

Meetings are held in wheelchair accessible facilities.

The Board may take action on items not on the agenda only if findings pursuant to the Sunshine Ordinance and Brown Act are made that the matter is urgent or an emergency.

For additional information, contact the Retirement Unit by calling (510) 238-7295. or send an email to jiloyd2@oaklandca.gov



Retirement Unit
150 Frank H. Ogawa Plaza
Oakland, California 94612

AGENDA

INVESTMENT COMMITTEE MEMBERS

Jaime T. Godfrey
Chairperson

R. Steven Wilkinson
Member

Robert W. Nichelini
Member

**In the event a quorum of the Board participates in the Committee meeting, the meeting is noticed as a Special Meeting of the Board; however, no final Board action can be taken. In the event that the Investment Committee does not reach quorum, this meeting is noticed as an informational meeting between staff and the Chair of the Investment Committee.*

SPECIAL MEETING of the OAKLAND POLICE AND FIRE RETIREMENT SYSTEM ("PFRS") INVESTMENT & FINANCIAL MATTERS COMMITTEE

TUESDAY, JUNE 24, 2025

1:00 PM

**ONE FRANK H. OGAWA PLAZA, HEARING ROOM 2
OAKLAND, CA 94612**

OBSERVE

- To observe the meeting by video conference, please click on this link: <https://us02web.zoom.us/j/82880493983> at the noted meeting time.
- To listen to the meeting by phone, please call the numbers below at the noticed meeting time: Dial (for higher quality, dial a number based on your current location):
- iPhone one-tap: US: +16699006833, 82880493983# or +13462487799, 82880493983#
- US: +1 669 900 6833 or +1 346 248 7799 or +1 253 215 8782 or +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099
- International numbers available: <https://us02web.zoom.us/j/82880493983>
- Webinar ID: 828 8049 3983.
- If asked for a participant ID or code, press #.

PUBLIC COMMENTS

There are two ways to submit public comments.

1. **Speaker Card:** All persons wishing to address the Board must complete a speaker's card, stating their name and the agenda item they wish to address, including "Open Forum".
2. **e-Comment:** To send your comment directly to staff BEFORE the meeting starts, please email jiloyd2@oaklandca.gov with "PFRS Board Meeting Public Comment" in the subject line for the corresponding meeting. Please note that e-Comment submission **closes two (2) hours before the posted meeting time.**
3. **Zoom (Remote Participation):**
Members of the public may observe and participate in the meeting remotely via Zoom.

OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
SPECIAL INVESTMENT & FINANCIAL MATTERS COMMITTEE MEETING
JUNE 24, 2025

- To comment by video, use the “Raise Hand” function during the Public Comment period. Instructions are available at the Zoom Raise Hand Help Article.
- To comment by phone, dial the number provided on the meeting agenda and press *9 to raise your hand and *6 to unmute when called upon.

Zoom access details (including Meeting ID and dial-in numbers) have been provided on the first page of the agenda.

If you have any questions, please email Jessica Lloyd, Administrative Analyst I, at jilloyd2@oaklandca.gov

ORDER OF BUSINESS

- 1. Subject:** **POLICE AND FIRE RETIREMENT SYSTEM (“PFRS”) INVESTMENT AND FINANCIAL MATTERS COMMITTEE MEETING MINUTES**

From: Staff of the PFRS Board

Recommendation: **APPROVE** the March 26, 2025, Special Meeting of Investment and Financial Matters Committee Minutes
- 2. Subject:** **PROSPECTIVE INVESTMENT STRATEGY MANAGER PRESENTATIONS: INTERNATIONAL EQUITY**

From: Meketa Investment Group

Recommendation: **RECEIVE** the finalists’ presentations from investment management firms seeking to serve as a PFRS International Equity Investment Manager

 - a) Acadian Asset Management, LLC
 - b) C Worldwide Asset Management, LLC (*REMOTE ATTENDANCE - the presentation will be broadcast live in the hearing room, allowing the Board and all other in-person attendees to hear the presentation*)
 - c) Strategic Global Advisors, LLC (SGA)
- 3. Subject:** **SELECTION OF INVESTMENT STRATEGY MANAGER PRESENTATIONS: INTERNATIONAL EQUITY**

From: PFRS Investment & Financial Matters Committee

Subject: **DISCUSS** Investment Management Firm Presentations, **SELECT** one investment management firm to serve as PFRS’ International Equity Investment Manager, and **RECOMMEND BOARD APPROVAL** of Committee’s selection.
- 4. Subject:** **ECONOMIC AND INVESTMENT MARKET OVERVIEW AS OF MAY 31, 2025**

From: Meketa Investment Group

Subject: **ACCEPT** an informational report regarding the Global Investment Markets as of May 31, 2025.

**OAKLAND POLICE AND FIRE RETIREMENT SYSTEM
SPECIAL INVESTMENT & FINANCIAL MATTERS COMMITTEE MEETING
JUNE 24, 2025**

5. **Subject:** **PFRS PRELIMINARY INVESTMENT FUND PERFORMANCE UPDATE
AS OF MAY 31, 2025**
From: Meketa Investment Group
Subject: **ACCEPT** an informational report on the preliminary performance of the PFRS Investment Fund as of May 31, 2025.
6. **Subject:** **\$13.2 MILLION DRAWDOWN FOR PFRS MEMBER RETIREMENT ALLOWANCES
FROM JULY 1, 2025, THROUGH SEPTEMBER 30, 2025 (Q3)**
From: Meketa Investment Group
Subject: **ACCEPT** the informational report and **RECOMMEND BOARD APPROVAL** of Meketa Investment Group's proposed drawdown of \$13.2 million. This amount includes an \$8.7 million contribution from the City of Oakland and a \$4.5 million contribution from the PFRS Investment Fund. The funds will be used to pay PFRS Member Retirement Allowances from July 1, 2025, through September 30, 2025.
7. **Subject:** **PFRS INVESTMENT POLICY UPDATE
ASSET ALLOCATION IMPLEMENTATION: FIXED INCOME**
From: Meketa Investment Group
Subject: **ACCEPT** a verbal informational update regarding the asset allocation of the Core and Core Plus Fixed Income managers for the City of Oakland's Police and Fire Retirement System. These managers include:
 - Loop Capital Asset Management
 - Ramirez Asset Management
 - Reams Asset Management
 - Wellington Management Company
8. **SCHEDULE OF PENDING INVESTMENT COMMITTEE MEETING AGENDA ITEMS**
9. **NEW BUSINESS**
10. **OPEN FORUM**
11. **FUTURE SCHEDULING**
12. **ADJOURNMENT**

A HYBRID MEETING OF THE INVESTMENT AND FINANCIAL MATTERS COMMITTEE of the Oakland Police and Fire Retirement System (“PFRS”) was held Wednesday, March 26, 2025, at One Frank Ogawa Plaza, Hearing Room 2, Oakland, California.

Committee Members	▪ Jaime T. Godfrey	Chairperson
	▪ Robert W. Nichelini	Member
	▪ R. Steven Wilkinson	Member (remote attendance)
Additional Attendees	▪ David F. Jones	PFRS Plan Administrator & Secretary
	▪ Téir Jenkins	PFRS Investment & Operations Manager
	▪ Jessica Lloyd	PFRS Staff Member
	▪ Selia Warren	PFRS Legal Counsel
	▪ David Sancewich	Meketa Investment Group
	▪ Paola Nealon	Meketa Investment Group
	▪ DeWayne Louis	Versor Investments, LLC
	▪ Ludger Hentschel	Versor Investments, LLC (remote attendance)

The meeting was called to order at 10:02 AM Pacific.

1. APPROVAL OF INVESTMENT & FINANCIAL MATTERS COMMITTEE MEETING MINUTES:

Member Nichelini made a motion to approve the minutes of the Investment & Financial Matters Committee meeting held on February 25, 2025. Plan Administrator D. Jones noted a correction to the date in the header. The motion was seconded by Chairperson Godfrey and passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0 / EXCUSED: 0)

**2. INVESTMENT MANAGER PERFORMANCE UPDATE:
VERSOR INVESTMENTS, LLC**

The Investment Committee received a presentation from Versor Investments, LLC, which was attended both in person and remotely via Zoom. During the presentation, the firm provided an overview of its operations, investment strategy, Diversity, Equity, and Inclusion (DEI) policies, and portfolio performance challenges. Versor's performance is currently being reviewed as they have been on Watch Status since 2023 due to negative gross returns.

MOTION: Member Nichelini made a motion to accept the informational presentation from Versor Investments, LLC; seconded by Member Wilkinson. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 0)

3. INVESTMENT MANAGER PERFORMANCE REVIEW**VERSOR INVESTMENTS, LLC**

David Sancewich from the Meketa Investment Group presented an informational memo regarding Versor's trend strategies. He advised that the Meketa Manager Research Team still had confidence in the firm, despite its negative performance since the portfolio's inception. Member Wilkinson questioned why the Board should retain Versor in the PFRS portfolio instead of reallocating those funds to other assets. In response, Mr. Sancewich recommended that Versor remain on Watch Status for an additional six to nine months for ongoing monitoring, with a performance review scheduled for the end of the calendar year. Chairperson Godfrey agreed with Meketa's recommendation.

MOTION: Member Nichelini made a motion to keep Versor Investments, LLC on Watch Status for an additional six to nine months for ongoing monitoring; seconded by Member Wilkinson. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 0)

4. ECONOMIC AND INVESTMENT MARKET OVERVIEW AS OF FEBRUARY 28, 2025

Paola Nealon from the Meketa Investment Group presented an informational report on the economic and investment market overview as of February 28, 2025. She highlighted key areas, including Index Returns, Domestic Equity Returns, Foreign Equity Returns, Fixed Income Returns, as well as the current volatility within the U.S. economy and consumer market.

MOTION: Chairperson Godfrey made a motion to accept Meketa's informational report and forward it to the Board; seconded by Member Nichelini. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 0)

5. PFRS PRELIMINARY INVESTMENT FUND PERFORMANCE UPDATE AS OF FEBRUARY 28, 2025

Paola Nealon from the Meketa Investment Group presented an informational report regarding a preliminary investment performance update of the PFRS Fund as of February 28, 2025, and noted the PFRS Plan saw a return of 2.4% quarter-to-date, with strong contributions from international equities and positive performance in fixed income. Certain managers outperformed their benchmarks, and overall plan returns remain solid across 1-, 5-, and 10-year periods.

MOTION: Chairperson Godfrey made a motion to accept Meketa's informational report and forward it to the Board; seconded by Member Nichelini. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 0)

6. PFRS INVESTMENT POLICY UPDATE**ASSET ALLOCATION IMPLEMENTATION: FIXED INCOME**

Paola Nealon from the Meketa Investment Group presented an informational report on the asset allocation of the PFRS portfolio. A proposed fixed income allocation was presented, based on an in-house model designed to maximize risk-adjusted returns while also managing portfolio risk. Four equally weighted metrics guided the process: Sharpe ratio, alpha, information ratio, and minimizing tracking error. The recommended allocation included Ramirez at 21.8%, Loop Capital Core at 21.9%, Reams Core Plus at 29.8%, and Wellington Core Plus at 26.5%. Board approval of this allocation was requested, with a rebalancing plan to follow upon approval. Member Wilkinson questioned the allocation amount for Reams, relative to the allocation amounts to the other three managers.

Paola Nealon clarified that the model used for this recommendation did not apply manager-specific restraints and that the current allocation reflected an optimized outcome based purely on performance and risk metrics.

MOTION: Chairperson Godfrey made a motion to accept Meketa's recommendation and forward it to the Board; seconded by Member Nichelini. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 0)

7. \$13.2 MILLION DRAWDOWN FOR PFRS MEMBER RETIREMENT ALLOWANCES FROM APRIL 1, 2025, THROUGH JUNE 30, 2025

David Sancewich from the Meketa Investment Group presented an informational report and noted that for Q2 2025, \$13.2 million is needed for member benefit payments. Meketa recommended withdrawing \$4.5 million from the PFRS Investment Fund (Wellington Select Equity Strategy), as part of ongoing de-risking efforts, with the remaining amount (\$8.7 million) to come from the City PTO Fund.

MOTION: Chairperson Godfrey made a motion to accept Meketa's recommendation and forward it to the Board; seconded by Member Nichelini. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 0)

8. SCHEDULE OF PENDING INVESTMENT COMMITTEE MEETING AGENDA ITEMS:

Member Nichelini made a motion to move agenda items 8-10 to the full Board of Administration; seconded by Chairperson Godfrey. Motion passed.

9. **NEW BUSINESS:** None

10. **OPEN FORUM:** None

11. **FUTURE SCHEDULING:**

The next meeting of the PFRS Investment & Financial Matters Committee is scheduled for April 30, 2025, at 10:30 AM, tentatively.

12. **ADJOURNMENT:**

Chairperson Godfrey made a motion to adjourn, seconded by Member Nichelini. Motion passed.

[GODFREY – Y / NICHELINI – Y / WILKINSON – Y]
(AYES: 3 / NOES: 0 / ABSTAIN: 0 / ABSENT: 0 / EXCUSED: 0)

The meeting adjourned at 11:58 AM.

JAIME T. GODFREY
COMMITTEE CHAIRPERSON

DATE



C WorldWide International Equities

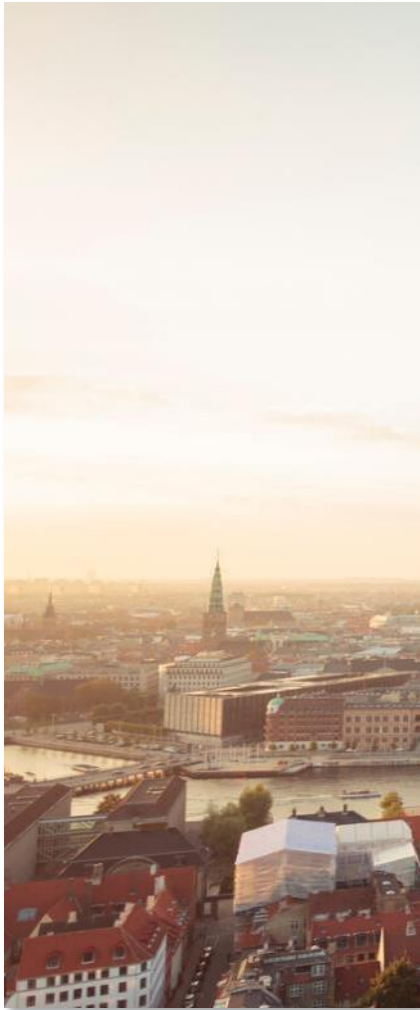
OPFRS

June 24th, 2025





Organization Overview



Equity Boutique – One Approach – Global Reach

Since 1986 – building the business, culture and our capabilities

Investment team – 11-year average tenure with CWW – range 1-37

Stable Organization – 11-year average tenure

Assets under Management* – USD 18 bn

**C WorldWide Asset Management, as of 31 December 2024*

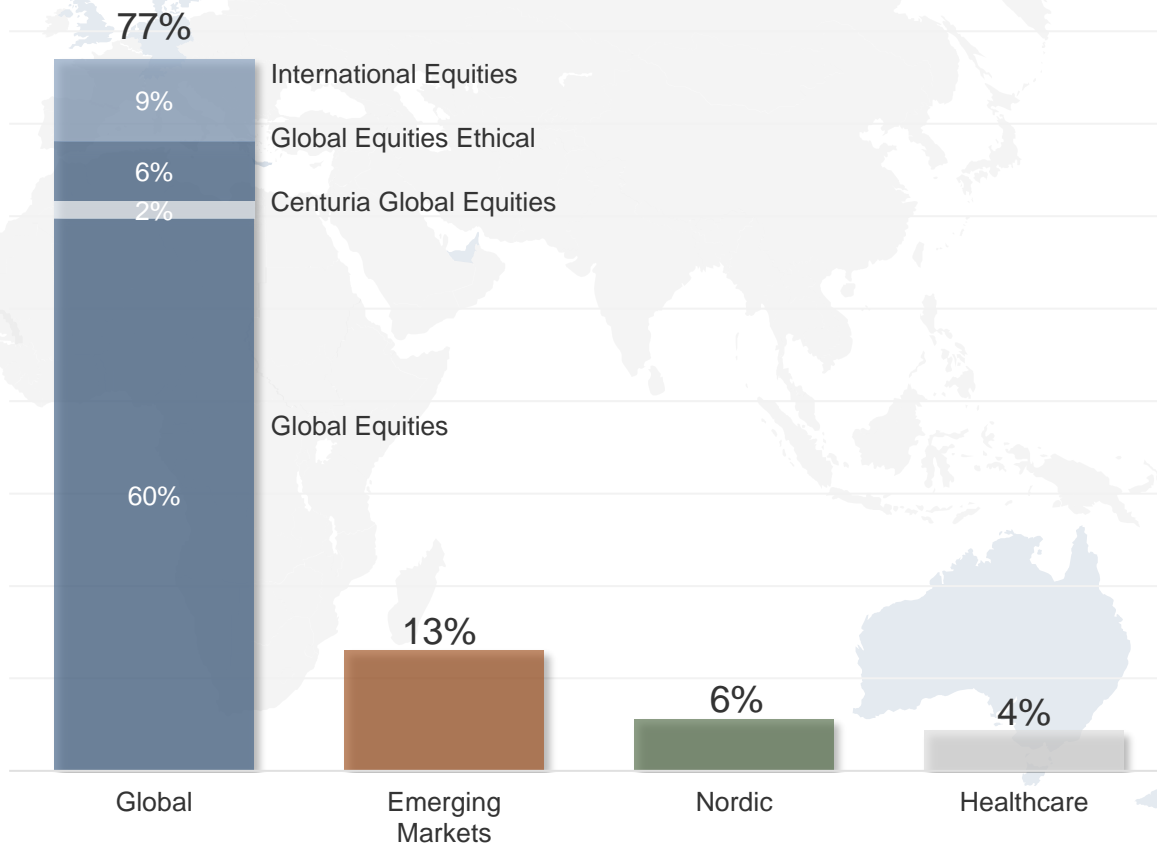


Our Client Relationships



Strategy Overview

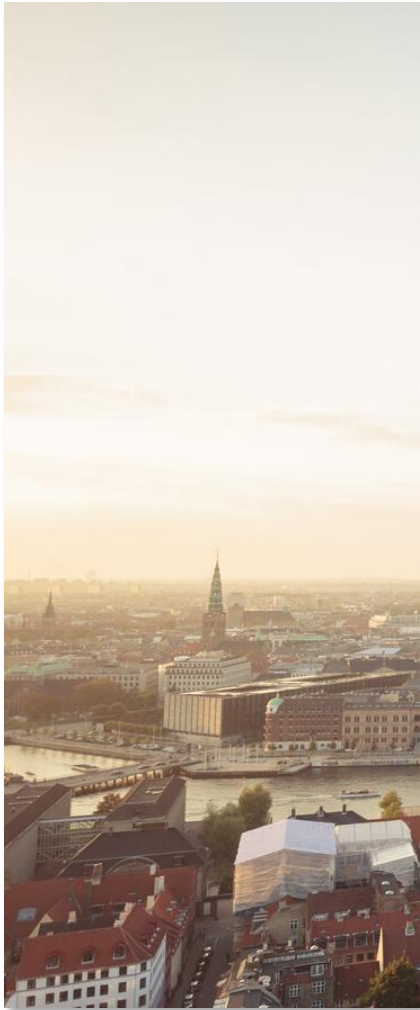
% of Total AuM



Source: C WorldWide Asset Management, 31 December 2024



Qualities We Have Cultivated Since 1986



Global lens from Copenhagen - a generalist mindset in company research

People over systems - building capabilities around people, not filling slots

Investment flexibility – a performance culture with an evergreen mindset

Forward Looking - experts in identifying sustainability of growth

Detest complacency – competitive team players

Excellence in client communication – candor, timeliness and relevance



Conviction: Maximum 30 Stocks

Each position makes a difference
Buy/Sell discipline – one in/one out

Quality and Large Cap bias

Earnings growth drives share prices

Low Turnover

Long-term investment horizon

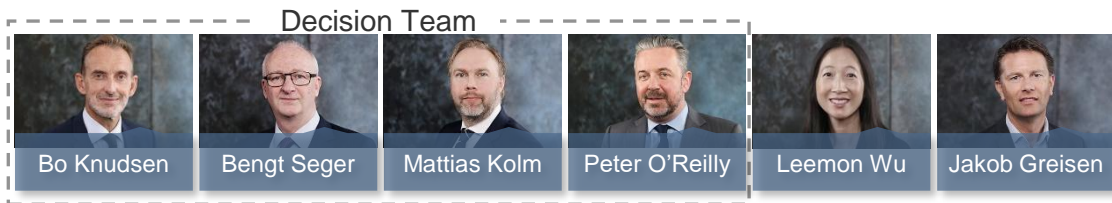
Global Trends and Themes

Tailwinds and headwinds



Investment Team

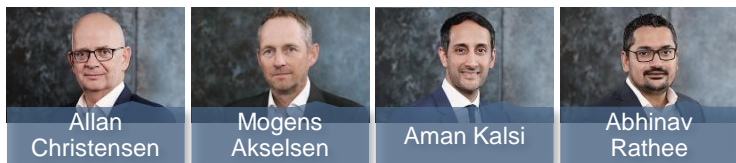
Global/ International Equities



Research



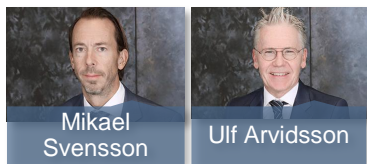
Emerging Markets Equities



Nordic Equities



Healthcare Equities



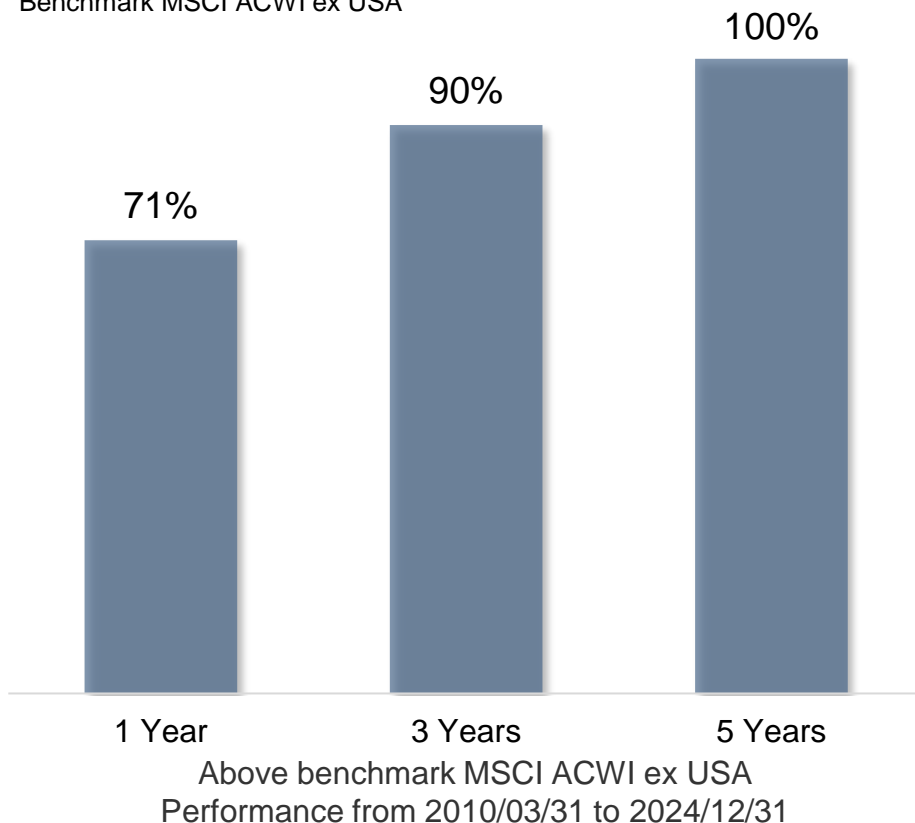
**Senior Advisor*



Performance Consistency: International Equities

Index Relative

Benchmark MSCI ACWI ex USA



Universe Relative – Rolling Periods

1 year	3 years	5 years	
56 periods	48 periods	40 periods	Quartile
38%	52%	55%	1 st
27%	31%	40%	2 nd
27%	15%	5%	3 rd
9%	2%	0%	4 th

Relative to ACWI ex USA Large Cap Equity Universe
Performance from 2010/03/31 to 2024/12/31

All figures are based on past performance. Past performance is not a reliable indicator of future performance.
The return may increase or decrease as a result of currency fluctuations.
The gross figures are gross of management fees and custodian fees, but after transaction costs.

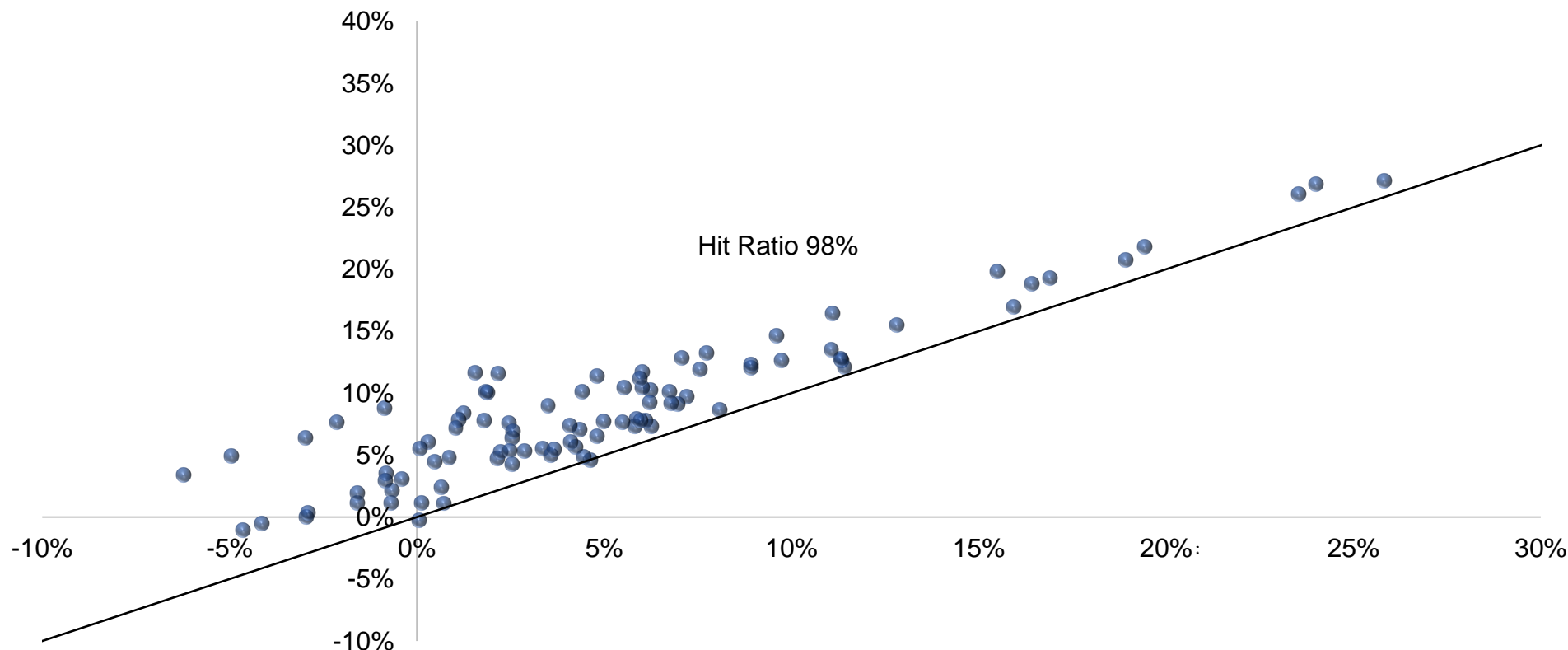
The data shows the percentage of 1, 3, and 5 year periods where the portfolio has performed better than the benchmark, calculated based on rolling monthly returns.

Portfolio: C WorldWide International Equities Composite
Benchmark: MSCI All Country World Index ex USA
Composite inception date: 31 December 1996
Currency: USD
Note: Quarterly rolling return, USD gross of fees
Source: eVestment, Campion Capital, 31 December 2024



Hit Ratio - International Equities (Net of Fees)

5Y rolling performance (annualized)



Periods with negative return: CWW 4% vs BM 17%

All figures are based on past performance. Past performance is not a reliable indicator of future performance. The return may increase or decrease as a result of currency fluctuations. The net figures are based on the actual performance after costs.

Hit ratio: Number of periods with positive excess return divided by number of periods.

Periods with negative return: Number of periods with negative absolute return divided by number of periods. Rolling periods, quarterly data since inception.

Notes:

Portfolio: C WorldWide International Equities Composite

Benchmark: MSCI All Country World ex. USA Index

Inception Date: 31 December 1996

Currency: USD

Last update: 31 December 2024

Benchmark was changed: 31 December 2009 from MSCI World Index to MSCI All Country World Index

Number of periods: 93



Our Investment Approach & Methodologies





Our Mission and Driving Beliefs

To own for our clients, a focused portfolio of compounding businesses with strong and sustainable business models that are favorably aligned with global and regional themes

Deep Qualitative Research

Each company is unique – learn what moves the dial

Focus to Deliver

Only high conviction ideas – Maximum 30 - benchmark thinking pollutes

The Weighing Machine

Compounding earnings growth drives our prospective returns

Potent Governance

Highly correlates with favorable operating results

Think Longer-Term

Prioritize lasting knowledge over noise

Integrated Thematic Insights

Diversified and forward looking

Quality = Sustainability

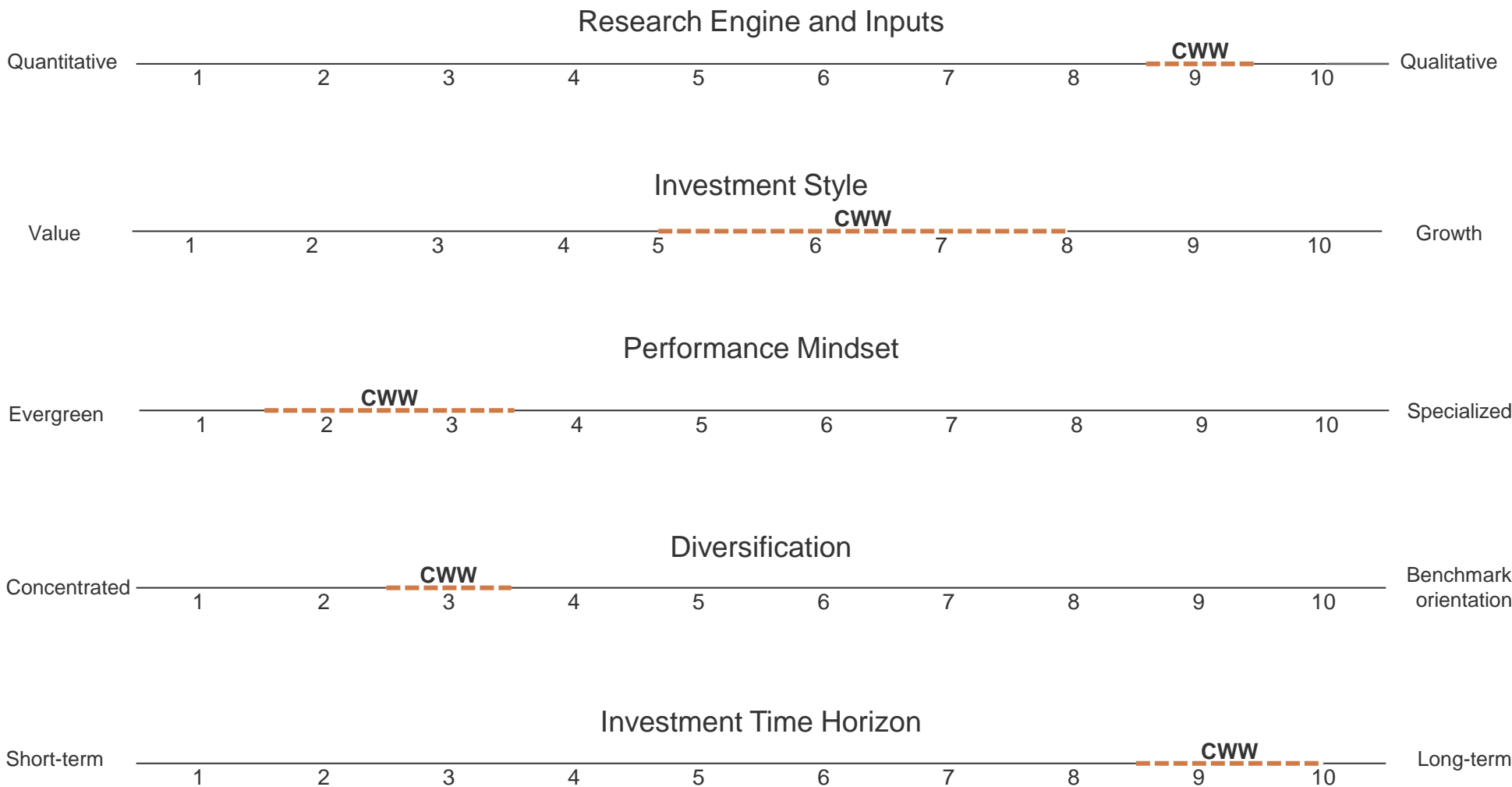
A strong business model is our primary margin of safety

Risk Management

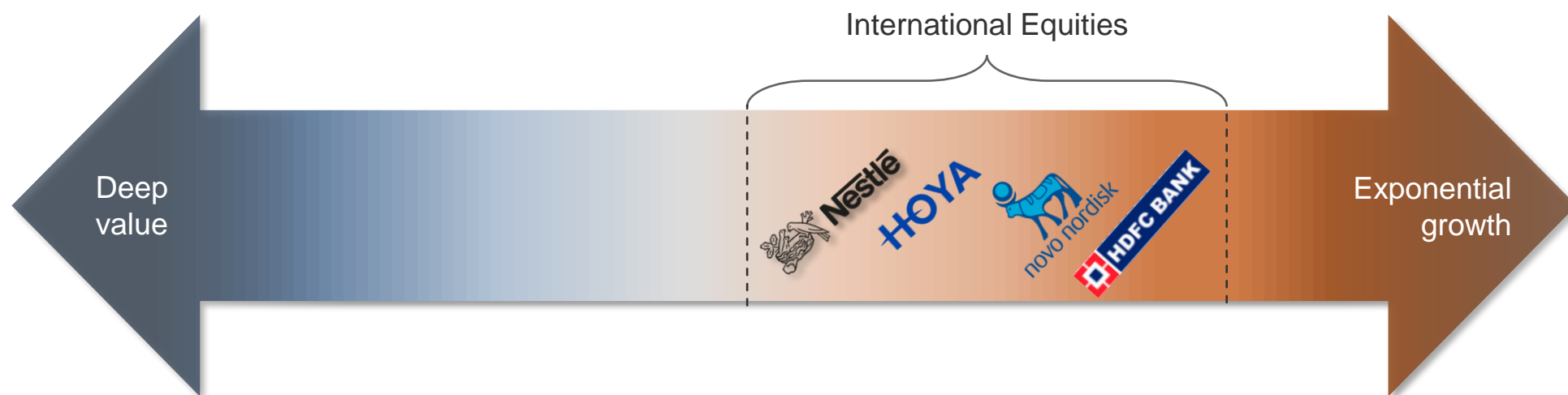
Understand what we own – effective diversification



Relative Perspectives On Our Approach



It's not the magnitude of growth, it's the sustainability of growth



Source: C WorldWide Asset Management, 31 December 2024



3 Sources of Alpha



Discover early – occasionally

Have an interpretational advantage – frequently

Take a longer perspective – always



Thematic Exposures at Work

Trend	Themes	Examples of investments
The Productive & Digital Society	Cloud & Edge Computing Advanced Manufacturing	Keyence, Siemens
Sociodemographic Change	Housing Aspiration Rise in Personal Wealth	AIA, HDFC
Pursuit of a Better & Longer Life	Lifestyle Diseases	Novo Nordisk

Trend	Themes	Unfavorable companies
The Circular Society	Energy Transition	BMW, Daimler, VW
The Productive & Digital Society	E-commerce & Online Advertising	Interpublic, Nielsen, Omnicom, Publicis, WPP

Source: C WorldWide Asset Management, 31 December 2024



Turnover:

- Five year rolling 10.5%*
- All purchases and sales are the result of competition for capital – one in, one out – better alternative

Primary reason for sale	Projected frequency
Decreased confidence in the Business Model to Deliver	40%
Negative changes in the industry structure – “Lay of the land”	30%
Changing interpretations of long-term exposure to relevant themes	15%
Valuation	10%
Management & Sustainability	5%

**Note: Based on C WorldWide International Equities (reference portfolio)*



Portfolio Perspectives





Key Ratios – International Equities

	International	MSCI ACWI ex USA
Est 3-5Y EPS growth	9.8	8.3
P/E 12M forward	20.0	13.2
ROE 12M trailing	20.5	12.2
Operating margin 12M trailing	24.7	11.8
Net Debt / EBITDA 12M forward	0.7	1.7

Based on C WorldWide International Equities (reference portfolio)
Source: Factset, 31 December 2024



Trend and Thematic Overview

The Productive & Digital Society (37.2%)	<i>Advanced Manufacturing</i>	Atlas Copco, Hoya, Keyence, SMC, Siemens
	<i>Big Data</i>	RELX
	<i>Cloud & Edge Computing</i>	SAP
	<i>Digital Consumption</i>	Sony Group
	<i>Technology Enablers</i>	ASML, TSMC
Sociodemographic Change (22.8%)	<i>Financial Inclusion</i>	Bank Central Asia, HDFC Bank
	<i>Housing Aspiration</i>	Ferguson Enterprises
	<i>Regulations</i>	Deutsche Boerse
	<i>Rising Personal Wealth</i>	AIA Group
	<i>Security</i>	Assa Abloy
The Necessities of Life (17%)	<i>Feed the World</i>	Compass Group
	<i>Infrastructure</i>	Vinci
	<i>Premiumization</i>	Diageo, L'Oréal, LVMH, Nestlé
The Circular Society (15%)	<i>Energy Efficiency</i>	Daikin Industries, Schneider Electric
	<i>Energy Transition</i>	Epiroc, Linde, SSE
Pursuit of a Better & Longer Life (8.1%)	<i>Lifestyle Diseases</i>	AstraZeneca, Novo Nordisk

