
- Ownership: 79% on fully diluted basis¹
- Security: Participating preferred with seniority in waterfall for capital invested
- LAC controls the Board



Investment Thesis

- 1. U.S. P&C insurance market is large (\$600B) and fragmented, with agents controlling a majority of the distribution
- 2. These agencies are typically small business lacking the scale, skill and capital to make the investments needed to grow the business in a technology-enabled environment
- 3. Renaissance is an established franchise with attractive standalone economics
- 4. The company has a proven track record with agents and provides an attractive platform to build upon

Ownership Plan

- Build out leadership team to drive the business
- Execute on "Embedded Value Initiatives" to improve profitability
 - Restructure commission sharing arrangements
 - Move premium to carriers with override and profit-sharing arrangements
- Invest in tech, services and marketing to make members' operations more efficient, driving growth and improving profitability
- Recruit new agencies
- Expand geographic footprint beyond New England

Information provided as of Long Arc's initial investment in the company in June 2018. 1 Includes subsequent follow-ons and investments held in LAC Fund I and LAC SPVs.



CircleBlack

Growing a competitively distinct technology aggregation platform for the wealth management industry.

Overview

Thesis development & sourcing

- In connection with LAC's investment in Robertson Stephens ("RS"), we conducted comprehensive market research to identify technology solutions to digitize RS advisors' workflow
 - We identified CircleBlack as the only rapidly deployable container software solution that provided a single-sign-on and seamless 2-way data flow integration with best-in-class applications
- CircleBlack's offering is nascent, but competitively distinct and there is no clear market leader in the space, creating the opportunity to win a large share of market

Company description (at time of investment)

- CircleBlack is an enterprise software solution for wealth management firms. The
 company's open-architecture software integrates various software applications that
 make up the technology stack for advisors (e.g., CRM, risk, rebalancing / trading,
 financial planning), warehouses data across these applications, and provides a
 consolidated view of that data
- The company is headquartered in New Jersey and has 17 full time employees

Key Terms

- Initial Investment: June 2020
- Total Invested: \$23M¹
- Ownership: 62% on fully diluted basis¹
- Security: Participating preferred with seniority in waterfall for capital invested
- LAC controls the Board



Investment Thesis

- 1. Growing RIA market and tailwinds promoting streamlined technology use among RIAs
- 2. Strong core product with competitively distinct strategy, various revenue expansion opportunities, and fiscal discipline
- 3. Attractive unit economics (65% gross margins)
- 4. LAC expertise in wealth management and existing Robertson Stephens investment create important synergies

Ownership Plan

- Build out management team
 - Recruit through combination of LAC network, advisor referrals, and executive search firms
- Build a strong sales organization
 - Reinforce go-to-market strategy
 - Grow both institutional and independent RIA customers
- Pursue product enhancement and technology updates
 - E.g., out-of-the-box bundles and model marketplace
- Institutionalize the organization by building out financial, operational, customer support, and admin functions

The information provided above is as of Long Arc's initial investment in the company in June 2020. ¹ Includes subsequent follow-on investments made after initial investment.



Skaleet (f/k/a TagPay)

Scaling an enterprise software business with a disruptive value proposition in a large and growing market.

Thesis development & sourcing

- Several hundred "challenger" banks are launched each year, each needing a technology backbone
- "Core banking software" (the mission critical back-end system that enables banks to process transactions and provide for record keeping) is a large and growing market with demand coming from these challenger banks and existing banks trying to adapt to changing customer needs and expectations
- LAC identified Skaleet as a disruptive provider of core banking systems through our industry research and a relationship with a senior executive at the company

Company description (at time of investment)

- Skaleet is an enterprise software company offering a next-gen, SaaS based, Core Banking System for retail banks, telecom operators, and other retail financial services providers
- HQ'ed in France with 29 employees, Skaleet generates €3.3M of ARR from 20 customers (including 2 top-tier European banks) across 7M underlying managed accounts and supports over 500k transactions per day

Key Terms

- Initial Investment: December 2020
- Total Invested: \$29M
- Ownership: 68% on fully diluted basis
- Security: Participating preferred with seniority in waterfall for capital invested
- LAC controls the Board



Investment Thesis

Overview

- 1. Large addressable market (\$1B in next 5 yrs) of technology needs of "challenger" and existing banks as the entire sector adapts to changing customer needs and expectations
- 2. One of the very few cloud based, open-architecture banking software solutions with proven product-market fit and a disruptive proposition relative to legacy providers (inexpensive, rapidly deployable, and extremely scalable)
- 3. Attractive unit economics (80% gross margins on recurring software revenue)
- 4. Strong management team including visionary co-Founders, CFO, and CTO (deep industry and technical expertise and as well as entrepreneurial skills)

Ownership Plan

- Scale distribution on immediate addressable markets where Skaleet has achieved product-market fit and local category leadership
 - Focus on payment/electronic money institutions and small digital banks launched by fintech, banks or Telco operators in French speaking countries
- Expand across adjacent segments
 - Full scope new digital banking projects of banks, fintechs, insurers, retailers and as a replacement of core banking systems for Tier 2/3 universal banks
- Increase geographic footprint with a focus on Europe and the U.S.

The information provided above is as of Long Arc's initial investment in the company in December 2020.



Overview

Scaling a procurement & spend management services platform already benefitting from network effects.

Thesis development & sourcing

- Small and medium sized professional services firms (e.g., boutique investment banks, law firms, and asset managers) lack the ability to get preferred rates on data services, travel, insurance and the like, as their larger counterparts do
- LAC researched procurement businesses in multiple industries and identified Concertiv as one of the only players targeting the professional services firm market through a relationship with a senior executive at the company

Company description (at time of investment)

- Concertiv is a procurement and spend management services platform that leverages group buying power and analytics to provide preferred pricing and contract management for professional services firms. It organizes, benchmarks, negotiates, documents, and quantifies savings across critical business functions (e.g., data services, travel, insurance, and benefits)
- HQ in NYC with 17 employees, the company has ~\$4M in recurring subscription revenue, is near breakeven, has ~50 blue-chip clients (including well-known Wall Street firms) and manages ~\$300M of annual spend

Key Terms

- Initial Investment: March 2021
- Total Invested: \$21M
- Ownership: 62% on fully diluted basis
- Security: Participating preferred with seniority in waterfall for capital invested
- LAC controls the Board



Investment Thesis

- 1. Large addressable market of financial/professional services firms (35K+ management consulting, investment, and law firms representing \$30B+ group purchasing)
- 2. Only company in the professional services arena at scale with marquee customers (already benefiting from network effects)
 - Delivers significant, immediate savings to customers with annual ROI of ~5x subscription fee
- 3. Attractive unit economics (60% gross margins)
- 4. Cross- and up-sell opportunities
- 5. Credible path to \$25M of ARR in 5 yrs with core offering, enabling LAC to achieve target returns + potential upside from new market expansion

Ownership Plan

- Focus on core customers with deeper product penetration and spend category expansion
- Deepen product expertise and rigor across spend categories and build out self-service platform
- Complement existing executive team and build out key leadership roles across product categories (e.g., insurance and IT) and platform development (product management and infrastructure)

The information provided above is as of Long Arc's initial investment in the company in December 2020.



Agile Frameworks

Scaling an enterprise software business with a high value prop in a large, underpenetrated market.

Overview Investment Thesis

Thesis development & sourcing

- Workflow and resource planning software for engineering services firms is a large and growing market: in the U.S., there are 15K+ engineering services firms generating \$270B+ of revenues and employing over 1.3M people
- The testing field engineers conduct is a labor intensive, administratively burdensome, and prone to errors process, representing a large opportunity for efficiency gains through digitization
- LAC identified Agile Frameworks as the only cloud-based, software solution that digitizes testing and inspection workflow for architecture and construction projects

Company description (at time of investment)

- Agile is a provider of a cloud-based SaaS solution to engineering services firms for project workflow, data management, and analytics. Its product enables revenue growth by delivering increased productivity, cost savings from reduced paperwork, and risk mitigation from better compliance and fewer human errors
- HQ'ed in Minneapolis with ~20 employees serving 70+ customers
- It was developed in-house by an engineering services firm and structured as an ESOP

Key Terms

- Initial Investment: April 2021
- Total Invested: \$12M
- Ownership: 56% on fully diluted basis
- Security: Participating preferred with seniority in waterfall for capital invested
- LAC controls the Board



- 1. Large and growing market, in need of digitization (\$700 TAM)
- 2. Proven value prop, competitive distinction, and sales momentum: main competitors are 20+ yrs old operating on legacy, on-premise software. The company has low churn and grew its customer base by 75% in last 2 years
- 3. Attractive unit economics (80%+ gross margins)
- 4. Credible path to scaling revenues 5x and opportunity for multiple expansion (entry valuation of ~2x ARR)
- 5. Strong management team with both technical and industry expertise
 - CEO with track record of successful exits for software businesses

Ownership Plan

- Build a strong sales organization
 - Recruit Head of Sales and additional sales professionals
 - Revise go-to-market strategy
- Enhance existing product (e.g., mobile applications and non-destructive testing applications)
- Develop next-gen product (a management resource planning solution)
- Establish operations independent of existing corporate parent (admin capabilities, decrease use of contract developers to in-house)

The information provided above is as of Long Arc's initial investment in the company in April 2021. 1\$5.5M funded to date.



Robertson Stephens

Building a differentiated, tech-enabled offering in the rapidly evolving wealth management space.

Overview Investment Thesis

Thesis development & sourcing

- The wealth management industry is undergoing significant changes due to demographic trends, customer expectations and technology advancements
- There are four basic needs all clients have, but very few firms provide. They are that a wealth manager:
 - Be a fiduciary
 - 2. Offer world-class investment strategies
 - 3. Provide holistic financial planning (tax, estate, philanthropy)
 - 4. Deliver a seamless digital interface
- LAC received an inbound call from a Board member we had worked with previously about an opportunity to acquire Robertson Stephens

Company description (at time of investment)

- Robertson Stephens is an independent wealth management firm (RIA). The company previously was a prominent investment bank focused on the technology sector in the 1990s. After being sold multiple times, it was shut down in 2002 then restarted as a wealth advisory firm in 2013
- Robertson Stephens has 15 employees and is headquartered in San Francisco with another office in New York. At the time of our investment, it had two advisory teams managing ~\$500M of assets

Key Terms

- Initial Investment: December 2017
- Total Invested: \$32M¹
- Ownership: 77% on fully diluted basis¹
- Security: Participating preferred with seniority in waterfall for capital invested
- LAC controls the Board

ROBERTSON STEPHENS®

- 1. Wealth management is a large market (\$25T) poised for disruption, creating an enormous opportunity
- 2. The RIA segment is large, fragmented and continuing to gain share
- 3. Advisors leaving wirehouses is a trend that will continue. Small RIAs will continue to join platforms rather than remain independent
- 4. Robertson Stephens gives us a good platform at an attractive price that we can build into a leading firm with competitive distinction

Ownership Plan

- Acquire and restructure assets and operation of OldCo entities
- Build out management team
- Establish "Four Pillars" of our strategy at the company (fiduciary, investment strategies group, holistic financial planning, technology offering)
- Add advisors and grow AUM
- Expand into Multi-Family Office offering

The information provided above is as of Long Arc's initial investment in the company in December 2017. ¹ Includes subsequent financings.



Appendix: Team Biographies





Gaurav Bhandari Managing Partner

Gaurav Bhandari is the Managing Partner and Chief Investment Officer of Long Arc Capital.

Prior to starting Long Arc, Gaurav was a Managing Director at Goldman Sachs where he led the private investment portfolio for Goldman Sachs Investment Partners, a multi-strategy global investment fund within Goldman Sachs Asset Management. While at Goldman Sachs Investment Partners, Gaurav led some of the largest transactions for the group, including investments in Facebook and Uber. Gaurav joined Goldman Sachs in 1990 and worked first as a quantitative strategist, then an investment banker and for the last 12 years of his career at Goldman Sachs, as a proprietary investor and portfolio manager.

Gaurav currently serves on the Boards of Agile, a provider of a cloud-based, SaaS software solution for engineering services firms; CircleBlack, an enterprise software business for financial advisors; Renaissance Alliance, an insurance distribution platform for independent agents; Robertson Stephens, a wealth management business; Skaleet, a SaaS provider of a next-gen core banking system serving retail banks globally; and Tinubu, an enterprise software business for specialty lines insurance (all LAC portfolio companies). He has previously served on the Boards of several companies, including Networked Insights, an advertising technology company; Media Rights Capital, an independent film and television studio; iCrossing, an advertising technology company; Leaf Group, an internet media business; Indostar, a Non-Banking Financial Company; James River Group Holdings, a specialty insurance and reinsurance business and Leor Energy, an oil and gas business. Gaurav earned a B.S. in Computer Science from Columbia University.



Ranu Dayal Partner

Ranu Dayal is a Partner of Long Arc Capital and Head of Ownership Initiatives.

Prior to joining Long Arc, Ranu was a Senior Partner and Managing Director at the Boston Consulting Group (BCG) where he led the South-East Asian business and served on the Audit Committee. Ranu has over two decades of experience as a management consultant, working in New York, New Delhi, Singapore and Bangkok. As a consultant, he specialized in turnarounds and the strategic repositioning and organization redesign of businesses to enable growth. Through his various assignments, he covered a wide range of companies across sectors, including: Financial Services, Telecom, Real Estate and Infrastructure. He was a Fellow at BCG and an industry advisor to the World Economic Forum on the subject of Financial Institutions in Emerging Markets. Prior to his consulting career, Ranu taught economics at the University of Oxford, the Kobe Institute and Delhi University.

Ranu currently serves on the Boards of Agile, a provider of a cloud-based, SaaS software solution for engineering services firms; CircleBlack, an enterprise software business for financial advisors; Concertiv, a procurement and spend management services platform; Renaissance Alliance, an insurance distribution platform for independent agents; Robertson Stephens, a wealth management business; and Tinubu, an enterprise software business for specialty lines insurance (all LAC portfolio companies). Ranu earned a D.Phil. in Economics from Oxford, an M.A. from JNU and a B.A. from St. Stephen's College, Delhi.



Vincent Fleury Partner

Vincent Fleury is a Partner of Long Arc Capital and Head of European Investments.

Prior to joining Long Arc, Vincent was the Global Head of Securitization for Credit Agricole CIB (CA-CIB), a business that he led for 10 years. At Credit Agricole, Vincent also managed a \$25B structured credit portfolio across various geographies. He led CA-CIB Securitization developments in the U.S., Brazil, Canada, Asia and set-up the CA-CIB Securitization LAB. Vincent was a founding member of SFIG (US Securitization Association) and was a member of its Chinese Committee. Prior to working at Credit Agricole, Vincent was a founding partner of Strategic Risk Solutions (SRS) a Bermudian reinsurance company formed in 2000 that was majority owned by Credit Suisse Group and focused on Alternative Risk Transfer (ART). He sold the firm to CA-CIB in 2002.

Vincent started his career as a rugby player in France before joining Arthur Andersen as an analyst focusing on M&A and restructuring projects for the French defense Industry and large French construction businesses. After that, Vincent held various positions within AXA, from leading M&A projects in the Insurance field to running Technical Risks and ART for AXA Global Risks, the AXA Group entity dedicated to providing insurance to large corporates.

Vincent currently serves on the boards of Tinubu, an enterprise software business for specialty lines insurance, and Skaleet, a SaaS provider of a next-gen core banking system, both LAC portfolio companies. Vincent holds a Business Degree from HEC in Paris.





Sang Gupta Partner

Sang Gupta is a Partner of Long Arc Capital and Head of Business Development.

Prior to joining Long Arc, Sang was a Managing Director at CLSA, a subsidiary of Credit Agricole CIB (CA-CIB), where he was a senior member of the Asian Equities Distribution team, which was consistently a Top Ranked Institutional Investor (II) platform. While at CLSA, he was responsible for the coverage of sovereign wealth funds, pension plans, family offices, hedge funds, private equity funds and asset managers, advising them on public & private investments throughout Asia. He was instrumental in sourcing and distributing over \$1.5B of secondary and private capital. He also focused on the consumer internet space in India, including advising companies such as Saavn, Zomato and InfoEdge on strategic initiatives ranging from capital raising to advising portfolio companies and synergistic acquisitions. Sang started his career at UBS and worked in a number of areas including Asian Equities, Derivatives Trading and Risk Control.

Sang is a founding member of Ashoka University, the first private, nonprofit university focused on a multidisciplinary liberal education in India.

Sang has a B.S. from the University of South Carolina.



Kipp Nelson Partner

Kipp Nelson is a Partner and President of Long Arc Capital.

Prior to joining Long Arc, Kipp was a Partner at Goldman Sachs in London where he was the Co-Head of the European Derivatives Business. He also worked in Hong Kong, where he co-headed the Fixed Income Division in Asia and co-managed Goldman's Asia Distressed Debt Fund. He began his finance career at The First National Bank of Chicago where he was a Vice President and was a Director of Credit Suisse First Boston in London. Kipp was also a founding Partner in Flashlight Films, an investment fund which focuses on developing scripts and producing motion pictures and television series. Most recently, Flashlight Films produced the critically acclaimed and commercially successful films, "Trial by Fire" and "Sully."

Kipp is the Chairman of U.S. Ski & Snowboard, the National Governing Body (NGB) of snow sports in America. In addition, he serves as Chairman of the Board of Concertiv, a procurement and spend management services platform and also serves on the Boards of Robertson Stephens, a wealth management business and Skaleet, a SaaS provider of a next-gen core banking system (all LAC portfolio companies).

Kipp graduated with a B.S. in Finance and an Economics minor from the University of Colorado where he competed on two NCAA Championships Ski Teams.



Tobin WhamondPartner

Tobin Whamond is a Partner of Long Arc Capital and Head of North American Investments.

Prior to joining Long Arc, Tobin was a Managing Director at Goldman Sachs, where he was a senior member of Goldman Sachs Investment Partners, a multi-strategy investment fund, focusing on private equity investments. He was a member of the Investment Committee and served as a Director of a number of Goldman invested portfolio companies. Prior to that, Tobin was a Co-Founding Principal of InsVest, LP, which acquired Southern Vanguard Insurance Co. and Republic Home Protectors, LLC from The Republic Group. He also served as Executive Vice President of HCC Insurance Holdings, Inc., including as Treasurer, Chief Financial Officer, and ultimately Chief Operating Officer. For the 20 years prior thereto, Tobin was an investment banker completing over \$30B of mergers and acquisitions and capital raising, including at Goldman Sachs and Wachovia Capital Markets LLC / Wells Fargo, where he served as Managing Director and Head of Financial Institutions M&A.

Tobin currently serves on the Boards of Agile, a provider of a cloud-based, SaaS software solution for engineering services firms; CircleBlack, an enterprise software business for financial advisors; Renaissance Alliance, an insurance distribution platform for independent agents; Robertson Stephens, a wealth management business; and Tinubu, an enterprise software business for specialty lines insurance (all LAC portfolio companies).

Tobin graduated with a B.S.B.A in Finance and an International Management minor from Georgetown University.





Jasprit Chana is a Managing Director of Long Arc Capital, based in London.

Prior to joining Long Arc, Jasprit was the Head of Alternative Capital Markets in EMEA for Goldman Sachs. Jasprit spent over 10 years with Goldman, initially in the Hedge Fund Strategies team and later in Alternative Capital Markets, which focuses on raising alternative assets across hedge funds, private equity, private debt, real estate and infrastructure. Jasprit worked on individual co-investments, Goldman Sachs' proprietary funds and with external managers. Jasprit also headed the EMEA Private Equity Secondary matching services. Jasprit started his career at Convertible Quantitative Strategies (CQS), a hedge fund based in London. He worked within the leveraged bank loan trading and collateralized loan obligation team, focusing on European senior secured, mezzanine and capital structure arbitrage strategies.

Jasprit is also a Trustee of Action4Youth, a charity seeking to inspire young people from disadvantaged backgrounds in the U.K.

Jasprit graduated with a B.Sc. in Economics from University College London and is a CFA Charter holder.



Robert Heathcote is a Managing Director of Long Arc Capital, based in London.

Prior to joining Long Arc, Robert was a Managing Director at UBS Investment Bank where he was Chief Advisor to the CEO. Previously, he was a Managing Director at Goldman Sachs where he held a variety of roles including European Head both of Derivatives Structuring and Credit Derivatives. Robert began his career at CSFB/Credit Suisse Financial Products in structuring and trading. Robert has over 30 years of experience in Finance.

Robert currently serves of the Board of Skaleet, a SaaS provider of a next-gen core banking system, and a Long Arc portfolio company.

Robert earned an MA (Oxon) in Engineering Science from the University of Oxford.



Frederic Garnier is a Managing Director and the Chief Financial Officer of Long Arc Capital.

Prior to joining Long Arc, Frederic was a Managing Director at Tishman Speyer where he was responsible for portfolio management and financing for the emerging markets real estate funds. Prior to that, Frederic worked for nine years at Morgan Stanley in the private equity / real estate group in London, Paris and New York, focusing on financing, tax structuring and risk management. He started his career as a financial auditor for PricewaterhouseCoopers in the banking division.

Frederic earned a Post Graduate Degree in Audit, Finance and Accounting from University Paris IX Dauphine, France.



Arshad Sayyad is a Managing Director of Long Arc Capital, based in India.

Prior to joining Long Arc, Arshad was President and Head of Fidelity Investments India where he led the Enterprise Technology units focused on the acceleration of the Digital transformation. He was on the Board of COLT DCS, building India's largest hyper scale cloud data centers. Arshad has over two decades of experience as an operating leader, advising and delivering on large scale transformational programs leveraging global sourcing models for Fortune 1000 companies. Prior to Fidelity Arshad was the Managing Director for Accenture wherein he led the design, build out and delivery of digital transformation programs across functions like Operations, Cybersecurity and Technology. Arshad joined Accenture after a successful seventeen-year stint in the Americas in various leadership roles at consulting firms Wipro, Cap Gemini, and Cognizant. He was the founder and CEO of SDI Technologies recognized by the Pittsburgh Technology council as the fastest growing boutique eBusiness startup in the tristate area.

Arshad received his MBA from Carnegie Mellon University, Tepper School of Business, and an Engineering Degree in Computer Science from Bombay University.





Matthew Barbas is a Principal at Long Arc Capital.

Prior to joining Long Arc, Matthew was a Vice President at North Star Investor Group where he was responsible for healthcare investments. Previously, he worked as an Investment Analyst at Adakin Capital, a Senior Private Equity Analyst at Audax Group and a Management Consultant at Oliver Wyman where he made investments and assisted in management operations of companies in the retail, healthcare, business services and oil & gas spaces.

Matthew currently serves on the Boards of Agile, a provider of a cloud-based, SaaS software solution for engineering services firms, and Renaissance Alliance, an insurance distribution platform for independent agents (both LAC portfolio companies).

Matthew earned a B.S. in Economics and U.S. History from Northwestern University and an M.B.A. from the Wharton School of Business, University of Pennsylvania.



Kate Kelberg is a Principal and the Chief Operating Officer of Long Arc Capital.

Prior to joining Long Arc, Kate was a Vice President at BlackRock where she was a Product Strategist responsible for investor relations and fundraising of BlackRock's event driven hedge fund. Kate began her career at Goldman Sachs where she spent five years focusing on investor relations, fundraising, client portfolio solutions, and product management for various alternative funds across the firm, including the Alternative Investments & Manager Selection (AIMS) Group's private equity business and Goldman Sachs Investment Partners' private equity platform.

Kate earned a B.A. in International Studies and a History minor from Johns Hopkins University where she graduated with university and departmental honors.



Martin Della Chiesa is a Vice President at Long Arc Capital.

Prior to joining Long Arc, Martin was a Manager at Accuracy, a management consulting firm, in their Paris office, where he conducted Strategy and Corporate Finance assignments for Financial Institutions and FinTech clients. He was also responsible for the Blockchain activities of the firm and is the co-author of the book, *Blockchain-The Key to Unlocking the Value Chain* (2018). Previously, Martin worked as a Deputy Manager at BPCE/Natixis Group's Inspection Générale Department, where he conducted audits and business reviews, and as a Junior Relationship Manager at Natixis. Martin also teaches at Sciences Po Paris and Paris Dauphine University.

He holds a master's degree in Economics & Business and a M.Sc. in Corporate and Market Finance from Sciences Po Strasbourg, France. He also studied Political Science at the Freie Universität Berlin, Germany.



Evan Cooney is a Vice President at Long Arc Capital.

Prior to joining Long Arc, Evan was a Project Leader at the Boston Consulting Group (BCG) where he was a member of the Private Equity and TMT practices, focusing on commercial diligence, growth strategy, and operational improvement assignments. Previously, he was a member of the investment team at Voyager Capital, an enterprise software-focused VC firm, and the Corporate Development team at Motricity, a publicly traded technology company, where he made investments in software and technology-enabled businesses. He began his career as an Analyst at Duff & Phelps, a transaction advisory firm.

Evan holds a B.A. in Business & Finance from Seattle Pacific University and an M.B.A. from the Kellogg School of Management at Northwestern University, and is a CFA Charterholder.





Shruti Kumar is an Associate at Long Arc Capital.

Prior to joining Long Arc, Shruti was an Associate at GlossGenius, a B2B software company in New York. While at GlossGenius, Shruti was responsible for various special projects, including the launch of the company's first PoS hardware device. Shruti was also involved in the company's Series A fundraise. Previously, Shruti was an Analyst at Citigroup in the Technology Investment Banking Group.

Shruti holds a B.S. in Finance from New York University.



Sami Petros is an Associate at Long Arc Capital.

Prior to joining Long Arc, Sami was an Associate at TAP Advisors, a boutique strategic and corporate finance advisory investment banking firm headquartered in New York. While at TAP Advisors, Sami worked on mergers and acquisitions engagements in the telecom, technology, fintech, and consumer space. Sami began his career as an Analyst at TAP Advisors.

Sami holds a B.Sc. in Economics from the Wharton School and a B.A. in International Studies from the College of Arts and Sciences at the University of Pennsylvania.



Freddie Lawlor is an Analyst at Long Arc Capital.

Prior to joining Long Arc, Freddie taught Maths and Science at Brandon Learning Centre, a tutoring agency based in Hong Kong. While there, he created a Critical Thinking course for students applying to top U.K. secondary schools. He also assisted in the creation of a new online testing and tutoring program tailored towards the UK 11+ exam.

Freddie graduated with a B.A. in Philosophy from the University of Cambridge. He recently passed the CFA Level 1 exam.

Advisory Board Biographies

Michael Boskin is the Tully M. Friedman Professor of Economics and Senior Fellow of the Hoover Institution at Stanford University. Additionally, He is the CEO and President of Boskin & Co., an economic consulting company, and a Research Associate for the National Bureau of Economic Research. Michael has been a constant fixture in the economics department at Stanford since joining the faculty in 1971, impacting the education of tens of thousands of students over the past 50 years. He has also been a visiting professor and scholar at Harvard, Yale, and the University of California.

Michael is a frequent advisor to governments and businesses globally and serves on several corporate and philanthropic boards of directors, including Oracle Corporation, Bloom Energy Corporation, Koret Foundation, and the Commerce Department's Advisory Committee on the National Income and Product Accounts. He previously served on the boards of Exxon Mobil Corporation, Shinsei Bank, Vodafone PLC, and as the Chairman of the President's Council of Economic Advisers (under President George H.W. Bush). He has published over 150 books and articles and is frequently sought out as a public speaker on the economic outlook and evolving trends significant to business, national and international economic policy, and the intersection of economics and geopolitics. Michael has received numerous professional awards and citations over his academic career, including receiving the 1998 NABE Adam Smith Prize for outstanding contributions to economics. Michael chaired the highly influential blue-ribbon Commission on the Consumer Price Index, whose report has transformed the way government statistical agencies around the world measure inflation, GDP, and productivity.

Michael received his B.A. with highest honors and the Chancellor's Award as outstanding undergraduate in 1967 from the University of California at Berkeley, where he also received his M.A. in 1968 and his Ph.D. in 1971, all in economics. He is a member of Phi Beta Kappa.

Hans-Paul Bürkner is Chairman Emeritus of The Boston Consulting Group. He was previously President and Chief Executive from 2003 to 2012. He joined BCG in 1981 and was a member of the teams that opened BCG's Düsseldorf (1982) and Frankfurt (1991) offices. Before becoming the firm's CEO, he was head of BCG's global Financial Services practice, Chair of the Practice Areas, and a member of the Executive Committee.

As CEO, Hans-Paul has driven BCG's expansion by geography, industries and functions. Among others, he has established the Social Impact Initiative and the Public Sector Practice. The Social Impact Initiative supports WFP, The Gates Foundation, Save the Children, Teach for All, WWF, and the Yunus Foundation, besides hundreds of local NGOs. Through the Public Sector Practice, BCG supports governments in addressing critical issues in education, employment, social welfare, taxation, etc.

He has counted among his clients many of the world's leading companies and public entities during his more than 30 years at BCG. He has worked with them to redefine their strategies and organizations, spearheaded major global expansion initiatives, and supported them in the fundamental restructuring of their businesses.

Hans-Paul studied economics, business administration, and Chinese, receiving a Diploma from the University of Bochum, an MA from Yale University, and a DPhil from the University of Oxford, where he was a Rhodes Scholar.

Today, he retains offices in Bangkok, Beijing, Frankfurt, Jakarta, Moscow and Mumbai. Besides his extensive travel to the countries where BCG operates in order to support key clients and teams, he is strongly engaged in global and regional conferences such as the World Economic Forum events in Europe, Asia and Africa, and the China Development and Boao Asian Forums. Hans-Paul is also Chair of the Centre for Public Impact, a new global not-for-profit BCG foundation that connects governments and their partners around the world to share and develop ideas that result in better outcomes for citizens. As the co-chair for various taskforces of the B20, he moderates a multitude of public and private institutions to provide input for the G20 leaders meeting.

Pete Briger is Co-Chief Executive Officer of Fortress Investment Group and an Advisory Partner of Long Arc Capital. Pete is responsible for the Credit and Real Estate business at Fortress where he has been a member of the Management Committee since 2002 and a member of the board of directors since November 2006.

Prior to joining Fortress, Pete spent fifteen years at Goldman, Sachs & Co., where he became a partner in 1996. He is a member of the Council on Foreign Relations and serves on the board of several charitable organizations including the UCSF Foundation, Tipping Point and Caliber Schools.

Pete received a B.A. from Princeton University and an M.B.A. from the Wharton School of Business at the University of Pennsylvania.



Advisory Board Biographies (continued)

Carsten Kengeter is currently Chairman, Partner and Co-Founder of Circuitus Capital, an asset management firm focused on private equity in infrastructure across Europe and Latam. Carsten is a senior business leader with three decades of experience growing and transforming businesses in investment banking, asset management and market infrastructure globally. He was CEO of Deutsche Boerse Group in Frankfurt, and before that Chairman and CEO of UBS Investment Bank, Member of the UBS Group Executive Board, Group ALCO, Board of Director's Risk & Audit Committee, Chair of the UBS IB Risk Committee and Head of Non-Core and Legacy. Before moving to UBS, Carsten was Partner at Goldman Sachs and Co-Head of the Securities Division Asia (ex-Japan). Over his time at Goldman he was Co-Head Emerging Markets, Co-Head European Securities Division Sales, Head of European and Asian CDO Business and Head FICC Germany and Austria. He started his career in credit derivatives trading at Barclays De Zoete Wedd. Carsten has also been Non-Executive Director of the Board at FNZ (UK) Ltd, Board member of CEINEX AG, Visiting Professor in the Department of Finance at the London School of Economics (LSE), and he continues to be Advisory Board member of the Financial Markets Group & Systemic Risk Centre at the LSE.

Carsten holds an MSc in Finance and Accounting from the London School of Economics, a BA (Honours) from Middlesex University in the UK and a Diplom-Betriebswirt from the University of Reutlingen in Germany.

Stephen Poss is a former Senior Partner at Goodwin Procter LLP, a 1,200-lawyer global law firm, where he served as Chair and Co-Chair of Goodwin's Securities Litigation and SEC Enforcement Practice. He was also a key member of the firm's Private Equity, Tech/Life Sciences, Financial Services, and Real Estate Capital Markets/REITs practices. Steve represented clients ranging from the leading global investment banks, Fortune 50 technology, consumer, energy, media and pharmaceutical companies, and leading real estate investment firms, to middle market growth private equity firms and their portfolio companies. He represented clients in connection with more than \$175 billion in M&A and private equity transactions and participated in some of the most significant corporate governance cases in the Delaware Chancery Court. Steve retired from Goodwin in 2018 after more than 35 years of big-firm law practice, first at Cravath, Swaine & Moore and subsequently at Goodwin.

Steve is a former Co-Chair of the Securities Litigation Subcommittee of the American Bar Association Section of Business Law and a former Vice Chairperson of the Massachusetts Bar Association Business Litigation Committee. While at Goodwin, Steve lectured extensively across the United States, as well as in France and the UK, on securities, corporate governance, and transactional issues for organizations such as the American Bar Association, NASDAQ, the American Institute of Certified Public Accountants (AICPA), The SEC Institute, Inc., and The Law Society of England and Wales. He has trained numerous investment professionals at private equity firms on how to be more effective members of the boards of directors of their portfolio companies.

Steve was selected by Chambers and Partners to appear in its research-based guide, Chambers USA: America's Leading Business Lawyers, for 16 consecutive years starting with Chambers' first year of publication in the US, being ranked as a leading business lawyer in both Securities Litigation and General Commercial Litigation. Boston Magazine repeatedly named Mr. Poss a Massachusetts "Super Lawyer" based on peer-review surveys. He has been recognized in U.S. News–Best Lawyers, The Best Lawyers in America, The Legal 500 U.S., and honored with Martindale Hubbell's highest possible rating of "AV® Preeminent™" in both legal ability and ethical standards for more than 20 consecutive years. He received a First Prize for "Global Dispute of the Year - - U.S. Financial Litigation" at the 2014 annual American Lawyer Global Legal awards.

Steve received his B.A. magna cum laude from Amherst College and his J.D. from The University of Chicago Law School.



Advisory Board Biographies (continued)

Jeffrey Rayport is a faculty member in the Entrepreneurial Management Unit at Harvard Business School.

Previously, Jeffrey was an Operating Partner at Castanea Partners, a private equity firm specializing in retail and consumer brands and digital marketing services. He was also a Senior Partner of Monitor Deloitte, where he was founder of the Marketspace digital strategy and advisory practice, and a cofounder of an executive development and e-learning business.

Earlier in his career, Jeffrey taught at HBS for nearly a decade in Marketing and Service Management. He developed the school's first e-commerce course, coined the term "viral marketing," and was elected Outstanding Professor for three consecutive years by the School's MBA students.

He has served as a director of public and private corporations including Agency.com (ACOM), Andrews McMeel Universal, Be Free (BFRE), CBS Market Watch (MKTW), Conversant (CNVR), GSI Commerce (GSIC), Hanley Wood, iCrossing, International Data Group, Linkwell Communications, MediaMath, Monster Worldwide (MWW), Nectar, Receptiv, and Shoprunner.

Jeffrey earned an A.B. from Harvard College, an M.Phil. in International Relations from the University of Cambridge (U.K.) and an A.M. and Ph.D. in Business History from Harvard University.

Yves de Talhouët currently serves on four boards (Devoteam, Tinubu, Twenga, Axway) and is, since 2014, Executive Chairman of Faiencerie de Gien, a famous deluxe earthenware French company, 200 years old, selling across the globe tableware and decorative objects. Previously, Yves de Talhouët was Managing Director of HP EMEA where he oversaw all HP activities in EMEA and had operational responsibility for all Global Accounts. Yves joined HP in October 2006 when he was appointed Managing Director of HP in France. In this role his priorities have been to provide leadership for HP in France whilst driving growth. As leader of the Enterprise Division, he managed the enterprise storage and systems, software and services businesses, including sales and marketing to enterprise and public sector customers. He has led France to record growth (best subsidiary of the year in 2009) and has concluded the biggest outsourcing contract ever signed by HP France.

Before joining HP, Yves was Chief Executive Officer of Oracle France. He supervised several key projects including the merger of Oracle and Peoplesoft in France, the reorganization of the company's sales segmentation and lobbying of the French government. Before his appointment at Oracle, Yves worked for SEMA in the service industry then SchlumbergerSema, and was also the Founder and President of Devotech, a company which provided consulting services to the telecommunications industry and integration services to call centers. He also co-Founded Devoteam and served as its first executive chairman. Yves has also worked as a project manager officer at the World Bank in Washington.

He was educated at the Ecole Polytechnique, the Ecole Nationale Supérieure des Télécommunications and the Institut des Sciences Politiques de Paris.



Operating Advisor Biographies

Raj Bhattacharyya is the CEO of Robertson Stephens where he is also a Board member.

Raj spent 17 years at Deutsche Bank, in both New York and London, in various senior roles. Most recently, he was the head of the Foreign Exchange Franchise in the Americas, as well as the head of the Emerging Markets business in the Americas. Previously, while based in London, he ran Capital Markets and Treasury Solutions for Western Europe, which covered all European corporations and financial institutions for their financing, risk management and treasury needs. Prior to that, he ran Debt Capital Markets and Corporate Risk Solutions in North America. Raj also spent 5 years at Merrill Lynch in derivatives, and 3 years at Goldman Sachs in Quantitative Research. Raj is also an active investor and mentor to early-stage companies, primarily in the financial technology space.

In addition to Robertson Stephens, Raj serves on the Board of Directors of Strive for College, a non-profit which connects aspiring college students with free, one-on-one, online mentoring through the entire college admissions and financial aid application process. He also sits on the Dean's Advisory Council at the School of Engineering and Applied Sciences at Harvard University.

Raj earned his BA in Computer Science and Engineering from Harvard University.

Kevin Callahan is the Executive Chairman of Renaissance Alliance.

Before joining Renaissance Alliance, Kevin served on the Operating Committee at Marsh, Inc. as Head of Global Sales for the Risk Solutions and Specialty Market business segment. He also worked as a Business Partner with Accenture in the Management Consulting group, focusing on the Insurance Industry. Prior to that, Kevin held the position of CEO of several Insurance Industry companies, including Affirmative Insurance Holdings, Inc., a company providing personal auto insurance in the non-standard customer segment and operating over 250 agencies in ten states and Allianz Global Risks US Insurance Holdings, Inc. Kevin began his career with The First National Bank of Chicago, worked at Goldman Sachs for nine years where he led the derivatives business, established Goldman's presence in the insurance-linked securities business and developed their reinsurance capabilities. After that, Kevin was a senior executive with Aon Corp., establishing Aon Capital Markets and Aon Financial Products, working closely with Aon Re Worldwide and helping transform Aon's U.S. retail brokerage business in 2001-2002.

Kevin graduated from the University of Notre Dame with a Bachelor's degree in Business Administration majoring in Finance and Philosophy.

Marc Dupaquier is a French-American business Angel with a specific focus on B2B Artificial Intelligence Software companies.

Marc is an investor in three Al companies, including Cartesiam, the Global Leader of Artificial Intelligence at the Edge (Machine Learning running on Microcontrollers). Additionally, he has recently taken executive responsibility as the Managing Director for Cartesiam overseeing US development and relations with VCs and strategic Partners.

Prior to his current role, Marc was a Senior Executive with IBM where he was part of the IBM PT (Top 50 Senior Executives) for 8 years and IBM IVT (Top 300 Executives) for 17 years. During his tenure at IBM he led multi Billion \$ businesses including the \$13B Business Partner Group, the iconic AS/400 & Mid Market Divisions and headed Marketing and Strategy for the Hardware and Software Groups. During his role as Head of Marketing and Strategy for the Hardware and Software Group, Marc led a Team that executed 12 acquisitions and oversaw the "post Jeopardy" launch of the IBM Watson Al Business Unit.

Curtis Gardner is a founding principal of Jackson Square Properties, LLC, a private real estate investment company founded in 2004. Jackson Square (through affiliated entities) owns and operates 19,000 apartment homes in the western United States. With over 34 years in the multifamily industry, Curtis is a recognized leader. He worked first as a broker specializing in the sale of institutional quality apartment properties, where he was consistently ranked as a top producer, and then as a principal acquiring multifamily properties for his own portfolio. He was a Partner at Arroyo and Coates, Inc., and then owned the California franchise of Apartment Reality Advisors (ARA). ARA was sold to Newmark in 2016 and Curtis remains a shareholder in NMRK. Curtis currently serves on the Board of Big Brothers Big Sisters of the Bay Area and the First Tee of San Francisco.

Curtis graduated from the University of Utah with a degree in Political Science.



Operating Advisor Biographies (continued)

Priya lyer is the CEO of Concertiv, Inc. With over 25 years of diverse international experience in nearly every facet of software, Priya is a proven, high-growth entrepreneurial CEO with a leadership philosophy centered on engaging clients and employees to build industry leading SaaS software platforms and delivering exceptional stakeholder value.

Her demonstrated success in developing and scaling a strong entrepreneurial and innovative culture, attracting and retaining top talent, cultivating a sense of ownership throughout the organization, and leading successful teams has earned her many recognitions. Priya was awarded New England Entrepreneur of the Year in 2014; ranked on the 2015 top 100 Entrepreneur list by the Boston Globe and was awarded The Top Women Leaders in SaaS 2018 by TSR (The SaaS Report) and named "Top 3 highly accomplished Women CEOs in SaaS" for 2019.

Prior to Concertiv, Priya was most recently Chairman & CEO of Vee24 which she drove to 100% year-on-year growth and 40% net margins. Prior to that, Priya was Chairman & CEO of Anaqua, Inc. which she founded in 2004 and grew into a global SaaS solutions provider for Intellectual Asset Management. Prior to Anaqua, Priya headed Operations at Steelpoint Technologies, a legal software provider for Fortune 500 companies and global law firms, where she drove the company from the red to profitable quarter-after-quarter growth. Prior to Steelpoint, Priya was Managing Partner at AGENCY.COM where she founded and grew a financial services practice to \$250 million in less than 5 years. Priya has also held senior positions at Bell Labs and Foxboro Systems.

Priya holds a bachelors and masters in Computer Science and an MBA from the Sloan Fellows program at MIT Sloan.

Peter Ort is a General Partner at Cambium Capital, a venture capital firm focused on early stage investments in advanced computing companies such as IonQ, Groq, and SeeQC. He is a member of the board or advisory board of Concord Acquisition Corp (NYSE: CND), MapText, Smartleaf, Ample, Redrock Biometrics, and Princeton NuEnergy. Pete is a co-founder of CurAlea Associates, an award-winning firm providing risk software and advisory solutions to hedge funds. Pete is also a Venture Partner at Nor'easter Ventures and an Operating Advisor at Long Arc Capital.

Pete was previously a Managing Director at Karsch Capital, and was a Managing Director at Goldman Sachs, where he was co-head of the Hedge Fund Strategies Group and worked in the firm's Private Equity Group and Financial Institutions Group in New York and Tokyo. Pete graduated from Duke University, obtained J.D. and M.B.A. degrees from New York University, and is a member of the New York and New Jersey State Bars. He was a Fulbright Scholar in Japan, and is Treasurer of the Fulbright Association's New Jersey Chapter.



Important Information

An investment in Long Arc Capital Fund I or any of its related funds (collectively referred to as the "Fund") is speculative and includes a high degree of risk, including the risk of a total loss of capital. The Fund is illiquid, subject to significant restrictions on transfer and investors should be aware that they may be required to bear the risks associated with holding such investment for an indefinite period of time.

The information contained in this presentation (this "Presentation") is not, and may not be relied on in any manner as an offer to sell or a solicitation of an offer to buy an interest in the Fund. A private offering of interests in the Fund will only be made pursuant to a confidential private placement memorandum (the "Offering Memorandum") and the Fund's subscription documents, which will be furnished to qualified investors on a confidential basis at their request for their consideration in connection with such offering. The information contained herein will be qualified in its entirety by reference to the Offering Memorandum, which contains additional information about the investment objectives, terms and conditions of an investment in the Fund and contains tax information and risk disclosures that are important to any investment decision regarding the Fund. No person has been authorized to make any statement concerning the Fund other than as set forth in the Offering Memorandum, and any such statements, if made, may not be relied upon. No sale of Fund interests will be made in any jurisdiction in which the offer, solicitation, or sales is not authorized or to any person to whom it is unlawful to make the offer, solicitation or sale. If any such offer of Fund interests is made, it will be made pursuant to the current Offering Memorandum that contain material information not contained herein and to which prospective investors will be referred. Any decision to invest in the Fund should be made solely on relying upon the Offering Memorandum of the Fund.

This material has not been approved by the SEC, FINRA, or any other regulatory authority or securities. This presentation is for informational and discussion purposes only and is not, and may not be relied upon as investment, legal, tax or financial advice. The Reader must consult with his or her independent professional advisors as to the legal, tax, financial or other matters relevant to the suitability of an investment in the Fund.

Any reference herein to any security and/or a particular issuer shall not constitute a recommendation to buy or sell, offer to buy, offer to sell, or solicitation of an offer to buy or sell any such securities issued by such issuer.

None of the interests of the Fund has been or will be registered under the United States Securities Act of 1933, as amended, ("33 Act") and the interests of the Fund may not be offered or sold, directly or indirectly, in the United States or to any U.S. Person, as such terms are defined in the Confidential Memorandum, without an applicable exemption from registration under the 33 Act. The Fund has not been registered in the United Sates Investment Company Act of 1940, as amended. Neither the United States Securities and Exchange Commission, nor any state securities administration has passed on, or endorsed, the merits of the Fund. Any representation to the contrary is unlawful.

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Intended for San Joaquin County Employees' Retirement Association

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This presentation does not constitute and should not be construed as investment, legal or tax advice, or a recommendation or opinion regarding the merits of investing in the Fund. Each potential investor should consult its own counsel, accountant or investment adviser as to the legal, tax and related matters concerning its investment. A potential investor considering an investment in the Fund should read this presentation in conjunction with the PPM. The PPM contains a more complete description of the Fund's investment strategy, practices, terms and conditions, restrictions, risks and other factors relevant to a decision to invest in the Fund, and also contains tax information and risk disclosures that are important to any investment decision. All information herein is subject to and qualified in its entirety by the PPM. No person has been authorized to make any statement concerning the Fund other than as set forth in the PPM and any such statements, if made, may not be relied upon. The date of the information is indicated herein, and Oaktree (as defined below) has no duty to update such information.

Responses to any inquiry that may involve the rendering of personalized investment advice or effecting or attempting to effect transactions in securities will not be made absent compliance with applicable laws or regulations (including broker dealer, investment adviser or applicable agent or representative registration requirements), or applicable exemptions or exclusions therefrom.

The term "Oaktree®" used herein refers to Oaktree Capital Management, L.P.™ or its affiliates, individually or collectively, as the context requires. Terms used but not defined herein shall have the meanings set forth in the PPM.

None of the information contained herein has been filed with the U.S. Securities and Exchange Commission, any securities administrator under any state securities laws or any other U.S. or non-U.S. governmental or self-regulatory authority. No governmental authority has passed on the merits of any offering of interests in the Fund or the adequacy of the information contained herein. Any representation to the contrary is unlawful.

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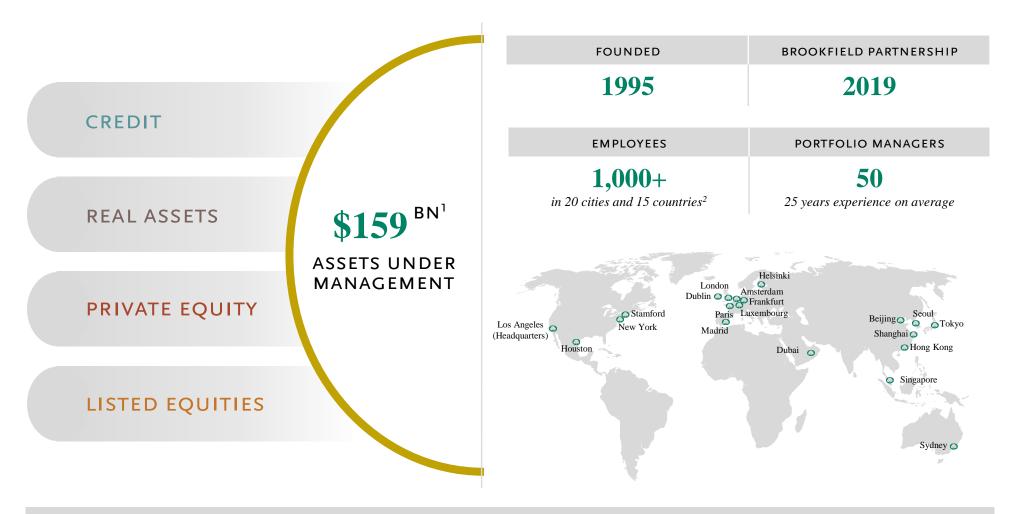
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1 | Oaktree Overview



Leading Global Alternative Asset Manager



Oaktree employs a contrarian, value-oriented and risk-controlled approach to investing and offers a comprehensive global platform of alternative investment products.

Oaktree's Unifying Investment Philosophy

Oaktree's mission is to deliver superior investment results with risk under control and to conduct our business with the highest integrity.

PRIMACY OF RISK CONTROL

"If we avoid the losers, the winners take care of themselves"

EMPHASIS ON CONSISTENCY

A superior record is best built on a high batting average rather than the hope that great years will outweigh dismal ones

IMPORTANCE OF MARKET INEFFICIENCY

It is only in less-efficient markets that hard work and skill are likely to produce superior returns

BENEFITS OF SPECIALIZATION

Our team members' experience and expertise give us a substantial advantage

MACRO-FORECASTING NOT CRITICAL TO INVESTING

Superior knowledge of companies and their securities is the best foundation for consistently excellent performance

DISAVOWAL OF MARKET TIMING

The ability to correctly time markets is limited at best; we are fully invested whenever we can find attractive investments



2 | The Special Situations Strategy



Overview of Oaktree Special Situations

KEY OBJECTIVES

- Make control-oriented equity and debt investments in middle-market companies
- Execute **flexible mandate** through three types of investment:
 - Structured Equity
 - Direct Equity
 - Distressed Debt
- Exploit idiosyncratic situations
- Target private equity returns while taking credit-like risk



- Complex situations in which companies can't access traditional capital sources
- Structured growth equity, rescue lending and value-oriented acquisitions
 - Businesses that need **near-term support** but could disproportionally benefit from the current economic recovery
 - Situations arising from the record-high amount of low-rated debt outstanding in North America



Capital Invested² \$4.9bn

Expertise

Team Size

30

Equity

Credit and Private

PURPOSE-BUILT TEAM

SET

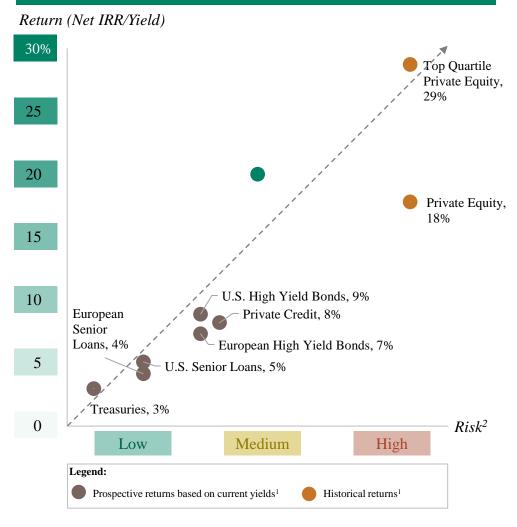
- Led by Matt Wilson and Jordon Kruse since 2014 (worked together since 2007)
- Average 20 years of industry experience¹
- Skilled in complex deal structuring
- Benefit from in-house Portfolio Transformation Team (operational and consulting experts)
- Utilize dedicated Oaktree sourcing group and proprietary trading platform



No. of Core Investments³ 31

Asset Class Risk/Return Profile

ASSET CLASS RISK/RETURN PROFILE1



KEY CHARACTERISTICS

- Seek investments where we can gain control or significant influence and secure meaningful downside protection
- Target special situations in all environments
- Offer additional alpha to credit portfolios
- Exploit market dislocations by going "all-in"
- Diversify LPs' credit or private equity portfolios
- Right-size AUM for the opportunity set

As of June 30, 2022, unless otherwise noted

Flexible Approach: Three Arrows in the Quiver

STRUCTURED EQUITY

- Provide tailored, structured solutions to growth and stressed companies
- Offer operational capabilities that traditional lenders do not possess
 - Professionalization resources to help growth companies reach potential
 - Strategic and operational skills to support stressed companies and resolve issues

VIEW OF CURRENT OPPORTUNITY SET



REPRESENTATIVE INVESTMENTS¹





DIRECT EQUITY

- Seek to purchase entire companies at bargain prices
- Establish platforms to buy assets in partnership with experienced management teams
- Focus on niche opportunities, misunderstood assets or industry-specific dislocation

VIEW OF CURRENT OPPORTUNITY SET



REPRESENTATIVE INVESTMENTS¹

WHPGLOBAL



DISTRESSED DEBT

- Capitalize on situational distress that can arise in any market environment
- Buy large blocks of relatively illiquid secondarymarket debt
- Target the debt class that will likely receive equity in a restructuring (i.e., the "fulcrum")
- Obtain a blocking (≥33% of class) or control position (≥66%)

VIEW OF CURRENT OPPORTUNITY SET



REPRESENTATIVE INVESTMENTS¹



Toehold Debt Investments

Special Situations Group

COHESIVE LEADERSHIP

PMs have worked together for 15 years

PURPOSE-BUILT TEAM

25 investment professionals and 5 in-house PTT professionals

CONNECTED GROUP

Investment committee / portfolio review meetings three times per week

SIGNIFICANT EXPERIENCE

20 years on average²

PORTFOLIO MANAGEMENT

Jordon Kruse

Managing Director & Co-Portfolio Manager Experience: 24 years Years at Oaktree: 21

Matt Wilson

Managing Director & Co-Portfolio Manager Experience: 25 years Years at Oaktree: 15

SOURCING AND PORTFOLIO TRANSFORMATION TEAM (PTT) INVESTMENT PROFESSIONALS ORIGINATION 1 (S&O) U.S. **AUSTRALIA** U.S. Milwood Hobbs, Jr. Managing Director & Head of North American S&O Tom Casarella Dave Ouick Colin Smith Zach Serebrenik Experience: 26 years Byron Beath Bala Ganesan Managing Director & Managing Director & Managing Director & Managing Director & Years at Oaktree: 9 Assistant Portfolio Manager Assistant Portfolio Manager Managing Director Head of PTT Managing Director Assistant Portfolio Manager Experience: 23 years Experience: 20 years Experience: 20 years Experience: 21 years Experience: 17 years Experience: 19 years Peter Corbell Years at Oaktree: 18 Years at Oaktree: 14 Years at Oaktree: 6 Years at Oaktree: 9 Years at Oaktree: 5 Years at Oaktree: 10 Managing Director Experience: 28 years Rich Goldstein Years at Oaktree: 9 Jared Frandle Matt Kupersmith Jarrad Solomons Dror Karidi Eric Gons Managing Director & Senior Vice President Managing Director Managing Director Managing Director Managing Director Head of Capital Markets Eric Johnson Experience: 20 years Experience: 15 years Experience: 22 years Experience: 17 years Experience: 19 years Experience: 33 years Managing Director Years at Oaktree: 3 Years at Oaktree: 6 Years at Oaktree: 4 Years at Oaktree: 3 Years at Oaktree: 4 Years at Oaktree: 27 Experience: 26 years Years at Oaktree: 5 Alexander Pickford Amy Rice Dave Smolens Gabe Diaz Kevin Meme Managing Director Senior Vice President Vice President Senior Vice President Senior Vice President David Matherly Experience: 20 years Experience: 9 years Experience: 10 years Experience: 11 years Experience: 13 years Managing Director Years at Oaktree: 13 Years at Oaktree: 3 Years at Oaktree: 2 Years at Oaktree: <1 Years at Oaktree: 2 Experience: 28 years Years at Oaktree: 2 Charlie Hauch Hank Sneddon PRODUCT SPECIALIST TRADING Thomas Lawson Martin Kaminsky Mario Shane Vice President Vice President Managing Director Senior Associate Associate Experience: 10 years Experience: 6 years Candace Myung Experience: 30 years George Leiva Years at Oaktree: 2 Years at Oaktree: 4 Years at Oaktree: 3 Vice President Managing Director & Experience: 14 years Head Trader Years at Oaktree: 4 Tamara Dowd Andrew Carlson Ryan Irwin Matthew Jones Senior Vice President Associate Associate Associate Experience: 23 years Years at Oaktree: 2 Rahsheed Clarke Analyst Hannah Lee Brian Minkus Nick Ulanoff Experience: 1 year Years at Oaktree: 1 Associate Associate Associate Brian Wong Canadian Business Matthew Warsaw Development Advisor Associate

INDUSTRY ADVISORS

Dean Hollis

Consumer

John DeRoche

Building Products

Jerry Kerins

Packaging

Yehuda Shmidman

Consumer

As of September 30, 2022

George Chappelle

Food and Beverage

John Connelly

Gaming

Michael Corasaniti

Financial Service

Bill Toler

Food and Beverage

Carl Stutts

Chemicals



3 | Market Environment and Opportunity Set



Growing Number of Special Situations Driven by Current Market Themes









IMPACTED INDUSTRIES



Aerospace & Defense



Chemicals



Consumer





Events



Food & Beverage



Gaming



Industrials



Lodging & Leisure





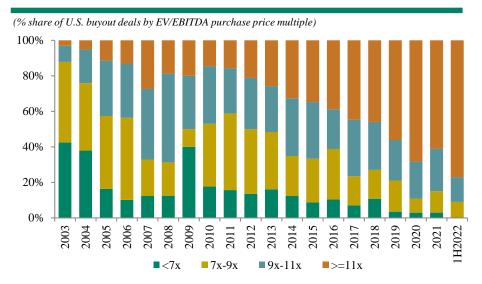
Restaurants



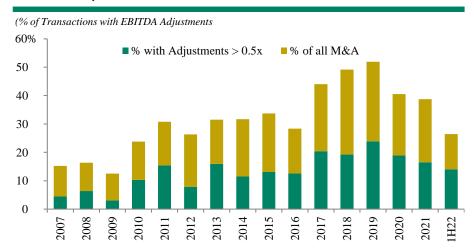
Technology

Debt Issuance on Risky Terms Creates Opportunities

LBO PURCHASE PRICE MULTIPLES ARE ELEVATED¹



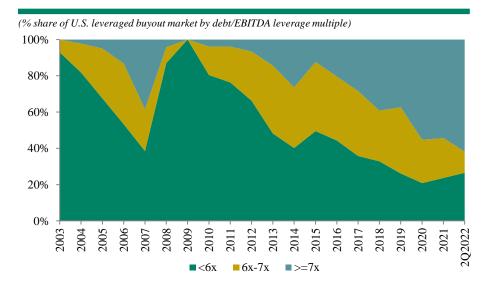
EBITDA ADJUSTMENTS HAVE BEEN AGGRESSIVE²



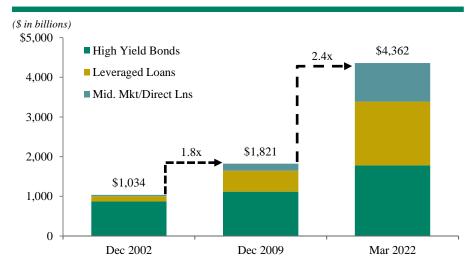
As of June 30, 2022, unless otherwise noted

Note: See the "Endnotes" for footnote references on page 15.

