

Oregon Investment Council

January 24, 2024

Cara Samples

Chair

Tobias Read

State Treasurer

Rex Kim

Chief Investment Officer





Oregon State Treasury Investment Division 16290 SW Upper Boones Ferry Road Tigard, OR 97224

Agenda January 24, 2024 9:00 AM

<u>Time</u>	<u>Tab</u>		<u>Presenter</u>
9:00 – 9:05	1	Review & Approval of Minutes December 6, 2023	Cara Samples <i>OIC Chair</i>
	2	Committee Reports	Rex Kim Chief Investment Officer
9:05 – 9:10	3	OIC Elections (Action Item: Chair, Vice Chair)	Cara Samples OIC Chair
9:10 – 9:15	4	2025 OIC Calendar (Action Item: Meeting Dates)	Cara Samples OIC Chair
9:15 – 10:00	5	Private Equity Market Review	Brian Ruder Partner, Permira
BREAK			

10:10 – 11:10	6	OPERF Private Equity Annual Review	Michael Langdon Director of Private Markets Ahman Dirks, Angela Schaffers, Eric Messer Investment Officers, Private Equity Tom Martin Head of Private Equity & Real Assets, Aksia Derrek Ransford, Pete Veravanich Pathway Capital Management
BREAK			
11:10 – 12:00	7	OPERF Public Equity Annual Review	Louise Howard Director of Capital Markets Wil Hiles Investment Officer, Public Equity Philip Larrieu Investment Officer, Stewardship Paola Nealon Managing Principal, Meketa Raneen Jalajel Associate Partner, Aon
12:00 – 12:20	8	Audits Review	Michael Kaplan Deputy State Treasurer, OST Michael Makale Chief Audit Officer, OST Sarah Anderson Audit Manager, Secretary of State Hannah Creighton Senior Auditor, Secretary of State
12:20	9	Calendar – Future Agenda Items	Rex Kim
12:25	10	Open Discussion	OIC Members, Staff, Consultants
		Public Comments	





TAB 1 REVIEW & APPROVAL OF MINUTES

State of Oregon Office of the State Treasurer

16290 SW Upper Boones Ferry Road Tigard, Oregon 97224

OREGON INVESTMENT COUNCIL

December 6, 2023

Meeting Minutes

Members Present: Cara Samples, Treasurer Tobias Read, Lorraine Arvin, Pia Wilson-Body, Alline

Akintore, Kevin Olineck

Staff Present: Rex Kim, David Randall, Karl Cheng, Louise Howard, Rupa Raman, Mike Mueller,

Jamie McCreary, Chris Ebersole, Andrew Coutu, Kenny Bao, Chuck Christopher,

Bryson Pate, Jennifer Kersgaard

Staff Participating Virtually: Ryan Auclair, Sara Bayes, Tyler Bernstein, Taylor Bowman, Tan Cao, Austin Carmichael,

Collin Cousar, Kiara Cruz, Bradley Curran, Ashley Daigle, Debra Day, Gloria Gil, Alli Gordon, Will Hampson, Wil Hiles, Ian Huculak, Roy Jackson, Aliese Jacobsen, Kristi Jenkins, Josh Jones, Young Kim, Amanda Kingsbury, Jeremy Knowles, Paul Koch, Michael Langdon, John Lutkehaus, Ben Mahon, Michael Makale, Tim Miller, George Naughton, Quran Nelson, Savanah Oliveira, Lisa Pettinati, Jen Plett, Mohammed Quraishi, Jo Recht, Andrew Robertson, Scott Robertson, Holly Rohwer, Angela Schaffers, Faith Sedberry, Mark Selfridge, Alli Sorensen, Loren Terry, Gisela Verdeja

Bogle, Rachel Wray, Tiffany Zahas

Consultants Present: Allan Emkin, Mika Malone, Eric Larsen, Tom Martin, Raneen Jalajel, Paola Nealon,

Ashley Woeste, Jason Trennert

PERS Present: Kevin Olineck

Legal Counsel Present: Steve Marlowe (Department of Justice)

The December 6, 2023, OIC meeting was called to order at 9:15am by Cara Samples, Chair

Time Tab Presenter

8:30 – 9:00 **Executive Session***

Steven Marlowe Oregon Department of Justice Christy Monson Oregon Department of Justice

An executive session was held pursuant to ORS 192.660(2)(f), to consider information and records that are exempt by law from public inspection. In compliance with ORS 192.660(6), no decisions were made during this meeting.

Cara Samples Chair

1 Review & Approval of Minutes

Cara Samples OIC Chair

October 25, 2023

Chair Samples asked for approval of the October 25, 2023 OIC regular meeting minutes. Treasurer Read moved approval at 9:16 am, member Arvin seconded the motion which then passed by a 5/0 vote. Acknowledging one change, not regarding the minutes but during the discussion of changes to INV 210 at the last meeting, INV 208 was referenced instead of INV 207, the correction has been made.