*Based on C WorldWide International Equities (reference portfolio)
Percentages may not add up to 100% due to rounding
Source: C WorldWide Asset Management, 31 December 2024*



Portfolio Overview – International Equities

	United Kingdom		Continental Europe		Pacific		Emerging Markets		USA & Canada		Total	Benchmark*
Energy											0.0	5.0
Materials									Linde	4.7	4.7	6.3
Industrials	RELX	3.6	Assa Abloy	3.3	Daikin	2.3			Ferguson	4.2	29.9	13.9
			Atlas Copco	2.8	SMC Corporation	2.7						
			Epiroc	1.9								
			Schneider Electric	3.6								
			Siemens	3.4								
			Vinci	2.1								
Consumer Discretionary	Compass Group	3.5	LVMH	3.0	Sony	3.7					10.2	11.2
Consumer Staples	Diageo	2.4	L'Oreal	2.7							8.3	7.0
			Nestle	3.2								
Healthcare	AstraZeneca	3.6	Novo Nordisk	4.5	Hoya	4.1					12.2	8.8
Financials			Deutsche Boerse	3.4	AIA Group	3.3	Bank Central Asia	3.0			15.3	23.7
							HDFC Bank	5.6				
Information Technology			ASML	2.8	Keyence	2.9	TSMC	5.3			17.0	13.5
			SAP	6.0								
Communication Services											0.0	5.9
Utilities	SSE	2.5									2.5	3.0
Real Estate											0.0	1.8
Total		15.6		42.7		19.0		13.9		8.9	100.0	100.0
Benchmark*		9.3		31.5		21.5		29.6		8.1	100.0	

Based on C WorldWide International Equities (reference portfolio)

*Benchmark: MSCI ACWI ex. USA

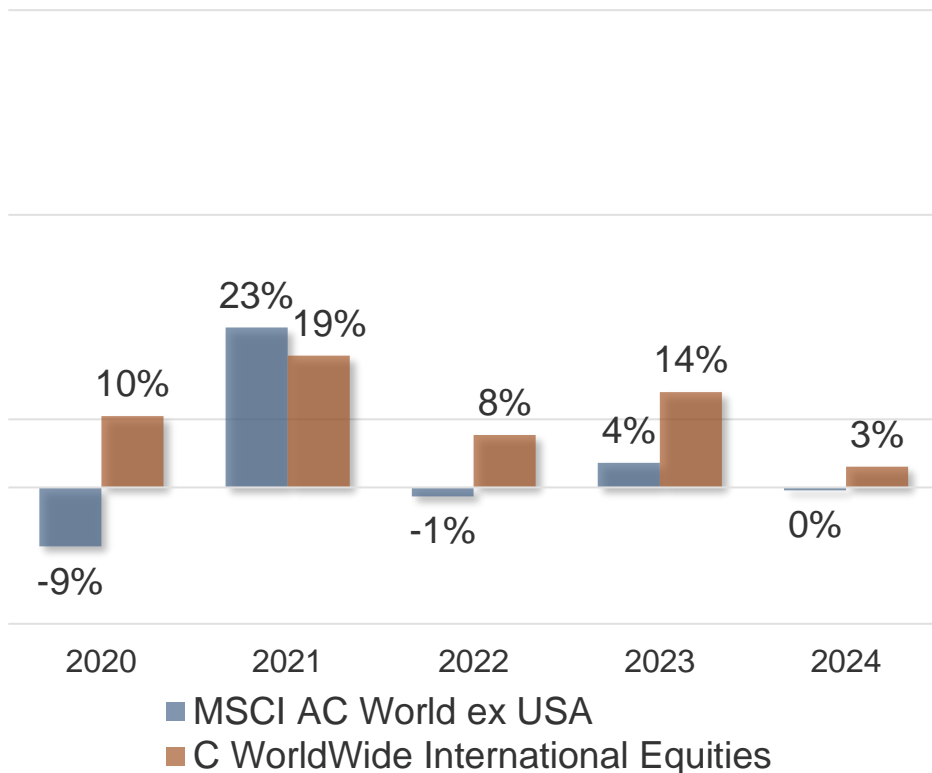
Percentages may not add up to 100% due to rounding

Source: C WorldWide Asset Management 31 December 2024

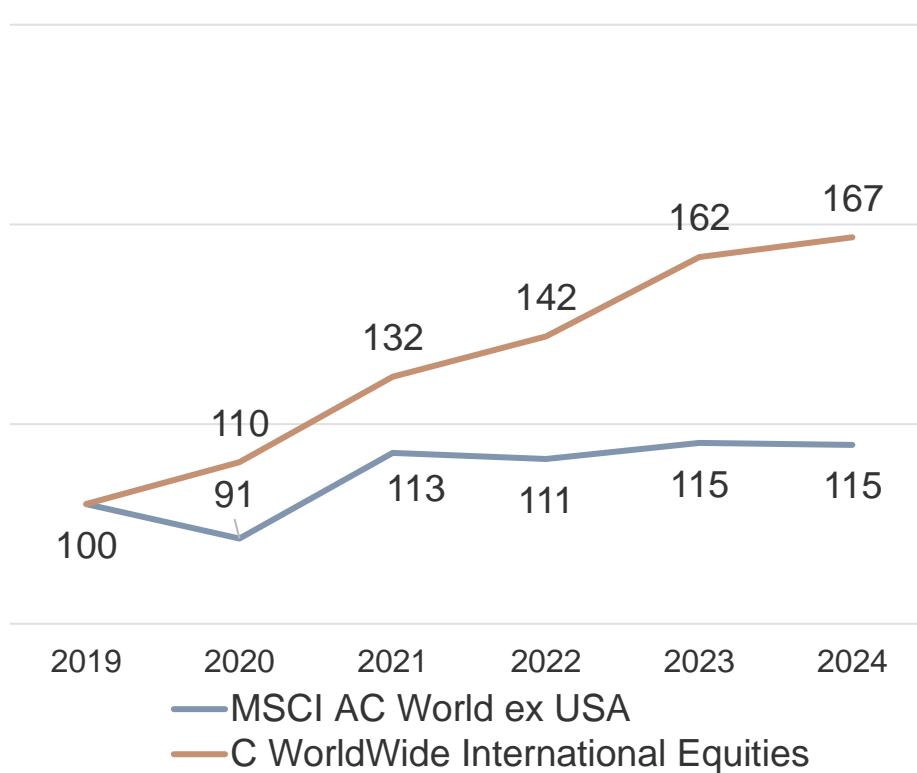


Compounding is a Marathon Not a Sprint

EPS growth



2019 EPS rebased*



*Consecutive negative earnings are set to 0% growth in the analysis
FactSet Estimates returns consensus estimates that are derived from data collected by research analysts. The weighted average methodology is used to calculate aggregated EPS growth numbers on portfolios. On an Index level, FactSet Market Aggregate method is used.

Notes:
Portfolio: C WorldWide International Equities (reference portfolio)
Benchmark: MSCI ACWI ex USA Index
Currency: USD
Source: FactSet, 31 December 2024

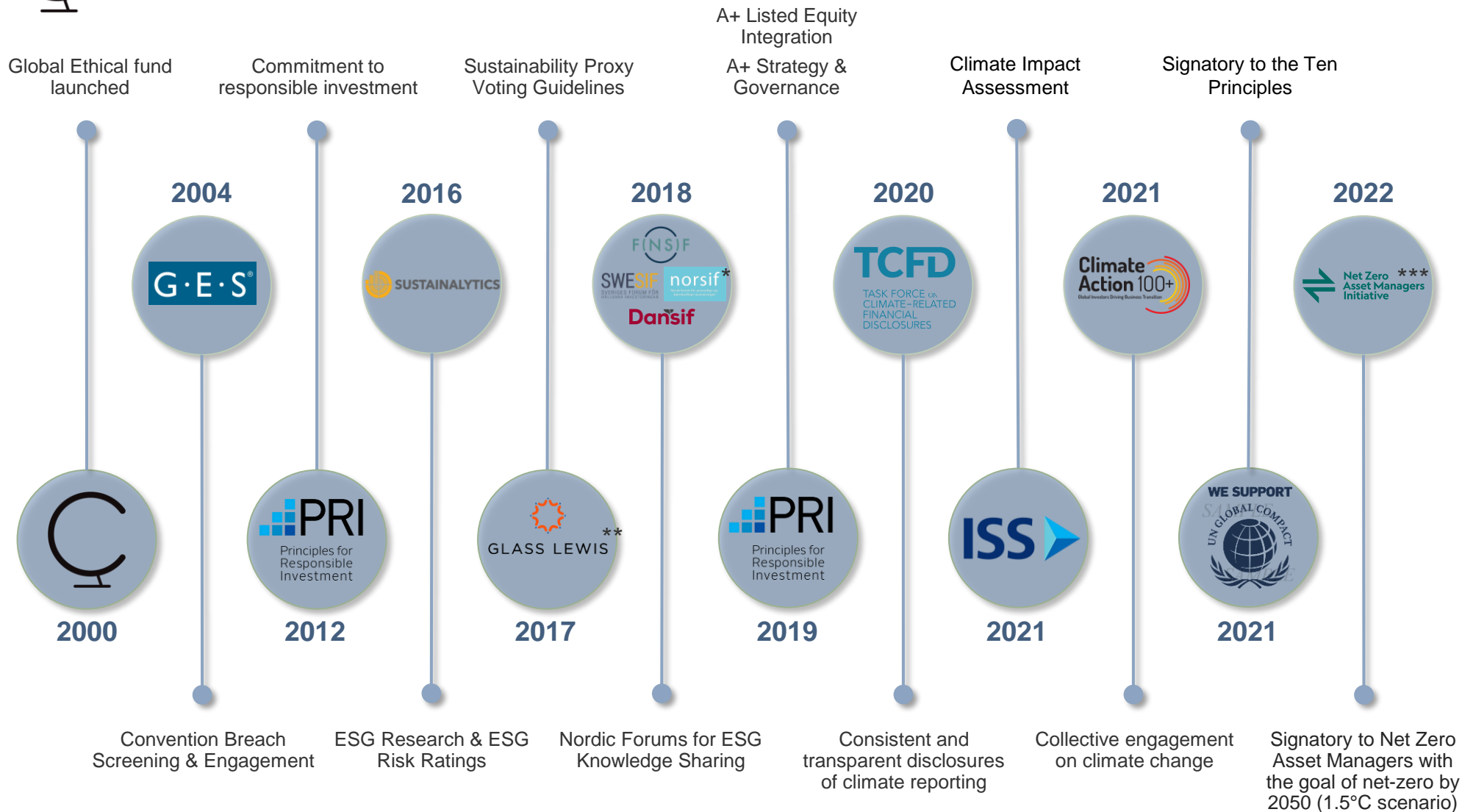


Sustainability Perspectives





Our Sustainability Journey & Partnerships



**Group Norway*
***Glass Lewis: It has been ISS providing this service until October 2022*
**** Net Zero Asset Managers Initiative is currently under review by the founding partners*



Diversity Representation Survey for Oakland Police and Fire Retirement System

DATA AS OF 05/05/2025

Firm Name	C WorldWide Asset Management
Product Name	International Equity (ACWI ex US)
Total No. of Employees	117

	Percentage (%) of Board of Directors/ Managing Members	Percentage(%) of Firm (Entire Staff)	Percentage (%) of Firm (Investment Professionals)
Race and Ethnicity*			
African American/Black	0,0%	0,0%	0,0%
Asian/Hawaiian/Pacific Islander	0,0%	0,0%	0,0%
Latino/Hispanic	0,0%	0,0%	0,0%
White	0,0%	0,0%	0,0%
American Indian/ Alaska Native	0,0%	0,0%	0,0%
Other	0,0%	0,0%	0,0%
Gender			
Male	67,0%	66,0%	81,0%
Female	33,0%	34,0%	19,0%
Non-Identified/Other	0,0%	0,0%	0,0%
	0,0%	0,0%	0,0%
	100,0%	100,0%	100,0%

** As we are domiciled in Denmark, we do not collect or report on racial or ethnic background data. This is not permitted under local data protection and employment legislation. As such, our organization can only provide diversity data related to gender. We understand the importance of these disclosures under U.S. EEOC guidelines, and we hope this clarification helps explain the limitations based on our local regulatory framework.*



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Any stock examples and images used in this presentation are not intended to represent recommendations to buy or sell, neither is it implied that they will prove profitable in the future. It is not known whether they will feature in any future portfolio managed by CWW AM. Any individual examples will represent only a small part of the overall portfolio and are inserted purely to help illustrate the investment style.

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All figures are based on past performance. Past performance is not a reliable indicator of future performance. The benchmark results presented are a combination of two indices. MSCI World ex USA net of dividends is used prior to 31 December 2000 whilst MSCI AC World ex USA net of dividends is used subsequently. The gross figures are gross of management fees and custodian fees, but after transaction costs. The net figures are based on the actual performance after costs. C WorldWide Asset Management claims compliance with the Global Investment Performance Standards (GIPS®). GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein. To obtain a GIPS Composite Report please send a request to us.admin@cworldwide.com.



City of Oakland Police and Fire Retirement System

All-Country World ex-U.S. Equity

June 24, 2025

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Presentation Team

Dan Le, CFA — Vice President, Portfolio Manager

Dan joined Acadian in 2011 and is a member of the Portfolio Management Team. She previously worked within the Portfolio Construction and Trading Group, where she specialized in portfolio construction and simulation-based research. She was also responsible for rebalancing and trading portfolios. Dan earned a B.A. in psychology from Brown University. She is a CFA charterholder and a member of CFA Society Boston.

Andrew Miller — Senior Vice President, Americas Client Group

Andrew joined Acadian in 2004 and is a senior member of Acadian's Global Client Group, focusing on business development within public pension and Taft-Hartley funds. Prior to his current role, he worked in client service, business development, and operations functions at Acadian. Before joining Acadian, he worked in global custody at State Street Corporation. Andrew is a member of numerous public pension associations including: the National Association of State Retirement Administrators (NASRA), National Council on Teacher Retirement (NCTR), National Conference on Public Employee Retirement Systems (NCPERS), and the State Association of County Retirement Systems (SACRS). He also serves on the Fenway High School (Boston) Investment Committee. Andrew received an M.B.A. from Northeastern University and a B.A. from Wheaton College.



OVERVIEW

Acadian

Investing systematically for over 30 years, we combine intellectual rigor, rich data, and powerful tools to deliver results with analytical clarity.

Acadian Systematic Investing Built On



Economic intuition & insights of a talented, experienced, diverse group of investors:

100+ person investment team | 1600+ years' collective experience
95+ advanced analytical degrees

PEOPLE

DATA

Extensive data repository supplemented by alternative data scouting effort:

620M+ daily observations | 61TB+ data
150+ global markets | 65K+ traded assets



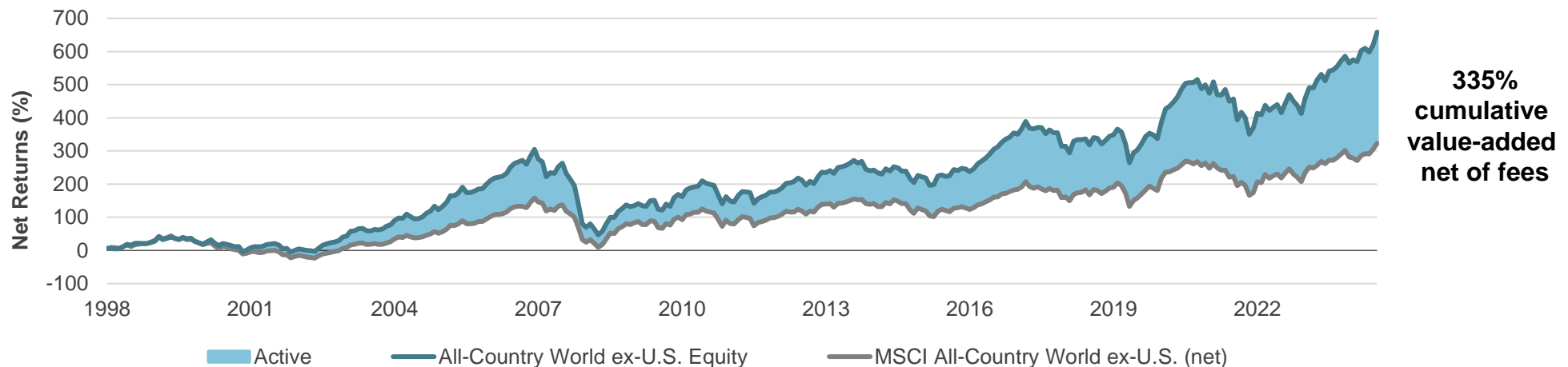
Transforming information into insights:

Robust technological infrastructure
Sophisticated analytical tools & portfolio attribution illuminate trends, relationships, and drivers of alpha

CLARITY

Why Acadian In All-Country World ex-U.S.?

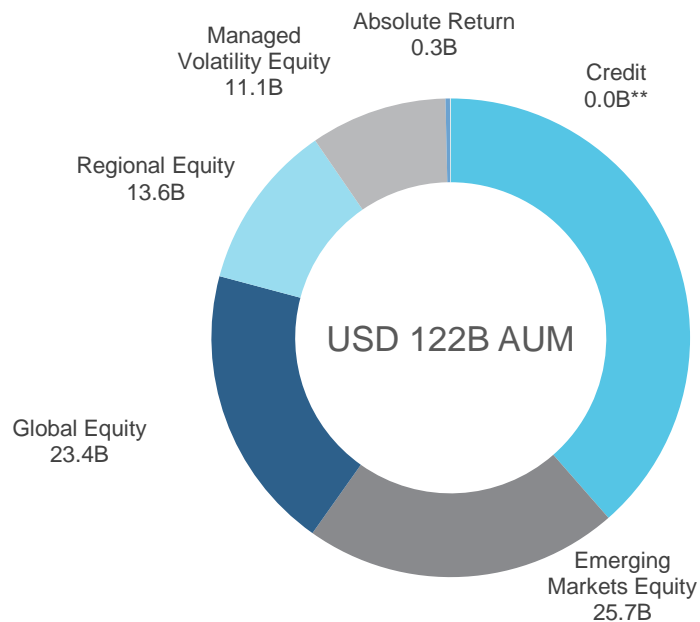
- Focus on international equities since inception of firm 30+ years ago
- Broad and mispriced security universe in an inefficient asset class
- Outperformance in 20 out of 27 years, with a since inception annualized return of 7.9% versus 5.6% for the benchmark as of May 31, 2025*



*All-Country World ex-U.S. Equity composite vs. the MSCI All-Country World ex-U.S. benchmark. After management fees in USD. Inception November 1, 1998. Reference to the benchmark is for comparative purposes only and is not intended to indicate that the composite will contain the same investments as the benchmark. Investors have the opportunity for losses as well as profits. Past performance is no guarantee of future results. The complete performance disclosure can be found in the composite performance disclosure page attached. Index Source: MSCI Copyright MSCI 2025. All Rights Reserved. Unpublished. PROPRIETARY TO MSCI.

Organizational Overview

- Acadian has been a pioneer in systematic investing since our founding in 1986
- We believe that a systematic approach grounded in fundamentals is well suited to delivering consistent risk-adjusted returns
- Our 364-person team is focused on continuous research and innovation



March 31, 2025

Rounding is applied to the total firm AUM which includes \$955.8 million in model advisory contracts where Acadian does not have trading authority. The individual strategy level assets under management (AUM) are rounded to the nearest million unless otherwise noted and do not include model advisory assets.

*As a separate legal entity, Acadian Asset Management (Australia) Limited. This was initially established as a joint venture with Colonial First State Investments Limited and became a wholly owned entity on June 30, 2015.

**Credit AUM: \$64.1M

Investment Team – Equities



D&I: Overview

A diverse firm across race/ethnicity, gender, culture, language, and other factors.

We believe diversity and inclusive practices...

- ▶ *lead to strength across all facets of our organization*
- ▶ *enhance decision-making and creativity, resulting in more resilient portfolios*
improved business outcomes
- ▶ *result in a more engaged and positive work environment*

A values-driven program based on:



Governance & commitment

Structured **accountability** across executive team, senior management, and D&I leadership



Data & transparency

Continuous **measurement** to assess program status including detailed tracking and reporting on diverse candidates, hires, promotions, and retention



Focused initiatives

Engaging employees and leaders through high-impact programs across our **workforce, business, and community** strategies

Representative Investors

Public

Employees' Retirement Fund of the City of Dallas
 Florida State Board of Administration
 Los Angeles County Employees Retirement Association
 Massachusetts Pension Reserves Investment Management Board
 Municipal Employees' Retirement System of Michigan
 New York City Employees Retirement System
 Ohio Public Employees Retirement System
 Oregon Public Employees
 Public School & Education Employee Retirement Systems of Missouri
 Tennessee Consolidated Retirement System
 Virginia Retirement System
 West Virginia Investment Management Board

Corporate

3M Company
 Altria Group
 Dow Inc.
 JM Family Enterprises, Inc.
 Pfizer
 The Boeing Company

Endowment/Foundation

Carnegie Mellon University
 Cornell University

Sub-Advisory

Harbor International Core Fund
 Optimum International Fund
 SEI

Taft-Hartley

North Atlantic States Carpenters Benefit Funds
 Producer-Writers Guild of America Pension Plan

Asia

Government Pension Fund [Thailand]
 Government Pension Investment Fund [Japan]
 Khazanah Nasional Berhad
 Permodalan Nasional Berhad (PNB)

Australia

Aware Super
 Colonial First State Investments Ltd.
 Rest Super

Canada

Mouvement Desjardins
 Ville de Montréal

Europe

Fidelity International
 Hampshire County Council
 Kempen Capital Management

The background of the slide is a complex, abstract network of thin, light blue lines connecting numerous small, dark blue circular nodes. The nodes are distributed across the entire frame, with some areas being more densely connected than others, creating a sense of a vast, interconnected system. The overall aesthetic is clean, modern, and technological.

PROCESS

Investment Philosophy

- Financial assets are often **mispriced** due to investors incorrectly processing information, having incomplete information, or both
- **Systematic** processes best capture inefficiencies arising from mispriced fundamental and market information
- Our **edge** comes from embracing new ideas and a continuous investment in people, technology, and data

Investment Process



All-Country World ex-U.S.

36,000 stock investment universe



Objective Return Forecast

Stock-specific

Selection within traditionally defined groups

+

Peer

Overlooked information from alternative peer groups

+

Macro

Top-down group signals (industry and country)



Disciplined Portfolio Construction

Multi-horizon forecasts

Proprietary risk models

Dynamic transaction cost modeling



Structured Trading Process

Systematic approach

Dynamic routing based on order profiling

Real-time oversight

Return Forecast Example

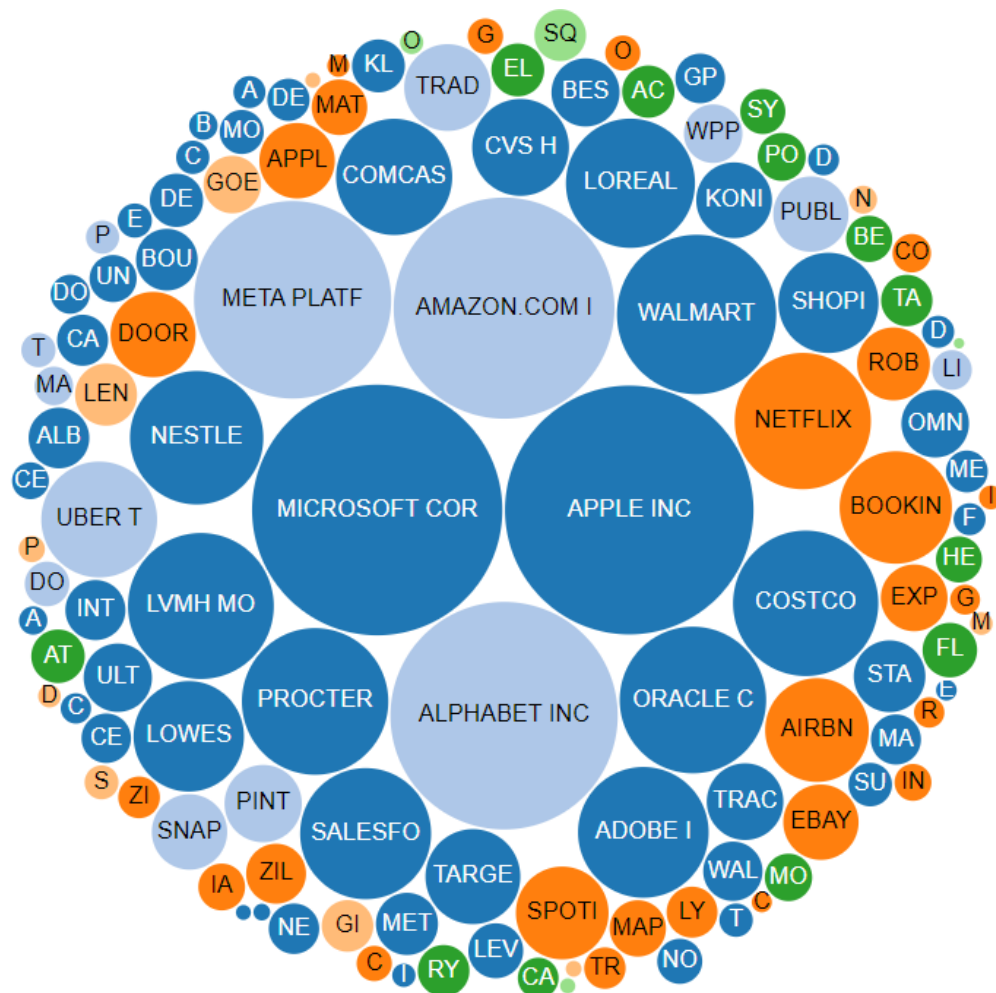
Model	Theme	Sample signals	Forecast
Stock-Specific	Value	→ Adjusted Intrinsic Value Extended Asset Value	+0.72
	Quality	→ Financial Strength Management Behavior	+0.71
	Growth	→ Earnings Surprise Recommendation Change	+0.84
	Technical	→ Institutional Investor Crowding Smart Reversal	+0.26
Peer	Proprietary Networks	→ Momentum Fundamentals	+0.38
Macro	Country	→ Corruption Adjusted Valuation Macro Environment	-0.10
	Industry	→ Quality Global Growth Sensitivity	+0.12
	Country/Industry Intersection	→ Price Momentum Adjusted Valuation	+0.19

Total Forecast +3.13%
Company: CRITEO SA Market Cap: USD 2B Country: France Industry: Media & Entertainment Description: Specializing in digital performance marketing

Source: Acadian Asset Management LLC. The information provided is for illustrative purposes only based on proprietary models. There can be no assurance that the forecasts will be achieved. The selected stock is intended to be an example of the process and is not a recommendation to buy or sell this specific security.

Stock Forecast Example: Mapping Peer Relationships

Criteo SA



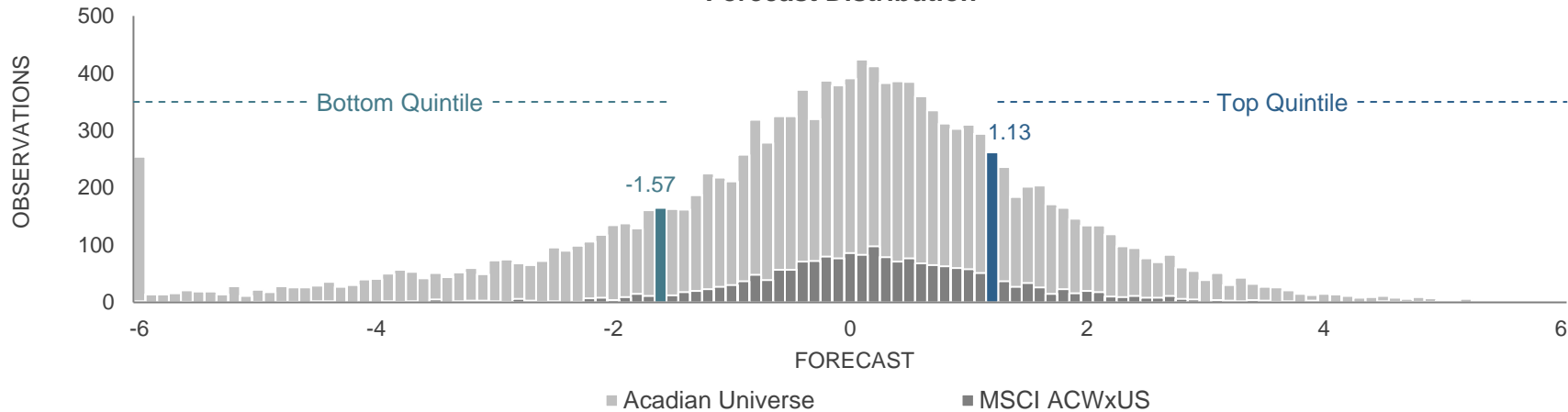
LEGEND

- Peer Linkage A
- Peer Linkage B
- Peer Linkage C
- Peer Linkage D
- Peer Linkage E

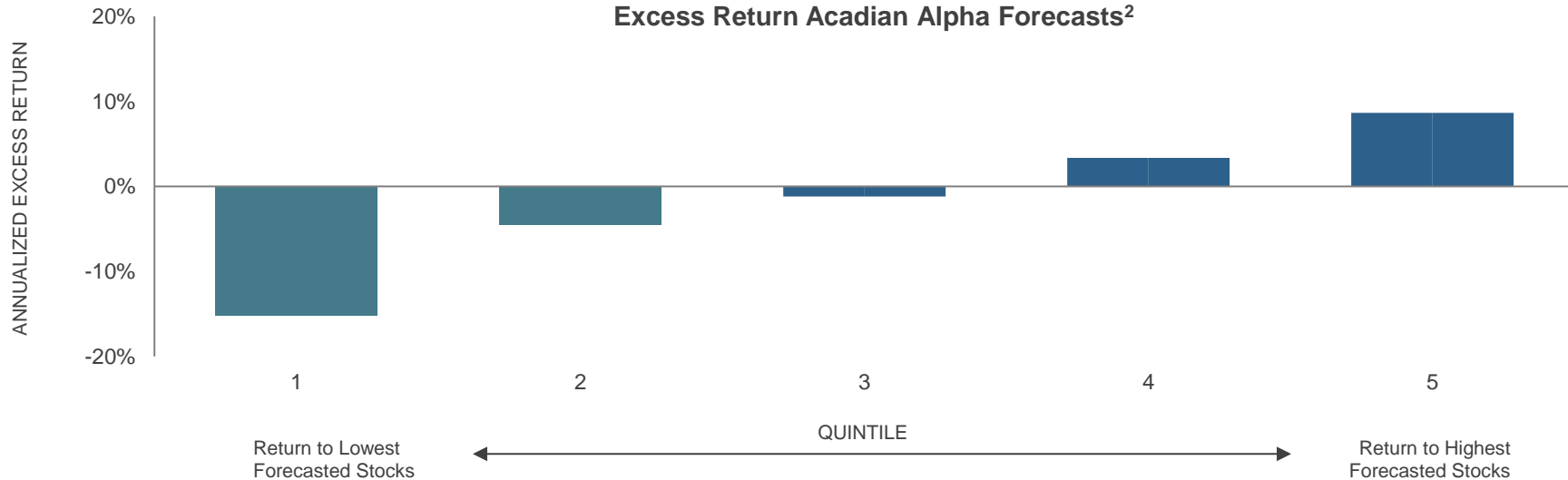
Stock Forecast Distribution and Returns

Trailing 10 Years as of December 2024

Forecast Distribution¹



Excess Return Acadian Alpha Forecasts²



Source: Acadian Asset Management LLC. For illustrative purposes only

¹Source: Acadian's All-Country World ex-U.S. universe with a market cap greater than \$100M. Methodology: Observations represents the number of forecasts. The highlighted values represent the observations in the top and bottom quintiles. The information is not reflective of a particular time period and is provided for illustrative purposes only. The chart depicts our forecast distribution process based on proprietary models. There can be no assurance that the forecasts will be achieved.

²This is not intended to represent investment returns generated by an actual portfolio. They do not represent actual trading or an actual account but were achieved by means of using Acadian's All-Country World ex-U.S. universe of securities for the period specified above. Results do not reflect transaction costs or other implementation costs. Past performance is no guarantee of future results. Index Source: MSCI Copyright MSCI 2025. All Rights Reserved. Unpublished. PROPRIETARY TO MSCI.

Risk Management and Portfolio Construction

All Country World ex-U.S. Equity

Active risk	4% - 6% tracking error
Market risk	Beta, volatility & size constrained relative to market
Security risk	Up to 2.25% active weight
Country/Industry/Currency risk	Risk aware, active bounds
Factor crowding	Mitigate factor crowding through Dynamic Factor Weighting
Human oversight	Portfolio review, discretionary risk management

The background of the slide is a complex, abstract network of thin, light blue lines connecting numerous small, dark blue circular nodes. The nodes are distributed across the entire frame, with some appearing as larger, more prominent hubs. The overall effect is one of a dense, interconnected web, suggesting themes of technology, communication, or organizational structure.

STRATEGY

Strategy Overview

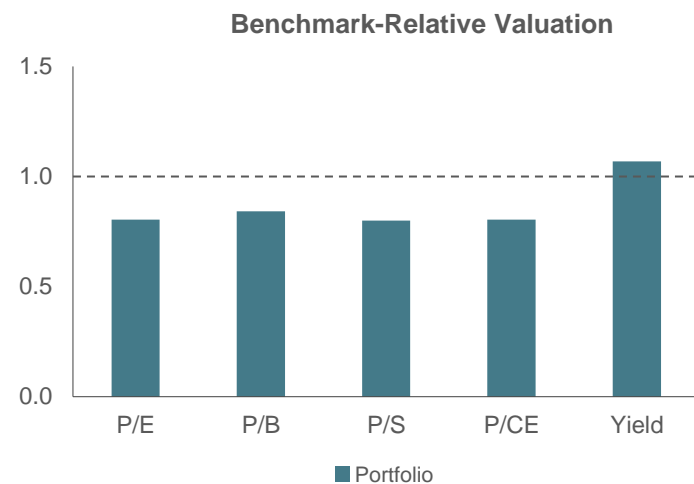
All Country World ex-U.S. Equity

Style	All-Cap
Process	Systematic stock selection, 100+ proprietary signals
Universe	36,000 securities
Benchmark	MSCI All-Country World ex-U.S.
Excess Return Target	2% - 3% (net of fees)
Active Risk Target	4% - 6%
Turnover	80% - 90%

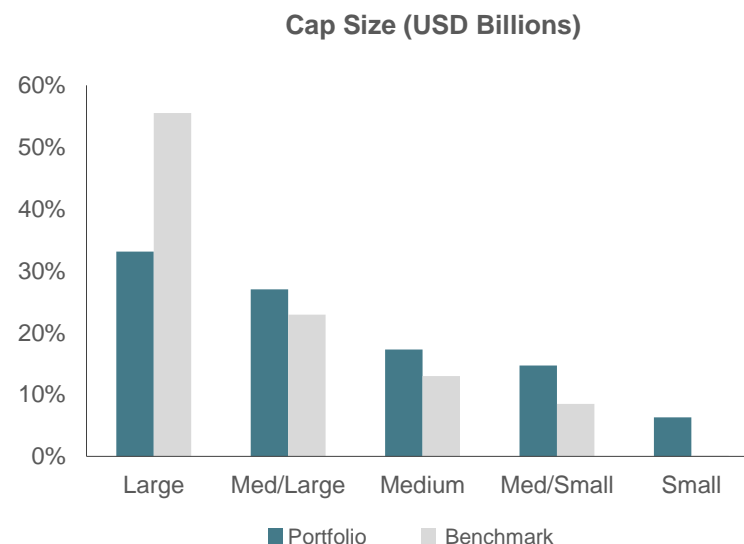
All-Country World ex-U.S. Equity

Key Characteristics – May 31, 2025*

Valuation	Portfolio	Benchmark
Price/Earnings	12.7	15.8
Price/Book	1.6	1.9
Price/Sales	1.2	1.5
Price/Cash Earnings	7.8	9.7
Yield	3.1%	2.9%
Total Securities	995	1983



Cap Size (USD Billions)	Portfolio	Benchmark
Large > \$50B	33.1%	55.5%
Med/Large \$20-\$50	27.0%	22.9%
Medium \$10-\$20	17.3%	13.0%
Med/Small \$3-\$10	14.7%	8.5%
Small < \$3	6.3%	0.1%
Median	1.2	11.8
Weighted Average	67.3	115.7



Portfolio: All-Country World ex-U.S. Equity. **Benchmark:** MSCI All-Country World ex-U.S..

*Preliminary. The data presented here is for a representative portfolio and is supplemental to the composite performance disclosure page attached. Reference to the benchmark is for comparative purposes only and is not intended to indicate that the composite will contain the same investments as the benchmark. Investors have the opportunity for losses as well as profits. Index Source: MSCI Copyright MSCI 2025. All Rights Reserved. Unpublished. PROPRIETARY TO MSCI.

All-Country World ex-U.S. Equity

Regional Allocations – May 31, 2025*

	Portfolio	Benchmark	Difference
Continental Europe	32.5%	32.7%	-0.2%
Austria	0.9	0.1	0.7
Belgium	0.5	0.6	-0.1
Denmark	1.5	1.5	0.0
Finland	0.5	0.7	-0.2
France	5.1	7.1	-2.0
Germany	6.5	6.6	-0.1
Ireland	0.0	0.2	-0.2
Italy	1.7	2.0	-0.3
Netherlands	4.3	2.9	1.4
Norway	0.6	0.4	0.3
Portugal	0.0	0.1	-0.1
Spain	2.1	2.1	0.0
Sweden	2.4	2.3	0.1
Switzerland	6.4	6.2	0.3
United Kingdom	4.4%	9.4%	-5.0%
Australia/New Zealand	4.9%	4.4%	0.5%
Australia	4.9	4.3	0.6
New Zealand	0.0	0.1	-0.1
Hong Kong/Singapore	2.9%	2.3%	0.6%
Hong Kong	0.1	1.2	-1.1
Singapore	2.7	1.1	1.7
Japan	9.8%	13.9%	-4.1%
North America	5.4%	8.0%	-2.7%
Canada	5.1	8.0	-2.9
Middle East	1.7%	0.6%	1.0%
Israel	1.7	0.6	1.0
Emerging Markets	36.9%	28.5%	8.4%
Cash Equitization	0.9		
Cash	0.6		



Portfolio: All-Country World ex-U.S. Equity. **Benchmark:** MSCI All-Country World ex-U.S..