LBO DEBT MULTIPLES ARE AT ALL-TIME HIGHS¹



LOW-RATED GLOBAL CORPORATE DEBT HAS BALLOONED3



A Growing Universe of Opportunities

TOTAL U.S. LEVERAGED DEBT OUTSTANDING



OUTSTANDING PAR AMOUNT OF U.S. DEBT RATED \leq CCC¹



As of June 30, 2022 Source: S&P LCD

See the "Endnotes" for footnote references on page 15.



4 | Appendices



Appendix I: Endnotes

Page 3

- Includes Oaktree's proportionate amount of DoubleLine Capital AUM resulting from its 20% minority interest therein. See the Legal Information and Marketing Disclosures section of the Appendix for important information regarding Oaktree's calculation methodology for assets under management.
- ² Includes offices of affiliates of Oaktree-managed funds. Oaktree is headquartered in Los Angeles.

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- Represents the average years of industry experience of the SSG investment professionals senior vice president and above as of July 31, 2022.
- Inclusive of all Active Special Situations funds which refer to funds that have been managed since their inception by Kruse and Wilson.
- 3 Inclusive of all core positions of Active Special Situations funds, which refer to funds that have been managed since their inception by Kruse and Wilson.

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- Does not represent returns of Oaktree funds. Treasuries = 10-yr U.S. Treasury Yield; U.S. Senior Loans = Credit Suisse U.S. Leveraged Loan Index current yield; European Senior Loans = Credit Suisse Western European Leveraged Loan Index current yield; U.S. High Yield Bonds = ICE BofA US High Yield Index yield to worst; European High Yield Bonds = ICE BofA Euro High Yield Index yield to worst; Private Credit = Refinitiv LPC's Middle Market 1st Lien Term Loan Yields (Direct Lenders); Avg. Private Equity = Preqin Private Equity Horizon IRRs for the preceding 10 years through September 30, 2021; Top Quartile Private Equity = Preqin Private Equity Benchmark Top Quartile Boundary Net IRR (average of preceding 10 vintage years)
- ² Risk is based on Oaktree's subjective assessment of each asset class including measures such as loss ratio, leverage profile and underlying investment types, as relevant.

Page 8

The representative investments were selected as it represents an example of the largest investments for each investment type by market value as of June 30, 2022 for the most recent fund of the Special Situations Strategy. See Legal Information and Marketing Disclosures section of the Appendix for disclosure about investment examples. Please see Appendix for additional information and disclosures.

Page 9

- Team serves as shared resource among Oaktree's Opportunistic Credit, Special Situations, Strategic Credit and U.S. Private Debt teams. Brian Wong is dedicated to Special Situations.
- ² Represents the average years of industry experience of the SSG investment professionals senior vice president and above as of July 31, 2022.

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- ¹ Source: Refinitiv LPC data as of June 30, 2022.
- ² Source: S&P LCD.
- ³ Source: J.P. Morgan data as of June 30, 2022. Mid. Market/Direct Loans data as of November 3, 2021, from Refinitiv LPC. Mid. Market/Direct Loans estimates for 2002 and 2009 from Pregin.

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Based on constituents of the Credit Suisse High Yield Bond and Leveraged Loan Indices and excludes defaults.

Appendix II: Legal Information & Marketing Disclosures

An investment in any fund or the establishment of an account within the Strategy is speculative and involves a high degree of risk. Such risks include, but are not limited to, those described below. An investment should only be made after consultation with independent qualified sources of investment, tax and legal advice. Prospective investors must review a particular fund's confidential private placement memorandum prior to investing in such fund.

Calculation of Assets Under Management

References to total "assets under management" or "AUM" represent assets managed by Oaktree and a proportionate amount of the AUM reported by DoubleLine Capital LP ("DoubleLine Capital"), in which Oaktree owns a 20% minority interest. Oaktree's methodology for calculating AUM includes (i) the net asset value (NAV) of assets managed directly by Oaktree, (ii) the leverage on which management fees are charged, (iii) undrawn capital that Oaktree is entitled to call from investors in Oaktree funds pursuant to their capital commitments, (iv) for collateralized loan obligation vehicles ("CLOs"), the aggregate par value of collateral assets and principal cash, (v) for publicly-traded business development companies, gross assets (including assets acquired with leverage), net of cash, and (vi) Oaktree's pro rata portion (20%) of the AUM reported by DoubleLine Capital. This calculation of AUM is not based on the definitions of AUM that may be set forth in agreements governing the investment funds, vehicles or accounts managed and is not calculated pursuant to regulatory definitions.

Important Information about Investment Examples

The examples of investments presented herein are for informational purposes only. The purpose of these investment examples is to give an illustrative example of the types of investments made. The investments presented may be more favorable than, and not representative of, all of the investments that may be made by the Fund. As a result, these materials are not intended to be, and should not be read as, full and complete descriptions of each investment transaction within any particular Oaktree strategy. If the recipient would like additional detail regarding these investments, please contact an Oaktree marketing representative.

Investments

The Strategy will involve investing in securities and obligations that entail substantial risk. There can be no assurance that such investments will increase in value, that significant losses will not be incurred or that the objectives of the Strategy will be achieved. In addition, investing in such securities and obligations may result in the incurrence of significant costs, fees and expenses, including legal, advisory and consulting fees and expenses, costs of regulatory compliance and costs of defending third-party litigation.

Investment Environment

Many factors affect the demand for and supply of the types of investments that the Strategy may target and their valuations. Interest rates and general levels of economic activity may affect the value of investments targeted by the Strategy or considered for investment. The investing activities of the Strategy could be materially adversely affected by instability in global financial markets or changes in market, economic, political or regulatory conditions, as well as by other factors outside the control of Oaktree or its affiliates.

Bridge Financing

The Strategy's activities may include providing bridge financing in connection with one or more of its equity investments. Such investments entail exposure to the risk of changes in capital markets, which may adversely affect the ability of a portfolio company to refinance any bridge investments. If the portfolio company were unable to complete a refinancing, the Strategy's investment could remain a long-term investment in a junior security or that junior security might be converted to equity.

Leverage of Portfolio Companies

The Strategy's investments are expected to include companies whose capital structures may have significant leverage. Such investments are inherently more sensitive to declines in revenues and to increases in expenses and interest rates, creating a greater possibility of default or bankruptcy of the borrower.

Nature of Bankruptcy Proceedings

The Strategy's investments that could require substantial workout negotiations or restructuring in the event of a default or bankruptcy, which could entail significant risks, time commitments and costs.

Currency Risks and Foreign Exchange

The Strategy may involve making investments denominated in currencies other than the base currency of the Strategy. Changes in the rates of exchange between such base currency and other currencies may have an adverse effect on the value of investments denominated in such other currencies and the performance of the Strategy. In addition, the costs may be incurred in converting investment proceeds from one currency to another. Oaktree may or may not attempt to hedge currency risk of the portfolio, but in any event it does not expect that the full risk of currency fluctuations can be eliminated due to the complexity of its investments and limitations in the foreign currency market.

Appendix II: Legal Information & Marketing Disclosures (continued)

Options

The Strategy may involve purchasing and selling covered and uncovered put and call options. The successful use of options depends principally on the price movements of the underlying securities. If the price of the underlying security does not rise (in the case of a call) or fall (in the case of a put) to an extent sufficient to cover the option premium and transaction costs, part or all of the investment in the option will be lost. If the puts or uncovered calls are sold, unfavorable price movements could result in significant losses.

Short Sales

A short sale involves the risk of a theoretically unlimited loss from a theoretically unlimited increase in the market price of the security sold short. Furthermore, there can be no assurance that the securities necessary to cover a short position will be available for purchase.

Contingent Liabilities on Disposition of Investments

Indemnification of the purchasers of investments that are sold may be required upon disposition of such investment. Such indemnity obligations may require the return of a portion of the sale proceeds.

Control Person Liability

The exercise of control of, or significant influence in, a company may impose additional risks of liability, such as liability for environmental damage, product defects, pension obligations or other types of liability in which the limited liability generally characteristic of business ownership may be ignored.

Illiquidity of Investments

The Strategy's investments may consist of securities and obligations which are thinly traded, securities and obligations for which no market exists, or securities and obligations which are restricted as to their transferability. These factors may limit the ability to sell such securities at their fair market value.

Regulatory Risks

Legal, tax and regulatory changes may adversely affect the Strategy's activities. The legal, tax and regulatory environment for investing in alternative investments is evolving, and changes in the regulation and market perception of alternative investments, including changes to existing laws and regulations and increased criticism of the private equity and alternative asset industry by some politicians, regulators and market commentators, may adversely affect the ability of the Strategy to pursue its investment strategy and the value of its investments.

Market disruptions and dramatic increases in capital allocated to alternative investment strategies have led to increased governmental and self-regulatory scrutiny of alternative investments. Greater regulation of the industry has been considered by both legislators and regulators. The effect of any future regulatory changes are impossible to predict, but could be substantial and adverse.

Market Conditions and Governmental Actions

The securities, futures and certain other derivatives markets are subject to comprehensive statutes, regulations and margin requirements. Government regulators and self-regulatory organizations and exchanges are authorized to take extraordinary actions in the event of market emergencies. Regulators have the ability to limit or suspend trading in securities, which could result in significant losses. The regulation of derivatives transactions and funds that engage in such transactions is an evolving area of law and is subject to modification by governmental and judicial action. The effect of any future regulatory changes could be substantial and adverse.

In recent years, world financial markets have experienced extraordinary market conditions. In reaction to these events, regulators in various countries have undertaken and continue to undertake unprecedented action to stabilize markets. The Strategy may be adversely affected by unstable markets and significant new regulations could limit the Strategy's activities and investment opportunities or change the functioning of the capital markets. In the event of a severe economic downturn, significant losses could result.

Institutional Risk

The brokerage firms, banks and other institutions who serve as counterparties in the trading activities of the Strategy, or to which securities will be entrusted for custodial and prime brokerage purposes, may encounter financial difficulties, fail or otherwise become unable to meet their obligations. In addition, legal, regulatory, reputational or other risks affecting such institutions could have a material adverse effect on the Strategy.

Material Non-public Information

In connection with the Oaktree's activities, personnel of Oaktree may acquire confidential or material non-public information or otherwise be restricted from initiating transactions in certain securities. Oaktree will not be free to act upon any such information and may not be able to initiate a transaction that it otherwise might have initiated.

Potential Conflicts of Interest

Oaktree and its affiliates manage a number of different funds and accounts (and may form additional funds and accounts) that invest in, and in some cases have priority ahead of the Strategy with respect to, securities or obligations eligible for purchase. This presents the possibility of overlapping investments, and thus the potential for conflicts of interest. To the extent permitted by law, Oaktree reserves the right to cause funds and accounts it manages to take such steps as may be necessary to minimize or eliminate any conflict between Oaktree-managed funds and accounts even if that requires the divestiture of securities that, in the absence of such conflict, it would have continued to hold or otherwise take action that may benefit Oaktree or any other Oaktree-managed fund or account and that may not be in the best interests of another Oaktree-managed fund or account. Oaktree will seek to manage conflicts in good faith.

Appendix II: Legal Information & Marketing Disclosures (continued)

Tax Matters

There are a series of complex tax issues related to the investments that will be the focus of the Strategy. In addition, changes in the tax laws may adversely affect the Strategy's ability to efficiently realize income or capital gains and could materially and adversely affect the after-tax returns to investors. Prospective investors are urged to consult their own tax advisors regarding the possible tax consequences of an investment in the Strategy.

Lack of Diversification

The Strategy's portfolio may not be diversified among a wide range of issuers or industries. Accordingly, returns may be subject to more rapid changes than would be the case if the portfolio maintained a wide diversification among companies, industries and types of securities.

Investments in Commingled Vehicles

A potential investor considering an investment in any commingled vehicle will be subject to the risks described above as well as the risks associated with an investment in a commingled vehicle. Interests of a commingled vehicle will generally be an illiquid investment and withdrawals from, and transfers of units of, a commingled vehicle may be subject to restrictions. The portfolio of a commingled vehicle may not be diversified among a wide range of issuers or industries which may make such portfolio subject to more rapid change in value than would be the case if the portfolio was more diversified. Investors also will not have the opportunity to participate in a commingled vehicle's management.

Certain information contained herein concerning economic trends and performance is based on or derived from information provided by independent third-party sources. Oaktree believes that such information is accurate and that the sources from which it has been obtained are reliable; however, Oaktree cannot guarantee the accuracy of such information and has not independently verified the accuracy or completeness of such information or the assumptions on which such information is based. Moreover, independent third-party sources cited in this presentation are not making any representations or warranties regarding any information attributed to them and shall have no liability in connection with the use of such information in this presentation.

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San Joaquin County Employee Preliminary Monthly Flash Report (No.		<u> </u>		Septemb	er 2022									
(Commitment (\$000)	Sub-Segment			Physical % of Total	Policy Target %	1-Mo	3-Mos	YTD	1-Yr	3-Yrs	5-Yrs	SI Return	SI Date
TOTAL PLAN ¹	(4000)		\$	3,647,083,963	100.0%	100.0%	-4.8	-3.4	-11.0	-7.4	4.0	4.8	7.4	Apr-90
Policy Benchmark ⁴							-8.2	-9.5	-17.1	-14.7	1.5	3.5	7.0	, i
Difference:							3.4	6.1	6.1	7.3	2.5	1.3	0.4	
75/25 Portfolio ⁵							-8.4	-6.7	-23.9	-20.2	2.7	3.6	6.7	
Difference:							3.6	3.3	12.9	12.8	1.3	1.2	0.7	
Broad Growth			\$	2,703,070,485	74.1%	76.0%	-6.0	-4.3	-14.0	-9.3	4.6	5.4	7.9	Jan-95
Aggressive Growth Lag ²			\$	340,526,027	9.3%	10.0%	4.4	4.4	16.2	36.0	20.4	17.6	-2.2	Feb-05
MSCI ACWI +2%Lag							4.8	1.2	8.9	19.2	16.7	12.4	0.0	
Difference:							-0.4	3.2	7.3	16.8	3.7	5.2	-2.2	
BlackRock Global Energy&Power Lag ³	\$50,000	Global Infrastructure	\$	26,940,131	0.7%		2.3	2.3	5.3	10.6	10.1		10.1	Jul-19
MSCI ACWI +2% Lag							2.4	-4.8	2.2	9.9	16.6		16.6	
Difference:							-0.1	7.1	3.1	0.7	-6.5		-6.5	
Ocean Avenue II Lag ³	\$40,000	PE Buyout FOF	\$	37,122,241	1.0%		3.7	3.7	21.3	48.4	37.7	33.8	18.9	May-13
MSCI ACWI +2% Lag							2.4	-4.8	2.2	9.9	16.6	12.3	10.8	
Difference:	440.000	0 1/ 0/ 1/0		c 504400	0.00/		1.3	8.5	19.1	38.5	21.1	21.5	8.1	
Lightspeed Venture Ptr Select V Lag ³	\$40,000	Growth-Stage VC	\$	6,591,123	0.2%									Jun-22
MSCI ACWI +2% Lag														
Difference:	\$50,000	PE Buyout FOF	\$	54,261,818	1.5%		9.1	9.1	23.6	53.9	29.2	35.8	27.4	Apr-16
Ocean Avenue III Lag ³	\$50,000	PE BUYOUI FOF	Ş	54,201,616	1.5%					9.9		12.3	11.7	Apr-10
MSCI ACWI +2% Lag Difference:							2.4 6.7	-4.8 13.9	2.2 21.4	9.9 44.0	<i>16.6</i> 12.6	23.6	15.7	
Ocean Avenue IV Lag ³	\$50,000	PE Buyout	\$	48,013,369	1.3%		5.3	5.3	23.8	39.5	12.0	23.0	36.7	Dec-19
MSCI ACWI +2% Lag	\$30,000	РЕ Виуоиі	ې	40,013,309	1.3%		2.4	-4.8	23.0	9.9			18.3	Dec-19
Difference:							2.4	10.1	21.6	29.6			18.4	
Morgan Creek III Lag ³	\$10,000	Multi-Strat FOF	Ś	5,108,214	0.1%		-3.4	-3.4	-14.9	-27.0	-17.8	-5.7	-5.2	Feb-15
MSCI ACWI +2% Lag	\$10,000	man on at 1 or	Ť	5,100,214	0.170		2.4	-4.8	2.2	9.9	16.6	12.3	11.3	1 05 15
Difference:							-2.4	4.8	-14.1	-34.3	-33.4	-17.4	-16.0	
Morgan Creek V Lag ³	\$12,000	Multi-Strat FOF	\$	7,870,853	0.2%		-0.2	-0.2	6.4	19.7	14.4	13.8	14.1	Jun-13
MSCI ACWI +2% Laa	¥12,000	man on at 7 or	Ť	,,5,5,555	0.270		2.4	-4.8	2.2	9.9	16.6	12.3	10.8	0411.10
Difference:							-2.4	4.8	4.3	10.0	-2.2	1.5	3.3	
Morgan Creek VI Lag ³	\$20,000	Multi-Strat FOF	\$	28,055,200	0.8%		-0.7	-0.7	15.7	41.1	24.7	22.0	12.7	Feb-15
MSCI ACWI +2% Lag	,,		'				2.4	-4.8	2.2	9.9	16.6	12.3	11.3	
Difference:							-2.4	4.8	14.3	32.2	8.4	9.8	1.5	
Stellex Capital Partners II Lag ³	\$50,000	Special Situations PE	\$	17,337,082	0.5%		11.4	11.4	8.7	-7.9			-7.9	Jul-21
MSCI ACWI +2% Lag	•	•					2.4	-4.8	2.2	9.9			5.1	
Difference:							9.0	16.2	6.6	-17.8			-13.0	
Non-Core Private Real Assets Lag ³	\$341,100	Private Real Estate	\$	109,225,996	3.0%		3.8	3.8	13.8	36.3	15.6	10.7	-1.8	Nov-04
MSCI ACWI +2% Lag							7.2	7.4	15.9	28.5	11.4	10.0	9.2	
Difference:							-3.4	-3.6	-2.1	7.8	4.2	0.7	-11.0	
Opportunistic Private Real Estate			\$	32,747,632	0.7%									
Greenfield V ³	\$30,000	Opportunistic Pvt. RE	\$	222,600	0.0%		-0.1	-0.1	-1.3	-2.0	-7.9	-5.7	-3.1	Jul-08
NCREIF ODCE + 1% Lag Blend							7.2	7.4	15.9	28.5	11.4	10.0	9.8	
Difference:							-7.3	-7.5	-17.2	-30.5	-19.3	-15.7	-12.9	
Greenfield VI ³	\$20,000	Opportunistic Pvt. RE	\$	34,815	0.0%		-1.4	-1.4	0.0	-38.1	-40.4	-31.5	-13.0	Apr-12
NCREIF ODCE + 1% Lag Blend							7.2	7.4	15.9	28.5	11.4	10.0	14.3	
Difference:							-8.6	-8.8	-15.9	-66.6	-51.8	-41.5	-27.3	
Greenfield VII ³	\$19,100	Opportunistic Pvt. RE	\$	5,422,943	0.1%		0.9	0.9	12.9	26.7	17.2	15.4	13.9	Oct-14
NCREIF ODCE + 1% Lag Blend							7.2	7.4	15.9	28.5	11.4	10.0	13.9	
Difference:							-6.3	-6.5	-3.0	-1.8	5.8	5.4	0.0	

Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.

²Total class returns are as of 6/30/22, and lagged 1 quarter.

³ Manager returns are as of 6/30/22, and lagged 1 quarter. Since Inception date reflects one quarter lag.

⁴ 8/1/22 to present benchmark is 32% MSCI ACWI IMI, 9% BB Aggregate Bond Index, 16% 50% BB High Yield/50% S&P Leveraged Loans, 7% NCREIF ODCE +1% lag; 10% T-Bill +4%, 10% MSCI ACWI +2%, 15% CRO Custom Benchmark. Prior to 8/1/22 benchmark is legacy policy benchmark. ⁵ 4/1/20 to present 75% MSCI ACWI, 25% BB Global Aggregate. Prior to 4/1/20 60% MSCI ACWI, 40% BB Global Aggregate.

San Joaquin Cour	ty Employees	Retirement Association	(SJCERA)
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Preliminary Monthly Flash Report (Ne	et)'			Septeml	oer 2022									
	Commitment (\$000)	Sub-Segment		Market Value	Physical % of Total	Policy Target %	1-Mo	3-Mos	YTD	1-Yr	3-Yrs	5-Yrs	SI Return	SI Date
Opportunistic Private Real Estate (continued)						·								
Grandview ³	\$30,000	Opportunistic Pvt. RE	\$	19,658,666	0.5%		-0.4	-0.4	25.3	41.8	30.5		25.7	Apr-18
NCREIF ODCE + 1% Lag Blend Difference:							7.2 -7.6	7.4 -7.8	15.9 9.4	28.5 13.3	<i>11.4</i> 19.1		13.5 12.2	
Miller Global Fund VI ³	\$30,000	Opportunistic Pvt. RE	\$	86,092	0.0%		0.0	0.0	81.0	115.4	-6.1	1.1	0.7	May-08
NCREIF ODCE + 1% Lag Blend	\$30,000	Opportunistic FVI. KL	٦	00,092	0.0%		7.2	7.4	15.9	28.5	11.4	10.0	9.8	Way-00
Difference:							-7.2	-7.4	65.1	86.9	-17.5	-8.9	-9.1	
Miller Global Fund VII ³	\$15,000	Opportunistic Pvt. RE	Ś	45,087	0.0%		0.0	0.0	-85.5	-88.3	-51.2	-36.0	-6.1	Dec-12
NCREIF ODCE + 1% Lag Blend	\$10,000	Opportunistic PVI. RE	٦	45,067	0.0%		7.2	7.4	15.9	28.5	11.4	10.0	14.0	Dec-12
Difference:							-7.2	-7.4 -7.4	-101.4	-116.8	-62.6	-46.0	-20.1	
Walton Street V ³	\$30,000	Opportunistic Pvt. RE	\$	1,544,898	0.0%		-7.0	-7.0	-17.4	-17.5	-15.1	-12.1	-5.1	Nov-06
NCREIF ODCE + 1% Lag Blend							7.2	7.4	15.9	28.5	11.4	10.0	10.7	
Difference:							-14.2	-14.4	-33.3	-46.0	-26.5	-22.1	-15.8	
Walton Street VI ³	\$15,000	Opportunistic Pvt. RE	\$	5,732,53	0.2%		2.4	2.4	14.6	16.5	2.7	3.8	7.8	Jul-09
NCREIF ODCE + 1% Lag Blend							7.2	7.4	15.9	28.5	11.4	10.0	12.6	
Difference:							-4.8	-5.0	-1.3	-12.0	-8.7	-6.2	-4.8	
Value-Added Private Real Estate			\$	79,183,076	2.2%									
AG Core Plus IV ³	\$20,000	Value-Added Pvt. RE	\$	13,858,156	0.4%		1.7	1.7	9.6	14.1	9.8	10.5	6.1	Sep-15
NCREIF ODCE + 1% Lag Blend							7.2	7.4	15.9	28.5	11.4	10.0	13.5	
Difference:							-5.5	-5.7	-6.3	-14.4	-1.6	0.5	-7.4	
Almanac Realty VI ³	\$30,000	Value-Added Pvt. RE	\$	4,249,408	0.1%		2.6	2.6	8.2	17.7	-7.2	-5.1	21.6	Feb-13
NCREIF ODCE + 1% Lag Blend							7.2	7.4	15.9	28.5	11.4	10.0	14.3	
Difference:							-4.6	-4.8	-7.7	-10.8	-18.6	-15.1	7.3	
Berkeley Partners Fund V, LP	\$40,000	Value-Added Pvt. RE	\$	27,886,236	0.8%		9.7	9.7	36.0	45.1			38.0	Aug-20
NCREIF ODCE + 1% Lag Blend							7.2	7.4	15.9	28.5			24.4	
Difference:							2.5	2.3	20.1	16.6			13.6	
Stockbridge RE III ³	\$45,000	Value-Added Pvt. RE	\$	33,189,276	0.9%		4.4	4.4	32.9	52.8	21.8		14.5	Jul-18
NCREIF ODCE + 1% Lag Blend							7.2	7.4	15.9	28.5	11.4		13.7	
Difference:							-2.8	-3.0	17.0	24.3	10.4		0.8	
Traditional Growth ²			\$	1,196,949,520	32.8%	33.0%	-9.4	-6.4	-25.2	-20.1	2.0	3.2	8.3	Jan-95
MSCI ACWI IMI Net							-9.7	-6.6	-25.7	-21.2	4.2	4.9	7.1	
Difference:							0.3	0.2	0.5	1.1	-2.2	-1.7	1.2	
Global Equity			\$	1,156,191,786	31.7%									
Northern Trust MSCI World IMI		All Cap Global	\$	1,035,933,442	28.4%		-9.4	-6.2	-25.4	-20.0			0.5	Sep-20
MSCI World IMI Net							-9.4	-6.1	-25.6	-20.3			0.1	
Difference:		*** 0 0 1 1		0.040	2.20/		0.0	-0.1	0.2	0.3			0.4	
SJCERA Transition Emerging Markets		All Cap Global	\$	2,812 120,255,532	0.0%		NM	NM	NM	NM			NM	Jul-20
		Emorging Markets	\$	54,078,139	1.5%		-7.2	-6.6	-23.6	-23.8			-5.1	Aug-20
GQG Active Emerging Markets MSCI Emerging Markets Index Net		Emerging Markets	ې	54,076,139	1.370		-1.2 -11.7	-0.0 -11.6	-23.0 -27.2	-23.6 -28.1			-5.1 -7.0	Aug-20
Difference:							-11.7 4.5	5.0	3.6	4.3			1.9	
PIMCO RAE Fundamental Emerging Markets		Emerging Markets	\$	66,177,393	1.8%		-9.7	-6.4	-21.7	-21.4	0.9	-0.3	3.5	Apr-07
MSCI Emerging Markets Index		Linei ging markets	ľ	00,111,090	1.070		-11.7	-11.4	-26.9	-27.8	-1.7	-1.4	2.4	Apr 07
Difference:							2.0	5.0	5.2	6.4	2.6	1.1	1.1	
			\$	40,757,734	1.1%									
IREIIS														
REITS Invesco All Equity REIT		Core US REIT	\$	40,757.734	1.1%		-12.4	-10.6	-26.4	-15.0	-2.1	3.5	7.8	Aug-04
Invesco All Equity REIT FTSE NAREIT Equity Index		Core US REIT	\$	40,757,734	1.1%		-12.4 <i>-12.2</i>	-10.6 - <i>9.9</i>	-26.4 <i>-28.1</i>	-15.0 <i>-16.4</i>	-2.1 -2.0	3.5 2.9	7.8 7.5	Aug-04

Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.

NM = Returns not meaningful

²MSCI ACWI IMI Net as of 4/1/2020, MSCI ACWI Gross prior.

 $^{^{3}}$ Manager returns are as of 6/30/22, and lagged 1 quarter. Since Inception date reflects one quarter lag.

Preliminary Monthly Flash Report (Net)'		Septemb	er 2022									
	Commitment (\$000)	Sub-Segment	Market Value	Physical % of Total	Policy Target %	1-Mo	3-Mos	YTD	1-Yr	3-Yrs	5-Yrs	SI Return	SI Date
Stabilized Growth			\$ 1,165,594,938	32.0%	33.0%	-3.9	-3.3	-7.1	-4.3	3.9	4.8	3.7	Jan-05
Risk Parity 7-Bill +4% Difference:			\$ 339,507,264	9.3%		-11.3 0.6 -11.9	-10.7 1.5 -12.2	-28.1 3.6 -31.7	-25.6 4.6 -30.2	-3.7 4.6 -8.3	0.6 5.2 -4.6	2.6 4.6 -2.0	
Bridgewater All Weather T-Bill +4% Difference:		Risk Parity	\$ 170,112,510	4.7%		-11.1 0.6 -11.7	-10.5 1.5 -12.0	-27.2 3.6 -30.8	-24.0 4.6 -28.6	-2.9 4.6 -7.5	0.5 5.2 -4.7	2.5 5.4 -2.9	Mar-12
PanAgora Diversified Risk Multi-Asset 7-Bill +4% Difference:		Risk Parity	\$ 169,394,754	4.6%		-11.5 0.6 -12.1	-10.9 1.5 -12.4	-29.0 3.6 -32.6	-27.2 4.6 -31.8	-4.5 4.6 -9.1	0.6 5.2 -4.6	2.5 5.0 -2.5	Apr-16
Liquid Credit 50% BB High Yield, 50% S&P/LSTA Lev Difference:	eraged Loans		\$ 215,124,482	5.9%		-2.7 -3.1 0.4	-0.1 0.4 -0.5	-9.5 -9.1 -0.4	-9.5 -8.4 -1.1	-0.5 0.9 -1.4	1.1 2.3 -1.2	1.5 5.0 -3.5	
Neuberger Berman 33% ICE BofA HY Constrained, 33% S&I Difference:	P/LSTA LL, 33% JPM EN	Global Credit IBI GIbI Div.	\$ 91,333,942	2.5%		-4.3 -4.2 -0.1	-1.8 -1.3 -0.5	-14.5 -14.1 -0.4	-14.5 -13.8 -0.7	-1.8 -1.9 0.1		-0.2 0.1 -0.3	Feb-19
Stone Harbor Absolute Return 3-Month Libor Total Return Difference:		Absolute Return	\$ 123,790,540	3.4%		-1.5 0.1 -1.6	1.2 <i>0.4</i> 0.8	-5.4 0.4 -5.8	-5.4 0.4 -5.8	0.5 <i>0.7</i> -0.2	1.4 1.3 0.1	2.4 1.3	Oct-06
Private Credit Lag ² 50% BB High Yield, 50% S&P/LSTA Lev Difference:	eraged Loans		\$ 372,258,438	10.2%		1.6 -0.5 2.1	1.6 -2.5 4.1	5.7 -1.8 7.5	9.1 <i>1.3</i> 7.8	4.8 <i>4.4</i> 0.4	3.9 4.4 -0.5	3.8 5.7 -1.9	
BlackRock Direct Lending Lag ³ S&P/LSTA Leveraged Loans +3% Blend Difference:	\$100,000 d ⁵	Direct Lending	\$ 83,786,802	2.3%		0.9 0.3 0.6	0.9 0.6 0.3	0.9 0.6 0.3	6.2 10.6 -4.4			8.7 14.4 -5.7	May-20
Mesa West RE Income IV Lag ³ S&P/LSTA Leveraged Loans +3% Blent Difference:	\$75,000 d ⁴	Comm. Mortgage	\$ 21,063,965	0.6%		0.7 0.3 0.4	0.7 0.6 0.1	3.4 3.8 -0.4	8.1 10.6 -2.5	7.8 9.0 -1.2	8.2 8.8 -0.6	7.5 8.8 -1.3	Mar-17
Crestline Opportunity II Lag ⁷ S&P/LSTA Leveraged Loans +3% Blend Difference:	\$45,000 d ⁴	Opportunistic	\$ 17,514,360	0.5%		-1.2 0.3 -1.5	-1.2 0.6 -1.8	1.3 3.8 -2.5	6.9 10.6 -3.7	2.1 9.0 -6.9	2.7 8.8 -6.1	5.0 8.9 -3.9	Nov-13
Davidson Kempner Distr Opp V Lag ³ S&P/LSTA Leveraged Loans +3% Blend Difference:	\$50,000 d ⁴	Opportunistic	\$ 49,020,155	0.0%		2.9 0.3 2.6	2.9 0.6 2.3	6.7 3.8 2.9	14.3 10.6 3.7			31.8 10.3 21.5	Oct-20
Oaktree Lag S&P/LSTA Leveraged Loans +3% Blend Difference:	\$50,000 d ⁴	Leveraged Direct	\$ 32,376,435	0.9%		3.7 0.3 3.4	3.7 0.6 3.1	9.8 <i>3.8</i> 6.0	16.9 10.6 6.3	18.3 <i>11.2</i> 7.0		12.0 9.0 3.0	Mar-18
HPS EU Asset Value II Lag ³ S&P/LSTA Leveraged Loans +3% Blend Difference:	\$50,000 d ⁴	Direct Lending	\$ 34,342,706	0.9%		3.2 0.3 2.9	3.2 0.6 2.6	4.5 3.8 0.7	7.8 10.6 -2.8			2.7 10.2 -7.5	Aug-20

Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.

Direct Lending

\$

57,419,823

1.6%

1.8

0.3

1.5

1.8

0.6

1.2

8.1

3.8

4.3

14.8

10.6

4.2

8.1

9.0

-0.9

8.8

8.8

0.0

4.2

8.8

-4.6

Nov-15

Raven Opportunity III Lag³

\$50,000

S&P/LSTA Leveraged Loans +3% Blend 4

Difference:

Returns are preliminary and are finalized during each quar

Total class returns are as of 6/30/22, and lagged 1 quarter.

³ Manager returns are as of 6/30/22, and lagged 1 quarter. Since Inception date reflects one quarter lag.

⁴9% Annual until 6/30/2018; CPI +6% Annual 7/1/2018 - 3/31/2022; S&P/LSTA Leveraged Loans +3% thereafter.

⁵ 50% Bloomberg High Yield/50% S&P Leveraged Loan until 12/31/20 then CPI +6% Annual thereafter. Benchmark lagged one quarter.

 $^{^6}$ MSCI ACWI + 2% until 12/31/20 then CPI +6% Annual thereafter. Benchmark lagged one quarter

San Joaquin County Employees' Retirement Association (SJCERA)														
Preliminary Monthly Flash Report (Net)'		,			oer 2022									
	Commitment (\$000)	Sub-Segment		Market Value	Physical % of Total	Policy Target %	1-Mo	3-Mos	YTD	1-Yr	3-Yrs	5-Yrs	SI Return	SI Date
Private Credit Lag (continued)														
Medley Opportunity II Lag ³	\$50,000	Direct Lending	\$	4,378,784	0.1%		0.0	0.0	-9.9	-12.7	-11.4	-10.1	-2.3	Jul-12
S&P/LSTA Leveraged Loans +3% Blend ⁴ Difference:	1						0.3 -0.3	0.6 -0.6	3.8 -13.7	10.6 -23.3	9.0 -20.4	8.8 -18.9	8.9 -11.2	
White Oak Summit Peer Fund Lag ³	\$50,000	Direct Lending	\$	27,705,821	0.8%		0.2	0.2	3.0	-0.9	3.4	5.1	5.7	Mar-16
S&P/LSTA Leveraged Loans +3% Blend ⁴	1						0.3 -0.1	0.6 -0.4	3.8 -0.8	10.6 -11.5	9.0 -5.6	8.8 -3.7	8.8 -3.1	
Difference: White Oak Yield Spectrum Master V Lag ³	\$50.000	Direct Lending	\$	44,649,587	1.2%		1.5	1.5	2.3	3.2	-5.0	-5.1	0.9	Mar-20
S&P/LSTA Leveraged Loans +3% Blend 4		Direct Lending	٦	44,049,361	1.270		0.3	0.6	3.8	10.6			9.3	Widi -20
Difference:							1.2	0.9	-1.5	-74			-8.4	
Core Private Real Estate Lag			\$	238,704,754	6.5%			0.3					J. 1	
Principal US ³	\$25.000	Core Pvt. RE	\$	45,152,344	1.2%		7.3	7.3	23.9	28.4	11.3	10.0	10.2	Jan-16
NCREIF ODCE + 1% Lag Blend	,,		'				7.2	7.4	15.9	28.5	11.4	10.0	13.1	
Difference:							0.1	-0.1	8.0	-0.1	-0.1	0.0	-2.9	
Prologis Logistics ³	\$35,000	Core Pvt. RE	\$	130,605,773	3.6%		11.8	11.8	41.2	57.9	27.6	23.5	9.7	Dec-07
NCREIF ODCE + 1% Lag Blend							7.2	7.4	15.9	28.5	11.4	10.0	10.0	
Difference:							4.6	4.4	25.3	29.4	16.2	13.5	-0.3	
RREEF America II ³	\$45,000	Core Pvt. RE	\$	63,378,443	1.7%		5.4	5.4	23.5	28.0	11.5	9.8	9.9	Jul-16
NCREIF ODCE + 1% Lag Blend							7.2	7.4	15.9	28.5	11.4	10.0	13.0	
Difference:							-1.8	-2.0	7.6	-0.5	0.1	-0.2	-3.1	
Diversifying Strategies			\$	838,850,418	23.0%	24.0%	-0.2	-0.1	3.1	2.5	2.0	3.4	6.3	Oct-90
Principal Protection			\$	276,994,820	7.6%	9.0%	-4.2	-4.1	-12.2	-12.3	-3.0	0.0	5.8	Oct-90
BB Aggregate Bond Index							-4.3	-4.8	-14.6	-14.6	-3.3	-0.3	5.3	
Difference:							0.1	0.7	2.4	2.3	0.3	0.3	0.5	
Dodge & Cox		Core Fixed Income	\$	188,236,226	5.2%		-4.2	-3.9	-13.2	-13.5	-1.7	0.8	6.5	Oct-90
BB Aggregate Bond Index							-4.3	-4.8	-14.6	-14.6	-3.3	-0.3	5.3	
Difference:							0.1	0.9	1.4	1.1	1.6	1.1	1.2	l

2.4%

-4.2

NM

-4.3

0.1

-4.5

NM

-4.8

0.3

-4.7

NM

0.3

NM

Mar-22

Feb-12

-11.7

0.3

MBS Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.

Core Fixed Income

\$

88,752,576

6,018

BB Aggregate Bond Index

Difference:

Loomis Sayles

DoubleLine Capital

²Total class returns are as of 6/30/22, and lagged 1 quarter.

³ Manager returns are as of 6/30/22, and lagged 1 quarter. Since Inception date reflects one quarter lag.

⁴9% Annual until 6/30/2018; CPI +6% Annual 7/1/2018 - 3/31/2022; S&P/LSTA Leveraged Loans +3% thereafter.

Preliminary Monthly Flash Report (Ne	t)'		Septemb	er 2022									
	Commitment (\$000)	Sub-Segment	Market Value	Physical % of Total	Policy Target %	1-Mo	3-Mos	YTD	1-Yr	3-Yrs	5-Yrs	SI Return	SI Date
Crisis Risk Offset	,		\$ 561,855,598	15.4%	15.0%	1.9	2.0	14.9	13.9	5.4	5.6	6.9	Jan-05
CRO Custom Benchmark ²						-1.1	-1.9	-3.6	-1.7	2.3	3.9	5.0	
Difference:						3.0	3.9	18.5	15.6	3.1	1.7	1.9	
Long Duration			\$ 112,506,053	3.1%		-7.7	-9.2	-27.7	-26.0	-8.3	-1.7	-1.5	
BB US Long Duration Treasuries						-7.9	-9.6	-28.8	-26.6	-8.5	-1.6	-0.9	
Difference:						0.2	0.4	1.1	0.6	0.2	-0.1	-0.6	
Dodge & Cox Long Duration		Long Duration	\$ 112,506,053	3.1%		-7.7	-9.2	-27.7	-26.0	-8.3	-1.7	-1.5	Feb-16
BB US Long Duration Treasuries						-7.9	-9.6	-28.8	-26.6	-8.5	-1.6	-0.9	
Difference:						0.2	0.4	1.1	0.6	0.2	-0.1	-0.6	
Systematic Trend Following			\$ 259,858,746	7.1%		2.9	4.3	41.8	37.3	16.8	10.5	9.8	
BTOP50 Index						4.2	2.6	19.4	21.4	10.5	7.8	5.5	
Difference:						-1.3	1.7	22.4	15.9	6.3	2.7	4.3	
Mt. Lucas Managed Futures - Cash		Systematic Trend Following	\$ 134,996,273	3.7%		2.7	6.4	43.0	36.1	20.1	10.5	9.4	Jan-05
BTOP50 Index						4.2	2.6	19.4	21.4	10.5	7.8	5.5	
Difference:						-1.5	3.8	23.6	14.7	9.6	2.7	3.9	
Graham Tactical Trend		Systematic Trend Following	\$ 124,862,473	3.4%		3.2	2.2	40.4	38.6	13.4	10.3	5.8	Apr-16
SG Trend Index						5.8	5.1	35.6	33.8	14.7	11.5	6.3	
Difference:						-2.6	-2.9	4.8	4.8	-1.3	-1.2	-0.5	
Alternative Risk Premia			\$ 189,490,799	5.2%		7.1	6.6	27.0	25.2	2.2	3.8	8.1	
5% Annual						0.4	1.2	3.7	5.0	5.0	5.0	6.2	
Difference:						6.7	5.4	23.3	20.2	-2.8	-1.2	1.9	
AQR Style Premia		Alternative Risk Premia	\$ 49,016,187	1.3%		-0.9	-7.4	16.0	19.5	0.4	-3.1	-1.2	May-16
5% Annual						0.4	1.2	3.7	5.0	5.0	5.0	5.0	
Difference:						-1.3	-8.6	12.3	14.5	-4.6	-8.1	-6.2	
PE Diversified Global Macro		Alternative Risk Premia	\$ 82,305,700	2.3%		20.2	23.3	86.4	75.5	7.6	8.8	6.8	Jun-16
5% Annual						0.4	1.2	3.7	5.0	5.0	5.0	5.0	
Difference:						19.8	22.1	82.7	70.5	2.6	3.8	1.8	
Lombard Odier		Alternative Risk Premia	\$ 58,168,912	1.6%		-1.5	0.1	-2.1	-3.0	-4.2		-3.3	Jan-19
5% Annual						0.4	1.2	3.7	5.0	5.0		5.0	
Difference:						-1.9	-1.1	-5.8	-8.0	-9.2		-8.3	
Cash ³			\$ 89,189,078	2.4%	0.0%	0.2	0.5	0.6	0.6	0.5	0.9	2.3	Sep-94
US T-Bills						0.2	0.5	0.6	0.6	0.6	1.1	2.3	
Difference:						0.0	0.0	0.0	0.0	-0.1	-0.2	0.0	
Northern Trust STIF		Collective Govt. Short Term	\$ 106,821,258	2.9%		0.2	0.4	0.6	0.6	0.5	0.9	2.5	Jan-95
US T-Bills						0.2	0.5	0.6		0.6	1.1		
Difference:						0.0	-0.1	0.0	0.0	-0.1	-0.2	0.2	
Parametric Overlay⁴		Cash Overlay	\$ 15,973,982	0.4%		0.0	0.0	0.0	0.0	_	_	0.0	Jan-20

Returns are preliminary and are finalized during each quarterly reporting cycle. Monthly returns since previous quarter are provided by the managers. Market values are provided by Northern Trust.

² Benchmark is (1/3) BB Long Duration Treasuries, (1/3) BTOP50 Index, (1/3) 5% Annual.

³Includes lagged cash.

⁴ Given daily cash movement returns may vary from those shown above.



Economic and Market Update

September 2022 Report



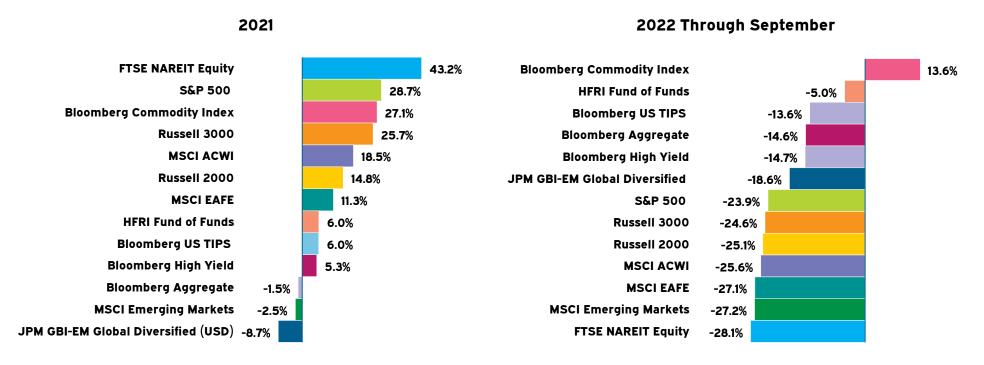
Commentary

- → After a strong July, global markets sold off in August and September, leading to quarterly declines as slower growth and higher inflation weighed on sentiment.
 - The Federal Reserve maintained its aggressive tightening campaign with future hikes expected as US inflation continues to surprise to the upside and labor markets remain tight.
 - In Europe, inflation hit a multi-decade high on energy prices. In the UK, Liz Truss became the new prime minister with her government quickly announcing a fiscal package in September. The proposal was poorly received by markets, as it undermined efforts of the central bank to lower inflation.
 - Equity markets significantly declined for the month leading to quarterly losses with international markets declining the most. The war in Ukraine has elevated prices in Europe, while tight COVID-19 policies, slowing growth, and property market issues have weighed on China. Continued US dollar strength has been a further headwind.
 - For the quarter, in a reversal of the prior trend, growth outpaced value across the capitalization spectrum but continued to trail year-to-date.
 - Interest rates rose significantly across the US yield curve for the month and quarter with the curve remaining inverted (ten-year yield minus the two-year yield) by 44 basis points. This is by far the worst start to a calendar year for bond investors.
- → Persistently high inflation and the likely increased pace of the policy response, the war in Ukraine, lingering COVID-19 issues, and lockdowns in China will all have considerable consequences for the global economy.

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Index Returns¹



- → Except for emerging markets and the broad US investment grade bond market (Bloomberg Aggregate), most asset classes appreciated in 2021.
- → After a brief rally in July most asset classes declined significantly in August and September as it became clear further policy tightening would be taken to try to control inflation. Except for commodities, all major assets classes have experienced significant declines year-to-date.

¹ Source: Bloomberg and FactSet. Data is as of September 30, 2022.



Domestic Equity Returns¹

	September	Q3	YTD	1 YR	3 YR	5 YR	10 YR
Domestic Equity	(%)	(%)	(%)	(%)	(%)	(%)	(%)
S&P 500	-9.2	-4.9	-23.9	-15.5	8.2	9.2	11.7
Russell 3000	-9.3	-4.5	-24.6	-17.6	7.7	8.6	11.4
Russell 1000	-9.3	-4.6	-24.6	-17.2	7.9	9.0	11.6
Russell 1000 Growth	-9.7	-3.6	-30.7	-22.6	10.7	12.2	13.7
Russell 1000 Value	-8.8	-5.6	-17.8	-11.4	4.4	5.3	9.2
Russell MidCap	-9.3	-3.4	-24.3	-19.4	5.2	6.5	10.3
Russell MidCap Growth	-8.5	-0.7	-31.5	-29.5	4.3	7.6	10.8
Russell MidCap Value	-9.7	-4.9	-20.4	-13.6	4.5	4.7	9.4
Russell 2000	-9.6	-2.2	-25.1	-23.5	4.3	3.6	8.5
Russell 2000 Growth	-9.0	0.2	-29.3	-29.3	2.9	3.6	8.8
Russell 2000 Value	-10.2	-4.6	-21.1	-17.7	4.7	2.9	7.9

US Equities: Russell 3000 Index fell 9.3% for September and 4.5% for the quarter.

- → US stocks fell sharply during September and finished down for the third quarter.
- → Each of the 11 sectors declined in September with six sectors (Real Estate, Communication Services, Technology, Utilities, Materials, and Industrials) falling by 10% or more. Health Care stocks fared best and declined 3.1%. For the quarter all sectors were down except for consumer discretionary and energy.
- → For the second straight month, value stocks outperformed growth stocks in the large cap segment of the market, while the reverse was true in the small cap segment. The underperformance of technology stocks, which account for 43% of the large cap growth market, drove this dynamic.

¹ Source: Bloomberg. Data is as of September 30, 2022.



Foreign Equity Returns¹

Foreign Equity	September (%)	Q3 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	-10.0	-9.9	-26.5	-25.2	-1.5	-0.8	3.0
MSCI EAFE	-9.4	-9.4	-27.1	-25.1	-1.8	-0.8	3.7
MSCI EAFE (Local Currency)	-6.2	-3.6	-14.5	-11.1	2.5	2.8	7.4
MSCI EAFE Small Cap	-11.5	-9.8	-32.1	-32.1	-2.2	-1.8	5.3
MSCI Emerging Markets	-11.7	-11.6	-27.2	-28.1	-2.1	-1.8	1.0
MSCI Emerging Markets (Local Currency)	-9.4	-8.2	-20.8	-21.5	1.1	1.1	4.5
MSCI China	-14.6	-22.5	-31.2	-35.4	-7.2	-5.5	2.4

International equities (MSCI EAFE) fell 9.4%, while emerging markets (MSCI EM) returned -11.7% in September leading to quarterly declines of similar amounts.

- → Non-US developed market stocks again broadly trailed the US for the month, leading to the steepest declines year-to-date. High inflation in Europe, particularly related to gas and electricity, the ongoing war in Ukraine, and relatively slower growth globally continue to weigh on sentiment.
- → Emerging market equities were deep in the red for the month, driven by China's (-14.6%) on-going property market issues and strict COVID-19 policies. The upcoming National Communist Party Congress in China in October is highly anticipated.
- → The strength of the US dollar continued as a headwind to international equities for the month and year-to-date, both in developed and emerging markets.

¹ Source: Bloomberg. Data is as of September 30, 2022.



Fixed Income Returns¹

Fixed Income	September (%)	Q3 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	-4.3	-4.5	-14.9	-14.9	-3.1	-0.2	1.2	5.2	6.2
Bloomberg Aggregate	-4.3	-4.8	-14.6	-14.6	-3.3	-0.3	0.9	4.8	6.4
Bloomberg US TIPS	-6.6	-5.1	-13.6	-11.6	0.8	1.9	1.0	4.3	6.9
Bloomberg High Yield	-4.0	-0.6	-14.7	-14.1	-0.5	1.6	3.9	9.7	4.6
JPM GBI-EM Global Diversified (USD)	-4.9	-4.7	-18.6	-20.6	-7.1	-3.9	-2.4	7.6	4.8

Fixed Income: The Bloomberg Universal declined 4.3% in September and 4.5% for the quarter.

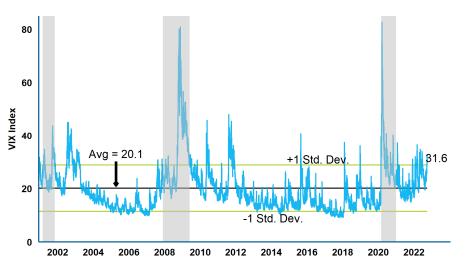
- → A sharp rise in bond yields driven by central banks confirming commitments to fight inflation weighed on fixed income in September leading to declines for the quarter as well. Year-to-date the US bond market is off by far to its worst calendar year start on record.
- → TIPS declined the most for the month and quarter as investors' confidence grew that tighter monetary policy would ultimately get inflation under control.
- → Riskier US bonds declined the least with the high yield index falling slightly less than the broad US bond market (-4.0% versus -4.3%). Emerging market bonds finished down close to 5% for the month with significant declines year-to-date.

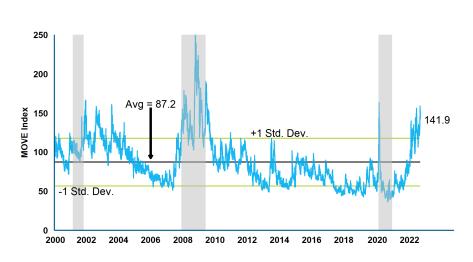
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¹ Source: Bloomberg. JPM GBI-EM is from InvestorForce. Data is as of September 30, 2022.



Equity and Fixed Income Volatility¹





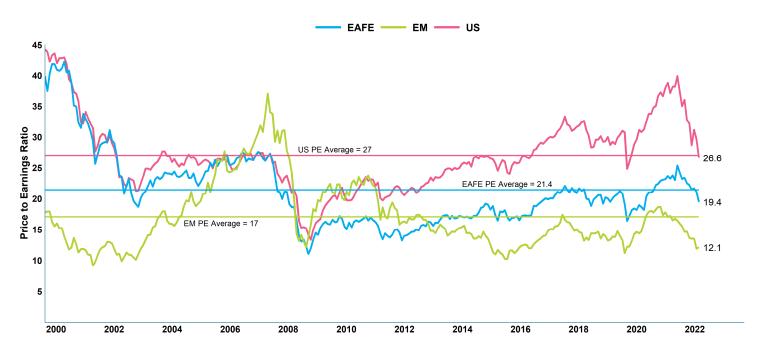
- → Volatility in equities (VIX) and fixed income (MOVE) rose in September and finished higher overall for the quarter as the Federal Reserve and other central banks made it clear that they were committed to aggressively tightening monetary policy to fight high inflation.
- → Fixed income volatility remains particularly high due to the uncertain path of short-term interest rates given stubbornly high inflation. Issues related to the UK's announcement to offer tax breaks despite the central bank's efforts to fight inflation also contributed to volatility in fixed income markets.

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¹ Equity and Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of September 2022. The average line indicated is the average of the VIX and MOVE values between January 2000 and the recent month-end respectively.



Equity Cyclically Adjusted P/E Ratios¹

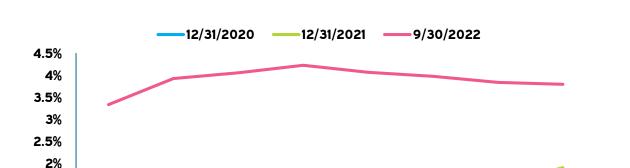


- → September price declines brought US equity price-to-earnings ratios slightly below the long-term (21st Century) average.
- → International developed market valuations remain below the US and are below their own long-term average, with those for emerging markets the lowest and well under the long-term average.

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¹ US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is as of September 30, 2022. The average line is the long-term average of the US, EM, and EAFE PE values from December 1999 to the recent month-end respectively.





US Yield Curve¹

→ Rates across the yield curve remain far higher than at the start of the year.

3M

6**M**

1Y

1.5% 1% 0.5% 0%

→ In September, rates rose across the yield curve, finishing the quarter significantly higher. Yields on two-year Treasuries increased 0.79% just in the month of September bring the quarterly increase to 1.32%, while ten-year Treasuries rose 0.64% for the month and 0.82% for the quarter.

2Y

5Y

7Y

10Y

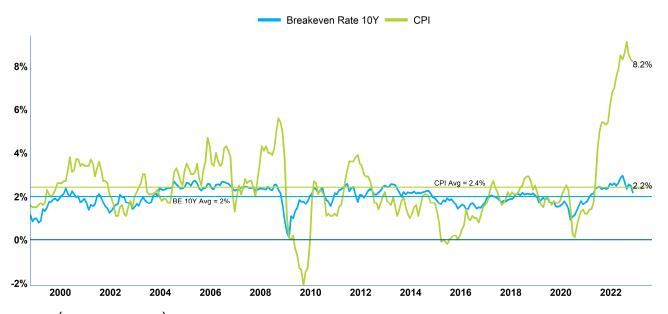
30Y

- → The Fed remains strongly committed to fighting inflation, as it increased rates another 75 basis points to a range of 3.0% and 3.25%. This was the fifth increase this year and the third consecutive increase of this amount.
- → The yield spread between two-year and ten-year Treasuries remained negative, finishing September at -0.44%. Inversions in the yield curve have historically often preceded recessions.

¹ Source: Bloomberg. Data is as of September 30, 2022.



Ten-Year Breakeven Inflation and CPI¹



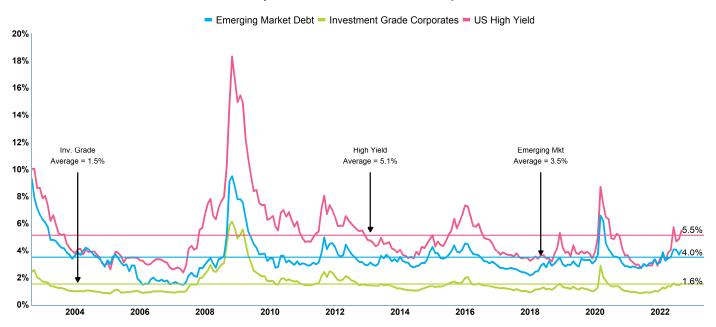
- → Inflation expectations (breakevens) declined for the month and finished the quarter slightly below the long-run average on the belief that tighter monetary policy would lower long-run inflation.
- → Trailing twelve-month CPI declined in September (8.2% versus 8.3%) but surprised markets by coming in above expectations.
- → Over the last year rising prices for energy (particularly oil), food, housing, and for new and used cars remain key drivers of inflation.

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¹ Source: Bloomberg. Data is as of September 30, 2022. The CPI and 10 Year Breakeven average lines denote the average values from August 1998 to the present month-end respectively. Breakeven values represent month-end values for comparative purposes.



Credit Spreads vs. US Treasury Bonds¹



- → Credit spreads (the spread above a comparable maturity Treasury) widened in September, finishing the quarter above long-term averages. Fears related to the impact of tighter monetary policy on economic growth was a key driver of wider spreads.
- → In the US, spreads for high yield increased sharply (5.5% versus 4.8%), with investment grade spreads rising more modestly (1.6% versus 1.4%). Emerging market spreads also increased (4.0% versus 3.6%).

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¹ Sources: Bloomberg. Data is as of September 30, 2022. Average lines denote the average of the investment grade, high yield, and emerging market spread values from August 2000 to the recent month-end respectively.



Global Economic Outlook

In their October update, the IMF maintained lowered global growth forecasts, driven by the economic impacts of persistent inflation and corresponding tighter policy, as well as issues related to the war in Ukraine and the lingering pandemic.

- → The IMF forecasts global GDP growth to come in at 3.2% in 2022 (like the July estimate) and 2.7% in 2023 (0.2% below the prior estimate).
- → In advanced economies, GDP is projected to grow 2.4% in 2022 and 1.1% in 2023. The US saw another downgrade in the 2022 (1.6% versus 2.3%) forecast largely due to accelerated policy tightening, given persistently high inflation. The euro area saw an upgrade in expected growth (3.1% versus 2.6%) on substantial fiscal stimulus in 2022 but a downgrade in 2023 (0.5% versus 1.2%) as rising energy prices weigh on the region that is a net importer of energy. The Japanese economy is expected to grow 1.7% this year and 1.6% in 2023.
- → Growth projections for emerging markets are higher than developed markets, at 3.7% in 2022 and 2023. China's growth was downgraded for 2022 (3.2% versus 3.3%) and 2023 (4.4% versus 4.6%) given tight COVID-19 restrictions and continued property sector problems.
- \rightarrow The global inflation forecast was significantly increased for 2022 (8.8% versus 7.4%).