2 Committee Reports

Rex Kim

Chief Investment Officer

Private Equity Committee:

November 30th Clearlake Capital Partners VIII \$250M USD November 30th Centerbridge Capital Partners V \$250M USD

Real Estate Committee:

November 13th Carlyle Property Investors \$200M USD

Opportunity Committee:

December 5th Sixth Street Lending Partners \$150M USD

Alternatives Portfolio Committee:

None

Staff Discretion

None

9:15 – 10:00 **3 Market Presentation**

Jason Trennert Managing Partner, Chief Strategist, Strategas Research

Jason Trennert, managing partner at Strategas Research, presented a market overview that touched on recession odds, inflation, and the possibility of a soft landing. He discussed factors influencing the market: quantitative easing, unemployment rates, GDP and interest expense.

--- BREAK --- 10:05 – 10:25

9:15

4 Q3 OPERF Performance

Paola Nealon Managing Principal, Meketa Eric Larsen Investment Analyst, Meketa

Paola Nealon, Managing Principal, Meketa, and Eric Larsen, Investment Analyst, Meketa presented the Q3 OPERF Performance Review. The presentation included an economic and market update that discussed inflation, global monetary policies, and pressure on US consumers.

OPERF's Q3 QTD returns trailed the policy benchmark by -0.6 but are exceeding the benchmarks for the 3 year and 5 year periods by 2.4% and 0.4%, respectively.

10:25 – 11:00 5 **OPERF Fixed Income Annual Review**

Rupa Raman Senior Investment Officer, Fixed Income Allan Emkin Managing Principal, Meketa Mika Malone Managing Principal, Meketa

Rupa Raman, Senior Investment Officer, Fixed Income, presented the OPERF Fixed Income Annual Review. The important role of Fixed Income as a diversifier relative to equity and equity-like asset classes was discussed, as well as shifts in the fixed income portfolio's benchmark over the last decade. It's been benchmarked to the Bloomberg US Aggregate Bond Index since 2021, which simplifies measurement. The priority for 2023 portfolio changes were adjustments made to address tracking error. In the current interest rate environment, the Fixed Income portfolio is in a position to generate a meaningful yield.

11:00 – 11:10 6 **OST Internal Fixed Income Overview**

Rupa Raman

Senior Investment Officer, Fixed Income

Rupa Raman, Senior Investment Officer, Fixed Income, presented the OST Internal Fixed Income Overview, which manages over \$40 billion in internally managed fixed income assets in 4 primary portfolios: Oregon Short Term Fund, Government Fund, Oregon Intermediate Term Pool, and the Public University Fund Core Bond.

All portfolios are producing excess returns relative to their benchmarks.

--- BREAK ---

Member Pia Wilson-Body left meeting during the break and then rejoined remotely.

11:10 - 11:20

OPERF Investment Policy Statement (Action Item: Approval of IPS)

Mika Malone Managing Principal, Meketa Raneen Jalajel Associate Partner, Aon

Mika Malone, Managing Principal, Meketa, and Raneen Jalajel, Associate Partner, Aon, presented the final version of the IPS for approval. At 11:19 am Treasurer Read moved for approval; member Arvin seconded the motion, which then passed by a vote of 5/o.

11:20 8 Calendar – Future Agenda Items

Rex Kim

Rex Kim presented the forward calendar, which includes a special OIC meeting on February 6, 2024, when Treasurer Read will present his climate plan.

11:20 9 **Open Discussion**

7

OIC Members, Staff, Consultants

Steve Marlowe, DOJ Counsel, discussed Chair Samples' request from the March 2023 OIC meeting for an update of the DOJ 2010 opinion. The memo can be released with the board's approval.

At 11:21 am Chair Samples made a motion to "waive attorney client privilege on the 2023 opinion memo to be released to the public." Treasurer Read seconded the motion which then passed by a 5/0 vote.

*Executive Session: No admittance unless stated below. Thank you.

The executive session is being held to consider records from the Department of Justice that are exempt from disclosure. The executive session is being held pursuant to ORS 192.660(2)(f), which allows a governing body to hold an executive session to consider information or records that are exempt by law from public inspection. In compliance with ORS 192.660(6), no decisions will be made during this meeting. Representatives of the news media, Treasury staff and Treasury consultants are allowed to attend this executive session. Representatives of the news media are specifically directed not to report on any of the deliberations during executive session, except to state the general subject of the session as previously announced.