*Preliminary. The data presented here is for a representative portfolio and is supplemental to the composite performance disclosure page attached. Reference to the benchmark is for comparative purposes only and is not intended to indicate that the composite will contain the same investments as the benchmark. Investors have the opportunity for losses as well as profits. Index Source: MSCI Copyright MSCI 2025. All Rights Reserved. Unpublished. PROPRIETARY TO MSCI.

All-Country World ex-U.S. Equity

Emerging Markets Allocations – May 31, 2025*

	Portfolio	Benchmark	Difference
Europe/Mid East/Africa	7.2%	3.6%	3.6%
Czech Republic	0.1	0.0	0.1
Egypt	0.0	0.0	0.0
Greece	0.1	0.2	-0.1
Hungary	0.4	0.1	0.3
Kuwait	0.5	0.2	0.3
Poland	2.1	0.3	1.8
Qatar	0.1	0.2	-0.1
Saudi Arabia	1.8	1.0	0.8
South Africa	0.1	0.9	-0.8
Turkey	0.0	0.1	-0.1
United Arab Emirates	1.9	0.4	1.5
Latin America	0.9%	2.1%	-1.2%
Brazil	0.6	1.2	-0.7
Chile	0.0	0.1	-0.1
Colombia	0.0	0.0	0.0
Mexico	0.1	0.6	-0.5
Peru	0.2	0.1	0.1
Asia	28.9%	22.9%	6.0%
China	12.6	8.3	4.3
India	3.9	5.3	-1.4
Indonesia	0.5	0.4	0.1
Malaysia	0.1	0.4	-0.2
Philippines	0.0	0.1	-0.1
South Korea	2.5	2.8	-0.3
Taiwan	8.0	5.3	2.7
Thailand	1.3	0.3	0.9



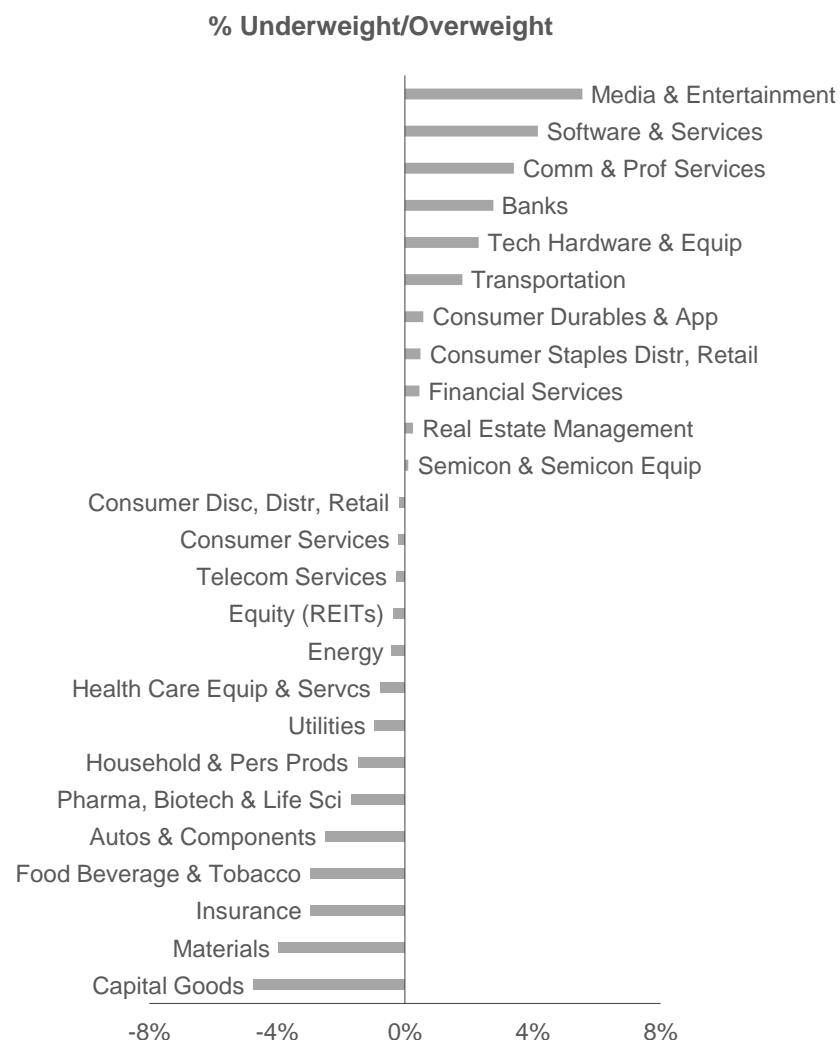
Portfolio: All-Country World ex-U.S. Equity. **Benchmark:** MSCI All-Country World ex-U.S..

*Preliminary. The data presented here is for a representative portfolio and is supplemental to the composite performance disclosure page attached. Reference to the benchmark is for comparative purposes only and is not intended to indicate that the composite will contain the same investments as the benchmark. Investors have the opportunity for losses as well as profits. Index Source: MSCI Copyright MSCI 2025. All Rights Reserved. Unpublished. PROPRIETARY TO MSCI.

All-Country World ex-U.S. Equity

Industry Allocations – May 31, 2025*

	Portfolio	Benchmark	Difference
Communication Services	11.5%	6.3%	5.3%
Media & Entertainment	9.1	3.5	5.5
Telecommunication Services	2.5	2.7	-0.3
Consumer Discretionary	8.3%	10.6%	-2.3%
Automobiles & Components	0.7	3.2	-2.5
Consumer Discretionary Distribution & Retail	2.8	3.0	-0.2
Consumer Durables & Apparel	3.3	2.7	0.6
Consumer Services	1.5	1.7	-0.2
Consumer Staples	3.0%	7.0%	-3.9%
Consumer Staples Distribution & Retail	1.9	1.4	0.5
Food, Beverage & Tobacco	1.0	4.0	-3.0
Household & Personal Products	0.1	1.5	-1.5
Energy	4.1%	4.5%	-0.4%
Financials	25.4%	25.1%	0.3%
Banks	18.4	15.6	2.8
Financial Services	4.5	4.0	0.5
Insurance	2.5	5.5	-3.0
Health Care	5.8%	8.3%	-2.4%
Health Care Equipment & Services	0.8	1.6	-0.8
Pharmaceuticals, Biotechnology & Life Sciences	5.0	6.7	-1.7
Industrials	15.1%	14.6%	0.5%
Capital Goods	6.1	10.8	-4.8
Commercial & Professional Services	5.1	1.6	3.4
Transportation	4.0	2.2	1.8
Information Technology	19.3%	12.7%	6.6%
Semiconductors & Semiconductor Equipment	5.7	5.6	0.1
Software & Services	7.8	3.7	4.2
Technology Hardware & Equipment	5.8	3.4	2.3
Materials	2.2%	6.2%	-4.0%
Real Estate	1.6%	1.7%	-0.1%
Equity Real Estate Investment Trusts (REITs)	0.2	0.6	-0.4
Real Estate Management	1.4	1.1	0.3
Utilities	2.2%	3.2%	-1.0%
Cash Equitization	0.9		
Cash	0.6		



Portfolio: All-Country World ex-U.S. Equity. **Benchmark:** MSCI All-Country World ex-U.S..

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All-Country World ex-U.S. Equity

Top Ten Portfolio Holdings – May 31, 2025*

Name	Country	Industry	Portfolio (%)
ROCHE HOLDING AG	Switzerland	Pharmaceuticals, Biotechnology & Life Sciences	2.8
BNP PARIBAS SA	France	Banks	2.5
WOLTERS KLUWER NV	Netherlands	Commercial & Professional Services	2.3
DEUTSCHE BOERSE AG	Germany	Financial Services	1.9
CHINA CONSTRUCTION BANK CORP.	China	Banks	1.6
ABB LTD	Switzerland	Capital Goods	1.5
ADIDAS AG	Germany	Consumer Durables & Apparel	1.4
RECRUIT HOLDINGS CO LTD	Japan	Commercial & Professional Services	1.4
SEA LTD	Singapore	Media & Entertainment	1.4
TAIWAN SEMICONDUCTOR MANUFACTURING CO LTD	Taiwan	Semiconductors & Semiconductor Equipment	1.4

Summary	Portfolio	Benchmark	Active Weight
% of Portfolio for Top 10 Active Weights	18.1	2.7	15.4
% of Portfolio for Top 20 Current Holdings	30.4	6.7	23.7
% of Non-Benchmark Portfolio Holdings	11.6		
Active Share of Portfolio	80.4		

Portfolio: All-Country World ex-U.S. Equity. **Benchmark:** MSCI All-Country World ex-U.S..

*Preliminary. Portfolio holdings are subject to change and should not be considered a recommendation to buy or sell individual securities. The data presented here is for a representative portfolio and is supplemental to the composite performance disclosure page attached. Reference to the benchmark is for comparative purposes only and is not intended to indicate that the composite will contain the same investments as the benchmark. Investors have the opportunity for losses as well as profits. Index Source: MSCI Copyright MSCI 2025. All Rights Reserved. Unpublished. PROPRIETARY TO MSCI.

All-Country World ex-U.S. Equity Composite

Performance (Returns in USD – Before and After Management Fees)

Time Period	Composite (gross)*	Composite (net)*	Benchmark	Value-Added (gross) vs. Benchmark
1998 (Inception: Nov 1, 1998)	5.5%	5.4%	9.0%	(3.5)%
1999	34.9	33.9	30.9	4.0
2000	(10.5)	(11.1)	(15.1)	4.6
2001	(10.4)	(11.1)	(19.7)	9.3
2002	(7.5)	(8.2)	(14.9)	7.4
2003	55.5	54.3	40.8	14.7
2004	26.0	25.1	20.9	5.1
2005	24.8	23.9	16.6	8.2
2006	31.1	30.1	26.7	4.4
2007	15.9	15.1	16.7	(0.8)
2008	(50.4)	(50.8)	(45.5)	(4.9)
2009	34.7	33.7	41.4	(6.7)
2010	18.0	17.1	11.2	6.8
2011	(12.3)	(13.0)	(13.7)	1.4
2012	18.6	17.8	16.8	1.8
2013	18.5	17.6	15.3	3.2
2014	(1.2)	(2.0)	(3.9)	2.7
2015	(3.9)	(4.6)	(5.7)	1.8
2016	9.5	8.7	4.5	5.0
2017	35.7	34.7	27.2	8.5
2018	(14.8)	(15.5)	(14.2)	(0.6)
2019	19.1	18.3	21.5	(2.4)
2020	13.9	13.1	10.7	3.2
2021	16.3	15.4	7.8	8.5
2022	(15.7)	(16.4)	(16.0)	0.3
2023	17.0	16.1	15.6	1.4
2024	14.2	13.4	5.5	8.7
2025 through May	13.6	13.3	14.0	(0.4)
One Year Annualized Return	19.3	18.4	13.8	5.5
Three Year Annualized Return	11.7	10.8	9.4	2.3
Five Year Annualized Return	14.3	13.5	10.4	3.9
Ten Year Annualized Return	8.9	8.1	5.5	3.4
Since-Inception Annualized Return	8.7	7.9	5.6	3.1
Since-Inception Annualized Standard Deviation	17.4	17.4	16.6	
Since-Inception Active Risk				4.1
Since-Inception Information Ratio				0.8

Composite: All-Country World ex-U.S. Equity. **Benchmark:** MSCI All-Country World ex-U.S. (net) 2001-01-01 To Present, MSCI AC World ex-USA (gross) 1998-11-01 To 2001-01-01.

*Returns that include the most recent month are preliminary. Acadian Asset Management LLC claims compliance with the Global Investment Performance Standards (GIPS®). GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein. Reference to the benchmark is for comparative purposes only and is not intended to indicate that the composite will contain the same investments as the benchmark. Investors have the opportunity for losses as well as profits. Past performance is no guarantee of future returns. The complete performance disclosure can be found in the composite performance disclosure page attached. Index Source: MSCI Copyright MSCI 2025. All Rights Reserved. Unpublished. PROPRIETARY TO MSCI.

The background of the slide is a complex, abstract network of thin, light blue lines connecting numerous small, dark blue circular nodes. The nodes are distributed across the entire frame, with some appearing as larger, more prominent hubs. The lines vary in thickness and opacity, creating a sense of depth and connectivity. The overall effect is a dense, interconnected web that suggests a global or digital network.

SUPPORTING EXHIBITS

Commingled Fund Summary of Terms

Name	Acadian All Country World ex U.S. CIT
AUM as of May 2025	\$2.2 Billion
Inception Date	July 2019
Benchmark	MSCI All-Country World ex-U.S.
Legal Structure	Collective Investment Trust
Domicile	United States of America
Eligible Investors	ERISA
Minimum Investment	\$1 million
Valuation	Daily
Liquidity Notice Period	Daily Prior to close of New York Stock Exchange
Custodian	Brown Brothers Harriman & Co.
Administrator	SEI Trust Company
Auditor	KPMG LLC
Management Fee	All-in fee 0.65%

Commingled Fund Summary of Terms

Name	Acadian All Country World ex U.S. Fund
AUM as of May 2025	\$1.9 Billion
Inception Date	April 2005
Benchmark	MSCI All-Country World ex-U.S.
Legal Structure	Limited Liability Company
Domicile	Delaware, U.S.
Eligible Investors	Qualified Purchasers (3(c)(7))
ERISA Qualified	Yes
Minimum Investment	\$1 million
Valuation	Daily
Liquidity Notice Period	10 Business Days
Custodian	The Bank of New York Mellon Corporation
Administrator	The Bank of New York Mellon Corporation
Auditor	PricewaterhouseCoopers LLP
Management Fee	0.75% first \$25M; 0.65% next \$25M; 0.50% next \$100M; 0.40% thereafter

Diversity Representation Survey for Oakland Police and Fire Retirement System

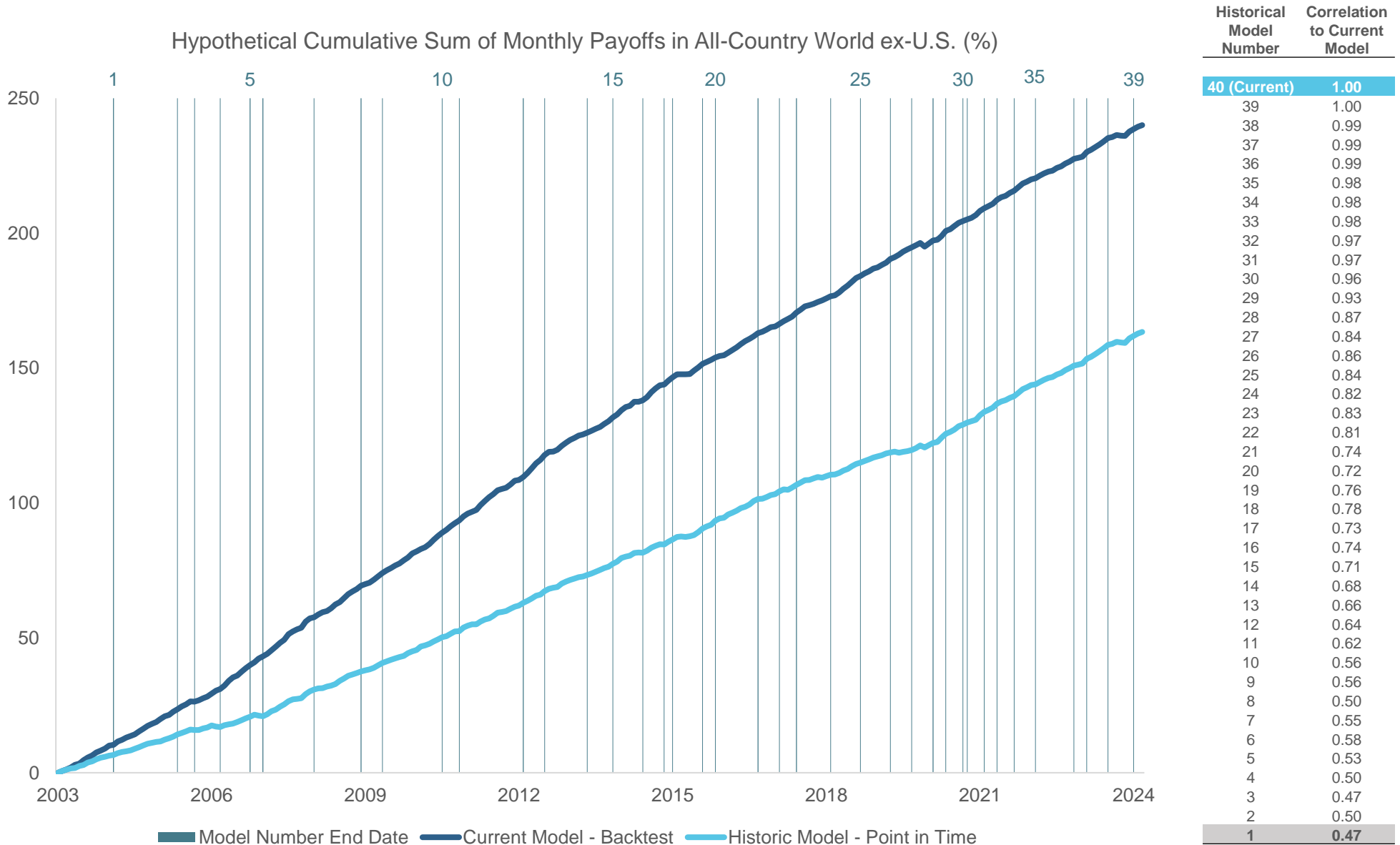


Firm Name	Acadian
Product Name	All Country World ex-US Equity
Total No. of Employees	367

	Percentage (%) of Board of Directors / Managing Members	Percentage(%) of Firm (Entire Staff)	Percentage (%) of Firm (Investment Professionals)
Race and Ethnicity*			
African American/Black	0.0%	2.7%	0.8%
Asian/Hawaiian/Pacific Islander	16.7%	25.9%	42.4%
Latino/Hispanic	0.0%	2.7%	0.8%
White	83.3%	65.9%	52.5%
American Indian/Alaska Native	0.0%	0.5%	0.0%
Other	0.0%	2.2%	3.4%
Gender			
Male	66.7%	68.7%	86.4%
Female	33.3%	31.3%	13.6%
Non-Identified/Other	0.0%	0.0%	0.0%

*Racial/ethnic categories appear as defined by EEOC guidance. Data as of May 31, 2025. Rather than a Board of Directors, Acadian has a Board of Managers comprised of senior executives of Acadian and Acadian's parent company Acadian Asset Management Inc. ("AAMI"). The data in the table above represents the four Acadian-employed members of the Board the two AAMI employed members. Statistics for the last two columns above includes Acadian Asset Management LLC and our three wholly-owned affiliates in Singapore, Australia, and the UK..

Research: Impact



The chart presented here is a hypothetical illustration for educational purposes only showing the cumulative sum of monthly payoffs in All-Country World ex-U.S. Markets. The light blue solid line represents the historic model's efficacy, while the dark blue solid line represents the efficacy of the current model in a backcast. Source: Acadian investable universe with a market capitalization greater than \$100MM. This is meant to be an educational illustrative example and is not intended to represent investment results generated by an actual portfolio. The payoffs do not represent actual trading or an actual account. Results do not reflect transaction costs, other implementation costs and do not reflect advisory fees or their potential impact. Hypothetical results are not indicative of actual future results. Every investment program has the opportunity for loss as well as profit.

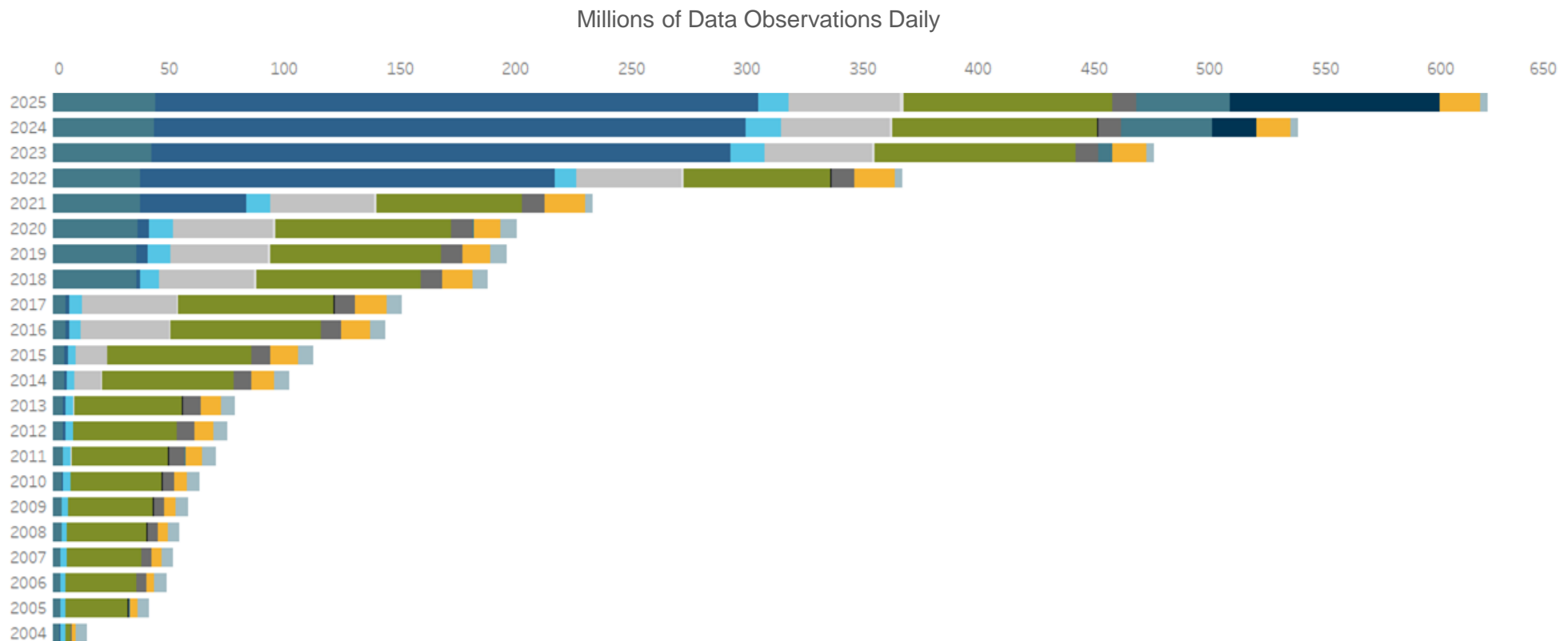
Global Data

44,000 COMPANIES
100 COUNTRIES

620 MILLION DAILY
OBSERVATIONS

61 TERABYTE
DATABASE

Daily data from over 40 sources including regulatory authorities, company websites, media sources, and industry trade organizations not available in standard vendor offerings:





BIOGRAPHIES

Investment Team

Brendan Bradley, Ph.D. – Executive Vice President, Chief Investment Officer

- 27 years of investment experience
- Member of the Acadian Board of Managers, Executive Management Team, Executive Committee, Responsible Investing Committee
- Ph.D. in applied mathematics from Boston University
- B.A. in physics from Boston College

Alexandre Voitenok – Executive Vice President, Deputy Chief Investment Officer

- 24 years of investment experience
- Member of Acadian's Executive Committee, Executive Management Team and Diversity & Inclusion Forum
- M.Sc. in software engineering from Minsk Radio Engineering Institute

Malcolm Baker, Ph.D. – Director, Research

- 23 years of investment experience
- Research consultant since 2006
- Robert G. Kirby Professor of Finance, Harvard Business School
- Ph.D. from Harvard University
- M.Phil. From Cambridge University
- B.A. from Brown University

Michael Gleason – Senior Vice President, Director, Equity Alternative

- 29 years of investment experience
- MSF from Northeastern University
- B.S. in management science from Bridgewater State University

Andy Moniz Ph.D., CFA – Senior Vice President, Director of Responsible Investing

Acadian Asset Management (U.K.) Limited

- 25 years of professional experience
- Ph.D. in natural language processing and information retrieval from Erasmus University
- MSc. in applied statistics from the University of London
- M.A. in economics from Cambridge University
- B.A. in economics from Cambridge University
- CFA charterholder and member of CFA Society U.K.

Ryan Taliaferro, Ph.D. – Senior Vice President, Director, Investment Strategies

- 23 years of professional experience
- Member of Acadian's Executive Committee
- Ph.D. in business economics (finance) from Harvard University
- M.B.A. in finance and economics from the University of Chicago
- A.M. in economics from Harvard University
- A.M. and A.B. in physics from Harvard University

Fanesca Young, Ph.D., CFA – Senior Vice President, Director, Equity Portfolio Management

- 20 years of professional experience
- Ph.D. in statistics from Columbia University
- M.Phil. in statistics from Columbia University
- M.A. in statistics from Columbia University
- B.A. in mathematics from the University of Virginia
- CFA charterholder

Vladimir Zdorovtsov, Ph.D. – Senior Vice President, Director, Global Equity Research

- 23 years of investment experience
- Member of the Acadian Executive Committee
- Ph.D. in finance from University of South Carolina
- M.B.A. from University of Arkansas
- B.A. in international economics from Sumy University, Ukraine

Francis Seah, CFA – Senior Vice President, Portfolio Manager and Managing Director, Acadian Singapore Acadian Asset Management (Singapore) Pte Ltd

- 21 years of investment experience
- B.S. and M.S. from Nanyang Technological University
- CPA, Institute of Certified Public Accountants Singapore
- CFA charterholder and a member of CFA Singapore
- Computational Finance Certificate from Carnegie Mellon University

Mark Birmingham, CFA – Senior Vice President, Head of Risk Modeling, Portfolio Manager

- 30 years of investment experience
- A.B. in computer science from Princeton University
- CFA charterholder and member of CFA Society Boston

Doug Eisenstein – Senior Vice President, Head of Investment Data Solutions

- 25 years of professional experience
- Studied computer science at Suffolk University

Joel Feinberg – Senior Vice President, Head of Trading

- 19 years of investment experience
- MSIM from Boston University
- B.B.A. in finance from the University of Massachusetts

Alexander Galakatos, Ph.D. – Senior Vice President, Head of Investment Data Engineering

- 6 years of professional experience
- Ph.D. in computer science from Brown University
- ScM in computer science from Brown University
- B.Sc. in computer engineering from Lehigh University

Investment Team

Anton Kapliy, Ph.D., CFA – Senior Vice President, Head of Portfolio Analytics

- 11 years of professional experience
- Ph.D. in high energy physics from University of Chicago
- B.A. in physics from University of Pennsylvania
- CFA charterholder and a member of CFA Society Boston

Jian Pan, CFA – Senior Vice President, Head of Quantitative Systems

- 31 years of professional experience
- M.S. in computer science from the University of Massachusetts
- B.S. industrial automation control from Nanjing University of Technology, China

Michael McCart, CFA – Senior Vice President, Investment Systems Architect

- 27 years of investment experience
- B.S. in engineering and economics, University of Pennsylvania
- CFA charterholder and a member of CFA Society Boston

Javier Alcazar, Ph.D. – Senior Vice President, Portfolio Manager, Research Acadian Asset Management (U.K.) Limited

- 23 years of professional experience
- Ph.D. in mechanical engineering from the Universidad Pontificia Comillas, ICAI, Spain
- M.Sc. in advanced mathematics and theoretical Physics from the University of Cambridge
- M.Sc. in aeronautical engineering from the Universidad Politecnica de Madrid, Spain
- M.Sc. in parallel computing from Imperial College London
- B.Sc. in theoretical physics from Universidad Complutense de Ciencias Fisicas, Spain

Daniel Adamson – Senior Vice President, Portfolio Manager, Implementation

- 22 years of professional experience
- M.B.A. from Boston College
- B.A. in accountancy and management information systems from Miami University

Giuliano Amantini, Ph.D. – Senior Vice President, Portfolio Manager, Implementation

- 20 years of professional experience
- Ph.D. in engineering and applied sciences from Yale University
- M.S. in mathematical finance from Bocconi University
- M.S. in mechanical engineering from Yale University
- M.S. in aerospace engineering from La Sapienza University
- B.S. in mechanical engineering from Tor Vergata University

Ioannis Baltopoulos – Senior Vice President, Portfolio Manager

- 16 years of professional experience
- M.Sc. in advanced computing from Imperial College London
- B.Sc. in computer science from the University of Kent

Pavel Bandarchuk, Ph.D., CFA – Senior Vice President, Portfolio Manager, Research

- 18 years of investment experience
- Ph.D. in international economics and finance from Brandeis University
- M.S. in finance from Brandeis University
- Diploma in international economics from Belarusian State University
- Certified FRM and CFA charterholder

Scott Brymer, CFA – Senior Vice President, Portfolio Manager

- 27 years of professional experience
- B.B.A. in finance from the University of Massachusetts Amherst
- CFA charterholder and a member of CFA Society Boston

Heidi Chen, CFA – Senior Vice President, Portfolio Manager

- 11 years of professional experience
- S.M. in computational science and engineering from Harvard University
- B.A. with Honors in mathematics from Williams College
- CFA charterholder and member of CFA Society Boston

Zhe Chen, Ph.D., CFA – Senior Vice President, Portfolio Manager, Research

Acadian Asset Management (Australia) Limited

- 16 years of professional experience
- Ph.D. in empirical finance from Macquarie University
- Bachelor of Engineering (bioinformatics), First Class Honours and University Medal, from the University of New South Wales
- Bachelor of Commerce (finance) from UNSW
- CFA charterholder

Chris Covington, CFA – Senior Vice President, Portfolio Manager

- 18 years of professional experience
- M.S. in investment management from Boston University
- B.A. in mathematical economics from Colorado College
- CFA charterholder

Thomas Dobler, Ph.D. – Senior Vice President, Portfolio Manager

- 29 years of investment experience
- Member of Acadian's Diversity & Inclusion Forum
- Ph.D. in mathematics from Columbia University
- M.S. in mathematics from University of Illinois
- B.S. in mathematics from University of Vienna, Austria

Investment Team

Timothy Ellerton, CFA – Senior Vice President, Portfolio Manager Acadian Asset Management (U.K.) Limited

- 25 years of professional experience
- M.Sc. in mathematical trading & finance from the Bayes Business School at City University
- B.A. in law & society from the University of Exeter
- CFA charterholder and member of CFA Society U.K

Denys Glushkov, Ph.D. – Senior Vice President, Portfolio Manager, Research

- 19 years of professional experience
- Ph.D. in finance, University of Texas at Austin
- M.S. in economic cybernetics, Dnipropetrovsk State University (Ukraine)
- M.A. in economics, Central European University (Hungary)

Katrina Khoupongsy, CFA – Senior Vice President, Portfolio Manager, Research

Acadian Asset Management (Australia) Limited

- 31 years of professional experience
- Bachelor in mathematics and finance (Hons) from the University of Technology, Sydney
- Graduate Diploma in applied finance and investments from the Securities Institute of Australia
- CFA charterholder

Owen Lamont, Ph.D. – Senior Vice President, Portfolio Manager, Research

- 37 years of professional experience
- Ph.D. in economics from the Massachusetts Institute of Technology
- B.A. in economics from Oberlin College

Devin Nial – Senior Vice President, Portfolio Manager, ESG

- 20 years of professional experience
- M.S. in finance from Boston College
- M.A. in computer science from Boston University
- B.A. in English literature from SUNY Albany

Brendan O’Leary, CFA – Senior Vice President, Portfolio Manager, Research

- 12 years of professional experience
- B.S.E. in mechanical & aerospace engineering from Princeton University
- CFA charterholder

Dmitry Olevsky, CFA – Senior Vice President, Portfolio Manager, Research

- 23 years of investment experience
- M.B.A. from Harvard Business School
- B.S. in structural engineering from Michigan Technological University
- FRM designation and CFA charterholder

Matthew Picone, CFA – Senior Vice President, Portfolio Manager Acadian Asset Management (Australia) Limited

- 21 years of professional experience
- Member of Acadian's Responsible Investing Committee
- Bachelor of Commerce in finance and econometrics from the University of Sydney
- CFA charterholder
- Member of the PRI Australian Advisory Committee

Lukasz Pomorski, Ph.D. – Senior Vice President, Portfolio Manager

- 19 years of professional experience
- Ph.D. in finance from the University of Chicago
- M.A. in finance from Tilburg University
- M.A. and B.A. in economics from the Warsaw School of Economics

Mark Roemer – Senior Vice President, Portfolio Manager

- 29 years of professional experience
- M.S. in finance from London Business School
- M.S. in engineering from Stanford University
- B.S. in mechanical engineering from Virginia Polytechnic Institute & State University

Bin Shi, Ph.D., CFA – Senior Vice President, Portfolio Manager, Research

- 19 years of investment experience
- Ph.D. in industrial and systems engineering from Georgia Institute of Technology
- M.S. in operations research from Georgia Institute of Technology
- B.S. in mechanical engineering from Southeast University, China
- CFA charterholder

Olivia Tang, Ph.D., CFA – Senior Vice President, Portfolio Manager, Research

- 15 years of professional experience
- Ph.D. in systems engineering, with a concentration in operations research, from Boston University
- B.S. in mathematics from Peking University (China)
- CFA charterholder

Charles Augello, CFA – Senior Vice President, Lead Analyst, Integration, Multi-Asset Class Strategies

- 20 years of professional experience
- B.A. in engineering sciences and economics from Dartmouth College
- CFA charterholder

Investment Team

Rob Ricciarelli, CFA – Senior Vice President, Lead Analyst, IPD

- 29 years of professional experience
- M.B.A. from Suffolk University
- B.S. in management and B.A. in psychology from the University of Massachusetts, Boston
- CFA charterholder

Jeffrey Sutthoff, CFA – Senior Vice President, Lead Analyst, Integration

- 30 years of professional experience
- M.B.A. in finance from Boston College
- B.S. in mathematics from Stetson University
- CFA charterholder

Mark Weissman – Senior Vice President, Lead Analyst, Research

- 19 years of investment experience
- B.S. in computer science, SUNY at Buffalo
- B.S. in chemical engineering from SUNY at Buffalo

Xiaoting Zhang, CFA, FRM – Senior Vice President, Lead Analyst, Integration

- 21 years of investment experience
- M.B.A. from the University of Chicago
- M.S. in financial mathematics from the University of Chicago
- M.S. in computer science from Loyola University Chicago
- B.A. in architecture from Tianjin University, China
- Certified FRM and CFA charterholder

Deborah Waters – Senior Vice President, Senior Trader, Implementation

- 35 years of professional experience
- B.S. in finance from Northeastern University

Tom Bilbe – Vice President, Portfolio Manager

Acadian Asset Management (U.K.) Limited

- 13 years of professional experience
- MSc in finance and investment from the University of Edinburgh Business School
- BEng in mechanical engineering with management from the University of Edinburgh

Stephen Fang – Vice President, Portfolio Manager, Research

- 8 years of investment experience
- M.S. in computational science and engineering from Harvard University
- B.A. in mathematics and economics from Middlebury College

Sean Geary, CFA – Vice President, Portfolio Manager

- 17 years of professional experience
- M.B.A. from Boston College
- M.S. in mechanical engineering from Boston University
- B.S. in physics from James Madison University
- CFA charterholder and member of CFA Society Boston

Charles Johnson – Vice President, Portfolio Manager

- 23 years of professional experience
- M.S. in finance from Northeastern University
- M.B.A. from Northeastern University
- B.S. in finance from the University of Massachusetts at Dartmouth

John King – Vice President, Portfolio Manager

- 24 years of professional experience
- Associate's degree in computer technology from Southern Maine Community College
- B.S. in analytics from Northeastern University

Dan Le, CFA – Vice President, Portfolio Manager

- 20 years of professional experience
- B.A. in psychology from Brown University
- CFA charterholder and a member of CFA Society Boston

Adhi Mallik, CFA – Vice President, Portfolio Manager

- 14 years of investment experience
- M.B.A. with a concentration in finance & accounting from Carnegie Mellon University
- B.A. in economics from University of CA – San Diego
- CFA charterholder
- Holds the CQF designation from CQF Institute

Ken Masse, CFA – Vice President, Portfolio Manager

- 33 years of investment experience
- M.S. in finance from Boston College Carroll School of Management
- B.S. in finance from Bentley University
- CFA charterholder

Kyle McCarthy, CFA – Vice President, Portfolio Manager, Implementation

- 19 years of professional experience
- B.S. in finance from Bentley University
- CFA charterholder and member of CFA Society Boston

Louis Seng – Vice President, Portfolio Manager, Implementation

Acadian Asset Management (Singapore) Pte Ltd

- 16 years of investment experience
- B.B.M in finance from Singapore Management University

Linda Wang – Vice President, Portfolio Manager, Research

- 12 years of investment experience
- Master of Finance from MIT's Sloan School of Management
- B.S. in finance and accounting from Drexel University
- Certified FRM

Investment Team

Steven Wong – Vice President, Portfolio Manager, Research Acadian Asset Management (Australia) Limited

- 14 years of professional experience
- Ph.D. in statistics from the University of Sydney
- Master of Finance from the University of New South Wales
- Bachelor of Commerce and Bachelor of Engineering (Hons, University Medal) from the University of New South Wales

Xunqi (Richie) Yu, CFA – Vice President, Portfolio Manager

- 17 years of professional experience
- Ph.D. in electrical and computer engineering from the University of Miami
- M.S. in computational finance from Carnegie Mellon University, Tepper School of Business
- B.S. in information engineering from Wuhan University, School of Remote Sensing and Information Engineering
- CFA charterholder

Wesley Jeng, CFA – Vice President, Associate Portfolio Manager, Implementation

Acadian Asset Management (Australia) Limited

- 12 years of investment experience
- Dual Master's Degree from UT Austin and ESCP Europe
- BA (Hons) from University of Nottingham
- CFA charterholder

Jeffrey Lobdell, CMT – Vice President, Associate Portfolio Manager, Implementation

- 17 years of professional experience
- M.B.A. in finance from the University of Massachusetts
- B.A. in communications from the University of Massachusetts
- CMT charterholder

Anna Papush, Ph.D. – Vice President, Associate Portfolio Manager,

- 11 years of professional experience
- Ph.D. in operations research from Massachusetts Institute of Technology
- B.A. in mathematics from Cornell University

Shivani Patnaik – Vice President, Associate Portfolio Manager

- 14 years of professional experience
- M.S. in mathematical finance from Boston University
- B.S. in chemical engineering from University of Maryland

Alexander Rikun – Vice President, Associate Portfolio Manager

- 15 years of professional experience
- Ph.D. in operations research from Massachusetts Institute of Technology
- B.S. in applied mathematics with a minor in economics from Columbia University