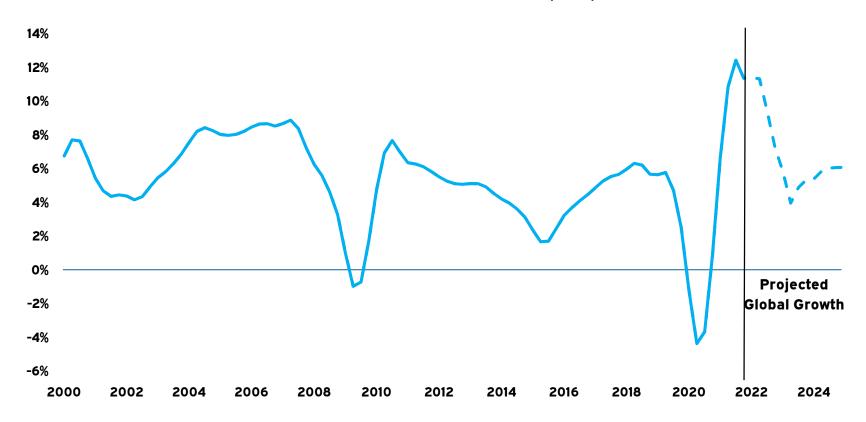
		Real GDP (%)1		Inflation (%)¹					
	IMF	IMF	Actual	IMF	IMF	Actual			
	2022 Forecast	2023 Forecast	10 Year Average	2022 Forecast	2023 Forecast	10 Year Average			
World	3.2	2.7	3.2	8.8	6.5	3.6			
Advanced Economies	2.4	1.1	1.6	7.2	4.3	1.6			
US	1.6	1.0	2.1	8.1	3.5	2.0			
Euro Area	3.1	0.5	1.0	8.3	5.7	1.3			
Japan	1.7	1.6	0.8	2.0	1.4	0.4			
Emerging Economies	3.7	3.7	4.4	9.9	8.1	5.3			
China	3.2	4.4	7.3	2.2	2.2	2.4			

¹ Source: IMF World Economic Outlook. Real GDP and Inflation forecasts from October 2022 Update. "Actual 10 Year Average" represents data from 2012 to 2021.

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Global Nominal Gross Domestic Product (GDP) Growth¹



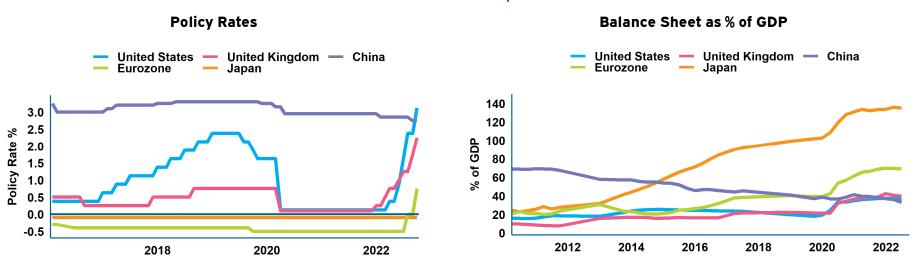
- → Global economies are expected to slow in 2022 compared to 2021, with risks of recession increasing given persistently high inflation and related tighter monetary policy.
- → The delicate balancing act of central banks trying to reduce inflation without dramatically impacting growth will remain key.

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¹ Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, nominal, % change YoY). Updated September 2022. Nominal expectations for GDP remain much higher than real GDP expectations given the elevated inflation levels.



Central Bank Response¹



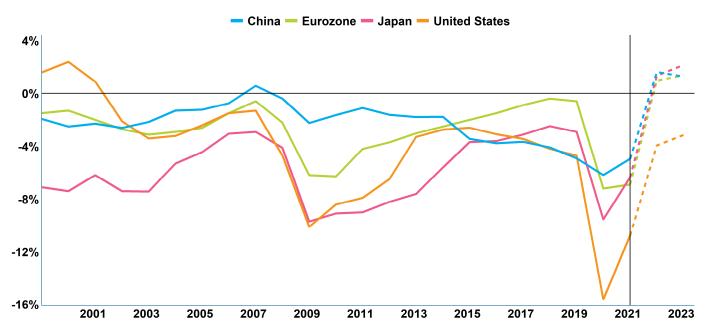
- → After global central banks took extraordinary action to support economies during the pandemic, including policy rate cuts and emergency stimulus through quantitative easing (QE), many are now aggressively reducing support in the face of high inflation.
- → The pace of withdrawing support varies across central banks with the US taking a more aggressive approach. The UK is also aggressively increasing rates, but recent talks of easing fiscal policy (this ultimately did not happen) created significant volatility that spilled over into other markets.
- → The one notable central bank outlier is China, where the central bank has lowered rates and reserve requirements in response to slowing growth.
- → The risk remains for a policy error, particularly overtightening, as record inflation, the war in Ukraine, and a tough COVID-19 policy in China could suppress global growth.

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¹ Source: Bloomberg. Policy rate data is as of September 30, 2022. China policy rate is defined as the medium-term lending facility 1 year interest rate. Balance sheet as % of GDP is based on quarterly data and is as of June 30, 2022.



Budget Surplus / Deficit as a Percentage of GDP1

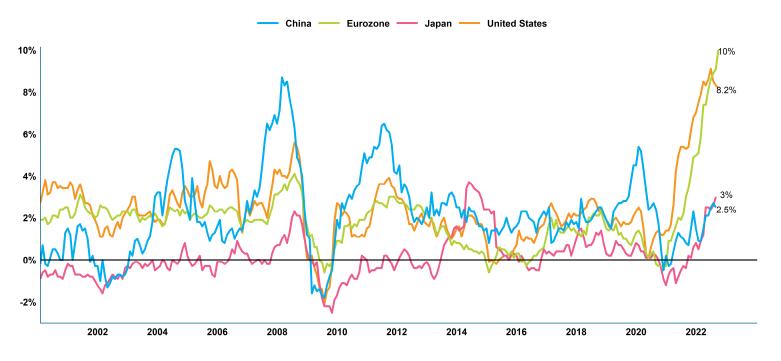


- → Budget deficits as a percentage of GDP drastically increased for major world economies, particularly the US, due to massive fiscal support and the severe economic contraction's effect on tax revenue in 2020 and 2021.
- → As fiscal stimulus programs end, and economic recoveries continue, deficits should improve.
- → Questions remain about how some countries will respond fiscally as inflation, particularly energy prices, weigh on consumers. Policies that undermine central banks' efforts to fight inflation could lead to additional market volatility like was seen in the UK.

¹ Source: Bloomberg. Data is as of September 30, 2022. Projections via IMF Forecasts from October 2022 Report. Dotted lines represent 2022 and 2023 forecasts.



Inflation (CPI Trailing Twelve Months)¹



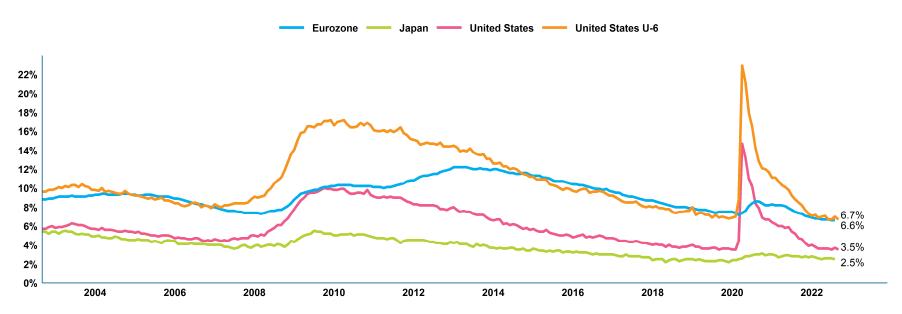
- → Inflation increased dramatically from the lows of the pandemic, particularly in the US and Eurozone where it has reached levels not seen in many decades.
- → Supply issues related to the pandemic, record monetary and fiscal stimulus, strict COVID-19 restrictions in China, and higher prices in many commodities driven by the war in Ukraine have been key global drivers of inflation.

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¹ Source: Bloomberg. Data is as of September 2022. The most recent data for Japan and China is as of August 31, 2022.





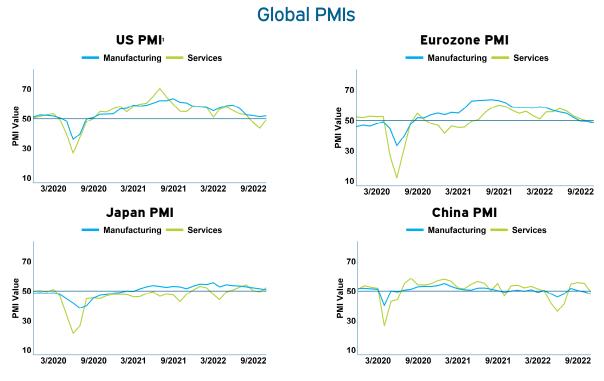


- → As economies have largely reopened, helped by vaccines for the virus, improvements have been seen in the labor market.
- → Despite slowing growth and high inflation the US labor market remains a bright spot. Unemployment in the US, which experienced the steepest rise from the pandemic, declined to pre-pandemic (3.5%) levels. The broader measure (U-6) that includes discouraged and underemployed workers declined but is much higher at 6.7%.
- → The strong labor market and higher wages, although beneficial for workers, motivates the Fed's efforts to fight inflation, likely leading to eventually higher unemployment.

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¹ Source: Bloomberg. Data is as of September 2022, for the US. The most recent data for Eurozone and Japanese unemployment is as of August 31, 2022.



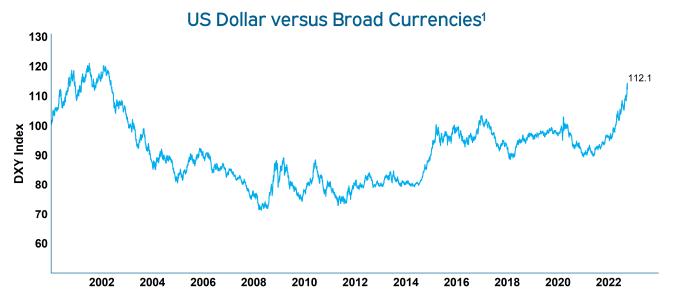


- → After improvements from the lows of the pandemic, Purchasing Managers Indices (PMI), based on surveys of private sector companies, have largely experienced downward pressure recently.
- → Service sector PMIs, except Japan, are all in contraction territory. The US service sector recovered somewhat but remains in negative territory due to weak demand, a sharp decline in new orders, and softening employment.
- → Manufacturing PMIs are also slowing across China and developed markets given declines in demand and inflationary pressures with the Eurozone and China in contraction territory.

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¹ Source: Bloomberg. US Markit Services and Manufacturing PMI, Caixin Services and Manufacturing PMI, Eurozone Markit Services and Manufacturing PMI, Jibun Bank Services and Manufacturing PMI. Data is as of September 2022. Readings below 50 represent economic contractions.





- → The US dollar continued to strengthen in September, increasing 7.1% overall for the quarter and reaching levels not seen in two decades.
- → The increased pace of policy tightening, stronger relative growth, and safe-haven flows all contributed to the dollar's strength this year.
- → The euro, yen, pound, and yuan have all experienced significant declines versus the dollar this year, adding to inflation.

¹ Source: Bloomberg. Data as of September 30, 2022.



Summary

Key Trends in 2022:

- → The impacts of record high inflation will remain key, with market volatility likely to remain high.
- → The pace of monetary tightening globally will be faster than previously expected, with the risk of overtightening.
- → Expect growth to slow globally in 2022 and into 2023 to the long-term trend or below. Inflation, monetary policy, and the war will all be key.
- → In the US the end of many fiscal programs is expected to put the burden of continued growth on consumers. Higher energy and food prices will depress consumers' spending in other areas.
- → Valuations have significantly declined in the US to below long-term averages.
- → Outside the US, equity valuations remain lower in both emerging and developed markets, but major risks remain, including continued strength in the US dollar, higher inflation particularly weighing on Europe, and China maintaining its restrictive COVID-19 policies.

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2022 Private Equity Investment Plan





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- 1. Program Review and Investment Plan
- 2. Summary and Recommendation



Section 1: Program Review and Investment Plan



Program Review and Investment Plan

SJCERA Program Overview

- → Since inception, \$472 million has been committed across 13 partnerships
 - Initial commitment began investing in 2013
 - Funds are combination of Fund-of-Funds, Buyout, Venture Capital, Special Situations, Co-investment and Infrastructure Funds.
- → Five new partnerships approved in 2022
 - Totaling \$190 million of commitments
- → Private equity targeted to be 10% of the total portfolio as part of the Aggresive Growth allocation
 - Current actual allocation at approximately 6%
 - Market value of \$237.6 million as of March 31, 2022
- → The Program has approved commitments across seven firms
 - Ocean Avenue has the largest commitments with a total of \$140 million across three funds and is approximately 62% of the market value.



Program Review and Investment Plan

SJCERA Commitment List

Since Inception Partnership Commitments

Partnership	Vintage Year	Commitment	Strategy
Morgan Creek V	2013	\$12 million	Primary Market Fund of Funds: diversified
Ocean Avenue II	2013	\$40 million	Primary Market Fund of Funds: diversified
Morgan Creek VI	2015	\$20 million	Primary Market Fund of Funds: diversified
Morgan Creek III	2015	\$10 million	Co-investment
Ocean Avenue III	2016	\$50 million	Co-investment
Ocean Avenue IV	2019	\$50 million	Co-investment
BlackRock Global Energy and Power Infrastructure III	2019	\$50 million	Infrastructure
Stellex II	2021	\$50 million	Special Situations
Lightspeed Venture Partners Select V	2022	\$40 million	Venture Capital
Ridgemont IV	2022	\$50 million	Buyout
BlackRock Global Energy and Power Infrastructure IV	2022	\$50 million	Infrastructure
Bessemer Venture Partners XII	2022	\$30 million	Venture Capital
Bessemer Venture Partners Forge Fund	2022	\$20 million	Venture Capital
Total Program		\$472 million	



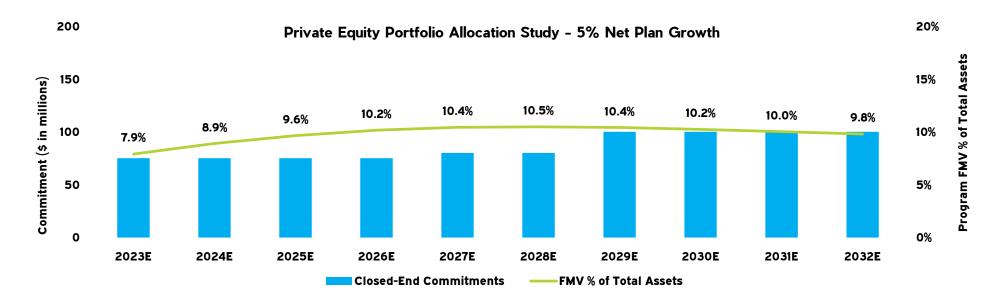
Program Review and Investment Plan

Future Growth

- → Additional activity required to achieve the target allocation over longer term
 - Also providing vintage year diversification
- → Growth of a private equity program a function of several factors:
 - Commitment pace
 - Rate of investment by underlying managers
 - Investment growth
 - Investment liquidations/distributions
- → Percentage allocation to private equity impacted by Total Portfolio growth
 - Slower Total Portfolio growth = larger private equity allocation
 - Faster Total Portfolio growth = smaller private equity allocation

Summary and Recommendation

SJCERA Projected Allocation



- → Modeling above assumes a commitment pace of \$60 to \$90 million per year
 - Reflecting 5% growth scenarios for the Total Portfolio.
 - Achieving the target allocation in the 2026 time frame
- → Consistent pacing needed to achieve the target allocation over several years
 - Maintains vintage year diversification
 - Revisit pacing annually to reflect existing portfolio conditions

Summary and Recommendation

Section 2: Summary and Recommendation



Summary and Recommendation

SJCERA Commitment Pacing

2022 Investment Plan

	Projections
Commitment Target: (commitment range)	\$75 million per year (\$60 -\$90million)
Commitment Sizing:	\$25 - \$37.5 million per opportunity
Number of Partnerships:	2 - 3 partnerships

- → Recommend targeting \$75 million in commitments annually
 - May scale up or down depending upon opportunity set
 - Target approximately \$25 million \$37.5 million per opportunity
- → Commit to two to three partnerships during the year
 - Provides diversification across vintage year and firm
- → Continue to update pacing targets on an annual basis
 - Update actual private equity cash flows and market values
 - Incorporates volatility of the public markets and Total Portfolio growth



Summary and Recommendation

Recommendations

Adopt the proposed 2022 commitment pacing plan and search criteria for the SJCERA private equity program. Specifically, the SJCERA should commit \$75 million per year across two to three private equity partnerships.



November 4, 2022

2022 Real Estate Investment Plan



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2. Section 2: Summary and Recommendation

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Section 1: Program Review and Investment Plan



Program Review and Investment Plan

SJCERA Program Overview

- → Since inception, \$479.1 million has been committed across 16 partnerships.
 - Initial commitment began investing in 2005.
 - Funds are combination of Core, Value-add, and Opportunistic Funds. These allocations are also across multiple property types.
- \rightarrow One new fund approved in 2022.
 - Totaling \$50 million of commitments.
- → Core Real Estate targeted to be 9% of the total portfolio as part of the Stabilized Growth allocation.
 - Current actual allocation at approximately 6%.
 - Market value of \$238.7 million as of March 31, 2022.
- → Non-Core Real Estate (Value-add and Opportunistic) targeted to be 8% of the total portfolio as part of the Aggressive Growth class.
 - Current actual allocation at approximately 3%.
 - Market value of \$109.3 million as of March 31, 2022.



Program Review and Investment Plan

SJCERA Commitment List

Since Inception Partnership Commitments

			3/31/2022	3/31/2022	3/31/2022
Fund Name	Strategy	Vintage Year	Commitment	Aggregate Contributions	Adjusted CAB
AG Core Plus Realty Fund IV, L.P.	Value-Added	2014	20.0	(20.0)	13.9
Almanac Realty Securities VI, L.P.	Value-Added	2011	30.0	(30.0)	4.2
Berkeley Partners Fund V, L.P.	Value-Added	2020	40.0	(22.0)	27.9
Colony Realty Partners III, L.P.	Value-Added	2007	21.0	(21.0)	0.0
Colony Realty Partners IV, L.P.	Value-Added	2012	21.0	(21.0)	0.0
Greenfield Acquisition Partners V, L.P.	Opportunistic	2007	30.0	(30.0)	0.2
Greenfield Acquisition Partners VI, L.P.	Opportunistic	2011	20.0	(20.0)	0.0
Greenfield Acquisition Partners VII, L.P.	Opportunistic	2013	19.1	(19.1)	5.4
Greenfield Acquisition Partners VIII, L.P.	Opportunistic	2017	30.0	(22.2)	19.6
Miller Global Fund V, L.P.	Opportunistic	2005	15.0	(14.5)	0.0
Miller Global Fund VI, L.P.	Opportunistic	2007	30.0	(30.0)	0.1
Miller Global Fund VII, L.P.	Opportunistic	2012	15.0	(15.0)	0.2
Stockbridge Real Estate Fund III, L.P.	Value-Added	2017	45.0	(39.1)	33.2
Walton Street Real Estate Fund V, L.P.	Opportunistic	2006	30.0	(30.0)	1.5
Walton Street Real Estate Fund VI, L.P.	Opportunistic	2007	15.0	(15.0)	5.7
Principal US Property Account	Core				45.2
Prologis Targeted U.S. Logistics Holdings, L.P.	Core				130.6
RREEF America REIT II, Inc.	Core				63.8

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Program Review and Investment Plan

Future Growth

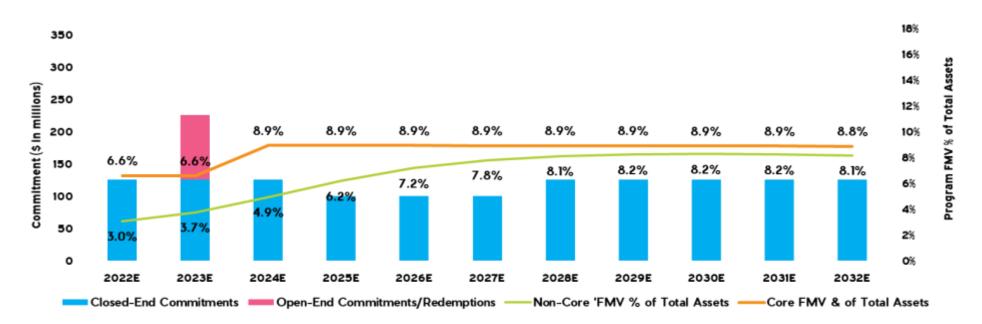
- → Additional activity required to achieve the target allocation over longer term.
 - Also providing vintage year diversification.
- → Growth of a private real estate program a function of several factors:
 - Commitment pace
 - Rate of investment by underlying managers
 - Investment growth
 - Investment liquidations/distributions
- → Percentage allocation to real estate impacted by Total Portfolio growth
 - Slower Total Portfolio growth = larger private equity allocation
 - Faster Total Portfolio growth = smaller private equity allocation



Program Review and Investment Plan

SJCERA Projected Allocation

Real Estate Portfolio Allocation Model



	Fair Market Value by Strategy												
		Target llocation	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E	2031E	2032E
Value-Added	0%	- 09	6 24%	31%	30%	32%	33%	33%	33%	33%	33%	32%	32%
Opportunistic	0%	- 09	6 8%	5%	6%	9%	11%	13%	15%	15%	15%	16%	16%
Core	0%	- 09	68%	64%	64%	59%	55%	53%	52%	52%	52%	52%	52%
Total			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



Program Review and Investment Plan

SJCERA Projected Allocation (continued)

- → Modeling above assumes a commitment pace of \$100-125 million per year.
 - Reflecting 5% growth scenarios for the Total Portfolio.
 - Achieving the target allocation in the 2027 time frame.
- → Consistent pacing needed to achieve the target allocation over several years.
 - Maintains vintage year diversification.
 - Revisit pacing annually to reflect existing portfolio conditions.

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Section 2: Summary and Recommendation



Summary and Recommendation

SJCERA Commitment Pacing

2022 Investment Plan

	Projections
Commitment Target: (commitment range)	\$100 million per year (\$100 -\$125 million)
Commitment Sizing:	\$50 - \$60 million per opportunity

Number of Partnerships: 2 - 3 partnerships

- → Recommend targeting \$100 million in commitments annually.
 - May scale up or down depending upon opportunity set.
 - Target approximately \$50 million \$60 million per opportunity.
- → Commit to two to three partnerships during the year.
 - Provides diversification across vintage year and firm.
- → Continue to update pacing targets on an annual basis.
 - Update actual Real Estate cash flows and market values.
 - Incorporates volatility of the public markets and Total Portfolio growth.



Summary and Recommendation

Recommendations

- → Assumption of 5% total asset plan growth rate.
- \rightarrow Goal of 9% core, 8% non-core for a total of 17% Real Estate Allocation.
- → More conservative investing approach (smoother), may take a few years to achieve.
- → Allows for vintage diversification more risk adverse.

Recommendation: Meketa recommends SJCERA adopt the proposed Real Estate Pacing plan

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San Joaquin County Employees'
Retirement Association ("SJCERA")
November 4, 2022

2022 Private Credit Pacing Study



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Section 1: Program Review and Investment Plan



Program Review and Investment Plan

SJCERA Private Credit Program Overview

- → Initial commitment began in 2010.
- → Two partnerships approved in 2020.
 - \$50 million to Davidson Kempner Distresses Opp. V.
 - \$50 million to White Oak Yield Spectrum Master.
- → Private credit is currently 10% of the total portfolio as part of the Credit allocation.
 - Current actual allocation at approximately 9.6%.
 - Market value of \$368.2 million as of June 30, 2022.
- → The Program has approved commitments across nine firms.
 - Mesa West Capital and BlackRock (Tennebaum Capital) have the largest commitments with a total of \$100 million and \$75 million committed.
 - BlackRock accounts for approximately 20% of the market value.



Program Review and Investment Plan

SJCERA Commitment List

Since Inception Partnership Commitments

Partnership	Vintage Year	Commitment	Strategy
Medley Opportunity Fund II	2010	\$50 million	Direct Lending
Crestline Opportunity Fund II	2012	\$45 million	Direct Lending and Secondary
Mesa West Real Estate Income III	2012	\$45 million	Real Estate Debt
Raven Asset-Based Opportunity II	2014	\$45 million	Asset Based Lending
Raven Asset-Based Opportunity III	2015	\$50 million	Asset Based Lending
Mesa West Real Estate Income IV	2016	\$75 million	Real Estate Debt
White Oak Summit Peer Fund	2016	\$50 million	Direct Lending
Oaktree Mid-Market Lending Fund	2018	\$50 million	Direct Lending
HPS European Asset Value Fund II	2019	\$50 million	Direct Lending
BlackRock TCP Direct Lending Fund IX	2019	\$100 million	Direct Lending
Davidson Kempner Fund V	2020	\$50 million	Distressed
HPS EU Asset Value	2020	\$50 million	Asset Based Lending
White Oak Yield Spectrum Master	2020	\$50 million	Specialty Finance
Total Program		\$710 million	

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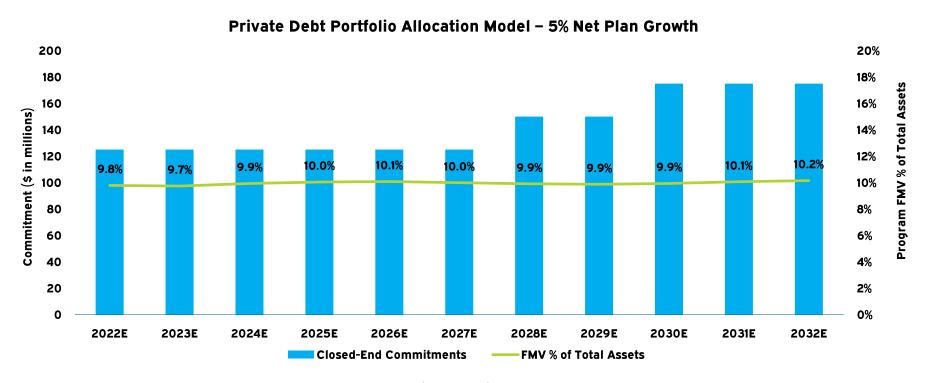
Program Review and Investment Plan

Future Growth

- → Additional activity required to achieve the target allocation over longer term.
 - Also providing vintage year diversification.
- → Growth of a private credit program a function of several factors:
 - Commitment pace
 - Rate of investment by underlying managers
 - Investment growth
 - Investment liquidations/distributions
 - Opportunity Set
- → Percentage allocation to private credit impacted by Total Portfolio growth.
 - Slower Total Portfolio growth = larger private credit allocation.
 - Faster Total Portfolio growth = smaller private credit allocation.



Program Review and Investment Plan



- \rightarrow Modeling above assumes a commitment pace of \$125 to \$150 million per year.
 - Reflecting 5% growth scenarios for the Total Portfolio.
 - Achieving the target allocation in the 2025-time frame.
- → Consistent pacing needed to achieve the target allocation over several years.
 - Maintains vintage year diversification.
 - Revisit pacing annually to reflect existing portfolio conditions.

Section 2: Recommendations and Summary



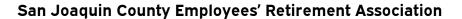
Recommendations and Summary

SJCERA Commitment Pacing

2022 Investment Plan

	Projections
Commitment Target: (commitment range)	\$125 million per year (\$125 -\$150 million)
Commitment Sizing:	\$50 - \$75 million per opportunity
Number of Partnerships:	2 - 3 partnerships

- → Recommend targeting \$125 million in commitments annually.
 - May scale up or down depending upon opportunity set.
 - Target approximately \$50 million \$75 million per opportunity.
- → Commit to two to three partnerships during the year.
 - Provides diversification across vintage year and firm.
- → Continue to update pacing targets on an annual basis.
 - Update actual private credit cash flows and market values.
 - Incorporates volatility of the public markets and Total Portfolio growth.





Summary and Recommendation

Recommendations

Adopt the proposed 2022 commitment pacing plan and search criteria for the SJCERA private credit program. Specifically, the SJCERA should commit \$125 million per year across two to three private credit partnerships.

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MEMORANDUM

TO: SJCERA Board of Retirement **FROM:** Meketa Investment Group

DATE: November 4, 2022

RE: 2022 Annual Roundtable: Summary

On October 6, 2022, the San Joaquin County Employees' Retirement Association (SJCERA) held its annual investment manager roundtable in Lodi, CA. The event featured various panel presentations on a variety of topics. This memo summarizes some of the issues discussed at the event that are facing SJCERA and key points.

Every year SJCERA staff and Meketa strive to make the event better than the previous. Similar to previous years there was a key note speaker and various managers were paired up with each other to present topics to the SJCERA board, staff and various attendees. These topics included a private markets discussion on Private Equity, Real Estate and Credit. In addition, we discussed Inflation and had a manager debate on various topics. The event was wrapped up with a prediction on inflation over the next 12-months and comments from SJCERA trustees and employers in attendance.

Key-Note Presentation

We were treated to an opening presentation by Tony Crescenzi from Pimco. He spent the morning talking about the world markets and the current outlook. Specifically, he addressed inflation, US Equity markets, fixed income and the conflict overseas. The conversation was informative and robust. Tony also took numerous questions about various topics from the group.

Private Equity

This panel was centered on discussing the trends and opportunities within the private equity markets. Judy Chambers from Meketa interviewed Ocean Avenue and Ridgemont. The comments from the panel were generally opportunistic. While the markets have been significantly down this also creates a buying opportunity for investors such as SJCERA, even in light of dry powder. The takeaway from these discussions was that there is still long-term value to be had from Private Equity assets.

Inflation

Loomis Sayles and Neuberger Berman discussed the trends and opportunities with regard to the current Inflation being seen in the economy. They both talked about the drivers of inflation, how the US compares to other countries, and what if anything should be done to deal with it. The takeaway from this session is that Inflation is difficult to manage, unpredictable, and involved various components of investments depending on the market environment. While historic CPI has been around 2% the panel made comments that something in the 4% range was more realistic moving forward.



Manager Debate

Following lunch, we put Dodge & Cox, Stone Harbor, and Mt Lucas on a panel to debate various topics. Topics ranged from the continued importance of fixed income within the portfolio to deglobalization. The managers went back and forth with a final judgement by SJCERA staff that Dodge & Cox won the debate.

Real Estate

Despite the drop in the capital markets in 2022, SJCERA's Real Estate managers provided an opportunistic view of investments moving forward. The general consensus was that after a correction in Real Estate assets there was going to be a buying opportunity for investors. Overall, the long-term future looks robust. SJCERA board members and attendees had a good interactive discussion with the managers.

Private Credit

Default rates, covenants, and yields were some of the topics that were questioned and discussed with Oaktree and BlackRock during this session. The managers had comments on how rising rates would affect current and future private credit investments within the portfolio. Given the inability of banks to provide financing to companies, the private markets have grown, and will continue to grow, to meet demand giving SJCERA a better opportunity to add value within the portfolio.

Conclusion and Next Steps

SJCERA, like many other pension plans, faces challenges in meeting an actuarial rate of return of 6.75% while managing risk and balancing diversification. In 2022, SJCERA, Meketa and Cheiron conducted an asset liability study to review the portfolio. As a result of this study SJCERA increased its long-term allocation to risk assets to help the plan improve its funding ratio. We will continue to review the SJCERA portfolio and its various asset classes into 2023.

Q1 Evaluator is a:

Answered: 30 Skipped: 0

ANSWER CHOICES	RESPONSES	
Manager	50.00%	15
Trustee	16.67%	5
Staff	20.00%	6
Consultant	3.33%	1
Employer	10.00%	3
Labor Representative	0.00%	0
TOTAL		30

Q2 Evaluator Name:

Answered: 29 Skipped: 1

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	27	Dean Sotter	10/8/2022 9:26 AM
29 Bruce George 10/8/2022 6:52 AM	28	Matthew Novak	10/8/2022 9:16 AM
	29	Bruce George	10/8/2022 6:52 AM

Q3 Presentations:

Answered: 30 Skipped: 0

	VERY GOOD	SATISFACTORY	UNSATISFACTORY	VERY POOR	TOTAL	WEIGHTED AVERAGE
Keynote Speaker - The World Markets in 2022 and Beyond: Tony Crescenzi	56.67% 17	40.00% 12	3.33% 1	0.00%	30	3.53
Private Equity - What's next and where are the markets today? Judy Chambers, Jack Purcell, Jeff Ennis	70.00% 21	26.67% 8	3.33%	0.00%	30	3.67
Inflation - Cost of Living, Cost of Investing, Supply Shortages, Fed Rates. Lynne Royer, Olumide Owolabi	70.00% 21	30.00% 9	0.00%	0.00%	30	3.70
Manager Debate: David Sancewich, Dave Torchia, Jerry Prior, Jim Dignan	83.33% 25	16.67% 5	0.00%	0.00%	30	3.83
Real Estate: What lies ahead and where are the opportunities? Brooks Monroe, Darren Kleis, Jake Thibeault	79.31% 23	20.69%	0.00%	0.00%	29	3.79
Private Credit: Rising rates and Investor Demand. What lies ahead for Private Credit? Raj Makam, Patrick Wolfe	68.97% 20	27.59% 8	3.45%	0.00%	29	3.66

#	OTHER (PLEASE SPECIFY)	DATE
1	I found the keynote speaker to have great insight and information; however, he mumbled a lot so it was often hard to understand him. I didn't find the debate was much of a debate. It was more of what each thought but they didn't debate or argue that their way was better than the other, etc. Lastly, the presentation on private credit was not engaging. There was a lot of information on the slides and it was hard for me to follow. It probably didn't help that it was at the end of the day.	10/10/2022 2:38 PM
2	Overall, this was an excellent event. Thank you to the Meketa team for organizing.	10/8/2022 9:50 AM

Q4 Moderator's facilitation of discussion

Answered: 30 Skipped: 0

	VERY GOOD	SATISFACTORY	UNSATISFACTORY	VERY POOR	TOTAL	WEIGHTED AVERAGE
(no label)	100.00%	0.00%	0.00%	0.00%		
	30	0	0	0	30	4.00

#	OTHER (PLEASE SPECIFY)	DATE
1	I particularly appreciated the structure for the day's content; making the afternoon more interactive helped keep everyone engaged	10/26/2022 5:05 PM
2	David did an excellent job!	10/21/2022 12:23 PM
3	David Sancewich was an excellent moderator for this event. The tone was the perfect mix of professional yet relaxed, which encouraged participation and engagement.	10/12/2022 7:22 AM
4	David did a great job with asking the right questions.	10/11/2022 11:53 AM
5	David was outstanding as moderator, and asked a few tough questions to panelists.	10/10/2022 5:07 PM
6	Both Judy and David had questions lined to keep the conversation going.	10/10/2022 2:38 PM
7	David did an excellent job.	10/10/2022 9:21 AM
8	David did an outstanding job of keeping the day on pace, injecting energy and soliciting feedback. Well done!	10/10/2022 8:13 AM
9	David is excellent.	10/8/2022 6:52 AM

Q5 What aspect of the roundtable session was most beneficial to you?

Answered: 28 Skipped: 2

#	RESPONSES	DATE
1	The ability to ask questions.	10/27/2022 1:30 PM
2	The opportunity to hear diverse perspectives and to engage with board members, staff, and industry peers	10/26/2022 5:05 PM
3	Inflation discussion	10/25/2022 9:36 AM
4	All of these presentations are helpful for planning out our future budgets, and as a community very dependent on the health of the economy, very helpful for overall budget planning.	10/24/2022 3:29 PM
5	I really liked the interactive nature of all the presentations, and the managers' debate was also a highlight this year!	10/24/2022 9:11 AM
6	One on one discussion, I engagement with those running the funds, diversity of participants	10/21/2022 1:58 PM
7	Enjoyed hearing thoughts from the board and questions from Paris in particular were particularly helpful during the presentations to help frame the discussion and debate.	10/21/2022 12:23 PM
8	Inflation discussion	10/21/2022 12:05 PM
9	It was all beneficial. The discussions on the economy were my favorite, because there are diverse views presented.	10/21/2022 11:38 AM
10	meeting others and learning exactly what they do for us and why they are there.	10/21/2022 11:36 AM
11	Great learning experience, even if most of it was above my frame of reference. I learned things.	10/19/2022 9:56 AM
12	All	10/15/2022 4:43 PM
13	I enjoyed the manager debates the most. These allowed managers to lose their script and put their personal opinions out there. I enjoy hearing contrarian opinions and this session helped bring them out.	10/12/2022 7:22 AM
14	Hearing other mangager's "house views"	10/11/2022 11:53 AM
15	Debate	10/11/2022 10:37 AM
16	Hearing questions and comments from trustees, staff, employers. Provides me further insight into wants important for SJCERA	10/11/2022 4:31 AM
17	Inflation discussion	10/10/2022 9:16 PM
18	The manager debate was excellent and I felt the Real Estate panel was most beneficial.	10/10/2022 5:07 PM
19	I found both the keynote speaker and the inflation portions to be the most beneficial.	10/10/2022 2:38 PM
20	Hearing different perspectives on interest rates, inflation, and the scenarios for the economy in the near and mid-term.	10/10/2022 9:21 AM
21	Investing strategies and inflation.	10/10/2022 8:49 AM
22	This was our first time at the event but I really apprecaited the overview at the outset by Meketa framing up program and the "role" the vaious strategies play. It was also helpful to get real data behind each strategy and school of thought. Finally, I apprecaited hearing from the staff, board and memebers at the end. Really brought it all home.	10/10/2022 8:13 AM
23	Discussion of inflation and rising interest rates and their effect on our ability to meet our return rate.	10/10/2022 8:09 AM
24	Hearing differing opinions of investing experts	10/9/2022 12:03 PM

	SJCERA Roundtable Evaluation October 6, 2022	SurveyMonkey
25	The initial overview of the markets and SJCERA's portfolio from the Meketa folks - that was right on point. The manager debate was #2 but I must exclude the Private Credit panel since I was on it!	10/8/2022 2:40 PM
26	panel discussions spanning multiple asset classes	10/8/2022 9:50 AM
27	Inflation discussion	10/8/2022 9:26 AM
28	Inflation Discussion and Manager Debate	10/8/2022 9:16 AM

Q6 What aspect of the roundtable session was least beneficial to you?

Answered: 24 Skipped: 6

#	RESPONSES	DATE
1	Nothing	10/27/2022 1:30 PM
2	I am as guilty of this as the next manager, but we frequently fall in to the trap of talking their book. One potential idea for future sessions: make managers argue against their own asset class.	10/26/2022 5:05 PM
3	N/A	10/25/2022 9:36 AM
4	Some of the nitty gritty details of the private equity deals.	10/24/2022 3:29 PM
5	I thought the keynote speaker was a bit lacking this year, I felt like it might be more beneficial if he has a formal presentation prepared instead of doing it like a college lecture style.	10/24/2022 9:11 AM
6	N/A	10/21/2022 12:23 PM
7	There wasn't anything that wasn't beneficial.	10/21/2022 11:38 AM
8	It was my first time, so everything was a great learning experience	10/21/2022 11:36 AM
9	Some of the speakers were hard to hear and some where hard to understand.	10/19/2022 9:56 AM
10	None	10/15/2022 4:43 PM
11	I was underwhelmed by the private credit session. They didn't make a case for the asset class, only that they were better than other managers in terms of avoiding leverage. This asset class scares me and I walked away thinking that the middle loan market has taken in way too much money and has grown way too fast. This market's excesses are being hidden in private credit.	10/12/2022 7:22 AM
12	nothing - time well spent	10/11/2022 11:53 AM
13	Keynote	10/11/2022 10:37 AM
14	I'm hardpressed to come up with a response. I would have to say the Private Equity discussion was least relevant for mebut quality of presentation was high	10/11/2022 4:31 AM
15	All was good	10/10/2022 9:16 PM
16	The Inflation panel was the least beneficial to me as I had an extremely hard time understanding Mr. Owolabi.	10/10/2022 5:07 PM
17	Private Credit	10/10/2022 2:38 PM
18	It was all beneficial.	10/10/2022 9:21 AM
19	Private equity.	10/10/2022 8:49 AM
20	I would have liked a few slides or frames of reference from the keynote speaker. It was tough to follow. I think providing an economic outlook to start is the right approach, however.	10/10/2022 8:13 AM
21	The last presentation on credit was my least favorite presentation.	10/10/2022 8:09 AM
22	Perhaps the initial keynote speaker - it was a bit unclear as to what the takeways were	10/8/2022 2:40 PM
23	a little hard to hear at times with the microphone situation, but overall good sound quality	10/8/2022 9:50 AM
24	I thought the moderator did a good job but somehow the panelists (and I know you want honesty) appeared to be competing for SJCERA's \$\$. Too much of a marketing pitch in my opinion.	10/8/2022 9:26 AM

Q7 What topics would you like to see covered in the roundtable session next year?

Answered: 24 Skipped: 6

#	RESPONSES	DATE
1	Actuarial processes	10/27/2022 1:30 PM
2	While interesting, I often wonder if the discussion of nearer term economic trends is useful for board members. I think the board (and staff) might benefit from hearing perspectives that are more structural/secular in nature (i.e. implications of demographic over the next 30 years). I also think the Board would benefit from hearing from plans who have pursued meaningfully different approaches to hedging liabilities. For instance, SJCERA might benefit from hearing from plans who have issued pension obligation bonds	10/26/2022 5:05 PM
3	Would like to hear more about how all this translates into our employer rates and how we are doing when it comes to percentage funded.	10/24/2022 3:29 PM
4	How to achieve our assumed rate of return if both fixed income/equity markets go sideways for a couple of years	10/24/2022 9:11 AM
5	Inflation hahahaha	10/21/2022 1:58 PM
5	Hard to pick topics given the continued volatility but very much enjoyed the debate.	10/21/2022 12:23 PM
7	Regulatory Environment	10/21/2022 12:05 PM
3	NA	10/21/2022 11:38 AM
9	How to manage finance/retirement investments 101	10/21/2022 11:36 AM
10	What is most urgent at that time.	10/19/2022 9:56 AM
11	Whatever is important at the time	10/15/2022 4:43 PM
12	Changing demographics and how this could potentially affect asset class return and risk assumptions.	10/12/2022 7:22 AM
13	asset allocation	10/11/2022 11:53 AM
14	Fiduciary duties of managers	10/11/2022 10:37 AM
15	Since the plan no longer has active public equity managers perhaps a guest speaker focusing on that topic might be helpful for context	10/11/2022 4:31 AM
16	I would like to re-visit the inflation discussion again next year as a "where are we now" vs. this year. Although not a topic, but I think we could get another topic for "debate".	10/10/2022 2:38 PM
17	Similar to this year, adjusted for current topics as of the date of the conference.	10/10/2022 9:21 AM
18	Investing strategies and inflation.	10/10/2022 8:49 AM
19	I think some case studies (if done well and not commercials) would be helpful. What went well, how addressing challendges across strategies?	10/10/2022 8:13 AM
20	unknown	10/10/2022 8:09 AM
21	Would be awesome to get some details on employees who participate in SJCERA's retirement plans - average age, profile, average retirement age so that we more specifically be aware on what we are working for.	10/8/2022 2:40 PM
22	a little more detail on SJCERA and its beneficiaries	10/8/2022 9:50 AM
23	Supply chain and labor forces and changes to inflation from prior year.	10/8/2022 9:26 AM
24	I think a similar agenda will be relevant next year - interest rates and inflation.	10/8/2022 9:16 AM

Q8 General:

Answered: 30 Skipped: 0

	VERY GOOD	SATISFACTORY	UNSATISFACTORY	VERY POOR	TOTAL	WEIGHTED AVERAGE
Communication prior to the meeting date	73.33% 22	26.67% 8	0.00%	0.00%	30	3.73
Organization of the event	96.67% 29	3.33%	0.00%	0.00%	30	3.97
Meeting materials	63.33% 19	36.67% 11	0.00%	0.00%	30	3.63
Meeting facilities	93.33% 28	6.67% 2	0.00%	0.00%	30	3.93
Hotel reservations (if applicable)	93.75% 15	6.25% 1	0.00%	0.00%	16	3.94
Quality of food and beverage	60.00% 18	40.00% 12	0.00%	0.00%	30	3.60
Quality of service	90.00% 27	10.00%	0.00%	0.00%	30	3.90
Networking with SJCERA trustees and staff	76.67% 23	23.33%	0.00%	0.00%	30	3.77

#	OTHER (PLEASE SPECIFY)	DATE
1	Another great learning experience coupled with extraordinary people!	10/27/2022 1:30 PM
2	I found the event extremely educational and enjoyed the opportunity to meet SJCERA Investment managers.	10/10/2022 5:07 PM
3	Although there was plenty of time allotted for networking, it did not seem that managers were as eager to network this year compared to past round table events.	10/10/2022 2:38 PM
4	The way the tables were set up made it hard for trustees to see the presenters as well as see the managers.	10/10/2022 8:09 AM
5	I was not a fan of the new room configuration. I like the old square. Felt like the back of the room - which was a mix of people - was the spectator section.	10/8/2022 9:26 AM

Q9 Should the format be repeated next year?

Answered: 30 Skipped: 0

ANSWER CHOICES	RESPONSES	
Yes	100.00%	30
No	0.00%	0
TOTAL		30

Q10 Should the location be repeated next year?

ANSWER CHOICES	RESPONSES	
Yes	100.00%	30
No	0.00%	0
TOTAL		30

#	OTHER (PLEASE SPECIFY)	DATE
1	if at all possible to start at 1:00 or so, that would allow east coast folks to travel in that morning	10/8/2022 9:50 AM

Q11 Suggestions for improving next year's event:

#	RESPONSES	DATE
1	Nothing	10/27/2022 1:30 PM
2	See above content recommendations. If you would like to force the group to get to know each other, you could implement a personal "fun fact" scavenger hunt ("Which attendee did XXX for their first job?")	10/26/2022 5:05 PM
3	Would like to hear more discussion amongst the Board Members.	10/24/2022 3:29 PM
4	It worked so well - keep it going with the board and staff's input on what is most relevant/topical.	10/21/2022 12:23 PM
5	Maybe move the tables up closer to the screen. I had a hard time seeing the numbers from the employer's table and I didn't bring a printed copy of the materials.	10/21/2022 11:38 AM
6	Better sound; graphics more tuned to overhead projector.	10/19/2022 9:56 AM
7	Lets see	10/15/2022 4:43 PM
8	Overall, I was quite impressed with the event and would love to return again next year. It was sometimes hard to hear the speakers due to the room acoustics but David did a good job of encouraging them to speak into the mic.	10/12/2022 7:22 AM
9	Nothing	10/11/2022 11:53 AM
10	Keep up the good work	10/11/2022 4:31 AM
11	1) Slides were ALOT more legible than previous years, but some were still difficult to read (type size) or crowded. So, some additional coaching would help. 2) Projector changed the color of the slidesmaybe it needs adjusting? Made it hard to tell which line speaker was referring to. 3) fix typo C+I = B+E (right now they are all + signs). 4) I heard some participants say they had difficulty understanding speakers with accents. I was able to understand them, but perhaps ask them to speak slowly so our ears can adjust since not all have a lot of experience with different accents. 5) I have more comments in my notes that I will email separately.	10/10/2022 9:16 PM
12	The dinner was sparsely attended by Trustees and SJCERA staff and felt this was the least valuable part of the event. Consider not holding dinner, but maybe just having appetizers and drings.	10/10/2022 5:07 PM
13	The chairs were not comfortable for an entire date of sitting but I am not sure if we have any way of changing this aspect.	10/10/2022 2:38 PM
14	More table seating for lunch.	10/10/2022 9:21 AM
15	Make sure people understand that they will be called out for marketing.	10/8/2022 9:26 AM
16	Maybe dinner the night before to allow for more informal networking in advance.	10/8/2022 9:16 AM

Q12 Additional suggestions or comments:

#	RESPONSES	DATE
1	I was very pleased to see that feedback from last years event was taken into consideration as the Slides in all presentations this year were legible and concise!	10/27/2022 1:30 PM
2	This is always a well run, thoughtful event that I look forward to attending. I'm grateful to Dave and the SJCERA's staff's efforts for organizing the discussions.	10/26/2022 5:05 PM
3	I continue to believe we should think more seriously about investing locally. For example, construction loans and permanent loans for well secured affordable housing projects would be a safe investment and contribute to the health of the County.	10/24/2022 3:29 PM
4	I think David did an excellent job moderating the day. Thank you for inviting us.	10/21/2022 11:38 AM
5	Great experience for my first RT.	10/19/2022 9:56 AM
6	None	10/15/2022 4:43 PM
7	Nothing	10/11/2022 11:53 AM
8	Job well done by everyone who played a role in putting the event together. Kudos!	10/10/2022 2:38 PM
9	Fantastic event! We were honored to be there and would very much welcome the opportunity to return!	10/10/2022 8:13 AM
10	THANK YOU for including me	10/8/2022 9:50 AM
11	None. Thanks!	10/8/2022 9:26 AM

Q1 Evaluator name:

#	RESPONSES	DATE
1	Phonxay Keokham	10/27/2022 1:49 PM
2	Steve Moore	10/27/2022 9:53 AM
3	Jennifer Goodman	10/26/2022 12:13 PM
4	Greg Frank	10/25/2022 9:31 AM
5	J.C. Weydert	10/24/2022 11:11 PM
6	Johanna Shick	10/24/2022 2:11 PM
7	Michael Duffy	10/21/2022 1:54 PM
8	Emily Nicholas	10/21/2022 11:23 AM
9	Ray	10/18/2022 2:32 PM
10	Adnan Khan	10/17/2022 9:25 AM
11	Chanda Bassett	10/17/2022 8:28 AM
12	Mike Restuccia	10/15/2022 4:45 PM

Q2 Evaluator is:

ANSWER CHOICES	RESPONSES	
Trustee	75.00%	9
Staff Member	25.00%	3
TOTAL		12

Q3 I have confidence in the advice SJCERA receives from its Actuarial Consultant

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no	100.00%	0.00%	0.00%	0.00%	0.00%		
label)	12	0	0	0	0	12	5.00

#	COMMENTS & SUGGESTIONS:	DATE
1	Always prepared to expand discussion to related topics as they come up	10/24/2022 11:11 PM

Q4 The Actuarial Consultant explains things in an understandable way.

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	91.67% 11	8.33% 1	0.00%	0.00%	0.00%	12	4.92

#	COMMENTS & SUGGESTIONS:	DATE
1	No complaint - often has more than enough charts and graphs to illustrate a point	10/24/2022 11:11 PM

Q5 The Actuarial Consultant presents data that supports their recommendations.

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	91.67% 11	8.33% 1	0.00%	0.00%	0.00%	12	4.92

#	COMMENTS & SUGGESTIONS:	DATE
1	Highly satisfied with analysis	10/24/2022 11:11 PM

Q6 The Actuarial Consultant keeps the Board informed of issues affecting SJCERA.

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	75.00% 9	25.00% 3	0.00%	0.00%	0.00%	12	4.75

#	COMMENTS & SUGGESTIONS:	DATE
1	strong point of his/their representation	10/24/2022 11:11 PM

Q7 Please rate your satisfaction with the quality of the following contractually required services.

Answered: 12 Skipped: 0

	SATISFIED	SOMEWHAT SATISFIED	SOMEWHAT UNSATISFIED	UNSATISFIED	TOTAL	WEIGHTED AVERAGE
Actuarial valuation	91.67% 11	8.33% 1	0.00%	0.00%	12	4.92
Actuarial and Government Table Updates and Testing	90.00%	10.00%	0.00%	0.00%	10	4.90
Section 415(b) calculations	100.00% 7	0.00%	0.00%	0.00%	7	5.00
Redeposit factors and bi-weekly payment schedules	100.00%	0.00%	0.00%	0.00%	6	5.00
GASB 67/68 financial statement disclosure report	88.89%	11.11% 1	0.00%	0.00%	9	4.89
CAFR schedules	88.89%	11.11%	0.00%	0.00%	9	4.89
PEPRA compensation limits	90.91%	9.09%	0.00%	0.00%	11	4.91
Retiree cost-of-living adjustment (COLA)	100.00% 11	0.00%	0.00%	0.00%	11	5.00
Other actuarial consulting	90.00%	10.00%	0.00%	0.00%	10	4.90

#	OTHER (PLEASE SPECIFY)	DATE
1	Cheiron (and Graham in particular) is very accommodating. They respond timely to requests and are thorough in their responses.	10/24/2022 2:11 PM
2	Graham and his team do a great job.	10/17/2022 8:28 AM

Question 7: Don't know/No opinion omitted from calculation of average score.

Q8 I have confidence in the firm for which our Actuarial Consultant works.

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	100.00% 12	0.00%	0.00%	0.00%	0.00%	12	4.00

#	COMMENTS & SUGGESTIONS:	DATE
1	Very comfortable in continuing long term relationship	10/24/2022 11:11 PM

Continue same emphasis

10/21/2022 1:54 PM

Q9 The actuarial issues or areas of concern I would like the consultant to address in the next twelve months are:(Identify your top 3 issues/concerns)

ANSWER C	CHOICES	RESPONSES	
1.		83.33%	5
2.		83.33%	5
3.		33.33%	2
Other Comr	nents:	16.67%	1
#	1.		DATE
1	Employee benefits		10/27/2022 1:49 PM
2	The upcoming LDROM report requirement		10/27/2022 9:53 AM
3	Prolonged market underperformance - failure to make assumtions	;	10/24/2022 11:11 PM
4	Funding alternatives		10/18/2022 2:32 PM
5	Final valuation data file to be provided immediately upon complet	ion	10/17/2022 9:25 AM
#	2.		DATE
1	Inflation		10/27/2022 1:49 PM
2	The next 2024 contribution rates		10/27/2022 9:53 AM
3	Extra Liquidity buffer / reserves		10/24/2022 11:11 PM
4	Communications with employers		10/18/2022 2:32 PM
5	Provide factor tables early this year if possible		10/17/2022 9:25 AM
#	3.		DATE
1	Funding ratio		10/27/2022 1:49 PM
2	I will create a new template for contribution rates, moving forward rates as per the new template as well as in the pdf format	please provide contribution	10/17/2022 9:25 AM
#	OTHER COMMENTS:		DATE

Q10 What would you like the Actuarial Consultant to do differently?

#	RESPONSES	DATE
1	When possible inclusion of an executive summary with reports.	10/27/2022 9:53 AM
2	The team creates great presentations, however, over this last year, the entire presentation was not given at the meeting. I think this impacts the information and education which the public and employers could be receiving. I would like the actuary to make the formal presentations.	10/26/2022 12:13 PM
3	stay healthy	10/24/2022 11:11 PM
4	Please see top 3 issues/concern above	10/17/2022 9:25 AM
5	n/a	10/17/2022 8:28 AM

Q11 Other Remarks

#	RESPONSES	DATE
1	I have no problems	10/18/2022 2:32 PM

Q1 Evaluator name:

#	RESPONSES	DATE
1	J.C. Weydert	10/26/2022 7:55 PM
2	Jennifer Goodman	10/26/2022 12:09 PM
3	Mike	10/26/2022 12:07 PM
4	Phonxay Keokham	10/25/2022 10:22 AM
5	Greg Frank	10/25/2022 9:33 AM
6	Johanna Shick	10/24/2022 2:27 PM
7	Paris	10/24/2022 11:39 AM
8	Elaina Petersen	10/19/2022 10:06 AM
9	Stephan Moore	10/13/2022 8:25 PM
10	Chanda Bassett	10/12/2022 3:11 PM
11	Emily Nicholas	10/12/2022 10:18 AM
12	Mp duffy	10/11/2022 9:47 AM

Q2 Evaluator is:

ANSWER CHOICES	RESPONSES	
Trustee	66.67%	8
Staff Member	33.33%	4
TOTAL		12

Q3 I am satisfied with the investment results that SJCERA has achieved while working with our Investment Consultant.

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	91.67% 11	8.33% 1	0.00%	0.00% 0	0.00%	12	4.92

#	COMMENTS & SUGGESTIONS:	DATE
1	Disagree with the amount of focus on ESG and placing too much / any emphasis on a funds ESG score - ESG - is a disaster NOW for many countries that had the highest scores in the world - as proclaimed by the World Bank and WEF	10/26/2022 7:55 PM
2	It's encouraging that, since getting our portfolio approach fully implemented in November 2016, our investment results over the 1-, 3-, and 5-year periods since calendar year 2017 have met or exceeded our assumed rate of return. However, other systems using this same type of approach (like Hawaii) seem to get better resultsI'd our consultant to help us to understand what they do differently and what we could do to achieve similar (better) results.	10/24/2022 2:27 PM
3	I am new to the behind the scenes of investments and consultants. I am impressed by the numbers that SJCERA has in investments and returns.	10/19/2022 10:06 AM
4	While we are experiencing losses in the portfolio, MAKETA seems to be working to keep the losses at a minimum while posturing for the future to ensure our overall goal of 7% return over a 10 to 20 year period.	10/13/2022 8:25 PM

Q4 I have confidence in the advice SJCERA receives from its Investment Consultant

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	91.67% 11	8.33% 1	0.00%	0.00%	0.00%	12	4.92

#	COMMENTS & SUGGESTIONS:	DATE
1	Would like to hear more about how Hawaii has structured their plan.	10/26/2022 7:55 PM

Q5 The Investment Consultant explains things in an understandable way.

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	100.00% 12	0.00%	0.00%	0.00%	0.00%	12	5.00

#	COMMENTS & SUGGESTIONS:	DATE
1	David's strong point - and brings in other Meketa consultants when needed / appropriate	10/26/2022 7:55 PM
2	I have learned so much from David.	10/19/2022 10:06 AM
3	The education provided is exceptional and there is often additional information provided to help those of us that do not operate in the investment world on a daily basis. I appreciate this very much.	10/12/2022 3:11 PM

Q6 The asset allocation was developed using a comprehensive, well-founded approach.

Answered: 12 Skipped: 0

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	TOTAL	WEIGHTED AVERAGE
(no label)	90.91% 10	9.09% 1	0.00%	0.00%	11	4.91

#	COMMENTS & SUGGESTIONS:	DATE
1	Was done with thoughtfulness and a positive general consensus	10/26/2022 7:55 PM
2	In general, I fully agree with this statement; my only concern is that sometimes I hear the consultant generalize the comments of an individual board member to represent direction by the entire board. Instead, on something as important as asset allocation, I would recommend the consultant clarify whether (or not) that comment reflects the full board's direction and explain the potential effects of that direction before trustees decide	10/24/2022 2:27 PM
3	Sorry, no knowledge of this.	10/19/2022 10:06 AM

Question 6: Don't know/No Opinion omitted from calculation of average score.

Q7 The consultant's investment recommendations align with the Board's risk tolerance.

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	83.33% 10	16.67% 2	0.00%	0.00%	0.00%	12	4.83

#	COMMENTS & SUGGESTIONS:	DATE
1	CRO has been a good decision - not so sure that risk parity is giving a true diversification benefit	10/26/2022 7:55 PM
2	See comment under #6 re clarifying the will of the full board vs. an individual Board member.	10/24/2022 2:27 PM

Q8 The investment consultant presents data that supports their recommendations.