September 5, 2023

Cara Samples Oregon Investment Council, Chair 16290 SW Upper Boones Ferry Road Portland, OR 97224

Treasurer Tobias Read Oregon State Treasury 16290 SW Upper Boones Ferry Road Portland, OR 97224

Re: OIC Fiduciary Duties and De-carbonization Framework

DOJ No. 171001-GT0352-23

Dear Ms. Samples and Mr. Read:

OIC Chair Cara Samples has asked whether new guidance provided by the U.S. Department of Labor alters the conclusions in a published Attorney General Opinion addressed to then Treasurer Ted Wheeler ("2010 opinion"). The 2010 opinion discussed the fiduciary duties of OIC members and the Treasurer, as Investment Officer, in identifying and selecting investments and cited to then-current interpretive guidance from the Department of Labor on the duties of ERISA (as well as other laws) plan fiduciaries. In short, our advice remains consistent with the 2010 opinion, as further clarified by the new federal guidance.

Since the issuance of the 2010 opinion, Treasurer Read has announced a Core Decarbonization Framework which refers to "decarbonizing OST's portfolio, consistent with our fiduciary duty." OIC has also held discussions in recent public meetings about Environmental, and Social Governance (ESG), and Diversity, Equity and Inclusion (DEI) principles for investing. This letter addresses how the new Department of Labor guidance can help to clarify the advice given in the 2010 opinion.

¹ See Letter of Advice dated August 5, 2010, to Treasurer Ted Wheeler, Office of the State Treasurer (OP 2010-3).

² Although PERS is not an ERISA plan, the fiduciary guidance provided with respect to ERISA plans has been used by the courts as useful guidance when determining the duties of the fiduciaries of non-ERISA plans.

³ https://www.oregon.gov/treasury/news-data/Documents/topics-of-interest/2022/Treasurer-Reads-Core-Decarbonization-Framework.pdf.

There have not been any relevant changes to Oregon law that would alter the advice this office gave in the 2010 opinion regarding Oregon law. Nor has our advice regarding compliance with the Internal Revenue Code changed. Here, we are focused solely on updating our prior advice in light of new guidance that has been provided by the U.S. Department of Labor. This update is applicable primarily to section III.D. of the 2010 opinion.

The Department of Labor's Investment Duties regulation under Title I of ERISA is codified at 29 CFR §2550.404a-1. On October 14, 2021, the Department of Labor published a notice of proposed rulemaking to amend the regulation regarding fiduciary duties for ERISA plans that had been adopted in 2020. The final regulation was then published on December 1, 2022, and became effective on January 30, 2023.⁴

The rule, in relevant part, provides:

(4) A fiduciary's determination with respect to an investment or investment course of action must be based on factors that the fiduciary reasonably determines are relevant to a risk and return analysis, using appropriate investment horizons consistent with the plan's investment objectives and taking into account the funding policy of the plan established pursuant to section 402(b)(1) of ERISA. Risk and return factors may include the economic effects of climate change and other environmental, social, or governance factors on the particular investment or investment course of action. Whether any particular consideration is a risk-return factor depends on the individual facts and circumstances. The weight given to any factor by a fiduciary should appropriately reflect a reasonable assessment of its impact on risk-return.

29 CFR §2550.404a-1.

In adopting the rule, the Department of Labor emphasized that the final regulation does not change "longstanding principles" and that the final regulation "retains the core principle that the duties of prudence and loyalty require ERISA plan fiduciaries to focus on relevant risk-return factors and not subordinate the interests of participants and beneficiaries (such as by sacrificing investment returns or taking on additional investment risk) to objectives unrelated to the provision of benefits under the plan."⁵

Our 2010 opinion stated that the "USDOL's highly rigorous approach ... does not rule out all considerations of social factors." The current regulation from the Department of Labor remains consistent with that conclusion. Rather than conflicting with its prior regulation or the 2010 opinion, the new Department of Labor regulation simply clarifies both by listing specifically allowable considerations that are relevant to the issues facing the world and the

⁴ Following the Department of Labor's rule, the Congress, resolved that it "disapproves the rule submitted by the Department of Labor. However, President Biden vetoed this joint resolution on March 20, 2023. Thus, the rule adopted in 2022 is the current law.

⁵ 87 FR 73822, 73827.

⁶ See Letter of Advice dated August 5, 2010, to Treasurer Ted Wheeler, Office of the State Treasurer (OP 2010-3).

economy today, e.g., economic effects of climate change and other environmental, social, or governance factors on a particular investment.