Vincent Tang – Vice President, Associate Portfolio Manager, Research

- 8 years of investment experience
- M. Eng. in financial engineering from Cornell University
- B. Econ in finance, with a minor in computer science, from Wuhan University

James Toppa, CFA, CAIA – Vice President, Associate Portfolio Manager, Implementation

- 17 years of professional experience
- B.S. in business administration from Bryant University
- CAIA charterholder
- CFA charterholder

James Coder, CFA – Vice President, Lead Analyst, Integration

- 12 years of investment experience
- B.S. in finance from the University of Kansas
- CFA charterholder

Bhaskar Edara, CFA, FRM – Vice President, Lead Analyst, Implementation

- 30 years of professional experience
- M.S. in finance from Boston College
- B.Tech. in mechanical engineering from the National Institute of Technology, India
- Certified FRM and CFA charterholder

Lucas Manley, CFA – Vice President, Lead Analyst

- 21 years of investment experience
- M.S. in investment management from Boston University
- B.S. in business administration from Northeastern University
- CFA charterholder and a member of CFA Society Boston

Yevgen Revtsov, CFA – Vice President, Lead Analyst, Integration

- 12 years of professional experience
- B.S. in computer systems engineering from Boston University
- CFA charterholder

Bernard Sim – Vice President, Lead Analyst, IPD

Acadian Asset Management (Singapore) Pte Ltd

- 24 years of professional experience
- Bachelor of Commerce in finance from the Australia National University

Michael Szrom, CFA – Vice President, Lead Analyst, Implementation

- 8 years of professional experience
- B.S. in computer science and computer engineering from Northeastern University
- CFA charterholder

Michael Vashevko – Vice President, Lead Analyst, Implementation

- 29 years of professional experience
- M.S. in applied mathematics and computer science from Belarusian State University

Investment Team

Yu (Richard) Wang, CFA, FRM – Vice President, Lead Analyst, Integration

- 20 years of professional experience
- M.B.A. from the University of Chicago Booth
- M.S. in computer science from Cornell University
- B.S. in computer science from National University of Singapore
- FRM and CFA charterholder

Shin Zhao, CFA – Vice President, Lead Analyst, Integration

- 22 years of professional experience
- M.S. in electrical and computer engineering from the University of Massachusetts
- B.S. in physics from the University of Science and Technology of China
- CFA charterholder

Matthew Calder – Vice President, Senior Analyst, Investment Data Engineering

- 27 years of professional experience
- Ph.D. in probability and mathematical statistics from Colorado State University
- B.S. in mathematics and statistics from the University of Wisconsin

Chong Chen – Vice President, Senior Analyst, Integration

- 10 years of professional experience
- M.A. in mathematics of finance from Columbia University
- M.S. in economics from Shanghai Jiao Tong University
- B.S. in finance and mathematics from Wuhan University

Rei Cheong, CFA – Vice President, Senior Analyst, IPD

Acadian Asset Management (Singapore) Pte Ltd

- 21 years of professional experience
- MSc in computer science from Georgia Institute of Technology
- Masters in Business Administration from the Singapore Management University
- Graduate Diploma in Financial Management from the Singapore Institute of Management
- Bachelor of Electrical Engineering from the National University of Singapore
- CFA charterholder

Eric Guenterberg – Vice President, Senior Analyst, Implementation

- 26 years of professional experience
- M.S. in electrical engineering from University of Texas at Dallas
- B.S. in electrical engineering from University of California, Los Angeles

Soichi Hayashi – Vice President, Senior Analyst, Implementation

- 24 years of professional experience
- B.S. in computer science and physics from Henderson State University

Shi He – Vice President, Senior Analyst, Integration

- 7 years of professional experience
- M.S. in data science from Worcester Polytechnic Institute
- B.S. in computer science from Hubei University of Police, China

Michael Kelsey – Vice President, Senior Analyst, Implementation

- 23 years of professional experience
- M.B.A. from Northeastern University
- B.S. from Babson College

Anthony King – Vice President, Senior Analyst, IPD

- 25 years of professional experience
- M.S. in computer science from Boston University
- B.S. in management science and information systems from The Pennsylvania State University

Anna Lang, CFA – Vice President, Senior Analyst, IPD

- 13 years of professional experience
- M.B.A. from Boston University
- B.S. in accounting from the International Slavic University
- CFA charterholder and a member of CFA Society Boston

Zhenan (Micky) Li, CFA – Vice President, Senior Analyst, IPD

- 14 years of investment experience
- M.S. in economics from Boston University
- B.S. in international business and trade from ShanDong University of Science & Technology
- B.S. in business management and administration from Cambridge College
- CFA charterholder and member of CFA Society Boston

Guy Mann – Vice President, Senior Analyst, Implementation

- 22 years of professional experience
- B.S. in computer science from Worcester Polytechnic Institute

David Meadows – Vice President, Senior Analyst

- 16 years of professional experience
- B.Sc. in computer science from Newcastle University

Aashir Naqvi – Vice President, Senior Analyst, Implementation

- 6 years of professional experience
- B.S. in industrial engineering from Northeastern University

Diego Torres Patino, Ph.D. – Vice President, Senior Analyst, Implementation

- 10 years of investment experience
- Ph.D. in economics from Stanford University
- B.S. degrees in industrial engineering and in economics from Instituto Tecnológico Autonomo de Mexico

Sam Rogers – Vice President, Senior Analyst, Integration

- 8 years of professional experience
- B.A. in economics from The University at Buffalo

Investment Team

Alagappan Solaiappan – Vice President, Senior Analyst, Data Engineering

- 20 years of professional experience
- M.E. in engineering from Anna University
- B.E. in engineering from Madurai Kamaraj University

Carl Thunman – Vice President, Senior Analyst, Implementation

- 14 years of professional experience
- B.S. in engineering and computer science from Princeton University

Shikun (George) Xue, CFA – Vice President, Senior Analyst, Integration

- 16 years of professional experience
- M.A. in finance from Peking University
- B.A. in economics and B.S. in mathematics from Wuhan University
- CFA charterholder

Jason Withrow – Vice President, Senior Analyst, Integration

- 28 years of professional experience
- Member of Acadian's Diversity & Inclusion Forum
- B.A. in computer science from the University of Rhode Island

Ted Zhang, CFA – Vice President, Senior Analyst, IPD

- 19 years of professional experience
- M.S. in finance from Bentley University
- B.S. accounting from Bentley University
- CFA charterholder and a member of CFA Society Boston

Jian Du- Vice President, Senior Trader, Implementation

Acadian Asset Management (Australia) Limited

- 13 years of professional experience
- Masters in Finance from London Business School
- Bachelor of Engineering from The University of Melbourne

Benjamin Hutchens, CAIA – Vice President, Senior Trader, Implementation

- 18 years of professional experience
- M.S. in investment management from Boston University
- B.A. in international affairs and political science from Northeastern University
- CAIA charterholder

Jason Littlefield – Vice President, Senior Trader, Implementation

- 20 years of professional experience
- M.S. in finance from Northeastern University
- B.S. in business administration, with a dual concentration in accounting and marketing, from Northeastern University

Udaiy Ogirala – Vice President, Senior Trader, Multi-Asset

- 25 years of professional experience
- B.A. in English from University of Rochester

Sean Paylor – Vice President, Senior Trader, Implementation

- 19 years of professional experience
- B.A. in sociology from Princeton University

Gregory Spyropoulos, CFA – Vice President, Credit Trader, Implementation

- 22 years of professional experience
- B.S in finance from Bentley College
- CFA charterholder

Jianing Duan – Assistant Vice President, Associate Portfolio Manager, Research

- 7 years of professional experience
- Ph.D. in mathematical finance from Boston University
- MSc in financial mathematics from University of Chicago
- BSc in applied mathematics from Peking University

Eric Huang – Assistant Vice President, Associate Portfolio Manager

- 9 years of professional experience
- B.S. in operations research and financial engineering from Princeton University

Jerry Yu, Ph.D., CFA – Assistant Vice President, Associate Portfolio Manager, ESG

- 5 years of investment experience
- Ph.D. in political science and scientific computing from the University of Michigan
- M.A. in statistics from the University of Michigan
- CFA charterholder and a member of the CFA Society Boston

Anh Huynh – Assistant Vice President, Senior Analyst, Integration

- 11 years of professional experience
- M.Sc. in mathematics from the University of Washington
- B.Sc. in mathematics from MIT

Steven Wang – Assistant Vice President, Senior Analyst Acadian Asset Management (Australia) Limited

- 18 years of professional experience
- Bachelor of Engineering (software engineering), First Class Honours, from the University of New South Wales
- Bachelor of Commerce (finance) from the University of New South Wales

Rajasekar (Raj) Karuppiiah – Assistant Vice President, Data Engineer

- 19 years of professional experience
- B.E. in electrical and electronics engineering from Anna University, Chennai, India

Siyu Chen – Assistant Vice President, Analyst, IPD

- 6 years of professional experience
- M.S. in management and finance from Case Western Reserve University
- B.S. in economics from Beihang University

Investment Team

Ian Chong, CFA – Assistant Vice President, Analyst, IPD

Acadian Asset Management (Singapore) Pte Ltd

- 8 years of professional experience
- Master of IT in business (artificial intelligence) from Singapore Management University
- M.S. in applied finance from Singapore Management University
- Specialist diploma in data science (artificial intelligence) from Singapore Polytechnic
- Bachelor of Business and Commerce from Monash University
- CFA charterholder

Jacob Hall – Assistant Vice President, Analyst, IPD

- 6 years of professional experience
- B.A. in business, entrepreneurship, and organizations from Brown University

Shirley Lu – Assistant Vice President, Analyst

- 9 years of investment experience
- M.S. in finance from MIT
- B.Econ. from Shanghai Jiao Tong University

Kunbo Wang – Assistant Vice President, Analyst, Research

- 4 years of investment experience
- Ph.D. in applied math and statistics from Johns Hopkins University
- M.Sc. in financial mathematics from Johns Hopkins University

The background of the slide is a complex, abstract network diagram. It consists of numerous small, dark grey circular nodes connected by thin, light grey lines. The nodes are distributed across the entire page, with some areas being more densely connected than others, creating a sense of a large, interconnected system. The overall aesthetic is clean and modern, typical of a professional presentation.

APPENDIX

Hypothetical Disclosure

Acadian is providing hypothetical performance information for your review as we believe you have access to resources to independently analyze this information and have the financial expertise to understand the risks and limitations of the presentation of hypothetical performance. Please immediately advise if that is not the case.

Hypothetical performance results have many inherent limitations, some of which are described below. No representation is being made that any account will or is likely to achieve profits or losses similar to those shown. In fact, there are frequently sharp differences between hypothetical performance results and the actual performance results subsequently achieved by any particular trading program.

One of the limitations of hypothetical performance results is that they are generally prepared with the benefit of hindsight. In addition, hypothetical trading does not involve financial risk, and no hypothetical trading record can completely account for the impact of financial risk in actual trading. For example, the ability to withstand losses or to adhere to a particular trading program in spite of trading losses are material points which can also adversely affect actual trading results. There are numerous other factors related to the markets in general or to the implementation of any specific trading program which cannot be fully accounted for in the preparation of hypothetical performance results and all of which can adversely affect actual trading results.

Annual Performance Disclosure

All-Country World ex-U.S. Equity Composite

	Composite Return (%) Gross-of-Fees	Composite Return (%) Net-of-Fees	Benchmark Return (%)	Dispersion of Returns Within Composite (%)	Three-Year ex-Post Standard Deviation of Absolute Gross Returns		Number of Portfolios in Composite	Assets In Composite (\$MMs)	Total Firm Assets Under Management (\$MMs)
					Composite	Benchmark			
2015	-3.9	-4.6	-5.7	1.0	11.7	12.1	9	5,004	66,834
2016	9.5	8.7	4.5	1.3	12.2	12.5	9	5,388	74,174
2017	35.7	34.7	27.2	1.2	11.6	11.9	9	6,207	96,765
2018	-14.8	-15.5	-14.2	0.7	12.0	11.4	11	5,682	85,338
2019	19.1	18.3	21.5	1.0	11.7	11.3	13	8,251	101,232
2020	13.9	13.1	10.7	2.0	17.4	17.9	13	9,682	107,229
2021	16.3	15.4	7.8	1.0	16.4	16.8	13	11,837	116,160
2022	-15.7	-16.4	-16.0	2.0	19.5	19.3	13	10,199	92,796
2023	17.0	16.1	15.6	1.4	16.8	16.1	15	12,832	102,930
2024	14.2	13.4	5.5	1.1	16.4	16.0	15	13,650	115,836

Performance Inception: November 1, 1998. This composite was created on: December 1, 1998. All figures stated in USD.

Acadian Asset Management claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. Acadian Asset Management has been independently verified for the periods January 1, 1994 through December 31, 2024¹. A copy of the verification report is available upon request. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report. Reference to the benchmark is for comparative purposes only and is not intended to indicate that the composite will contain the same investments as the benchmark. Investors have the opportunity for losses as well as profits. **Past performance is no guarantee of future returns.** Acadian Asset Management is an investment adviser specializing in global equity management. Acadian Asset Management is defined to include assets managed by Acadian Asset Management LLC, an investment adviser registered with and regulated by the United States Securities and Exchange Commission, as well as assets managed by its wholly-owned affiliates, Acadian Asset Management (Australia) Limited (ABN 41 114 200 127), Acadian Asset Management Singapore Pte Ltd, (Registration Number: 199902125D) is licensed by the Monetary Authority of Singapore, and Acadian Asset Management (UK) Limited, authorized and regulated by the Financial Conduct Authority of the United Kingdom. On June 30, 2015, Acadian acquired the assets of Acadian's Australian office.

Methodology: Returns are net of foreign withholding taxes on dividends, interest, and capital gains. Since January 1, 2010 Acadian's methodology was augmented to produce a more accurate gross return figure by eliminating modest cash flows such as securities lending income and custodial fees which are regarded as independent of the investment management process; the reinvestment of all income and trading expenses continue to be included. Monthly composite results are asset-weighted by beginning-of-month asset values of member portfolios which are geometrically linked to arrive at the annual composite return. Net-of-fee performance is calculated on a monthly basis by deducting a model management fee equal to 1/12 of the highest annual management fee listed in the standard fee schedule for accounts shown below. The standard fee schedule for accounts managed with this product is 0.75% on the first \$25 million, 0.65% on the next \$25 million, 0.5% on the next \$100 million, and 0.4% thereafter. The combined, all-in maximum fee that includes management and operating expenses for the Acadian All Country World ex US Equity CIT, which is included in the composite, is 0.65% on all assets. The standard management fee schedule and total expense ratio for the Acadian All-Country World ex U.S. Fund, which is included in the composite, are 0.75% on all assets and 0.86%, respectively. Management fees may vary according to the range of services provided, investment performance, and the amount of assets under management. Constituent portfolios are included from the first full month after inception to the present or the last full month prior to cessation of the client relationship with the firm. For example, an account that opened January 15, 2019 will be included beginning February 1, 2019. An account that terminated February 12, 2019 will be included through January 31, 2019. Policies for valuing investments, calculating performance, and preparing GIPS reports are available upon request.

Dispersion and Standard Deviation: Acadian's broad definitions are mainly the product of a highly customized process that may result in modest differences with regards to portfolio characteristics among constituents. All accounts managed with directly comparable investment objectives are included, though it's possible for members to utilize slightly different benchmarks in optimization and reporting. Although at times dispersion among constituents may be high, the long-term forecast for each portfolio is consistent with the overall composite. The 'Dispersion' statistic presented above uses gross of fee returns and is an annual, asset-weighted standard deviation calculation performed only on those portfolios who have been members for the entire calendar year. These figures are not applicable if there is only one portfolio in the composite for the full year. Thirty-six months are required to calculate the 'Three Year ex-Post Standard Deviation' statistic. These figures are not applicable if thirty-six months of composite returns are not available.

Composite Description: This composite invests broadly in developed and emerging equity markets excluding the United States. Complete lists of the firm's composite descriptions, limited distribution pooled fund descriptions, and broad distribution funds are available upon request.

Benchmark Description: The benchmark for the composite is MSCI All-Country World ex-U.S. (net of dividend withholding taxes). The MSCI All-Country World ex-U.S. Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets excluding the United States.

Index Source: MSCI Copyright MSCI 2025. All Rights Reserved. Unpublished. PROPRIETARY TO MSCI.

¹Ashland Partners verified Acadian's GIPS Compliance claim through March 31, 2017. ACA Compliance Group acquired Ashland's GIPS Verification unit and provided subsequent verifications.

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Acadian provides this material as a general overview of the firm, our processes and our investment capabilities. It has been provided for informational purposes only. It does not constitute or form part of any offer to issue or sell, or any solicitation of any offer to subscribe or to purchase, shares, units or other interests in investments that may be referred to herein and must not be construed as investment or financial product advice. Acadian has not considered any reader's financial situation, objective or needs in providing the relevant information.

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Acadian's quantitative investment process is supported by extensive proprietary computer code. Acadian's researchers, software developers, and IT teams follow a structured design, development, testing, change control, and review processes during the development of its systems and the implementation within our investment process. These controls and their effectiveness are subject to regular internal reviews, at least annual independent review by our SOC1 auditor. However, despite these extensive controls it is possible that errors may occur in coding and within the investment process, as is the case with any complex software or data-driven model, and no guarantee or warranty can be provided that any quantitative investment model is completely free of errors. Any such errors could have a negative impact on investment results. We have in place control systems and processes which are intended to identify in a timely manner any such errors which would have a material impact on the investment process.

Acadian Asset Management LLC has wholly owned affiliates located in London, Singapore, and Sydney. Pursuant to the terms of service level agreements with each affiliate, employees of Acadian Asset Management LLC may provide certain services on behalf of each affiliate and employees of each affiliate may provide certain administrative services, including marketing and client service, on behalf of Acadian Asset Management LLC.

Acadian Asset Management LLC is registered as an investment adviser with the U.S. Securities and Exchange Commission. Registration of an investment adviser does not imply any level of skill or training.

Acadian Asset Management (Singapore) Pte Ltd, (Registration Number: 199902125D) is licensed by the Monetary Authority of Singapore. It is also registered as an investment adviser with the U.S. Securities and Exchange Commission.

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GLOBAL AFFILIATES

Boston London Singapore Sydney

ACADIAN-ASSET.COM



A Presentation to The City of Oakland Police and Fire Retirement System

International ACWI ex-U.S. Equity Strategy

June 24, 2025

Reporting period May 31, 2025

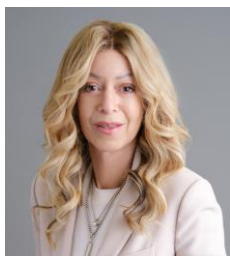


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Signatory of:





Leslie Spencer
Director, Institutional Investments

Ms. Spencer joined SGA in January 2025, where she is responsible for institutional business development. With 21 years of experience in the asset management industry, she has worked with a diverse array of clients, including public sector funds, foundations and endowments, insurance companies, and corporations. Prior to joining SGA, Ms. Spencer served as Director, National Accounts at PFM Asset Management, LLC. She also spent six years as a Trustee for a public pension fund valued at over \$3.5 billion. Ms. Spencer earned her BSM in Business Management from Pepperdine University.



Cynthia Tusan, CFA
Chief Executive Officer and a Senior Portfolio Manager

Ms. Tusan founded SGA in 2005 as she envisioned a firm that would combine the efficiency of quantitative research with the qualitative insights of fundamental company analysis. Her investment career spans three decades, including 16 years with Wells Fargo where she began in 1989 as a Senior Portfolio Manager. In 1996, Ms. Tusan started the Risk Management Group for Wells Capital Management, and eventually led their international equity team in running close to \$1.5 billion in international equity assets. Ms. Tusan earned her BA in Economics from Bryn Mawr College and her MBA from the Anderson School at UCLA. She is a CFA charter holder and is a member of the CFA Society of Los Angeles and the CFA Society of Orange County.



David Cai, CFA **Director of Quantitative Research**

Mr. Cai joined SGA in 2015 and is responsible for advancing and maintaining Alpha Model and Risk Model factor research. Prior to joining the firm, Mr. Cai served as a Trader and Researcher at Henning & Carey Proprietary Trading in Chicago, where he traded U.S. fixed income products, modeled the Treasury yield curve, and researched new strategies. Mr. Cai brings skills that combine quantitative modeling, data analysis, and macroeconomic analysis to SGA. Mr. Cai earned his BBA in Finance and Mathematics from the University of Wisconsin, Madison and Master in Financial Engineering (MFE) from the University of California, Berkeley.

City of Oakland Police & Fire Retirement System

Account Overview

As of May 31, 2025



Overview	
Inception Date	January 31, 2020
Benchmark	MSCI ACWI ex USA Index (Net)
Inception Value	\$36.5m
Current Value (net of inflow)	\$51.9m
ITD Excess Return (net of fees)	1.99%

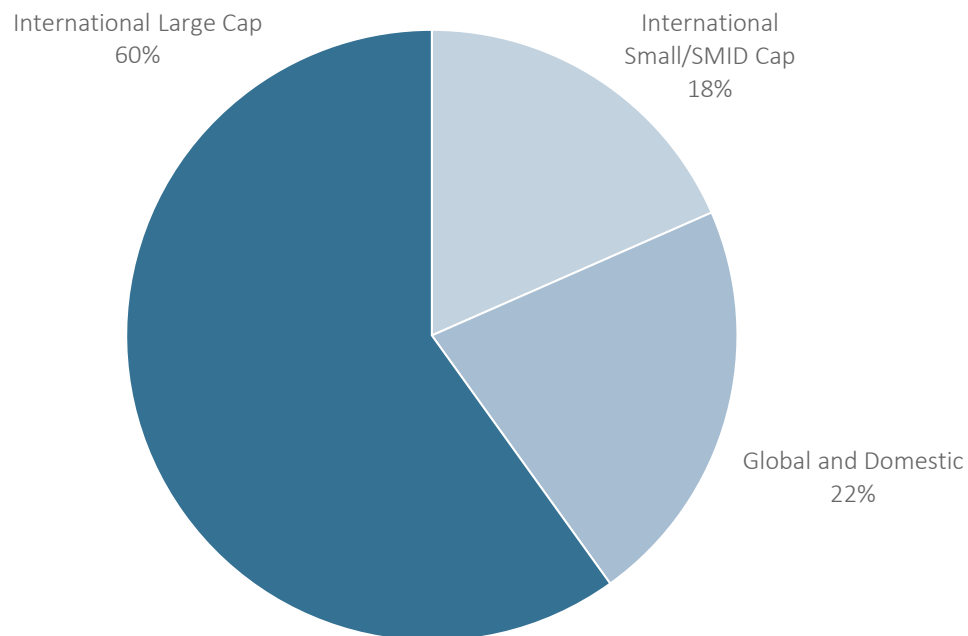
Organization

SGA has managed International Equity strategies since 2005



Firm Total Assets – \$3.2 Billion

AUM by Strategy



As of May 31, 2025. Total Assets include Assets Under Management (AUM) and Assets Under Advisement (AUA) where SGA performs investment advisory services to model portfolios and platforms. Approximately 12% of AUM is represented by AUA. Some public clients may be managed through a relationship where SGA serves as sub-advisor.

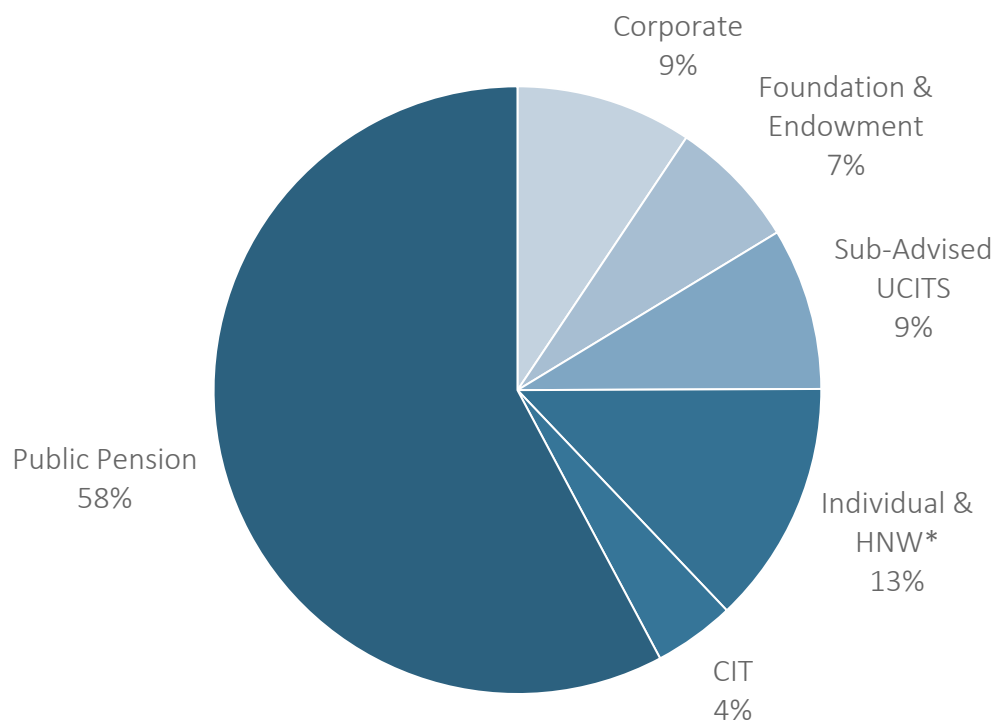
Organization

SGA has managed International Equity strategies since 2005



Firm Total Assets – \$3.2 Billion

AUM by Client Type



As of May 31, 2025. Total Assets include Assets Under Management (AUM) and Assets Under Advisement (AUA) where SGA performs investment advisory services to model portfolios and platforms. Approximately 12% of AUM is represented by AUA. Some public clients may be managed through a relationship where SGA serves as sub-advisor.

*Individual & HNW includes High Net Worth, proprietary accounts, wrap accounts and Assets Under Advisement where SGA performs investment advisory services to model portfolios and platforms.

Diversity Representation Survey for Oakland Police and Fire Retirement System



Data as of	5/31/2025
Firm Name	Strategic Global Advisors, LLC
Product Name	International ACWI ex-U.S. Equity
Total No. of Employees	20

Race and Ethnicity*	Percentage (%) of Board of Directors / Managing Members**	Percentage(%) of Firm (Entire Staff)	Percentage (%) of Firm (Investment Professionals)
African American/Black	25.0%	10.0%	0.0%
Asian/Hawaiian/Pacific Islander	0.0%	25.0%	45.0%
Latino/Hispanic	0.0%	5.0%	0.0%
White	75.0%	60.0%	55.0%
American Indian/Alaska Native	0.0%	0.0%	0.0%
Other	0.0%	0.0%	0.0%
Gender			
Male	50.0%	55.0%	73.0%
Female	50.0%	45.0%	27.0%
Non-Identified/Other	0.0%	0.0%	0.0%
	100.0%	100.0%	100.0%
	100.0%	100.0%	100.0%

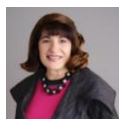
Strategic Global Advisors is an independent, majority women and employee-owned investment boutique founded in 2005 and based in Newport Beach, California

*Racial/ethnic categories appear as defined by EEOC guidance.

**Represents SGA's Executive Advisory Committee.

Investment Team Organization

Senior Portfolio Management & Research



Cynthia Tusan, CFA
Founder and CEO
36 years experience



Cherie Badri, CFA
Director of Fundamental
Research
30 years experience



Brendan Skarra-Corson, CFA
Senior Portfolio Manager
18 years experience



David Cai, CFA
Director of Quantitative
Research
13 years experience

Office of the CIO

Gary Baierl, PhD
CIO
27 years experience

Richard Sloan, PhD*
Director of Investment
Research
33 years experience

Cherie Badri, CFA
Director of Fundamental
Research
30 years experience

Brendan Skarra-Corson, CFA
Senior Portfolio Manager
18 years experience

David Cai, CFA
Director of Quantitative
Research
13 years experience

Quantitative Research

David Cai, CFA
Director of
Quantitative Research
13 years experience

Vaibhav Kumar, CFA
Senior Quantitative
Analyst
15 years experience

Quang Ngu, CFA
Senior Quantitative
Analyst
15 years experience

Xiyuan Dong
Senior Quantitative
Analyst
5 years experience

Fundamental Research & Associate Portfolio Management

Cherie Badri, CFA
Director of
Fundamental Research
30 years experience

Sylvester Malapas, CFA
Senior Fundamental
Analyst & Associate PM
17 years experience

Brett Darragh, CFA
Senior Fundamental
Analyst & Associate PM
10 years experience

Michael Gianatasio
Fundamental
Analyst
3 years experience

Academic Advisory Board

Since its founding, SGA's investment team has been augmented by an Academic Advisory Board.

*Consulting basis

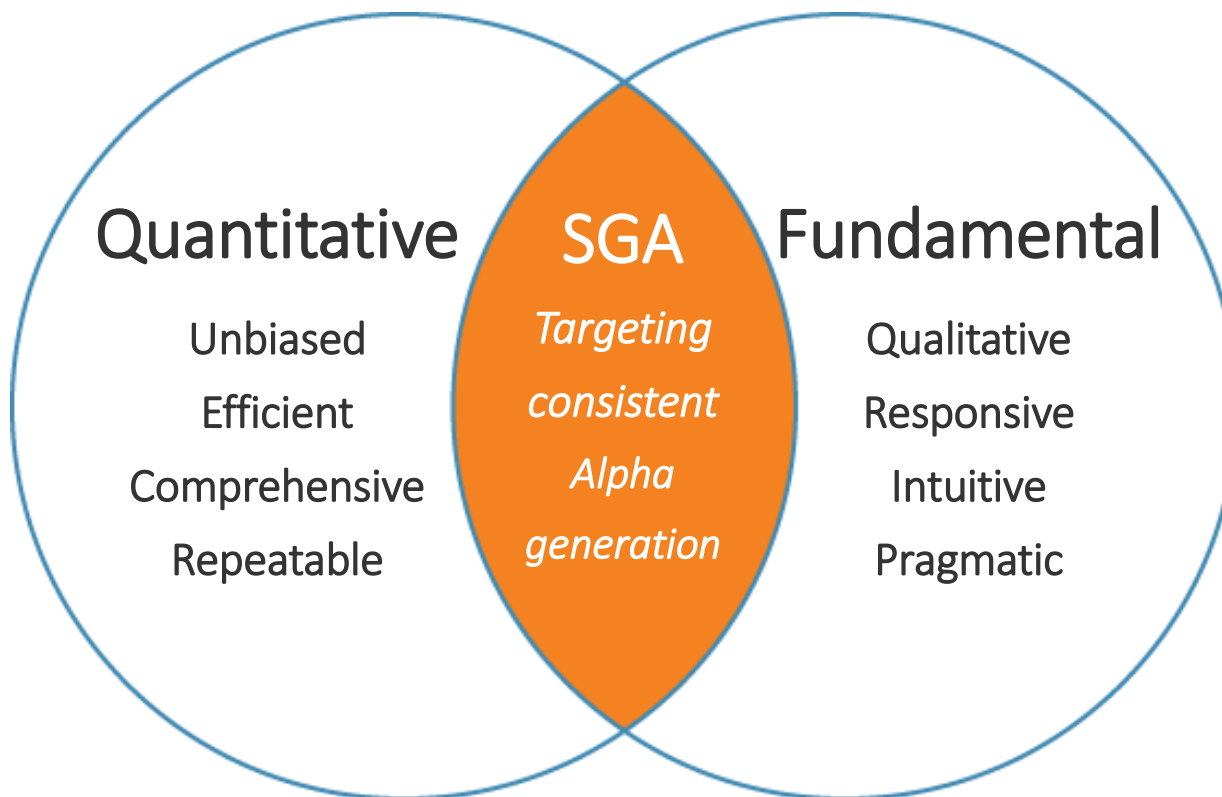
**Denotes years of relevant professional experience

Investment Philosophy

Fundamentally Inspired. Quantitatively Driven.



SGA believes our quantitative investment process can deliver consistent outperformance by identifying mispriced companies within each global industry utilizing our fundamental and behavioral factors. SGA also believes our proprietary fundamental review process is critical to providing incremental alpha and a feedback loop.



Step 1: Quantitative Research

Global Universe: Approximately 40,000 Publicly Traded Companies

Alpha Model		Risk Model		
Factor Weights	Valuation (2) – 30%	Sector	Growth	Crude Oil Beta
	Quality (5) – 28%	Currency	Value	Volatility
	Growth (3) – 22%	Region	Momentum	Residual
	Sentiment (4) – 20%	Size	Beta	Liquidity













Output delivers company's expected industry relative return per unit of risk

Step 2: Daily Screening Optimization

Geographic Weights Sector/Industry Weights Currency Weights Targeted Tracking Error

Identifies suggested buy/sell candidates*

Step 3: Fundamental Review

  Macro/Political Risk	  Competitive Forces	  Governance	  Language Processing (NLP)	  Short Utilization	  Refinancing Risk
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A confirmation process that seeks to avoid false-positives*

Step 4: Final Optimization & Rebalance

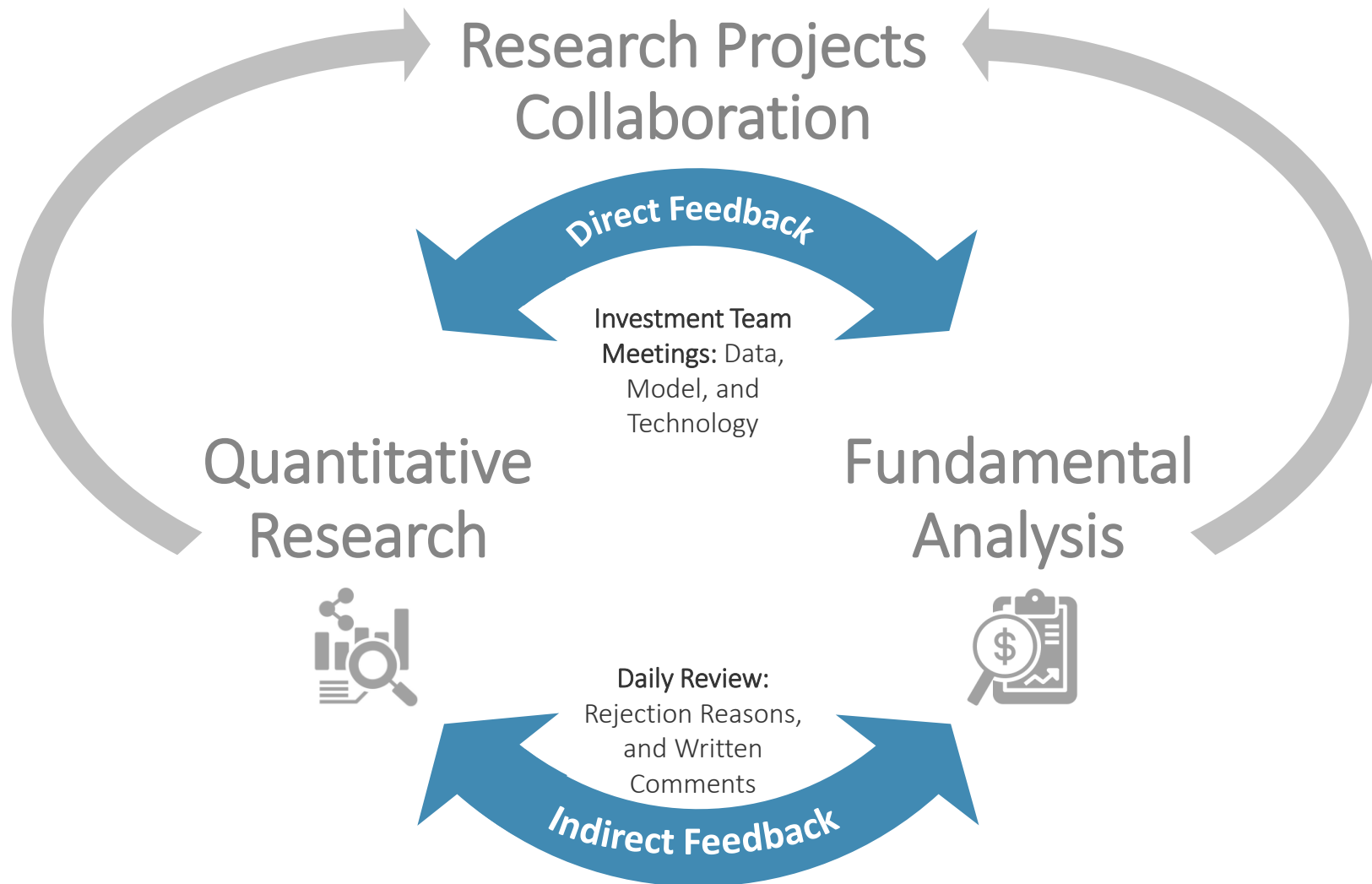
Limited to Approved Stocks - Rebalance a Function of Expected Alpha - Measured Turnover Strategy - Active Risk at Stock Level

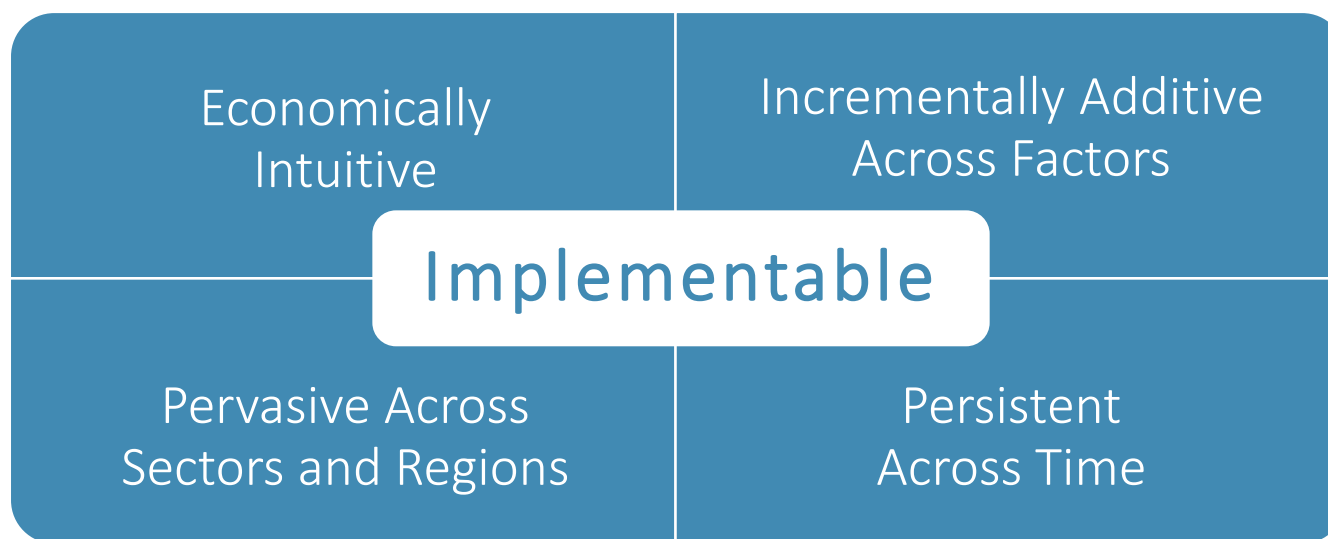
Final Portfolio ~ 165 Securities

*Typically 1-2 new buy universe candidates per day, 10-20% of which are removed from investment universe.
Please see Appendix for additional information contained in the Investment Process Disclosure.