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	91.67% 11	8.33% 1	0.00%	0.00%	0.00%	12	4.92

#	COMMENTS & SUGGESTIONS:	DATE
1	Not in agreement about ESG recommendations - especially elimination of fossil fuels or placing heavy emphasis on electrical grid and massive battery dependency - viability	10/26/2022 7:55 PM

Q9 I have confidence in the quality of managers the consultant brings to the Board for consideration.

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	91.67% 11	8.33% 1	0.00%	0.00%	0.00%	12	4.92

#	COMMENTS & SUGGESTIONS:	DATE
1	Going to miss David Glickman - Mekata has an outstanding pool of talent to add to any of the board's inquiries	10/26/2022 7:55 PM

recession scenarios

1

10/26/2022 7:55 PM

Q10 The Investment Consultant brings forward ideas and strategies that will enable SJCERA to meet or exceed its assumed rate of return over the long term.

Answered: 12 Skipped: 0

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	91.67%	8.33%	0.00%	0.00%	0.00%	12	4.92
#	COMM	MENTS & SUGGESTI	ONS:			DATE	

Want to know more what Hawaii and others that are doing more about down side - extended

Q11 The consultant keeps the Board informed of events affecting SJCERA's investments.

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	100.00% 12	0.00%	0.00%	0.00% 0	0.00%	12	5.00

#	COMMENTS & SUGGESTIONS:	DATE
1	Satisfied	10/26/2022 7:55 PM

Q12 Please rate your satisfaction with the following contractually required services.

	SATISFIED	SOMEWHAT SATISFIED	SOMEWHAT UNSATISFIED	UNSATISFIED	TOTAL	WEIGHTED AVERAGE
Annual asset allocation and liability management review	100.00% 11	0.00%	0.00%	0.00%	11	5.00
Asset class structure/manager structure	81.82% 9	18.18% 2	0.00%	0.00%	11	4.82
Annual investment strategic planning and policy review	100.00% 12	0.00%	0.00%	0.00%	12	5.00
Investment analysis	100.00% 11	0.00%	0.00%	0.00%	11	5.00
Research, reporting and due diligence	75.00% 9	25.00% 3	0.00%	0.00%	12	4.75
Manager searches/selection	90.91%	9.09%	0.00%	0.00%	11	4.91
Portfolio management review	91.67%	8.33%	0.00%	0.00%	12	4.92
Investment performance measurement	83.33% 10	16.67% 2	0.00%	0.00%	12	4.83
Manager oversight, monitoring and reconciliations with managers and custodian	83.33% 10	16.67% 2	0.00%	0.00%	12	4.83

1

10/12/2022 3:11 PM

Q13 The investment consulting firm appears to have the depth and breadth of resources (e.g., research, manager relationships, etc.) to support our consultant's work.

Answered: 12 Skipped: 0

	AGREE	SOMEWHAT AGREE	SOMEWHAT DISAGREE	DISAGREE	DON'T KNOW/NO OPINION	TOTAL	WEIGHTED AVERAGE
(no label)	100.00% 12	0.00%	0.00%	0.00%	0.00%	12	5.00
#	СОММ	ENTS & SUGGESTION	ONS:			DATE	

Many managers praise working with our consultants and Meketa.

OTHER COMMENTS:

DATE

Q14 The investment issues or areas of concern I would like the consultant to address in the next twelve months are:(Identify your top 3 issues/concerns)

ANSWE	ER CHOICES	RESPONSES		
1.		87.50%		7
2.		87.50%		7
3.		87.50%		7
Other C	Comments:	12.50%		1
#	1.		DATE	
1	Inflation = recession		10/26/2022 7:55 PM	
2	Continuing Inflation		10/26/2022 12:09 PM	
3	Return		10/25/2022 10:22 AM	
4	How to achieve our assumed rate of return if market goes sid	eways for a few years	10/24/2022 11:39 AM	
5	Continued management to minimize losses		10/13/2022 8:25 PM	
6	Continue to minimize losses in current market		10/12/2022 3:11 PM	
7	Inflation		10/11/2022 9:47 AM	
#	2.		DATE	
1	Fed raising interest rated		10/26/2022 7:55 PM	
2	Real Estate education and investment pacing		10/26/2022 12:09 PM	
3	Fees		10/25/2022 10:22 AM	
4	Fixed Income (finally!) starts to look interesting with quite so what could we possibly do to capture this oppotunity?	me yield to a lot of the sectors -	10/24/2022 11:39 AM	
5	Strategies for a recession I 2023		10/13/2022 8:25 PM	
6	Continue with educational presentations		10/12/2022 3:11 PM	
7	Inflation		10/11/2022 9:47 AM	
#	3.		DATE	
1	Government dept - deficit spending		10/26/2022 7:55 PM	
2	Private Equity Opportunities		10/26/2022 12:09 PM	
3	Funding		10/25/2022 10:22 AM	
4	Review/education of the CRO bucket		10/24/2022 11:39 AM	
5	Continued research into public/private debt & real estate		10/13/2022 8:25 PM	
6	Making allocations adjustments that better align with recent of	hanges	10/12/2022 3:11 PM	
7	Long term inflation		10/11/2022 9:47 AM	

I can't think of any at this moment

1

10/12/2022 10:18 AM

Q15 What would you like the Investment Consultant to do differently?

#	RESPONSES	DATE
1	Submit Board materials by SJCERA's deadline. If that deadline is routinely impossible to meet for certain documents, negotiate a deadline for those specific documents that you can reliably meet (or beat) each month.	10/24/2022 2:27 PM
2	I would like to see more research/due diligence process from Meketa.	10/24/2022 11:39 AM
3	Continue vigilance to minimize our losses with real time analysis for the Board to review to fine tune the assets allocations that have been established.	10/13/2022 8:25 PM
4	I would like a short manager profile update on at least one manager when we get the manager review update. I know the due diligence is being conducted but a five minute or so presentation on a manager/group would be something I would enjoy.	10/12/2022 3:11 PM
5	Smile more :-)	10/11/2022 9:47 AM

Q16 Other Remarks

#	RESPONSES	DATE
1	Has excellent communication skills - demonstrates self-confidence in the opinions he gives to the board	10/26/2022 7:55 PM
2	Thanks to David and the Meketa team for all the hard work! I appreciate the education provided to trustees to ensure we have the tools to make decisions for the best of SJCERA.	10/26/2022 12:09 PM
3	I am new to the investment 'arena' and I have gained knowledge which will help me in my job and in my future retirement.	10/19/2022 10:06 AM
4	David is a great asset to SJCERA and	10/12/2022 3:11 PM
5	Dave and crew have done a great job helping us to stay on mission and enabling our vision to take shape. No need of luck when u got good folks with good ideas	10/11/2022 9:47 AM

2022-2023 CONFERENCES AND EVENTS SCHEDULE

2022-2023 EVENT DATES		EVENT TITLE	EVENT SPONSOR LOCATION		REG. FEE	WEBLINK FOR MORE INFO	EST. BOARD EDUCATION
BEGIN	END						HOURS
Nov 8	Nov 11	SACRS Fall Conference	SACRS	Long Beach, CA	\$120	sacrs.org	11 hrs*
Nov 10	Nov 10	2022 Midterm Elections Results	Invesce	Webinar	\$0	contact Elaina for link	TBD
NOV 10	NOV 10		Invesco		ΦU	IOI IIIIK	100
		2023 Visions, Insights & Perspectives		Rancho Palos Verdes,			
Jan 17	Jan 19	Americas	IREI	CA	\$0	IREI.com	TBD
						contact Elaina	
Jan 25	Jan 25	Approving Key Decisions	Board Smart	Online webinar	\$0	for link	TBD
Mar 8	Mar 8	7th Annual Real Estate West Forum	Markets Group	San Francisco, CA	\$0	Invite by email	TBD

^{*} Estimates based on prior agendas

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION SUMMARY OF PENDING TRUSTEE AND EXECUTIVE STAFF TRAVEL **BOR Approval** 2022 **Estimated Event Dates Sponsor / Event Description** Location Date Traveler(s) Cost JC Weydert, Chanda Bassett, Emily Nicholas, Brain McKelvey, Michael Nov 8-11 SACRS Fall Conference Long Beach Duffy \$6,946 N/A Michael Restuccia, 2022 Midterm Elections Results Webinar Phonxay Keokham \$0 Nov 10 N/A Rancho Palos Jan 17-19 IREI 2023 Visions, insights & Perspectives America Verdes, CA \$700.00 **Pending Approval** Michael Restuccia

SAN JOAQUIN COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

SUMMARY OF COMPLETED TRUSTEE AND EXECUTIVE STAFF TRAVEL

Event Dates 2022	Sponsor / Event Description	Location	Traveler(s)	Estimated Cost	Actual Cost	Event Report Filed
Feb 11	CALAPRS Administrators' Roundtable	Webinar	McKelvey, Shick	\$100	\$100	N/A
Feb 18	CALAPRS Attorneys' Roundtable	Webinar	Morrish	\$50	\$50	N/A
Mar 5 - 8	CALAPRS General Assembly	San Diego, CA	McKelvey, Shick	\$4,000	\$1,798.50	N/A
Apr 29	Special Virtual Trustee Round Table	Virtual Conference	Moore, Bassett, Weydert, McKelvey	\$200	\$200	N/A
May 10 - 13	SACRS Spring Conference	Rancho Mirage, CA	Weydert, Keokham, McKelvey, Morrish	\$6,800	\$5,979	N/A
May 27	CALAPRS Attorneys' Roundtable	Webinar	Morrish	\$50	\$50	N/A
Jun 24	CALAPRS Administrators' Round Table	Webinar	Johanna Shick, Brian McKelvey	\$100	\$100	N/A
Jun 27-29	NCPERS - 2022 Chief Officers Summit	San Francisco	Brian McKelvey	\$1,750	\$1,552.00	8/12/22
Jul 17-20	SACRS UC Berkeley Program	Berkeley, CA	JC Weydert	\$4,500	\$4,160.65	N/A
Aug 29 - Sep 1	Principles of Pension Governance for Trustees	Tiburon, CA	Moore	\$3,200	\$3,332	N/A
Sep 6-8	IREI Fall Advisory Board Meeting	Pasadena, CA	Mike Restuccia	\$1,000	\$461.03	Due
Sep 23	Attorneys Round Table	Webinar	Jason Morrish	\$50	\$50	N/A
Sep 28-30	CALAPRS Administrators' Institute 2022	Long Beach, CA	Johanna Shick	\$1,800	\$1,868.88	N/A
Oct 28	CALAPRS Trustees Round Table	Webinar	Mike Restuccia, Emily Nicholas	\$100	\$100	N/A



2022 CHAPTERED LEGISLATION - FINAL

Last Updated: 10/26/2022 **LAST IMPACT ON AUTHOR** DESCRIPTION LOC **BILL ACTION SJCERA** NO. DATE **Legislation Impacting SJCERA:** AB 551 Rodriguez Current law, until January 1, 2023, establishes a disability retirement 09/29/22 Chaptered Updating all presumption that is applicable to the members of various public employee pertinent disability retirement systems who are employed in certain firefighter, public safety communications officer, and health care job classifications, among others, who test positive for and website: COVID-19, as specified. The law requires, if the member retires for disability on notifying labor, the basis, in whole or in part, of a COVID-19-related illness, that it be presumed employers and that the disability arose out of, or in the course of, the member's employment, disability unless rebutted. This bill would extend the operation of the provisions described attorneys. above until January 1, 2024. AB 1824 Cooper This bill represents the annual omnibus bill to propose technical "housekeeping" 09/02/22 Chaptered Legislation Project amendments to the CERL and PERL. This bill would 1) allow members to Implementation designate a corporation, trust, or estate to receive their last check upon death, Team conducting 2) modify existing law's requirement that the retirement date not be earlier than meetings to the date the application is filed or 60 days after the filing, by allowing the Board discuss impact on to adopt an alternative number of days, 3) require any computation for absence SJCERA, updating related to death benefit calculation be based on the compensation held by procedures for member at beginning of absence, and 4) make other non-substantive changes to 2023. the CFRL. AB 1971 Cooper This bill would: 1) allow a member to purchase service credit for an 09/25/22 Chaptered Legislation Project uncompensated leave of absence due to the serious illness of a family member, Implementation 2) authorize the board to grant members subject to a temporary mandatory Team conducting furlough the same service credit and FAC calculation as they would have received meetings to if there had been no furlough; 3) authorize a member retired for service to serve discuss impact on SJCERA, updating on a part-time governmental board or commission without reinstatement to membership, provided compensation does not exceed \$60,000 annually, 4) procedures for authorize a member retired for service who is subsequently granted a disability 2023. retirement to change the type of optional or unmodified allowance that they elected at the time the service retirement was granted, 5) a member retired for service who subsequently files an application for disability retirement and, if eligible for disability, would require adjustments to be made in the retirement allowance retroactive to the disability retirement, and 6) require reclassifying a disability retiree's benefit to a service retirement in the same amount if they are subsequently determined not to be incapacitated and the employer will not reinstate them.

BILL NO.	AUTHOR	DESCRIPTION	LAST ACTION DATE	LOC	IMPACT ON SJCERA
AB 2449	Rubio	Existing law, until January 1, 2024, authorizes a local agency to use teleconferencing without complying with specified teleconferencing requirements when a declared state of emergency is in effect. This bill would authorize, until January 1, 2026, a local agency to use teleconferencing without complying with those specified teleconferencing requirements if at least a quorum of the members of the legislative body participates in person from a singular location clearly identified on the agenda that is open to the public and situated within the local agency's jurisdiction. The state of emergency circumstances for remote participation would be contingent upon an action by the legislative body. This bill would further allow the legislative body to take action on member's request to participate in a meeting remotely due to emergency circumstances if there was insufficient time to place the proposed action on the posted agenda.	09/13/22	Chaptered	Counsel to update Board on amendments to teleconferencing requirements at December 2022 meeting.
AB 2647	Levine	This bill would require a local agency to make agendas and other writings distributed to the members of the governing board available for public inspection at a public office or location that the agency designates or post the writings on the local agency's internet website in a position and manner that makes it clear that the writing relates to an agenda item for an upcoming meeting.	09/30/22	Chaptered	None, SJCERA's existing procedures comply with law.
SB 1100	Cortese	This bill would authorize the presiding member of the legislative body conducting a meeting to remove an individual for willfully interrupting the meeting. The bill would require removal to be preceded by a warning by the presiding member, that the individual is disrupting the proceedings, a request that the individual failure to cease their behavior may result in removal, and a reasonable opportunity to cease the disruptive behavior.	08/22/22	Chaptered	Counsel to update Board on amendments to meeting requirements at December 2022 meeting.
Other Bil	ls of Interes	t:			
AB 1722	Cooper	PERL, until January 1, 2023, provides state safety members who retire for industrial disability a retirement benefit equal to the greatest amount resulting from three possible calculations. This bill would delete the January 1, 2023 termination date which would make the provision operative in perpetuity.	09/18/22	Chaptered	None, PERL- related legislation.
SB 850	Laird	This bill, for purpose of the additional percentage of the special death benefit for service-connected deaths provided under PERL, would require that payment be made to the person having custody of the member's child or children, if the member does not have a surviving spouse or if the surviving spouse dies before each child marries or reaches ate 22. Provisions of this bill would be retroactive to January 1, 2013.	08/29/22	Chaptered	None, PERL- related legislation.
SB 1168	Cortese	This bill would require PERS, beginning on July 1, 2023, to increase the \$500 lump sum death benefit to \$2,000.	08/26/22	Chaptered	None, PERL- related legislation.

BILL NO.	AUTHOR	DESCRIPTION	LAST ACTION DATE	LOC	IMPACT ON SJCERA
Federal	Legislation:				
HR 2954	Neal	Called the "Securing a Strong Retirement Act of 2022", this bill would (1) increase RMD age to 75 from 72 over the next decade, (2) provide greater latitude to decide to recoup inadvertent overpayments, (3) permit first responders to exclude service-connected disability pension payments from gross income after reaching retirement age, and (4) expand the Employee Plans Compliance Resolution System (EPCRS) to allow more types of errors to be corrected through self-correction.	03/30/22	Senate Finance Comm.	
HR 3684	DeFazio	Called the "Infrastructure Investment and Jobs Act", better known as the \$1 trillion infrastructure bill, includes a crypto tax-reporting provision requiring digital asset brokers to report their users' annual transactions to the IRS effective year-end 2022.	11/15/21	Became Public Law No. 117-58	Legislation Team conducting meetings to discuss impact on SJCERA
HR 4728	Takano	To amend the Fair Labor Standards Act to reduce the standard workweek from 40 hours per week to 32 hours per week.	07/27/21	House Comm. on Education and Labor	
		2023 State Legislative Calendar (tentative)			
Feb 18	Last day for	new bills to be introduced			
Apr 7	Spring Reces	s begins upon adjournment			
May 27	Last day for	bills to be passed out of the house of origin			
Jun 15	Budget Bill must be passed by midnight				
Jul 1 -	Cummar Das	race upon adjournment provided budget bill passed		-	-
Aug 1 Aug 25		tess upon adjournment provided budget bill passed amend bills on the floor			
Aug 31		each house to pass bills; Final Study Recess begins upon adjournment			
		r Governor to sign or veto bills.			



San Joaquin County Employees' Retirement Association

October 27, 2022

TO: Board of Retirement

FROM: Johanna Shick Jhick

Chief Executive Officer

SUBJECT: Chief Executive Officer Report

Strengthen the long-term financial health of the Retirement Plan

Review and confirm or refresh asset allocation

- Optimize Strategic Asset Allocation policy in light of studies and market projections.
 - <u>Conduct a pacing study of private market assets</u>. At the November Board meeting, David Sancewich
 of Meketa will present pacing studies for three private asset classes: Private Equity, Private Credit
 and Private Real Estate.
- Optimize Investment Manager Line Up
 - <u>Consider prospective Private Equity managers</u>. In accordance to SJCERA's pacing plan for the Private Equity asset class, two prospective managers will present at the November Board meeting: Long Arc Capital (a Growth Equity oriented strategy), and Oaktree (a Special Situation strategy).

Modernize the operations infrastructure

Implement Pension Administration System (PAS)

- Program/Test new PAS
 - Three senior members of the Tegrit project team (Jake Timmons, Joe Trupiano and Paul Booth) will visit SJCERA on November 15-16 to talk with Benefits, Finance and IT team members. Gathering information in advance will assist Tegrit in planning for the project's start in early 2023. Linea Solutions consultants will also be on-site for these discussions as part of their project oversight responsibilities.
- Maintain functionality of legacy PAS until new PAS is implemented and stabilized
 The legacy PAS vendor, IGI, was on-site October 10-14, to provide five days of technical support training to SJCERA's IT staff as required by the July 2022 service and support agreement. In addition to the training, IGI met with the finance team (Carmen Murillo, Eve Cavender, and Marissa Smith) to discuss and plan the implementation of the new IRS W4P form and tax withholding methodologies that will be effective January 1, 2023.

Enhance the member experience

• Identify the conditions necessary to enable a full-service member portal, and develop and initiate a plan to fulfill those conditions

Linea Solutions will be on-site the week of November 14-18. While here, they will work with Ron Banez, Melinda DeOliveira, Brian McKelvey, Carmen Murillo, and Jordan Regevig to finalize the list of conditions necessary to enable a full-service member portal and develop the plan to fulfill those conditions. As mentioned in the October CEO Report, staff identified an initial list of nine conditions. The meeting with Linea Solutions will validate and expand the list of conditions given their extensive experience with PAS implementations that include full-service member portals.

Align resources and organizational capabilities

Enhance education and development across all levels of the organization

• Offer training and development opportunities intended to strengthen SJCERA's on-boarding and succession planning

Information Systems Specialist II Jordan Regevig and Management Analyst III Greg Frank participated in CALAPRS round tables. Jordan attended the IT roundtable on October 21, and Greg attended the first-ever CALAPRS Compliance Roundtable on October 25. Compliance Roundtable discussions included components of a compliance program and CalPERS presented an overview of their enterprise compliance reporting process. With regards to mandatory training, staff has completed 99 percent of available required trainings. To reach 100 percent, one staff member needs to complete one class (no pressure, though!) Administrative Secretary, Elaina Petersen will enroll that staff member in the class at the earliest available opportunity. Thanks to Elaina's leadership and staff's cooperation, our goal of being 100 percent compliant by year-end is well within reach. Well done!

Employee of the Month. Congratulations to Melinda DeOliveira, Acting Retirement Services Supervisor, and Elaina Petersen, Administrative Secretary, for being named employees of the month! Melinda was recognized for her leadership, not only of the Benefits team, but also more broadly in the organization. Melinda consistently volunteers to lead various implementation projects: she is leading the effort to create and roll out a condensed Project Management training to all staff, and she also successfully led the sick leave bank project with one of our employers. Melinda's keen focus on results and task completion, combined with her initiative and leadership, is driving SJCERA to success. Exceptional!

Elaina was recognized for her attention to detail and follow through in coordinating this year's Investment Roundtable (her first)! Elaina had taken great care to provide the venue all the details, and met with the event coordinator on-site to ensure everything was in order. However, shortly before the event, she suspected something might be amiss due to a lack of contact from the venue. Much to our surprise, she discovered the event coordinator no longer worked for the venue and had left no notes about our arrangements. The roundtable could have been heading to disaster, but thanks to Elaina's "Spidey Sense" and follow-through, the roundtable was a rousing success! I hate to think what the results would have been had Elaina not been on the job verifying every last detail!

<u>Something wicked this way comes: hocus pocus & focus on October 31</u>. SJCERA staff will be celebrating Halloween in style...well in costume, actually! There will definitely be few "characters" roaming the halls on Monday! Despite any unusual attire or hocus pocus, all business operations will continue as usual and our customers can continue to expect our same high level of service.



Maintain Business Operations

Member Communications: SJCERA participated in the County's National Retirement Security Month events by offering one-hour virtual "SJCERA: Understanding Retirement" workshops. Melinda DeOliveira and Ron Banez presented, and County Human Resources estimates 40 members attended.

Public Pension Standards Award for Funding and Administration: The Public Pension Coordinating Council presented SJCERA with the Public Pension Standards Award for Funding and Administration in recognition of meeting professional standards for plan funding and administration as set forth in the Public Pension Standards. The PPCC is a confederation of the National Association of State Retirement Administrators (NASRA), the National Conference on Public Employee Retirement Systems (NCPERS), and the National Council on Teacher Retirement (NCTR).

Provide Excellent Customer Service

A few quotes from our members:

- "I had the pleasure of speaking with Kathleen Goodwin. She is knowledgeable, pleasant, efficient, patient and courteous!"
- "Melinda DeOliveira is very competent at her work. I appreciate her guidance."
- Regarding Bethany Vavzincak: "Wow, got my request within 5 mins, thanks so much."

Conclusion

SJCERA's performance between the last board meeting and today reminds me of the old Timex slogan: "It takes a licking and keeps on ticking", we had several staff out on vacation who had planned their work and/or back-up coverage so business would continue smoothly in their absence. However, a number of unexpected events, including absences due to COVID, family issues, and other unanticipated events also occurred during that time period. To many organizations a 26 percent absenteeism rate would have been "deep mud", but like the dog pictured on the right, our experienced, reliable, dedicated team of professionals rose to the challenge, performing all critical business processes without a hitch! Staff's adaptability, teamwork and focus during times of need is impressive indeed!



Keep on chugging along



Board of Retirement MeetingSan Joaquin County Employees' Retirement Association

Agenda Item 11.0

November 4, 2022

SUBJECT: Direction to the Board's SACRS Voting Delegate Business Meeting of November 11, 2022

SUBMITTED FOR: ___ CONSENT ___ ACTION X INFORMATION

RECOMMENDATION

None. There are no action items on the SACRS Business Meeting Agenda for November 11, 2022.

PURPOSE

Typically, at its November meeting, the Board considers the SACRS Business Meeting materials and provides direction to its SACRS Voting Delegate regarding the items presented for action; however, there are no action items on the current agenda.

DISCUSSION

None. The SACRS Business Meeting Packet materials are provided for your review and information.

ATTACHMENTS

SACRS Business Meeting Packet – November 11, 2022

JOHANNA SHICK Chief Executive Officer



SACRS Business Meeting Agenda Friday, November 11, 2022 10:15 AM - 11:30 AM Hyatt Regency Long Beach Regency ABC Ballroom

SACRS Parliamentarian – David Lantzer, San Bernardino CERA Sergeant at Arms – Brian Williams, Sonoma CERA

1. SACRS System Roll Call

Adele Tagaloa, Orange CERS, SACRS Secretary

2. Secretary's Report - Receive and File

Adele Tagaloa, Orange CERS, SACRS Secretary

A. Spring 2022 SACRS Business Meeting Minutes

3. Treasurer's Report - Receive and File

Jordan Kaufman, Kern CERA, SACRS Treasurer

- A. July August 2022 Financials
- B. 2022-2023 Annual Budget

4. SACRS President Report - No Action

Vivian Gray, Los Angeles CERA, SACRS President

A. SACRS President Update

5. SACRS Legislative Committee Update - No Action

Eric Stern, Sacramento CERS and Dave Nelsen, Alameda CERA – SACRS Legislative Committee Co-Chairs

A. 2022 Legislative Report – No Action

6. SACRS Nomination Committee - 2023-2024 SACRS Election Notice - No Action

Dan McAllister, San Diego CERA, SACRS Nomination Committee Chair

A. SACRS Election Notice 2023-2024

7. SACRS Audit Report - No Action

Steve Delaney, Orange CERS, SACRS Audit Committee Chair

A. Audit Committee report/verbal update





8. SACRS Education Committee Report – No Action

JJ Popowich, Los Angeles CERA, SACRS Education Committee Chair

A. SACRS Annual Fall Conference 2022 Evaluations/verbal update

9. SACRS Program Committee Report - No Action

David MacDonald, Contra Costa CERA, SACRS Program Committee Chair

A. Program Committee report/verbal update

10. SACRS Affiliate Committee Report - No Action

Wally Fikri, William Blair, SACRS Affiliate Committee Chair

A. Affiliate Committee report/verbal update

11. SACRS Bylaws Committee Report – No Action

Barbara Hannah, San Bernardino CERA, SACRS Bylaws Committee Chair

A. Bylaws Committee report/verbal update

12. SACRS Fall Conference Breakout Reports - No Action

A representative from each breakout will give report on their meetings.

- A. Administrators
- B. Counsel
- C. Disability/ Operations & Benefits Combo
- D. Internal Auditors
- E. Investment Officers
- F. Safety Trustees
- G. General Trustees

13. Adjournment

Next scheduled SACRS Association Business Meeting will be held Friday, May 12, 2023 at the Paradise Point Resort & Spa, San Diego, CA.



1. SACRS System Roll Call

Adele Tagaloa, Orange CERS, SACRS Secretary



1. SACRS System Roll Call Adele Tagaloa, SACRS Secretary

System	In Attendance	Absent	Delegate/Alternate Name
Alameda			
Contra Costa			
Fresno			
Imperial			
Kern			
Los Angeles			
Marin			
Mendocino			
Merced			
Orange			
Sacramento			
San			
Bernardino			
San Diego			
San Joaquin			
San Mateo			
Santa Barbara			
Sonoma			
Stanislaus			
Tulare			
Ventura			
Total			



2. Secretary's Report - Receive and File

Adele Tagaloa, Orange CERS, SACRS Secretary

A. Spring 2022 SACRS Business Meeting Minutes



SACRS Business Meeting Minutes Friday, May 13, 2022 Omni Rancho Las Palmas Resort & Spa Rancho Mirage, CA Salon's A-E

SACRS Parliamentarian – David Lantzer, San Bernardino CERA Sergeant at Arms – Brian Williams, Sonoma CERA

Meeting called to order at 10:05 AM

SACRS Board of Directors in Attendance:

Vivian Gray, President; Harry Hagen, Treasurer; David MacDonald, Board Member; Dan McAllister, Immediate Past President, Vere Williams, Board Member

1. SACRS System Roll Call

Vacant, SACRS Secretary

19 SACRS Member Systems Present

Alameda, Contra Costa, Fresno, Imperial, Kern, Los Angeles, Marin, Merced, Orange, Sacramento, San Bernardino, San Diego, San Joaquin, San Mateo, Santa Barbara, Sonoma, Stanislaus, Tulare and Ventura Absent - Mendocino

2. Secretary's Report - Receive and File

Vacant, SACRS Secretary

a) November 2021 SACRS Business Meeting Minutes

Motion: A motion to approve the November 2021 SACRS Business Meeting Minutes as presented was made by San Diego CERA.

2nd: Sonoma CERA

Yes: Alameda, Contra Costa, Fresno, Imperial, Kern, Los Angeles, Marin, Merced, Orange, Sacramento, San Bernardino, San Diego, San Joaquin, San Mateo, Santa Barbara, Sonoma, Stanislaus, Tulare and Ventura

No: 0

Absent: Mendocino Motion Passes 19-0-1

3. Treasurer's Report - Receive and File

Harry Hagen, Santa Barbara CERS, SACRS Treasurer

a) July 2021 - February 2022 Financials

Motion: A motion to approve the Treasurers July 2021-February 2022 Financial report was made by San Diego CERA.



2nd: Imperial

Yes: Alameda, Contra Costa, Fresno, Imperial, Kern, Los Angeles, Marin, Merced, Orange, Sacramento, San Bernardino, San Diego, San Joaquin, San Mateo, Santa

Barbara, Sonoma, Stanislaus, Tulare and Ventura

No: 0

Absent: Mendocino Motion Passes 19-0-1

4. SACRS President Report - No Action

Vivian Gray, Los Angeles CERA, SACRS President

a) SACRS President Update

Discussion: A verbal update was given by Vivian Gray. She discussed the conference, thanked the Program Committee Chair and the embers of the committee. She thanked SACRS Conference staff, AV team and the hotel. She noted a special thanks to the Safety members that helped assist during the Tuesday reception emergency situation. Particularly Brian Williams, Sonoma CERA and Chris Cooper, Marin CERA for their quick action and safety measures taken to help a member.

5. SACRS Legislative Committee Update – No Action

Eric Stern, Sacramento CERS and Dave Nelsen, Alameda CERA – SACRS Legislative Committee Co-Chairs

- a) 2022 Legislative Report No Action
- b) SACRS Board of Directors Legislative Proposal No Action

Discussion: A written report was provided in the packet and reviewed by Eric Stern. No Action

6. SACRS Nomination Committee - 2022-2023 SACRS Board of Directors **Elections- Action**

Dan McAllister, San Diego CERA, SACRS Nomination Committee Chair

a) SACRS Board of Directors Elections 2022-2023

Motion: A motion to approve the recommended slate submitted by the Nomination Committee was made by Contra Costa CERA. The recommended slate is;

- Vivian Gray, Los Angeles CERA, President
- David MacDonald, Contra Costa CERA, Vice President
- Adele Tagaloa, Orange CERS, Secretary
- Jordan Kaufman, Kern CERA, Treasurer
- Vere Williams, San Bernardino CERA, General Member
- David Gilmore, San Diego CERA, General Member

2nd: San Diego

Yes: Alameda, Contra Costa, Fresno, Imperial, Kern, Los Angeles, Marin, Merced, Orange, Sacramento, San Bernardino, San Diego, San Joaquin, San Mateo, Santa Barbara, Sonoma, Stanislaus, Tulare and Ventura



No: 0

Absent: Mendocino Motion Passes 19-0-1

7. SACRS Audit Report – Action

Steve Delaney, Orange CERS, SACRS Audit Committee Chair

a) SACRS 2020-2021 Annual Audit

Motion: Orange CERS made a motion to approve the 2020-2021 SACRS Financial Audit presented by Steve Delaney, Audit Chair.

2nd: Fresno

Yes: Alameda, Contra Costa, Fresno, Imperial, Kern, Los Angeles, Marin, Merced, Orange, Sacramento, San Bernardino, San Diego, San Joaquin, San Mateo, Santa Barbara, Sonoma, Stanislaus, Tulare and Ventura

No:0

Absent: Mendocino Motion Passes 19-0-1

8. SACRS Education Committee Report – No Action

JJ Popowich, Los Angeles CERA, SACRS Education Committee Chair

a) SACRS Annual Spring 2022 Conference Evaluations/Feedback **Discussion:** JJ Popowich presented a verbal report on the Spring Conference based on feedback from the Education Committee meeting held on Thursday afternoon at the conference. The Education committee and other attendees reviewed all sessions from Tuesday – Thursday, rated them, gave general input on the presentations/topics/speakers/content and the hotel. The committee felt the that conference was a success and that SACRS presented great content. A written report will be provided once the evaluation deadline expires July 1. No Action.

9. SACRS Program Committee Report - No Action

Kathryn Cavness, Mendocino CERA, SACRS Program Committee Chair

a) SACRS Annual Spring 2022 Conference Report

Discussion: Vivian Gray gave a verbal report on behalf of Kathryn Cavness, she thanks the committee members for their efforts and commitment to the program. She reminded attendees that SACRS has a speaker solicitation link on the SACRS website and welcomes ideas/suggestions for future programs. No Action.

10. SACRS Affiliate Committee Report – No Action

Wally Fikri, William Blair, SACRS Affiliate Committee Chair

a) Affiliate Committee Update

Discussion: Scott Draper gave a verbal report on behalf of Wally Fikri, he thanked



the committee members for developing a great Affiliate Breakout. The breakout was well attended and all 4 rooms were packed with attendees. The content was great and the format worked so that attendees could hear from all four participating firms. Great participation by the affiliate attendees. No Action.

11. SACRS Bylaws Committee Report – No Action

Barbara Hannah, San Bernardino CERA, SACRS Bylaws Committee Chair

a) Bylaws Committee Update

Discussion: Barbara Hannah gave a verbal report discussing the upcoming Bylaws review. This summer the committee is tasked with reviewing the Bylaws and Affiliate Guidelines every three (3) years. The Affiliate Committee will be sending Barbara their recommendations in June. No Action.

12. SACRS Spring Conference Breakout Reports – No Action

A representative from each breakout will give report on their meetings.

- a) Administrators Santos Kreimann, Los Angeles CERA, gave a verbal overview of the Administrators Breakout, good discussion and presentation. The session was well attended, members discussed "getting back in the office" in post-covid work atmosphere. Brian McKelvey, San Joaquin CERA will be the Fall 2022 Moderator.
- b) Counsel No report
- c) Disability/ Operations & Benefits Combo Carlos Barrios, Los Angeles CERA, gave a verbal overview of the Disability and Ops Session. It was a good session, many take-aways from the roundtable discussion. Carlos Barrios, Los Angeles CERA will be the Fall 2022 Moderator.
- d) Internal Auditors No report
- e) Investment Officers No report
- f) Safety Trustees Brian Williams, Sonoma CERA, gave a verbal update on the member that was injured during the Tuesday reception. Brian recommended that SACRS BOD invest in an emergency bag for conferences. Brian and other safety members will work with Sulema Peterson on a recommendation and pricing. The hotel was very helpful during the response to the injured attendee, and he thanked Chris Cooper, Marin CERA, for his quick response to the situation. Brian Williams, Sonoma CERA will be the Fall 2022 Moderator.
- g) General Trustees Vivian Gray, Los Angeles CERA, gave a verbal overview of the Trustee breakout, thanked Kathy Foster, Alameda CERA, for her volunteerism over the years at SACRS. Kathy was a presenter and this was her last SACRS as she is retiring. Everyone wished Kathy well and thanked her. No moderator for the Fall 2022 was selected.



13. Adjournment

Next scheduled SACRS Association Business Meeting will be held Friday, November 11, 2022 at the Hyatt Regency Long Beach, Long Beach, CA unless Covid-19 restrictions are in place.

Motion: A motion to adjourn the SACRS Annual Spring Business Meeting 2022 was submitted by San Diego CERA at 10:42 am.

2nd: Sonoma

Yes: Alameda, Contra Costa, Fresno, Imperial, Kern, Los Angeles, Marin, Merced, Orange, Sacramento, San Bernardino, San Diego, San Joaquin, San Mateo, Santa Barbara, Sonoma, Stanislaus, Tulare and Ventura

No: 0

Absent: Mendocino **Motion Passes 19-0-1**

Meeting Adjourned 10:42 am.



3. Treasurer's Report - Receive and File

Jordan Kaufman, Kern CERA, SACRS Treasurer

- A. July August 2022 Financials
- B. 2022-2023 Annual Budget

7:48 PM 09/25/22 Cash Basis

STATE ASSOCIATION OF COUNTY RETIREMENT SYSTEMS Balance Sheet

As of August 31, 2022

	Aug 31, 22
ASSETS	
Current Assets	
Checking/Savings	
1000 · First Foundation Bank-Checking	213,418.74
1001 · BofA Interest Checking 4389	46,670.04
1002 · First Foundation Bank ICS Acct	57,586.34
Total Checking/Savings	317,675.12
Other Current Assets	
1100 · CalTrust - Medium Term	693,320.96
1107 · CalTrust Liquidity Fund	8,269.03
1110 · CAMP-SACRS Liquidity Fund	795,833.34
Total Other Current Assets	1,497,423.33
Total Current Assets	1,815,098.45
TOTAL ASSETS	1,815,098.45
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Credit Cards	
2200 · First Foundation Credit Card	2,236.25
Total Credit Cards	2,236.25
Other Current Liabilities	
2150 · Refund Liability	10.00
Total Other Current Liabilities	10.00
Total Current Liabilities	2,246.25
Total Liabilities	2,246.25
Equity	
32000 · Retained Earnings	1,904,635.13
Net Income	-91,782.93
Total Equity	1,812,852.20
TOTAL LIABILITIES & EQUITY	1,815,098.45

8:41 PM 09/25/22 Cash Basis

STATE ASSOCIATION OF COUNTY RETIREMENT SYSTEMS Profit & Loss

July tillout	July tillough August 2022	
	Jul - Aug 22	
Ordinary Income/Expense		
Income		
4100 · Membership Dues		
4101 · Affiliates	191,250.00	
4102 · Non Profit - Organizations	2,000.00	
4103 · Non Profit - Systems	6,000.00	
4104 · Systems - Medium	52,000.00	
4105 - Systems - Large	36,000.00	
Total 4100 · Membership Dues	287,250.00	
4270 · UC Berkeley Program		
4271 · Registrations	5,000.00	
4272 ⋅ Sponsorships	7,500.00	
Total 4270 · UC Berkeley Program	12,500.00	
4350 · Spring Conference Registration		
4355 ⋅ Systems	240.00	
4357 - Fun Run	15.00	
4358 · Yoga	15.00	
Total 4350 · Spring Conference Registration	270.00	
4900 · Interest Earned	895.05	
Total Income	300,915.05	
Gross Profit	300,915.05	
Expense		
5000 · Administrative Fee	56,250.00	
5001 · Administrative Services	1,388.00	
5002 · Awards	31.02	
5003 · Bank Charges/Credit Card Fees	5,377.57	
5010 · Berkeley & Symposium	·	
5014 · Food & Beverage	608.03	
5015 · Materials/Printing/Design	951.06	
5016 · Travel	166.47	
Total 5010 · Berkeley & Symposium	1,725.56	
5041 · Consulting	3,532.00	
5050 · Fall Conference	.,	
5055 · Program Material	4.99	
Total 5050 · Fall Conference	4.99	
5071 · Legal & Professional Fees	1,200.00	
5072 · Legislative Advocacy	10,468.00	
6000 · Board & Committees	,	
6001 ⋅ Board of Directors		
6001.1 · Food & Beverage	8,000.00	
6001.2 · Printing/Supplies	2,250.04	
6001.3 · Travel - BOD Meetings	89.27	
6001.5 · Board Of Directors - Other	4,500.00	
6001 · Board of Directors - Other	820.36	
Total 6001 - Board of Directors	15,659.67	
. T.C. T.T. Bould of Billottolo	10,000.01	

8:41 PM 09/25/22 Cash Basis

STATE ASSOCIATION OF COUNTY RETIREMENT SYSTEMS Profit & Loss

	Jul - Aug 22
Total 6000 · Board & Committees	15,659.67
6011 · Postage & Delivery	1,217.93
6020 · Spring Conference	
6023 · Entertainment	476.49
6024 ⋅ Hotel	
6024.1 · Wednesday Night Event	103,426.52
6024.2 ⋅ Conference	2,094.84
6024.3 ⋅ Food & Beverage	161,992.19
6024 · Hotel - Other	4,483.22
Total 6024 · Hotel	271,996.77
6025 · Program Material	156.40
6026 ⋅ Speakers	4,320.80
6028 · Travel	13,585.71
Total 6020 · Spring Conference	290,536.17
6053 · Technology/AMS/Website	5,307.07
Total Expense	392,697.98
Net Ordinary Income	-91,782.93
Net Income	-91,782.93

8:56 PM 09/25/22 Cash Basis

STATE ASSOCIATION OF COUNTY RETIREMENT SYSTEMS Profit & Loss Budget vs. Actual

	Jul - Aug 22	Budget	\$ Over Budget	% of Budget
rdinary Income/Expense	oui - Aug 22	Budget	y Over Budget	,, or budget
Income				
4100 · Membership Dues				
4101 · Affiliates	191,250.00	268,750.00	-77,500.00	71.16%
4102 · Non Profit - Organizations	2,000.00	2,750.00	-750.00	72.73%
4103 · Non Profit - Systems	6,000.00	6,000.00	0.00	100.0%
4104 · Systems - Medium	52,000.00	52,000.00	0.00	100.0%
4105 · Systems - Large	36,000.00	42,000.00	-6,000.00	85.71%
Total 4100 · Membership Dues	287,250.00	371,500.00	-84,250.00	77.32%
4250 · Product Income	201,200.00	0,000.00	0 1,200100	
4251 · CERL	0.00	0.00	0.00	0.0%
Total 4250 · Product Income	0.00	0.00	0.00	0.0%
4270 · UC Berkeley Program	0.00	0.00	0.00	0.07
4271 · Registrations	5,000.00	60,000.00	-55,000.00	8.33%
4272 · Sponsorships	7,500.00	40,000.00	-32,500.00	18.75%
Total 4270 · UC Berkeley Program	12,500.00	100,000.00	-87,500.00	12.5%
4300 · Fall Conference Registration	12,000.00	100,000.00	07,000.00	12.07
4301 · Affiliates - Early	0.00	140,000.00	-140,000.00	0.0%
4302 · Affiliates - Regular	0.00	60,000.00	-60,000.00	0.0%
4303 · Affiliates - Late/Onsite	0.00	70,400.00	-70,400.00	0.09
4304 · Non Profit	0.00	960.00	-960.00	0.0%
4305 · Systems	0.00	20,000.00	-20,000.00	0.0%
4306 · Non-Members	0.00	200,250.00	-200,250.00	0.0%
4307 · Fun Run	0.00	500.00	-500.00	0.0%
4308 · Yoga	0.00	100.00	-100.00	0.09
4300 · Fall Conference Registration - Other	0.00	0.00	0.00	0.0%
Total 4300 · Fall Conference Registration	0.00	492,210.00	-492,210.00	0.0%
4350 · Spring Conference Registration	0.00	.02,2.0.00	.02,2.0.00	0.07
4351 · Affiliates - Early	0.00	140,000.00	-140,000.00	0.0%
4352 · Affiliates - Regular	0.00	60,000.00	-60,000.00	0.0%
4353 · Affiliates - Late/Onsite	0.00	70,400.00	-70,400.00	0.0%
4354 · Non Profit	0.00	960.00	-960.00	0.0%
4355 · Systems	240.00	20,000.00	-19,760.00	1.2%
4356 · Non-Members	0.00	200,250.00	-200,250.00	0.0%
4357 ⋅ Fun Run	15.00	500.00	-485.00	3.0%
4358 · Yoga	15.00	100.00	-85.00	15.0%
Total 4350 ⋅ Spring Conference Registration	270.00	492,210.00	-491,940.00	0.06%
4900 · Interest Earned	895.05	-953.55	1,848.60	-93.87%
Total Income	300,915.05	1,454,966.45	-1,154,051.40	20.68%
Gross Profit	300,915.05	1,454,966.45	-1,154,051.40	20.68%
Expense	300,313.03	1,404,000.40	1,104,001.40	20.007
5000 · Administrative Fee	56,250.00	225,000.00	-168,750.00	25.0%
5001 · Administrative Fee	1,388.00	500.00	888.00	277.6%
777 / Marining Marin 7 701 71000	1,000.00	000.00	000.00	211.070

8:56 PM 09/25/22 Cash Basis

STATE ASSOCIATION OF COUNTY RETIREMENT SYSTEMS Profit & Loss Budget vs. Actual

	Jul - Aug 22	Budget	\$ Over Budget	% of Budget
5003 · Bank Charges/Credit Card Fees	5,377.57	36,000.00	-30,622.43	14.94%
5010 · Berkeley & Symposium				
5011 · Audio/Visual	0.00	2,200.00	-2,200.00	0.0%
5012 · Delivery & Shipping	0.00	0.00	0.00	0.0%
5013 · Hotel	0.00	12,500.00	-12,500.00	0.0%
5014 · Food & Beverage	608.03	12,500.00	-11,891.97	4.86%
5015 · Materials/Printing/Design	951.06	3,000.00	-2,048.94	31.7%
5016 · Travel	166.47	2,500.00	-2,333.53	6.66%
5017 · UC Berkeley	0.00	216,000.00	-216,000.00	0.0%
Total 5010 · Berkeley & Symposium	1,725.56	248,700.00	-246,974.44	0.69%
5020 · Webinar Symposium	•	•	,	
5021 · Webinar Speaker	0.00	0.00	0.00	0.0%
5022 · Webinar Technology	0.00	25,000.00	-25,000.00	0.0%
5023 · Webinar Misc	0.00	0.00	0.00	0.0%
Total 5020 · Webinar Symposium	0.00	25,000.00	-25,000.00	0.0%
5030 · CERL				
5031 · Materials/Printing/Design	0.00	16,500.00	-16,500.00	0.0%
5032 · Shipping	0.00	1,300.00	-1,300.00	0.0%
Total 5030 · CERL	0.00	17,800.00	-17,800.00	0.0%
5040 · Commissions & Fees	0.00	20,000.00	-20,000.00	0.0%
5041 · Consulting	3,532.00	21,192.00	-17,660.00	16.67%
5042 · Dues & Subscriptions	0.00	3,700.00	-3,700.00	0.0%
5050 · Fall Conference		.,	,	
5051 ⋅ Audio/Visual	0.00	90,000.00	-90,000.00	0.0%
5052 · Delivery & Shipping	0.00	2,500.00	-2,500.00	0.0%
5053 · Entertainment	0.00	6,500.00	-6,500.00	0.0%
5054 · Hotel		5,555.55	-,	
5054.1 · Wednesday Night Event	0.00	65,000.00	-65,000.00	0.0%
5054.2 · Conference	0.00	15,000.00	-15,000.00	0.0%
5054.3 · Food & Beverage	0.00	250,000.00	-250,000.00	0.0%
Total 5054 · Hotel	0.00	330,000.00	-330,000.00	0.0%
5055 · Program Material	4.99	25,000.00	-24,995.01	0.02%
5056 · Speakers	0.00	50,000.00	-50,000.00	0.0%
5057 · Supplies	0.00	500.00	-500.00	0.0%
5058 · Travel	0.00	15,000.00	-15,000.00	0.0%
5050 · Fall Conference - Other	0.00	0.00	0.00	0.0%
Total 5050 · Fall Conference	4.99	519,500.00	-519,495.01	0.0%
5070 · Insurance	0.00	5,000.00	-5,000.00	0.0%
5071 · Legal & Professional Fees	1,200.00	35,000.00	-33,800.00	3.43%
5072 · Legislative Advocacy	10,468.00	62,808.00	-52,340.00	16.67%
5080 · Magazine	10,400.00	02,000.00	02,040.00	10.07 /0
5081 · Delivery & Shipping	0.00	600.00	-600.00	0.0%
5082 · Design/Printing/Etc.	0.00	20,000.00	-20,000.00	0.0%
5083 · Magazine - Other	0.00	6,000.00	-6,000.00	0.0%
Jood - Magazine - Other	0.00	0,000.00	-0,000.00	0.0%

8:56 PM 09/25/22 Cash Basis

STATE ASSOCIATION OF COUNTY RETIREMENT SYSTEMS Profit & Loss Budget vs. Actual

	Jul - Aug 22	Budget	\$ Over Budget	% of Budget
Total 5080 · Magazine	0.00	26,600.00	-26,600.00	0.0%
6000 ⋅ Board & Committees				
6001 · Board of Directors				
6001.1 · Food & Beverage	8,000.00	25,000.00	-17,000.00	32.0%
6001.2 · Printing/Supplies	2,250.04	4,000.00	-1,749.96	56.25%
6001.3 · Travel - BOD Meetings	89.27	11,000.00	-10,910.73	0.81%
6001.4 · Travel - Miscellaneous BOD	0.00	8,000.00	-8,000.00	0.0%
6001.5 ⋅ Board Of Directors - Other	4,500.00	3,000.00	1,500.00	150.0%
6001 · Board of Directors - Other	820.36			
Total 6001 · Board of Directors	15,659.67	51,000.00	-35,340.33	30.71%
6002 · Legislative Committee Meetings	0.00	250.00	-250.00	0.0%
6003 · Program Committee Meetings	0.00	2,500.00	-2,500.00	0.0%
Total 6000 · Board & Committees	15,659.67	53,750.00	-38,090.33	29.13%
6010 · Office Expenses / Supplies	0.00	2,500.00	-2,500.00	0.0%
6011 · Postage & Delivery	1,217.93	6,000.00	-4,782.07	20.3%
6020 · Spring Conference				
6021 · Audio/Visual	0.00	90,000.00	-90,000.00	0.0%
6022 · Delivery & Shipping	0.00	2,500.00	-2,500.00	0.0%
6023 · Entertainment	476.49	6,500.00	-6,023.51	7.33%
6024 · Hotel				
6024.1 · Wednesday Night Event	103,426.52	65,000.00	38,426.52	159.12%
6024.2 ⋅ Conference	2,094.84	0.00	2,094.84	100.0%
6024.3 ⋅ Food & Beverage	161,992.19			
6024.4 · Hotel - Other	0.00	25,000.00	-25,000.00	0.0%
6024 - Hotel - Other	4,483.22			
Total 6024 · Hotel	271,996.77	90,000.00	181,996.77	302.22%
6025 · Program Material	156.40	25,000.00	-24,843.60	0.63%
6026 ⋅ Speakers	4,320.80	50,000.00	-45,679.20	8.64%
6027 ⋅ Supplies	0.00	1,000.00	-1,000.00	0.0%
6028 · Travel	13,585.71	15,000.00	-1,414.29	90.57%
6020 · Spring Conference - Other	0.00	0.00	0.00	0.0%
Total 6020 · Spring Conference	290,536.17	280,000.00	10,536.17	103.76%
6050 · Strategic Facilitator	0.00	15,000.00	-15,000.00	0.0%
6051 · Taxes & Licenses	0.00	600.00	-600.00	0.0%
6053 · Technology/AMS/Website	5,307.07	45,000.00	-39,692.93	11.79%
6054 · Travel	0.00	7,500.00	-7,500.00	0.0%
Total Expense	392,697.98	1,657,650.00	-1,264,952.02	23.69%
Net Ordinary Income	-91,782.93	-202,683.55	110,900.62	45.28%
	-91,782.93	-202,683.55	110,900.62	45.28%

STATE ASSOCIATION OF COUNTY RETIREMENT **SYSTEMS** Annual Budget July '22 - June '23

Jul '22 - Jun 23 **Annual Budget**

Ordinary Income/Expense

Income

come	
4100 · Membership Dues	
4101 · Affiliates	268,750.00
4102 · Non Profit - Organizations	2,750.00
4103 · Non Profit - Systems	6,000.00
4104 · Systems - Medium	52,000.00
4105 · Systems - Large	42,000.00
4100 · Membership Dues - Other	0.00
Total 4100 ⋅ Membership Dues	371,500.00
4200 · Webinar Symposium Registration	
4201 · Affiliates - Early	0.00
4202 · Affiliates - Regular	0.00
4203 · Affiliates - Late	0.00
4204 · Non Profit	0.00
4205 ⋅ Systems	0.00
4206 · Non-Members	0.00
Total 4200 - Webinar Symposium Registration	
4250 · Product Income	0.00
4251 · CERL	
4252 ⋅ Roster	0.00
4253 · Website Advertising	0.00
4254 · Website Job Board	0.00
4255 · Magazine Advertising	0.00
4256 · Conference Recordings	0.00
4257 · Trustee Handbooks	0.00
4269 · Product Shipping	0.00
Total 4250 · Product Income	0.00
4270 · UC Berkeley Program	
4271 · Registrations	60,000.00
4272 · Sponsorships	40,000.00
4270 · UC Berkeley Program - Other	0.00
Total 4270 ⋅ UC Berkeley Program	100,000.00
4300 · Fall Conference Registration	
4301 · Affiliates - Early	140,000.00
4302 · Affiliates - Regular	60,000.00
4303 · Affiliates - Late/Onsite	70,400.00
4304 · Non Profit	960.00
4305 ⋅ Systems	20,000.00
4306 · Non-Members	200,250.00
4307 · Fun Run	500.00
4308 ⋅ Yoga	100.00
4300 · Fall Conference Registration - Other	0.00
Total 4300 · Fall Conference Registration	492,210.00
4350 ⋅ Spring Conference Registration	

STATE ASSOCIATION OF COUNTY RETIREMENT SYSTEMS

Annual Budget July '22 - June '23

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	Jul '22 - Jun 23 Annual Budget
4351 · Affiliates - Early	140,000.00
4352 · Affiliates - Regular	60,000.00
4353 · Affiliates - Late/Onsite	70,400.00
4354 · Non Profit	960.00
4355 · Systems	20,000.00
4356 ⋅ Non-Members	200,250.00
4357 · Fun Run	500.00
4358 ⋅ Yoga	100.00
4350 · Spring Conference Registration - Other	0.00
Total 4350 · Spring Conference Registration	492,210.00
4900 · Interest Earned	-953.55
Total Income	1,454,966.45
Gross Profit	1,454,966.45
Expense	
5000 · Administrative Fee	225,000.00
5001 · Administrative Services	500.00
5002 ⋅ Awards	500.00
5003 · Bank Charges/Credit Card Fees	36,000.00
5010 · Berkeley & Symposium	
5011 · Audio/Visual	2,200.00
5012 Delivery & Shipping	0.00
5013 · Hotel	12,500.00
5014 · Food & Beverage	12,500.00
5015 · Materials/Printing/Design	3,000.00
5016 · Travel	2,500.00
5017 · UC Berkeley	216,000.00
Total 5010 · Berkeley & Symposium	248,700.00
5020 · Webinar Symposium	0.00
5021 - Webinar Speaker	0.00
5022 · Webinar Technology	25,000.00
5023- Webinar Misc	0.00
Total 5020 · Webinar Symposium	25,000.00
5030 · CERL	16 500 00
5031 · Materials/Printing/Design	16,500.00
5032 · Shipping Total 5030 · CERL	1,300.00 17,800.00
5040 · Commissions & Fees	20,000.00
5041 · Consulting	•
5042 · Dues & Subscriptions	21,192.00 3,700.00
5050 · Fall Conference	3,700.00
5051 · Audio/Visual	90,000.00
5051 · Addio/visual 5052 · Delivery & Shipping	2,500.00
5052 · Delivery & Shipping	•
	6,500.00
5054 · Hotel	

5054.1 · Wednesday Night Event

5054.2 · Conference

65,000.00

15,000.00

STATE ASSOCIATION OF COUNTY RETIREMENT SYSTEMS Annual Budget July '22 - June '23

Jul '22 - Jun 23 Annual Budget

	Annual Budget
5054.3 · Food & Beverage	250,000.00
5054 · Hotel - Other	
Total 5054 · Hotel	330,000.00
5055 · Program Material	25,000.00
5056 ⋅ Speakers	50,000.00
5057 · Supplies	500.00
5058 · Travel	15,000.00
5050 · Fall Conference - Other	0.00
Total 5050 · Fall Conference	519,500.00
5070 ⋅ Insurance	5,000.00
5071 · Legal & Professional Fees	35,000.00
5072 · Legislative Advocacy	62,808.00
5080 · Magazine	
5081 · Delivery & Shipping	600.00
5082 · Design/Printing/Etc.	20,000.00
5083 · Magazine - Other	6,000.00
Total 5080 · Magazine	26,600.00
6000 ⋅ Board & Committees	
6001 ⋅ Board of Directors	
6001.1 · Food & Beverage	25,000.00
6001.2 · Printing/Supplies	4,000.00
6001.3 · Travel - BOD Meetings	11,000.00
6001.4 · Travel - Miscellaneous BOD	8,000.00
6001.5 · Board Of Directors - Other	3,000.00
Total 6001 · Board of Directors	51,000.00
6002 · Legislative Committee Meetings	250.00
6003 · Program Committee Meetings	2,500.00
6004 · Nominating Committee Meetings	
6005 · Audit Committee Meetings	
6006 · Education Committee Meetings	
6007 · ByLaws Committee Meetings	
6008 · Board & Committees - Other	
6000 · Board & Committees - Other	0.00
Total 6000 · Board & Committees	53,750.00
6010 · Office Expenses / Supplies	2,500.00
6011 · Postage & Delivery	6,000.00
6020 · Spring Conference	
6021 · Audio/Visual	90,000.00
6022 · Delivery & Shipping	2,500.00
6023 · Entertainment	6,500.00
6024 · Hotel	
6024.1 · Wednesday Night Event	65,000.00
6024.2 · Conference	0.00
6024.3 · Food & Beverage	0.00
6024.4 · Hotel - Other	25,000.00
Total 6024 · Hotel	90,000.00

STATE ASSOCIATION OF COUNTY RETIREMENT SYSTEMS Annual Budget July '22 - June '23

Jul '22 - Jun 23 Annual Budget

6025 · Program Material	25,000.00
6026 ⋅ Speakers	50,000.00
6027 · Supplies	1,000.00
6028 · Travel	15,000.00
6020 · Spring Conference - Other	0.00
Total 6020 · Spring Conference	280,000.00
6050 · Strategic Facilitator	15,000.00
6051 · Taxes & Licenses	600.00
6053 · Technology/AMS/Website	45,000.00
6054 · Travel	7,500.00
66900 · Reconciliation Discrepancies	0.00
Total Expense	1,657,650.00
Net Ordinary Income	-202,683.55
Net Income	-202,683.55



4. SACRS President Report - No Action

Vivian Gray, Los Angeles CERA, SACRS President

A. SACRS President Update



5. SACRS Legislative Committee Update - No Action

Eric Stern, Sacramento CERS and Dave Nelsen, Alameda CERA – SACRS Legislative **Committee Co-Chairs**

A. 2022 Legislative Report – No Action



Donald B. Gilbert Michael R. Robson Trent E. Smith Jason D. Ikerd Associate Bridget E. McGowan Associate

October 6, 2022

TO: State Association of County Retirement Systems

FROM: Edelstein Gilbert Robson & Smith, LLC

RE: Legislative Update – October 2022

General Update

The Legislature adjourned for final recess on August 31. Since then, the Governor has been working his way through all the bills sent to his desk in the final weeks of session.