While the proposed regulation initially contained examples, they were deleted from the final version passed by the Department of Labor. However, the federal rulemaking preamble from the Department of Labor does provide that:

[D]epending on the surrounding circumstances, a fiduciary may reasonably conclude that climate-related factors, such as a corporation's exposure to the real and potential economic effects of climate change including exposure to the physical and transitional risks of climate change and the positive or negative effect of Government regulations and policies to mitigate climate change, can be relevant to a risk/return analysis of an investment or investment course of action. A fiduciary also may make a similar determination with respect to governance factors, such as those involving board composition, executive compensation, and transparency and accountability in corporate decision-making; a corporation's avoidance of criminal liability; compliance with labor, employment, environmental, tax, and other applicable laws and regulations; the corporation's progress on workforce diversity, inclusion, and other drivers of employee hiring, promotion, and retention; investment in training to develop a skilled workforce; equal employment opportunity; and labor relations and workforce practices generally.

The foregoing examples are merely illustrative, and not intended to limit a fiduciary's discretion to identify factors that are relevant with respect to its risk/return analysis of any particular investment or investment course of action. A fiduciary may reasonably determine that a factor that seems to fall within a general category described above (e.g., climate-related factors), but is not specifically identified above, nonetheless is relevant to the analysis (e.g., drought). For example, depending on the facts and circumstances, relevant factors may include impact on communities in which companies operate, due diligence and practices regarding supply chain management, including environmental impact, human rights violations records, and lack of transparency or failure to meet other compliance standards. As another example, labor-relations factors, such as reduced turnover and increased productivity associated with collective bargaining, also may be relevant to a risk and return analysis.⁷

These examples provide a variety of factors the OIC and Treasurer could consider in making investment decisions, while still complying with its fiduciary responsibilities. A note of caution is warranted, however, because the preamble to the regulation also states that "the final rule makes unambiguous that it is *not establishing a mandate that ESG factors are relevant under every circumstance, nor is it creating an incentive for a fiduciary to put a thumb on the scale in favor of ESG factors.*"8

In essence, the new Department of Labor regulation largely replaces the prior federal guidance about the use of ESG as a "tie-breaker" provision with a standard that, instead, requires

⁷ 87 FR 73822, 73832 (2022).

⁸ 87 FR at 73831 (emphasis added).

the fiduciary to conclude prudently that competing investments, or competing investment courses of action, equally serve the financial interests of the plan over the appropriate time horizon. In such cases, the fiduciary is not prohibited from selecting the investment, or investment course of action, based on collateral benefits other than investment returns.⁹

Finally, we think the following guidance from the preamble provides a path for the OIC to approach the consideration of ESG factors in making future investment decisions:

[T]he new text [of the regulation] sets forth three clear principles. First, a fiduciary's determination with respect to an investment or investment course of action must be based on factors that the fiduciary reasonably determines are relevant to a risk and return analysis, using appropriate investment horizons consistent with the plan's investment objectives and taking into account the funding policy of the plan established pursuant to section 402(b)(1) of ERISA. Second, risk and return factors may include the economic effects of climate change and other environmental, social, or governance factors on the particular investment or investment course of action. Whether any particular consideration is a risk-return factor depends on the individual facts and circumstances. Third, the weight given to any factor by a fiduciary should appropriately reflect an assessment of its impact on risk and return.¹⁰

In other words, consistent with the Department of Labor regulation, the OIC may follow these principles in making investment decisions:

- 1) Investment decisions may be based on factors reasonably relevant to a risk and return analysis over the appropriate investment horizon.
- 2) Risk and return factors may include economic effects of climate change and other ESG factors on the particular investment or investment course of action, and each investment depends upon the individual facts and circumstances.
- 3) Investment decisions must weigh all factors based on an assessment of the factor's impact on risk and return.

Conclusion

As noted above, the 2010 opinion concluded that the "USDOL's highly rigorous approach ... does not rule out all considerations of social factors." We think the Department of Labor's latest amendments to the ERISA regulations result in a similar conclusion, addressing the common issues of the day and clarifying that climate change and other ESG factors may be relevant risk and return factors to be considered.

10 87 FR 73822, 73831 (2022).

⁹ 87 FR at 73827.

September 5, 2023 Page 5

If you have any questions or concerns about any specific future investments, we are happy to advise and assist you.

/s/ Steven Marlowe
Steven Marlowe
Sr. Assistant Attorney General
Tax & Finance Section

SWM:rmk/klp/mmr/798532134 c: Deena Bothello, General Counsel, Oregon State Treasury Rex Kim





TAB 2 COMMITTEE REPORTS





TAB 3 OIC ELECTIONS





TAB 4 2025 OIC CALENDAR

OREGON INVESTMENT COUNCIL

2025 Meeting Schedule

Meetings Begin at 9:00 am

Oregon State Treasury Investment Division 16290 SW Upper Boones Ferry Road Tigard, OR 97224