Creating a Valuable Feedback Loop

Insights from the Fundamental Review are Utilized in the Quantitative Process





Factor Evaluation Criteria

- Economically Intuitive: SGA requires an ex ante economic rationale for the factor. This may include a risk-based explanation, behavioral biases, market inefficiencies, information asymmetries, or analytical advantages.
- Incrementally Additive: The factor must contribute incremental explanatory power to the model, as demonstrated through multivariate factor testing.
- Pervasive Across Sectors and Regions: The factor should exhibit statistically significant Information Coefficient (IC) t-statistics across the majority of sectors and geographic regions.
- Persistent Over Time: The factor should show consistently significant IC t-statistics over the full time period as well as across most sub-periods.
- Implementable: SGA requires a portfolio simulation when backtesting a factor to ensure that the excess returns associated with the factor are not eroded by transaction costs or shorting constraints.

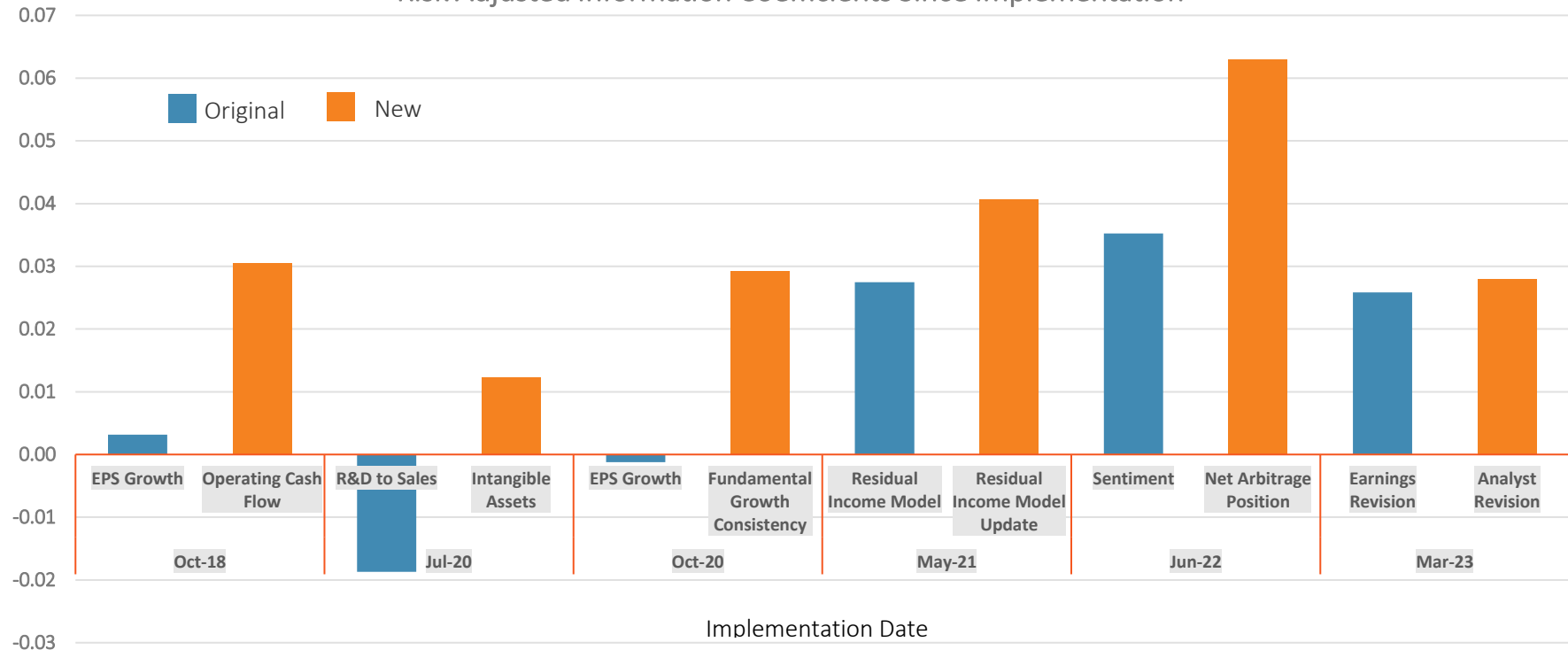
SGA Model Performance

Research Impact

As of March 31, 2025

Original Factor vs. New:

Risk Adjusted Information Coefficients Since Implementation

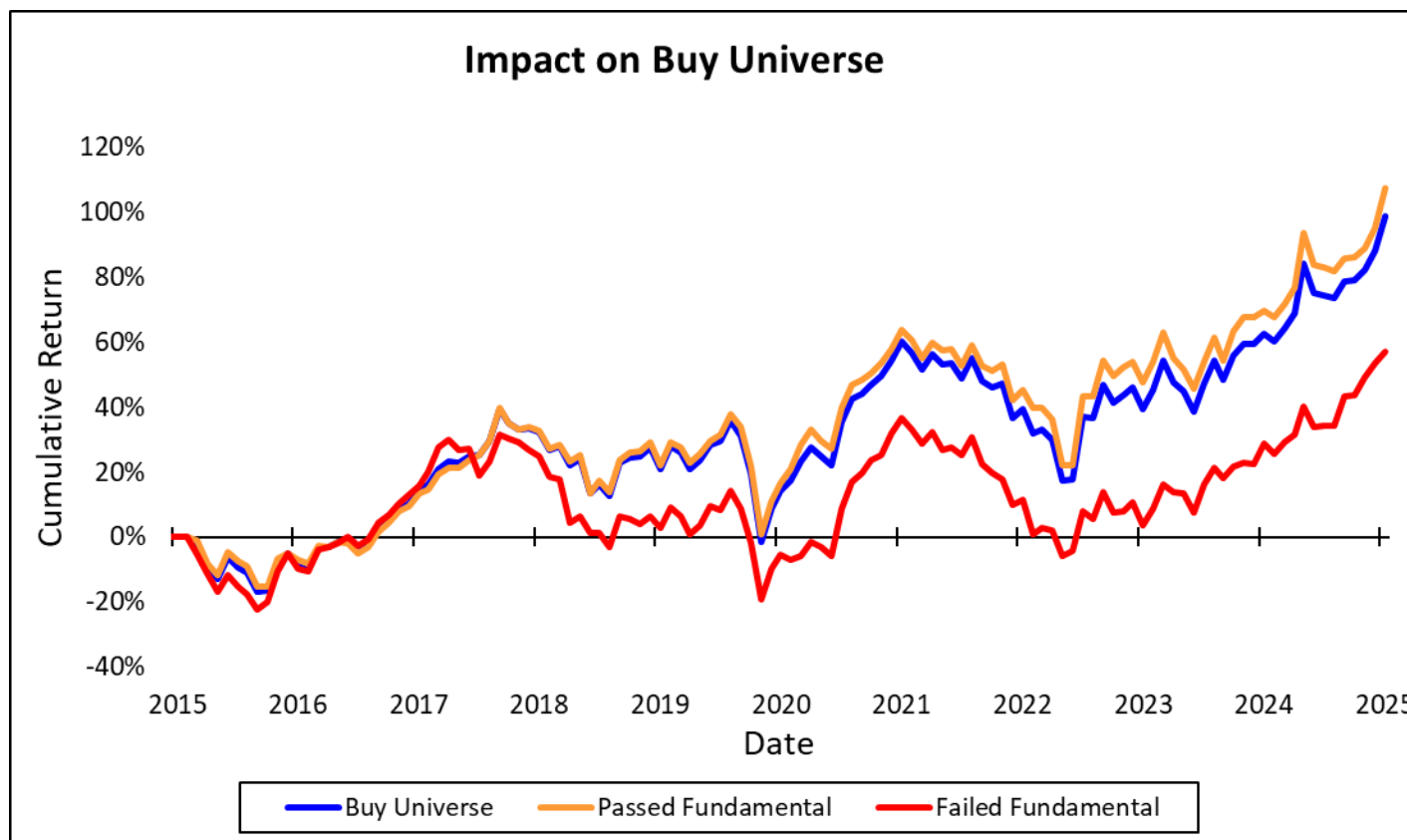


- All recently added factors have outperformed the factor(s) they replaced.

Source: FactSet, SGA. Information Coefficient: Correlation between SGA's factor score and the subsequent quarterly risk-adjusted return across the universe. The data above illustrates a comparison of forecasting performance of factor scores of the SGA factor base-case (old) to those of the new factor. The comparison is shown by calculating the correlation between the Current and New and the subsequent quarterly returns of companies in the universe (Information Coefficient). This data is for illustrative purposes only. Past performance is not indicative of future results. Please see Appendix for SGA Category Group Research Disclosure and Investment Process Disclosure.

Process – International ACWI ex-U.S. Equity Fundamental Analysis

Impact of SGA Fundamental Analysis on Buy Universe, 06/2015 – 5/2025



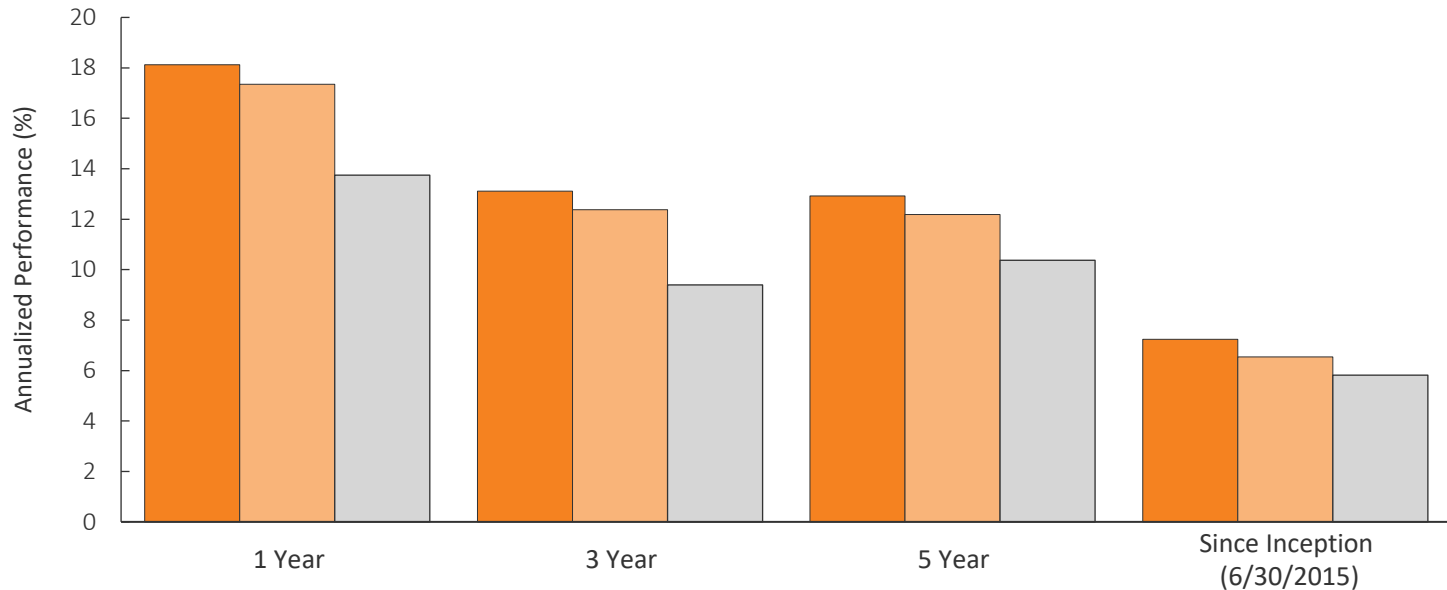
Buy Universe includes securities which are eligible for inclusion in the SGA International ACWI ex-U.S. Equity strategy up for review as new buys in the past six months. Source: FactSet, SGA. Past performance is not indicative of future results. Buy Universe, Passed Fundamental, and Failed Fundamental are reduced by the highest applicable annual management fee of 0.65% applied monthly. Please see Appendix for additional information regarding "Fundamental Analysis and Process Performance Attribution Charts."

SGA International ACWI ex-U.S. Equity Composite

Annualized Performance



Period Ending May 31, 2025



International ACWI ex-U.S. Equity (Gross) %	18.12	13.11	12.92	7.24
International ACWI ex-U.S. Equity (Net) %	17.35	12.38	12.19	6.54
MSCI ACWI ex USA Index (Net) %	13.75	9.40	10.37	5.82
Gross Excess Return %	4.37	3.71	2.55	1.42

Composite net of fees performance was calculated by reducing the gross of fees return by the maximum model annual management fee of 0.65% applied monthly; actual investment advisory fees incurred by clients may vary. Please see Appendix for additional information contained in the GIPS® Report. Past performance is not indicative of future results.

SGA International ACWI ex-U.S. Equity

Portfolio Characteristics

Period Ending May 31, 2025



	SGA INTL ACWI EX-U.S. EQUITY	MSCI ACWI EX USA NET
Number of Stocks	164	1,983
Active Share	77%	0%
Price/Earnings (1-Year Forecast)	12.2x	14.5x
Price/Book	1.9x	1.9x
Dividend Yield	3.2%	2.9%
Historical 3-Year EPS Growth	17.7%	13.9%
Weighted Average Market Cap	\$95.7B	\$115.7B
Median Market Cap	\$29.4B	\$59.7B
12-Month Trailing Turnover	49.4%	---

Source: SGA, Northern Trust, FactSet, MSCI

Characteristics are based on a representative account calculated as of May 31, 2025 without the deduction of fees and expenses. Active Share is calculated by taking the sum of the absolute value of the differences of the weight of each holding in a portfolio versus the weight of each holding in the benchmark index and dividing by two. Price/Earnings (1-Year Forecast) and Price/Book are weighted harmonic averages.

SGA International ACWI ex-U.S. Equity Composite

Risk/Return Characteristics



	SGA INTL ACWI EX-U.S. EQUITY	MSCI ACWI EX USA NET
Annualized Return	7.24%	5.82%
Avg. Annualized 3-Year Rolling Return	5.94%	5.04%
Monthly Batting Average	53.78%	--
Standard Deviation	15.00%	15.02%
Upside Market Capture	102.32%	100%
Downside Market Capture	95.96%	100%
Information Ratio	0.54	--
Sharpe Ratio	0.35	0.25
Sortino Ratio	0.52	0.37
T-Statistic	1.62	--

Characteristics and returns are calculated since inception of the strategy, June 30, 2015, through May 31, 2025, and are calculated on a gross basis without the deduction of fees and expenses. Please see the additional information contained in the GIPS® Report, which is located at the end of this presentation. Past performance is not indicative of future results.

Batting Average = The number of months in which the strategy outperformed the primary benchmark divided by the total number of months in the period.

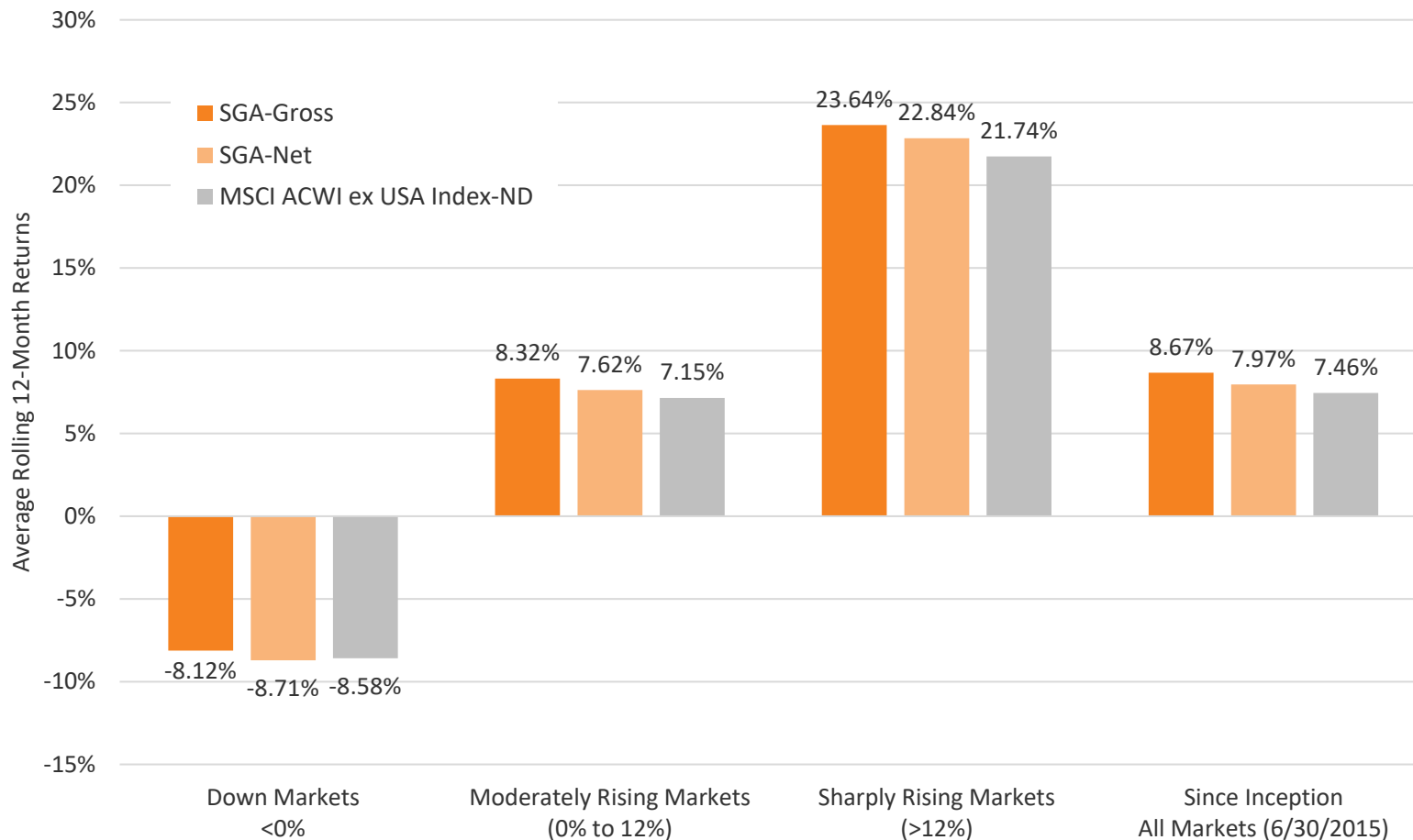
Sortino Ratio = The downside volatility versus total volatility. This statistic is computed by subtracting the return of the risk-free index from the return of the manager to determine the risk-adjusted excess return. This excess return is then divided by the downside risk of the manager.

T-Statistic = A measure of the likelihood that the actual value of monthly excess return is not zero. The larger the absolute value of t, the less likely that the actual value of monthly excess return could be zero. It is computed by dividing average monthly excess return since inception by its standard error, where monthly excess return is monthly portfolio return minus monthly benchmark return.

International ACWI ex-U.S. Equity

Performance in Various Market Conditions

Period Ending May 31, 2025



Market based on MSCI ACWI ex USA Net Index

Returns consist of the simple average of the rolling twelve month returns of the periods that meet the outlined criteria for the respective benchmark. Net of fees performance was calculated using the highest applicable annual management fee of 0.65% applied monthly; actual investment advisory fees incurred by clients may vary. Please see Appendix for additional information contained in the GIPS® Report. Past performance is not indicative of future results.

Points of Summary

SGA's Approach and Strengths



- Integration of proprietary quantitative systems and fundamental analysis
- Deeply talented team with expertise in global markets, committed to continuous innovation
- A true core approach that offers both diversification and opportunity for alpha through various market environments

Fundamentally Inspired. Quantitatively Driven.

Appendix

People – Portfolio Management and Research



Cynthia Tusan, CFA (35 + years of Investment Experience)

Chief Executive Officer and a Senior Portfolio Manager

Ms. Tusan founded SGA in 2005 as she envisioned a firm that would combine the efficiency of quantitative research with the qualitative insights of fundamental company analysis. Her investment career spans three decades, including 16 years with Wells Fargo where she began in 1989 as a Senior Portfolio Manager. In 1996, Ms. Tusan started the Risk Management Group for Wells Capital Management and eventually led their international equity team in running close to \$1.5 billion in international equity assets. Ms. Tusan earned her BA in Economics from Bryn Mawr College and her MBA from the Anderson School at UCLA. She is a CFA charter holder and is a member of the CFA Society of Los Angeles and the CFA Society of Orange County.

Gary Baierl, PhD (26 + years of Investment Experience)

Chief Investment Officer

Dr. Baierl joined SGA in 2005, developing and developed and overseeing quantitative research. Prior to SGA he served as the Director of Quantitative Research at Causeway Capital Management where he developed the quantitative screens and the risk model used by the firm in their stock selection and portfolio construction processes. In addition, he launched and managed their quantitative market neutral international equity hedge fund. Prior to Causeway, Dr. Baierl was Head of Quantitative Research at Hotchkis and Wiley and also was a Senior Consultant in the Research Group at Ibbotson Associates. Dr. Baierl earned his PhD in Managerial Economics and Decision Science from Northwestern University and BA in Mathematics and Economics from Boston University.

Professor Richard Sloan (25+ years of Investment & Research Experience)

Director of Investment Research

Professor Sloan joined SGA's Advisory Board in 2018 and joined SGA in a consulting capacity as Director of Investment Research in 2023. As Director of Investment Research, his consulting relationship and involvement with the Fundamental and Quantitative research teams expands, leveraging his expertise in an effort to further refine SGA's investment process and incorporate new insights from academia. Professor Sloan is a professor of accounting, finance and business economics at the University of Southern California. He has also served on the faculties of UC Berkeley's Haas School of Business, University of Michigan's Ross School of Business and University of Pennsylvania's Wharton School. While at the University of Michigan, Professor Sloan was the founding director of the John R. and Georgene M. Tozzi Electronic Business and Finance Center. From 2006 to 2009, Sloan was a managing director in equity research at Barclays Global Investors (since acquired by Blackrock). Professor Sloan is a pioneer in the field of quantitative investing. He has served as a consultant to numerous firms in the investment management industry and is a frequent speaker at industry conferences.

Cherie Badri, CFA (29 years of Investment Experience)

Director of Fundamental Research and a Senior Portfolio Manager

Ms. Badri joined SGA in 2006, where her responsibilities include portfolio management and fundamental company analysis. Ms. Badri spent over eight years as a Senior Associate Research Analyst at William Blair & Company in Chicago. Previously, she was an Analyst at Picoco in Newport Beach where she co-managed a fund focused on small-cap companies. Ms. Badri earned her BA in Economics from Northwestern University and both her MBA and MS in Finance from the University of Illinois at Urbana-Champaign. She is a CFA charter holder and is a member of the CFA Society of Orange County.

Brendan Skarra-Corson, CFA (17 years of Investment Experience)

Senior Portfolio Manager

Mr. Skarra-Corson joined SGA in 2012, and his responsibilities include portfolio management and Alpha Model factor research. He joined the firm after completing a Master of Financial Engineering (MFE) degree at the University of California, Berkeley. Mr. Skarra-Corson worked at INDATA Services, LLC where he led a team that implemented solutions to meet the financial technology needs of asset managers. He also earned his BA in Economics and Mathematics from University of California, San Diego. Mr. Skarra-Corson is a CFA charter holder and member of the Orange County CFA Society.

David Cai, CFA (12 years of Investment Experience)

Director of Quantitative Research

Mr. Cai joined SGA in 2015 and is responsible for advancing and maintaining Alpha Model and Risk Model factor research. Prior to joining the firm, Mr. Cai served as a Trader and Researcher at Henning & Carey Proprietary Trading in Chicago, where he traded U.S. fixed income products, modeled the Treasury yield curve, and researched new strategies. Mr. Cai brings skills that combine quantitative modeling, data analysis, and macroeconomic analysis to SGA. Mr. Cai earned his BBA in Finance and Mathematics from the University of Wisconsin, Madison and Master in Financial Engineering (MFE) from the University of California, Berkeley.

Vaibhav Kumar, CFA (15 years of Investment Experience)

Senior Quantitative Analyst

Mr. Kumar joined SGA in 2015 where his responsibilities include Alpha Model factor research as well as model and systems development. Prior to joining the firm, he created risk and stress testing models for Goldman Sachs' Market Risk division and co-founded Quark Analytics, a high frequency trading firm, where he developed a low latency trade execution environment for select exchanges. Mr. Kumar spent three years with Microsoft R&D as a software developer where he designed and developed network security modules for Windows 7 in C++ before pursuing a career in finance. He earned his Integrated Master in Mathematics and Computing from IIT Kharagpur and Master in Financial Engineering (MFE) from the University of California, Berkeley.

Quang Ngu, CFA (15 years of Professional Experience)

Senior Quantitative Analyst

Mr. Ngu joined SGA in 2020 after previously being an intern at the firm, where his focus was on expanding the functionality of our simulation platform. His on-going responsibilities include portfolio optimization and the researching of alpha signals and risk factors. Prior to joining the firm, Mr. Ngu was a lead engineer at the Boeing Company for over a decade, where he specialized in quantitative modeling and simulation, research and software development within Boeing's Satellite Division. Mr. Ngu earned his BS in Electrical Engineering from the University of Hawaii at Manoa, a MS in Electrical Engineering and an MBA from the University of California at Los Angeles (UCLA), and a Master of Financial Engineering (MFE) from the University of California at Berkeley (UCB).

Xiyuan Dong (5 years of Investment Experience)

Senior Quantitative Analyst

Ms. Dong joined SGA in 2021 after previously working as an intern, focusing on utilizing Machine Learning (AI) tools in investment research and improving the firm's research platform. Her on-going responsibilities include factor and portfolio research as well as systems development. Prior to joining SGA, Ms. Dong gained extensive internship experience in the investment industry as a quantitative researcher and in the insurance industry as an actuary. Ms. Dong earned her BBA in Actuarial Science and Statistics from the Chinese University of Hong Kong and Master of Financial Engineering (MFE) from the University of California, Los Angeles (UCLA).

Sylvester Malapas, CFA (17 years of Investment Experience)

Senior Fundamental Analyst and Associate Portfolio Manager

Mr. Malapas joined SGA in 2016 and is a Senior Fundamental Analyst and Associate Portfolio Manager. His responsibilities include conducting fundamental research on prospective and current holdings, as well as supporting portfolio management. In his previous role, he was a Credit Analyst at Standard & Poor's Ratings Services in San Francisco where he focused on high yield credits within the software and services technology sector. Prior to that position, he spent four years at Merrill Lynch Bank of America where he supported the trading desk and compliance officer. Mr. Malapas earned his BA in Economics from the University of California, Irvine, and MBA from the Johnson School at Cornell University.

Brett Darragh, CFA (10 years of Investment Experience)

Senior Fundamental Analyst and Associate Portfolio Manager

Mr. Darragh joined SGA in 2019 and is a Senior Fundamental Analyst and Associate Portfolio Manager. His responsibilities include performing fundamental reviews of new ideas generated by the quantitative model and portfolio management. Most recently, he was an equity research associate at Northland Securities in Newport Beach, CA where he primarily focused on the energy sector. Prior to Northland Securities, he was an associate financial analyst at TCW and Space Systems Loral. Brett received his BS in Business Administration from Cal Poly San Luis Obispo and is a member of the CFA Society of Orange County.

Michael Gianatasio (3 years of Investment Experience)

Fundamental Analyst

Mr. Gianatasio joined SGA in 2025 and is a Fundamental Analyst. His responsibilities include performing fundamental reviews of new ideas generated by the quantitative model. Most recently, he was an equity analyst at Schonfeld Strategic Advisors in New York, where he primarily focused on the Industrials sector. Prior to Schonfeld, he was an equity analyst at Causeway Capital Management in Los Angeles. He began his career as an investment banking analyst at Barclays in New York. Michael received his B.A. in Business, Entrepreneurship, Organizations from Brown University.

People – Executive Management Committee



Cynthia Tusan, CFA - Chief Executive Officer and a Senior Portfolio Manager (35+ years of Investment Experience)

Joel Reynolds - Chief Compliance Officer (29 years of Investment Industry Experience)

Mr. Reynolds is Chief Compliance Officer at SGA and responsible for all of the firm's compliance functions. Prior to joining SGA, Mr. Reynolds was Senior Vice President, Senior Compliance Officer at PIMCO for more than eight years, where he was responsible for managing core functions related to regulatory and investment compliance, including personal trading, portfolio compliance, client certifications, and compliance training. Previously, Mr. Reynolds was a vice president in compliance at Income Research & Management and held compliance positions with Geode Capital Management and Fidelity Investments. He holds a JD from Suffolk University Law School, and an MBA from Babson College. He received his undergraduate degree in Economics from the University of Utah. He is admitted to the bar in Massachusetts and Arizona.

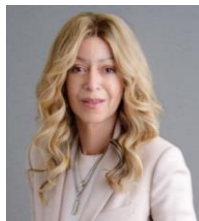
Elyse Waldinger - Chief Operating Officer (28 years of Investment Industry Experience)

Ms. Waldinger is Chief Operating Officer at SGA and is responsible for the firm's operations and technology functions. Prior to joining SGA, Ms. Waldinger was Partner/Chief Operating Officer/Chief Compliance Officer at R Squared Capital Management. Previously, she was the Head of Trading and Portfolio Support, Equities at Artio Global Management. Prior to joining Artio in 2000, she was a Sales Assistant on the Municipal Bond Trading Desk at Morgan Stanley for three years and a Portfolio Assistant with Burnham Securities for two years. Ms. Waldinger received a BS from AB Freeman School of Business, Tulane University.

SGA Client Service and Operations Contacts



Ulana Blahy
Head of Client Service,
Institutional Investments
+1.949.662.2224
ublahy@sgadvisors.com



Leslie Spencer
Director,
Institutional Investments
+1.949.438-2618
lspencer@sgadvisors.com



Ryan Hissey
Associate Director,
Business Development
+1.949.438-2624
lspencer@sgadvisors.com



Jennifer Coyle, PMP
Head of Operations
+1.949.438.2621
jcoyle@sgadvisors.com



Chauntelle Zwonitzer
Senior Marketing Associate
+1.949.662.2232
czwonitzer@sgadvisors.com



Lelia Kennedy
Marketing Associate
+1.949.662.2233
lkennedy@sgadvisors.com



Jose Garcia Hernandez
Marketing Associate
+1.949.438-2604
jhernandez@sgadvisors.com

100 Bayview Circle, South Tower, Suite 650, Newport Beach, CA 92660
Main line: +1.949.706.2640
clientservice@sgadvisors.com



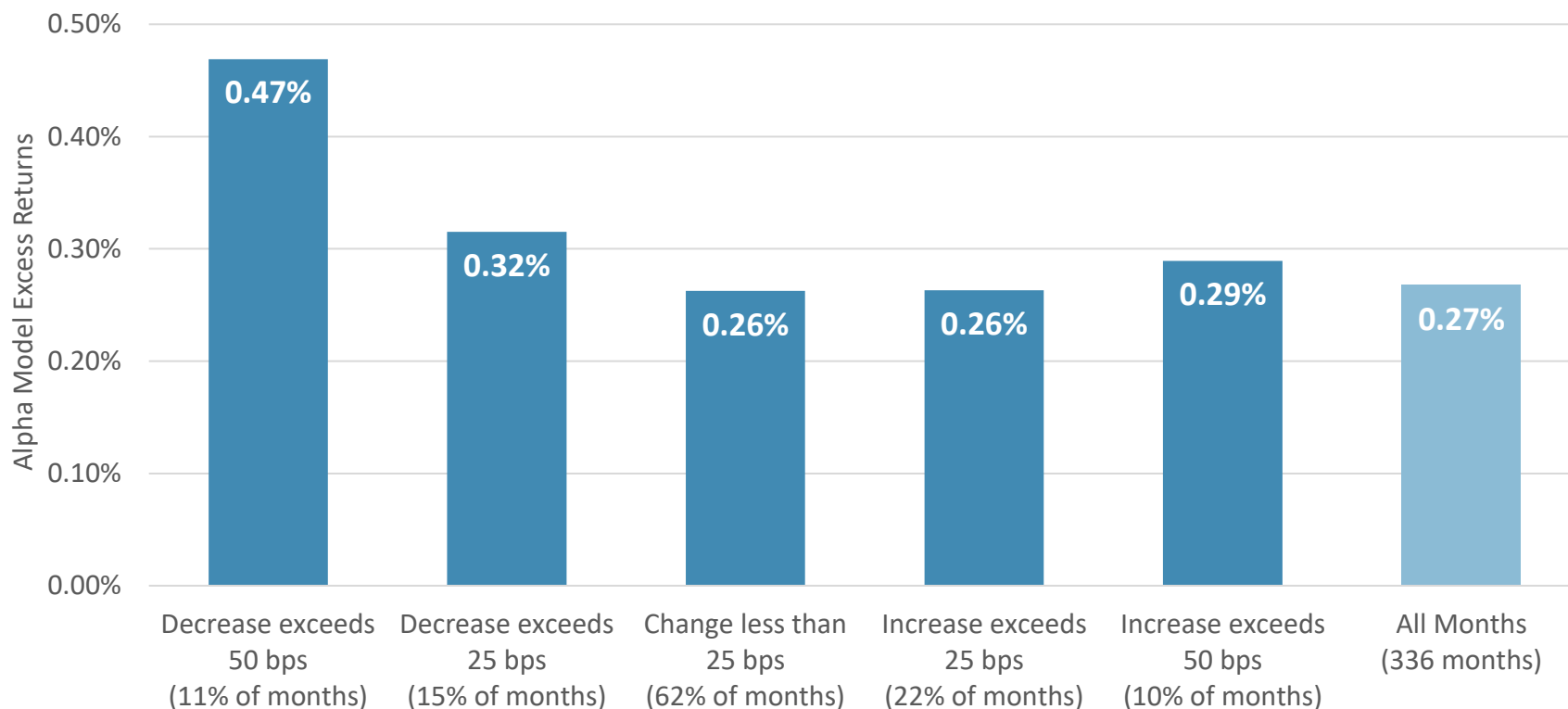
- Philosophy & Process
 - Monthly performance and custom attribution reports
 - Client specific reporting templates
- Reporting to OPFRS staff:
 - Monthly performance and custom attribution reports
 - Client specific reporting templates
 - Quarterly performance and attribution reports, statements, and ad hoc communications
 - Quarterly, monthly, or as requested portfolio review calls or meetings with a member of the portfolio management team
 - SGA views its relationship as a client resource and can provide analysis relevant to OPFRS
- Educational
 - Advisory Board
 - Market and research webinars
 - White papers

International Developed Large Cap Universe

Regime Analysis

January 1997 to March 2025

Historical SGA Alpha Model Returns After Federal Reserve Rate Actions

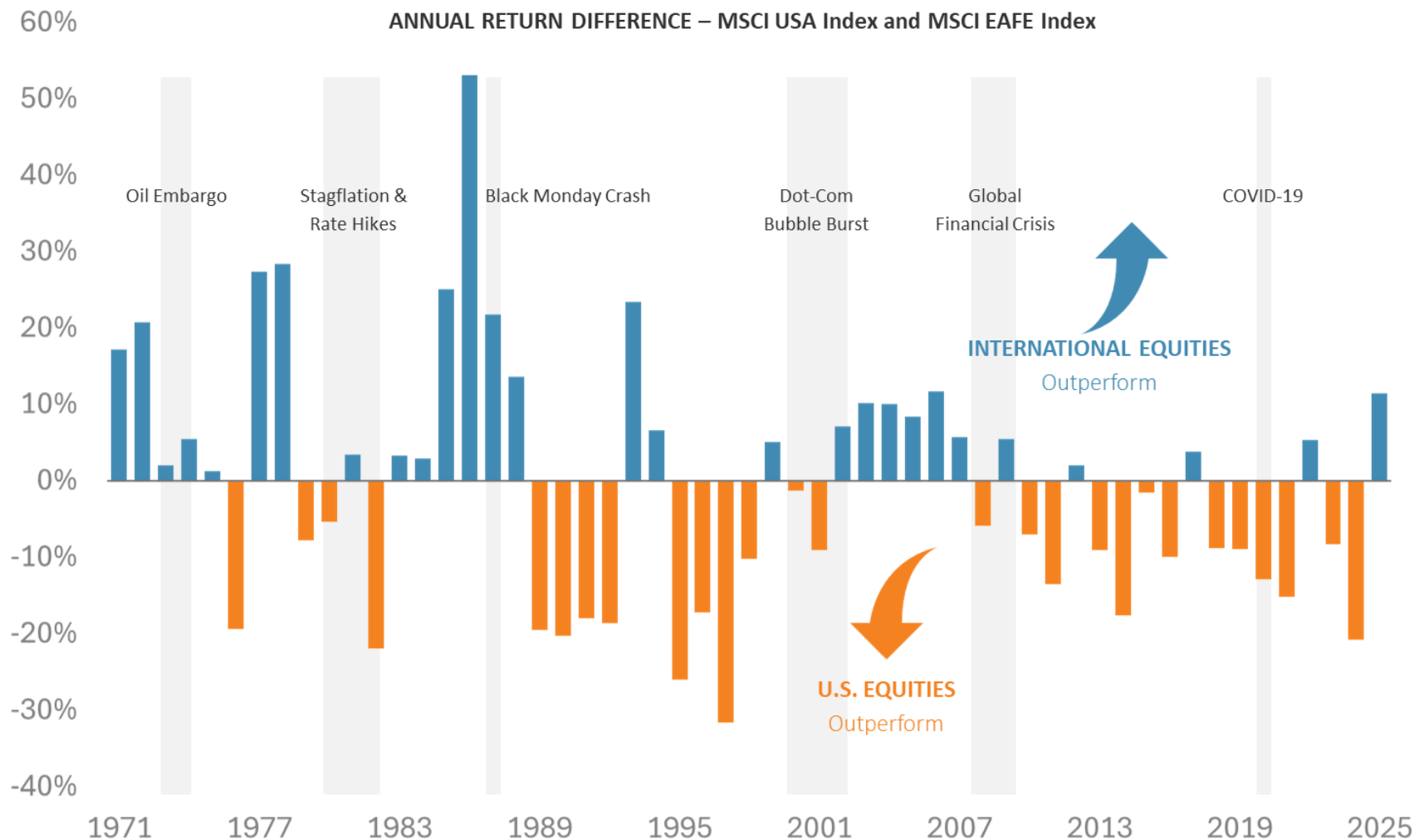


Benchmark: MSCI EAFE. Source: SGA, FactSet, MSCI.