The deadline for the Governor to sign or veto bills was September 30. This year, he signed just under 1,000 bills and vetoed 169 of them (about 14.5 percent of bills sent to his desk). This is a higher veto rate than the last two years, and it is worth noting that many of the bills he vetoed were done so based on cost concerns. Recognizing that the economy is slowing, the Governor vetoed many bills to avoid the long-term financial obligations that recurring expenditures bring to the state budget.

Aside from an organizational day of session in early December, legislators will remain in their districts for the rest of the year, focusing on the upcoming election and other district activities.

SACRS Sponsored Bills

Both SACRS sponsored bills passed out of the Legislature and were signed by the Governor. These include **AB 1824 (Committee on Public Employment and Retirement)** – Committee Cleanup Bill and **AB 1971 (Cooper)** – CERL Policy Bill.

Other Bills of Interest

AB 2493 (Chen) – Disallowed Compensation. As initially amended, this bill would have allowed OCERS to adjust retirement payments based on disallowed compensation for peace officers and firefighters under certain circumstances. The bill was later amended to apply to all CERL systems.

While SACRS did not take a position, we are aware that some systems submitted their own letters and shared concerns with the Legislature.

As noted in our last update, the bill was not brought up for a final vote and is dead for the year.

AB 2449 (Rubio) – Public Meetings. This bill would allow a local agency to use teleconferencing for a public meeting if at least a quorum of members of the legislative body participate in person from a single location that is identified on the agenda and is open to the public within the local agency's jurisdiction, among other requirements. The last amendments to the bill added more guardrails for when a board member can participate remotely and added a sunset date, among other changes.

The Governor signed this bill on September 13.

AB 826 (Irwin) – Compensation Earnable. As reported in previous updates, AB 826 was gutted and amended in June of 2021 with the CERL provisions relating to compensation earnable.

AB 826 was amended and pulled off the Inactive File on August 3. It passed out of the Legislature but was vetoed by the Governor on September 29. In his veto message, the Governor said he is sympathetic to the issue, but the bill would incentivize PEPRA noncompliance and "attempt to circumvent recent court decisions, undermine the intent of the PEPRA, and expose the local governments to increased costs and litigation."



6. SACRS Nomination Committee – 2023-2024 SACRS Election Notice – No Action

Dan McAllister, San Diego CERA, SACRS Nomination Committee Chair

A. SACRS Election Notice 2023-2024



October 1, 2022

To: SACRS Trustees & SACRS Administrators/CEO's

From: Dan McAllister, SACRS Immediate Past President, Nominating Committee Chair

SACRS Nominating Committee

Re: SACRS Board of Director Elections 2023-2024 - Elections Notice

SACRS BOD 2023-2024 election process will begin January 1, 2023. Please provide this election notice to your Board of Trustees and Voting Delegates.

DEADLINE	DESCRIPTION
March 1, 2023	Any regular member may submit nominations for the election of a
	Director to the Nominating Committee, provided the Nominating
	Committee receives those nominations no later than noon on
	March 1 of each calendar year regardless of whether March 1 is
	a Business Day. Each candidate may run for only one office.
	Write-in candidates for the final ballot, and nominations from the
	floor on the day of the election, shall not be accepted.
March 25, 2023	The Nominating Committee will report a final ballot to each
	regular member County Retirement System prior to March 25
May 13, 2023	Nomination Committee to conduct elections during the SACRS
	Business Meeting at the Spring Conference
May 15, 2023	Board of Directors take office for 1 year

Per SACRS Bylaws, Article VIII, Section 1. Board of Director and Section 2. Elections of Directors:

Section 1. Board of Directors. The Board shall consist of the officers of SACRS as described in Article VI, Section 1, the immediate Past President, and two (2) regular members

A. Immediate Past President. The immediate Past President, while he or she is a regular member of SACRS, shall also be a member of the Board. In the event the immediate Past President is unable to serve on the Board, the most recent Past President who qualifies shall serve as a member of the Board.

B. Two (2) Regular Members. Two (2) regular members shall also be members of the Board with full voting rights.

Section 2. Elections of Directors. Any regular member may submit nominations for the election of a Director to the Nominating Committee, provided the Nominating Committee receives those nominations no later than noon on March 1 of each calendar year regardless of whether March 1 is a Business Day. Each candidate may run for only one office. Write-in candidates for the final ballot, and nominations from the floor on the day of the election, shall not be accepted.

The Nominating Committee will report its suggested slate, along with a list of the names of all members who had been nominated, to each regular member County Retirement System prior to March 25. The Administrator of each regular member County Retirement System shall be responsible for communicating the Nominating Committee's suggested slate to each trustee and placing the election of SACRS Directors on his or her board agenda. The Administrator shall acknowledge the completion of these responsibilities with the Nominating Committee.



Director elections shall take place during the first regular meeting of each calendar year. The election shall be conducted by an open roll call vote, and shall conform to Article V, Sections 6 and 7 of these Bylaws.

Newly elected Directors shall assume their duties at the conclusion of the meeting at which they are elected, with the exception of the office of Treasurer. The incumbent Treasurer shall co-serve with the newly elected Treasurer through the completion of the current fiscal year.

The elections will be held at the SACRS Spring Conference May 9-12, 2023. Elections will be held during the Annual Business meeting on Friday, May 12, 2023 in San Diego at Paradise Point Hotel and Resort.

If you have any questions, please contact Dan McAllister, Dan.McAllister@sdcounty.ca.gov

Thank you for your prompt attention to this timely matter.

Sincerely,

Dan McAllister

Dan McAllister, San Diego CERA Trustee & San Diego County Treasurer Tax Collector SACRS Nominating Committee Chair

CC: SACRS Board of Directors

SACRS Nominating Committee Members Sulema H. Peterson, SACRS Executive Director



SACRS Nomination Submission Form SACRS Board of Directors Elections 2023-2024

All interested candidates must complete this form and submit along with a letter of intent. **Both the form and the letter of intent must be submitted no later than March 1, 2023.** Please submit to the Nominating Committee Chair at Dan.McAllister@sdcounty.ca.gov AND to SACRS at sulema@sacrs.org. If you have any questions, please feel free to contact Sulema Peterson at SACRS at (916) 701-5158.

Name of Candidate	Name:
Name of Candidate	ivalle.
Candidate Contact	Mailing Address:
Information	Walling Address.
(Please include – Phone	Email Address:
	Email Address.
Number, Email Address	Discussion
and Mailing Address)	Phone:
Name of Retirement	System Name:
System Candidate	
Currently Serves On	
List Your Current	o Chair
Position on Retirement	o Alternate
Board (Chair, Alternate,	○ General Elected
Retiree, General Elected,	o Retiree
Etc)	o Other
Applying for SACRS	o President
Board of Directors	 Vice President
Position (select only one)	o Treasurer
	 Secretary
	Regular Member
Drief Die in Denemont	
Brief Bio in Paragraph	
Format	



7. SACRS Audit Report – No Action

Steve Delaney, Orange CERS, SACRS Audit Committee Chair

A. Audit Committee report/verbal update



No printed materials for this item



8. SACRS Education Committee Report - No Action

JJ Popowich, Los Angeles CERA, SACRS Education Committee Chair

A. SACRS Annual Fall Conference 2022 Evaluations/verbal update



No printed materials for this item



9. SACRS Program Committee Report – No Action

David MacDonald, Contra Costa CERA, SACRS Program Committee Chair

A. Program Committee report/verbal update



No printed materials for this item



10. SACRS Affiliate Committee Report - No Action Wally Fikri, William Blair, SACRS Affiliate Committee Chair

A. Affiliate Committee report/verbal update



No printed materials for this item



11. SACRS Bylaws Committee Report – No Action

Barbara Hannah, San Bernardino CERA, SACRS Bylaws Committee Chair

A. Bylaws Committee report/verbal update



No printed materials for this item



12. SACRS Fall Conference Breakout Reports - No Action

A representative from each breakout will give report on their meetings.

- A. Administrators
- B. Counsel
- C. Disability/ Operations & Benefits Combo
- D. Internal Auditors
- E. Investment Officers
- F. Safety Trustees
- G. General Trustees



13. Adjournment

Next scheduled SACRS Association Business Meeting will be held Friday, May 12, 2023 at the Paradise Point Resort & Spa, San Diego, CA.



ARTICLE

ESG Is a Preference, Not a Strategy

January 2022

Reality television programming exists in a myriad of settings. Shows focus on a broad range of topics from home renovation, car restoration, gold mining, deep sea fishing, to even selecting a potential spouse from a group of strangers. A reality show likely already exists in any scenario you can imagine. The one constant among them, however, is that they all follow the same strategy: the participants face some sort of adversity. At times this adversity is life-threatening, but more often it simply takes the form of interpersonal crisis embellished with dramatic tension and occasionally with comedy. *The various iterations simply exist to meet audience preferences*.

We see a similar situation in the investment industry.

We believe the term *ESG strategy* is generally a mischaracterization. While some managers use ESG measures to identify risks and opportunities, more often ESG metrics merely reflect investor preferences incorporated in an existing strategy. An investment strategy represents a decision, or set of decisions, that guide a portfolio's risk-and-return profile over time. The underlying investment process drives the return of the chosen investment strategy; the ESG preferences reflected in the securities selected for the portfolio do not. We make this distinction not to disparage ESG investing—we actually view this trait as a benefit. We like the ability to align our portfolios' composition with our beliefs without a meaningful impact on performance.

Making Our Case: Preference, Not Strategy

Let's take, for example, an actively managed equity portfolio that favors companies with low valuations, strong financial health, and decent price momentum. This investment strategy, when applied across various industries, sectors, and countries, will perform similarly relative to a market portfolio with or without incorporating ESG preferences. Assuming we select and size positions in a consistent manner, a portfolio that leans toward value, quality, and momentum will tend to exhibit strong relative performance when companies that exhibit those characteristics perform well across exposures. The portfolio's performance will follow the performance of its characteristics regardless of whether the opportunity set is small-cap retailers in the United States, renewable energy providers in Europe, or a global portfolio for which every publicly traded company is eligible.

"Often ESG metrics merely reflect investor preferences incorporated in an existing strategy."



AUTHORS



Brent Leadbetter, CFA*Partner, Head of Equity Solution
Distribution



Ari Polychronopoulos, CFAPartner, Head of Product Management and ESG

*Corresponding author

Key Points

- A portfolio's return is driven by its investment strategy—a set of decisions that governs allocation and timing of capital among the portfolio's positions. Modest exclusions designed to align a broadly diversified portfolio with an investor's ESG principles do not change the underlying investment strategy and therefore are not responsible for driving the portfolio's return.
- ESG investing is a preference, not a strategy.
 We view this trait as a benefit to investors, who can align their portfolios' composition with their beliefs without experiencing a meaningful impact on performance.
- Because ESG is a preference, not a strategy, investors can incorporate their ESG principles within a wide range of investment strategies, including non-cap-weighted indices. Today, the RAFI ESG strategy allows investors to invest according to their ESG principles and still maintain a valuation discount relative to the market at a time when value appears attractively priced.



To demonstrate the lack of impact ESG preferences have on performance, let's examine the five largest index-based ESG products (ETFs or mutual funds) by AUM available in the US market as of December 31, 2021.² The comparison of these five largest ESG investment vehicles to a non-ESG cap-weighted benchmark reveals essentially no differences among the portfolios because the five products each weight their holdings by market capitalization. Thus, incorporating ESG metrics has virtually no impact on the portfolios.

The following table lists the top ten holdings for six portfolios: the five largest ESG vehicles and a cap-weighted benchmark. We intentionally omit labels. Can you tell which vehicle is the non-ESG portfolio? Johnson & Johnson, Berkshire Hathaway, and PayPal are the only companies that are unique to individual portfolios. Every other company is included in two or more strategies.

Top Ten Holdings of Five Largest US Index-Based ESG Products and Non-ESG Cap-Weighted Benchmark, as of 12/31/2021

Portfolio	1	Portfolio 2	2	Portfolio 3	;	Portfolio 4		Portfolio 5		Portfolio 6	
Apple	7%	Apple	8%	Apple	7%	Microsoft	11%	Microsoft	10%	Apple	6%
Microsoft	6%	Microsoft	7%	Microsoft	6%	Alphabet	8%	Alphabet	8%	Microsoft	6%
Alphabet	4%	Alphabet	5%	Alphabet	4%	Tesla	4%	Tesla	3%	Alphabet	4%
Amazon	4%	Amazon	4%	Amazon	4%	NVIDIA	3%	NVIDIA	3%	Amazon	3%
Tesla	2%	Tesla	2%	Tesla	2%	Johnson & Johnson	2%	Visa	2%	Tesla	2%
NVIDIA	2%	Meta Platforms	3 2%	Meta Platforms	2%	Home Depot	2%	Home Depot	2%	Meta Platforms	2%
Meta Platforms	3 2%	NVIDIA	2%	NVIDIA	2%	Proctor & Gamble	2%	Proctor & Gamble	2%	NVIDIA	2%
JPMorgan	1%	UnitedHealth	1%	UnitedHealth	1%	Visa	2%	Mastercard	2%	Berkshire Hathaway	1%
Home Depot	1%	JPMorgan	1%	JPMorgan	1%	Mastercard	1%	Disney	2%	UnitedHealth	1%
Visa	1%	Home Depot	1%	Home Depot	1%	Disney	1%	PayPal	1%	JPMorgan	1%

 $Source: Research\ Affiliates, LLC, based\ on\ data\ from\ FactSet.$

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We consider just the top 10 holdings of the six portfolios, each of which holds hundreds of positions. An analysis of the portfolios' valuations should offer a better comparison of the portfolios. Our regular readers know we do not like to rely on a single valuation ratio. We prefer to look at multiple metrics and thus we compare the portfolios using the following ratios: price to sales (P/S), price to cash flow (P/CF), price to earnings (P/E), price to book (P/B), and price to dividends (P/D).

"We like the ability to align our portfolios' composition with our beliefs without a meaningful impact on performance."



Based on valuation metrics, the six ESG portfolios we analyze are not readily distinguishable from each other.

Valuation Metrics for Five Largest US Index-Based ESG Products and Non-ESG Cap-Weighted Benchmark, as of 12/31/2021



Source: Research Affiliates, LLC, based on data from FactSet.

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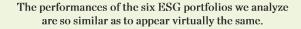


Does the non-ESG portfolio stand out yet?

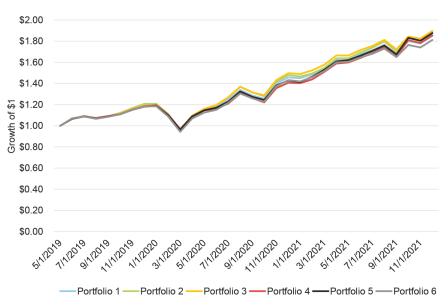
Based on valuation metrics, again all six portfolios appear quite similar. The range of values for each of the five metrics is quite narrow; for example, P/E ranges from 24.7 to 27.9 and P/B ranges from 4.5 to 5.8. Thus, both holdings and valuation characteristics show a lack of differentiation. Next, let's compare the portfolios based on performance. (And yes, we recognize you already know what this comparison is going to show.)

Portfolio





Performance of Five Largest US Index-Based ESG Products and Non-ESG Cap-Weighted Benchmark, May 2019–Dec 2021



Source: Research Affiliates, LLC, based on data from FactSet.

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We show performance beginning in May 2019 because some of the ETFs are relatively new, however, the tight correlation between the various portfolios' returns would persist if we included simulated results for the indices the products track. Even though the graph contains six separate return series, it appears as a single line because the nearly identical returns blend together.

Therefore, let us reiterate our point: the similarities—in holdings, valuation, and performance—among these five cap-weighted ESG investment vehicles and a non-ESG cap-weighted index (in this case, the non-ESG index is the Russell 1000, which was the sixth portfolio in each exhibit) is not a bad thing. Products such as these provide great solutions for investors who want exposure to a cap-weighted portfolio that aligns with their ESG preferences.

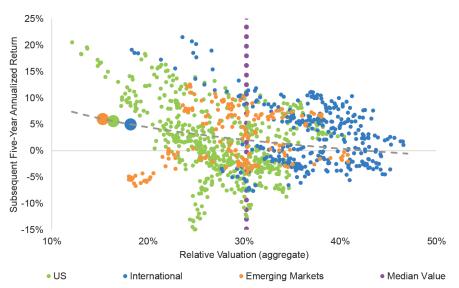
Wary of a Growth-Dominated Cap-Weighted Strategy? Read On

Of course, just as our regular readers know that we prefer multiple measures when valuing firms, so too they know we prefer an alternative to cap-weighted indices, especially when the valuation dispersion between cheap and expensive companies is as historically wide as it is today. Arnott et al. (2021) show that value investing is not broken. Value stocks have merely become far cheaper than they normally are relative to growth stocks. The elevated discount for value stocks exists both within and outside the US market.



Today's heavily discounted valuations for value stocks relative to growth and the resultant expected excess return for value stocks make us particularly wary of today's growth-dominated cap-weighted indices.

Value Factor Across Regions, Jul 1968-Sep 2021



Note: We use the composite value-factor definition provided on our Smart Beta Interactive web tool, because we believe it provides a more-robust measure of value than the traditional book-to-price measure. The composite comprises four measures: book to price, earnings to price, sales to price, and dividends to price.

Source: Research Affiliates, LLC, based on data from CRSP/Compustat and WorldScope/DataStream.

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The horizontal axis in the preceding figure notes the valuation of value stocks relative to growth stocks in the US, developed ex US, and emerging markets. As we would expect, value stocks are always cheaper than growth stocks, but the degree to which value stocks are cheaper varies considerably over time. The median relative valuation of value stocks to growth stocks over the period July 1968 through September 2021 is roughly 30% when measured by an average of the following four metrics: P/S, P/E, P/B, and P/D.

As of September 30, 2021, the valuations for the value factor were 16% in the US, 18% in developed ex US, and 15% in emerging markets. The vertical axis in the preceding figure notes the subsequent five-year annualized excess return that a value strategy has generated relative to a growth strategy from each starting point used in the analysis. Whereas we observe dispersion around the line of best fit, we also see a discernable pattern in which the slope of the line indicates a relationship between starting valuation and subsequent return. Lower starting valuations translate to better performance for value strategies relative to growth strategies.

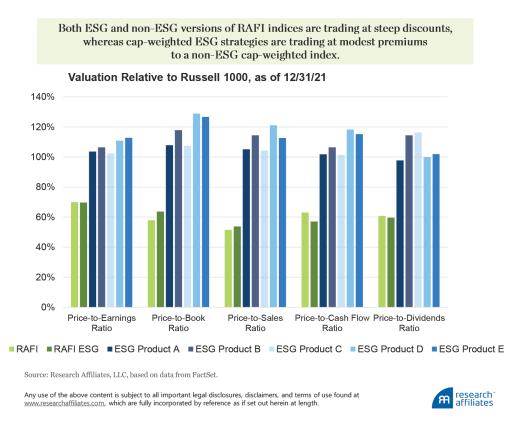
Today's heavily discounted valuations for value stocks relative to growth stocks, and the resultant expected excess return for value stocks, make us particularly wary of today's growth-dominated cap-weighted indices. Fortunately, investors can apply ESG preferences to any investment strategy. ESG-minded investors who are concerned with growth stocks' high valuations can simply opt for a non-cap-weighted ESG strategy.



Structuring a Non-Cap-Weighted ESG Strategy

The RAFITM index strategy offers one alternative to a cap-weighted index. By selecting and weighting companies based on fundamental measures of size—sales, cash flow, dividends plus buybacks, and book value plus intangibles—the RAFI approach represents a contrarian portfolio that rebalances out of the very mega-cap growth companies that currently dominate cap-weighted indices due to their significant price appreciation. When multiple dispersion between growth and value stocks is low, market-cap and RAFI indices will appear quite similar. As the market's willingness to pay a premium for growth increases, the difference between cap-weighted and RAFI indices will also grow. RAFI indices exhibit a dynamic value exposure regardless of whether they incorporate an ESG methodology.

Cap-weighted ESG strategies are currently trading at a modest premium to a non-ESG cap-weighted index, whereas both ESG and non-ESG versions of RAFI indices are trading at steep discounts. Based on the five valuation ratios we used earlier, as of September 30, 2021, the five largest US cap-weighted ESG products were trading at an average 10.2% premium to the Russell 1000. In contrast, the RAFI ESG US Index was trading at an average discount of 39.2% to the Russell 1000, virtually the same as the 39.3% discount of the RAFI US Index.



Likewise, both ESG and non-ESG versions of the RAFI strategy have exhibited similar return patterns versus the Russell 1000, particularly since the beginning of 2020. A collapse in the prices of value companies brought on by the Covid pandemic marked the first eight months of 2020. Over the next nine months, from the end of August 2020 through the end of May 2021, value stocks rallied considerably on reopening hopes. The value rally then cooled from June through December 2021. Both versions of the RAFI strategy faced performance headwinds when value was under pressure, and both outpaced the cap-weighted index when value rebounded.



Performance of RAFI US and RAFI ESG US Indices, Jan 2020-Dec 2021

	RAFI Fundamental US	RAFI ESG US	Russell 1000
1/1/2020-8/31/2020	-4.1%	-7.0%	10.4%
8/31/2020-5/31/2021	36.9%	37.0%	22.8%
5/31/2021–12/31/2021	7.7%	8.6%	12.8%

Source: Research Affiliates, LLC, based on data from FactSet.

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Not only does the RAFI ESG Index³ have a similar valuation discount and performance to the RAFI US Index, it achieves this without sacrificing in terms of ESG characteristics. The RAFI ESG Index provides a reduction in carbon footprint close to that of the five largest US cap-weighted ESG products we analyze. The RAFI ESG Index has a carbon intensity of 70 tons CO2 equivalent/Revenue in US\$MM. The five largest US cap-weighted ESG products have an average score of 71 in the same metric. The carbon intensity scores of all six ESG investment vehicles are well below the score of the Russell 1000 cap-weighted index, which has a carbon intensity score of 125.

Carbon Intensity and ESG Scores: Comparison of US ESG Products and Russell 1000, as of 12/31/2021

	Carbon Intensity Score	Environment Score	Social Score	Governance Score	Diversity Score
RAFI ESG Index	70	54	56	74	76
ESG Product A	92	53	53	71	71
ESG Product B	60	53	53	70	71
ESG Product C	84	51	52	70	69
ESG Product D	56	55	53	73	72
ESG Product E	65	54	53	73	71
Russell 1000	125	51	51	70	69

Source: Research Affiliates, LLC, based on data from FactSet and ISS.

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In addition to reducing carbon intensity, the RAFI ESG Index goes beyond many of the popular strategies, which rely largely on exclusions of firms with poor ESG scores and specific companies that belong to controversial industries. The RAFI ESG Index excludes any company that ranks poorly across any of five different groups of ESG metrics: environmental, social, governance, financial discipline, and diversity. Further, the RAFI ESG strategy incorporates a firm's ESG score in its index weight.

Recall the lists of the top ten holdings of the five largest US ESG products at the beginning of this article. The holdings lists provide an example of how the RAFI ESG Index's more stringent ESG methodology differentiates it from other portfolios. Alphabet (Google) is a top holding in all five of those ESG products. Meta Platforms (Facebook) is a top holding in four of the products. RAFI ESG includes neither firm because both fail our social and governance screens.^{4,5}



Alternatives to ESG Cap-Weighted Strategies Can Offer Benefits

While seemingly ubiquitous, reality TV shows are not the only programming available. Viewers who are uninterested in reality TV shows yet who are attracted to drama and humor in a home renovation setting on the "big screen" can watch the severely underrated *Money Pit* and fans of reality show competitions (in this case best-in-class dog shows) have the option of *Best in Show*.

Likewise, cap-weighting is not the only form of indexing available to ESG investors. Those investors who want to incorporate their ESG preferences in their portfolios can opt for alternative forms of indexing, such as the fundamentally weighted RAFI strategies. The RAFI ESG strategy allows investors to invest according to their ESG principles and still maintain a valuation discount relative to the market at a time when value appears attractively priced.

"The RAFI ESG strategy allows investors to invest according to their ESG principles and still maintain a valuation discount relative to the market at a time when value appears attractively priced."

Endnotes

- 1. Lively debate is ongoing regarding the efficacy of not just active management, but whether incorporating ESG provides a robust source of return (West and Polychronopoulos, 2020).
- 2. The names of the five largest index-based ESG products that we use in our analysis are available upon request.
- 3. The RAFI ESG Index strategy is currently provided in three regions: US, Developed, and Developed EUR Hedged (Net).
- 4. The RAFI ESG Index series ranks companies by individual ISS social or governance score in the starting index universe and then excludes companies that rank in the bottom 10% by cumulative fundamental weight.
- 5. To name a few recent controversies for Alphabet and Facebook: Alphabet was fined €100M in December 2020 for violating the French Data Protection Act for automatically placing tracking cookies on users' computers without prior consent, and was fined \$170M by the FTC for violating the US Children's Online Privacy Protection Act. Facebook has long faced consumer complaints regarding data privacy and security and failing to moderate online content. On the governance side, both firms have long been criticized for the fact that company founders (Larry Page and Sergey Brin at Alphabet and Mark Zuckerberg at Facebook) own the majority of the firm's voting stock (Source: ISS).

References

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ARTICLE

No Excuses: Plan Now for Recession

June 2022

Recessions do not naturally begin in an economy with two job openings for every job seeker. That said, there's nothing natural about recessions. In 1998, MIT economist Rudi Dornbusch observed that "none of the post-war expansions died of natural causes, they were all murdered by the Fed." The motive for this murder is usually to save the economy from incipient inflation by killing the economy.

Now is a time of heightened uncertainty, with many forces driving that uncertainty. We have an inflation rate at a four-decade high. Most don't remember the last time inflation was at this level. The Fed has not had to deal with serious inflation in the past 40 years and the responses adopted now will likely slow the economy. The Fed is very late to the game because the board members were in denial for a long time. In November 2021, the Fed finally officially retired the word *transitory* after dismissing the inflationary pressures with that description far too long. We might be surprised that the Fed did not see this coming, but the Fed's track record on forecasting, whether the economy or inflation, is rarely better than a Ouija board.

Inflation's Causes, Prospects, and the Fed's Toolkit

Inflation is a simple consequence of a supply/demand imbalance. If demand exceeds supply, prices rise until balance is restored. The current surge in inflation has been caused mainly by blowout spending, supply chain disruptions—some related to Covid lockdowns and some to geopolitics—the Russia-Ukraine war, and working from home, which leaves people with more money to spend, even as many produce less goods and services. Which of these can the Fed influence? None? Is the Fed powerless to rein in inflation? Not at all. Central bankers can decrease demand, albeit with serious lags, even if the problem is on the supply side.

To a person with a hammer, everything looks like a nail. With an echo-chamber guiding monetary policy all over the world, the only answer that seems to resonate with central bankers is to decrease demand. None of this is to say that the Fed should continue with a dozen years of negative real rates. Jerome Powell faces the same problem as poor lain MacDougall, lost in the Scottish countryside. MacDougall asks a local, "How do I gae to Dundee?" The local replies, "Well, I would nae start from here." Jerome Powell inherited a Fed after a half-dozen years of negative real interest rates, which he has continued to this day.

The 40-year comparison is much talked about. Many of our current problems are self-inflicted by an extended period of negative real rates. Indeed, with robust economic growth, low unemployment, and stock markets at all-time highs, it is



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Key Points

- A recession may already be under way. Even if not, the Fed's actions greatly increase the risk of a recession in the months ahead.
- The Fed's tardiness in tackling inflation raises the probability that policy makers overreact, increasing uncertainty and the likelihood of a recession.
- Policy makers need to deal with each of the individual sources of inflation in a coordinated fashion. Using a blunt instrument, such as a rate hike or quantitative tightening, merely crushes demand.
- Given today's relatively high level of uncertainty, business leaders owe it to their shareholders to engage in risk management.



baffling that the Fed continued with quantitative easing and persisted in keeping short-term nominal interest rates at essentially zero. In contrast, in 1981, the fed funds rate was 19%.

We liken real interest rates to a speed bump. Too high and traffic is stopped: innovation, long-horizon investment in new initiatives, entrepreneurial capitalism all slow markedly. Too low and reckless driving ensues: if we are among those able to borrow at negative real rates, we will, whether we have good ideas for the money or not. Misallocation of resources and malinvestment—at the individual, corporate, and government level—naturally will follow, along with propping up zombie companies that clog the runway for the innovators. All of this in turn inhibits innovation and entrepreneurial capitalism, both because risky projects cannot access those ultra-low rates, and established enterprises and government may waste much of the free money at their disposal.

Being late to the game increases the probability that the Fed overreacts, because it didn't act soon enough. This increases uncertainty and elevates the probability of a hard landing, which is what everybody wants to avoid. Hard landing means we go into a serious recession, like the one associated with the global financial crisis. There are huge economic as well as human costs associated with hard landings. Nobody wants to be laid off or to spend an extended amount of time on unemployment insurance. A soft-landing scenario is much more desirable. That could mean slower economic growth or maybe a mild recession before the economy moves into a recovery phase.

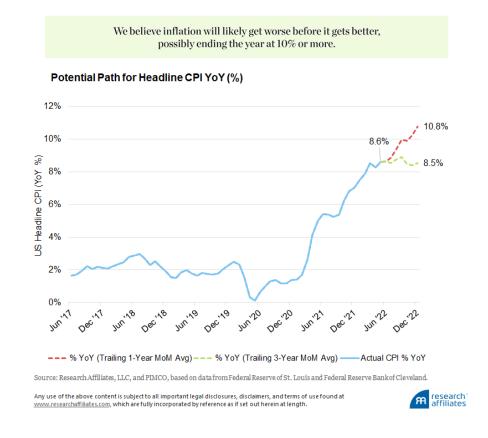
The main issue is that the Fed ignored inflation for far too long. One of the main things we worry about is that the Fed board members believe that increasing interest rates is sufficient to fine tune inflation. If they really believe that, it's dangerous. Outsiders are not privy to what happens at the FOMC other than reading the summary minutes, because the detailed minutes are only released after five years. Traditionally, interest rate hikes have been the go-to tool in a tightening regime and have had some historical success. But this time might be different. Indeed, every time is different.

What are the root causes of the inflation we have now? Some of them are intuitive, such as supply chain disruptions. Will the Fed's raising interest rates by 75 basis points make a difference to supply chain disruptions? No. To deal with inflation, we need to deal with the source of the problem and address it directly, not just hit it with a blunt instrument that sometimes worked in the past. The usual approach does not inspire confidence. We worry the Fed is going to mess it up.

Step number one is to go through the individual components driving the 8.6% CPI inflation number. Consider housing, for example. Given that a homebuyer can get a mortgage for much less than 8.6% means that effectively the financing is free or being subsidized. In terms of real rates, this increases the demand for housing. So, for this component, raising rates appears to have some logic. That is the sort of analysis we need to see. But the housing issue is much more complex, encompassing not just the demand for mortgages, but the demand for materials, and the structural backlog caused because we have not been building enough housing over the last five years. The rise in housing prices has nothing to do with Covid.

The near-term prognosis for inflation is not good. Each month's 12-month inflation rate matches the previous month's inflation rate, plus a new month, minus the corresponding month dropped from the previous year. We can't know with any confidence what the new month's rate will be, but we know with precision the rate of the month being dropped. The next four months to be dropped from 2021 will be 0.9%, 0.5%, 0.2%, and 0.3%, respectively. The Cleveland Fed produces an "inflation nowcast" which estimates what the monthly inflation would be if the month ended today. If their nowcast is correct, the 0.9% from June 2021 will be replaced with 1.0% for June 2022. If inflation in each subsequent month through year-end 2022 matches the average inflation rate over the prior 12 months, we should finish the summer at 9.9% and finish the year at 10.8%. If, alternatively, monthly inflation recedes to match the trailing 36-month average, then the current 8.6% inflation rate would remain steady through year-end. This simple analysis leads us to believe that inflation will likely get worse before it gets better.





There's another problem with the way CPI inflation is calculated. The largest component, shelter, is one-third of the total and is smoothed and lagged. According to the Bureau of Labor Statistics (BLS), their chosen measure for the cost of home ownership, owners' equivalent rent (OER), is up 7.3% in the last two years, while the S&P/Case-Shiller Home Price Index shows that US home prices have risen by 37% in the two years ended March. The BLS switched to OER after the last inflationary surge in 1979–81; indeed, if inflation was calculated today like it was in 1981, we would already be solidly into double digits.¹

Similarly, the BLS estimate of rental prices, rent of primary residence (RPR), is up a near-identical 7.1% in the last two years, while the CoreLogic Single-Family Rent Index is up twice that in the last year alone (and an astounding 41% in Miami!). The BLS uses survey data to gauge shelter inflation. Homeowners' perceptions of their property rental values anchor on the past and only respond to soaring home prices slowly, gradually, and over several years.

The one-third of CPI for shelter will be playing catch-up for some years to come. Empirically, most of that catch-up occurs over the subsequent two to three years. Note that this inflation has already happened; it simply hasn't made its way into CPI guite yet.

Suppose the Fed identified five major causes of inflation and how it plans to deal with each of them. Wouldn't this approach instill greater confidence in investors and business leaders? Unfortunately, the Fed has no control over most of the current causes of inflation, but could work with the Treasury to address some of these at a fiscal level.² Consistent with the policy response in the global financial crisis, we need a coordinated effort within our government to reduce uncertainty and to lay out a plan to reduce inflation—component by component.

Here is an example of the type of actions that can help. Long Beach, California, hosts the largest container port in the United States. Given current supply chain issues, the port had a long backlog and considerable wait for container ships to unload. The City of Long



Beach had a regulation that allowed the stacking of only two containers, designed to keep the containers from blocking residents' view of the ocean. Realizing the bottleneck at their port was causing a national problem, the City of Long Beach changed the regulation, allowing four or five containers to be stacked. While inconvenient for citizens in the short term, the City of Long Beach did something to help the nation.

Hundreds, if not thousands, of opportunities like this exist. These initiatives focus on supply. In contrast, the Fed is focused on 75 basis-point rate hikes. Each of the causes of inflation needs its own policy response. None will typically respond as predictably or quickly to aggressive tightening by the Fed.

Preparing for Recession versus Reacting to Recession

Uncertainty is a negative force and is a question of degree. When a war is going on, especially involving a nuclear power (as is the case now), that's a big deal, much different than a regional war that doesn't involve a nuclear power. The degree of uncertainty is key. An average level of uncertainty is always present, but the level can fluctuate. When the level of uncertainty is relatively high, as it is today, business leaders should actively manage their risk.

What does risk management look like? Let's say, for instance, that a corporation has a promising project which entails building a new plant. Management believes this investment will enhance its long-term value. It increases investment, employment, economic growth, all good things, but the corporation needs to finance the plant. At this point in time, do you want to bet on the company given the current uncertainties? This isn't theoretical. With inflation running at a 40-year high, major geopolitical disruptions around the world, monetary and fiscal policies in flux, the logical tactic is to exercise caution.

"When the level of uncertainty is relatively high, as it is today, business leaders should actively manage their risk."

In his 1986 PhD dissertation, one of us (Cam Harvey) was the first to show that a yield-curve inversion has a perfect batting average in forecasting recessions since 1968. The other (Rob Arnott) has suggested that a yield-curve inversion doesn't *predict* recessions, it *causes* recessions. The long end of the yield curve is mainly a market rate set by the market's perception of the fair cost of long-term capital. The short end is largely managed by the central bank. If the central bank raises the short-term cost of risk-free capital above the long end, it is choosing a rate the market *tells* us is too high. This isn't necessarily the case in an economy (Europe or Japan) where the central bank also controls the long end of the yield curve (in policy circles, this is called yield-curve control). But, when the free market determines the long end of the yield curve, the Fed should pay close attention!

On June 30, 2019, when the yield curve had inverted for a full quarter, Cam was frequently interviewed by the media, explaining that this signal was "code red" for recession. All previous eight episodes [since October 1968] of inverted yield curves were followed by recessions, with no false signals. Some criticized his statements as potentially causing a recession. No, his warning was risk management 101. Facing a red flag, a business would be ill-advised to bet the firm on that new plant.

Today, the yield curve is not inverted, so why worry? As with the recent two-fold surplus of job openings relative to job seekers, this too shall pass. Really? The forward markets do a pretty good job of forecasting near-term Fed decisions and they are suggesting a 90% likelihood of a 75 basis-point hike in July followed by another 50 to 75 basis points in September. Those moves would take the 3-month Treasury bill yield to about 3%, within hailing distance of the current 3.15% yield on the 10-year Treasury bond. Absent a run-up in long bond yields, one additional hike before year-end would leave us with an inverted yield curve. Further, Cam's analysis shows the slope of the yield curve is the key indicator. A flat curve is bad and an inverted curve is really bad for economic prospects.



For a consumer maybe it isn't the time to take that trip to Disney and use your credit card to finance it. Uncertainty can slow economic growth, but slowing economic growth is a lot better than going into a hard landing unprepared. A company that chooses not to undertake new investment in a proposed plant will likely survive the recession, but if it rolls the dice and forges ahead, it might not survive. The costs of failing are high, but the costs are not just economic. Of course, the company's shareholders would lose given its falling stock price. These losses are easy to measure and tend to dominate the headlines. However, the human costs are high when people are thrown out of work. These hardships are much more difficult to quantify, but they are real and large. Too often, the human costs are ignored.

Many companies took Cam's warning in 2019 very seriously, and indeed when Covid hit, they were in reasonably good shape. No single industry faced an existential crisis as a result of Covid, although some industries, especially hospitality, restaurants, and retailers, were more negatively affected than most. But this was not like the global financial crisis when a single industry, financials, faced a risk of collapse and/or nationalization. Some people were ready because they knew an inverted yield curve was a reliable red flag. Today the heightened uncertainty is obvious. We think that means people will be cautious and they will engage in risk management.

It's Not Too Late to Prepare

If we are not already slipping into recession, we see a substantial probability that a recession could start in late 2022 or 2023. If we are right, then the CEO of a company that gets into real trouble in the recession can't go on stage at the shareholders' meeting or on the quarterly earnings call and say management was blindsided by the recession. That's not good enough. People would laugh at them. The signs of recession are in your face. The way to deal with it is to be more conservative until some of the uncertainty is resolved.

End Notes

- 1. In "The Coming Rise in Residential Inflation" available on SSRN, Bolhuis, Cramer, and Summers (2022) argue that "the current inflation regime is closer to that of the late 1970s than it may at first appear."
- 2. This need not be a pipe dream. The Fed and Treasury have not been this close since the early 1970s when Arthur Burns, Economic Advisor to the President in the Nixon Administration, was subsequently Fed Chair from 1970 to 1978. We know how that turned out, but cooperation and collaboration can, just as easily, lead to good outcomes.



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INVESTMENT POLICY STATEMENT

A monthly review of the markets



SEPTEMBER 2022

Laying Out the Path to a "Softish" Landing

For much of this year, market participants have focused on the pace and magnitude of policy tightening by the U.S. Federal Reserve (Fed), as they confront generational highs in inflation. Of particular note, the August reading for the core Consumer Price Index (CPI) increased at an annualized rate of over 7%, well above acceptable levels. While a true "soft" landing—where growth slows toward potential from above—appears unlikely at this point, we do see a potential for a "softish" landing: one that avoids a substantial economic downturn, though growth slows notably below potential. In this issue, we lay out what the path to that outcome would look like over the next couple quarters, while continuing to acknowledge that the risks of a harder landing remain significant.

In thinking about the policy path going forward, framing the analysis around the question, "what does the path to success look like for the Fed at this point?" can be useful. With the current level of elevated inflation, the Fed's primary goal is to bring it down to a reasonable level. They would clearly prefer avoiding recession, but they are also willing to run a risk—a substantial risk at that—of triggering a recession to control inflation.

A true "soft" landing—where growth slows toward the underlying trend, which we put around 13% from above but does not dip below that pace—appears unlikely at this point, in our view. However, we do still see a path to a "softish" landing, where growth dips below 13% but does not turn outright recessionary, as still a realistic possibility. That said, the path to that outcome is relatively narrow, and it is clearly possible that the economy tumbles off the path into a recession.

We think laying out the path to the latter outcome is useful for several reasons. First, it helps in assessing how plausible the outcome is. Second, and perhaps more important, it provides some markers along the way that can help us evaluate whether the economy is following this path or wandering off into the thickets of recession. And, put simply, the economy needs a period of below trend growth to cool off the labor market. Though there have been two consecutive quarters of negative gross domestic product (GDP) growth, that likely overstates the amount of slowdown. Gross domestic income (GDI), a parallel measure of the economy's output, has been notably stronger and GDP has swung around by noisy areas such as net exports and inventories. In looking through the weakness in first half of this year, we think that underlying GDP growth needs to dip meaningfully below 1¾% for a moderate amount of time, probably down into the ¾% range.

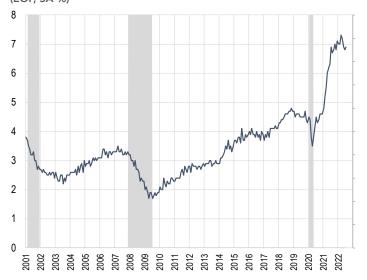
Along with the slowdown in growth, the labor market needs to slow, and the needed slowing looks somewhat sharper as the current pace looks elevated compared to overall output growth. Though there was some moderation, the latest employment report continues to suggest a relatively robust labor market; one with growth that is too rapid for the current inflation situation. When we look across a range of measures, the current rate of employment growth appears to be around 300k per month. That is very clearly slower than in late 2021 and early 2022, when the pace was closer to 600k, but it is still too fast in the context of where the Fed is attempting to steer the economy. The pace of employment growth that stabilizes the unemployment rate looks to be about 125k per month and to open up some slack requires dipping below that level. The path toward a "softish" landing likely requires employment growth to drop down toward about 50k per month, or even a bit lower.

"The most difficult thing is the decision to act, the rest is merely tenacity."

– Amelia Earhart, American Aviator We think the Fed hopes to get there through a substantial reduction in hiring, but without a big pickup in layoffs. One way to watch progress toward that is through the JOLTS data, which has information on both the openings rate and the layoffs rate. The JOLTS opening rate is about 7% now, down from a 7.3% high but still extremely elevated compared to its history (see figure 1). A rough benchmark for where it needs to go is back to where it was in the pre-pandemic labor market—about 5%. However, the most recent data from July showed a small uptick instead, following declines in the prior several months. A large part of why the Fed wants lower job openings is that they hope it will slow wage gains, which are currently above the pace consistent with the 2% inflation target. And there has been some better news here as average hourly earnings have been a little slower, and labor force participation has moved up, which could also help moderate wage gains. These positives have not yet been nearly enough though to change the direction of Fed policy.

On inflation, what is needed for a "softish" landing is pretty simple: less of it. There have been positive signs on the supply chain side, where pressures finally seem to be abating. Some of that has started to filter into actual prices. For instance, appliance prices, as shown in figure 2, have dropped substantially from their peak. Similarly, the Manheim index for used cars at auction has also dropped. But at this point, these are only tentative signs, and goods price declines need to be much broader than what we have seen so far. And importantly, we also need evidence of moderation for services prices, which has continued to experience significant upward pressures over the last several months. This will be, over time, closely tied to the labor market as labor costs, which make up a significant portion of costs in the services sector of the economy. Here, the path includes sequentially lower readings in the employment costs index, probably needing to drop to around a 3½-4% annualized rate from the current 5%.

FIGURE 1: JOLTS: JOB OPENINGS RATE (EOP, SA %)



As of 31 August 2022. Sources: Haver Analytics, Stone Harbor Investment Partners. For illustrative purposes only.

FIGURE 2: U.S. INFLATION HOUSEHOLD APPLIANCES (DEC 1997=100)



As of 31 August 2022. Sources: Haver Analytics, Stone Harbor Investment Partners. For illustrative purposes only.

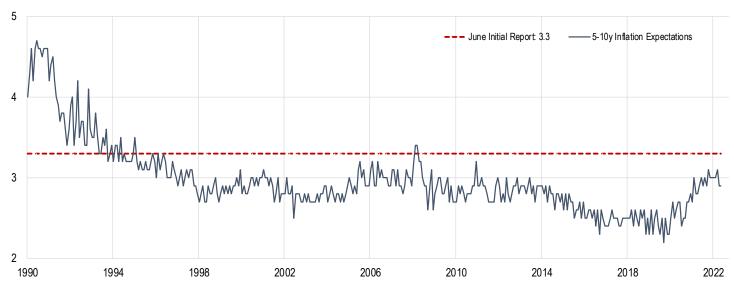
At the same time, inflation expectations must remain anchored, as they have been so far. The measure from University of Michigan's consumer survey has actually been improving over the last several months (see figure 3). It has declined to 2.8% after touching 3.3% on the preliminary reading for June, an alarming jump that helped accelerate the pace of rate increases from 50 bps to 75 bps, though one that has since been partially revised away. The New York Fed's 2-3 year inflation expectations are down to 2.8% from over 4.4% in mid-2021.

The "softish" landing laid out above remains our base case macroeconomic scenario, but the risks around that are very elevated. In Europe, we have moved more drag from continued elevated energy prices into our base case. However, the more extreme downside risks we had been highlighting in a separate scenario—one where an idiosyncratic European recession is precipitated by Russian gas shutoff—look less likely to be realized and, therefore, we have eliminated that scenario. In its place, we have added one where, despite even slower growth, inflation does not drop in the face of slower activity, and both policy and longer-term rates increase further. Our expectation is that the Fed likely raises rates by another 75 bps at the next meeting. Beyond that, the path will be dependent on the evolution of the economy, but we think the Fed would like to

slow down the rate hikes and, in our base case, the data cooperates enough to allow them to do so. With only 40% assigned to our base case, different outcomes are very possible. We assign a 35% probability to a scenario of a central bank-led global recession, 15% probability to resilient inflation in the face of slow growth, and 10% probability to inflation reversing course, which leads the Fed to also reverse course.

Much of emerging markets (EMs) faces a similar challenge in the sense that inflation is running too high, rate hikes have been substantial, in fact much more aggressive than the Fed, and policy makers are hoping to avoid a contraction in output. Most EMs have a similar determination to return inflation back to target relatively quickly. But for many EMs the problem is more complex as external factors usually play a larger role, i.e., the impact of exchange rates and commodity prices on inflation and the impact of the global activity cycle on output is larger. Therefore, the ability of EMs to avoid recessions in part will depend on the major developed markets, as well as China. Our base case sees many EMs succeeding and some early evidence is supportive. For example, we have seen economic activity remain resilient in several countries with very aggressive rate hikes, such as Brazil. But in most EMs, with inflation still too high, we expect to see more rate hikes and uncertainty to remain in the near term.

FIGURE 3: INFLATION EXPECTATIONS 5-10 YEARS



As of 31 August 2022. Sources: Bloomberg, University of Michigan, Stone Harbor Investment Partners. For illustrative purposes only.

"Softish" Landing (40%)

- Tighter financial conditions, induced by higher Fed policy rates, along with tighter fiscal and fading rebound from covid meaningfully slow growth.
- Slower growth spreads out beyond interest rate sensitive sectors, such as housing, that are already lagging, to the consumer and investment sectors.
- Russia-Ukraine War and sanctions both continue. Natural gas supplies to Europe continue to be erratic at best. The resulting higher prices for both natural gas and electricity substantially drag down European growth through the winter.
- U.S. growth remains positive, though Eurozone is modestly negative.
- China growth remains subdued despite by more policy support in H2. The continuing housing slump and continued zero-Covid policy prevent a more dynamic rebound. Growth in other EMs also slower due to drag from DMs and tighter monetary conditions. Commodity exporters still benefit from strong terms of trade.
- U.S. core PCE remains elevated through 2022 as services inflation remains elevated, though some relief from good prices. By spring-23 enough labor market space has been opened up that inflation starts to moderate further, though run-rate is still above target.
- Fed hikes by 75bp in November, but slower goods price inflation gives enough room to moderate to 50 in December and 25bp in early 23. With growth meaningfully slower and rates above neutral to neutral, they pause to assess. Balance sheet runoff at sustained \$95bn/month pace.
- ECB pace accelerates to 75bp for two meetings and then drops back to 50bp.
- Rate hikes continue in many EMs but are peaking on average in Q1. China remains a key exception with continued very gradual easing.
- Oil prices remain elevated, though premium declines somewhat ~\$90/barrel WTI, Brent ~\$95.

Central Bank-Led Global Recession (35%)

- Combination of tighter fiscal and monetary policies, sharply elevated energy prices, hit to sentiment from Russia-Ukraine
 War and associated trade disruption tips global economies into recession.
- Growth fades rapidly over Q4 for the U.S. Interest rate sensitive sectors—housing, business investment, and durables—lead
 the downshift, but typical recessionary dynamics take hold in the labor market spreading the weakness across economy.
- With slower activity and sluggish consumer demand inflation moderates rapidly.
- European growth even slower than U.S. growth. The recession spills over into other DM and EM economies, though they
 perform relatively better than the U.S./EZ.
- Broadly, sanctions against Russia remain in place.
- Fed, hikes rates by 75bp in both November and December and continues to hike in the face of slowing growth, with two 50bp increases in 2023. It then pauses as payrolls turn negative. As recession dynamics take hold they reverse course, and start to cut the funds rate. By Q3-23 rates are back to around 2% with potential for further cuts. Balance sheet shrinkage stops, but purchases do not restart.
- ECB lifts rates by 75bp at the next three meetings, slows to 50, and then pauses as the combination of rate increases and the drag from high energy prices induce contraction. They then likewise begin reversing hikes.
- EM economies still raising rates in 2022 but shifting policy stance by Q2. More decisive cuts than in base case scenario.
- Oil: WTI at ~\$55/barrel; Brent ~\$60/barrel.

Resilient Inflation in Face of Slow Growth

(15%)

(10%)

- Despite ongoing tightening—and slower growth—inflation proves resilient. Core continues to run over 4% despite substantially slower growth.
- Similar inflation dynamics across DM economies.
- Faced with the higher ongoing inflation, central banks broadly continue to push up rates at the expense of growth. Economies stagnate, though don't tip into outright recession.
- Markets mark up estimates of the neutral interest rate and expect the higher rate environment to be persistent. The 10y trades a bit under 6%.
- EM inflation fails to fall meaningfully. Weaker growth in EMs as central banks keep tighter monetary conditions. Especially weaker EMs are struggling with tight funding conditions.

However, inflation proves more sensitive to slower growth and core inflation rates drop quite quickly; easing of supply

• Oil: WTI at ~\$105/barrel; Brent ~\$110/barrel.

Fed continues to raise rates and fed funds rate peaks just over 4%.

Inflation Reverses Course, Leading the Fed to Also Reverse Course

With inflation cooling rapidly and growth below trend, the Fed starts to reverse course in early Q3 of 2023. Market prices
in further cuts ahead and a rebound of growth back toward potential

• Dollar broadly gives back some of the outsize 2022 gains.

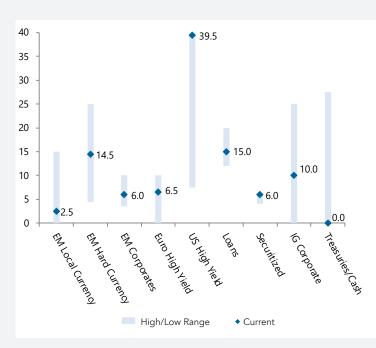
Reverse Course
in further cuts ahead and a rebound of growth back toward potential
Other DMs and EMs also see some moderation of inflation pressures, which leads to similar central bank pullbacks.

chain snarls amplifies drop.

• Oil: WTI at ~\$90/barrel; Brent ~\$95/barrel.

	"Softish" Landing (40%)	Global Recession (35%)	Resilient Inflation (15%)	Inflation Reverses Course (10%)
U.S. Real 4Q GDP (%)	0.75	-1.00	0.00	1.25
Fed Funds (%)	4.38	2.13	5.38	3.63
U.S. Core PCE (%)	3.60	2.75	4.75	2.65
2yr Treasury (%)	3.70	1.75	5.50	2.10
10yr Treasury (%)	3.40	1.75	5.75	2.75
10yr Bund (%)	2.25	0.25	4.00	0.75
China 4Q GDP (%)	3.50	2.50	3.00	4.00
EM 4Q GDP (%)	3.00	1.50	2.00	4.00

MULTI-ASSET CREDIT TARGET ALLOCATIONS (%) SINCE INCEPTION & **RECENT ALLOCATION CHANGES²**



LATEST ALLOCATION CHANGES							
	Month	Change (%)					
EM Local Currency	May-Jun 2022	-2.5					
EM Hard Currency	May-Jun 2022	+2.5					
EM Corporates	Feb-Mar 2022	+0.5					
Euro High Yield	Dec-Jan 2022	+2.5					
U.S. High Yield	Jan-Feb 2022	+8.5					
Loans	Jan-Feb 2021	+1.5					
Securitized	Mar-April 2019	+1.0					
IG Corporate	Mar-April 2022	+10.0					
Treasuries/Cash	Mar-April 2022	-10.0					

 $^2\text{Since Inception:}$ September 2013. Stone Harbor Multi-Asset Credit Representative Target Allocation as of 31 August 2022. Actual allocations within any account may be significantly different from the target allocations shown here. For illustrative purposes only.

AUGUST CREDIT MARKET TOTAL RETURNS & ATTRIBUTION

	U.S. High Yield	EM Hard	Loans	EM Local	EM Corp	Euro High Yield	IG Corporate
Total Return	-2.39	-0.95	1.54	-0.14	0.18	-1.07	-3.05
Duration (Returns from Interest Rates %)	-2.21	-2.84	0.19	-2.22	-2.04	-2.97	-3.15
Credit Beta (Returns from Spreads %)	-0.18	1.89	1.35	2.08	2.22	1.90	0.10

Month Ended 31 August 2022. Performance reflects representative asset class benchmarks. HY: ICE BofAML U.S. High Yield Constrained Index; EMD: J.P. Morgan EMBI Global Diversified; EMDLC: J.P. Morgan GBI-EM Global Diversified; EMDCR: J.P. Morgan Corporate Emerging Markets Bond Index Broad Diversified; EUR HY: ICE BofAML European Currency High Yield 2% Constrained Ex Financial; IG Corp: Bloomberg Global Agg Corporate Index; Loans: S&P/LSTA Leveraged Loan Index. Past performance is not a guarantee of future results. Returns are shown gross of fees. For illustrative purposes only.

STONE HARBOR INVESTMENT PARTNERS

Stone Harbor is a global credit specialist with expertise in emerging and developed markets debt, with three decades of informed experience allocating risk in complex areas of the fixed income markets. We manage credit portfolios for clients globally.

- Institutional fixed income investment firm focused on credit risk strategies and asset allocation
- Over 30-year performance history
- Offices in New York, London, and Singapore
- Effective January 1, 2022, Stone Harbor Investment Partners is an affiliate of Virtus Investment Partners

Indices referred to herein are broad-based securities market indices. Broad-based securities indices are unmanaged and are not subject to fees and expenses typically associated with managed accounts or investment funds. Investments cannot be made directly in an index.

Index Definitions

The J.P. Morgan CEMBI Broad Diversified (CEMBI Broad Diversified) tracks total returns of U.S. dollar-denominated debt instruments issued by corporate entities in emerging market countries and consists of an investable universe of corporate bonds. The minimum amount outstanding required is \$350 mm for the CEMBI Broad Diversified. The CEMBI Broad Diversified limits the weights of those index countries with larger corporate debt stocks by only including a specified portion of these countries' eligible current face amounts of debt outstanding.

The J.P. Morgan EMBI Global Diversified (EMBI Global Diversified) limits the weights of those index countries with larger debt stocks by only including specified portions of these countries' eligible current face amounts outstanding. The countries covered in the EMBI Global Diversified are identical to those covered by the EMBI Global.

The J.P. Morgan GBI-EM Global Diversified (GBI EM Global Diversified) consists of regularly traded, liquid fixed-rate, domestic currency government bonds to which international investors can gain exposure. The weightings among the countries are more evenly distributed within this index.

The ICE BofAML European Currency Non-Financial High Yield 2% Constrained Index contains all non-Financial securities in the ICE BofAML European Currency High Yield Index but caps issuer exposure at 2%. Index constituents are capitalization-weighted, based on their current amount outstanding, provided the total allocation to an individual issuer does not exceed 2%. Issuers that exceed the limit are reduced to 2% and the face value of each of their bonds is adjusted on a pro-rata basis. Similarly, the face values of bonds of all other issuers that fall below the 2% cap are increased on a pro-rata basis.

The ICE BofAML U.S. High Yield Constrained Index (HUC0) contains all securities in ICE BofAML U.S. High Yield Index but caps issuer exposure at 2%. Index constituents are capitalization-weighted, based on their current amount outstanding, provided the total allocation to an individual issuer does not exceed 2%. Issuers that exceed the limit are reduced to 2% and the face value of each of their bonds is adjusted on a pro-rata basis. Similarly, the face values of bonds of all other issuers that fall below the 2% cap are increased on a pro-rata basis. In the event there are fewer than 50 issues in the Index, each is equally weighted and the face values of their respective bonds are increased or decreased on a pro-rata basis.

The S&P/LSTA Leveraged Loan Index is a partnership between Standard & Poor's and the Loan Syndications and Trading Association, tracking returns in the leveraged loan market and capturing a broad cross-section of the U.S. leveraged loan market—including dollar-denominated, U.S.-syndicated loans to overseas issuers.

The Bloomberg U.S. Aggregate Index is a broad base, market capitalization-weighted bond market index representing intermediate term investment grade bonds traded in the United States.

The Bloomberg Global Aggregate Bond Index provides a broad-based measure of the global investment grade fixed-rate debt markets. It is comprised of the U.S. Aggregate, PanEuropean Aggregate, and the Asian-Pacific Aggregate Indexes. It also includes a wide range of standard and customized subindices by liquidity constraint, sector, quality, and maturity.

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BlackRock Exec Warns ESG Politicization 'Threatens' Neutrality of Capital Markets

Asset managers are increasingly having to justify their approach to environmental, social and governance investing to both sides of the U.S. political aisle.

By Bridget Hickey | October 3, 2022

Political forces on the left and right are "trying to threaten" the neutrality of the capital markets, a senior **BlackRock** executive said Wednesday, responding to statements from state officials in New York and Texas who have taken aim at the asset management giant's climate policies.

The world's largest asset manager has become a lightening rod for criticism in recent months, with New York City's comptroller threatening to reassess BlackRock's business with the city's pension funds over its "nebulous" net-zero policies just weeks after an official in Texas added the firm to a blacklist of companies the state claims are "boycotting" energy firms.

Mark Wiedman, BlackRock's head of international and corporate strategy, described his firm as at the center of "a bunch of forces" that are "buffeting" the industry, while speaking at the Financial Times' Future of Asset Management conference on Sept 28.