Wednesday, January 22

Wednesday, March 5

Wednesday, April 16

Wednesday, May 28

Wednesday, July 16

Wednesday, September 3

Wednesday, October 22

Wednesday, December 3





TAB 5 PRIVATE EQUITY MARKET REVIEW





TAB 6 OPERF PRIVATE EQUITY ANNUAL REVIEW



Agenda

		OIC Investment and Management Beliefs Mapping																	
Section	Pages	1A	1B	1C	1D	2A	2B	3A	4A	4B	5A	5B	6A	6B	7A	7B	8A	8B	9A
Agenda	2																		
Private Equity Strategic Role	3																		
Private Equity Portfolio Positioning	4																		
Executive Summary	5																		
2023 Year In Review	6-12																		
Returns & Attribution	13-20																		
Portfolio Review	21-35																		
Allocation Relative to Target	36-45																		
Closing	46-49																		
Appendix	50-69																		

LEGEND: OIC INVESTMENT AND MANAGEMENT BELIEFS

- THE OIC SETS POLICY AND IS ULTIMATELY RESPONSIBLE FOR THE INVESTMENT PROGRAM
- A. Investment management is dichotomous -- part art and part science.
- B. The OIC is a policy-setting council that largely delegates investment management activities to the OST and qualified external fiduciaries.
- C. The OIC is vested with the authority to set and monitor portfolio risk. Both short-term and long-term risks are critical.
- D. To exploit market inefficiencies, the OIC should be long term, contrarian, innovative, and opportunistic in its investment approach.
- 2 ASSET ALLOCATION DRIVES RISK AND RETURN
- A. Asset allocation is the OIC's primary policy tool for managing the investment program's long-term risk/return profile.
- B. Portfolio construction, including diversification and correlation considerations, is essential to maximizing risk-adjusted returns.
- 3 THE EQUITY RISK PREMIUM WILL BE REWARDED
- A. Over the long-term, equity-oriented investments provide reliable return premiums relative to risk-free investments.
- PRIVATE MARKET INVESTMENTS CAN ADD SIGNIFICANT VALUE AND REPRESENT A CORE OIC/OST COMPETENCY
- A. The OIC can capitalize on its status as a true, long-term investor by making meaningful allocations to illiquid, private market investments.
- B. Dispersion in private market investment retums is wide; accordingly, top-quartile manager selection, diversification across vintage year, strategy type, and geography, and careful attention to costs are paramount.
- 5 CAPITAL MARKETS HAVE INEFFICIENCIES THAT CAN BE EXPLOITED
- A. Inefficiencies that can be exploited by active management may exist in certain segments of the capital markets.
 - B. Passive investment management in public markets will outperform the median active manager in those markets over time.
- 6 COSTS DIRECTLY IMPACT INVESTMENT RETURNS AND SHOULD BE MONITORED AND MANAGED CAREFULLY
- A. All fees, expenses, commissions, and transaction costs should be diligently monitored and managed in order to maximize net investment returns.
- B. External incentive structures should be carefully evaluated to ensure proper alignment with investment program objectives.
- 7 FAIR AND EFFICIENT CAPITAL MARKETS ARE ESSENTIAL FOR THE LONG-TERM INVESTMENT SUCCESS
 - A. The OIC recognizes that the quality of regulation and corporate governance can affect the long-term value of its investments.
- B. The OIC also recognizes that voting rights have economic value.
- THE INTEGRATION OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) FACTORS, SIMILAR TO OTHER INVESTMENT FACTORS, MAY HAVE A BENEFICIAL IMPACT ON THE ECONOMIC OUTCOME OF AN INVESTMENT AND AID IN THE ASSESSMENT OF RISKS ASSOCIATED WITH THAT INVESTMENT
- A. The consideration of ESG factors within the investment decision-making framework is importantin understanding the near-term and long-term impacts of investment decisions.
- B. Over time, there has been an evolution of multi-factor, or more holistic approaches, to identify opportunities and remediate risks, in a large globally-diversified investment portfolio.
- 9 DIVERSITY, IN ALL ASPECTS, IS ACCRETIVE TO MEETING OIC OBJECTIVES
- A. By embracing and enhancing diversity and inclusion efforts, the OIC ensures that the investment program will be exposed to and informed by a wide range of perspectives, ideas and opinions.



Private Equity Strategic Role

<u>INV 1201: Investment Belief #4 – Private market investments can add significant value and represent a core OIC/OST competency</u>

- The OIC can capitalize on its status as a true, long-term investor by making meaningful allocations to illiquid, private market investments
 - Private markets provide a diversifying risk/return profile relative to public market analogues
 - · Private markets offer excess return opportunities that may be exploited by patient, long-term investors
- Dispersion in private market investment returns is wide; accordingly, top-quartile manager selection, diversification across vintage year, strategy type, geography, and careful attention to costs are paramount
 - Private market investment success is predicated on identifying skilled managers and developing long-term investment relationships with those managers that enable the application of skill to manifest in the form of excess returns
 - Proper investment pacing, including deliberate vintage year diversification is also an integral element of superior private market investment results