This analysis uses monthly data from January 1997 to March 2025 for a total of 336 monthly periods in the International Developed Large Cap Universe. However, the first three months (January–March 1997) are excluded from the regime calculations since the regime is defined as the change in the three-month Fed Funds rate. The values in the chart represents the data for periods that fit into the specified Economic Regimes. For more information on the Economic Regimes, please see the “Regime Disclosure” at the end of this presentation. SGA Alpha performance is shown in each regime as the average return. Please see Appendix for additional information contained in the Custom Attribution Disclosure. SGA did not begin managing portfolios until November 30, 2005. The SGA returns do not reflect actual returns of SGA portfolios and are for illustrative purposes only.

Equity Returns – U.S. vs. International

1971 through 2025 YTD



Source: SGA, MSCI.

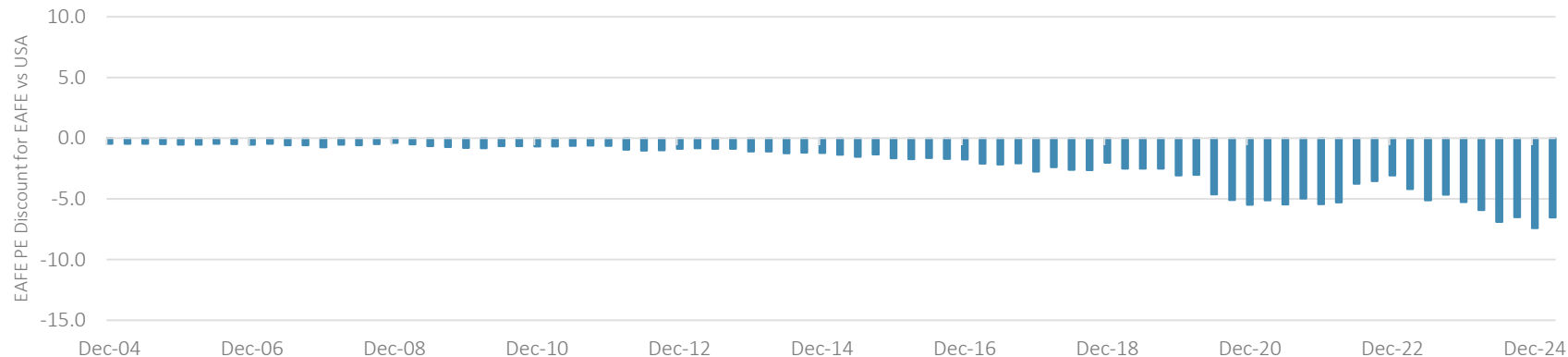
Analysis period 1/1/1971 through 3/31/2025. Index returns are net of dividends. Shaded areas in the chart represent U.S. recessionary periods as defined by the National Bureau of Economic Research (NBER). More information can be found <https://www.nber.org/research/data/us-business-cycle-expansions-and-contractions>. These periods are included to provide historical economic context and do not represent forward-looking statements or guarantees of future performance.

Market Observation

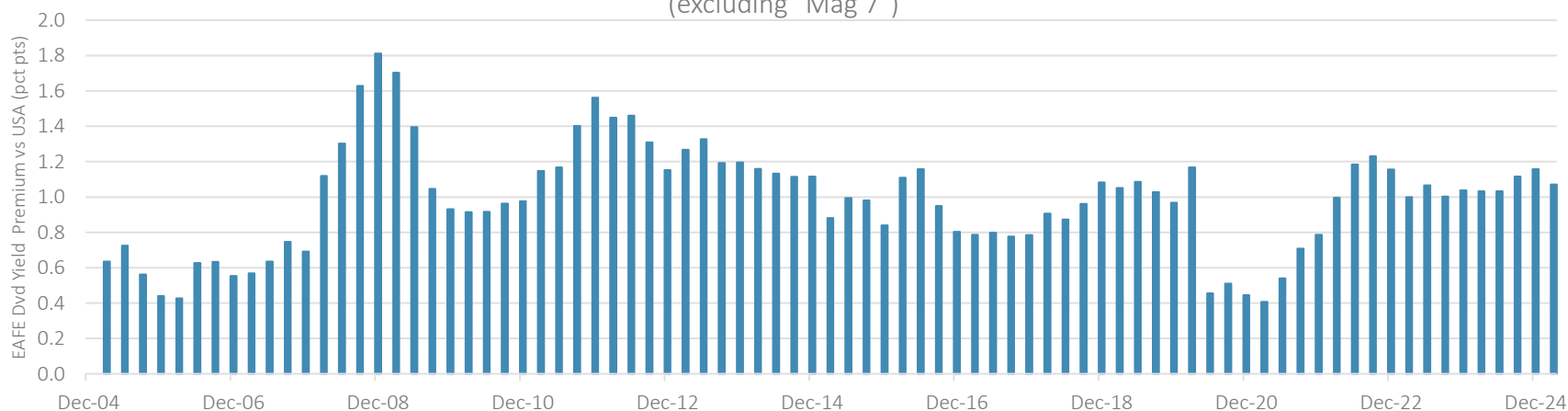
Time for Non-U.S. markets to Shine?

Comparative Valuations Dec 31, 2004 to March 31, 2025

MSCI EAFE PE Premium (Discount) vs MSCI USA
(excluding "Mag 7")



MSCI EAFE Dividend Yield Premium vs MSCI USA
(excluding "Mag 7")



- The "Mag 7" are the largest public equity stocks in the U.S. based on market cap value.

Source: MSCI, FactSet, SGA

See Market Outlook disclosure at the end of this presentation.

Russell 1000 ex Mag 7 vs EAFE

Underlying Fundamental Characteristics (As of 5/31/2025)



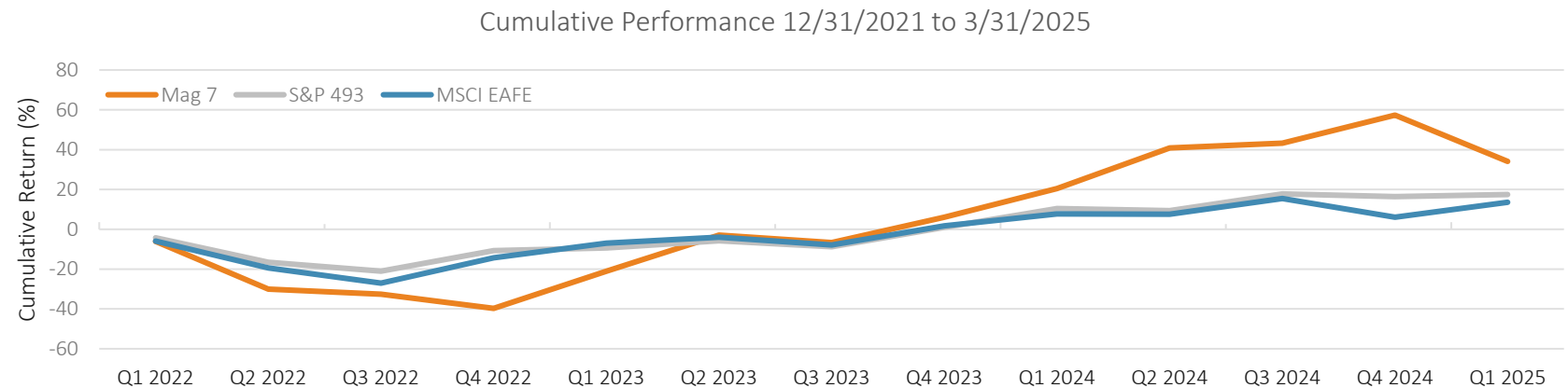
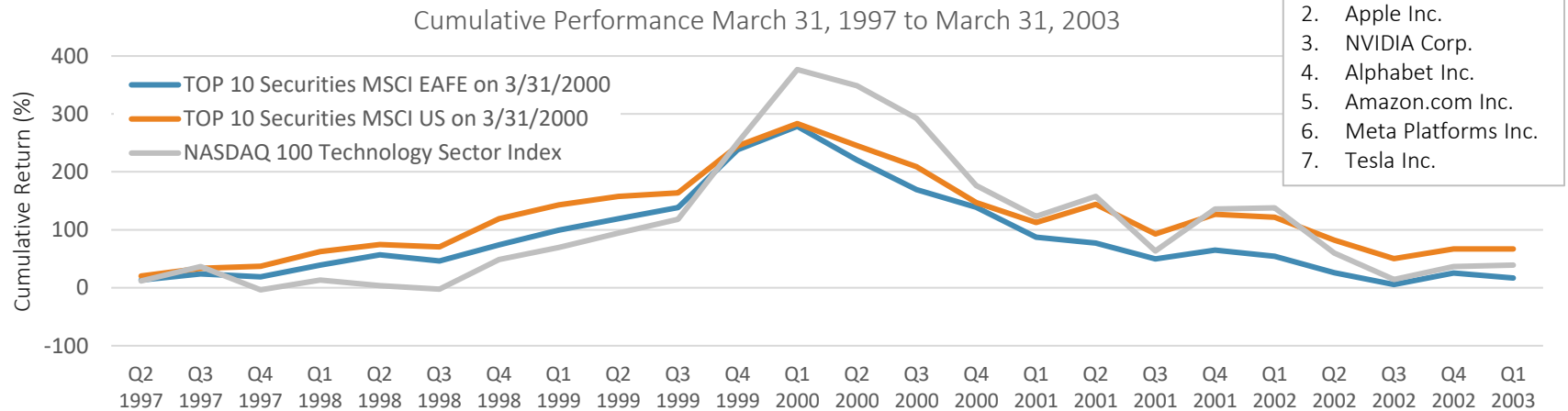
	RUSSELL 1000 EX MAG 7	MSCI EAFE
# of Securities	996	694
Market Capitalization*	\$227.7B	\$94.3B
P/E using FY1 Est	20.3	15.2
Est 3-5 YR EPS Growth	11.4%	8.1%
Hist 3YR EPS Growth	11.6%	15.5%
Hist 3YR Sales Growth	10.4%	11.1%
Operation Margin	21.35%	18.36%
Debt to Capital	44.25%	31.93%

Source: FactSet

*FactSet market capitalization values reflect price multiplied by shares outstanding (e.g., gross market capitalization as opposed to free-float market capitalization) and do not exclude shares limited by foreign ownership.

Market Observation

Is This a Bubble Similar to 2000?



- Above we compare the Tech Bubble experience with the recent run up of the Mag-7 and AI-related stocks.
- Pre tech bubble (1997-2001), Post tech bubble (2001-2003).
- Three year run up below internet bubble proportions.
- The “Mag 7” are the largest public equity stocks in the U.S. based on market cap value.

Strategic Global Advisors, LLC (SGA) claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. SGA has been independently verified for the periods December 1, 2005 through December 31, 2024. The verification report(s) is/are available upon request. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards.

Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. Verification does not provide assurance on the accuracy of any specific performance report.

SGA is an independently registered investment advisor. Registration does not imply any level of skill or training. A list of all composite and pooled fund investment strategies offered by the firm, with a description of each strategy, is available upon request. The type of portfolios in which each strategy is available (segregated account, limited distribution pooled fund, or broad distribution pooled fund) is indicated in the description of each strategy. Results are based on fully discretionary accounts under management, including those accounts no longer with the firm. Composite performance is presented net of foreign withholding taxes on dividends and interest income, where applicable. Withholding taxes may vary according to the investor's domicile. Composite returns represent investors domiciled primarily in the United States.

The U.S. dollar is the currency used to express performance. The following returns are presented gross (or pure gross, where specified) and net of management fees and include the reinvestment of all income.

The annual composite dispersion presented is a gross of fees asset weighted standard deviation calculated for the accounts in the composite the entire year and is only presented for periods with more than five accounts in for the entire year. Policies for valuing investments, calculating performance, and preparing GIPS Reports are available upon request.

Past performance is not indicative of future results.

GIPS® is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

Systematic Investment Risk

There is potential for shortfall in any investment process due to a variety of factors including, but not limited to, data and system imperfections, analyst judgment, and the complex nature of designing and implementing portfolio construction systems and other quantitative models. Such shortfalls in systematic or quantitative processes in particular pose broader risk because they may be more pervasive in nature.

Furthermore, the Advisor's systems may not necessarily perform in a manner in which they have historically performed or were intended to perform. The Advisor recognizes that such shortfalls are inherent to both fundamental and quantitative processes and believes that combining both approaches improves the opportunity to reduce these shortfalls. However these efforts may not necessarily result in the identification of profitable investments or the management of risk.

SGA International ACWI ex-U.S. GIPS® Report

YEAR END	TOTAL FIRM ASSETS (MILLIONS)	COMPOSITE ASSETS		ANNUAL PERFORMANCE RESULTS				3-YEAR ANNUALIZED EX-POST STANDARD DEVIATION**	
		USD (MILLIONS)	NO. OF ACCOUNTS	COMPOSITE GROSS	COMPOSITE NET	MSCI ACWI EX USA INDEX (NET)	COMPOSITE DISPERSION	COMPOSITE GROSS	MSCI ACWI EX USA INDEX (NET)
2024	2,507	45	1	10.16%	9.44%	5.53%	N/A	16.86%	16.25%
2023	2,769	445	2	21.64%	20.85%	15.62%	N/A	16.92%	16.30%
2022	3,231	370	2	-16.13%	-16.67%	-16.00%	N/A	19.30%	19.53%
2021	4,365	444	2	12.23%	11.50%	7.82%	N/A	16.64%	17.03%
2020	5,045	511	4	6.91%	6.21%	10.65%	N/A	17.81%	18.19%
2019	5,139	496	4	22.08%	21.29%	21.51%	N/A	12.27%	11.50%
2018	3,944	116	2	-14.72%	-15.27%	-14.20%	N/A	11.80%	11.54%
2017	4,085	136	2	29.59%	28.75%	27.19%	N/A	N/A	N/A
2016	3,023	105	2	1.61%	0.95%	4.50%	N/A	N/A	N/A
2015*	2,548	39	1	-6.97%	-7.27%	-9.32%	N/A	N/A	N/A

N/A – Information is not statistically meaningful due to an insufficient number of portfolios in the composite for the entire year.

*Performance represents a non-annualized partial period return beginning on June 30, 2015.

**The 3-year annualized ex-post standard deviation is not shown when there are not 36 monthly performance returns available.

International ACWI ex-U.S. Equity Composite includes all discretionary, investment restricted, equity only accounts whose primary investment objective is growth, and secondarily yield, and are invested in international large cap securities. The minimum account size for this composite is \$100 thousand. Key material risks include foreign company, currency, political, and economic events unique to a country or region that may affect those markets and their issuers. Moreover, investing in emerging markets securities are subject to heightened risks as these types of securities may have governments that are less stable, markets that are less liquid and economies that are less developed. For comparison purposes, the composite is compared to MSCI ACWI ex USA Net Index, which includes large and mid-cap companies outside the U.S. in developed and emerging market countries. The MSCI ACWI ex USA Net Index uses withholding tax rates applicable to Luxembourg holding companies. The International ACWI ex-U.S. Equity Composite was created and inceptioned on June 30, 2015. Prior to December 31, 2016, the International ACWI ex-U.S. Equity Composite was known as the International Large Cap Core Equity MSCI All Country World ex-U.S. Composite. The International ACWI ex- U.S. Equity Composite has had a performance examination for the periods January 1, 2018 through December 31, 2024. The performance examination reports are available upon request.

Composite net of fees performance was calculated by reducing the gross of fees return by the maximum model annual management fee of 0.65% applied monthly. Please note that the maximum model annual management fee for the respective period may differ from the actual investment advisory fees incurred by clients.

From July 1, 2019 through January 31, 2024, the composite policy required the temporary removal of any portfolio due to a client-initiated significant cash inflow or outflow, excluding securities received or delivered in kind when the cash inflow or outflow represented 10% or greater of the portfolio assets. Additional information regarding the treatment of significant cash flows is available upon request.

Past performance is not indicative of future results.

Maximum annual management fee is 0.65%; actual investment advisory fees incurred by clients may vary.

Investment Process

Pages in this presentation referring to investment process, portfolio construction, investment guidelines, research, portfolio characteristics, and portfolio positioning are for illustrative purposes only. Figures and statements on these pages are subject to change and may vary based on market conditions, strategy and client-specific constraints.

The “daily screening portfolio optimization” generally runs daily on the strategy’s universe subject to SGA’s strategy and client-specific constraints. The “Stock Selection Model” estimates industry relative score based on several factors and may be interpreted as expected relative return. The “Risk Model” estimates the risk profile of each stock based on SGA’s proprietary alpha and risk factors.

Fundamental analysis generally takes into consideration more areas than listed. The areas listed as well as areas not listed may singly or jointly impact an analyst’s decision. The judgment of experienced analysts is used to determine the importance of these areas and whether they constitute a high enough level of concern that a stock will be deemed ineligible for purchase.

Never invest based purely on our publication or information, which is provided on an “as is” basis without representations. Past performance is not indicative of future results.

Stock Examples

Stock examples are intended for illustration purposes only. The actual company review may differ significantly in terms of model rankings, and the parameters for the fundamental review, including areas not listed on this page. Portfolio manager judgment, as well as, research accessed from a variety of sources may be used, alone and together. The rankings at the time of purchase and at the time of sale will vary significantly by security. There is no threshold by which a stock is purchased or sold and portfolio manager judgment at all times is a factor.

Percentiles are calculated for illustration purposes using SGA’s proprietary Alpha Model estimates, which are used to assess companies. Every company receives an alpha, which may be interpreted as a proxy for expected excess return or peer group rank.

Nothing published should be considered personalized investment advice, investment services or solicitation to buy, sell, or hold any securities.

Investments do not guarantee a positive return as stocks are subject to market risks, including the potential loss of principal.

Fundamental Analysis and Process Performance Attribution Charts

These charts represent SGA's tracking of fundamental analysis ratings, which impact the eligibility of stocks that can be considered for purchase in client portfolios. SGA began tracking fundamental analysis ratings as noted on the slide and so can not provide this information back to inception of the firm. The charts do not reflect actual or intended implementation of a portfolio by SGA. They are presented as a simplified demonstration of the historical influence of our fundamental analysis on SGA's investment process and were achieved by means of the retroactive application of an investment process that was designed with the benefit of hindsight. Thus, the performance results noted should not be considered indicative of the skill of the advisor or its investment professionals. The back-tested performance was compiled after the end of the period depicted and does not represent the actual investment decisions of the advisor. In addition, back-tested performance results do not involve financial risk, and no hypothetical trading record can completely account for the impact of financial risks associated with actual investing. There is not necessarily a correlation between the effectiveness of the fundamental review process depicted in these charts and the actual returns of client portfolios. While these charts show all potential new buys that were reviewed, client portfolios hold only a small subsection of these universes. Furthermore, there are many more factors that impact client portfolios such as optimization, which incorporates account and strategy restrictions, risk aversion assumptions, transaction costs, etc. Portfolio manager discretion will also significantly impact portfolios depending on market conditions. Nonetheless, SGA believes this analysis provides important insights into SGA's philosophy, process, and approach.

Past performance is not indicative of future results. Returns are presented net of fees calculated using the current highest applicable annual management fee applied monthly as described in the GIPS® Report.

The volatility of the index may be materially different from any portfolio or universe of securities shown.

This is supplemental information to the GIPS® Report. SGA encourages clients and prospects to seek independent sources of analysis in assessing SGA's returns and process. For additional information on the calculation methodology please contact Strategic Global Advisors, LLC at 949.706.2640.

Methodology and Parameters:

- A "Buy Universe" is the "equal weighted portfolio" formed at the end of each month comprised only of new stocks that appear in the daily optimal portfolios for the trailing six months across related strategies. Developed market and emerging markets, as well as, securities restricted for certain client portfolios are included. The Buy Universe is then divided into two groups of "Passed Fundamental" and "Failed Fundamental" universes based on our ratings, each equally weighted. "Returns" for all three universes are calculated for the next month. At the end of that month, the universes are reformed in the same process described above, dropping names that appeared prior to the trailing six months.
- In the graphs, the monthly returns are cumulated while in the tables the cumulative returns are then annualized.
- Returns cover the time period specified in the chart title and start with the later of the product inception date or six months after the earliest month where ratings were tracked.
- Zero transaction costs.

Source: FactSet, SGA

There are limitations inherent in universe analysis, particularly the fact that such results do not represent actual trading and that they may not reflect the impact of implementation shortfall, as well as, material economic and market factors that may have an impact on portfolio decision making and market timing in a live client account. SGA did manage portfolios longer than the analysis period, however, returns only depict the time period listed on the chart. The results portrayed reflect the reinvestment of dividends and other earnings.

International equity investing includes the possibility of loss. Universe analysis is inherently a hypothetical model because it does not reflect actual trading and portfolio management decisions. Actual investor performance could be lower than the universe analysis.

Strategic Global Advisors

SGA Category Group Research Disclosure



The SGA Category Group Research slide illustrates a backtest that is hypothetical and does not reflect actual returns of SGA portfolios. SGA does not guarantee the accuracy of these estimates or methodology. SGA believes the backtest analysis provides important insights for SGA in thinking about and designing the firm's investment process. SGA applies both quantitative and qualitative approaches to portfolio management, which may vary depending on market conditions and impact the firm's ability to capture the alpha indicated by these backtests.

There are limitations inherent in backtested category research results, particularly the fact that such results do not represent actual trading and that they may not reflect the impact that material economic and market factors might have had on portfolio decision making in a live client account. SGA did not manage any live accounts prior to November 2005.

International investing includes the possibility of loss.

SGA encourages clients and prospects to seek independent sources of analysis in assessing SGA's returns and process. For additional information on the calculation methodology please contact Strategic Global Advisors, LLC at 949.706.2640.

- The securities in the analysis consist of SGA's default universe of companies and recalculated every quarter through time. It includes companies in global developed and emerging market countries that have had a market cap in the top four deciles at any month-end over the trailing 12 months as of the start of each quarter.
- Quarterly rebalancing with no transaction costs
- Included: Developed and Emerging countries
- SGA is equally weighting all companies in the universe in a correlation calculation in order to determine Information Coefficients.

Source: FactSet, SGA

Past performance is not indicative of future results.

SGA Alpha Model Return values on the chart reflect the difference from the average monthly performance in the International Developed Large Cap Universe during the months fitting the criteria of Decrease exceeds 50 bps, Decrease exceeds 25 bps, Change less than 25 bps, Increase exceeds 25 bps and Increase exceeds 50 bps, as defined by the regimes herein, and does not reflect actual returns of SGA portfolios.

- Time period: January 1997 – March 2025 (January–March 1997 are excluded from the regime calculations since the regime is defined as the change in the three-month Fed Funds rate.)
- 336 monthly periods
- Economic Regimes were determined through time this way:
 - Decrease exceeds 50 bps: Fed Fund Effective Rate falling more than 55 basis points in the prior 3 months.
 - Decrease exceeds 25 bps: Fed Fund Effective Rate falling more than 25 basis points in the prior 3 months.
 - Change less than 25 bps: Fed Fund Effective Rate moving less than 25 basis points in either direction in the prior 3 months.
 - Increase exceeds 25 bps: Fed Fund Effective Rate raising more than 25 basis points in the prior 3 months.
 - Increase exceeds 50 bps: Fed Fund Effective Rate raising more than 50 basis points in the prior 3 months.

Source: SGA, MSCI, FactSet

SGA did not manage live accounts during every month in the time period.

This data in the referenced charts is to be used for illustrative purposes only and not indicative of future results.

International Developed Large Cap Universe

- Quarterly rebalancing with no transaction costs
- The universe of securities for SGA's International Equity strategy includes approximately 2,000-2,500 companies in developed markets that meet market relative market capitalization and internal liquidity requirements.
- Market cap cutoff was determined through time this way:
 - The top 10% of companies in the universe as measured by market cap at each given period
 - The approximate number of companies in International Equity universe varies significantly over time and in comparison to the universe used when constructing actual client portfolios

Strategic Global Advisors

Market Outlook Disclosure



The Market Outlook presentation is meant for illustrative purposes only and is not intended as a recommendation to invest in any particular asset class or strategy. The views and opinions expressed are those of Strategic Global Advisors, LLC and should not be construed as an estimate or a promise of results that a portfolio may achieve. The materials provided in this presentation and any comments or information provided by the authors are for educational purposes only and nothing presented should be considered legal or investment advice. Information contained herein has been obtained from sources believed to be reliable, but not guaranteed.

For additional information, please contact Strategic Global Advisors, LLC.

MEMORANDUM

TO: Oakland Police and Fire Retirement System (“PFRS” or “the Board”)
FROM: Meketa Investment Group (“Meketa”)
DATE: June 24, 2025
RE: Selection of International Equity Investment Manager

At the July 2024 meeting, the Board approved a search process to identify the most attractive candidates to manage PFRS’s International (Non-US) Equity mandate. At the February 2025 meeting, the Board approved Meketa’s recommended list of three finalist firms for interviews and delegated to the Investment Committee to conduct them.

This document serves to further implement the Board’s decision and to provide an overview of the candidates and their strategies. Meketa recommends that the Board select one manager for the mandate.

Overview of Finalists

The three International Equity finalist candidates are as follows, in alphabetical order:

Recommended Finalists	Product
Acadian Asset Management	Non-US Equity ¹
C Worldwide Asset Management	International Equities
Strategic Global Advisors ²	International ACWI ex-US Equity

All three managers and their products possess the abilities to provide PFRS with the appropriate services. The following table summarizes their key information about the firms and the proposed products. Summary profiles are also included in the following pages.³

	Acadian	C Worldwide	Strategic Global Advisors
Firm Location	Boston, MA	Copenhagen, Denmark	Newport Beach, CA
Firm Inception	1986	1986	2005
Ownership Structure	100% Parent Owned	20% Employee Owned/ 80% PE Firm (Altor)	56% Employee Owned/ 44% Horvath and Nile
Firm AUM (03/2025)	\$120.9 billion	\$17.7 billion	\$2.7 billion
Strategy Name	All Country World ex US	International Equities	International ACWI ex US
Strategy Inception	November 1998	September 1986	June 2015
Strategy AUM (03/2025)	\$12.8 billion	\$1.8 billion	\$47.7 million
Investment Vehicle	Commingled (CIT)	Commingled (CIT)	Separate Account
Liquidity	Daily	Daily	Daily
All-in-Fee (for \$25M mandate)⁴	0.75%	0.40%	0.65%
Fee Peer Percentile Rank⁵	56th – Commingled Fund	19th – Commingled Fund	37th – Separate Account

¹ Acadian proposed the Non-US Equity (EAFE) strategy in their RFP response. Given the mandate’s nature, Acadian’s ACWI ex US strategy is presented in this document.

² Strategic Global Advisors (SGA) is an incumbent manager with an ACWI ex US mandate.

³ Source of information for these summary profiles are eVestment and the manager’s RFP responses.

⁴ Sliding fee schedules are as follows—Acadian: 0.75% for first \$25 million, 0.65% for next \$25 million, 0.50% for next \$100 million, and 0.40% thereafter. C Worldwide proposed a flat 0.40% commingled fund (CIT). SGA: 0.65% for first \$50 million, 0.60% for next \$50 million, 0.55% for next \$100 million, 0.50% for next \$300 million, 0.45% thereafter.

⁵ Peer group rankings displayed represent lowest fees as 1st to highest fees as 100th. Rankings compare effective fees from manager RFP responses against the eVestment All EAFE Equity Universe for mandate size of \$25 million as of 03/31/2025.

Acadian Asset Management

Organization

- Acadian Asset Management LLC (“Acadian”), originally established in 1986, is a Boston-headquartered wholly owned subsidiary of Acadian Affiliate Holdings LLC, which is an indirectly wholly owned subsidiary of Acadian Asset Management Inc. (“AAMI”), a publicly traded Delaware corporation listed on the NYSE. Acadian has wholly-owned affiliates in Singapore, Australia, and the UK.
- Acadian specializes in the active management of systematic investment strategies. It has maintained its core independence and autonomy throughout several corporate transitions and has operated with full discretion over its investment philosophy and process since its inception.

Investment Team

- For all traditional equity products offered by the firm, including the proposed strategy, Acadian manages a single core process that is custom-tailored to the client objectives. Over 100 investment professionals firm-wide are directly involved in the application of the investment process and its ongoing enhancement.
- Brendan Bradley, Acadian’s CIO, has ultimate oversight responsibility for all Acadian strategies. Acadian employs a systematic investment process and a team-based approach to portfolio management. The Equity Investment Team is supported by the full resources of the larger investment team inclusive of Investment Analytics and Data, Global Equity Research, and Implementation. Acadian’s Investment Policy Committee, which is comprised of all senior investment staff, is responsible for reviewing potential changes to investment policy or process. The CIO has final authority and responsibility over any qualitative overlays applied to the process as well as for the investment decision-making process as a whole.

Philosophy

- Acadian believes that markets are inefficient, and that such inefficiencies are caused in part by behaviorally-based mispricings. Acadian applies fundamental insights in a systematic manner to attempt to exploit these mispricings and to find attractive stock opportunities. Further, Acadian believes that stocks and markets have many attributes that are related to potential outperformance, and that a successful investment approach must be multi-faceted and adaptable.

Process

- The investment process is team-managed. Acadian’s research team focuses on monitoring and enhancing the investment process, while Acadian’s portfolio management team oversees client portfolios. Portfolio managers are also part of the research team, so that they can contribute their valuable day to day observations on client portfolios and markets to the ongoing enhancement of the investment process.
- Acadian’s broad global equity universe covers 44,000 stocks in more than 100 countries, including 15,500 Non-US Equity securities. Due to liquidity considerations, securities with market capitalizations of under \$100 million are generally not considered.
- The process starts with proprietary return forecasting models that evaluate stocks across a broad range of signals evaluating stocks simultaneously on three dimensions:
 - Bottom-up, peer-relative perspective to forecast returns for stocks relative to their region-industry peers.
 - Stock-specific peer group perspective for insight via non-obvious fundamental economic linkages.
 - Top-down macro perspective to forecast country, industry group, and local country-industry intersection.
- Afterwards, the forecasting framework properly combines the outputs from each of the forecast models to arrive at a holistic total return forecast for each stock. These views are updated continuously to construct portfolios from real-time and objective views on global stocks.
- A proprietary portfolio optimization system is then applied to combine return, transaction costs, and risk forecasts with the objective of producing a portfolio with the highest expected returns relative to these.
- Prior to trading, all portfolios are independently reviewed by a member of both the Portfolio Management and Portfolio Construction and Trading teams to confirm that each portfolio meets its specific investment objectives and risk parameters. The Compliance Team also performs a separate pre-trade compliance review.

C Worldwide Asset Management

Organization

- C Worldwide Asset Management (“C Worldwide”) was founded in 1986 in Copenhagen, Denmark to manage high conviction equity portfolios for institutional investors. The international equity strategy was founded in 1986, closely followed by the Global equity strategy in 1990. The company is headquartered in Copenhagen, Denmark where most of its 120 employees are based.
- The current ownership structure is split between 80% Altor (a Swedish private equity firm) and 20% employee-ownership.

Investment Team

- The overall Investment Team consists of 26 investment professionals who contribute to the International Strategy. All perform individual company research and have a voice in identifying new ideas. C Worldwide employs a generalist analytic structure, with some exceptions that require specialist expertise. The firm believes that the generalist mindset provides the best method for objectively allocating capital.
- Four senior investors comprise the “Decision Team”, which is responsible for all final buy and sell transactions. All decisions require unanimous agreement in the Decision Team. These individuals are Bo Knudsen (since 1994), Bengt Seger (since 1988), Mattias Kolm (officially joining the Global Decision team in 2017 to reinforce the strength and capabilities of the team after having been the lead portfolio manager on the Global Equities Ethical strategy since 2003), and Peter O'Reilly (officially joining the International Decision team in 2022 after having worked closely with the International Decision Team since 2018).
- The Decision Team is supported by 12 Portfolio Managers, 1 Global Thematic Specialist, 1 ESG Specialist, and 8 Research Analysts.

Philosophy

- The investment philosophy centers on the belief that businesses with durable moats, strong governance and a clear long-term strategy can sustain consistent growth levels well into the future. By weighting the analysis on a company's long-term prospects rather than its short-term results, estimating its compounding potential can be more objective / effective.
- C Worldwide believes that securities are mispriced due to the market's obsession with short-term results. Most market participants focus on the next 12 months of earnings. Few investors focus on three-year results and hardly any focus on results greater than five years. The firm's research focus is on finding companies that they believe can continue to compound well beyond this short-term period, meaning that their long-term growth is mispriced and something to be embraced and capitalized on.

Process

- The investment process starts with a broad initial universe that includes all publicly traded companies worldwide with a market capitalization above \$5 billion. The process is centered around a constant competition for capital in a fully invested portfolio of 30 high conviction companies. It is iterative in nature, with the ideas on the holdings and pipeline of investment opportunities are engaged in constant debate. The 26-person investment team meets formally twice a week, the senior research team meets additionally once per month, and the Decision Team have a formal decision meeting every 10 days or as needed.
- Everyone on the investment team is involved in primary stock research / analysis and everyone provides input into idea generation for the pipeline and where applicable, analytical insights on the existing portfolio. The entire investment team has a collective responsibility not only to maintain but also continuously enhance the team's foundation of lasting knowledge.
- When an idea is deemed to be interesting it enters the Global Research Assignments list for deeper analysis. The Global Research assignment list is the more formal framework of responsibilities, where specific responsibilities are assigned. Typically, 20-30 research assignments are at different stages of maturity at a given moment in time. In addition, ongoing research on current holdings is being done.
- The highest conviction ideas get moved to the pipeline, generally consisting of 5-10 companies. Existing holdings are constantly challenged by new maturing ideas in a continuous optimization of the portfolio. There is a constant competition for capital with a “one in, one out” approach. The Decision Team is responsible for all final buy and sell transactions including adjusting portfolio security weights. All decisions require unanimity.

Strategic Global Advisors

Organization

- Strategic Global Advisors, LLC (“SGA”) is a majority woman and employee-owned registered investment advisor based in Newport Beach, California. It was founded in 2005 by CEO Cynthia Tusan, CFA. SGA has managed non-US equity strategies for institutional accounts since the firm’s inception in 2005. Its core investment philosophy began to be implemented into US equities in 2007 followed by global strategies.
- SGA is 55.75% employee-owned and employees maintain 100% of voting control. Hovnanian-SGA, LLC obtained a non-voting minority ownership stake in May 2007. In December 2015, SGA entered a strategic relationship with Nile Capital Fund, LP (Nile LP). Nile LP has a non-voting, minority stake in SGA and advises the firm on non-investment functions.

Investment Team

- SGA’s investment team structure is comprised of three teams. The portfolio management team, the quantitative team, and the fundamental team work closely together to apply SGA’s investment process across all SGA strategies. SGA’s Office of the CIO is involved in setting research priorities of the firm and is comprised of the firm’s senior investment professionals. In addition, SGA has had an Academic Advisory Board which has been in place since the inception of the firm and is currently comprised of two finance professors, one of whom engages with SGA in a consulting capacity as the firm’s Director of Investment Research.
- As of March 31, 2025, there are 10 full-time employees on the investment team comprised of three senior portfolio managers, the CIO, and six senior analysts across the quantitative and fundamental teams.

Philosophy

- SGA’s philosophy can be described as “Fundamentally Inspired, Quantitatively Driven”. This philosophy integrates the breadth, systematic and unbiased discipline, scope, and repeatability of a Quantitative engine with the insight, experience, and judgment of a Fundamental analyst team. This integration and the feedback loop between these two disciplines has been integral to SGA since its inception.

Process

- Security Universe: Includes approximately 2,000-3,000 companies in developed and emerging markets that meet the strategy’s market capitalization and liquidity requirements.
- Systematic Idea Generation: On a daily basis, SGA’s proprietary Alpha Model identifies 1-2 new companies for potential inclusion based on the optimal trade-off between their expected alpha and active risk, as calculated by SGA’s proprietary Alpha and Risk Models.
- Fundamental Analysis: Analysts conduct in-depth research on potential new opportunities; companies impacted by macro/geopolitical factors, ESG concerns, or industries in decline may be eliminated. Typically 80% - 90% of suggested companies pass our fundamental review.
- Portfolio Rebalancing: Portfolios are rebalanced after a final optimization, considering trading costs, benchmark constraints, and client customization requests. The portfolio management team reviews and adjusts holdings based on updated information, market conditions, and investment experience.

DS/PN/JLC/mn

Economic and Market Update

May 2025 Report

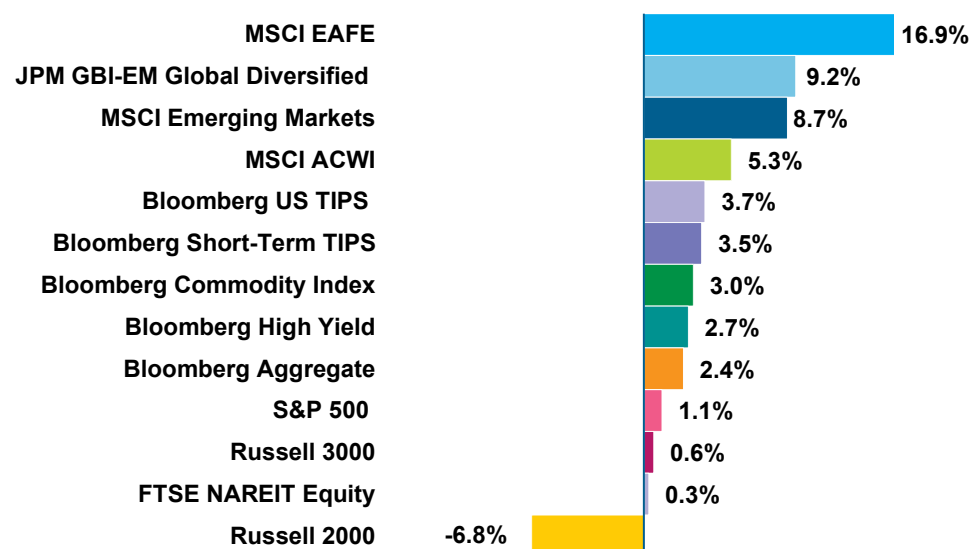
Commentary

Tariff related uncertainty declined in May and lifted global equity markets, but renewed concerns over the level of national debt emerged as a headwind for fixed income markets.