Mark Wiedman, head of international and corporate strategy at BlackRock, speaking at the Financial Times' Future of Asset Management conference in 2022

He blamed the criticism in part on the increased visibility of the asset management industry, which is attracting attention across the political spectrum, as well as the rise of indexing.

"We're seeing the rise of asset management, the rise of capital markets, and the relative decline [...] of balance-sheet institutions in the whole west," Wiedman said. "As that's happened, what asset managers do has started to draw attention. Ten years ago, no-one knew who we were. Today, lots of attention."

He also suggested managers needed to "take quite seriously" changing political views on the

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capital markets.

Political forces on the left and right are "actually drawing into question, trying to threaten the neutrality, the discipline, the integrity of the capital markets," he said.

The capital markets are one of the reasons for the U.S.' success globally, he said.

Related Content

September 23, 2022

NYC Comptroller Accuses BlackRock of 'Backtracking' on Climate Commitments

September 29, 2022

Managers are Grappling with 'Complex' Obligations to Meet Net-Zero Goals "We have to pause and wonder whether we're killing the goose that laid the golden egg," he added.

The attention comes as a growing number of managers and institutional investors have signed net-zero pledges meant to keep global warming at no more than 1.5° Celsius – as called for in the Paris Agreement. To reach that target, emissions must be reduced by 45% by 2030 and reach net zero by 2050.

BlackRock has committed to "supporting the goal of net-zero greenhouse gas emissions by 2050 or sooner" but said in a recent response to Texas that it does not dictate what specific emission targets the companies it invests in should meet.

The asset management giant, which invests more than any other firm in oil and gas in Texas, sees opportunity in the global energy transformation, Wiedman said.

Sustainable investing is "less about capital market pricing of risks, but actually about a fundamental change in the macro economy, which is the rise of the low carbon economy and the displacement of much more carbon intensive businesses, that's being driven by technology, [...] by market forces, by consumer preferences," he said. "That transformation is a massive investment responsibility for all of us."

Environment, social and governance, or ESG, investing "shouldn't be and doesn't need to be" politicized, said **Michelle Seitz**, chairman and CEO of **Russell Investments**, speaking on a separate panel at the conference on Wednesday.

"Whether it's an environmental risk, a societal risk, or a governance risk, it's a risk, and our job as investment managers is to integrate those [and] analyze those," she said. ESG "will not go away, and it will, and should be further integrated into portfolios, driven by the client needs."

David Hunt, president and CEO of **PGIM**, also underscored ESG's role as part of the firm's fiduciary duty.

"I sit [here] today and look at the pictures of Florida, and you say, 'so you think I shouldn't really look at the rising problems with climate and underwriting a building in Tampa?'," he said. "It's absolutely fundamental to our duty."

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October 2022

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Communications professionals at public pensions are facing the daunting task of effectively engaging with and educating members with disparate needs and preferences for media consumption.

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On September 20, the House Ways and Means Committee voted by voice vote to approve without recommendation H.R. 82, the bill to repeal the Windfall Elimination Provision (WEP) and the Government Pension Offset (GPO).

8 Around the Regions



This month, we will highlight Delaware, Illinois, Louisiana, and California.

Amid Robust Debate, Pension System Policies Remain Responsive to ESG Considerations



ebate over the proper role of environmental, social, and governance factors in investing is growing noisier and more acrimonious by the day. But one thing is clear: Love it or hate it, ESG is reshaping how pension funds invest.

Pension systems in New York City, New York State, California, and Maine are among those that have taken investment policy stances on environmental grounds. Wall Street firms, exemplified by BlackRock, Vanguard, and State Street, have been leading the way. They're often called the Big Three, and they are strong advocates of applying an ESG lens to investing. In recent years, they have articulated reasons why ESG considerations are good for business.

On the flip side, pension systems in Florida, Louisiana, Texas and other states are under pressure to limit ESG considerations. This is part of a massive backlash driven in large part by prominent Republicans who ridicule ESG as the epitome of "woke capitalism." Energy-producing states in particular have challenged the Big Three. A group of attorneys general have sent a letter to BlackRock, arguing that its ESG stance is harming state pension plans. Missouri is spearheading an investigation into Morningstar and its Sustainaltyics subsidiary over their role in evaluating ESG performance. And proxy ballots are turning up at shareholder meetings to rein in ESG policies.

Yet even in Florida—where Governor Ron DeSantis has banned state pension funds from screening for ESG risks-ESG appears to have some staying power. The Florida State Board of Administration reported that it voted in favor of more than 40 percent of social-related shareholder resolutions and nearly 30 percent of environmental-related shareholder resolutions during the fiscal year ended June 30.

And research from Morningstar has shown that state and local defined benefit pension funds support ESG shareholder resolutions at higher rates than do general shareholders.

Still, the drumbeat of opposition is intensifying. Recently, the attorneys general of Louisiana and Indiana issued opinions warning their state pension boards that ESG investing violates fiduciary duty. More such actions could follow. And the American Legislative Exchange Council (ALEC) is working with states to advance model legislation to limit pension plans' authority to reflect ESG concerns in their investing strategies.

It's worth remembering that ESG investing was intended from its inception to be compatible with investors' fiduciary duties. ESG has its roots in the United Nations Sustainable Development Goals, which are premised on the idea that reducing financial risks from factors such as climate change, worker disputes, human rights issues in supply chains, and poor corporate governance is an appropriate exercise of fiduciary responsibility.

Whether or not ESG investing violates or supports fiduciary duty is a matter that will likely take years, and many opinions and court cases, to resolve. While uncertainly lingers, it will be a critically important issue, and one that NCPERS will keep its members up to date on. We know we're not going to cross this difficult terrain by ignoring this debate.



Executive Director's Corner



Communication is Key for Public Pension Plans



CPERS members oversee retirement funds on behalf of seven million retirees and nearly 15 million active public servants. Those 22 million individuals span across generations—from Baby Boomers to Gen Z—and communications professionals at public pensions are facing the daunting task of effectively engaging with and educating members with disparate needs and preferences for media consumption.

Utilizing digital communications is an important part of modern financial communications, but public pension plans have lagged behind the private sector in providing account information to members through a mobile app. According to the 2021 NCPERS Public Retirement Systems Study, only 7 percent of public pension systems provide account information to members via a mobile app.

Last month, NCPERS hosted a <u>webinar</u> to explore the importance of digital access for pension plan members. COPERA Executive Director Ron Baker and SamCERA CEO Scott Hood discussed their decisions to work with PensionX to develop a mobile app. As Ron put it, they're trying to meet members where they are in their journey and tailor information based on their needs. Sandeep Mehta, CTO of Digital Deployment, also discussed opportunities for plans to deliver better member self-service through a mobile app or online tools.

Part of a new strategic partnership, NCPERS members now receive a 10 percent discount on the PensionX digital platform. You can watch the replay of the webinar and learn more about how to take advantage of this new member benefit here.

NCPERS members oversee retirement funds on behalf of seven million retirees and nearly 15 million active public servants.

We launched another new member benefit last month: the <u>Communications Roundtable</u>. Open exclusively to NCPERS pension fund and stakeholder members, this group will meet regularly via Zoom to address day-to-day communications challenges, get advice from peers, and share best practices for internal and external communications strategies.

Whether your role is dedicated to communications—or it's just one of your many responsibilities—joining the roundtable is a great way to connect with industry peers and learn from the experience of others. If you are interested in joining the Communications Roundtable, please contact NCPERS Director of Communications, Lizzy Lees, at lizzy@ncpers.org.

On January 23-24, 2023 NCPERS will also host the inaugural Pension Communications Summit. Held in conjunction with the relaunch of the annual Legislative Conference, this new event is designed to celebrate and accelerate the role of the public plan communicator.

The <u>agenda</u> will be set by fellow public pension communications professionals-members of NCPERS Communications Roundtable—and will feature peer-to-peer learning, networking

opportunities, and hands-on training from industry experts. You'll learn strategies for improving member engagement; get tips for developing effective digital content; learn best practices for developing compelling narratives for the media; and more.

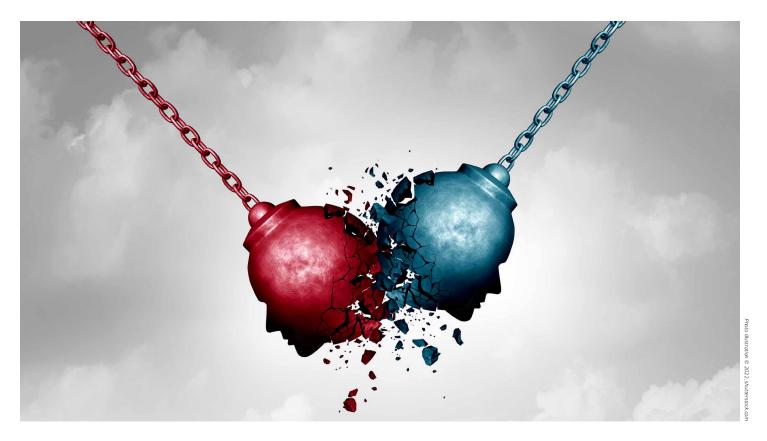
The Pension Communications Summit will be held in Washington, DC and is open to all NCPERS members who work in or have an interest in external or internal communications. Stay tuned for details in the coming weeks about registration.

As evidenced by these new member benefits, NCPERS is constantly evaluating and expanding our services and benefits. With membership renewal season beginning, we hope you will continue to take advantage of the many valuable resources and offerings that our members have access to.



Dust-Up on Social Security Penalties

By Tony Roda



n September 20, the House Ways and Means Committee voted by voice vote to approve without recommendation H.R. 82, the bill to repeal the Windfall Elimination Provision (WEP) and the Government Pension Offset (GPO).

WEP reduces your Social Security benefit if you also earn a retirement benefit from non-Social Security employment. If you are hit with the full WEP penalty, your Social Security benefit will be reduced by \$6,144 per year. GPO affects spousal and survivor benefits and can zero out those benefits completely.

During the markup, Social Security Subcommittee Chairman John Larson (D-CT) offered and then withdrew H.R. 2100, which is a comprehensive reform of the Social Security program, including a five-year repeal of WEP and GPO. Likewise, Senior Committee Republican Kevin Brady (R-TX) offered his WEP-only reform bill (H.R. 5834) as an amendment but then also withdrew it.

The result of the vote is that H.R. 82 will not go to the House floor under the expedited procedure that was triggered when the bill reached 290 cosponsors and was placed on the House Consensus Calendar. If the Committee did not act, H.R. 82 would have been scheduled for a House floor vote this month.

This action raises the obvious question: Why would the Ways and Means Committee intervene and prevent such a popular bill from being considered on the House floor? The answer is that despite the high number of cosponsors, Members have concerns over the bill's cost – \$182 billion over 10 years – and that it would accelerate Social Security's insolvency by one year. In addition, Congressional Leadership and committee chairmen historically have opposed expedited floor procedures that effectively bypass committees and dictate when legislation will be considered on the floor, thereby removing their discretionary authority over the substance and timing of legislation.

If there was a positive result from the dust-up, it was that full Committee Chairman Richard Neal (D-MA) and Ranking Member Brady publicly renewed their commitment to work toward finding solution to the WEP issue. It appears that neither Member seems open at this point to also tacking the GPO issue.

Neal and Brady each have their own WEP-only bills. If reconciled, a compromise version could gain enough traction for House passage and the possibility of approval by the Senate. Chairman Neal has introduced H.R. 2337, and Ranking Member Brady has introduced H.R. 5834. The bills take a similar approach – (1) provide current retirees who are being impacted by WEP a

monthly rebate (Neal's bill is set at \$150; Brady's at \$100), and (2) begin utilizing a new proportional formula instead of the onesize-fits-all WEP penalty. The Brady bill would give future retirees ages 21 and over the better of the new formula or WEP. This type of provision is commonly referred to as a "hold harmless" provision. Chairman Neal's bill would extend the hold harmless treatment in perpetuity. The Neal bill would transfer funds from general revenues to offset the cost of the changes. The Brady bill is designed to be budget neutral to the Social Security trust fund.

The seeds of a compromise are present and with Brady's retirement at the end of the 117th Congress there is even greater urgency on the need for Congress to act this year.

Please be assured that NCPERS will continue to keep its members informed on the latest developments regarding the Windfall Elimination Provision and the Government Pension Offset.

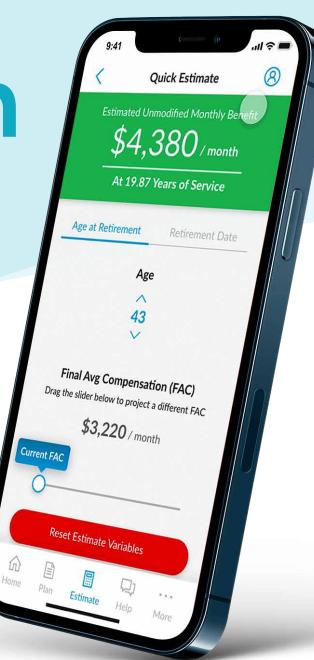
Tony Roda is a partner at the Washington, D.C. law and lobbying firm Williams & Jensen, where he specializes in legislative, regulatory, and fiduciary matters affecting state and local pension plans. He represents the National Conference on Public Employee Retirement Systems and state-wide, county, and municipal pension plans in California, Colorado, Georgia, Kentucky, Ohio, Tennessee, and Texas. He has an undergraduate degree in government and politics from the University of Maryland, J.D. from the Catholic University of America, and LL.M (tax law) from the Georgetown University Law Center.



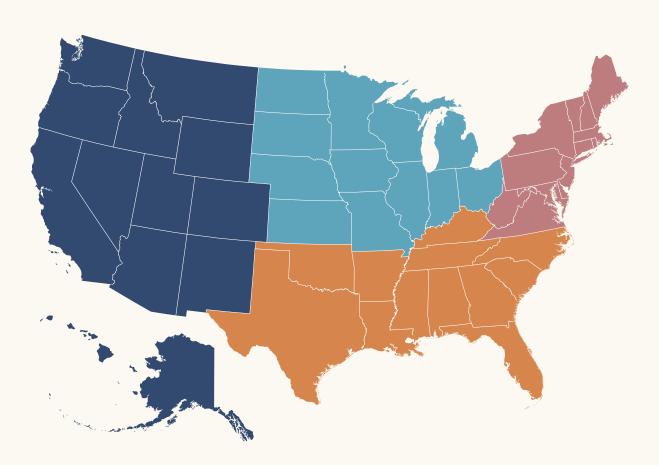
NCPERS PensionX Digital Platform

NCPERS has partnered with Digital Deployment to offer its members a 10% DISCOUNT on PensionX, the premier digital platform that securely enables pensions to engage with active and retired participants via a mobile self-service app and portal.





This month, we will highlight Delaware, Illinois, Louisiana, and California.



NORTHEAST: **Delaware**

Delaware EARNS has become law, bringing to 16 the number of states that have created retirement programs designed to foster savings by private-sector employees. The law is expected to be implemented in 2025.

Governor John Carney on August 18 signed legislation creating the state-run program. His action came two months after the state Senate voted to authorize the program. Delaware EARNS is expected to extend retirement benefits to almost 150,000 private sector workers, or 38 percent of the state's workforce.

"What we currently know is that hundreds of thousands of Delawareans, particularly middle to low income, and particularly woman, really do not have access to a workplace retirement savings program," Lt. Gov. Bethany Hall-Long said in a TV news interview.

State Representative Larry Lambert, a Democrat, was the legislation's prime sponsor, and State Treasurer Colleen Davis has been a driver of the initiative. AARP research shows that Americans are 15 times more likely to save for retirement when they can do so at work, and are 20 times more likely if their workplace savings is automatic.

Delaware EARNS requires businesses with more than five employees that don't currently offer a retirement plan to participate through a payroll deduction process. The State Treasurer's Office, with the oversight of the Plans Management Board, will handle all duties and functions of the plan once initial design and implementation are complete.

"This plan has an initial one-time cost and then is self-sustaining, entirely funded through employee contributions," Davis said, according to an article in Plan Sponsor. "The oversight of the investments, product offerings and negotiated contracts is done by my office with the insights of a board composed of both public and private sector members to ensure transparency in all that we do and a collective stance on all aspects of these and other investment vehicles."

NCPERS

Around the Regions

Three state programs—OregonSaves, CalSavers, and Illinois Secure Choice—are out in front of the trend, with additional state programs under construction and preparing to launch over the next years. One of the newest was Maryland, which launched on September 15. Maryland announced that it will waive an annual \$300 filing fee for businesses that sign up by December 1 to enable automatic employee enrollment.

MIDWEST: Illinois



Last month, Chicago Mayor Lori Lightfoot proposed to enact a 2.5 percent property tax hike on January 1, 2023, with the entire \$42.7 million proceeds going to public pensions. In her budget message, Lightfoot called Chicago's pension obligations "sacrosanct," adding, "It's important to remember that we made promises to our now-pensioners over years

that must be kept."

Bloomberg reported that in fiscal year 2022, more than 80 percent of Chicago's property taxes collections covered city employee pensions, according to an analysis from the watchdog Civic Federation. This is an unusually high share, and it has nearly doubled since 2013, making Chicago "unique" among US cities, said Justin Marlowe, a public finance research professor at the University of Chicago.

Shortly after last month's announcement, however, Lightfoot scrapped plans for the pre-election property tax hike at the urging of her closest allies. Despite the pivot, she remains committed to her mission to push the cities four public pensions closer to the 90 percent funded level.

On October 3, Bloomberg reported that Lightfoot is planning to advance payments to the city's pension funds as part of her \$16.4 billion proposed budget for 2023. The city would contribute an additional \$242 million in early payments in 2023 on top of its regular contributions. The first \$40 million check from Bally's for the new Chicago casino would also support pensions for police and firefighters.

According to the city's annual financial report, Chicago's pension for firefighters was funded at 20.9 percent as of December 2021; for municipal employees, at 23.4 percent; for police at 23.5 percent; and for laborers at 45.9 percent. These ratios, coupled with rising liabilities, are considered a strain on the city's credit rating, which currently has a stable outlook.

SOUTH: Louisiana



Louisiana has joined a groundswell of opposition to the policies of the "Big Three" investment firms' practice of factoring environmental, social, and governance (ESG) considerations into decision-making.

The state's attorney general, Jeff Landry, issued guidance August 31 to legislators and state retirement boards that BlackRock, Vanguard, and State Street have violated their fiduciary duty by placing "their interest in the ESG agenda above the interest of their investor-clients."

Oil- and gas-producing states, including Texas and Oklahoma, have become increasingly vocal about their opposition to ESG policies, creating a backlash to an investment approach that has gained traction in recent years.

Landry previously announced he was joining 17 other state attorneys general in an investigation into Morningstar's role in evaluating ESG issues.

"Policy is made in our legislative branch, not woke corporate boardrooms," Landry said in the guidance. "The Big Three have a responsibility to invest with their client's best interests in mind rather than their own agenda on climate change, politics, and other self-interests."

He argued that investment firms that operate as investment advisors in Louisiana and utilize ESG factors without full disclosure to their investor-clients are likely in violation of their fiduciary duties imposed by Louisiana law. In Louisiana, those investor-clients include entities such as the Louisiana Treasury and Louisiana State Retirement Boards - including the Louisiana State Employees Retirement System.

The attorney general cited BlackRock's imposition of ESG requirements on Exxon but not on PetroChina as an example of breach of fiduciary duty.

Around the Regions

WEST: California



American Express, Mastercard International, and Visa said they plan to start separately categorizing sales at gun shops. The move is at least in part a response to pressure from the California State Teachers' Retirement System and the New York City Employees' Retirement System, Teachers' Retirement System and Board of Education Retirement System.

In letters to the three companies, the pension systems noted that financial companies already report potential money laundering and other kinds of criminal activity, and argued they should do the same for suspicious gun sales. They asked the companies to support a new merchant-category code, or MCCs for gun and ammunition shops. MCCs are four-digit numbers that networks use to identify

types of merchants by the goods and services they sell. Gun shops have typically been counted among broader categories such as specialty retailers or durable-goods sellers.

CalSTRS has engaged with the gun industry since at least 2018, following a series of gun-related tragedies in schools. Gun control advocates say the move will improve tracking of suspicious surges of gun sales that could be a prelude to a mass shooting. But gun rights advocates have argued that step would unfairly segregate legal gun sales when most sales do not lead to mass shootings.

Officials from CalSTRS and the three New York City retirement systems began the push in August, according to a report in Pensions & Investments. Executives for the pension systems reached out to American Express and Mastercard International as well as Visa. They argued that the credit card firms have "a responsibility to prohibit the use of its network for illegal activity," and that not doing so "can result in regulatory, reputational, and litigation risks that may harm long-term shareholder value."





Calendar of Events 2022

October

NCPERS Accredited Fiduciary (NAF) Program

October 22 – 23 Nashville, TN

Public Safety Conference

October 23 – 26 Nashville, TN

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STATE ASSOCIATION of COUNTY RETIREMENT SYSTEMS



Electric Vehicles
Have Shifted Into
HIGH GEAR

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JUMPING ON THE SPAC TRAIN? NOT SO FAST. SECURITIES LITIGATION IS ON THE RISE.

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PUBLIC PENSION PLAN FUNDING POLICY — PART TWO

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All in One Place... SACRS!

Summer is flying by and fall will be here before we know it. Before it slips away, I want to report on SACRS' wonderful summer Public Pension Investment Management Program 2022 that we held in July. From July 17-20 we had 50 members gather together (24 were new trustees) to take advantage of the UC Berkeley Haas School of Business Modern Investment Theory & Practice

for Retirement Systems course. It was great to have the mix of faculty, practitioners, and SACRS members all together in-person to learn and network. We are really proud of this program and the vital information it provides. Here is what a few of the attendees had to say about the program:

"There is a wealth of knowledge gathered in one place for a short time. The face-to-face interactions go a very long way. It is an opportunity to learn and to clarify any ideas or thoughts you may have been wondering about."

"It was a great program and I will recommend it for new trustees, as well as for continuing education for experienced trustees."

"The program provides good insights into the mechanics and philosophical underpinnings of the duties of a retirement system trustee's role - especially in the area of investing."

If you didn't get to attend this summer, be sure to try next year. It has become the hallmark of our SACRS summer!

Opportunities to be together, even for a brief time, can yield long-term benefits. One of the reasons for the richness of our time together is, just like the Berkeley program attendee said, is the "wealth of knowledge"

gathered in one place." We have amazing members and this is an important asset of SACRS membership: Our people. At our events, on our committees, or as part of a SACRS program you are exposed to people like Thomas Kim, Investment Officer, San Bernardino County Employees' Retirement Association (SBCERA). Just recently, Institutional Investor's editorial team chose a few Rising Stars from a pool of talented allocators nominated by their peers, bosses, and industry experts to be honored at the fifth-annual Allocators' Choice Awards on September 13 in New York City. Thomas Kim is one of the 10 selected allocators! We are very proud of him. According to the publication's selection team, "It isn't easy to excel in this investment environment. The highest inflation in decades, rising interest rates, geopolitical concerns, and the threat of a recession have dominated the past year for allocators. And yet, Institutional Investor's 2022 Rising Stars rose to the challenge."

Thomas was nominated for his "immediate impact" on SBCERA's innovative team after joining in 2020. Thomas, whose background is in hedge funds, has helped SBCERA build strategic partnerships and grow its geographic footprint into areas like the pan-Asia credit markets. His nominator believes, "He is a natural fit to be considered as one of the next generation CIOs."

Fall is just around the corner, and your next opportunity to meet members like Thomas is coming up. Will I see you this November 8-11 at the Hyatt Regency Long Beach? I hope so. Registration is open and all details for the Fall Conference can be found on SACRS website.

Sulema H. Deterson

Sulema H. Peterson, SACRS Executive Director, State Association of County Retirement Systems

Featured SACRS Member

The Contra Costa County Employees' Retirement Association (CCCERA) is a public employee retirement system established by the County of Contra Costa on July 1, 1945. The day-to-day operation of CCCERA is delegated to Chief Executive Officer Gail Strohl and a full-time staff of approximately 50 employees. CCCERA is a defined benefit plan with approximately \$11 billion in assets (as of March 31, 2022).

Contra Costa CERA active members are doing positive things for their community. Knowing that many low-income families are struggling to make ends meet and cannot afford back-to-school expenses, the Contra Costa County Department of Child Support Services staff brought smiles to the faces of children and parents during their 6th Annual Backpacks for Kids distribution on July 27. The staff of Child Support Services relied upon internal fundraisers, individual donations, and the support of some local businesses to fill 115 backpacks with supplies and books for K-12 kids in their community to help them get the most out of their educational experience.





Knowing that they are helping children start the year off right with the tools they need, the dedicated staff members of Contra Costa County Department of Child Support Services find the annual **Backpacks for Kids** a rewarding experience.



COMMUNITY FINANCIAL LITERACY... REACHING BEYOND OUR FIDUCIARY DUTY

66 Our fiduciary duty goes beyond the boardroom, beyond our members interests beyond the fund itself...we each have a duty to the communities we live in as a whole ??

s public sector employees, we are fortunate to have a defined benefit pension that gives each of us financial retirement security. As trustees of our pension plans, we have a fiduciary duty to the fund and our members to ensure the fund's financial health and meet the promised pension benefits.

Consider this: "Doesn't our fiduciary duty extend beyond our boardroom decisions, our members' interests, the fund itself, and into our communties?"

If you attended SACRS past Spring Conference, you might recall that I spoke about our duty to educate beyond just our members on the second morning. I also touched on "financial literacy" and how so many have yet to plan for their financial future. It seems we are all living day-to-day and trying to make ends meet. Saving? Who can do that?

Here is where our fiduciary duty comes into play. As trustees, we carry a wealth of knowledge about finance and preparation for our retirement futures. We must educate our communities one person at a time. Sometimes an unplanned twominute conversation with a person can change their entire financial future. It is as simple as helping someone understand that saving five dollars a month can mature into a portion of their retirement.

Not everyone is fortunate to have a defined benefit retirement, but everyone can be educated about planning and saving for a secure retirement.

Vivian Gray, President of SACRS & LACERA Trustee





4 TIPS FOR A SUCCESSFUL GO LIVE

ension administration system implementation projects are long and complex. It's natural to focus narrowly on the readiness of the system; that's why the project is undertaken. However, there are many non-system areas of readiness work that are just as essential to success as the readiness of the system itself. Often these preparations are given low or no priority, but if any one of them is not ready or simply overlooked, the whole project may be put at risk.

Some of these areas include aspects of staff member and internal stakeholder readiness, data readiness, user support readiness, external stakeholder readiness, plan sponsor readiness, management of deferred functionality, and decision-maker readiness (at the Go/No-Go decision point). This article will address four of these critical areas, the risks associated with them, and present some possible mitigation strategies.

Your staff members must be ready to use the system in the context of the new business operations model, which goes far beyond navigating and clicking buttons.



STAFF MEMBER AND INTERNAL STAKEHOLDER READINESS

Staff members need more than just system use training. Software vendors will typically provide that in their scope of work. But what they usually cannot provide is the development of and training on new operational processes in which the system will play a part. Your staff members must be ready to use the system in the context of the new business operations model, which goes far beyond navigating and clicking buttons. Transitioning from an older legacy system to a new, automated tool introduces new processes; you do not want your staff members to be unable to complete a task because they do not understand its context within a larger business process. Without the development of end-to-end business processes and proper training, staff will more likely have difficulties, especially under stress, and then lose trust in the new system, impacting productivity.

Developing a future state target-operating model is an important migration strategy. It is paramount that staff members are given operational process training in conjunction with system training. The best time to start developing new operational processes is in the very beginning of your project, based upon your business

objectives. These processes are then carried forward as early models, and they are modified and expanded throughout as the new software is developed. When your system is ready, so is the operational model in which it will be used.

DATA READINESS

Many difficult data decisions must be made in the course of pension administration system (PAS) projects, and your organization needs to understand the full operational impact of each one, in the context of your new system's operation. The only way to make an educated choice is to have a clear and detailed understanding of your data. If data is not complete or accurate enough to support business functions (which is typical, as newer automations usually require data points that may not have existed in your legacy system, or greater levels of detailed historical completeness to function well), your system may not work as expected. Imagine the ramifications of inaccurate benefit calculations that impact a portion of the population that aren't immediately recognized.

Data validation and cleansing should start in the early stages of a project. It is your responsibility to ensure that the legacy data is correct, not the vendor's. This is time-consuming, critical work that must be complete before the data can be converted.



EXTERNAL STAKEHOLDER READINESS

Members and employers are the most important external stakeholders, but external business partners like actuaries, auditors, custodial banks, and third-party administrators must also be ready for Go Live. If you do not communicate to these business partners what is changing because of your project or you don't understand the impact on these stakeholders, they may be unable to support your future vision and your project may be perceived as a failure. By not engaging these stakeholders, you run the risk of recreating the legacy process in the new system, thereby missing an opportunity for optimization.

Your organization's entire implementation may be put at risk, if needed optimizations cannot be realized because external stakeholders' needs are poorly understood. For instance, you may want to take advantage of a banking service that you did not previously use. Banks will typically need significant lead-time to participate in testing, and vendors will need to incorporate this testing into their implementation plan. If you fail to communicate clearly and early with banks, you will run the risk of incorrect integration files potentially delaying your project schedule.

The formation of working groups that bring external stakeholders to the table early in a project will both help you understand what constraints these partners have and help them to understand how your project may improve their operations. Employers and actuaries are two good examples of external stakeholders who

will benefit from system modernization and improvements to the data sets.



DEFERRED FUNCTIONALITY

"We'll deal with this after we Go Live." This sentiment is prevalent on many projects because of deadlines. In these situations, required functionality will be delayed to a future release and workarounds will be defined when necessary.

Delaying Go Live vs. delaying functionality can be one of the most important questions in any implementation project. It is not unusual that certain functions, such as large annual processing, will be deferred with enough lead-time before the functionality is needed. However, processes that must be executed regularly cannot be deferred without a viable workaround and significant impact analysis.

The management of mid-stream cases, called "work-in-flight," is further complicated by the need for temporary workarounds. It is critical to consider these temporary processes when planning the work-in-flight strategy. Not doing so will adversely impact member service and frustrate staff.

Going Live with a workaround is not as simple as it may seem. It requires complete design, detailed documentation, and staff member training on the temporary process. You will also need to plan the "sunsetting" of the workaround when functionality is ready to be implemented after Go Live, including another round of work-in-flight planning. It is also very important to have a realistic understanding of the total staffing required to support the workaround. Failure to do so can result in the accumulation of backlogs and further frustrations.

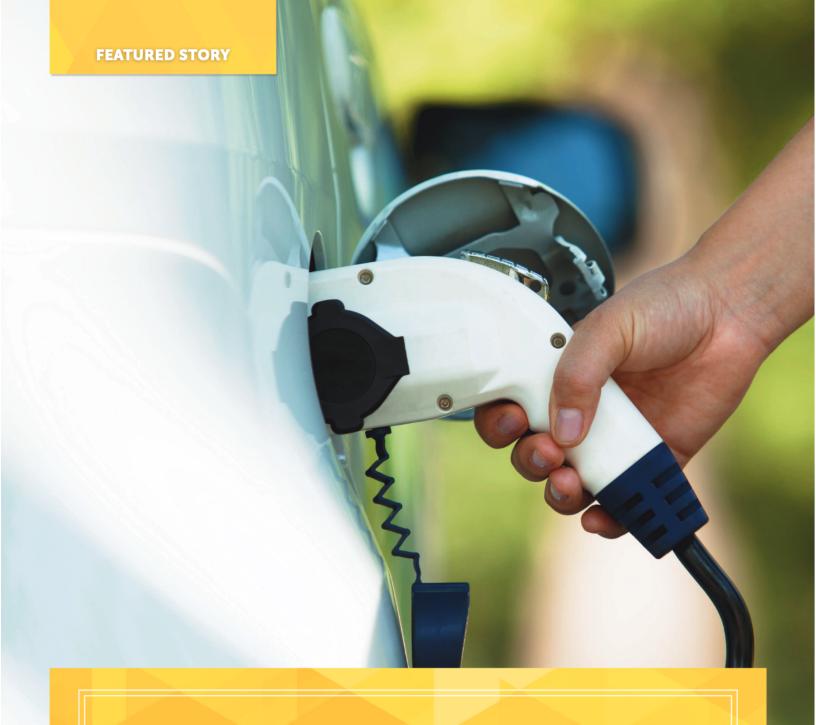
ULTIMATELY

PAS projects are challenging. Going Live with a new core system is a project that pension administrators generally face only once in a career. You would do well to remember that although your new automation system may be ready, there are many parts that require careful planning and work to ensure a successful Go Live.

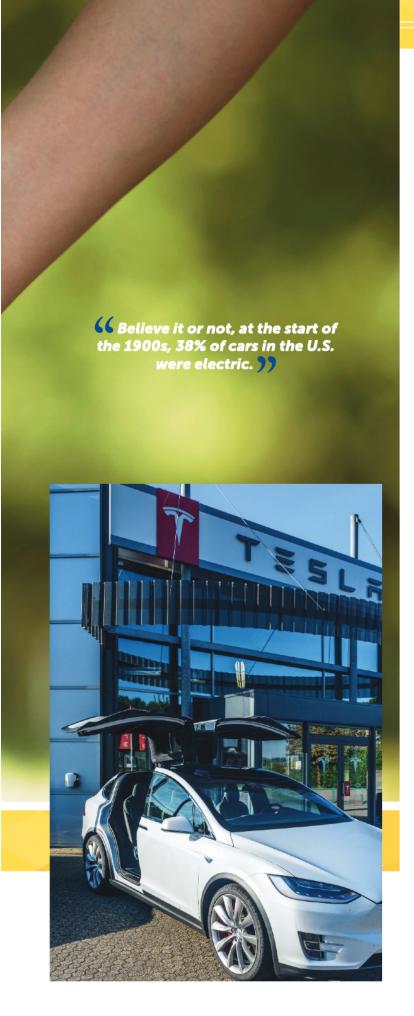


Mary Anne Walker has served in many roles for Linea Solutions over her 20 years with the company, helping to build early consulting practices and developing Linea's client service methodologies. She continues this work in her

current position on the Leadership Team as the VP of Consulting Services, while also serving as a Senior Principal Consultant for Walker's areas of specialization include the her clients. management of automation system projects, leading endeavors from procurement to post-implementation optimization of organizational structures. She has managed a broad spectrum of projects for her clients, including both technical and business foundation building. They have included strategic technology planning, operational model development, business process reengineering, compliance, and workflow.



Electric Vehicles Have Shifted Into HIGH GEAR



fter idling for decades, electric vehicles (EVs) are finally ready to race ahead. Changes in the regulatory landscape, decreasing costs, and a substantially wider range of buying options have transformed the industry and created a powerful secular growth trend.

Believe it or not, at the start of the 1900s, 38% of cars in the U.S. were electric. Their heyday was short lived, however, as gas-powered vehicles proved to be more practical - they were cheaper, easier to refuel, and traveled farther.

These same three issues (price, charging, range) have dogged the EV industry ever since, but thanks to a confluence of structural economic changes, and the rapid embrace of Tesla by consumers, electric cars finally appear poised to make their long-awaited resurgence.

EV HISTORY: THE CHICKEN OR THE EGG?

To understand the challenges facing the EV industry, it is helpful to consider the chicken and egg problem. Anytime a disruptive new product enters an established market, manufacturers are hesitant to mass produce the item as they are unsure of demand. With limited supply, sales are muted, which reinforces the status quo.

Electric vehicles are a textbook example of this phenomenon, particularly because they also require an extensive infrastructure investment (i.e., charging stations). Historically the EV industry has grappled with multiple challenges that have slowed its evolution:

- O Auto manufacturers have been hesitant to ramp up production due to uncertain demand. And that hesitancy has been warranted, as consumers have been slow to adopt EVs due to concerns about limited range and lack of charging stations.
- O EVs are expensive, which has restricted the market opportunity to high-end buyers. Batteries are the most costly components of EVs, but without sufficient revenues to fund research, battery costs have declined slowly.

Given the circularity of these issues, it is not hard to see why EV penetration was slow to take off. Progress was made in fits and starts, including the GM EV1 in the late 90s and the Nissan Leaf in 2011, but it has only been within the past few years that EVs have experienced any sustained momentum.

THE FUTURE: A SECULAR GROWTH TREND **BUILT FOR THE LONG RUN**

In contrast to the early days, most analysts believe that EVs have hit an inflection point, and expectations for the industry are higher than ever. We share this view and believe EVs are poised to become a major secular growth trend, similar in scale to mobile phones or the internet. Like those other innovations, EVs are a fundamental paradigm shift that we expect both consumers and businesses to embrace for years to come.

In our view, there are four primary drivers that are creating the secular tailwinds for EVs:

- Government intervention
- Falling battery prices
- Increased commitment from auto companies
- Customer preferences

The climate crisis was the catalyst that changed the trajectory of the industry, but going forward we believe each of the above trends will contribute to a powerful flywheel effect that should sustain growth of EVs for the foreseeable future.

Probably the single biggest change in the EV landscape in the past few years has been the increased role of governments around the world.



GOVERNMENTS ARE DRIVING DEMAND

Probably the single biggest change in the EV landscape in the past few years has been the increased role of governments around the world. Motivated by a desire to reduce fossil fuel consumption, regulators have used a combination of carrots and sticks for both car companies and consumers to increase the quantity of EVs that are manufactured, sold, and purchased.

In 2009 the EU began to pass regulations aimed at reducing CO2 emissions. One of the most meaningful was a 2014 law that mandated CO2 emissions of new vehicles had to be below 95 g/km by 2021. Practically speaking, this meant that auto companies had to start thinking about developing more hybrids and electric vehicles if they wanted to meet these targets. Non-compliance was technically "legal," but the fines were so high that it was not economically feasible.

At the same time, many EU nations have been providing meaningful financial incentives to consumers who buy EVs. Sensing an opportunity to stimulate the economy and push green initiatives, Germany increased its subsidies to as much as 9,000 EUR per car, which lowered prices without reducing manufacturers' revenues. For example, the Renault Zoe can be purchased for less than 20,000 EUR or leased for as low as 39 EUR/month! These factors led the Zoe to be the best selling EV in Europe in 2020.

China, home of the world's largest EV market, has taken a similar approach to the EU to boost EV adoption. The government has relied on tools such as subsidies, tax exemptions, and faster access to license plate registrations for consumers, while also levying increasingly stringent CO2 emissions standards. EVs made up nearly 6% of China's car sales in 2020 and accelerated to nearly 15% of sales in 2021. The country appears ahead of schedule on the government's goals of making EVs 20% of sales by 2025 and 40% by 2030.

In the U.S., governmental initiatives to push EV adoption lagged behind Europe and Asia during the Trump administration, but that mindset has shifted dramatically under President Biden, who has prioritized EV and clean energy in his agenda. President Biden's bipartisan infrastructure plan includes \$7.5 billion dedicated to building out EV chargers amidst the administration's broader goal of rolling out a national network of 500,000 charging stations. The President has also pushed for additional EV tax credits in his Build Back Better plan. It is yet to be seen whether this plan will be enacted by Congress, but it's clear that no more steps backward on EV adoption are expected during Biden's tenure.

As if these initiatives aren't enough, governments throughout the world are establishing hard dates for when they are banning internal combustion engine (ICE) vehicles. California won't allow sales of ICE vehicles starting in 2035. The U.K. has moved up its ban from 2035 to 2030, which aligns with Iceland, Netherlands, and Sweden. Norway, the current leader in EV sales, plans to eliminate ICE vehicle sales by 2025!

Figure 1 Countries/Regions Planning to Ban Pure Ice Vehicle Sales

2025	2030	2035	2040
NORWAY	DENMARK	CALIFORNIA	CANADA
	GERMANY	JAPAN	FRANCE
	ICELAND	NEW YORK	NEW JERSEY
	INDIA	THAILAND	PORTUGAL
	IRELAND		SINGAPORE
	ISRAEL		SPAIN
	NETHERLANDS		SRI LANKA
	SLOVENIA		TAIWAN
	SWEDEN		
	UK		

The target price to achieve mainstream adoption is far lower each of the top 10 selling cars in the U.S. has a starting price below \$30,000. For EVs to truly compete with ICE vehicles, they have to reach that price point, and the best way to accomplish that is to produce cheaper batteries, which is exactly what has played out.

Thanks to improvements in efficiency, cheaper raw materials, and manufacturing techniques, there have been meaningful declines in battery prices over the past several years.

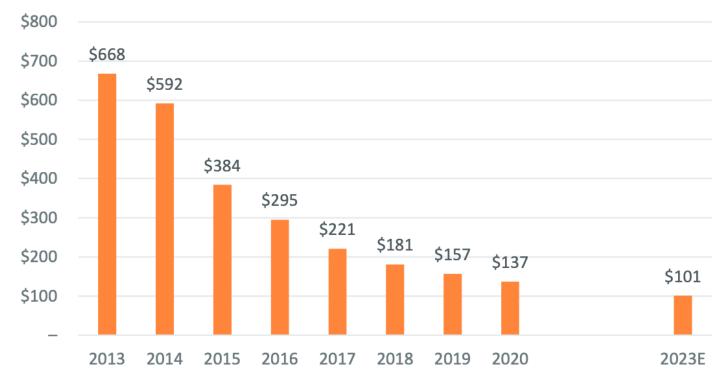
This is significant because batteries make up 20-30% of the price of an electric vehicle. Five years ago, the battery on a 300 milerange car cost about \$22,000. By 2023, a 300 mile-range battery should cost about \$7,500, which would allow car makers to produce an electric vehicle priced below the magical \$30,000 price point. In the meantime, government subsidies help bridge the gap to bring the price of EVs roughly level with their ICE counterparts.

BATTERY COSTS ARE FALLING

In the early 2010s, it wasn't even feasible to make a car that could reach 300 miles on a single charge - a milestone that was particularly important to Americans, but also of interest in international markets. Enter the Tesla Model S 90D in 2016, the first EV to surpass 300 miles in range. It also cost nearly \$90,000, so it was far too expensive for most households to afford.

Bolstered by governmental intervention, technological improvements, and the effect that Tesla has had on the industry, car manufacturers are recognizing they need to go all-in on electric vehicles. ??

Figure 2 Avg Battery Pack Price (\$/kWh)



Source: BloombergNEF

Car manufacturers released 85 new EV models in 2021 and are expected to release another 36 this year. The more EV models are introduced, the more likely that a given consumer will be able to find an EV that fits their needs. ??

CAR MANUFACTURERS ARE GOING ALL-IN

Bolstered by governmental intervention, technological improvements, and the effect that Tesla has had on the industry, car manufacturers are recognizing they need to go all-in on electric vehicles. They realize that EVs are the future of the industry and cannot hold onto the hope that traditional vehicles come back into voque.

As seen in Figure 3, car companies are making significant pledges towards an electric future.

Figure 3

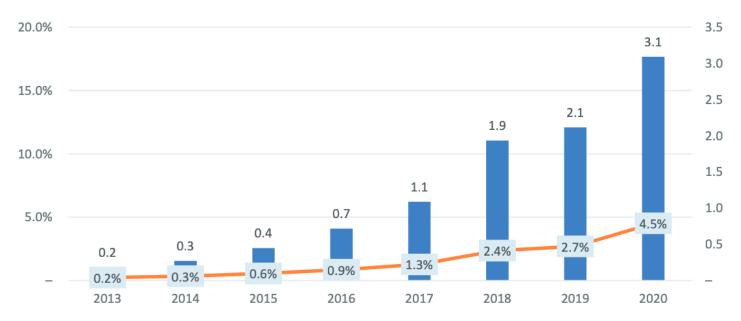
Automaker	Commitments
BMW	50% of sales will be electric by 2030
Daimler	50% of sales will be electric by 2025
Ford	40% of sales will be electric by 2030
GM	100% of sales will be electric by 2035
Honda	40% of major market sales will be electric by 2030
Volkswagen	50% of sales will be electric by 2030
Volvo	50% of sales will be electric by 2025

These aren't simply PR moves. These companies are rapidly shifting their capital expenditures (capex) and R&D spend towards developing EVs while running their legacy ICE businesses for cash. GM has committed to spending \$35 billion on EV development through 2025 - roughly equal to their capex over the previous five years. Ford announced that they would commit \$30 billion of EV spend through 2025 - just shy of their total capex spend over the last five years. These companies are accelerating their push into EVs because they know it is critical to their growth.

As part of this transformation, auto manufacturers have finally started to release a wider selection of models priced for the mainstream. Gone are the days of just the Nissan Leaf and the Tesla Model S. Notable launches in 2021 include Volkswagen's ID.4, Ford's Mach-E, and Hyundai's Ionig 5 - all are part of the ever-popular compact SUV category, and all priced competitively vs. similar ICE models. (The ID.4 can be purchased for under \$30,000 after Federal, California, and local tax incentives!)

This trend is just beginning. Car manufacturers released 85 new EV models in 2021 and are expected to release another 36 this year. The more EV models are introduced, the more likely that a given consumer will be able to find an EV that fits their needs.

Figure 4 EV % Car Sales (Left Axis) and Annual EV Sales (mm, Right Axis)



Source: Bloombera



EV's market share of total vehicles sold is still small – 4% of vehicles sold in 2020 and initial estimates of 9% of vehicles sold in 2021 – but in our view that percentage will change markedly over the next few years. ??

CUSTOMERS PREFER ELECTRIC VEHICLES

Even in a year where total auto sales were down 16% due to COVID-19, EV sales managed to grow 43% in 2020. EV's market share of total vehicles sold is still small - 4% of vehicles sold in 2020 and initial estimates of 9% of vehicles sold in 2021 - but in our view that percentage will change markedly over the next few years.

As the industry continues to mature and customers can easily choose between similarly priced EVs and ICE models, we are confident that an increasing percentage of buyers will select EVs because of their many inherent advantages. In addition to reduced carbon emissions, EVs cost much less to charge than an equivalent tank of gas. Furthermore, EVs have significantly fewer moving parts (20 in an EV engine vs 2,000+ in an ICE vehicle) make them cheaper to operate day-to-day and maintain over the years.

With EVs becoming more affordable and accessible, we believe uptake is a long-term inevitability. They run quieter and cleaner, and they are cheaper and easier to maintain. What's not to like? In addition, EVs have an intangible "cool" factor that we expect will motivate younger buyers. And although the automotive industry is cyclical, electric vehicles provide a secular trend with a long growth runway ahead.

Based on our analysis, we anticipate that by 2025 EVs will comprise as much as 20-25% of all car sales. This would translate to 17 million electric vehicles sold, or 5.5x 2020 levels.

FINAL THOUGHTS

The growth of electric vehicles is an important secular trend that we believe will continue for many years. The transition away from our current gasoline-based transportation infrastructure will be a complex process, and it is already spawning a new generation of companies built for an EV-world.

We will be watching the space carefully, not only because we expect attractive investment opportunities to present themselves, but also because we prefer to invest in companies that have a modest impact on the environment. We believe in ESG investing, and the EV industry is well aligned with those principles.



Osterweis Co-Chief Investment Officer Larry Cordisco is a principal of the firm and a co-lead Portfolio Manager for the core equity, growth & income, and flexible balanced strategies. Before joining Osterweis in 2019, Cordisco was a Co-Portfolio Manager of the Meridian Contrarian

Fund at ArrowMark Partners/Meridian Funds. Prior to co-managing the Contrarian Fund, he was an equity analyst for 11 years, most recently as Vice President of Investment Research for the Meridian Contrarian Fund. Before that he was an analyst within the technology group at Bank of America Securities. He was also a business and technology consultant for Accenture in San Francisco and began his professional career in the public sector as local staff for a member of Congress.



Andrew Chang is an Analyst for the core equity strategy at Osterweis. Prior to joining Osterweis Capital Management in 2020, Chang was a Senior Associate at Mill Road Capital. Before that, he was an Associate at Darlington Partners. Chang began his investment career at Goldman

Sachs Investment Partners. He also serves on the board of Project Open Hand.







THE DANGER OF DOING NOTHING

ARGUMENT 1.

"It is a zero-sum game and it all comes out in the wash."

Given that each currency transaction involves a currency pair with a buyer of one and a seller of the other, the holder of the currency which appreciates has an equal and opposite gain to the holder of the currency which depreciates. As such, the sum of the gain and loss is zero hence, a "zero-sum game".

Further, since currencies exhibit cyclical behaviour it is sometimes claimed that the long-term return impact is close to zero and therefore the impact can be ignored as "it comes out in the wash".

Let's examine the evidence.

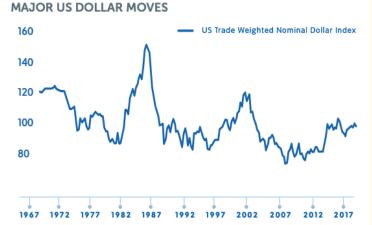
RETURN IMPACT OF THE "DO NOTHING" APPROACH

We have seen that the currency market is by definition a zerosum game and that currencies exhibit cyclical tendencies. It follows that the long-term expected return of a given currency pair should be close to zero.

Indeed, over the last 50 years, while there is clear evidence of cyclicality in the US dollar's movements versus foreign currencies and a secular downtrend in the dollar's Trade Weighted value, the net long term average change is relatively small.

However, the magnitude of the movements in the shorter cycles, even spanning multi-year time frames, has been very large as shown in Figure 1 next page. For individual currencies versus the US dollar, the size of these moves has been even greater.

Figure 1



Source: Millennium Global and Bloomberg, 1967 to 2019. Sourced on 31 March 2020

MAJOR MOVES

	Period	Percentage Move		
1	Oct 1978 - Mar 1985 (78 months)	+48.9 %		
2	Mar 1985 - May 1995 (123 months)	- 35.2 %		
3	May 1995 - Feb 2002 (82 months)	+32.6 %		
4	Mar 2002 - Mar 2008 (84 months)	- 39.5 %		
5	Mar 2008 - Dec 2016 (69 months)	+42.4 %		

Unless an investor genuinely has a multi-decade horizon, currency movements over five to 10 year horizons will have a significant impact on the value of international portfolios and cannot be ignored.

Given the downward trend in the US dollar versus its major trading partners over the long term, it cannot be argued that "it all comes out in the wash" because it rarely reverts to the same level. Furthermore, while the US dollar has oscillated between both expensive and cheap valuations during these cycles, the movements are so large that the impact is significant for international portfolios on a multi-year time frame.

ARGUMENT 2.

"If you like the international asset, you should also like the currency."

The idea here is that if an international equity market is believed to be an attractive investment opportunity, the expected high return on capital in the equity market will drive capital inflows, which will also lead to an appreciation of the underlying currency.

If this were true, then there would be no need to manage or hedge the currency exposure as leaving the currency exposure unhedged would result in the best return outcome as both the asset and the currency appreciate in unison.

However, the empirical evidence does not support this theory and the theory itself is flawed.

EXAMPLE: Japanese equities and the Japanese yen.

The correlation between the Nikkei 225 Index and the Japanese yen has been frequently negative and often significantly so. This means that when the equity market has been strong, the Japanese yen has been weak and so the currency loss has reduced the return from the investment into Japanese equities in US dollar terms.

CORRELATION OF THE JAPANESE YEN AND JAPANESE EQUITIES

Figure 2

THE CHART BELOW ILLUSTRATES THIS VARIABLE AND OFTEN **NEGATIVE CORRELATION.**

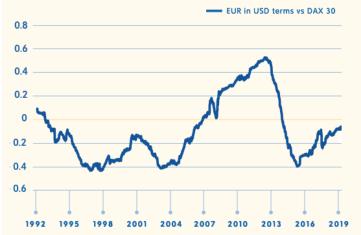


Source: 2 year rolling correlation of monthly returns 1990 to 2019. Millennium Global and Bloomberg.

CORRELATION OF THE EURO AND GERMAN EQUITIES

Figure 3

A SIMILAR STORY IS EVIDENT IN THE RELATIONSHIP BETWEEN GERMAN EQUITES AND THE EURO CURRENCY.



Source: 2 year rolling correlation of monthly returns 1990 to 2019. Millennium Global and Bloomberg.

In fact, there is a very good reason why there is often a negative correlation between an equity market and the associated currency.

When a currency depreciates, exporting companies get a boost as their products become cheaper to sell in overseas markets and sales volumes go up accordingly. Alternatively, they can raise their prices in domestic currency while keeping prices constant in foreign currency and expand their profit margins. Either way, corporate profits get a boost.

Hence, it is often the case that there is a causal link between an equity market valuation and the currency market valuation as a weaker currency provides a pricing advantage to exporting firms. Japan is a relevant case study as the Japanese equity market has a large proportion of exporting oriented firms.

This is where the "Do Nothing" approach can be a poor choice as gains from foreign equity market appreciation can be offset by currency depreciation.

The case study shown on the right provides a dramatic historical example of this phenomenon.

As such, the claim that "if you like the international asset you must also like the currency" is a fallacy.

In this case it was possible to hedge the yen exposure back into US dollars ensuring that all the Japanese equity return was protected and gaining a small additional yield benefit.

The return on the Japanese equity market hedged into US dollars has the highest return in US dollar terms of all 3 scenarios as Figure 5 shows.

CASE STUDY

HOW A GREAT ASSET ALLOCATION DECISION ALSO NEEDED A CURRENCY STRATEGY.

In the 15 months from 30/Sep/2012 to 31/Dec/2013, the Japanese Nikkei 225 Index rose by 83.7% in Japanese yen terms. However, the yen fell substantially versus the US dollar and so in US dollar terms, the Nikkei 225 Index rose by only 37.1%.

The policies that the Japanese government put in place to boost the economy and the stock market also had the effect of depreciating the yen and the yen's weakness was a contributing factor in stock market strength through its positive influence on exporting company earnings.

In this period therefore, the relationship between the Japanese equity market and the Japanese yen was inverse - in fact, you could go further and state that the reason for the very strong performance of the equity market was, at least in part, caused by the weakness in the yen.

Despite the dramatic impact illustrated in this case study, it is not always the case that the returns in an international equity market move in the opposite direction to its currency - it depends on the particular driving factors at the time.

However, it does imply that the outlook for the currency needs to be assessed independently of considerations around the international equity market or other foreign asset. Separation of currency and asset market analysis is key in the effective management of these two sources of risk and return.

INVESTMENT IN JAPANESE EQUITIES

Figure 4

RETURN IN JPY VS RETURN IN USD



	Nikkei 225 Index in JPY (Rebased to 100)	Nikkei 225 Index Unhedged in USD (Rebased to 100)
30 September 2012	100.00	100.00
31 December 2013	183.66	137.07
Return	83.66%	37.07%

Source: Millennium Global and Bloomberg, September 2012 to December 2013. Sourced on 31 March 2020

Figure 5

THE BENEFIT OF A CURRENCY HEDGE



	Nikkei 225 Index in JPY (Rebased to 100)	Nikkei 225 Index Nikkei 225 Ind Unhedged in USD Hedged in US (Rebased to 100) (Rebased to 10	
30 September 2012	100.00	100.00	100.00
31 December 2013	183.66	137.07	184.18
Return	83.66%	37.07%	84.18%

Source: Millennium Global and Bloomberg, September 2012 to December 2013 Sourced on 31 March 2020

THE RISK IMPACT OF THE "DO NOTHING" APPROACH

The graphic to the right shows the contribution to total risk (as defined by variance) coming from;

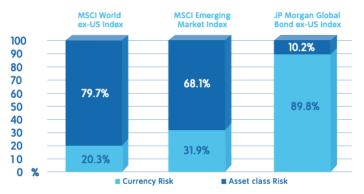
- the underlying asset (dark blue)
- the currency exposure (light blue)

IN THE CASE OF:

- International Developed Market Equities MSCI World ex-US Index
- Emerging market equities MSCI Emerging Market Index
- International Government Bonds JP Morgan Global Bond ex-US Index

Figure 6

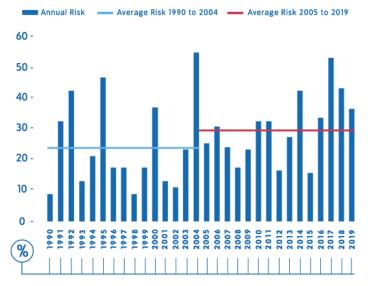
CURRENCY RISK IN INTERNATIONAL ASSET PORTFOLIOS



Source: Millennium Global and Bloomberg, December 1998 to December 2019. Sourced on 31 March 2020

Figure 7

CURRENCY RISK AS A % OF TOTAL PORTFOLIO RISK: MSCI WORLD INDEX EX-US



Source: Millennium Global and Bloomberg, 1993 to 2019. Sourced on 31 March 2020

It is a significant minority contribution for developed market equites, (about 1/5), a higher impact for emerging market equities (about 1/3) and an overwhelming contributor for international fixed income (about 9/10).

In addition, over the past 30 years, the amount of currency risk inherent in international developed market equities (which is the largest overseas allocation by US investors) has been rising.

This is evidenced by the fact that the average contribution to variance from currency exposure was 23.8% in the 15 years, 1990-2004 and 29.5% in the 15 years, 2005-2019. See graph on the right.

N.B. Variance has been used here rather than the usual measure of standard deviation as variances are additive so that it is possible to show the proportion of risk emanating from each source - currency and equity risk in this case. (Variance = standard deviation squared).

UNCOMPENSATED RISK

The risk contribution coming from the currency exposure in these various asset classes has no corresponding expected positive return to compensate investors for taking on the currency risk when the currency risk is not managed. The expected returns are essentially random and hence, the risk is known as "uncompensated risk".

In absolute terms, the amount of currency risk inherent in a typical international equity allocation, say the MSCI World ex-US Index, is about 7.3% p.a. (the standard deviation of returns of the currency exposures - 2000 to 2019). Given that this passive underlying currency exposure has no expected return, this position is akin to owning an investment vehicle with a 7.3% volatility with random returns and an expected average return of 0%.

If this was proposed as a stand-alone investment opportunity, no investor would willingly make this investment it has certain risk but no expected return. However, this is effectively what is embedded in an international equity allocation and is why the "Do Nothing" approach is not advisable.

THE RISK OF CATASTROPHIC LOSS

While portfolio risk is typically measured in terms of the annualised standard deviation of returns, another way to consider risk is the incidence and depth of performance drawdowns. The risk of drawdowns will increase the possibility of not having sufficient funds to satisfy the liabilities or meet the needs of the beneficiaries of the portfolio. For many, in practical terms, this is the most important risk of all.

Given the US dollar's rally between May 2011 and December 2016 which was 42.8% in trade weighted terms, a very large currency related loss was made by US institutional investors holding overseas assets with no currency management strategy as the foreign currency values in US dollar terms suffered a precipitous drop.



According to Reuters News (July 2015), the US pension industry lost in excess of USD 1 trillion in value during the nine-month period from July 2014 to March 2015 as a direct consequence of the US dollar rally and foreign currency collapse. >>>

According to Reuters News (July 2015), the US pension industry lost in excess of USD 1 trillion in value during the 9-month period from July 2014 to March 2015 as a direct consequence of the US dollar rally and foreign currency collapse. This was largely due to funds having no currency management strategy on a large proportion of foreign asset exposure.