<u>INV 701: Private Equity Portfolio Standards and Procedures – Policy Statement II – Objective #1 Performance</u>

• The performance objective is long-term, net returns above a public market analog plus an appropriate premium to compensate for illiquidity, principal risk and related investment costs and expenses. Specifically, Program performance should exceed a net internal rate of return equal to the Russell 3000 Index plus 300 basis points

9/30/2023	1 Yr.	3 Yr.	5 Yr.	10 Yr.
OPERF Private Equity	6.5 %	14.4%	13. 7%	13.0%
Russell 3000 + 3%	24.0%	13.8%	13.2%	15.2%
OPERF Value-Add:	-17.5%	0.6%	0.5%	-2.2%
MSCI ACWI + 3%	24.3%	11.1%	10.4%	11.2%
OPERF Value-Add:	-17.8%	3.3%	3.3%	1.8%
Burgiss All Funds Ex. Real Assets	4.1%	14.8%	14.2%	13.8%
OPERF Value-Add:	2.5%	-0.4%	-0.6%	-0.8%



Private Equity Portfolio Positioning

<u>INV 701: Private Equity Portfolio Standards and Procedures – Policy Statement II – Objective #2 Diversification</u>

• Diversification reduces risk among Program investments. The following types of diversification should be considered by Staff, including, but not limited to stage (strategy), sector, size, geography and time





Executive Summary

Markets are still digesting violent shifts in monetary policy...

- 1. M&A activity remains extremely depressed
- 2. Continued market volatility creates benchmarking challenges
- 3. OPERF's private equity exposure remains stubbornly high

The portfolio is well positioned for a normalized environment...



2023 Year In Review

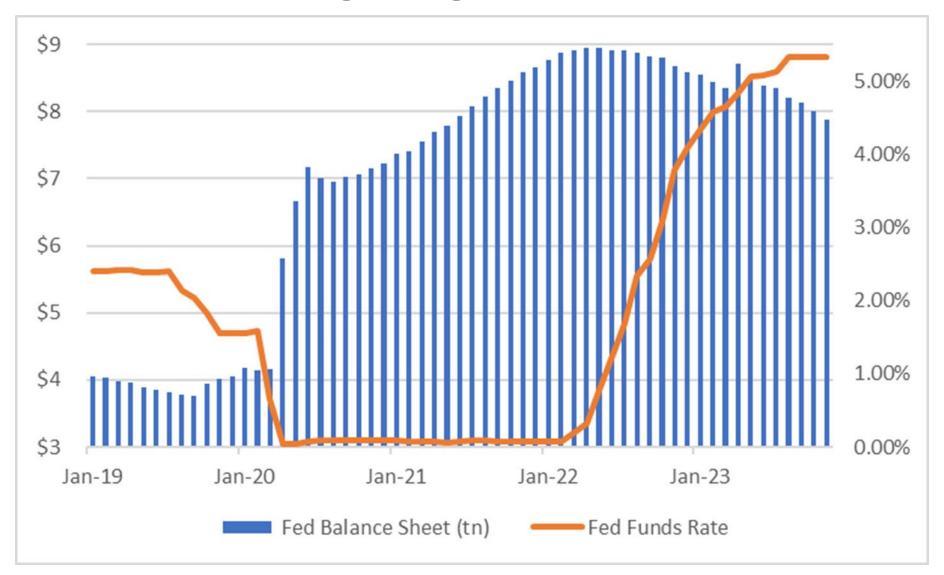
Markets are still digesting violent shifts in monetary policy...

- 1. Investment Environment
- 2. Cash Flows
- 3. New Investments

The portfolio is well positioned for a normalized environment...



Markets Still Digesting...





Investment Environment

M&A Activity

- Global M&A volumes are on pace for the slowest year since 2013
- Transaction multiples remain down from the peak levels seen in 2021

• Corporate Leveraged Finance

- 2023 will match 2022 in terms of weak new issue volumes as compared to the peaks seen in 2021
- The market pivoted aggressively to refinancings in 2023, as borrowers prepare for a wall of maturities starting in 2025

Private Equity Returns

- Having largely missed the 2022 correction, private equity has not kept pace with strongly rebounding public equity returns in 2023, but the asset class continues to meaningfully outperform over the long-term
- While venture capital returns remain strong over the long-term, the challenges of the past two years are starting to show up in the results of more recent periods

Private Equity Activity

- Fundraising totals remain solid, but there are clear signs of a slowdown
- Deployment levels remain meaningfully below the peaks seen in 2021, and exit activity has been anemic