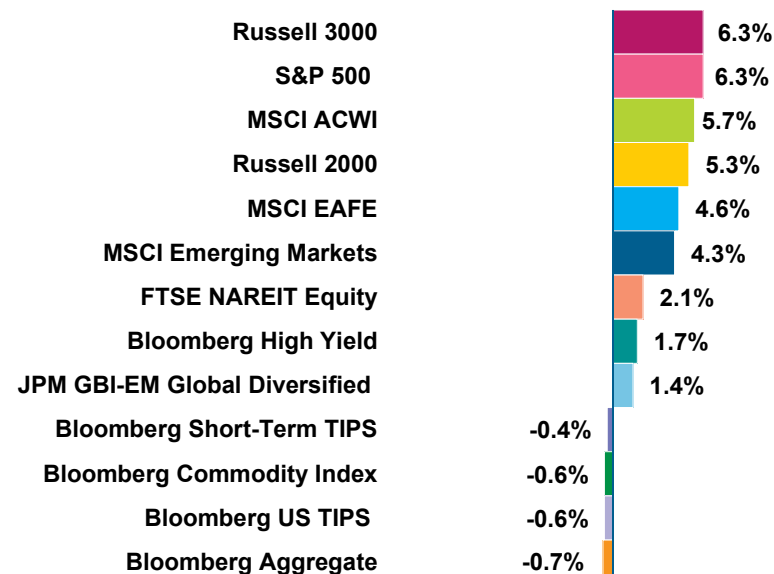
- Domestic equities rallied in May (Russell 3000: +6.3%), with growth stocks particularly in the technology sector leading the way.
- Non-US developed market stocks (MSCI EAFE: +4.6%) lagged US markets in May but lead most asset classes year-to-date returning +16.9%.
- Emerging market equities returned +4.3% for the month, with a +2.7% return in China weighing on overall results.
- In early May, the Federal Reserve held rates steady, with inflation, while improving, remaining above target and the unemployment rate remaining low.
- Most fixed income markets dropped in May, with the broad Bloomberg Aggregate Index returning -0.7%, long Treasuries falling 2.9%, and TIPS declining 0.6%. Riskier bonds did better as risk sentiment improved with high yield bonds gaining 1.7% and emerging market debt increasing 1.4%.
- Looking ahead, continued uncertainty related to the US administration's tariff policies and their impact on the economy, inflation and Fed policy will be key. The track of the US deficit, China's economy and relations with the US, as well as concerns over elevated valuations and weakening earnings in the US equity market, will also be important focuses for the rest of this year.

Index Returns¹

YTD



May



- After tariff-related market volatility in April, global equity markets rallied in May on the announcement of a 90-day agreement between the US and China to pause reciprocal tariffs. Bond markets fell on concerns over growing debt levels globally.
- US equity markets delivered the strongest returns in May, returning year-to-date performance to positive territory after a very weak start to 2025. International equities, particularly developed markets, added to their strong results for the year, supported by a weakening US dollar.

¹ Source: Bloomberg. Data is as of May 31, 2025.

Domestic Equity Returns¹

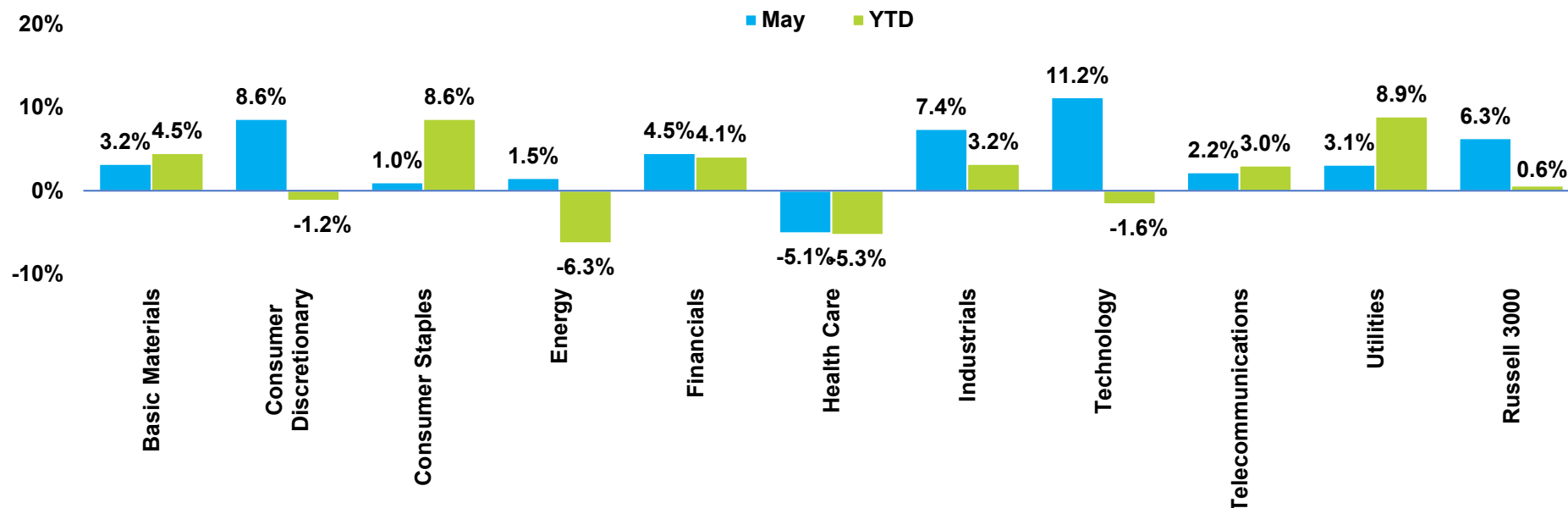
Domestic Equity	May (%)	QTD (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	6.3	5.6	1.1	13.5	14.4	15.9	12.8
Russell 3000	6.3	5.6	0.6	13.1	13.8	15.3	12.2
Russell 1000	6.4	5.8	1.0	13.7	14.3	15.6	12.6
Russell 1000 Growth	8.8	10.8	-0.3	17.6	19.8	17.7	16.1
Russell 1000 Value	3.5	0.4	2.5	8.9	8.2	13.0	8.6
Russell MidCap	5.7	4.6	1.1	10.3	9.1	12.7	9.2
Russell MidCap Growth	9.6	13.3	5.2	23.2	16.7	12.2	11.5
Russell MidCap Value	4.4	1.8	-0.4	6.0	5.9	13.2	7.7
Russell 2000	5.3	2.9	-6.8	1.2	5.0	9.6	6.6
Russell 2000 Growth	6.4	5.7	-6.0	3.5	7.9	7.0	6.7
Russell 2000 Value	4.2	0.0	-7.7	-1.1	2.1	12.0	6.2

US Equities: The Russell 3000 returned 6.3% in May.

- US stocks rallied 6.3% in May as trade tensions eased. The bulk of the gains came after an agreement between the US and China to temporarily suspend their tariffs on May 12. The Russell 3000 index appreciated 3.3% on that day alone.
- Except for Apple, the “Magnificent 7” stocks drove the broad indices higher. NVIDIA was the top contributor in the Russell 3000 index: the stock appreciated 24% in May, powered by a strong first quarter earnings report.
- Growth stocks outperformed value stocks across the market capitalization spectrum for the month, a continuation of the year-to-date trend in large and small capitalization markets. In the mid cap space, growth stocks have outperformed value stocks year to date, largely due to a single stock: Palantir Technologies.

¹ Source: Bloomberg. Data is as of May 31, 2025.

Russell 3000 Sector Returns¹



- In a reversal of the trend so far in 2025 technology stocks led the way in May driven by the so-called “Magnificent 7” stocks. According to FactSet, the first quarter earnings of these companies exceeded estimates by 14.9%, compared to 8.2% for the remainder of the S&P 500.
- Consumer discretionary was the next leading sector, almost exclusively due to gains by Tesla and Amazon.
- Health Care had the weakest results. Eli Lilly, despite reporting a reasonably strong first quarter, was the sector’s largest detractor. Investors became wary of the competition in the GLP-1 space, mainly from Novo Nordisk.
- For the year, defensive sectors like utilities and consumer staples continued to lead the way.

¹ Source: Bloomberg. Data is as of May 31, 2025.

Foreign Equity Returns¹

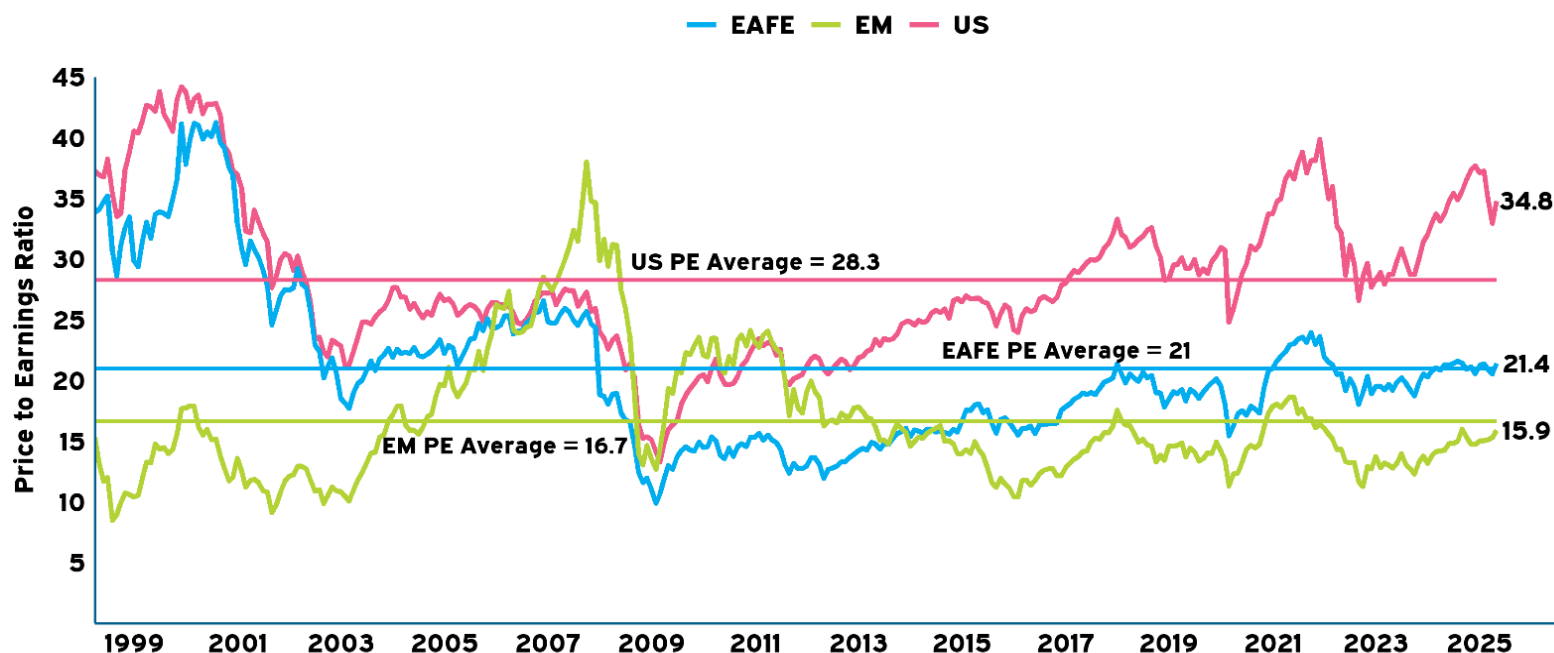
Foreign Equity	May (%)	QTD (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI Ex US	4.6	8.4	14.0	13.8	9.4	10.4	5.5
MSCI EAFE	4.6	9.4	16.9	13.3	11.5	11.4	6.0
MSCI EAFE (Local Currency)	4.7	4.6	7.6	7.2	10.9	12.2	6.5
MSCI EAFE Small Cap	5.6	11.7	15.9	13.8	7.5	8.6	5.9
MSCI Emerging Markets	4.3	5.6	8.7	13.0	5.1	7.1	3.9
MSCI Emerging Markets (Local Currency)	3.1	2.9	5.6	12.2	7.0	8.3	5.7
MSCI EM ex China	4.9	9.0	7.1	8.5	5.9	11.2	5.3
MSCI China	2.7	-1.6	13.1	26.5	4.0	0.0	1.2

Foreign Equity: Developed international equities (MSCI EAFE) returned 4.6% in May and emerging market equities (MSCI Emerging Markets) rose 4.3%.

- Developed markets saw solid returns in May but lagged their US peers. Eurozone equities benefitted from expectations of fiscal support and positive earnings revisions, although a drop in PMIs and continued US trade uncertainty weighed on returns. The UK lagged Eurozone peers, benefitting early in the month from a rate cut before a jump in inflation dampened excitement. Japan saw the strongest performance among developed ex- US markets, bolstered by strong earnings for large cap exporters and promising US-China trade negotiations.
- Emerging markets also performed well particularly in dollar terms but lagged developed counterparts slightly. While Chinese equities benefitted from a temporary tariff agreement they continued to face headwinds from a slowing economy. India underperformed emerging market peers after several months of strong returns, while Korea and Taiwan were among the strongest performers in May on renewed enthusiasm around AI.

¹ Source: Bloomberg. Data is as of May 31, 2025.

Equity Cyclically Adjusted P/E Ratios¹



- After a considerable pullback to start the year, US stock valuations rose in May and continued to trade well above their long-run cyclically adjusted P/E average of 28.3.
- While non-US developed stocks performed very well at the start of 2025, at the end of May their valuations remain close to their long-run P/E ratio of 21.
- Emerging market equities continue to trade below their long-run P/E average of 16.7 despite the recent rally.

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: Bloomberg. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is as of May 2025. The average line is the long-term average of the US, EM, and EAFE PE values from April 1998 to the recent month-end, respectively.

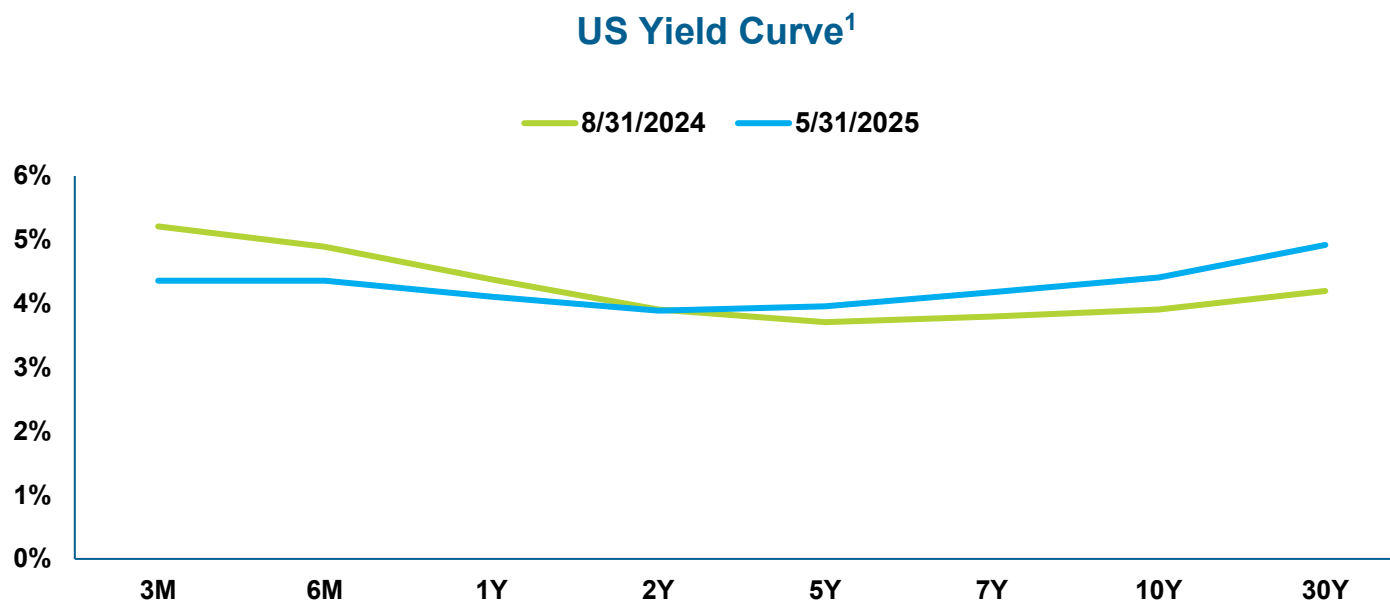
Fixed Income Returns¹

Fixed Income	May (%)	QTD (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	-0.5	-0.2	2.5	5.8	2.1	-0.3	1.8	4.9	5.9
Bloomberg Aggregate	-0.7	-0.3	2.4	5.5	1.5	-0.9	1.5	4.7	6.1
Bloomberg US TIPS	-0.6	-0.5	3.7	5.7	0.9	1.6	2.5	4.3	6.6
Bloomberg Short-term TIPS	-0.4	0.4	3.5	6.6	3.3	3.8	2.8	4.1	2.4
Bloomberg US Long Treasury	-2.9	-3.9	0.6	0.7	-5.0	-8.6	-0.5	4.9	14.7
Bloomberg High Yield	1.7	1.7	2.7	9.3	6.8	5.8	5.0	7.5	3.3
JPM GBI-EM Global Diversified (USD)	1.4	4.7	9.2	9.5	5.9	1.4	1.7	--	--

Fixed Income: The Bloomberg Universal index declined 0.5% in May.

- In the bond market easing trade tensions were offset by rising concerns over expansionary US fiscal policies in May.
- Rising Treasury yields weighed on the broad US bond market with the Bloomberg Aggregate declining 0.7% for the month. Long-term Treasuries (-2.9%) were the worst performer in the rising rate environment.
- Short (-0.4%) and longer dated (-0.6%) TIPS also fell as economic uncertainty remained elevated, but growth expectations improved.
- Given the improving risk sentiment high yield (+1.7%) and emerging market debt (+1.4%) had the best results in May.

¹ Source: Bloomberg. Data is as of May 31, 2025. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration, respectively. JPM GBI-EM data is from J.P. Morgan. Current yield and duration data is not available.

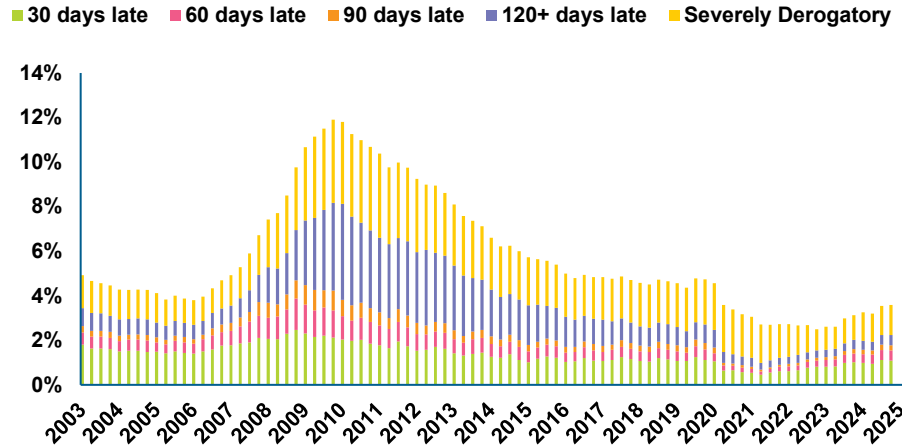


- In the bond market, relief over a de-escalation in tariff tensions quickly switched to fiscal concerns related to a growing US government debt load and interest expense. The related headline of Moody's cutting the US credit rating added to bond market volatility during the month.
- In May the policy sensitive two-year Treasury yield increased to 3.9% by month end on reduced Fed rate cut expectations. Longer dated bonds were particularly impacted by fiscal concerns with both ten-year (4.2% to 4.4%) and thirty-year (4.7% to 4.9%) Treasury yields rising over the month.
- After the Fed started reducing interest rates in September 2024, the yield curve stopped being inverted (short-term interest rates higher than long-term interest rates) as this reduced short-term rates while long-term rates have been influenced by growth and inflation expectations and recently concerns over the US fiscal situation.

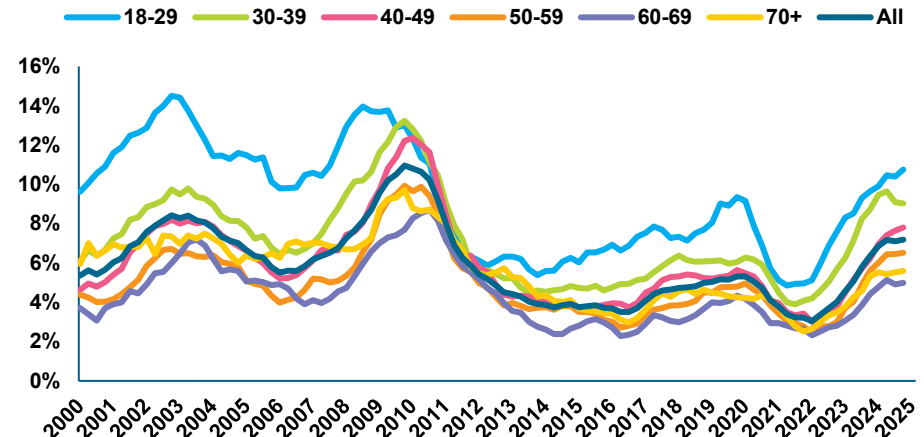
¹ Source: Bloomberg. Data is as of May 31, 2025. The August 2024 Treasury yields are shown as a reference before the first interest rate cut.

Stress is Building on US Consumers

Total Balance by Delinquency Status¹



Transition into Serious Delinquency for Credit Cards by Age²

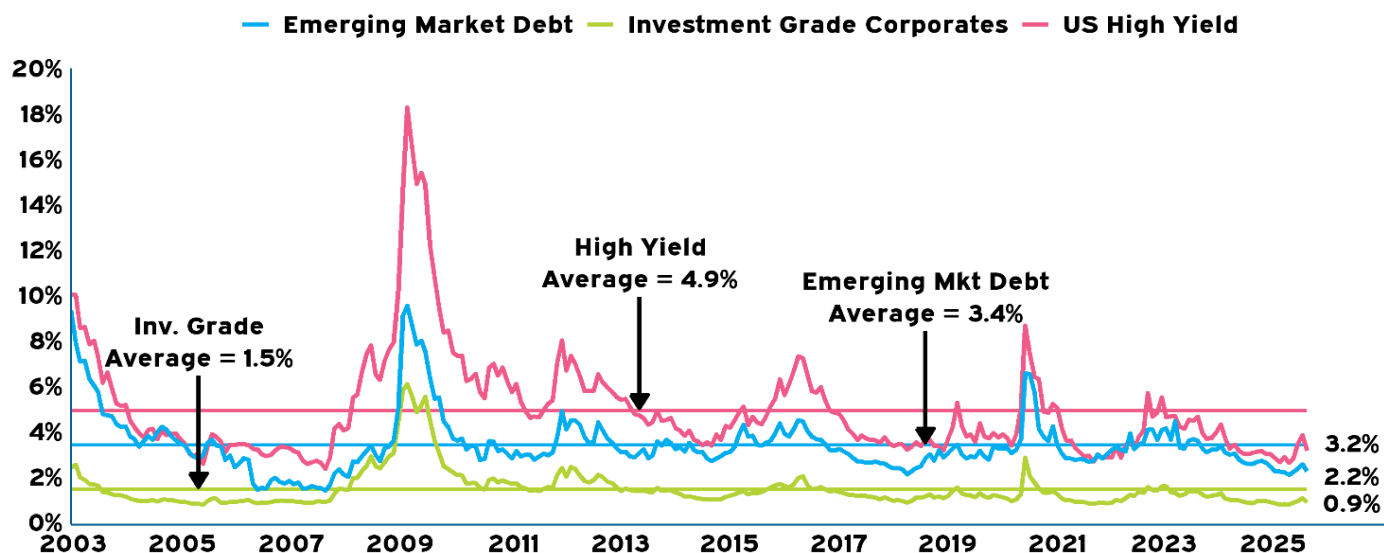


- Signs of stress on the US consumer have started to emerge given persistently higher prices and interest rates.
- After falling to historic lows during the pandemic, loan delinquencies recently started rising.
- Parts of the credit market have started to show stress, but total delinquencies are well below pre-pandemic levels.
- While total delinquency rates are below pre-pandemic levels, the credit card segment is showing more signs of distress as borrowers are subject to variable and higher borrowing costs.
- Credit card delinquencies are rising rapidly, especially for borrowers under the age of forty.
- The restarting of student loan payments and reporting for those in default could add additional pressures to consumers going forward.

¹ Source: New York Federal Reserve, Quarterly Household Debt and Credit Report, February 2025. See also FRED. Data is as of April 30, 2025.

² Source: FRED. Data is as of April 30, 2025.

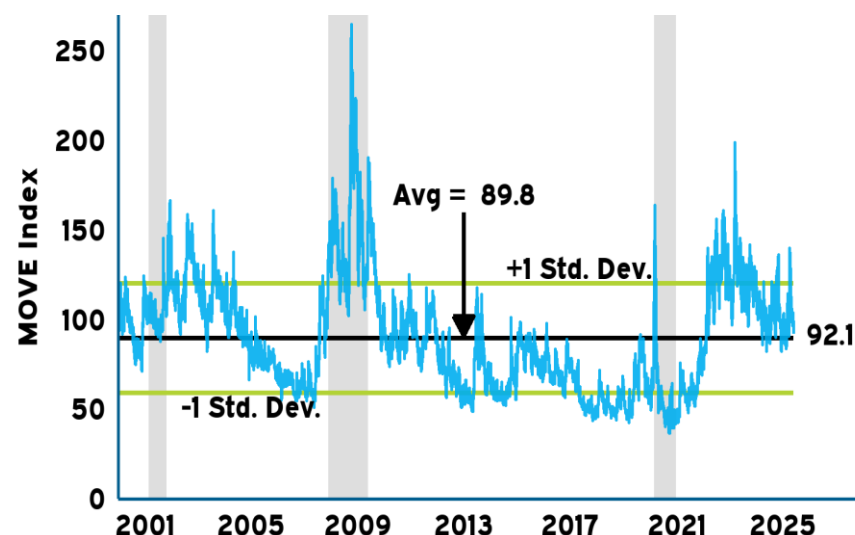
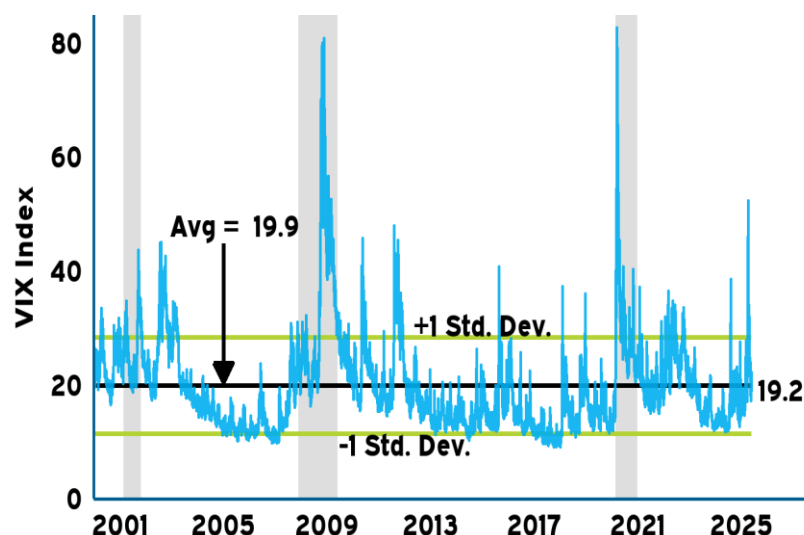
Credit Spreads vs. US Treasury Bonds¹



- As Treasury yields rose and risk sentiment improved credit spreads narrowed in May.
- Investment grade spreads (the difference in yield from a comparable Treasury) spiked in the risk-off environment in April but have largely returned to prior levels.
- High yield spreads moved the most (3.8% to 3.2%) in May. At the peak of uncertainty in April, they crossed above 4.5%. Emerging market spreads declined (2.5% to 2.2%) over the month of May.
- All yield spreads remained below their respective long-run averages, particularly high yield (3.2% versus 4.9%).

¹ Source: Bloomberg. Data is as May 31, 2025. Average lines denote the average of the investment grade, high yield, and emerging market spread values from September 2002 to the recent month-end, respectively.

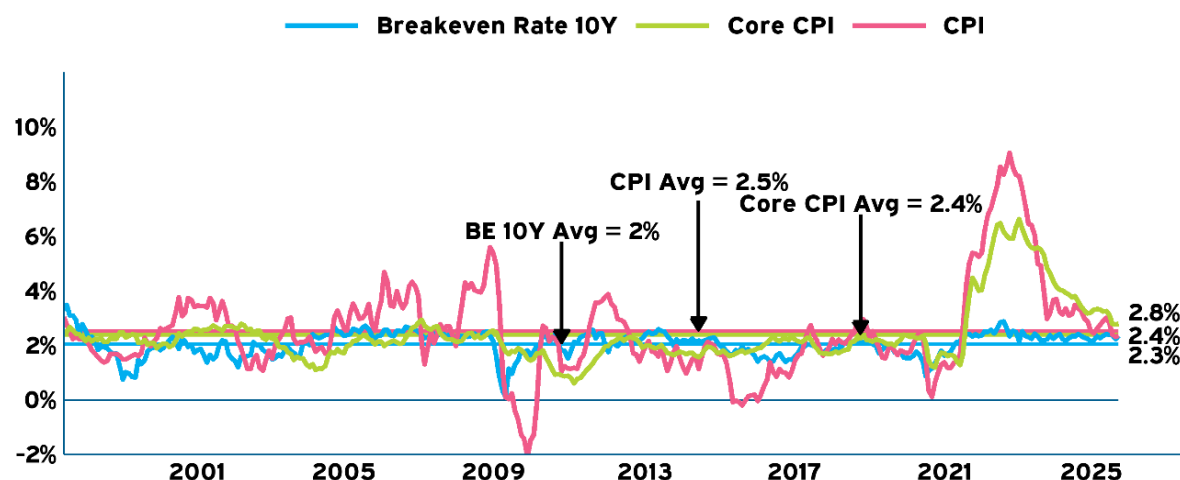
Equity and Fixed Income Volatility¹



- Bond and equity volatility spiked in April after the “Liberation Day” tariff announcement. Volatility levels finished well off their highs, though, in May, as the new tariffs were subsequently put on hold for 90 days for many countries to allow time for negotiations.
- Volatility levels (VIX) in the US stock market finished May below its long-run average while bond market (MOVE) volatility ended the month slightly above its long-run average.

¹ Equity Volatility – Source: FRED. 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 May 31, 2025. The average line indicated is the average of the VIX and MOVE values between January 2000 and May 2025.

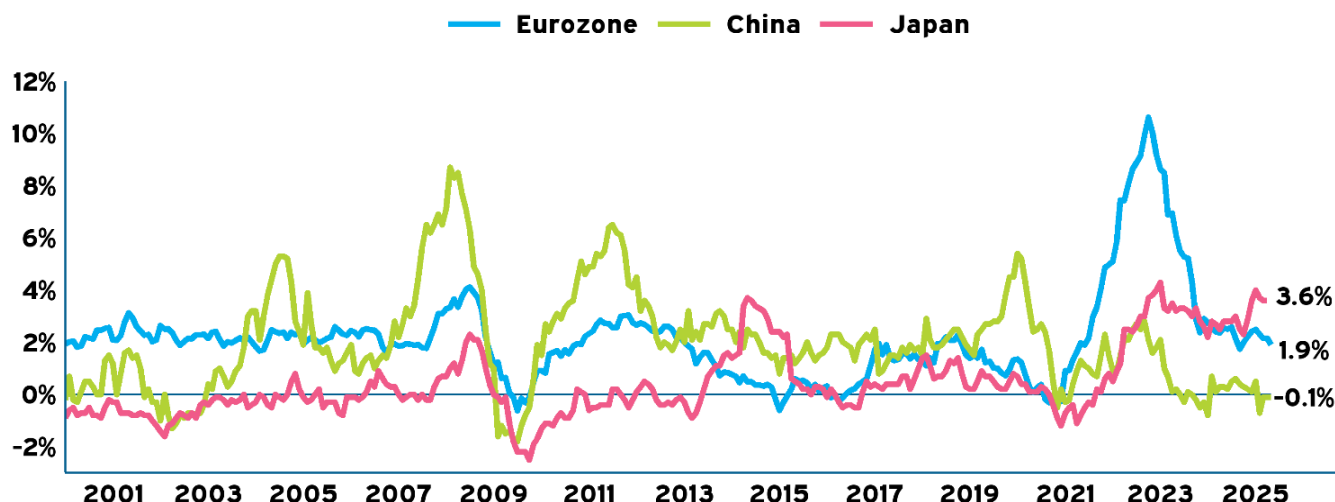
US Ten-Year Breakeven Inflation and CPI¹



- Inflation has been slow to return to the Fed's 2% average target, with headline twelve-month inflation rising slightly from 2.3% to 2.4% in May matching expectations. For the month, shelter rose 0.3% and was the primary factor in the monthly increase with food prices rising a similar amount and energy falling 1.0% on lower gas prices.
- Core inflation year-over-year held steady at 2.8% in May (slightly below expectations for a 2.9% reading). For the month it increased 0.1%, down from the 0.2% level in April. Shelter, medical care, and transportation (particularly motor vehicle insurance) all rose while car and apparel prices fell.
- While tariff related price rises were not evident in the May inflation data, underlying price pressures in shelter and services continue to be headwinds for consumer prices.
- Inflation expectations (breakevens) rose slightly in May from 2.2% to 2.3% given on-going tariff uncertainty and expansionary fiscal policy.

¹ Source: FRED. Data is as of May 2025. The CPI and 10 Year Breakeven average lines denote the average values from February 1997 to the present month-end, respectively. Breakeven values represent month-end values for comparative purposes.

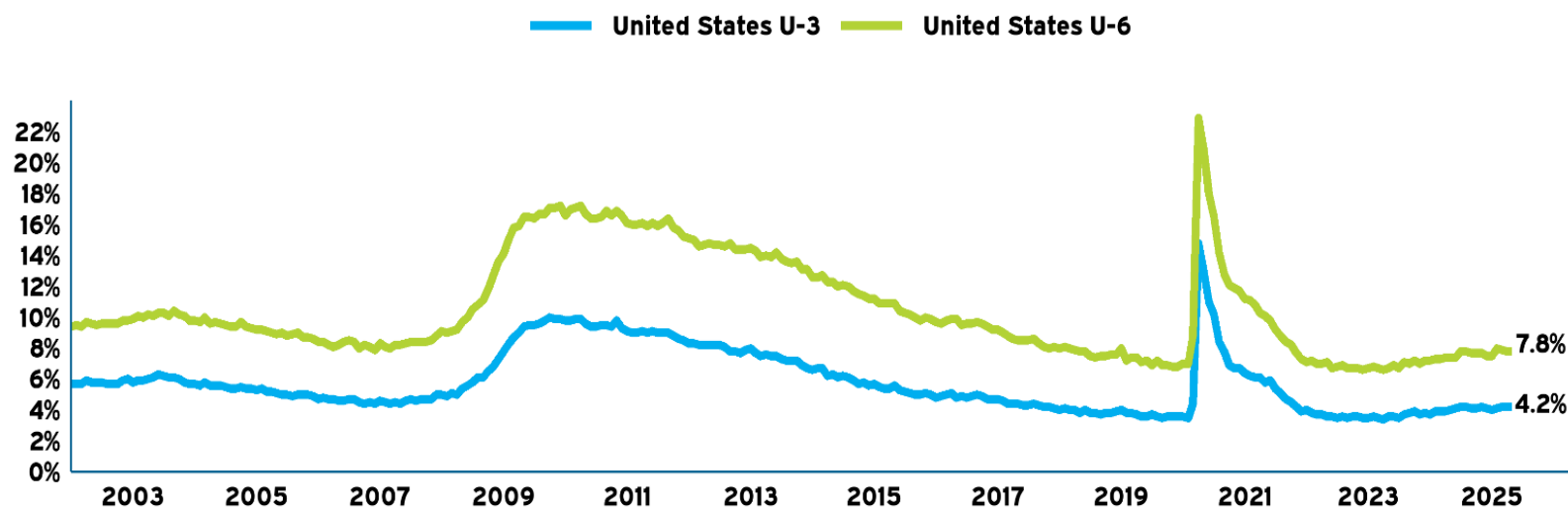
Global Inflation (CPI Trailing Twelve Months)¹



- Inflation in the eurozone fell below its 2% target in May, rising 1.9% year-on-year largely due to a significant decline in services inflation. Given reduced inflation pressures, markets expect the ECB to cut interest rates once more by early next year.
- The potential impact of future tariffs has complicated the inflation outlook for the Bank of Japan. Inflation rose 3.6% in May (the same rate as in April) driven by food prices with the cost of rice up 98% yoy given weak harvests.
- In China, despite record policy stimulus, consumer prices declined for the fourth month in a row. During the month, prices fell by 0.1% compared to a year prior, highlighting the widespread weakness of the economy and ongoing trade uncertainty related to the US.

¹ Source: Bloomberg. Data is as May 2025, except Japan which is as of April 2025.