During this time, the flaws in the "Do Nothing" approach were painfully exposed. In fact it is the position of highest risk. As a consequence of unmanaged currency exposure, a randomness is introduced into the portfolio which can have unforeseen and damaging effects.



Mark Astley, Co-CEO, Millennium Global Investments is a member of the Board of Directors of Millennium Global Investments. His role includes responsibility for product development, marketing and the growth of the

firm. Astley has extensive experience in currency management and has written extensively on this subject and is the author of the recently published 'A Comprehensive Guide to Currency Issues for Institutional Investors'. He regularly participates in media discussion of currency issues and has been a frequent contributor to CNBC coverage of foreign exchange.

KEY TAKE AWAYS

- The impact of currency exposures on international investments can be large in both return and risk terms. History is replete with examples of large negative impacts from unmanaged currency exposure.
- "Doing nothing" is the highest risk option.
- 3) Owning currency exposure injects risk into an international portfolio with no ex ante expected return. In no other asset class would risk be left unmanaged.
- 4) If the currency exposure is not managed then the return impact is essentially random.



Long-lasting investment success in our view comes down to a single word: Compounders, companies whose returns materially exceed their cost of capital year after year through volatile markets and rallies. We believe that portfolios focused on Compounders can offer a steady and resilient path to capital appreciation, and identifying them serves as the primary focus of our investment research.

66 Quality companies achieve Compounder status when they can sustain their competitive advantage over a lengthy period against competition, market saturation, disruptive business models, and any other challenge that might confront them. >>

WHAT MAKES A COMPOUNDER?

Compounders are above all quality companies. Investors, led by index providers such as MSCI, often define quality companies as those with robust and sustainable returns on equity (ROE), clean balance sheets with low levels of debt relative to equity, and a

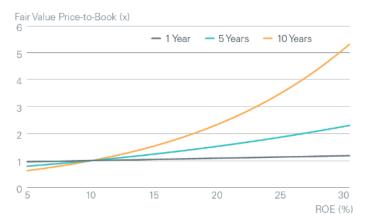
record of stable or rising earnings. While we agree these are typical characteristics of quality companies, our investment process focuses on companies that produce high returns on capital, which we refer to as financial productivity, and then seek to ensure that they can sustain those returns. Companies that sustain high returns generally do so by reinvesting

some or all their profits in themselves. Identifying financially productive companies with a durable competitive advantagedominant market share, an established and respected brand, an innovative new product, manufacturing efficiencies, broad distribution scale, or exceptional intellectual properties—in our view offers the surest way to invest in high quality stocks.

Quality companies achieve Compounder status when they can sustain their competitive advantage over a lengthy period against competition, market saturation, disruptive business models, and any other challenge that might confront them. Our analysis demonstrates that the durability of a company's competitive advantage crucially determines its fair value, particularly for the highest quality companies with the most robust ROEs. (Exhibit 1).

Exhibit 1

How Holding Off the Competition for 1, 5, and 10 Years Affect a Company's Value



For illustrative purpose only. This information does not represtn any product or strategy managed by Lazard.

Source: Lazard

The y-axis indicates theoretical current fair value price-to-book (P/B) ratio of companies at different levels of ROE during their competitive advantage periods of one, five, and 10 years. The left portion of the chart shows that, for companies with low ROEs, the length of their competitive edge is largely irrelevant to what they are worth. But for companies with a robust competitive advantage, the durability of their edge leads to a very wide range of appropriate valuations. For example, the company with a competitive edge that enables a high ROE that it can maintain for 10 years should be worth substantially more than if it could only maintain the advantage for five years. Likewise, the higher the level of ROE that can be maintained, the more the company would be worth. In other words, for the companies we focus on-those that are the most financially productive-the durability of their competitive advantage matters most, and evidence suggests it matters a great deal.

VIRTUE IN ADVERSITY

In our view, the secret of Compounders' success lies largely in their resilience during downturns. Thanks to their durable competitive advantages, their businesses and profit margins have typically held up better in recessions, so their stocks have generally defended versus the broad benchmark. And since typically they haven't fallen as much during retreats, they also haven't had to perform as well during rallies to outperform over the long haul.

This comes down to the simple math of compounding returns, where outperformance is simply more valuable during falling markets than in rising markets. Say, to take a simple example, that Quality Manager A and Manager B start out with \$1,000 in assets. In their first year of investing, the market drops 50%. Manager B follows suit, leaving him or her with \$500. Quality Manager A outperforms Manager B by 5%, leaving him or her with \$550, or

a -45% return. In year two, say the market goes up 50%, leaving it 25% behind its starting point. This time, Quality Manager A performs in line with the index, adding \$275 to his or her assets for a total of \$825. Meanwhile, Manager B outperforms by 5%, for a 55% return. However, because Manager B started from a lower base, he or she is left with only \$775. In other words, Quality Manager A would still outperform both the index and Manager B despite Manager B's superior performance in the rally (Exhibit 2).

Exhibit 2

Quality Math

	Starting Capital	Market Falls 50%		Market Rises 50%	
Index	1,000	-50%	500	50%	750
Quality Manager A	1,000	-45%	550	50%	825
Manager B	1,000	-50%	500	55%	775

For illustrative purpose only.

66 But while the initial stages of competitive advantage can generate a breathtaking burst of momentum, finding companies that can maintain a competitive advantage that results in superior financial productivity over a long period of time is no small accomplishment.

QUALITY OUTPUT REQUIRES QUALITY INPUT

We believe that while the objective of quality investing looks clear cut and every bit as straightforward as growth, value, or momentum investing, these last three styles tend to grab most headlines and investor attention. But while the initial stages of competitive advantage can generate a breathtaking burst of momentum, finding companies that can maintain a competitive advantage that results in superior financial productivity over a long period of time is no small accomplishment. Perhaps the sheer difficulty of defining quality explains why the category has never attained fad status—and why excessive market enthusiasm has never arbitraged away its advantage.

66 Even with the recent dominance of glamorous tech titans in the growth category, quality has outperformed growth over time, with lower volatility. "

Value captivated investors before the global financial crisis and growth has garnered their enthusiasm ever since. But over the long run, quality companies have outperformed both. Even with the recent dominance of glamorous tech titans in the growth category, quality has outperformed growth over time, with lower volatility. Furthermore, despite a long period of outperformance,



quality stocks do not currently look expensive. Growth stocks have far higher price to equity (P/E) ratios with lower ROE. While quality stocks do trade at a premium to value stocks, they also generate four times the ROE. (Exhibit 3).

Exhibit 3

Top of the Charts



As of 31 December 2020

Source: MSCI

IMPROVERS: POSITIONING FOR A RE-RATING

During their ongoing research into Compounders, our analysts often uncover companies trading at attractive valuations, which they believe have underappreciated opportunities to improve their financial productivity. Companies in this category typically lack Compounders' track record, but our analysts have spotted a specific catalyst-management actions or industry trends, for example—that they believe will enhance the company's financial productivity and warrant a higher valuation for its stock. The analysts are not screening for cheap stocks whose valuation might revert to some theoretical mean. Rather, they actively seek out companies with the potential to decisively improve their financial productivity, and we closely measure their progress against explicit milestones. We hold these "Improvers" until we feel either that the market has factored their enhanced financial productivity into their current valuations, or their progress has stalled.

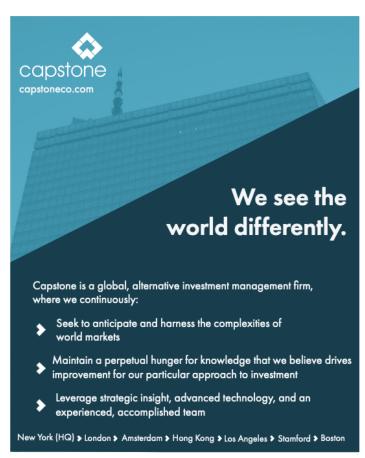
QUALITY INVESTING

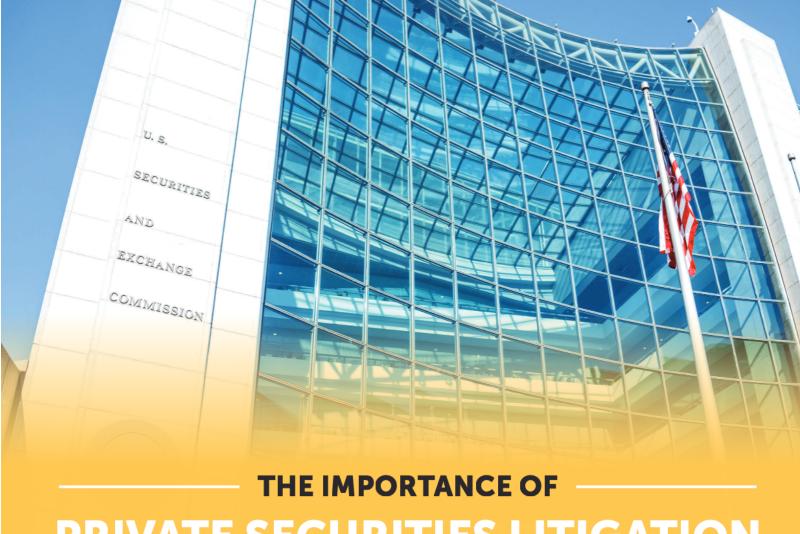
To emphasize again what we cannot over-emphasize, we believe quality investing is an active pursuit, not an exercise in armchair analytics. It takes intensive fundamental research digging deep past "stock stories" to identify not only a company's competitive advantage but also its ability to maintain it. We believe it calls for hands-on research of companies and industries and for experienced analysis that is sensitive to competitive dynamicsanalysis that does not merely project a static past into the future, but also anticipates how the current environment might evolve. Amid the unprecedented uncertainties confronting investors today, we believe this focus can provide a solid foundation for an overall portfolio allocation.



Louis Florentin-Lee is a Managing Director and Portfolio Manager/Analyst on various Lazard global, international, and US equity strategies. Prior to joining Lazard in 2004, he was an equity research analyst at Soros Funds Limited and Schroder Investment Management. He has a

BSc (Hons) in Economics from the London School of Economics.





PRIVATE SECURITIES LITIGATION AS A COMPLEMENT TO 'WORN OUT' REGULATORS

Why?

"Public pension funds often ask us why they should get involved in securities fraud litigation. They question whether their leadership can really have a meaningful impact in seeking justice for injured investors and holding wrongdoers accountable. Funds want to know if they can make a difference for investors when the Securities and Exchange Commission is regulating the markets.

In this article, my colleagues Scott Foglietta and Brittney Balser answer this precise question and share data that objectively demonstrates why institutional investors play such a crucial role in policing the capital markets. The answer turns on both the remarkable successes public pension funds have had recovering billions of dollars for investors, and the limitations inherent in relying on regulators to protect investors. Over my more than 20 years prosecuting securities fraud cases, I have seen firsthand the significant recoveries and governance reforms that institutional investors have secured for harmed investors."

- Hannah Ross, Senior Partner, BLB&G

(6 It is investors that incur the largest losses caused by corporate fraud or misconduct that will continue to suffer from a continually overburdened SEC.))

A recently published study confirmed what many proactive institutional investors already know: Private litigation is an integral piece of the securities enforcement puzzle. In the United States, the Securities and Exchange Commission (SEC) is the principal regulator tasked with overseeing the financial markets and the sale of securities.

As with all government regulators, the SEC suffers from limited staffing and resources, and is subject to political pressures, which forces the agency to make difficult choices about the companies and individuals it investigates. Although the need to prioritize investigations and allocate resources is not itself problematic, a recent study revealed that it is the investigations and cases that involve the largest shareholder losses that suffer most as a result of the SEC's backlog. See Samuel B. Bonsall IV et al., Wearing Out the Watchdog: The Impact of SEC Case Backlog on the Formal Investigation Process (https://ssrn.com/abstract=3912645) (2021).

In other words, the study concluded that an overburdened SEC tends to neglect the cases involving the greatest harm to investors. Accordingly, private securities litigation—where the law incentivizes investors to pursue cases that involve the largest shareholder losses—remains vital in enforcing the securities laws and serving as an important deterrent to corporate misconduct.

Using statistical analyses, the authors of the study sought to determine the impact that the SEC's case backlog has on the types of investigations the SEC ultimately elects to pursue. The study found, not surprisingly, that a large backlog materially decreases the likelihood that the SEC will open a new investigation.

What is surprising is that the study also found that not all investigations are treated equally when it comes to the prioritization of SEC resources. In fact, while certain cases—particularly those that involve accounting restatements or insider trading—are pursued regardless of backlog status, investigations involving misrepresentations to investors that cause the greatest shareholder harm are the most likely to be neglected by an overstretched SEC.

The study attributes the SEC's case prioritization, in part, to the fact that such investigations take longer to close and are especially costly for the SEC to conduct during periods of significant backlog.

In addition, according to the study, when the SEC is dealing with a significant backlog, companies are generally less likely to be the target of enforcement actions. Even when they are targeted, the penalties imposed are less severe and there is a lower incidence of remedial governance changes.

The study also found that SEC offices with high backlogs are less likely to investigate companies that have recently lobbied the U.S. government, a result suggesting that agency "busyness" may complement the utility of political lobbying for companies that would otherwise be the target of an SEC investigation.

While the study focused on data from 2000 through mid-2017, the SEC's case backlog has not abated. In fact, recently, SEC Chairman Gary Gensler expressed concern that the SEC was "short staffed" and testified to Senate lawmakers that the SEC needs "a lot more people" in order to fully investigate ongoing misconduct.



its oversight of cryptocurrencies, special purpose acquisition companies or SPACs, and payment for order flow, among other things, which will only further stretch the SEC's already taxed resources. ??

Gensler also noted that the SEC is expanding its oversight of cryptocurrencies, special purpose acquisition companies or SPACs, and payment for order flow, among other things, which will only further stretch

66 The role of private litigants is particularly important in light of the fact that the cases they tend to pursue are the very cases most likely to be de-prioritized by the SEC. The Private Securities Litigation Reform Act of 1995 (PSLRA) essentially deputized sophisticated shareholders to privately enforce the federal securities laws on their own behalf and on behalf of other similarly situated investors. 🥦

the SEC's already taxed resources. It is investors that incur the largest losses caused by corporate fraud or misconduct that will continue to suffer from a continually overburdened SEC.

Fortunately for those investors, they have other means of recourse in the form of powerful private rights of action to enforce the federal securities laws. The role of private litigants is particularly important in light of the fact that the cases they tend to pursue are the very cases most likely to be de-prioritized by the SEC. The Private Securities Litigation Reform Act of 1995 (PSLRA) essentially deputized sophisticated shareholders to privately enforce the federal securities laws on their own behalf and on behalf of other similarly situated investors. See 15 U.S.C. §78u-4, et seq. The PSLRA does this by, among other things, granting the power to lead private securities class actions to the investors with the "largest financial interest" in the securities at issue, which is frequently understood to mean the investor that incurred the largest losses. 15 U.S.C. §78u4(a)(3)(B)(iii)(I)(bb).

Those investors tend to be sophisticated institutions with the resources and experience necessary to seek redress from the most powerful corporations in the world. Moreover, by aligning themselves with specialized lawyers who act as private prosecutors willing to pursue these cases on contingency, proactive institutional investors are perfectly situated and highly incentivized to pursue the meritorious cases in which they have suffered the greatest losses-the exact cases that are so often overlooked by the SEC.

The findings from the study may also explain why private litigants often recover larger sums than regulators when investigating or pursuing claims against the same companies and executives. In the wake of the dotcom collapse, private securities plaintiffs obtained recoveries at least four times greater than the SEC in suits against common defendants based on identical infractions. See Nishal Ray Ramphal, The Role of Public and Private Litigation in the Enforcement of Securities Laws in the United States (https://www.rand.org/pubs/rgs_dissertations/ RGSD224.html) (2007).



This pattern continued after the financial crisis, when private litigants recovered billions of dollars more than the SEC in cases against financial institutions that were impacted by the severe decline in the value of mortgage-backed securities. For example, compare the \$150 million obtained by the SEC in an enforcement action arising from the Bank of America/Merrill Lynch merger, with the \$2.4 billion recovered by investors through private litigation involving the same misconduct.

The United States boasts the strongest capital markets in the world, reported to fund nearly three guarters of all economic activity in the country. The robust regulatory environment and private investor rights are essential to maintaining the integrity of this complex financial system.

There is no question that the SEC plays a critical role in overseeing the markets and holding wrongdoers accountable, but, as the study has confirmed, the SEC cannot do this alone. Instead, it is private litigants with a track record of recovering over \$106 billion for injured investors since the passage of the PSLRAparticularly in cases involving large losses, which the SEC lacks the capacity and resources to pursue—that support meaningful enforcement of the securities laws and create a deterrent effect that far exceeds what the SEC could accomplish alone. In stark contrast to the study's tag line-Wearing Out the Watchdogsprivate litigants and their lawyers do not "wear out" so easily.







Scott Foglietta and Hannah Ross are partners and Brittney Balser is an associate at Bernstein Litowitz Berger & Grossmann LLP (BLB&G), where they represent institutional investors in shareholder litigation. A version of this article originally ran in the New York Law Journal, and appears here with the publication's permission.



MODERN INVESTMENT THEORY & PRACTICE for Retirement Systems

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SHORT TAKES

Conversations with Spring Conference Keynotes

SACRS Spring Conference 2022 had an incredible lineup of insightful and inspirational speakers. If you missed any of the keynote presentations, here are a few highlights and key takeaways.

KEISHA LANCE BOTTOMS

In her keynote, Leadership in the Toughest of Times, Keisha Lance Bottoms, CNN Political Commentator and former 60th Mayor of Atlanta shared insights from her leadership journey, recounting not only how she achieved many accomplishments, but also how she overcame the obstacles.

SACRS Magazine: As an elected official, (and as such, a beneficiary), you understand the importance of ensuring the strength and viability of a pension plan. As you entered into the Mayor's office, there were challenges to your own city's pension funds.

KLB: Before becoming the Mayor of Atlanta, our city pension funds were 55% under funded. The city could not meet its commitments. We had to look at reform through the lens of providing benefits that the city could promise to keep. We took the city's three pension funds (Atlanta General Employees' Pension Fund, Atlanta Firefighters' Pension Fund and Atlanta Police Officers' Pension Fund) and consolidated them into one plan. Reforming the city's three pension boards into one strong, streamlined and effective board was to the benefit of city workers, taxpayers, and the public. It did not happen, however, without challenges. In the end, our consolidation approach was approved and it allowed the city's pension plan to get back on financial solid footing, be healthy, and sustainable.

SACRS Magazine: During your time as Mayor you served in the midst of a global pandemic and a significant racial justice movement. What was it like to be in that position in one of the most challenging times in the history of Atlanta?

KLB: During the pandemic in some ways we felt we had time to talk about racial justice, to motivate, to think about strategies for change. Then, all of a sudden, May 29 and the murder of George Floyd. All hell broke loose in Atlanta. As this fire spread across our nation, we lost all benefit of time. In the older people I saw anger and frustration; and the younger were afraid and worried. It was such a tough time for all of us across the country. We had to walk and chew gum at the same time. We had a

city to run and services to provide. We needed to protect our city as demonstrations evolved into vandalism. We called for the people of Atlanta, the city made famous for no riots after the 1968 murder of Dr. King, to go home. Putting the pieces back together again in the aftermath of events like the pandemic and George Floyd is very hard.

SACRS Magazine: It must have been unbearable to see, at the tender age of 8, your Father, Grammy-nominated singer Major Lance, being led away in handcuffs. How did that inform your thinking as a public servant?

KLB: My Father struggled with addiction and went to prison for three years for cocaine possession and dealing. I know what it is like to have and to have not. In Atlanta, we have done away with cash bail for minor offenses, ended cooperation with ICE and raised police pay by 30% while striking a blow against mass incarceration. We cut our corrections budget by almost 60%, and we are converting our city jail into a center of equity, health and wellness.

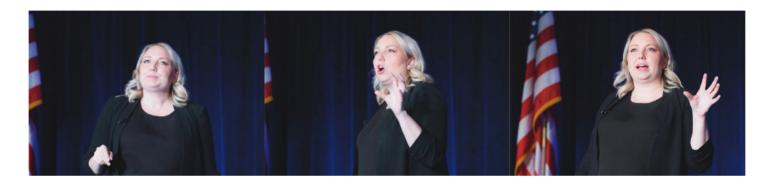
I know that good people make bad decisions; it shouldn't be the end of the road for them. I hope that my four years of leadership in Atlanta has left a legacy of that.

SACRS Magazine: Speaking of legacies, what do you think our SACRS members can do to further justice and be good global citizens?

KLB: Use your role as an investor. Use the influence you have through engagement with companies you do business with. Think in the same way you cast a vote for an elected official. Lean into policy you feel is important. The push for that, to be good global citizens, is growing by the day. Recent numbers show 40% of people are involved in a boycott of a product for some reason. The power is in your hands, in the same way that consumers have it.

We have to be the example that we want to see. I also talk about people giving grace, but I have to check myself sometimes. We need to do more of that in our professional and personal lives.





FRANCES DONALD

At the Spring Conference, Frances Donald, Global Chief Economist and Global Head of Macroeconomic Strategy, Multi-Asset Solutions Team, at Manulife Investment Management, returned to the SACRS stage for her presentation Inflation: What It Is, Where It's Coming from, and What It Means for Your Retirement Plan. (* Note the following comments are from a May 2022 point in time.)

SACRS Magazine: We are hearing about inflation every day. Do you see it as transitory or permanent?

FD: U.S. Consumer Price Index (CPI) jumped 7.9% in February year over year and core CPI, which strips out energy and food prices, rose 6.4% year over year—levels not seen since the early 1980s. While services inflation is starting to rise as price pressures become more broad-based, the bulk of price increases continue to be most prominent in COVID-19 distorted areas, such as cars and goods. Deflation areas during COVID, hotel, airlines, and clothing, are now coming back to pre-COVID levels. For example: We are seeing an 18% increase in airfare. Is this really inflation? We look at that and think COVID inflation is transitory.

We are now, however, moving toward a more nefarious type of inflation. Even as we still see re-opening activity, we now also see pressure coming from higher gasoline spending and food. High prices on housing and used cars are one thing, but higher prices on food and energy will crowd out other spending. Food and energy are items that you cannot substitute away from and they are going to be more painful for the American consumer.

SACRS Magazine: Will there be a sharp spending slowdown as a result?

FD: I see a materials slowdown across most sectors in the US.

What matters here is where the inflation is concentrated. During COVID, we were seeing it in things I am going to call largely discretionary - home renovations, fences, pools, cars. Things that are not bought every month and things that you can live without.

Right now we need to change the way we think about inflation. We need to recognize that the composition of inflation is changing. In the next three to six months we are going to see the shifting nature of inflation.

What we are actually witnessing here in the US economy is a transition away from COVID inflation and COVID themes toward something more nefarious: conflict inflation and conflict themes.

MATT HOUGAN

In Crypto 101: Everything You Wanted to Know But Are Afraid to Ask, SACRS keynote Matt Hougan, Chief Investment Officer of Bitwise Asset Management, delivered a primer on crypto currency exploring how it derives its value and why many believe its impact on the economy is just starting.

SACRS Magazine: Even though crypto currency has become more universally accepted, and is now officially a mainstream asset class, many still do not fully understand the concept.

MH: The biggest misunderstanding about crypto is it is not currency; it cannot be used to buy coffee. What it can do is move assets and move it guickly, in minutes not in days. If you have Venmo or PayPal, you know the payment service model. So for Crypto think Venmo or PayPal meets the open Internet.

SACRS Magazine: Why is this significant?

MH: Crypto is important because you can now move money at the speed of the Internet. Moving money traditionally is very slow. Crypto enables Decentralized Finance (DeFi.) What DeFi does is offer financial instruments without relying on intermediaries such as brokerages, exchanges, or banks by using smart contracts on a blockchain. It gives people a way to own their own money and eliminates the need for a single controlled third-party database owned by, for instance, Wells Fargo. Instead, a blockchain stores information electronically in a digital format that is secure and offers a decentralized record of transactions. Crypto allows the Internet to tackle investment and finance.

SACRS Magazine: It sounds very disruptive to the current way of doing things. Why are there so many different kinds of crypto currencies?

MH: There are different kinds of crypto because the technology is being optimized in different ways. It is just like software companies, we don't ask why are there so many different software companies?

What needs to happen next is the regulatory piece. How does crypto get incorporated into securities laws, such as the Securities Act of 1933 and the Investment Company Act of 1940? I think we are headed for new legislative action as we move from the early stages towards maturity.

It is an exciting time. We have the technology that allows the Internet to tackle the money and finance market. The big question is: Will it succeed?





JASON SCHENKER

For his presentation, The Future of Business in the Metaverse Economy, Jason Schenker, Chairman of The Futurist Institute and the President of Prestige Economics, shared his analysis, insights, and futurist scenarios for the most significant trends and technologies that will shape the future Metaverse and more. Topics during his talk included AR, VR, XR, NFTs, blockchain, Web3, DeFi, Cold War Two, supply chain, and more. Schenker has written 36 books on emerging technologies, business strategy, finance, and the economy.

SACRS Magazine: In your talk you explored the Metaverse, which is tough to explain.

JS: Metaverse is a catchall because it has the potential to take many different forms. There are a number of ways it could play out and I shared the possibilities - it could be a "Multiverse Metatverse" that is life in all its aspects that is expanded online. It could be just a "Gamerverse" that will mostly be for video gaming. Or less desirable: "Scammerverse", like a carney midway online or a "Creeperverse" where there is insufficient social controls. It could be "Businessverse" with the use of VR to accelerate training, which is probably where the most ROI is.

SACRS Magazine: It sounds fantastical.

JS: It does. Metaverse technologies carry a lot of hype. You have to be careful of the shiny. The real value is usually not in the whiz-bang. If you look long-term, multi-year, multi-decade, that is when you can see the long-term economic value of something and it is usually super boring! Investible opportunities lie in (potentially boring) corporate use cases.

SACRS Magazine: Do you think the Russian War on Ukraine will turn into Cold War Two?

JS: The sides, Russia and China, want to go back to the pre-1945 world map. China has it sights on Taiwan, but China told Russia "you go first." Russia thought taking Ukraine back would be easy. But that didn't happen.

The Russian War on Ukraine seems likely to become a frozen war that turns into Cold War Two. Markets may be able to live with that. Cold War Two could necessitate NFTs* in Supply Chain.

(*An NFT (non-fungible token) is a record on a blockchain with unique identification codes and metadata associated with a particular digital or physical asset and has huge potential for logistics, as it could ensure much more accurate traceability control.)

BRENDAN AHERN

In the SACRS keynote session Navigating China and Why It Matters, Brendan Ahern, Chief Investment Officer at KraneShares provided an overview of the current environment in China. Ahern is a frequent visitor to China and actively maintains daily contact with a deep local research network comprised of investment banks, brokers, and regional and boutique research firms, as well as produces a daily update called *China Last Night.com*, which also appears as a column for Forbes.com.

SACRS Magazine: What are the geopolitical risks for China related to the Russia-Ukraine war?

BA: Although China imports both Ukrainian wheat and Russian natural resources, higher commodity prices have had a limited impact on the CPI. Overall, the potential trade disruption with Russia is less impactful on Chinese economy. China state-backed banks, including the Asian Infrastructure Investment Bank (AIIB), have suspended Russian activity.

SACRS Magazine: You spoke of US interdependence with China, in particular with California, and why China's struggle to reopen after the pandemic is concerning.

BA: China did not accept Western COVID vaccines and their vaccine is greatly behind the Western world. Because of this, there are continued lockdowns with low vaccination rates, especially among their elderly, who are most vulnerable. They are very aware of COVID-19 and the Omicron variants potential to overwhelm their hospitals and this is slowing recovery and impacting supply chains.

US and China economies are intertwined with China very geared toward the West. Many U.S. companies have taken advantage of China's urban middle-class. American brands are alive and well, with many American companies, like Apple and Boeing, doing great business in China. For example, General Motors annually sells more cars into China than in the U.S. Overall; California is highly dependent on China.

There is an underestimated risk and lack of debate by politicians and others about this interdependence. It is often ignored. We think of China manufacturing exports, but there is a greater economic impact on the US by China's faltering, not the other way around.

SACRS Magazine: How does the market reflect the US-China relationship today?

BA: The Goldman Sachs US-China Relationship Barometer Index is at a level of 95.5, near its all time high and close to the maximum of 100. Equity technology sectors have been impacted significantly. Meanwhile, trade tension with China has decreased significantly since its high in September 2018 and is currently at 10% in the index. We, at KraneShares, believe US-China political tensions are already priced in. In short, it has never been stronger.



RETIRED GENERAL DAVID PETRAEUS

A highly decorated general and one of the most prominent combat commanders in American history, General David Petraeus (U.S. Army, retired) has dedicated his life to public service, leading military campaigns in Iraq and Afghanistan and then serving as the director of the Central Intelligence Agency. In a timely SACRS presentation, General Petraeus, via livestream, offered his perspectives on the Russian invasion of Ukraine, discussed Russia's strategy, and what might lie ahead.

SACRS Magazine:

In your opinion, how are things progressing with Russian President Vladimir Putin's efforts to reunify Russia through the invasion of Ukraine?

GP: Putin underestimated Ukraine's desire to remain independent and he overestimated his own forces. His deficiencies are quite extraordinary. Russia's army has underachieved in virtually every conceivable area since the war began in February. After failing to capture any of Ukraine's major cities, Moscow was forced to pullback from territory around Kyiv and refocus on the separatist regions in the east. Their logistics proved absolutely abysmal. The level of training of their soldiers and their junior leaders is clearly inadequate.

Of the people Putin has surrounded himself with, there is no one to tell him it isn't going well. No one in Moscow is going to tell him it's time to surrender and get financial systems back from sanctions and protect the economy. The question is: "What will Putin accept?" The West will not negotiate with him until Ukraine President Volodymyr Oleksandrovych Zelenskyy and the Ukraine people have their say. In a war of attrition, increasing damage, and loss of life, over time we might see what is acceptable to both sides. It will be a frozen conflict for some time.

SACRS Magazine: How has the Ukraine invasion by Russia impacted NATO?

GP: This is the first unprovoked invasion of an independent European country since WWII. It is a battle for rule of law. A battle for democracy. A battle for freedom of the press. While Russia has the goal of reunifying, what has become more unified is



NATO. Right now, NATO unity is unparalled. There is a level of cohesion that has not been seen since the 1980s. It is remarkable.

Although, keep in mind that there wasn't complete unity in the 80s. The "good old days" weren't always much "gooder." We have to be careful about that.

SACRS Magazine: Given Russia's destructive indiscriminate military tactics, what do you think the likelihood is of military escalation by Putin?

GP: We need to go at this clear eyed, which we are. The idea of rationality for Putin might be to act in what may seem irrational to us. He is unconcerned and has no problem violating Geneva Convention. We don't want a situation where Putin has nothing left to lose. We don't want to back Russia into a corner. Chances are much higher now than in the beginning that Putin might use small-yield nuclear weapons. We need to be concerned about that because deployment will be unthinkable.

CONGRATULATIONS!

During the Fall Conference, the SACRS Volunteer Awards were presented to Thomas (Tommy) Garcia, Imperial County Employees Retirement Systems and SACRS Past Secretary and Harry Hagen, Santa Barbara County Employees Retirement Systems, SACRS Treasurer, and Santa Barbara County Treasurer-Tax Collector. We thank them for their contributions to SACRS!





Vivian Gray, President of SACRS & LACERA Trustee, shares a laugh with Award recipient Harry Hagen (left) and congratulates Tommy Garcia (right) during the presentation of the SACRS Volunteer Award.

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FEATURED FALL KEYNOTE

A Conversation with Admiral William H. McRaven, USN (Retired)

Admiral William H. McRaven is a retired U.S. Navy Four-Star Admiral and the former Chancellor of the University of Texas System. During his time in the military, he commanded special operations forces at every level, eventually taking charge of the U.S. Special Operations Command. His career included combat during Desert Storm and both the Iraq and Afghanistan wars. He commanded the troops that captured Saddam Hussein and rescued Captain Phillips. McRaven is also credited with developing the plan and leading the Osama bin Laden mission in 2011. He is a recognized national authority on U.S. foreign policy and has advised Presidents George W. Bush, Barack Obama, and other U.S. leaders on

defense issues. McRaven is the author of two books, SPEC OPS: Case Studies in Special Operations Warfare and Make Your Bed: Little Things That Can Change Your Life and Maybe the World. He's a Senior advisor to Lazard Asset Management. Lazard serves investors with a broad range of global investment solutions and investment management services. In a special SACRS keynote session, McRaven will share stories and insights into leadership and risk management.

Retired U.S. Navy Four-Star Admiral William H. McRaven

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Jumping on the SPAC train?

Not so fast. Securities litigation is on the rise.

K The number of SPAC initial public offerings rose exponentially from 59 in 2019 to 248 in 2020 to an astonishing 498 in 2021, raising over \$120 billion this past year alone. \$9

hile the last two years will likely be remembered mainly for the COVID-19 pandemic ravaging the globe, many in the financial space will also remember this time as the rise of Special Purpose Acquisition Companies, more commonly referred to as SPACs. The number of SPAC initial public offerings (IPOs) rose exponentially from 59 in 2019 to 248 in 2020 to an astonishing 498 in 2021, raising over \$120 billion this past year alone. SPAC IPOs now make up more than three-fifths of all IPOs in the United States. With this rise in popularity has come greater scrutiny by the SEC and an increase in securities litigation filed on behalf of shareholders. Despite the pace of new SPACs slowing mid-year, by the end of 2021 the market was booming once again and the wave shows no signs of cresting as 2022 progresses.

With SPACs being run by the likes of professional athletes like Alex Rodriguez and musicians like Jay-Z, it is easy to get caught up in the hype. There has been so much hype in fact, that the SEC had to issue a warning to 'never invest in a SPAC based solely on a celebrity's involvement. >>

In addition to their increasing popularity among institutional investors, SPACs have become a new status symbol for celebrities and financiers alike, drawing in a whole new crowd of interested participants, including retail investors. With SPACs being run by the likes of professional athletes like Alex Rodriguez and musicians like Jay-Z, it is easy to get caught up in the hype. There has been so much hype in fact, that the SEC had to issue a warning to "never invest in a SPAC based solely on a celebrity's involvement." While having name recognition and success in other fields, those promoting SPACs don't necessarily have the financial savvy and experience to pick the most profitable companies.

So what are SPACs and why are they so popular?

SPACs are essentially shell companies set up by investors for the sole purpose of raising money through IPOs to acquire or merge with other companies and take them public, usually within two years. SPACs have no underlying operating businesses and do not have assets other than proceeds from the IPOs. The founders of SPACs do not identify the targets of the acquisitions before the IPOs, which is why they are sometimes referred to as "blank check" companies. Investors do not know what companies they will ultimately end up investing in.

Once the SPAC acquires a target company, they merge in a process known as a "de-SPAC" transaction, after which they become an operating company with publicly traded shares. SPACs are popular because they frequently result in a large return on investment for the sponsors putting up the initial capital (usually a 20% interest in the SPAC that is converted to shares in the public company after the merger) and they can be easily created without having to comply with the regulatory requirements for traditional IPOs.

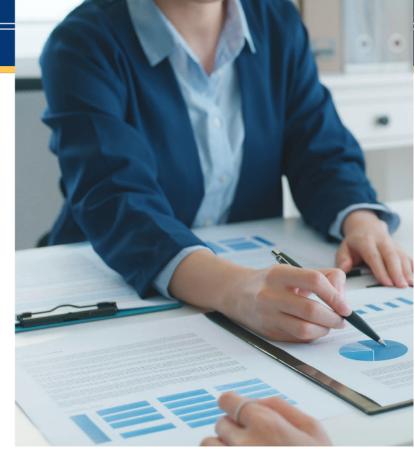
In a normal IPO process, a company going public must issue various disclosures about its financial records and history. Because a SPAC is not an operating business at the time of its IPO, it has very little financial information to report, and therefore it is easier to meet disclosure obligations. Further, companies with IPOs are barred from making projections about future earnings so as not to mislead investors with overly rosy forecasts of future success not based on underlying data. SPACs, however, are free to publish financial projections for themselves, which can be inflated and based on very little but hype.

With their quick rise in popularity, and little regulation, it was only a matter of time before there was an increase in litigation. In fact, at least 35 securities class action lawsuits relating to SPACs have been filed since 2019, with the number expected to keep rising each year. Last year, suits involving SPACs tripled. There are two main aspects of SPACs that make them particularly ripe for securities suits and will fuel continued litigation.

The SPAC structure and environment may encourage fraud.

SPACs are designed with systemic misalignments of incentives that create an environment conducive to fraud. The SPAC sponsors often contribute only a relatively small amount of assets to cover overhead before taking it public, but usually receive a 20% interest in the resulting company. Given the significant rise in the number of SPACs and deals in the last year, the market is flooded with potential buyers, resulting in a shrinking pool of profitable companies to acquire within the two-year time frame. As a result, many SPACs are overpaying for companies and receiving high valuations because of increased demand alone and not their actual value.

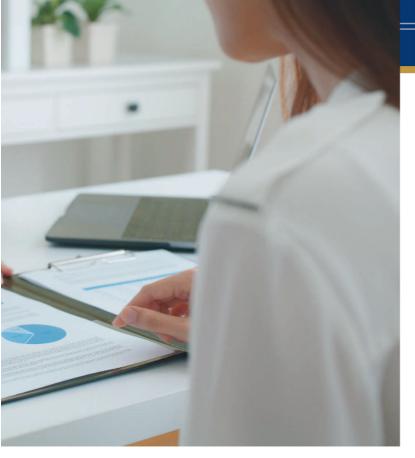
Further, the system provides significant incentives for sponsors to exaggerate or overinflate the value of the target company, which can cross the line from hype to fraud. In a speech on December 9, 2021, SEC Chair Gary Gensler noted that "SPAC sponsors may be priming the market without providing robust disclosures to the public to back up their claims. Investors may be making decisions based on incomplete information or just plain old hype."[1] The way SPACs are designed, even if the company ends up being an unprofitable acquisition, sponsors often walk away with a significant profit, frequently making several hundred percent on their original investments, while the return for retail shareholders is usually far less.



Additionally, sponsors may cut corners on due diligence because they are typically looking to merge within two years. SEC Chair Gensler has further noted that investors in SPAC IPOs should be afforded similar protections as those in standard IPOs, but that the "gatekeepers" behind SPACs, such as directors and officers, sponsors, financial advisers, and accountants "may not be performing the due diligence that we've come to expect."[2] Standard IPO due diligence practices can take time. Sponsors have an interest in making an acquisition quickly, regardless of the quality of the operating company they are purchasing, and with limited due diligence, in order to maximize their own profit and ensure an acquisition occurs within the required time frame. If they don't meet the deadline, they need to refund investor money.

The SPAC's underwriting banks also have reason to exaggerate the value of an acquired company and downplay any potential issues with the merger. SPACs are not required to disclose their banks' fees in regulatory filings. But typically sponsors pay such banks a 5.5% fee for underwriting the IPO, part of which is paid upfront, with the remainder paid once a merger is complete. The underwriting banks therefore also have an interest in a merger going through, regardless of the value of the target company. This risk is further compounded by the fact that these same underwriting banks can sometimes earn even more fees if they represent the target company and assist the SPAC in raising additional capital for the merger.

Combine this potential for fraud with limited due diligence and you get the key ingredients for securities litigation. And while it is true that there are fewer registration requirements for SPACs, particularly at their IPO, there are still several disclosure requirements that must be complied with, the violation of which can be the basis for shareholder actions. In fact, as a merger vehicle, SPACs are



uniquely susceptible to certain claims relating to proxy statements that are easier to prove than securities fraud claims.

6 Plaintiffs' counsel and frustrated SPAC investors could decide to file whenever an acquired company fails to perform well after the de-SPAC transaction. >>

Securities claims against SPACs may be easier to prove.

Securities class actions are brought under a variety of laws, chief among them Section 10(b) of the Securities Exchange Act of 1934 ("Exchange Act") and Rule 10b-5 promulgated thereunder, which prohibit companies from engaging in several types of fraudulent behavior, including making material misstatements or omissions in connection with the sale of a security. To prove a Section 10(b) claim, a class must plead facts showing a strong inference that the company acted recklessly or with the intent to deceive, manipulate, or defraud. Proving intent, which is a state of mind, particularly of a corporation, can be exceedingly difficult and by its very nature can often only be proven through circumstantial evidence. The element of intent, therefore, presents a significant hurdle to successfully prosecuting cases.

With SPAC litigation, the plaintiffs can bring proxy claims under Section 14(a) of the Exchange Act and Rule 14a-9 promulgated

thereunder. During the de-SPAC transaction, once a business has been identified for acquisition, the acquisition is put to a shareholder vote. As part of that process, the SPAC must issue a proxy statement through which it discloses detailed information about the target business, including its financial history, operational structure, and financial projections of its expected performance. Section 14(a) prohibits material misstatements and omissions in proxy statements that cause injury to a plaintiff. Unlike Section 10(b) claims, however, Section 14(a) claims only require plaintiffs to show that a company was negligent, not that it recklessly or intentionally lied or omitted key facts. To prove negligence, a plaintiff class needs to show that a company acted with less care than an ordinary company would have exercised under similar circumstances. It is a much lower bar to meet than proving intent and will no doubt result in an increase in securities class actions against SPACs.

The fact that the demand for target companies by SPACs has increased while the pool of quality companies for purchase has decreased will only further contribute to the filing of such actions. Plaintiffs' counsel and frustrated SPAC investors could decide to file whenever an acquired company fails to perform well after the de-SPAC transaction. SPAC investors could then argue under Section 14(a) that the sponsors and SPAC made misrepresentations and omitted information regarding the financial conditions of the target company to convince shareholders to approve the transaction so that the sponsors could profit and the SPAC could meet the two-year deadline. They would then allege that the SPAC was negligent in doing so, e.g. that it failed to conduct sufficient due diligence, and that they relied on the SPAC's false statements or omissions in the proxy statement to approve the transaction, suffering injury when the target company underperformed.

Pending securities class actions against SPACs have asserted Section 14(a) claims, as well as claims under a variety of additional securities laws, including Section 10(b) and others. As investors continue to pour more money into a system structurally primed for fraud, and some SPAC-purchased companies turn out to be poor acquisitions, more securities cases will inevitably follow.

https://www.sec.gov/news/speech/gensler-healthy-marketsassociation-conference-120921

^[2] Id.



Colin N. Holmes is associate counsel with Financial Recovery Technologies. Financial Recovery Technologies is singularly focused on providing investors with solutions that address the growing complexities of the securities class

action landscape and ensure clients understand what's going on with securities litigation and how to make sure they maximize their recoveries with better monitoring, filing, and recovery practices.



State Association of County Retirement Systems

LEGISLATIVE REPORT

he Legislature returned from Summer Recess on August 1 and focused on the fiscal committee deadline. For this deadline, all bills keyed fiscal must pass out of the Appropriations Committee of the bill's second house by August 12. To meet this deadline, both the Senate and Assembly Appropriations Committees will hold a "Suspense Hearing" on August 11 where they will dispense with hundreds of bills at once.

After August 12, legislators must pass the remaining bills off the floor of the second house and if applicable, the floor of the house of origin for concurrence, before the Legislature adjourns for final recess on August 31.

The Governor will have until September 30 to act upon the bills on his desk.

SACRS SPONSORED BILLS

AB 1824 (Committee on Public Employment and Retirement) -Committee Cleanup Bill. This bill passed out of the Legislature unanimously on August 18 and is awaiting consideration by the Governor. SACRS submitted a letter formally requesting the Governor's signature on the bill.

AB 1971 (Cooper) - CERL Policy Bill. This bill passed out of the Legislature on August 22 and is awaiting consideration by the Governor. Like AB 1824, SACRS submitted a letter formally requesting the Governor's signature on the bill.

In preparation for next year's cleanup bill, the SACRS Legislative Committee will be fielding and reviewing cleanup proposals in the fall.

OTHER BILLS OF INTEREST

SB 1328 (McGuire) - Divestment. This bill would prohibit public retirement boards from investing public employee retirement funds in a company with business operations in Russia or Belarus, among other requirements. Amendments from May narrowed the bill, which included narrowing restrictions on pension investments to companies domiciled in Russia and Belarus, supplying military equipment to Russia and Belarus or companies complicit with the invasion and eliminating requirements that pension funds survey all portfolio companies for compliance with the divestment requirements.

SACRS submitted a letter of concern on this bill.

The bill was set to be heard in the Assembly Public Employment and Retirement Committee in late June, with the Chair of the Committee pushing amendments that would have made the bill a reporting bill. The author was not willing to accept the amendments, so the bill was pulled from the Committee and is now dead for the year.

AB 2493 (Chen) - Disallowed Compensation. As initially amended, this bill would have allowed OCERS to adjust retirement payments based on disallowed compensation for peace officers and firefighters under certain circumstances. The bill was later amended to apply to all CERL systems.

When this bill had a hearing in the Senate Judiciary Committee in late June, CSAC was the lead opposition witness and discussed these cost concerns as well as how the bill differs from SB 278 (Leyva) from 2021.

The bill was amended substantially after the author and sponsors worked with committee staff. While SACRS did not take a position, we are aware that some systems submitted their own letters and shared concerns with the Legislature.

The bill passed out of the Senate, but before it was brought up for a final vote in the Assembly, the author pulled the bill from consideration based on opposition from counties and discussions with the Governor's office.

AB 1944 (Lee) - Public Meetings. This bill would make changes to the Brown Act to add additional flexibility for board members to teleconference into meetings if certain requirements are met, including that a quorum of members of the body participate in person. SACRS supported this bill.

Before the bill's hearing in the Senate Governance and Finance Committee, the committee offered amendments that the author would not accept, so the author pulled the bill, and it was not heard in committee. This caused the bill to fail the policy committee deadline, so it won't move further this session.

AB 2449 (Rubio) - Public Meetings. This bill would allow a local agency to use teleconferencing for a public meeting, if at least a quorum of members of the legislative body participate in person from a single location that is identified on the agenda and is open to the public within the local agency's jurisdiction, among other requirements. Recent amendments add more guardrails for when a board member can participate remotely and add a sunset date, among other changes.

The bill passed out of the Legislature and is on the Governor's desk for consideration.

Compensation Earnable Bills - Last session, two bills were introduced relating to compensation earnable - AB 498 (QuirkSilva) and AB 826 (Irwin). As reported in previous updates, AB 826 was gutted and amended in June of 2021 with the CERL provisions currently contained in the bill. AB 498 (Quirk Silva) was similarly amended at the end of session last year in September.

In late June, AB 498 was gutted and amended again, this time with provisions unrelated to county retirement systems, so it is no longer of interest to SACRS.

AB 826 was amended and pulled off the Inactive File on August 3. It subsequently passed out of both houses of the Legislature and is now on the Governor's desk.



Michael R. Robson has worked since 1990 in California politics and has been lobbying since 2001 when he joined Edelstein, Gilbert, Robson & Smith LLC. Prior to joining the firm, he began a successful career with Senator Dede Alpert as a

legislative aide soon after she was elected to the Assembly in 1990. He became staff director/chief of staff in 1998, while the Senator served in the position of Chair of the Senate Appropriations Committee. He is experienced in all public policy areas with particular expertise in environmental safety, utilities, revenue and taxation, local government finance, education, and the budget.



Trent E. Smith worked for over 12 years in the State Capitol prior to joining the Edelstein, Gilbert, Robson & Smith LLC. He started his career in 1990 working for the well-respected late Senate Republican Leader Ken Maddy. He

was later awarded one of 16 positions in the prestigious Senate Fellowship Program. Upon completion, he started working in various positions in the State Assembly. He worked as a Chief of Staff to Assembly Member Tom Woods of Redding and later to Orange County Assembly Member, Patricia Bates, who served as Vice Chair of the Assembly Appropriations Committee. In this position, he gained a unique and valuable knowledge of the State budget and related fiscal policy matters. In addition, he has extensive experience in numerous policy areas.



Bridget McGowan joined Edelstein Gilbert Robson & Smith in 2018. Prior to joining the firm, she gained policy experience in the California State Assembly. Through internships in the district office of her local Assemblymember and

later, in the office of the Chief Clerk, McGowan developed her knowledge of California's legislative process, rules and procedures. A graduate from UC Davis in 2018 with a Bachelor of Arts in International Relations, she is currently pursing a Master of Public Administration from the University of Southern California Price School of Public Policy.



PUBLIC PENSION PLAN FUNDING POLICY - PART TWO

Effectiveness of Amortization Methods Under Projected Investment Scenarios

One of the most important decisions made for public sector pension plans is adopting a funding policy that balances the needs of all stakeholders. In general, larger benefits require larger contributions. For a given benefit level, the purpose of a funding policy is to balance the level and volatility of contributions with the funded status of the plan. In this article, we continue to explore, compare, and contrast various methods of amortizing liabilities and their impacts on the contribution rates allocated to employers.

he first article of this series. Public Pension Plan Funding Policy: Effectiveness of Amortization Methods Under Deterministic Projections, developed a framework to help plan sponsors understand the funding policy implications of their choice of amortization method, if all actuarial assumptions are perfectly met. This article expands that discussion to focus on how the various amortization methods handle deviations from expectations. Specifically, this article looks at how the various amortization methodologies react to volatility in investment markets. We selected these particular amortization methods as they are the most commonly used. This is not an exhaustive list of funding methodologies. A plan should use the methodology that best meets the needs of its stakeholders.

Plan modeled :

For purposes of this article, we modeled a "typical" ongoing open public pension plan. We use a 7.0% expected return on assets,

which is a common assumption among public pension plans, an entry age normal actuarial cost method, and a fresh start for the amortization of the unfunded liabilities. We then explored multiple amortization methodologies. We set assets equal to 79% of liabilities, which is the aggregated funding level in the Milliman Public Pension Funding Index (PPFI) as of January 1, 2021. Additional key methods, assumptions, and plan provisions are listed in the appendix on page 46.

"Stochastic testing" involves using a random number generator to perform a statistical analysis where 1,000 or more runs are created to test the likelihood of future events. This is also sometimes referred to as Monte Carlo analysis. ")

Stochastic modeling:

In this article we focus on volatility inherent in investment markets. Therefore, we developed 1,000 "random walk" scenarios for the plan's actual asset returns via stochastic projections using a random number generator, the plan's asset allocation, and Milliman's capital market assumptions. "Stochastic testing" involves using a random number generator to perform a statistical analysis where 1,000 or more runs are created to test the likelihood of future events. This is also sometimes referred to as Monte Carlo analysis. In our projections, other than the actual investment returns, we assume that all assumptions are met and that there are no other actuarial experience gains or losses.

The stochastic testing in this article consists of asset return projections over the 40-year period generated using a normal distribution, a 7.00% geometric average annual return, and a standard deviation of 12.00%. The equivalent average arithmetic return is 7.72%.

Throughout the remainder of this article, we look at how each of the amortization methods reacts to sample scenarios from the stochastic projections.

Results under a single scenario =

Often, stochastic testing is used to create a "cone of uncertainty." This valuable tool for risk analysis will be explored in a later article

in this series. One limitation of cones of uncertainty is the illusion of smoothness. Therefore, before exploring cones of uncertainty, we focus on the path of single scenarios. As shown throughout this article, the path of a single scenario can be guite volatile and provides insight into how the various amortization methods handle asset volatility.

We examined each amortization method under a single scenario selected from the stochastic projections. When the scenarios are ordered from lowest to highest based on the cumulative return over the 40-year projection period, we selected the 500th scenario and define it as the "median." This median scenario had an annualized compound return of 6.93%, slightly less than the 7.0% expected. Details of the scenario, including the annual returns, can be found in the appendix.

Funded status =

The funded status under different amortization methods over the 40-year projection period for the median scenario are shown in Figure 2. The funded status here is the actuarial value of assets as a percentage of the total pension liability. The actuarial value of assets is a smoothed asset value, based on the market value of assets, but recognizing gains and losses over five years. This smoothing reduces the volatility of the funded status.

The funded status behaves similarly under the different methods. However, near the end of the projection period, the funded status begins to differentiate.

There are two broad generalizations we can make when the funded status is below 100% and all assumptions are met. First, shorter amortization periods lead to a higher funded status. Second, layered funding methods will lead to a higher funded status compared to a rolling method with the same amortization period.

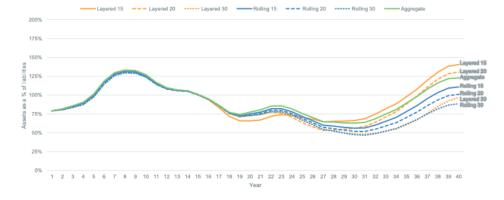
In this scenario, due to the high initial returns, the funded status reaches 100% by year 6 under all methods and maintains a funded status above 100% through year 15. However, over the next 15 years, the funded status deteriorates under all methods, and dips below 50% under Rolling-30 and Layered-30 methods. For the last 10 years of the projection, years 30 to 40, the funded status then improves again under all methods due to the high average returns during this period.

Layered-15 and Layered-20 end up with the largest funded status at the end of the period, while Rolling-30 and Layered-30 end up with the lowest funded status. There is a 51% spread between

Figure 1: Employer Contributions (500th scenario)



Figure 2: Funded Status (500th scenario)



Layered-15 (the highest funded status at 140%), and Rolling-30 (the lowest funded status at 89%). Rolling-30 and Layered-30 don't recover to 100% at the end of the 40-year projection period despite effectively reaching the expected 7% return and having reached well over 100% funded early on in this scenario.

If all assumptions are perfectly met with precisely 7% investment earnings each year, Rolling-30 would end the 40-year projection period at 89% funded, as seen in Public Pension Plan Funding Policy: Effectiveness of Amortization Methods. The slow reactions of the long amortization periods may be reason for some employers to move to a shorter amortization period. Note that recent funding guidance from both the Society of Actuaries' Blue Ribbon Panel on Public Pension Plan Funding | SOA and the Conference of Consulting Actuaries' Actuarial Funding Policies and Practices for Public Pension Plans (ccactuaries.org) specifically caution against long, rolling amortization periods.

The purpose of analyzing this scenario is to highlight the volatility that can occur under different amortization methods, assuming no benefit changes, or changes to the funding or investment policies. However, were this a real plan, the funded status under all methods is so high from years 7 to 9, at 125% or higher, that it's possible there would be an increase in benefits provided or changes to the funding or investment policy. Depending on the nature of the benefit changes during good times, the low funded status and high contributions in the

A note on actuarial versus market value of assets

following 10 to 20 years could be worse.

If the funded status were instead measured as a percentage of the market value of assets, rather than the smoothed value used above, there would be more volatility. Figure 3 shows the funded status on a market value basis (i.e., market value of assets as a percentage of the actuarial accrued liability) by year for the same median scenario.

The funded status under various amortization methods may move similarly, but employer contribution rates show striking differences between methods, particularly in the second half of the projection. ??

Employer contributions =

The funded status under various amortization methods may move similarly, but employer contribution rates show striking differences between methods, particularly in the second half of the projection. Before the initial layer is eliminated under the layered methods, rolling and layered methods move similarly, although methods with shorter amortization periods experience more volatility. At years 15, 20, and 30, the respective layered methods all have a drop in the contributions. From this point on, the layered methods are more volatile than the rolling methods.

The volatility under layered methods, particularly when paired with shorter amortization periods, may be challenging for plans sensitive to volatility in employer contributions. For example, under Layered-15, the contribution rate increases from 0% to 38% in just 10 years, from years 16 to 25. Under Layered-20, the contribution rates increase from 8% to 42% over a seven-year period, from years 23 to 29, then drop back to 0% over the next 10 years.

The average employer contributions are 13.7% under both Layered-30 and Aggregate methods over the 40-year period. However, the funded status at the end of the projection period is 97% under Layered-30, and 123% under the Aggregate method. This is primarily due to the relative responsiveness of the



Figure 3: Funded Status MVA Basis (500th scenario)

Figure 4: Employer Contributions (500th scenario)



Figure 5: Contribution Rates

500th Scenario	Layered 15	Layered 20	Layered 30	Aggregate	Rolling 15	Rolling 20	Rolling 30
Average	15.1%	14.5%	13.7%	13.7%	13.2%	12.9%	12.2%
Year 40 funded status	140%	130%	97%	123%	111%	101%	89%
Largest 1-year increase	8.7%	10.2%	4.0%	6.7%	5.2%	4.3%	3.5%
Largest 5-year increase	29.6%	32.1%	11.9%	22.8%	17.4%	14.5%	11.7%

Aggregate method, which created a higher funded status headed into the favorable return years 30 to 36.

The largest one-year and five-year increases in contribution rates may be challenging for some plans to manage, particularly under Layered-15 and Layered-20, where the increases are the highest.

The potential for counterintuitive contributions under layered methods

Another challenge of layered methods is that the changes in employer contribution rates aren't necessarily related to the funded status or returns at the time. Contribution rates may move in counterintuitive ways, based on what happened 15, 20, or even 30 years ago, depending on the amortization period.

An example in Figure 4 of contribution rates moving counterintuitively is when contributions rates increase almost 10% from years 34 through 37 under Layered-30. During these same years, returns are quite high, and every other method experiences a decrease in the contribution rate, with contribution rate decreases ranging from 5% under Rolling-30 to 20% under Layered-20.

Another example occurs in years 20 to 23, where all methods except Layered-15 have decreases in employer contributions. The increases in employer contributions under Layered-15 are due to the two years of favorable asset experience in years 4 and 5. Using smoothed assets means significant gains in the few years after that. As those layers peel away, the contribution rates increase.

The rolling periods bear a consistent relationship between the contribution rates and funded status, almost mirroring each other. The better the funded status, the lower the contribution rate. However, the relationship between funded status and contribution rates is not so strict with layered amortizations.

In Figure 6, the funded status and employer contributions under Layered20 are shown to illustrate the nature of this relationship.

From years 6 through 10, the employer contributions are zero (a contribution "holiday"). The employer contribution rates then increase from years 11 through 19. In year 20, the initial layer drops off, leading to a drop in the employer contributions from

17% of pay to 7% of pay. This occurs even though the funded status is 73%, well below 100%. This drop may seem counterintuitive to employers when the funded status is low and following nine years of increases in contribution rates. To add to the whiplash, after a couple of years of decreases, the contribution rates begin to increase again in year 23 rising to a peak of 42% of pay in year 29. This volatility in employer contributions may be difficult for plan sponsors to manage.

In contrast, the graph in Figure 7 shows the funded status and employer contributions under Rolling-15. Here the employer contributions behave intuitively based on the funded status. When funded status improves, employer contribution rates decrease and vice versa. Instead of a 10% decrease beginning in year 20, there is only a 3% decrease, from 19% of pay in year 20

Figure 6: Funded Status and Employer Contributions Under Layered-20 (500th scenario)

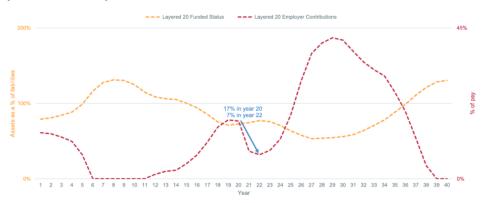


Figure 7: Funded Status and Employer Contributions Under Rolling-15 (500th scenario)



to 16% of pay in year 22. This more closely mirrors the small increase in funded status during these years.