· Additional materials on investment environment available in the appendix

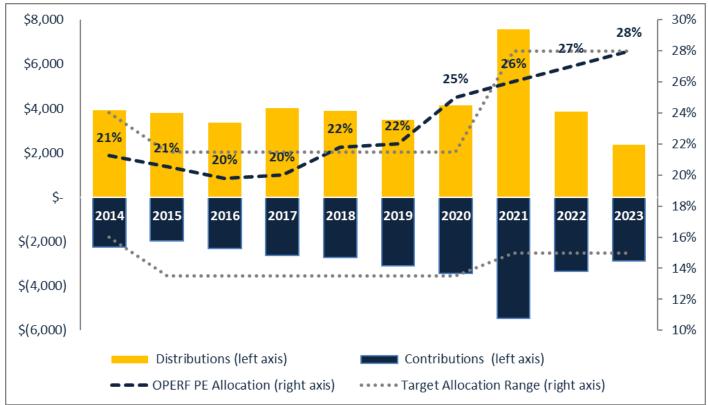
Markets are still digesting violent shifts in monetary policy



2023 Year in Review – Cash Flows

For the calendar year 2023, the private equity portfolio processed capital calls totaling \$2.9 billion and distributions totaling \$2.4 billion for net contributions of \$518 million

- 2023 was the portfolio's first negative cash flow year since the GFC
- As of December 31, 2023 (9/30/23 PE valuation adjusted for cash flows), the portfolio's net asset value of \$26.4 billion represented roughly 28% of the full OPERF portfolio. This at the top end of the OPERF's target allocation range (15-28%)





2023 Year in Review - Commitment Pacing

At \$2.5 billion of total pacing, the 2023 vintage is at the low end of the target range, but medium-term pacing remains on plan





2023 Year in Review – Approvals

Over the course of 2023, the OIC approved 10 new private equity commitments totaling \$2.1 billion

- **Pacing** \$2.5 billion with evergreen commitments
- **Strategy** 14% growth/VC & 86% buyout
- **Geography** 75% North America, 20% Europe, 4% Asia & 1% ROW
- **Manager** All approved managers were in the existing GP roster (Parthenon relationship restarted)

					CO	MMIT
	FUND NAME	SEGMENT	STRATEGY	GEOGRAPHY	(MM)
1	Alpine Investors VIII	Buyout	Mid-market - software & services	North America	\$	200
2	Centerbridge Capital Partners V	Buyout	Mid-market - HC, FIG, TMT & industrial	NA/Europe	\$	250
3	Clearlake Capital Partners VIII	Buyout	Upper mid-market - technology, industrial & consumer	North America	\$	250
4	CVC Capital Partners IX	Buyout	Large buyout - diversified	Global/Europe	€	300 *
5	Genstar Capital Partners XI	Buyout	Upper mid-market - HC, FIG, software & industrial	North America	\$	250
6	Hellman & Friedman Capital Partners XI	Buyout	Large buyout - diversified	NA/Europe	\$	250
7	KPS Special Situations Fund VI	Buyout	Turnaround - manufacturing	NA/Europe	\$	150
8	Parthenon Investors VII	Buyout	Mid-market - HC, FIG & business services	North America	\$	150
	BUYOUT TOTAL				\$	1,830
9	Mayfield XVII & Select II	Growth/VC	Multi-stage venture capital	North America	\$	50
10	TA Associates XV	Growth/VC	Growth equity / growth buyout	Global	\$	200
	GROWTH/VC TOTAL				\$	250
	TOTAL APPROVALS				\$	2,080
11	General Atlantic SMA	Growth/VC	Growth equity - diversified	Global	\$	150
	Pathway Co-Inv - Recycling	Co-Invest	Co-invest with OPERF GP roster	Global	\$	250
	TOTAL PACING				\$	2,480

^{* -} Euro/USD - 0.91



2023 Year in Review – Priorities

OST Staff made progress on all five initiatives set out in the 2023 PE Annual Review & Plan:

- 1. \$2.5-3.5 billion of new commitments
 - 10-15 commitments of \$100-350 million
- **2.** Leverage portfolio & pacing management tools
 - · Carefully consider additional enhanced liquidity opportunities
- 3. Explore scalable implementation models in venture capital
 - Consider options for medium term implementation
- 4. Private equity team capacity
 - Recruit to fill open position(s)
- 5. Continue enhancements to due diligence and monitoring capabilities
 - Implement and leverage portfolio management tools