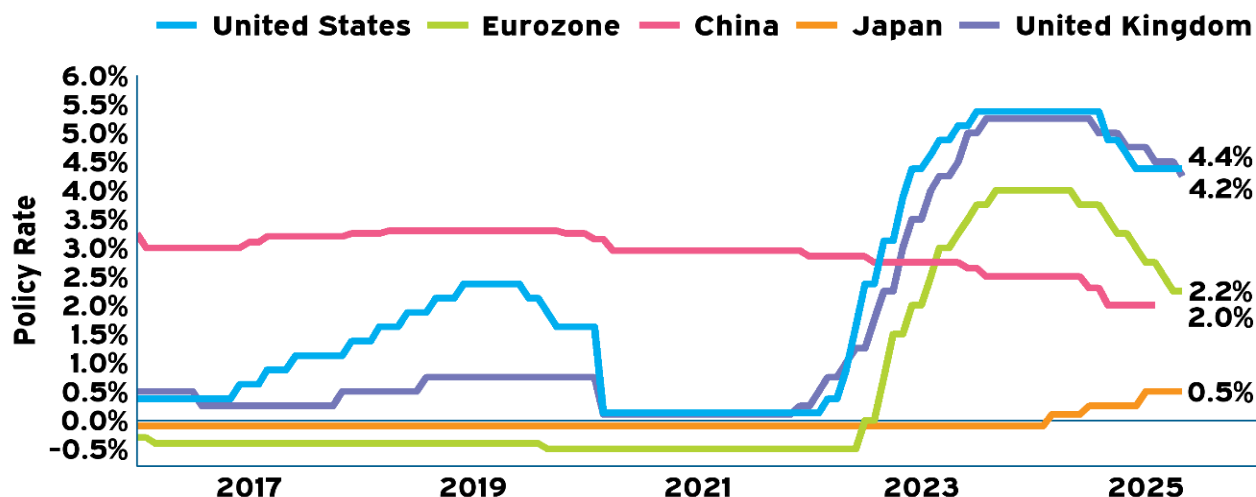
US Unemployment¹



- In May, the US added 139,000 jobs (above expectations of 126,000); the unemployment rate held steady at 4.2% with 7.2 million unemployed.
- Health care added 62,000 jobs (close to 20,000 more than the recent trend), leisure and hospitality added 48,000 jobs, and social assistance added 16,000 jobs in May. Federal employees lost 22,000 jobs in May, bringing total losses to 59,000 since the start of the year.
- May hires (5.6M) outnumbered separations (5.3M) with quits (3.2M) exceeding layoffs (1.8M).
- Initial claims for unemployment remain relatively low and annual wage growth, although tracking down, is close to 4.0%.

¹ Source: FRED and BLS. Data is as of May 31, 2025.

Global Policy Rates¹



- While the Fed remains on hold, other central banks have continued to ease policy rates. Expectations are now for the Fed to cut rates roughly two times this year, down from four expected cuts during the heart of growth concerns.
- In May, the Bank of England cut interest rates for the fourth time, by 0.25% to 4.25%, while in May the European Central Bank cut rates by another 0.25% to 2.0%. In addition to cutting interest rates, the People's Bank of China has also reduced reserve requirements, lowered mortgage rates, and supported the stock market.
- In contrast to many other central banks, the Bank of Japan increased interest rates in January to 0.5% in the face of persistent inflation. Future rate hikes and/or quantitative tightening are anticipated in the coming months, while rate cutting by other major central banks complicate prospects for further policy rate hikes in Japan.

¹ Source: Bloomberg. Data is as of May 31, 2025, except China which is as of February 28, 2025. United States rate is the mid-point of the Federal Funds Target Rate range. Eurozone rate is the ECB Deposit Facility Announcement Rate. Japan rate is the Bank of Japan Unsecured Overnight Call Rate Expected. China rate is the China Central Bank 1-Year Medium Term Interest Rate. UK rate is the UK Bank of England Official Bank Rate.

US Dollar vs. Broad Currencies¹



- After several years of appreciation against a basket of currencies, the US dollar continued to weaken in May.
- Typically, higher interest rates support the US dollar but recent concerns over changing US administration policies, potentially slower growth, and fiscal concerns all led to investors shedding US assets.

¹ Source: Bloomberg. Data as of May 31, 2025.

Summary

Key Trends:

- According to the International Monetary Fund's (IMF) April annual report, global growth in 2025 was downgraded from 3.3% to 2.8%, 0.5% lower than 2024. Concerns related to tariffs and their impact on growth drove the reduction. Growth forecast in the US saw one of the larger declines for 2025 (+2.7% to +1.8%). China's growth forecast was also substantially lowered for this year (4.6% to 4.0%), while growth in the EU is projected to be slightly lower (1.0% to 0.8%) in 2025.
- Despite the recent pause and negotiations related to tariffs, questions remain. Overall higher tariff levels and continued uncertainty could weigh on growth while at the same time increasing prices. Inflation levels and recent developments with tariffs will likely lead to a slower pace of interest rate cuts by the Fed. Uncertainty in the US and the potential for slower growth could continue the rotation out of US assets and the pressure on the dollar.
- Signs of stress have started to emerge on the US consumer with sentiment weakening. Consumers are particularly concerned about losing their jobs and the potential for higher prices. Overall risk to economic growth and to inflation from tariffs, as well as elevated borrowing costs, could put further pressure on consumers and lead to a weaker job market. The recent resumption of collecting and reporting delinquent student loans could be a further headwind to consumption.
- US equities have now recovered from losses during the first week of April and are approaching all-time highs. A focus going forward will be whether earnings can remain resilient if growth slows. Also, the future paths of the large technology companies that have driven market gains will continue to be important.
- Trade tensions between the US and China will remain a key focus. Recently the two countries agreed on a 90-day truce with the US lowering its maximum tariff rate on Chinese goods from 145% to 30%, with a 10% baseline level. China agreed to lower its 125% tariff on American goods to 10%. Questions remain about what will happen after the 90-day period and notably tariff levels on China remain higher than where they previously were.

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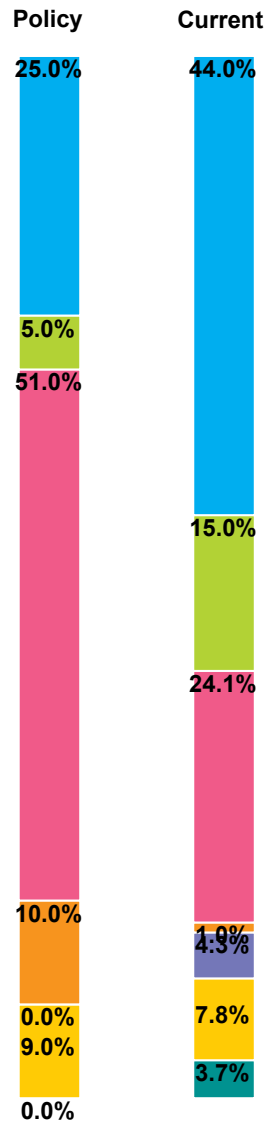
PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Oakland Police and Fire Retirement System

June 25, 2025

May Flash Report

As of May 31, 2025



Allocation vs. Targets and Policy							
	Balance (\$)	Current (%)	Long-Term Policy (%)	Difference (%)	Interim Policy (%)	Policy Range (%)	Within Range?
Domestic Equity	205,853,688	44.0	25.0	19.0	34.0	15.0 - 35.0	No
International Equity	69,958,711	15.0	5.0	10.0	12.0	2.0 - 22.0	Yes
Fixed Income	112,797,765	24.1	51.0	-26.9	44.0	31.0 - 71.0	No
Credit	4,527,597	1.0	10.0	-9.0	0.0	0.0 - 16.0	Yes
Covered Calls	20,209,335	4.3	0.0	4.3	0.0	0.0 - 5.0	Yes
Crisis Risk Offset	36,614,954	7.8	9.0	-1.2	10.0	4.0 - 14.0	Yes
Cash	17,396,656	3.7	0.0	3.7	0.0	0.0 - 5.0	Yes
Total	467,358,707	100.0	100.0	0.0	100.0		

The new asset allocation policy established after the completion of the 2023 Asset-Liability Study became effective in July 2024. The asset classes may be out of policy ranges due to pending transitions.

Asset Class Performance Summary | As of May 31, 2025

Asset Class Performance Summary												
	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	YTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
OPFRS Total Plan	467,358,707	100.0	2.9	2.5	2.4	6.5	7.3	6.6	7.6	6.6	6.7	Dec-88
<i>OPFRS Policy Benchmark</i>			2.2	2.3	2.7	6.7	8.4	7.8	7.9	7.0	8.0	
Excess Return			0.6	0.2	-0.3	-0.2	-1.1	-1.2	-0.3	-0.4	-1.3	
Domestic Equity	205,853,688	44.0	5.3	3.7	-0.3	7.6	9.1	10.0	12.9	10.7	9.1	Jun-97
<i>Russell 3000 (Blend)</i>			6.3	5.6	0.6	9.7	13.1	13.8	15.3	12.2	9.6	
Excess Return			-1.1	-1.9	-0.9	-2.1	-4.0	-3.8	-2.4	-1.6	-0.6	
International Equity	69,958,711	15.0	4.3	8.4	15.9	16.9	15.9	11.6	11.6	6.6	5.9	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			4.6	8.4	14.0	13.9	13.8	9.4	10.4	5.5	5.6	
Excess Return			-0.2	0.1	1.9	3.0	2.2	2.2	1.2	1.2	0.4	
Fixed Income	112,797,765	24.1	-0.7	-0.3	2.5	4.5	5.6	2.0	0.2	1.9	4.4	Jan-94
<i>Fixed Income & Credit Benchmark</i>			-0.7	-0.3	2.4	4.8	5.8	2.0	-0.3	1.8	4.5	
Excess Return			0.0	0.0	0.1	-0.3	-0.2	-0.1	0.5	0.1	-0.1	
Credit	4,527,597	1.0	2.0	1.6	2.1	5.9	6.4	6.2	8.2	5.0	5.2	Feb-15
<i>Blmbg. U.S. Corp: High Yield Index</i>			1.7	1.7	2.7	8.3	9.3	6.8	5.8	5.0	5.2	
Excess Return			0.3	-0.1	-0.6	-2.4	-2.9	-0.6	2.5	0.0	0.0	
Covered Calls	20,209,335	4.3	4.6	3.3	0.0	7.6	9.8	10.9	13.2	9.7	9.5	Apr-14
<i>Cboe S&P 500 Buy Write Index</i>			0.9	-0.7	-3.8	7.4	9.3	7.4	9.6	6.1	6.1	
Excess Return			3.7	4.1	3.8	0.2	0.5	3.5	3.7	3.6	3.4	
Crisis Risk Offset	36,614,954	7.8	-1.2	-4.5	-2.0	-7.1	-8.0	-3.0	-5.8	--	-6.9	Aug-18
<i>Crisis Risk Offset Benchmark</i>			-1.7	-4.3	-3.1	-4.9	-5.4	0.6	1.8	--	-0.1	
Excess Return			0.4	-0.2	1.1	-2.3	-2.6	-3.7	-7.7	--	-6.7	
Cash	17,396,656	3.7	0.1	0.3	0.7	1.2	1.2	0.5	0.3	0.9	0.6	Mar-11

Performance shown is net of fees, except for Total Plan, Domestic Equity, and International Equity composites which have a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investment's initial funding. Fiscal year begins on July 1. Please see Benchmark History section for custom benchmark compositions.

Asset Class & Manager Performance | As of May 31, 2025

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	YTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
OPFRS Total Plan	467,358,707	100.0	2.9	2.5	2.4	6.5	7.3	6.6	7.6	6.6	6.7	Dec-88
<i>OPFRS Policy Benchmark</i>			2.2	2.3	2.7	6.7	8.4	7.8	7.9	7.0	8.0	
Excess Return			0.6	0.2	-0.3	-0.2	-1.1	-1.2	-0.3	-0.4	-1.3	
Domestic Equity	205,853,688	44.0	5.3	3.7	-0.3	7.6	9.1	10.0	12.9	10.7	9.1	Jun-97
<i>Russell 3000 (Blend)</i>			6.3	5.6	0.6	9.7	13.1	13.8	15.3	12.2	9.6	
Excess Return			-1.1	-1.9	-0.9	-2.1	-4.0	-3.8	-2.4	-1.6	-0.6	
Northern Trust Russell 1000	110,932,687	23.7	6.4	5.7	1.0	10.0	13.7	14.2	15.6	12.5	13.8	Jun-10
<i>Russell 1000 Index</i>			6.4	5.8	1.0	10.1	13.7	14.3	15.7	12.6	13.9	
Excess Return			0.0	0.0	0.0	-0.1	-0.1	0.0	-0.1	-0.1	-0.1	
EARNEST Partners	40,428,271	8.7	3.9	0.6	-2.9	1.7	1.0	4.0	10.4	10.1	8.9	Apr-06
<i>Russell Midcap Index</i>			5.7	4.6	1.1	11.1	10.3	9.1	12.7	9.3	9.0	
Excess Return			-1.8	-4.0	-4.0	-9.3	-9.3	-5.1	-2.3	0.8	-0.1	
Wellington Select Quality Equity	23,010,133	4.9	4.6	3.0	2.0	7.8	7.8	7.8	--	--	7.5	May-22
<i>Russell 1000 Index</i>			6.4	5.8	1.0	10.1	13.7	14.3	--	--	13.8	
Excess Return			-1.7	-2.8	1.0	-2.3	-6.0	-6.4	--	--	-6.2	
Brown Fundamental Small Cap Value	13,363,697	2.9	2.9	-0.9	-7.2	1.1	-0.6	7.6	--	--	5.5	Apr-21
<i>Russell 2000 Value Index</i>			4.2	0.0	-7.7	0.6	-1.1	2.1	--	--	0.8	
Excess Return			-1.3	-0.9	0.5	0.5	0.5	5.4	--	--	4.6	
Rice Hall James	18,118,900	3.9	4.5	2.9	0.4	12.6	12.0	7.8	8.8	--	7.5	Aug-17
<i>Russell 2000 Growth Index</i>			6.4	5.7	-6.0	3.6	3.5	7.9	7.0	--	6.9	
Excess Return			-2.0	-2.8	6.4	9.0	8.5	-0.2	1.8	--	0.6	

Performance shown is net of fees, except for Total Plan and Domestic Equity which have a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see the Benchmark History for custom benchmark compositions.

Asset Class & Manager Performance | As of May 31, 2025

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	YTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
International Equity	69,958,711	15.0	4.3	8.4	15.9	16.9	15.9	11.6	11.6	6.6	5.9	Jan-98
<i>MSCI ACWI ex US (Blend)</i>			4.6	8.4	14.0	13.9	13.8	9.4	10.4	5.5	5.6	
Excess Return			-0.2	0.1	1.9	3.0	2.2	2.2	1.2	1.2	0.4	
Vanguard Developed Markets ETF	18,611,797	4.0	5.1	9.3	16.8	15.0	13.1	10.4	11.4	--	9.1	Sep-19
<i>FTSE Developed All Cap ex-U.S. Index</i>			5.1	10.1	16.6	15.6	14.0	10.7	11.7	--	9.4	
Excess Return			0.1	-0.7	0.2	-0.6	-0.9	-0.2	-0.3	--	-0.3	
SGA ACWI ex-U.S. Equity	51,346,915	11.0	4.1	8.1	15.6	17.6	17.0	12.2	11.7	--	7.7	Dec-19
<i>MSCI AC World ex USA (Net)</i>			4.6	8.4	14.0	13.9	13.8	9.4	10.4	--	7.1	
Excess Return			-0.5	-0.3	1.5	3.7	3.3	2.8	1.3	--	0.7	
Fixed Income	112,797,765	24.1	-0.7	-0.3	2.5	4.5	5.6	2.0	0.2	1.9	4.4	Jan-94
<i>Fixed Income & Credit Benchmark</i>			-0.7	-0.3	2.4	4.8	5.8	2.0	-0.3	1.8	4.5	
Excess Return			0.0	0.0	0.1	-0.3	-0.2	-0.1	0.5	0.1	-0.1	
Ramirez	76,323,673	16.3	-0.7	-0.4	2.5	4.3	5.4	1.8	0.1	--	1.9	Jan-17
<i>Blmbg. U.S. Aggregate Index</i>			-0.7	-0.3	2.4	4.5	5.5	1.5	-0.9	--	1.5	
Excess Return			0.0	0.0	0.0	-0.1	-0.1	0.3	1.0	--	0.3	
Wellington Core Bond	7,318,424	1.6	-0.7	-0.5	2.2	4.4	5.5	2.0	--	--	-0.6	Apr-21
<i>Blmbg. U.S. Aggregate Index</i>			-0.7	-0.3	2.4	4.5	5.5	1.5	--	--	-0.7	
Excess Return			0.0	-0.2	-0.2	0.0	0.0	0.5	--	--	0.1	
Reams	29,155,668	6.2	-0.5	-0.1	2.8	5.0	6.2	2.3	0.4	3.0	4.8	Feb-98
<i>Fixed Income & Credit Benchmark</i>			-0.7	-0.3	2.4	4.8	5.8	2.0	-0.3	1.8	4.1	
Excess Return			0.2	0.3	0.4	0.2	0.4	0.3	0.7	1.1	0.7	

Performance shown is net of fees, except for International Equity composite which has a mix of gross and net of fees performance. Please see the Addendum for more details. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see the Benchmark History for custom benchmark compositions.

Asset Class & Manager Performance | As of May 31, 2025

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	YTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Credit	4,527,597	1.0	2.0	1.6	2.1	5.9	6.4	6.2	8.2	5.0	5.2	Feb-15
<i>Blmbg. U.S. Corp: High Yield Index</i>			1.7	1.7	2.7	8.3	9.3	6.8	5.8	5.0	5.2	
Excess Return			0.3	-0.1	-0.6	-2.4	-2.9	-0.6	2.5	0.0	0.0	
Polen Capital	4,527,597	1.0	2.0	1.6	2.1	5.9	6.4	6.2	8.2	5.0	5.2	Feb-15
<i>ICE BofA U.S. High Yield Index</i>			1.7	1.7	2.6	8.2	9.3	6.6	5.8	4.9	5.1	
Excess Return			0.3	-0.1	-0.5	-2.3	-2.8	-0.4	2.4	0.1	0.1	
Covered Calls	20,209,335	4.3	4.6	3.3	0.0	7.6	9.8	10.9	13.2	9.7	9.5	Apr-14
<i>Cboe S&P 500 Buy Write Index</i>			0.9	-0.7	-3.8	7.4	9.3	7.4	9.6	6.1	6.1	
Excess Return			3.7	4.1	3.8	0.2	0.5	3.5	3.7	3.6	3.4	
Parametric BXM	9,525,197	2.0	3.2	1.4	-1.3	6.2	7.6	9.0	11.1	7.7	7.5	Apr-14
<i>Cboe S&P 500 Buy Write Index</i>			0.9	-0.7	-3.8	7.4	9.3	7.4	9.6	6.1	6.1	
Excess Return			2.3	2.2	2.5	-1.2	-1.7	1.6	1.5	1.6	1.4	
Parametric DeltaShift	10,684,139	2.3	6.0	5.1	1.2	9.0	11.8	12.8	15.2	11.4	11.5	Apr-14
<i>Cboe S&P 500 Buy Write Index</i>			0.9	-0.7	-3.8	7.4	9.3	7.4	9.6	6.1	6.1	
Excess Return			5.0	5.8	5.0	1.6	2.5	5.4	5.6	5.3	5.4	

Performance shown is net of fees. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see the Benchmark History for custom benchmark compositions.

Asset Class & Manager Performance | As of May 31, 2025

	Market Value (\$)	% of Portfolio	1 Mo (%)	QTD (%)	YTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Crisis Risk Offset	36,614,954	7.8	-1.2	-4.5	-2.0	-7.1	-8.0	-3.0	-5.8	--	-6.9	Aug-18
<i>Crisis Risk Offset Benchmark</i>			<i>-1.7</i>	<i>-4.3</i>	<i>-3.1</i>	<i>-4.9</i>	<i>-5.4</i>	<i>0.6</i>	<i>1.8</i>	<i>--</i>	<i>-0.1</i>	
Excess Return			0.4	-0.2	1.1	-2.3	-2.6	-3.7	-7.7	--	-6.7	
Kepos Alternative Risk Premia	13,445,878	2.9	-0.6	-3.6	7.4	10.9	8.8	10.8	--	--	9.3	Feb-22
<i>SG Multi Alternative Risk Premia Index</i>			<i>0.1</i>	<i>-2.0</i>	<i>1.7</i>	<i>3.0</i>	<i>2.5</i>	<i>6.0</i>	<i>--</i>	<i>--</i>	<i>6.4</i>	
Excess Return			-0.8	-1.6	5.6	7.9	6.3	4.7	--	--	2.9	
Versor Trend Following	10,941,714	2.3	0.0	-6.2	-13.9	-27.0	-28.7	-11.6	--	--	-9.5	Apr-22
<i>SG Trend Index</i>			<i>-2.2</i>	<i>-7.0</i>	<i>-11.3</i>	<i>-16.3</i>	<i>-18.6</i>	<i>-4.1</i>	<i>--</i>	<i>--</i>	<i>-1.8</i>	
Excess Return			2.2	0.8	-2.6	-10.7	-10.1	-7.6	--	--	-7.7	
Vanguard Long-Term Treasury ETF	12,227,362	2.6	-2.9	-3.9	0.7	-0.9	0.7	-5.0	-8.6	--	-3.8	Jul-19
<i>Blmbg. U.S. Gov Long Index</i>			<i>-2.9</i>	<i>-3.9</i>	<i>0.6</i>	<i>-0.9</i>	<i>0.7</i>	<i>-4.9</i>	<i>-8.6</i>	<i>--</i>	<i>-3.7</i>	
Excess Return			-0.1	0.0	0.2	-0.1	0.0	0.0	0.0	--	0.0	
Cash	17,396,656	3.7	0.1	0.3	0.7	1.2	1.2	0.5	0.3	0.9	0.6	Mar-11

Performance shown is net of fees. Since inception date and performance begin in the month following an investments initial funding. Fiscal year begins on July 1. Please see the Benchmark History for custom benchmark compositions. Versor Trend Following reflects a rolled forward 4/30/2025 market value due to statement availability at the time of this report.

Cash Flow Summary Month to Date				
	Beginning Market Value (\$)	Net Cash Flow (\$)	Net Investment Change (\$)	Ending Market Value (\$)
Northern Trust Russell 1000	104,285,990	-	6,646,697	110,932,687
EARNEST Partners	38,877,302	-	1,550,968	40,428,271
Wellington Select Quality Equity	21,987,978	-	1,032,706	23,010,133
Brown Fundamental Small Cap Value	13,113,132	-131,676	382,241	13,363,697
Rice Hall James	17,332,174	-	786,726	18,118,900
Vanguard Developed Markets ETF	17,704,313	-	907,484	18,611,797
SGA ACWI ex-U.S. Equity	49,346,591	-	2,000,324	51,346,915
Ramirez	76,870,873	-	-547,200	76,323,673
Wellington Core Bond	7,367,817	-	-49,393	7,318,424
Reams	29,301,391	-	-145,723	29,155,668
Polen Capital	5,938,503	-1,500,000	89,094	4,527,597
Parametric BXM	9,232,134	-	293,062	9,525,197
Parametric DeltaShift	10,082,089	-	602,050	10,684,139
Kepos Alternative Risk Premia	13,533,667	-	-87,789	13,445,878
Versor Trend Following	10,941,714	-	-	10,941,714
Vanguard Long-Term Treasury ETF	12,643,319	-44,932	-371,025	12,227,362
Cash - Money Market	7,046,056	327,597	18,003	7,391,656
Cash - Treasury	10,235,000	-230,000	-	10,005,000
Securities Lending Northern Trust	-	-10,704	10,704	-
OPFRS Total Plan	455,840,045	-1,589,716	13,118,929	467,358,707

Benchmark History		
From Date	To Date	Benchmark
OPFRS Total Plan		
01/01/2025	Present	34.0% Russell 3000 Index, 12.0% MSCI AC World ex USA (Net), 44.0% Fixed Income & Credit Benchmark, 10.0% Crisis Risk Offset Benchmark
07/01/2024	01/01/2025	34.0% Russell 3000 Index, 12.0% MSCI AC World ex USA (Net), 44.0% Blmbg. U.S. Universal Index, 10.0% Crisis Risk Offset Benchmark
06/01/2022	07/01/2024	40.0% Russell 3000 Index, 12.0% MSCI AC World ex USA (Net), 31.0% Blmbg. U.S. Universal Index, 2.0% Blmbg. U.S. Corp: High Yield Index, 5.0% Cboe S&P 500 Buy Write Index, 10.0% Crisis Risk Offset Benchmark
01/01/2019	06/01/2022	40.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 31.0% Blmbg. U.S. Universal Index, 5.0% Cboe S&P 500 Buy Write Index, 2.0% Blmbg. U.S. Treasury: Long, 10.0% Crisis Risk Offset Benchmark
05/01/2016	01/01/2019	48.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 20.0% CBOE BXM
10/01/2015	05/01/2016	43.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 15.0% CBOE BXM, 10.0% CPI - All Urban Consumers (unadjusted) +3%
01/01/2014	10/01/2015	48.0% Russell 3000 Index, 12.0% MSCI AC World ex USA index, 20.0% Blmbg. U.S. Universal Index, 10.0% CBOE BXM, 10.0% CPI - All Urban Consumers (unadjusted) +3%
03/01/2013	01/01/2014	40.0% Russell 3000 Index, 10.0% MSCI AC World ex USA index, 17.0% Blmbg. U.S. Universal Index, 33.0% ICE BofA 3 Month U.S. T-Bill
08/01/2012	03/01/2013	20.0% Russell 3000 Index, 7.0% MSCI AC World ex USA index, 18.0% Blmbg. U.S. Universal Index, 55.0% ICE BofA 3 Month U.S. T-Bill
10/01/2007	08/01/2012	53.0% Russell 3000 Index, 17.0% MSCI AC World ex USA index, 30.0% Blmbg. U.S. Universal Index
04/01/2006	10/01/2007	35.0% Russell 3000 Index, 15.0% MSCI AC World ex USA index, 50.0% Blmbg. U.S. Universal Index
01/01/2005	04/01/2006	35.0% Russell 3000 Index, 50.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI AC World ex USA index
04/01/1998	01/01/2005	20.0% Russell 1000 Value Index, 10.0% Russell 1000 Index, 5.0% Russell Midcap Index, 50.0% Blmbg. U.S. Aggregate Index, 15.0% MSCI EAFE (Net)
01/01/1978	04/01/1998	40.0% S&P 500 Index, 55.0% Blmbg. U.S. Aggregate Index, 5.0% FTSE 3 Month T-Bill

Benchmark History		
From Date	To Date	Benchmark
Domestic Equity		
01/01/2005	Present	100.0% Russell 3000 Index
04/01/1998	01/01/2005	57.1% Russell 1000 Value Index, 28.6% Russell 1000 Index, 14.3% Russell Midcap Index
09/01/1988	04/01/1998	100.0% S&P 500 Index
International Equity		
01/01/2005	Present	100.0% MSCI AC World ex USA (Net)
01/01/1998	01/01/2005	100.0% MSCI EAFE Index
Fixed Income & Credit		
01/01/2025	Present	100.0% Blmbg. U.S. Aggregate Index
04/01/2006	01/01/2025	100.0% Blmbg. U.S. Universal Index
01/01/1976	04/01/2006	100.0% Blmbg. U.S. Aggregate Index
Covered Calls		
04/01/2014	Present	Cboe S&P 500 Buy Write Index
Crisis Risk Offset		
01/01/2023	Present	33.3% SG Trend Index, 33.3% SG Multi Alternative Risk Premia Index, 33.3% Blmbg. U.S. Government: Long Term Bond Index
08/01/2018	01/01/2023	100.0% SG Multi Alternative Risk Premia Index
Cash		
03/01/2011	Present	FTSE 3 Month T-Bill

Additional Information

Performance Return Types: Performance shown is net of fees, except for OPFRS Total Plan, Domestic Equity, and International Equity Composites, which have a mix of gross and net of fees performance. Performance shown for OPFRS Total Plan and International Equity composite is gross of fees prior to January 2016. Performance shown for Domestic Equity composite is gross of fees prior to January 2017.

Inception Date: Since inception date and performance begin in the month following an investments initial funding.

Fiscal Year: Fiscal year begins on July 1.

Fair Value Pricing Methodology: Though Vanguard Developed Markets ETF is a passive strategy, short-term performance may appear to diverge from the index it tracks more than would be expected. This is due to Fair Value Pricing (FVP) adjustments that address the pricing discrepancies that may arise from time-zone differences among global securities markets. The resulting temporary divergence is expected to correct itself when the foreign markets reopen.

Disclaimer, Glossary, and Notes

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PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

Credit Risk: Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security).

Duration: Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

Information Ratio: This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

Jensen's Alpha: A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk. Portfolio Return- [Risk Free Rate+Beta*(market return-Risk Free Rate)].

Market Capitalization: For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

Market Weighted: Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

Maturity: The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

Prepayment Risk: The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

Price-Book Value (P/B) Ratio: The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

Price-Earnings (P/E) Ratio: A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

Quality Rating: The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

Sharpe Ratio: A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

STIF Account: Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

Standard Deviation: A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

Style: The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

Tracking Error: A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

Yield to Maturity: The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a “basis book.” For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

Yield to Worst: The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

NCREIF Property Index (NPI): Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE): Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.
The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.

Oakland Police and Fire Retirement System

June 25, 2025

Recommendation for
2025 Q3 Cash Flows

Asset Class / Manager Liquidity

Description of Liquidity Tiers

Asset Class	Fund	Liquidity Tier	Tier	Description	Balance (\$M)	In Months ¹
US Equity	Northern Trust Russell 1000	1	1	Public, Scheduled Withdrawal Allowances	151.9	101.3
US Equity	EARNEST Partners	3	2	Public, Accommodating of Withdrawals	131.4	87.6
US Equity	Wellington Select Quality Equity	3	3	Public; Must Plan Withdrawals	172.5	115.0
US Equity	Rice Hall James	3	4	Privately Held / Illiquid	0.0	--
US Equity	Brown Small Cap Value	3	Total		455.8	
International Equity	SGA ACWI ex US	3				
International Equity	Vanguard Developed Markets	1				
Fixed Income	Ramirez	2				
Fixed Income	Reams	2				
Fixed Income	Wellington Core	3				
Credit	Polen Capital High Yield	2				
Covered Calls	Parametric	2				
Crisis Risk Offset	Kepos Alternative Risk Premia	3				
Crisis Risk Offset	Versor Trend Following	3				
Crisis Risk Offset	Vanguard Long-Term Treasury	1				
Cash	Cash	1				

¹ Illustrates liquidity in months per liquidity tier assuming a net drawdown of \$1.5 million per month estimated for FYE2025 based on prior fiscal year's actuarial valuations..

Oakland PFRS Asset Allocation as of April 30, 2025¹

	Market Value as of April 30, 2025		Long-Term Targets	Variance from Long-Term Targets		Planned Cash Flows for Current Quarter		Suggested Cash Flows for Next Quarter	
	(\$M)	(%)	(%)	(\$M)	(%)	In (\$M)	Out (\$M)	In (\$M)	Out (\$M)
Northern Trust Russell 1000	104.3	22.9	15.0	35.9	7.9	--	--	--	--
EARNEST Partners	38.9	8.5	5.0	16.1	3.5	--	--	--	--
Wellington Select Quality Equity	22.0	4.8	0.0	22.0	4.8	--	--	--	--
Rice Hall James	17.3	3.8	2.5	5.9	1.3	--	--	--	(3.5)
Brown Small Cap Value	13.1	2.9	2.5	1.7	0.4	--	--	--	--
US Equity	195.6	42.9	25.0	81.6	17.9	--	--	--	(3.5)
SGA ACWI ex US	49.3	10.8	--*	--*	--*	--	--	--	--
Vanguard Developed Markets	17.7	3.9	--*	--*	--*	--	--	--	--
International Equity	67.1	14.7	5.0	44.3	9.7	--	--	--	--
Parametric (BXM & DeltaShift)	19.3	4.2	0.0	19.3	4.2	--	--	--	--
Covered Calls	19.3	4.2	0.0	19.3	4.2	--	--	--	--
Kepos Alternative Risk Premia	13.5	3.0	3.0	(0.1)	(0.0)	--	--	--	--
Versor Trend Following	10.9	2.4	3.0	(2.7)	(0.6)	--	--	--	--
Vanguard Long-Term Treasury	12.6	2.8	3.0	(1.0)	(0.2)	--	--	--	--
Crisis Risk Offset	37.1	8.1	9.0	(3.9)	(0.9)	--	--	--	--
Ramirez Core	76.9	16.9	13.5	15.3	3.4	--	--	--	--
Loop Core	0.0	0.0	13.5	(61.5)	(13.5)	--	--	--	--
Reams Core Plus	29.3	6.4	18.0	(52.7)	(11.6)	--	--	--	--
Wellington Core Plus*	7.4	1.6	16.0	(65.6)	(14.4)	--	--	--	--
Polen Capital High Yield	5.9	1.3	0.0	5.9	1.3	--	(4.5)	--	(1.0)
Fixed Income (IG & Credit)	119.5	26.2	61.0	(158.6)	(34.8)	--	(4.5)	--	(1.0)
Cash & City Contributions	17.3	3.8	0.0	17.3	3.8	8.7	(8.7)	8.7	(8.7)
Total Portfolio	455.8	100.0	100.0	--	--	8.7	(13.2)	8.7	(13.2)

*Some investment manager targets and variances are omitted due to ongoing investment manager review/search and transition planning. Wellington currently manages a core fixed income mandate which is currently being revised as a core plus mandate. The Planned and Suggested Cash Flows includes only the cash flows related to monthly benefit payments and expenses. The asset allocation and rebalancing transition cash flows are not included.

¹ Benefit payments and expenses are estimated at \$13.2 million quarterly for FYE2025 based on prior fiscal year's actuarial valuations. The expected quarterly contribution from the City is \$8.7 million. Benefits are payable on first of each month.

Recommendation for 2025 Q3 Cash Flows

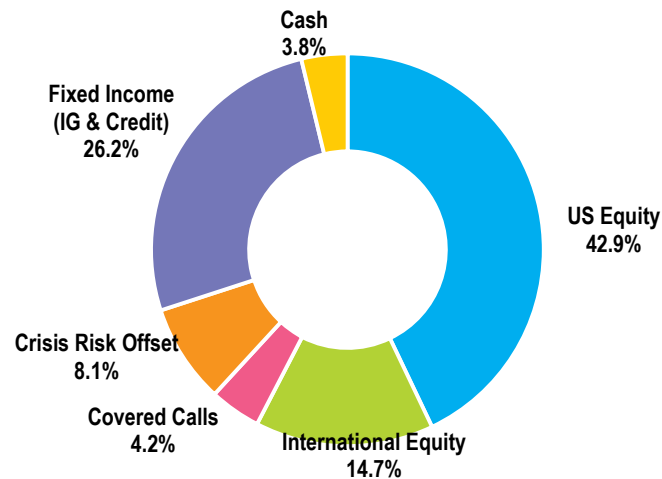
Suggested Cash Withdrawals

Source	Amount (\$M)
Treasury Cash / City Contributions	8.7
Polen Capital High Yield	1.0
Rice Hall James	3.5
Total Withdrawals for Benefits	13.2

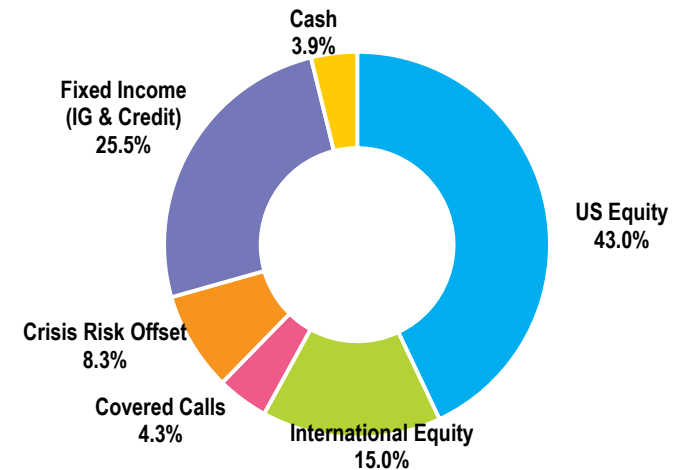
Allocations by Portfolio Segment

Portfolio Segment	Balance Before Cash Flows (\$M)	Allocations Before Cash Flows (%)	Allocations After Cash Flows (%)
US Equity	195.6	42.9	43.0
International Equity	67.1	14.7	15.0
Covered Calls	19.3	4.2	4.3
Crisis Risk Offset	37.1	8.1	8.3
Fixed Income (IG & Credit)	119.5	26.2	25.5
Cash	17.3	3.8	3.9
Total Portfolio	455.8	100.0	100.0

Allocations Before Cash Flows



Projected Allocations After Cash Flows



Projected OPFRS Asset Allocation as of September 30, 2025¹

	Estimated Market Value		Long-Term Targets	Variance from Long-Term Targets	
	(\$M)	(%)	(%)	(\$M)	(%)
Northern Trust Russell 1000	104.3	23.3	15.0	37.3	8.3
EARNEST Partners	38.9	8.7	5.0	16.5	3.7
Wellington Select Quality Equity	22.0	4.9	0.0	22.0	4.9
Rice Hall James	13.8	3.1	2.5	2.7	0.6
Brown Small Cap Value	13.1	2.9	2.5	1.9	0.4
US Equity	192.1	43.0	25.0	80.4	18.0
SGA ACWI ex US	49.3	11.0	--*	--*	--*
Vanguard Developed Markets	17.7	4.0	--*	--*	--*
International Equity	67.1	15.0	5.0	44.7	10.0
Parametric	19.3	4.3	0.0	19.3	4.3
Covered Calls	19.3	4.3	0.0	19.3	4.3
Kepos Alternative Risk Premia	13.5	3.0	3.0	0.1	0.0
Versor Trend Following	10.9	2.4	3.0	(2.5)	(0.6)
Vanguard Long-Term Treasury	12.6	2.8	3.0	(0.8)	(0.2)
Crisis Risk Offset	37.1	8.3	9.0	(3.1)	(0.7)
Ramirez Core	76.9	17.2	13.5	16.5	3.7
Loop Core	0.0	0.0	13.5	(60.3)	(13.5)
Reams Core Plus	29.3	6.6	18.0	(51.1)	(11.4)
Wellington Core Plus*	7.4	1.6	16.0	(64.1)	(14.4)
Polen Capital High Yield	0.4	0.1	0.0	0.4	0.1
Fixed Income (IG & Credit)	114.0	25.5	61.0	(158.6)	(35.5)
Cash	17.3	3.9	0.0	17.3	3.9
Total Portfolio	446.8	100.0	100.0	--	--

*Some investment manager targets and variances are omitted due to ongoing investment manager review/search and transition planning. Wellington currently manages a core fixed income mandate which is currently being revised as a core plus mandate.

¹ Estimated ending market value accounts for the remaining Planned Cash Flows (recommended previously) for the current quarter and Suggested Cash Flows for the following quarter. Only the cash flows related to monthly benefit payments and expenses are included. Asset allocation and rebalancing transition cash flows are not included.

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