Some stakeholders may prefer that contribution rates are not strictly linked to asset performance or current funded status. After all, budgets may be tighter at the same time that investment markets have suffered losses. While this may be the case, there are better ways to approach this issue than allowing the contribution rate to fluctuate based on experience that is 15, 20, or 30 years old. For instance, employers could contribute to a reserve fund when able to contribute more than the actuarially determined contribution and draw upon the reserve fund at other times.

When near 100% funded, there is consistency among the different methods. However, as the funded status moves away from 100% the methods begin to differentiate.))

The path matters =

The order of investment returns can play a key role in the funded status and contribution requirements. The scenarios immediately above and below the median scenario (in terms of cumulative asset returns) show radically different paths for funded status and contribution requirements despite having nearly identical aggregated returns over the period.

Which amortization method would best support the goals of the plan's stakeholders?

In the graphs to the right, the funded status under different methods moves similarly, as also seen in the median scenario studied. When near 100% funded, there is consistency among the different methods. However, as the funded status moves away from 100% the methods begin to differentiate. In each of these three scenarios, layered methods with shorter amortization periods end the 40-year projection horizon with the highest funded statuses.

Figure 8: Funded Status (501st scenario)

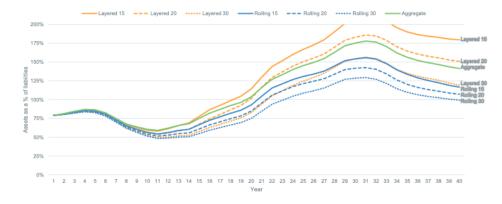


Figure 9: Employer Contributions (501st scenario)



Figure 10: Contribution Rates (501st scenario)

501st Scenario	Layered 15	Layered 20	Layered 30	Aggregate	Rolling 15	Rolling 20	Rolling 30
Average	12.0%	11.5%		10.6%	10.0%	9.9%	10.4%
Year 40 funded status	180%	151%		141%	117%	107%	99%
Largest 1-year increase	4.9%	4.0%	3.0%	5.4%	4.2%	3.5%	2.9%
Largest 5-year increase	19%	15%	12%	19%	15%	13%	11%

Figure 11: Funded Status (499th scenario)



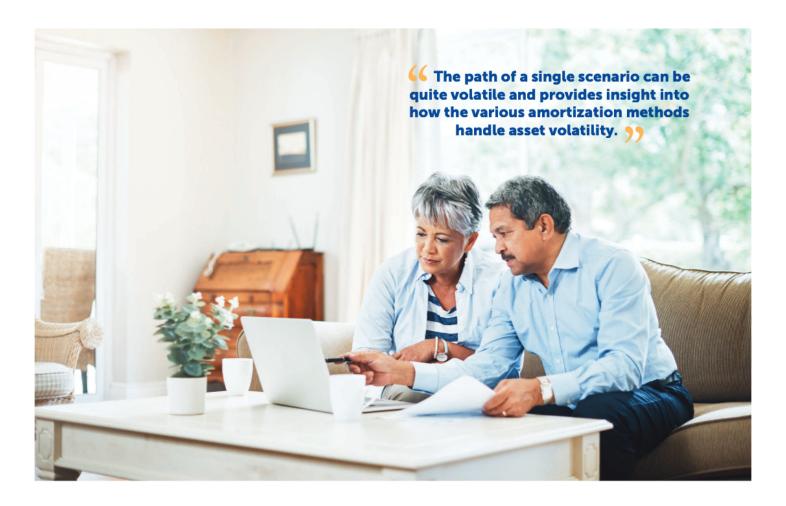


Figure 12: Employer Contributions (499th scenario)

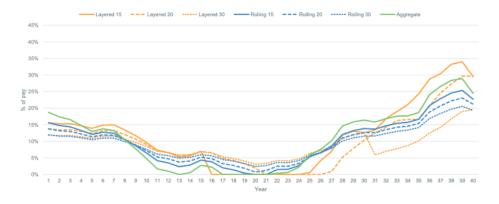


Figure 13: Contribution Rates (499th scenario)

499th Scenario	Layered 15	Layered 20	Layered 30	Aggregate	Rolling 15	Rolling 20	Rolling 30
Average	11.8%	10.3%	9.0%	10.8%	10.1%	9.8%	9.5%
Year 40 funded status	75%	66%	59%	74%	68%	64%	60%
Largest 1-year increase	4.9%	4.3%	2.6%	5.4%	4.1%	3.4%	2.7%
Largest 5-year increase	15%	13%	10%	14%	11%	9%	7%

There is not as much differentiation in employer contributions in the graphs to the left, compared to the median scenario studied. Consistent with the median scenario, contributions under rolling methods move together, and are generally less volatile, while contributions under layered methods are more volatile.

Volatility in employer contributions

Because volatility employer contributions can be a particular area of concern for some employers, we highlighted the employer contributions for all three scenarios. We first compare Layered-15 to Rolling-15 in Figure 14.

Under layered methods, as time passes, each individual layer gets shorter, and therefore the effective amortization period for a layered amortization will tend to be lower than a rolling amortization with the same "length." For this reason, it might make more sense to compare Layered-20 to Rolling-15, as shown in Figure 15.

Figure 14: Employer Contributions — Layered-15 and Rolling-15

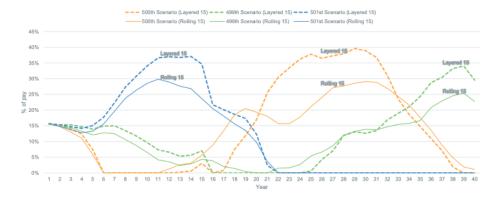


Figure 15: Employer Contributions – Layered-20 and Rolling-15



Employer contributions when using layered methods are more volatile, with higher peaks under all three scenarios shown.

Summary =

In this article we examined how the various amortization methodologies react to the volatility inherent in investment markets, with a focus on the path of single scenarios. The path of a single scenario can be quite volatile and provides insight into how the various amortization methods handle asset volatility.

Under all three scenarios shown, the average return effectively met assumptions. However, the order of investment returns had a significant impact on the funded percentage and especially the employer contributions during the 40-year projection horizon.

Under a single scenario, the various amortization methods led to funded statuses that moved similarly over time, but the employer contribution rates show striking differences between methods, particularly in the second half of the projection.



The rolling periods bear a consistent relationship between the contribution rates and funded status, almost mirroring each other. The better the funded status, the lower the contribution rate. Shorter amortization periods are more responsive, while longer amortization periods have less contribution volatility. The relationship between funded status and contribution rates is not so strict with lavered amortizations and can be counterintuitive. given the nature of layered amortization methods on contributions. Rolling methods, in contrast, respond to market events as expected and have lower levels of volatility in employer contributions.

While this article outlines some of the limitations of layered amortization methods, future articles will examine alternative funding policies that incorporate its advantages while partially mitigating some of the contribution volatility.

Although there are limitations to layered amortization methods, rolling amortization methods also present concerns. In many situations, plans with rolling amortization methods are more likely to have a "depletion date" under Governmental Accounting Standards Board (GASB) Statements No. 67 and 68. When a rolling amortization is used with a target of 100% funding, the net pension liability is never fully paid if assumptions are precisely met. Whereas, under a layered methodology, 100% funding will eventually be achieved, if all assumptions are precisely met. While we know that assumptions will never be precisely met, there can be negative consequences to having a depletion date under GASB 67/68.

The most appropriate amortization method for a plan will be based on the needs of the stakeholders.

Appendix: Key methods, provisions, and assumptions

PROJECTIONS

Assets: Assets are valued based on their fair value, with a five-year smoothing of all fair value gains and losses, except where noted. The expected return is determined for each year based on the beginningof-year fair value and actual cash flows during the year. Any difference between the expected fair value return and the actual fair value return is recognized evenly over a period of five years.

Initial asset values are such that the funded status of the plan at the beginning of the projection period is 79%.

Investment earnings: Stochastic projections over the 40-year period were generated using a normal distribution, a 7.00% geometric average annual return, and a standard deviation of 12.00%. The

equivalent average arithmetic return is 7.72%.

We generated 1,000 scenarios. The median annualized compound return over the 40-year period is 6.93%. The mean annualized compound return over the 40-year period is 7.00%.

Actuarial cost method: Liabilities are valued using the entry age actuarial cost method.

Data: The population is made up of 50% active members, 15% terminated vested members, and 35% retired and in-pay members. Within each status group, males and females are equally weighted by count.

The population is not assumed to grow or decline. Future members are assumed to have the same ages at entry and distribution by sex of the present members that they replace.

Plan provisions: Normal retirement benefits are equal to 2% of the highest consecutive three years of pay per year of service, up to 30 years. Normal retirement benefits are payable at age 65. Upon retirement, benefits increase annually at 2%.

Early retirement benefits and optional forms of benefits are actuarially equivalent to the normal form of payment.

YEAR-OVER-YEAR RETURNS

We highlighted several scenarios. We ordered the scenarios from lowest to highest based on the annualized compound return over the 40-year period and defined the "median" as the 500th scenario. We then highlighted the two scenarios closest to this median scenario (the 499th and 501st scenarios). The returns by year under these scenarios are in the tables below.

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500th (median) Scenario Returns

Mean return: 7.78%

Annualized compound return: 6.93%

Year	Return	Year	Return	Year	Return	Year	Return
1	12.65%	11	1.04%	21	2.09%	31	22.49%
2	15.98%	12	8.51%	22	-19.38%	32	18.76%
3	10.23%	13	3.47%	23	15.82%	33	7.19%
4	42.06%	14	-4.91%	24	-4.38%	34	20.98%
5	31.45%	15	-0.81%	25	-1.44%	35	11.14%
6	-8.53%	16	-18.65%	26	-6.82%	36	26.34%
7	-7.40%	17	1.00%	27	13.31%	37	6.95%
8	-2.44%	18	45.60%	28	5.91%	38	2.41%
9	15.19%	19	18.84%	29	-1.84%	39	1.47%
10	5.16%	20	-1.37%	30	11.54%	40	11.39%

499th Scenario Returns

Mean return: 7.57%

Annualized compound return: 6.93%

Year	Return	Year	Return	Year	Return	Year	Return
1	11.47%	11	11.16%	21	11.84%	31	-16.72%
2	1.78%	12	17.32%	22	14.62%	32	8.16%
3	17.92%	13	-2.77%	23	-7.07%	33	18.47%
4	5.74%	14	1.44%	24	-4.34%	34	-13.34%
5	-11.62%	15	17.76%	25	15.30%	35	-14.36%
6	29.11%	16	20.17%	26	-0.06%	36	7.01%
7	14.67%	17	3.20%	27	-1.85%	37	9.29%
8	14.95%	18	3.64%	28	14.52%	38	29.11%
9	8.00%	19	7.61%	29	-2.23%	39	26.08%
10	-2.36%	20	-0.51%	30	26.88%	40	12.79%

501st Scenario Returns

Mean return: 7.49%

Annualized compound return: 6.93%

Year	Return	Year	Return	Year	Return	Year	Return
1	11.29%	11	22.43%	21	7.93%	31	-3.32%
2	10.37%	12	10.82%	22	-5.10%	32	-4.87%
3	5.68%	13	10.51%	23	14.66%	33	9.35%
4	-8.59%	14	21.32%	24	19.16%	34	6.21%
5	-12.06%	15	4.33%	25	11.76%	35	16.21%
6	-15.20%	16	11.44%	26	9.62%	36	-3.03%
7	7.61%	17	11.77%	27	7.02%	37	0.46%
8	24.50%	18	7.33%	28	14.07%	38	9.36%
9	-17.34%	19	36.46%	29	-0.19%	39	7.92%
10	2.87%	20	21.74%	30	10.58%	40	4.33%

VALUATION ASSUMPTIONS

Contributions

Member contributions: Employee contributions are 6% of pay annually, regardless of the funded status of the plan.

Employer contributions: Service cost plus amortization of Net Pension Liability (NPL) minus employee contributions, but not less than zero. Note that for the aggregate actuarial cost method, the service cost is defined under that actuarial cost method, and there is no component for the amortization of the NPL.

Demographic assumptions

Mortality: PubG-2010 general amount-weighted mortality rates projected with MP-2019.

Termination: Service-based rates starting at 20% in the first year of service and grading to 1.5% at 22 or more years of service.

Retirement: Rates vary by age and service based on retirement eligibility up to 100% at ages 70 or older.

Disability: Age-based rates starting at 0% and grading to 0.1% at retirement eligibility.

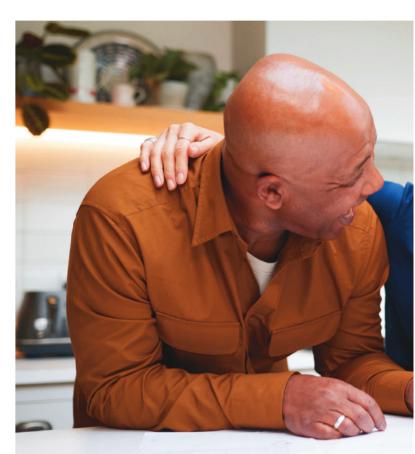
Discount rate: Based on a 7.0% annual investment return.

Projected payroll increases: Total plan payroll increases by 3.0% per year. Individual members receive increases due to promotion and longevity.

EDITOR'S NOTE: =

The first in this series, Public Pension Plan Funding Policy: Effectiveness of Amortization Methods Under Deterministic Projections, can be found on page 39 of the Spring 2022 issue of SACRS Magazine.

¹ As an example of how common benefit improvements are when funded statuses are high, we look back to the last time that funded statuses were as high as 120%, just before the dot-com bust of 2000-2002. Consider findings of a survey conducted by the Wisconsin Legislative Council, the "2002 Comparative Study of Major Public Retirement Systems." The report compared significant features of major state and local public employee retirement systems in the United States. The report considered retirement benefits provided to general employees and teachers. According to the survey, 30 of 85



plans increased their benefit multipliers between 2000 and 2002. In addition, 32 of the 85 plans studied increased their benefit multipliers between 1996 and 2000 (some appeared both times).



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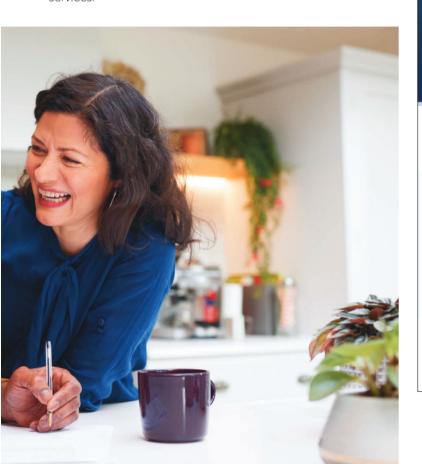


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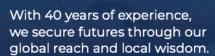
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The Voice for Public Pensions

Fall 2022 | Volume 35 |

Number 3



NCPERS Message



Public Pension Staffing: A New Tool to Benchmark **Compensation and Benefits Packages**

he COVID-19 pandemic and historic levels of workers quitting their jobs have rapidly reshaped the American workplace over the last few years. At the same time, the makeup of the workforce has changed dramatically. Nearly 29 million Baby Boomers retired in 2020, an increase of more than 3 million from the year prior, according to Pew Research Center.

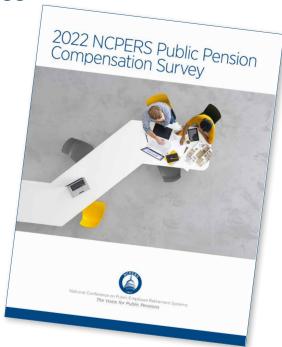
During this era known as "the Great Resignation," recruiting and retaining talent has been a significant challenge across industries. In the most recent NCPERS Public Retirement Systems Study, 56 percent of reporting funds said they anticipate having a problem attracting and retaining skilled staff.

So, in early 2022, NCPERS met with a small group of member funds to explore a compensation study. The goal was to compare the compensation and benefits offered to senior employees to help ensure these key positions were filled with skilled and qualified staff.

Working with the non-profit research firm Cobalt Community Research, NCPERS developed the inaugural Public Pension Compensation Survey, which will be published this month. The report features data from 153 funds representing over 9 million active and retired individuals and almost 12,000 staff positions.

NCPERS will host a webinar on October 19 to present key findings from the Survey and discuss employee recruitment and retention trends in the public pension industry. Register here.

The Public Pension Compensation Survey is intended to help funds benchmark against their peers as they evaluate their compensation



and benefits packages going forward. The data is available in an online interactive dashboard, where you can filter data in a number of ways to help optimize the mix of funds to which you would like to compare your organization. Survey participants should have already received information about how to access the dashboard and report.

Learn more about the survey and find out how to order a copy of the report here. If you have any questions, please email lizzy@ ncpers.org.

In This Issue

Liability Aware Investing (LAI) for Public Pension Plans

Public pension plans tend to focus disproportionately on investment performance while paying only cursory attention to liability performance. We believe public pension liabilities can, and deserve to, play a more central role in portfolio construction and holistic performance measurement.

The Importance of Private **Enforcement of Federal Securities Laws: Institutional Investors Continue to Outpace SEC**

This article discusses why it remains important for public pension plans to continue to monitor and participate in securities class actions so that plan assets can be maximized. It may not be in plans' best interests to rely solely on government regulators.

Is Shipping Cost Inflation About to Peak?

From their peak earlier this year, spot trucking rates have been in decline, marking a shift versus prior years—and given how impactful shipping-cost inflation was across the broader economy from 2020 to 2022, the recent change in trend has widespread implications for many companies.

Recent Trends in Securities Litigation

Securities fraud class action litigation is a paramount means through which investors of all types, including institutional pension funds, can recover investment losses in cases of corporate misconduct. Securities class actions have been a growing field, fueled by increases in cryptocurrency filings, COVID-19 filings, and SPAC filings.

12 Monitoring Global Class **Actions as Part of ESG Policies**

The past few years have shown that the current social justice zeitgeist has increased market and shareholder attention to company ESG policies. Indeed, global class actions, ESG and investor stewardship principles have been developing on parallel tracks, but in the months and years to come, they are likely to intersect with increasing frequency.

14 The Impact of Inflation on **Public Pensions**

Over the last year inflation has hit record highs, creating a strong effect on our goods. services, travel, and lives in general. In this article, we cover the most common ways that high inflation may affect public pension plans and their funding.

16 ESG From the Practitioner Point of View

Environmental, Social and Governance (ESG) investing has gained immense popularity in the last few years, and there is a good likelihood the practice will continue to see rapid adoption in the future. For practitioners of ESG investing, the challenge of doing good and doing well often relies on an old routine.

18 Market Perspectives: The **Secondary Market**

Many pension funds are finding that the strong performance of their private market portfolios coupled with declines in liquid asset prices have left them over-allocated relative to their private equity targets. Some are considering whether and how to rebalance their portfolios. Goldman Sachs Asset Management's Suzanne Gauron highlights a few considerations for secondary market selling.

20 Proposed Climate Change **Disclosure Rule for Public Companies**

In March 2021, the U.S. Securities and Exchange Commission voted to implement a new rule that requires public companies to disclose climate-related risks. greenhouse gas emissions, and carbon footprints. While the rule would ensure disclosure of information relevant to many investors' decisions, it is also controversial both with regard to its subject matter and its disclosure regime and remains subject to review.

21 The Fed's "Summer of 75" **Closes with Another Big Hike**

Persistent inflation has left the Fed with little choice but to continue its recent run of large interest rate hikes. With monetary policy now firmly in restrictive territory, we expect a moderation in inflation...but at the likely cost of weaker job creation and slower growth.

23 Growth Pains Lead to Lessons Learned

After relentless multi-year outperformance, growth stocks around the world have finally seen sustained and significant underperformance. The end of the decade-long bull run for growth had been predicted many times over, but in our view, what finally set the end in motion were the downstream impacts of persistent inflationary pressures.

Liability Aware Investing (LAI) for Public Pension Plans

By: Michael Buchenholz, CFA, FSA and Jason Malinowski, CFA

n 1959, Harvey Haddix pitched 12 perfect innings for the Pittsburgh Pirates. Despite what some consider to be the best pitching performance in baseball history, the Pirates actually ended up losing the game 1-0. In a similar respect, public pensions that focus solely on investment performance are only watching one-half of each inning. In order to truly gauge a winning performance, one must look up and occasionally check



the scoreboard to see how the liabilities are performing. We believe public pension liabilities can, and deserve to, play a more central role in portfolio construction and holistic performance measurement.

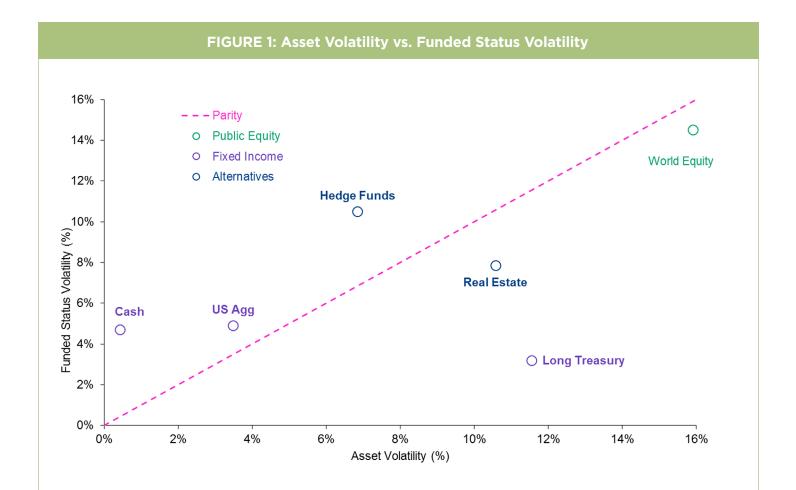
Pension assets and liabilities are inextricably linked through the expected return on assets (EROA) discounting mechanism. Realized investment returns drive plan assets, but also plan liabilities as a consequence of their impact on asset valuations and thus forward-looking expected returns. For example, a 70 public equity / 30 fixed income portfolio would have lost roughly 10.5%

for the fiscal year ending June 30th, 2022 due, in part, to rising interest rates and falling equity valuations. If we only mark down the assets while ignoring the positive revaluation impact of more favorable return expectations on liabilities, we may be perceiving a distorted view of plan health.

We define **Liability Aware Investing (LAI)** as a broad framework that explicitly recognizes the linkage between assets and liabilities and funded status volatility as a holistic measure of total plan risk that quantifies the co-movement or tracking error of plan assets and liabilities. Importantly, LAI is NOT corporate pension

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Liability Aware Investing can augment and enhance the set of performance and risk metrics a plan evaluates.

liability-driven investing (LDI) applied to public plans. Rather, LDI can be conceptually understood as narrow application of the broader LAI framework where the liability reference is prescribed as a portfolio of high-quality bonds instead of based on the expected return of the actual portfolio held.

Traditionally, plans focus on asset volatility as the main barometer of portfolio risk. However, by ignoring the correlation between assets and liabilities, risk may in fact be overstated. Likewise, when shifting from a traditional asset-only framework to an LAI framework, the relative attractiveness of asset classes is repositioned. For example, Public Equity, whose expected return tends to rise in response to market drawdowns, becomes more attractive while others like Cash appear less attractive. Through LAI we are also led to the sensible conclusion that long-dated assets are a good match for long-dated pension liabilities. While these findings are notable, the utilization of LAI in portfolio construction leads only to moderate asset allocation changes without reshaping the typical public portfolio into something unrecognizable.

Rather than replace current practice, LAI can augment and enhance the set of performance and risk metrics a plan evaluates. In this way, it can be a useful tool for communicating with investment committees and other plan stakeholders. It can also be leveraged as a tool in portfolio construction. By expanding the set of available analytics, we can discern portfolios which are ostensibly similar through an asset-only lens but deviate under an LAI lens. LAI also gives credence to rebalancing while confronting market volatility. Not only are you "buying low" and "selling high," but also curbing liability values.

In short, the LAI framework offers an additional tool to measure risk and keep score. If plan sponsors want to maximize their chances of beating their liabilities, they must follow the whole game.

To learn more about liability aware investing for public pension plans, read the full white paper.

The Importance of Private Enforcement of Federal Securities Laws: Institutional Investors Continue to **Outpace SEC**

By: Javier Bleichmar, Nancy Kulesa, and Erin Woods Bleichmar Fonti & Auld LLP



ension trustees have the fiduciary responsibility to act in the best interests of plan participants. One of the most important responsibilities is to oversee fund investments. Trustees often seek to fulfill this oversight role, in part, by establishing procedures to monitor and participate in securities class action lawsuits that impact the fund's portfolio. By participating in these matters, a pension plan can recover funds lost as the result of misconduct and can enhance the value of plan assets.

Since the passage of the PSLRA, institutional investors have achieved tens of billions of dollars in recoveries.

The SEC serves as an important line of defense for investors against corporate malfeasance. However, since Congress enacted the Private Securities Litigation Reform Act of 1995 ("PSLRA"), expressing its clear preference that institutional investors lead shareholder actions, public pension plans have repeatedly demonstrated that they play an indispensable role protecting investors and recovering for corporate misconduct. Since the passage of the PSLRA, institutional investors have achieved tens of billions of dollars in recoveries. In many instances, the recoveries outpace those achieved by the SEC in related matters. The chart below shows the disparity.

This trend of outperformance has continued and suggests that institutional investors' participation in securities litigation is as important as ever. Take for example, the recent securities class action The Police Retirement System of St. Louis v. Granite Construction Incorporated, 19-cv-4744 (N.D. Cal.). In March 2022, a federal district court approved a \$129 million resolution in the case, which concerned allegations of accounting fraud perpetrated by Granite and several of its senior executives.



Consistent with the historical trend, on August 25, 2022, the SEC announced that it resolved similar claims of financial reporting fraud against Granite and several former executives for approximately 90 percent less than what investors achieved. Specifically, Granite agreed to pay \$12 million to resolve the SEC's claims and the company's former CEO and two former CFOs agreed to return a total of roughly \$1.9 million in bonuses and compensation to Granite. While the SEC is continuing to pursue claims against another former Granite executive, the results the SEC has achieved to-date suggests that the agency will not reach the level of renumeration achieved in the class action.

The disparity in the results achieved shows that it is not in pension plans' best interests to rely solely on public enforcement. Indeed, the SEC has different goals when instituting an action as compared to private investors. In private securities litigation, the goal of a plaintiff is generally to achieve the largest possible monetary recovery. The SEC has a broader mission which, in addition to protecting investors, includes maintaining fair, orderly and efficient markets and facilitating capital formation. Significantly, the SEC states that "[w]hile in some cases, ill-gotten gains disgorged by defendants are returned to defrauded investors," that is not always the case as it is with successful securities class actions.

The resolution of the Granite matters demonstrates that it remains essential for public pension funds to continue to monitor and participate in securities litigation matters, when warranted, so that plan assets can be maximized.

Disclosure Statement

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Is Shipping Cost Inflation About to Peak?

By: Yan Krasov, CFA, Partner, William Blair Investment Management



rucking is the largest input into shipping costs across the U.S. economy and accounts for an estimated 80% of total freight spending, according to the American Trucking Association.

For goods that need to be shipped immediately by truck, the spot trucking rate serves as the prevailing price that shippers and trucking providers agreed upon.

According to DAT Freight and Analytics, trucking spot rates increased by more than 100% from their trough in May 2020 to their recent peak in January 2022 (both including and excluding the cost of fuel). In the first quarter of 2022, trucking spot rates were tracking up as much as 20% to 30% year-over-year, but they have been falling sharply since then.

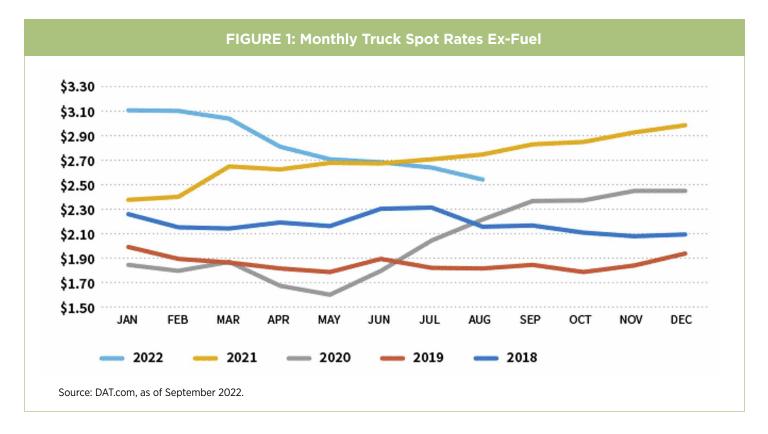
Demand for trucking is more volatile than the overall economy due to the "bullwhip effect" of inventory movement.

We expect spot rates to continue to trend lower year-over-year. All in, we believe trucking spot rates could fall 25% to 35% from their peak in early 2022 to their trough, potentially by the end of 2023.

What's Going On?

Unlike in normal boom-and-bust trucking cycles, the initial downtick in trucking spot rates in 2022 appears to have been mostly demand-driven. Normally, there is an influx of trucking supply that is chasing higher rates, within 6 to 12 months of the initial rate increases. However, this time, based on recent publication of new truck sales and orders from ACT Research, it appears that trucking supply had been growing at much more modest rates than in prior cycles, until recent months, when new truck sales began to accelerate.

To understand these supply-demand dynamics, recall that over the past two years we saw a surge in freight-cost inflation driven by a number of factors. An overall increase in consumer income from stimulus checks, coupled with a strong recovery in employment, drove consumer goods demand to record highs. During the pandemic much of that spending shifted away from services, like travel, concert attendance, and restaurant dining, and toward goods, like furniture, electronics, and home improvement products. As a result, retailers rushed to restock their shelves to meet the unexpected surge in demand, starting in the summer of 2020. However, the additional trucking supply needed to transport



these goods was not available, as production of heavy-duty trucks was constrained by a shortage of parts, including semiconductors (as we saw in the automotive industry as well). This combination led to a significant increase in spot rates over the past two years.

According to ACT Research, recent months have shown an uptick in new truck sales above normal replacement levels, yet the order backlogs for original equipment manufacturers remain stretched, indicating further potential supply that could be added to the market, which may help relieve cost pressures. In addition, if consumer spending were to "normalize" to the pre-COVID mix of consumption between goods and services, an incremental 10% to 20% of freight demand could be removed from the system. This would further help alleviate the recent freight cost pressure for shippers, especially if the supply of new trucks continues to grow.

Investment Implications

Demand for trucking is more volatile than the overall economy due to the "bullwhip effect" of inventory movement. Therefore, not every downturn in freight demand necessarily leads to a broader economic recession. However, it does typically coincide with at least decelerating gross domestic product (GDP) growth, as inventories transition from being additive to GDP to being neutral or detracting, as seen in data from the first and second quarters of 2022.

Moreover, in our opinion, the fall in spot rates should meaningfully curtail the pricing power of transportation providers in the second half of 2022 and 2023, and that could benefit shippers by reducing their costs. For companies with stable revenue streams unaffected by swings in consumer and industrial demand, margin relief from falling transportation costs should begin in the second half of 2022 and carry into 2023.

This article is excerpted from our blog, which you can read in full here.

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Recent Trends in Securities Litigation

By: Jonathon Saidel and Jack Stalzer, Rosen Law Firm

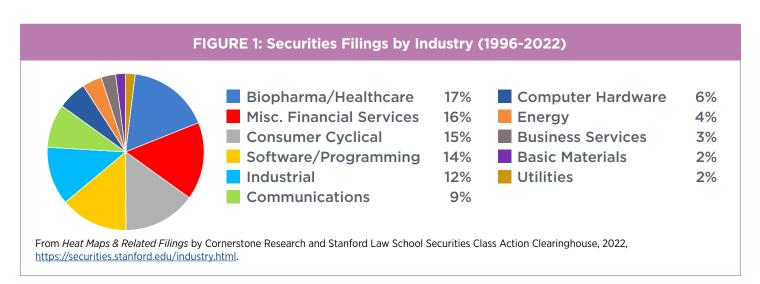
ecurities litigation, a paramount means through which pension funds and other investors can reclaim investment losses stemming from corporate misconduct, remains an active and thriving subset of litigation in the aftermath of the COVID-19 pandemic. In addition to an increase in the number of securities class action filings, maximum dollar loss and disclosure dollar loss, two measures of the damages incurred by plaintiffs in securities class action lawsuits, have grown to all-time highs. In fact, the maximum dollar loss index rose 150% in the first half of 2022, making it more than triple the 1997-2021 semiannual average. This indicates that investors are attempting to recover more of their losses

through securities class action lawsuits than at any other time. Pension funds find themselves at the forefront of this legal arena as they increasingly act as lead plaintiff in such cases.

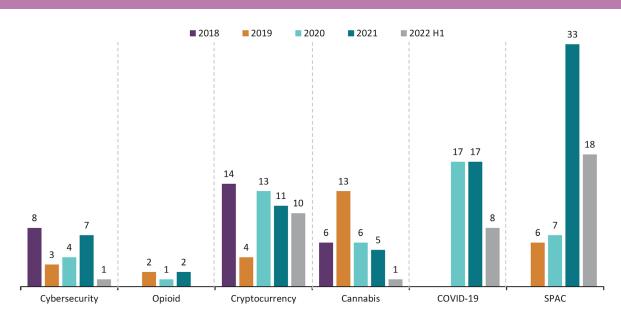
Historically, securities class action filings rise when markets decline because during these times, investors focus on identifying valid explanations for the fall in asset values, one of which is corporate misconduct. This makes the recent rise in securities class action suits particularly interesting, as it has taken place while financial markets boomed during 2020-21.



The growing popularity of price-volatile crypto currencies and initial coin offerings (ICOs) that often fail to disclose their associated risks, along with the rise of Special Purpose Acquisitions companies (SPACs), a quick way of going public or conducting a merger with minimal due diligence and transparency requirements, have created ample opportunities for litigation. Furthermore, the industry that has composed the largest share of securities filings since 1996, the biopharma and healthcare industry (see Figure 1), is home to another leading type of securities cases: COVID-19 filings, which deal with companies that created products to fill a demand generated by the virus. Half of the COVID-19 filings in the







From Securities Class Action Filings 2022 Midyear Assessment by Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse, 2022, https://securities.stanford.edu/research-reports/1996-2022/Securities-Class-Action-Filings-2022-Midyear-Assessment.pdf.

first half of 2022 (four) were within the healthcare and biopharma industry. COVID-19-related cases continue to be filed at elevated levels in 2022.

Both SPACs and cryptocurrency cases compose larger shares of securities fraud class action cases in the first half of 2022 than they did in the past, with 18 and 10 filings, respectively. Therefore, these types of cases will likely exceed last year's totals, with technology-related SPAC filings already surpassing the 2021 total. This trend will likely persist, thereby providing numerous opportunities for securities class actions, regardless of the performance of financial markets.

Beyond the above case-types fueling securities litigation growth, dropping asset prices and the onset of a bear market also increase litigation, as investors experience losses more frequently, some of which can be recovered in instances of corporate wrongdoing in a class action. Therefore, securities litigation is growing (by dollars lost) and provides investors such as pension funds recourse to recover losses. This opportunity is especially important for underfunded plans.

Reference:

Cornerstone Research and Stanford Law School Securities Class Action Clearinghouse, 2022, Securities Class Action Filings 2022 Midyear Assessment, https://securities.stanford.edu/research-reports/1996-2022/ Securities-Class-Action-Filings-2022-Midyear-Assessment.pdf.

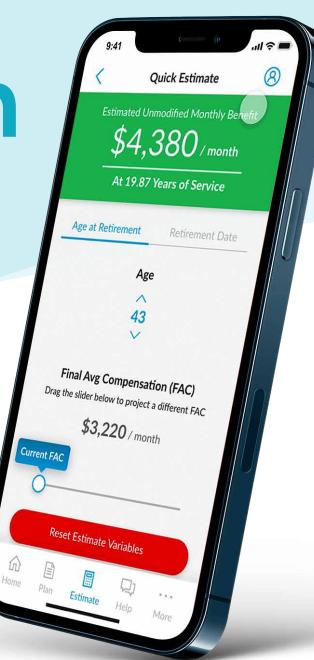
Jonathon (Jon) Saidel has a long and distinguished career in Pennsylvania politics and in the roles of attorney, accountant and author. He served as Philadelphia city controller for four terms, each time earning reelection by a wide margin, and enacting financial reforms that have saved taxpayers upwards of \$500 million. Later, in 2010, he went on to campaign for lieutenant governor of Pennsylvania, where he was runner-up to Scott Conklin. A lifelong resident of Northeast Philadelphia, Jon's tireless dedication to fiscal discipline reduced the city's tax burden and spurred economic development. Today, Jon is a partner at the Rosen Law Firm.

Jack Stalzer works as an associate at the Rosen Law Firm's Institutional Investor Relations division, providing individualized portfolio monitoring services to public and union pension funds, Taft Hartley, mutual funds, hedge funds, endowments, and family offices that identifies potential recoverable losses for our institutional clients' portfolios due to corporate fraud and misconduct.

NCPERS PensionX Digital Platform

NCPERS has partnered with Digital Deployment to offer its members a 10% DISCOUNT on PensionX, the premier digital platform that securely enables pensions to engage with active and retired participants via a mobile self-service app and portal.





Monitoring Global Class Actions as Part of ESG Policies

By: Noah Wortman, Pogust Goodhead



rstock.com

he past few years have shown that the current social justice zeitgeist has increased market and shareholder attention to company ESG policies. Indeed, global class actions, ESG and investor stewardship principles have been developing on parallel tracks, but in the months and years to come, they are likely to intersect with increasing frequency. Empowered by evolving collective redress regimes, classes of claimants may bring a wide range of new cases against defendants who have acted unlawfully in matters related to environmental, social and corporate governance issues. That is why it is important for institutional investors, such as pension funds, to have policy and procedure in place to make sure that they are monitoring and managing global securities litigation and possible avenues of legal redress options across the world.

A growing number of lawsuits on the basis of ESG statements in securities filings, including bond offering documents, have been filed against corporations and governments. A stakeholder's right to pursue civil remedies varies depending on jurisdiction, but the scope of information that can form the basis of a lawsuit is expanding with greater inclusion of ESG.

ESG disclosures have historically been governed mostly by voluntary frameworks. But the voluntary nature of ESG reporting is on the wane, as evidenced for example, by the requirement (since March 2021) for banks, private equity firms, pension funds, hedge funds

and other asset managers to comply with sweeping new European rules set forth in Regulation 2019/2088 on Sustainability-related Disclosures in the Financial Services Sector (EU Sustainable Finance Disclosure Regulation (SFDR)).

As ESG standards and disclosure become not just best practice, but mandated by various cross-cutting regulations, the opportunity for claims based on alleged negligent misstatement, misrepresentation or omissions in these disclosures has opened. Such claims have built on an existing body of case law establishing the clear liability of businesses for providing misleading information about their business practices.

A growing number of lawsuits on the basis of ESG statements in securities filings, including bond offering documents, have been filed against corporations and governments.

As countries increasingly mandate disclosures through legislation such as the SFDR, the Modern Slavery Act 2015 (UK), Transparency in Supply Chains Act 2010 (California), and the Duty of Vigilance Act (France), the publicly available information about companies' ESG practices is likely to only increase.

Investor stewardship principles and practices are being adopted in many markets around the world, as the development of stewardship codes for investors complements the similar development of codes of corporate governance that have been established for companies. Indeed, the International Corporate Governance Network ("ICGN") defines stewardship as: "the responsible management of something entrusted to one's care. This suggests a fiduciary duty of care on the part of those agents entrusted with management responsibility to act on behalf of the end beneficiaries."

The growing importance of social factors within corporate sustainability frameworks may continue to create new areas where investors or consumers identify gaps between disclosures and practices.

As Director - Global Collective Redress at Pogust Goodhead, Noah brings his extensive experience in assessing and analyzing corporate misconduct in the financial markets, as well as his commitment to finding global litigation and shareholder engagement solutions to investors across the world. He has extensive experience advocating for global investors, promoting corporate governance and investor stewardship, and implementing strategies to achieve collective redress.

Noah splits his time between Philadelphia and London with a global remit where he strives to provide access to justice for global institutional investors and others via engagement and litigation strategies in global shareholder litigation.



The Impact of Inflation on Public Pensions

By: Matthew Strom, FSA, MAAA, EA, Segal



s consultants and advisors to public pension plans, we often receive this fair and intriguing question from stakeholders: "What impact will high inflation have on public pensions?" In this article we provide the most common considerations.

Cost-of-Living Adjustments (COLA)

Some plan designs tie increases to annuities in payment status to changes in the consumer price index (CPI). While many of these designs include "caps" or are based on a portion of CPI changes, the current level of inflation will likely generate additional unfunded liabilities for these plans. This could translate to a higher required contribution or delay the number of years until full funding. While a sizeable number of plans (47% of those providing increases, according to the June 2022 NASRA Issue Brief) provide automatic COLAs linked to inflation, many plans do not provide automatic increases or offer a fixed increase that is not tied to inflation. Most plans will see a decrease in purchasing power for their current retirees.

Salaries

Conventional economic theory states that a portion of an employee's annual salary increase is tied to current inflation. However, with CPI up over 9% for the year that ended in June, it is unclear how much of that will flow through to employees via wage increases, and how quickly. Larger-than-expected increases in salaries could result in increased unfunded liabilities and higher levels of "normal cost" funding. However, as many public systems receive contributions tied to payroll, if higher-than-expected contributions exceed the Actuarial Determined Contribution in expected dollars, that would partially mitigate the increase in unfunded liability.

While a sizeable number of plans provide automatic COLAs linked to inflation. many plans do not provide automatic increases or offer a fixed increase that is not tied to inflation.

Investment Return

Considering that nominal returns on investments can be thought of as real returns in excess of inflation, pension funds' total portfolio returns may be expected to increase in periods of high inflation. However, real returns on equities and fixed income are more nuanced and are subject to volatility from several economic factors. High inflation can be correlated with lower equity returns and can also erode the value of bonds that are not indexed to inflation. Other investments, such as commodities, may increase in value during periods of high inflation.

Demographics

Periods of high inflation may also have demographic effects. If active membership decreases due to layoffs, costs could be lower in the long run, but be inflated in the short run as a percentage of payroll (or result in a decreased contribution base), particularly for legacy unfunded liability. Delayed retirement dates caused by higher prices of consumer goods and healthcare could result in shorter periods of retirement and a decrease in unfunded liability, partially offset by potentially increased monthly benefits.

The Bottom Line

Except for some COLA designs and potential investment impacts, periods of high inflation generally do not have a direct, immediate impact on public pensions. Typically, the effect is delayed and is based on other factors related to inflation; and may not have as great an impact on plan costs as the prices of goods and services.

To understand the potential impact, plan sponsors and their actuaries could thoughtfully model projection scenarios where these factors are considered. However, the true impact will only be determined in hindsight as actual experience emerges over time. •

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ESG From the Practitioner Point of View

By: Ricardo Daley, Victory Capital Management



nvironmental, Social and Governance (ESG) investing has gained immense popularity in the last few years and there is a good likelihood the practice will continue to see rapid adoption in the future. For practitioners of ESG investing, the challenge of doing good and doing well often relies on an old routine.

Active portfolio managers who consider ESG and/or responsible investing principles, while also seeking to produce alpha, should start by getting the fundamentals down. This is especially the case for small cap managers.

Quality and the Role of Rating Agencies

From the perspective of THB Asset Management, a Victory Capital Investment Franchise (THB), the process should start with a focus on quality, which is typically revealed by fundamental security analysis.

Some managers, however, may delegate the ESG component of their research to third party rating agencies. But layering an ESG rating screen atop current investment processes may be imprecise. ESG ratings are somewhat subjective and rife with inconsistency.

For example, some rating agencies include controversies (e.g., bad behavior of management) in a rating. Others don't. They may disclose controversies, but they won't impact their rating.

Rating agencies don't produce consistent ESG scores because data collection processes are different from agency to agency. How they analyze data is also dissimilar. And the resources they devote to any individual company can often be constrained. The three big rating agencies are, after all, for-profit businesses.

An example of rating inconsistency is revealed by how often the agencies agree. Each offers an A rating to a host of companies. But

From the portfolio manager's perspective, relying solely on published ESG ratings filters out many small companies for whom compliance might be burdensome.

within that universe, only 16 percent share the same rating from all three providers.

There is also the fact that not all public companies get rated. For example, MSCI covers nearly all of the S&P 500 companies. That rating coverage applies to about two-thirds of Russell small-cap companies and slightly more than a quarter of the Russell micro-cap universe.

This creates opportunities for active portfolio managers.

A Holistic Approach to ESG

Rating agencies rely on compliance. And compliance can be expensive. A public company's ability to marshal the human and financial resources to compile information required by an ESG rating agency can have a meaningful impact on that company's ability to garner a favorable ESG score.

From the portfolio manager's perspective, relying solely on published ESG ratings filters out many small companies for whom compliance might be burdensome. A small company (even one with \$1 billion in capital) that doesn't report to any of the agencies, may get overlooked or under-rated.

So, it is important for portfolio managers to maintain an active approach and engage with companies to explain what information they are looking for and why it's important in their investment decision-making process.

In this way, portfolio managers need to take a holistic approach to ESG.

The takeaway for portfolio managers is to not look at any given data point as purely black or white. There is plenty to be missed in the broader picture. Without delving deeper into the circumstances around a catalyst, managers might miss a very reasonable explanation for why an ESG issue exists. So, it's possible to miss how a company's management is addressing it.

ESG issues are not always black or white. There are myriad shades of gray that can reveal much more about a company than any single data point suggests.

Importantly, missing the shades of gray can constrain alpha for clients. This is especially the case with small cap companies.

To learn more, we invite you to listen in to this podcast as Chief Investment Officer of THB Asset Management, Chris Cuesta, talks about investing with purpose. •

Many Shades of ESG: A holistic view of the alpha opportunities



- Nuances in data when evaluating ESG in small caps
- Areas of greatest opportunity and greatest challenges
- Specific examples of why active management can offer advantages
- Where ESG investing might be headed in the next five years

Disclaimer

All investments carry a certain degree of risk including the possible loss of principal, and an investment should be made with an understanding of the risks involved with owning a particular security or asset class. Interested parties are strongly encouraged to seek advice from qualified tax and financial experts regarding the best options for your particular circumstances.

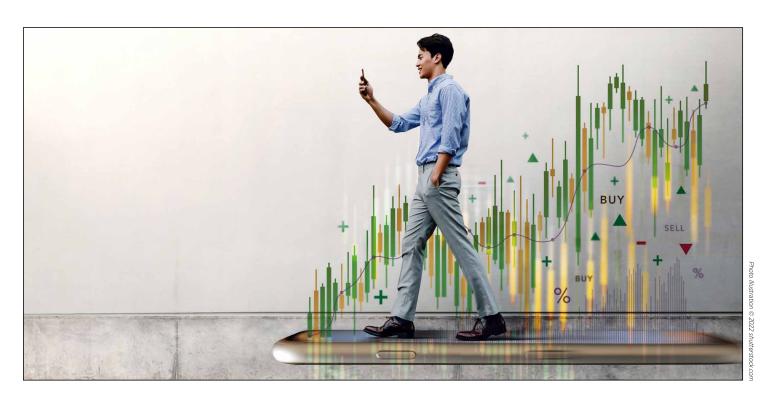
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Prior to joining Victory Capital in 2021, Mr. Daley worked at Equity Trust, where he was a Qualified Plan Consultant. He also has experience in wealth management having worked as a financial advisor for Merrill Lynch and Waddell & Reed as well as a Senior Investment Consultant within the former High Net Worth group at USAA.

Mr. Daley earned a B.A. in Business Administration and Accounting from Thiel College and an MBA in Finance from the Keller Graduate School of Management. He is currently a member of the Thiel College Board of Trustees, serving as Chair of the Investment & Finance committee. He holds the FINRA series 7 & 63 licenses.

Market Perspectives: The Secondary Market

By: Suzanne Gauron, Global Head of Private Equity Strategies, Alternatives Capital Markets & Strategy, Goldman Sachs Asset Management



any pension funds are finding that the strong performance of their private market portfolios coupled with declines in liquid asset prices have left them overallocated relative to their private equity targets. Some are considering whether and how to rebalance their portfolios. Below are a few considerations for secondary market selling.

Given recent public market volatility, what can we expect to see when it comes to private market valuations?

Valuation changes in private markets generally take more time to reach investors, as the assets are only valued quarterly, and price changes tend to be more moderate than those in public markets. We have yet to observe significant decreases in private equity valuations through Q1 2022, but we are observing modest adjustments in Q2 marks, reflecting operating performance and the current exit environment.

What typically causes pension funds to sell?

Sellers rarely sell based on valuation. Rather, secondary market selling is usually strategic, as doing so takes time and incurs costs. Pension funds mainly sell in the secondary market because of changes to their portfolio. This may include, among other things, over-allocation to the asset class (common in 2022) or a desire to reduce the number of manager relationships. Organizational changes, such as a new CIO or asset allocation, may also prompt selling. Sellers typically receive a discount to the lagged unrealized net asset value ("NAV"), so there must be a non-financial value to making these changes. Since most investors are long-term private market participants, these considerations often lead them to sell more than once in the secondary market.

Valuation changes in private markets generally take more time to reach investors, as the assets are only valued quarterly, and price changes tend to be more moderate than those in public markets.

How liquid is the secondary market and what assets are salable?

It depends. The secondary market has grown exponentially. Transactions in 2021 were about \$130 billion, a historic high, and this is just a fraction of the estimated \$8-\$9 trillion in private equity assets today. In times of market dislocation, secondary market activity tends to slow. We are starting to see this in H1 2022 activity, as buyers were bidding at discounts that sellers were unwilling to accept. Some of this is due to the NAV lag—the valuations LPs are looking at are three to six months old. This will adjust in the coming quarters. Also, GPs perceived to be higher quality are more saleable, provided the GP supports a secondary sale. Strategy is important, too. The majority of secondary buyers focus on buyout assets. Other private asset classes, including venture, energy, infrastructure, credit, and real estate, have a narrower buyer base and may receive fewer bids.

So you want to sell. Now what?

The secondary market is no longer just a "buy or hold" decision. Sellers have options, including financing, partial sales, deferred payments, and more structured solutions. It is important to define objectives upfront. What factors are you optimizing for? Price? Size? "Day one" cash? Liability reduction? Also, remember that secondary sales take time. GPs will have a say in most sales, so understanding their approach and guidelines is important.

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Proposed Climate Change Disclosure Rule for Public Companies

By: Rachel A. Avan, Saxena White P.A.

egulators are finally beginning to recognize the materiality investors assign to the environmental practices of public companies. On March 21, 2022, the U.S. Securities and Exchange Commission voted 3 to 1 to implement sweeping rule changes that require companies to disclose climate-related risks, greenhouse gas emissions, and carbon footprintsmetrics that were, until now, only reported voluntarily and without standardization.

Pursuant to the proposed rule¹, companies will need to disclose information about:

(1) their governance of climate-related risks and related risk management processes; and (2) any actual or likely "material impact[s]" of climate risks on their business, strategy, expenditures, and outlooks. The rule would require that a company report direct and indirect emissions if they are deemed material to investors or if a company has pledged to reduce emissions going forward. These include "Scope 1" and "Scope 2" emissions, which are generated from a company's own operations and purchases of energy, and for larger companies, "Scope 3" emissions, which are generated by a company's supply chain. The SEC's Acting Chief Accountant, Paul Munter, has noted that the rule would also require an attestation report from an independent provider, which would offer an "additional degree of reliability" about emissions and provide the "key assumptions" and data informing a company's analysis.

The proposed rule was originally scheduled to be subject to public comment for 60 days, but due to significant public interest, the comment period was extended to June 17, 2022. Perhaps unsurprisingly, both sides of the aisle have criticized the rule. For example, Rep. Patrick McHenry (R-NC) claimed the rule mandated disclosure of information that "is not material for most companies," and Sen. Sheldon Whitehouse (D-RI) took issue with the rule's failure to require disclosures about "climate-related lobbying and influencing activities . . . the single most material disclosures a company could make to achieve climate safety." Then, in early April, a group of 40 members of Congress joined other Republicans in arguing the rule is "extremely burdensome,"



presents insurmountable compliance challenges, and exceeds the SEC's authority. In response, SEC Chair Gary Gensler emphasized that the SEC has "over the generations" always been a "disclosurebased" regulator that "step[s] in when there's a significant need for the disclosure of information relevant to investors' decisions." Gensler further noted that the proposed rule would benefit both investors and public companies by offering "consistent [and] comparable . . . information" for investors and "provid[ing] consistent and clear reporting obligations for issuers."

By the end of the comment period, the SEC received more than 14,000 comment letters, many more than the Commission typically receives upon announcing proposed rules. Given the volume of public feedback, the politically charged subject of the rule, and likely court challenges, the final rule may ultimately differ, perhaps substantially, from the proposed rule.

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[&]quot;SEC Proposes Rules to Enhance and Standardize Climate-Related Disclosures for Investors" (Mar. 21, 2022), available at https://www.sec.gov/news/pressrelease/2022-46; see also Release Nos. 33-11042, 34-94478.

The Fed's "Summer of 75" Closes with Another Big Hike

By: Brian Nick, Nuveen



aving staked a claim as an inflation fighter at any cost, Chair Jay Powell will now follow through on this commitment until the rate of price increases slows to something like its 2% target. Fed tightening is exerting an irresistible force on the U.S. economy. Having already brought the housing market to its knees, the Fed now wants to bring the U.S. growth rate below its 1.8% trend, which should discourage companies from hiring new workers. Lowering income and spending growth is now the Fed's only way to reduce inflation over the next 12 months.

On its mission to cool the economy, the Fed has run into an immovable force: U.S. consumers have thus far refused to reduce their spending from the overstimulated days of 2021. Indeed, the rate of household spending growth even in excess of inflation has remained solidly positive this year. How is this possible with inflation rising at close to a double-digit annualized pace?

A variety of factors have helped bolster U.S. consumers. First, households still have trillions in excess savings from the pandemic and the related stimulus programs. Second, household debt service costs are still close to all-time low levels thanks to the legacy of low interest rates over the past decade until this year. Third, falling gasoline prices have helped real income growth turn positive for the first time in a year. Last, job security is still unusually high, arming consumers with the confidence to spend more and save less.

In the near term, the Fed has the best chance at affecting the last of these. Debt service costs are slow to rise even when policy rates are moving up quickly. Most homeowners are paying off their mortgages at extremely low rates. Credit card balances are increasing

Lowering income and spending growth is now the Fed's only way to reduce inflation over the next 12 months.

but remain below their pre-pandemic trend, as consumers paid down debt during the first year of the pandemic. But by softening the labor market, the Fed can strike at the hidden heart of consumer confidence: workers' conviction that they are unlikely to lose their jobs and could find other gainful employment quickly. •

Endnotes

Sources: Federal Reserve Statement, September 2022.

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Growth Pains Lead to Lessons Learned

By: Jason Williams, CFA, Lazard Asset Management



The Inflation Catalyst

hen we roll the clock back to 2021, the predominant narrative in the market was that rising inflationary pressures would ultimately subside as supply constraints believed to be caused largely by the COVID-19 pandemic righted themselves. However, that didn't happen. Mismatches between supply and demand

persisted, exacerbating inflationary pressures and by the end of last year the market began to wake up to the fact that inflation trends were getting worse, not better (Exhibit 1).

Style Shock

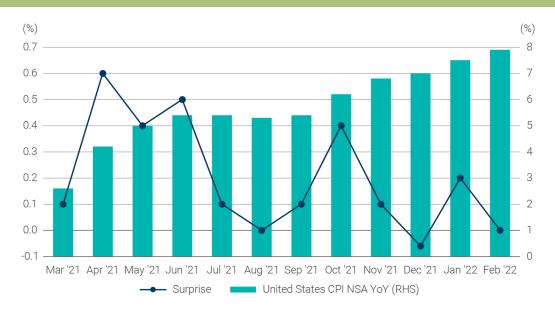
While the growth complex began to weaken last year, which was also about when it started to dawn on markets that inflation wasn't subsiding as hoped, some pockets of growth performed significantly worse than others during the downturn. We believe the difference between the stocks that held their value and those that fell the farthest is quality.

We can tease out this quality distinction in different ways. We can simply compare the performance of growth stocks with a positive return on equity and those with a negative return on equity. Highgrowth stocks with a positive return on equity have generally performed significantly better than stocks with negative returns since September 2020, well before the growth complex as a whole started to falter (Exhibit 2).

Identifying attractive fundamentals and teasing out uncertainty are also strong markers. For example, investors have become much more discerning about how much they can count on future returns from a high-growth business. If analysts, collectively, simply have no idea what the future holds for a given business, investors have beat a hasty retreat. We can proxy this lack of predictability, or uncertainty, using the dispersion of analysts' earnings-per-share forecasts. The greater the dispersion, the more uncertain the outlook for a given stock (Exhibit 3).

We believe the difference between the stocks that held their value and those that fell the farthest is quality.

EXHIBIT 1: Inflationary Shocks Broaden and Accelerate



As of 31 March 2022. This chart illustrates monthly year-on-year changes to consumer price indices (CPI) indices for the US with associated surprises to consensus estimates at the time of the report. Source: Lazard, FactSet.

EXHIBIT 2: Growth Sell-Off Was Deeper for Loss-Making Companies



As of 31 March 2022. This chart reflects the performance of high-growth stocks versus the equal-weighted market return, daily, indexed to 30 September 2020. High-growth stocks are the top 20% of stocks ranked according to an equal-weighted combination of 5-year sales growth, 3-year backward looking earnings growth, and 3-year forward looking earnings growth. Stocks are screened for positive ROE and negative ROE, respectively. Source: Lazard, FactSet, S&P Global BMI.

EXHIBIT 3: Growth Sell-Off Was Deeper for Stocks with Perception of More Uncertain Future



As of 31 March 2022. This chart reflects the performance of high-growth stocks versus the equal-weighted market return, daily, indexed to 30 September 2020. High-growth stocks are the top 20% of stocks ranked according to an equal-weighted combination of 5-year sales growth, 3-year backward looking earnings growth, and 3-year forward looking earnings growth. Stocks are screened for positive ROE and negative ROE, respectively. Source: Lazard, FactSet, S&P Global BMI.

What Does This Mean for Investors?

It has been interesting to see that the market has drawn some clear distinctions among different types of growth stocks. Those that are profitable, have stronger fundamentals, and enjoy more certainty from the analyst community about the future of their returns have held up significantly better.

As we go forward into a rising-rate environment amid sustained inflation, we believe that both growth and core equity investors will be much less impacted by the ongoing and steep underperformance of growth stocks if they focus their search on companies that seem more likely to sustain their growth over a long period of time. •

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