Returns & Attribution

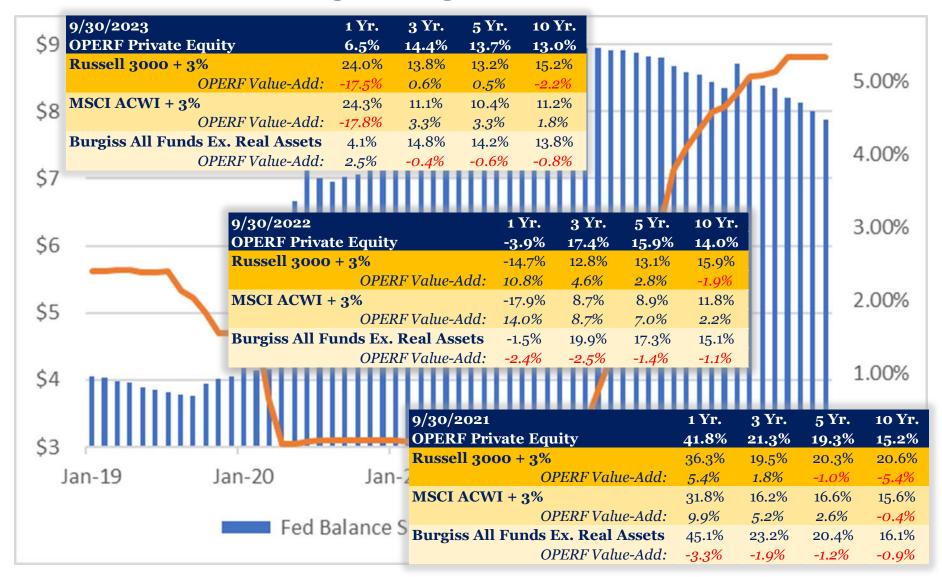
Markets are still digesting violent shifts in monetary policy...

- 1. Public/Private Equity Mismatch
- 2. Relative Returns
- 3. Return Attribution

The portfolio is well positioned for a normalized environment...



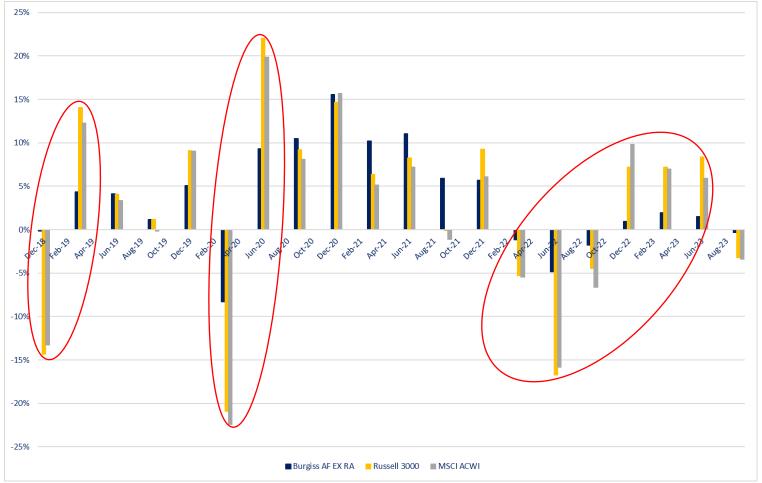
Markets still digesting...





Public/Private Equity Mismatch

Equities have experienced three full cycles in the past five years, and private equity always lags at the start of both sides of a cycle





Relative Returns – Horizon

OPERF's private equity portfolio trails public equity indices short-term but outperforms long-term, and performance relative to the asset class benchmarks continues to improve

9/30/2023	IRR 1 year	IRR 3 year	IRR 5 year	IRR 10 year
OPERF Private Equity	6.5 %	14.4%	13.7%	13.0%
Russell 3000 + 3%	24.0%	13.8%	13.2%	15.2%
Value-Added	<i>-17.5</i> %	0.6%	0.5%	-2.2%
Russell 3000	20.4%	10.5%	9.9%	11.9%
Value-Added	-13.9%	3.9%	3.8%	1.1%
Russell 2000 + 3%	12.1%	12.1%	6.5%	10.8%
Value-Added	<i>-5.6%</i>	2.3%	7.2 %	2.2%
Russell 2000	8.8%	8.9%	3.5%	7.8%
Value-Added	-2.3%	<i>5.5</i> %	10.2%	<i>5.2%</i>
MSCI ACWI + 3%	24.3%	11.1%	10.4%	11.2%
Value-Added	-17.8%	3.3%	3.3%	1.8%
MSCI ACWI	20.6%	7.9%	7.2%	8.1%
Value-Added	-14.1%	6.5%	6.5%	4.9%
Burgiss All Funds Ex RA	4.1%	14.8%	14.2%	13.8%
Value-Added	2.5%	-0.4%	-0.6%	-0.8%
*Cambridge Associates	3.3%	15.9%	13.7%	13.2%
Value-Added	<i>3.2</i> %	-1.5%	0.0%	-0.2%



Return Attribution – Summary

OPERF's relative performance attribution is mixed

Asset Allocation Factor: sub-strategy (i.e. buyout, venture capital, growth equity, etc.) and geographic allocations

Timing Factor: pacing

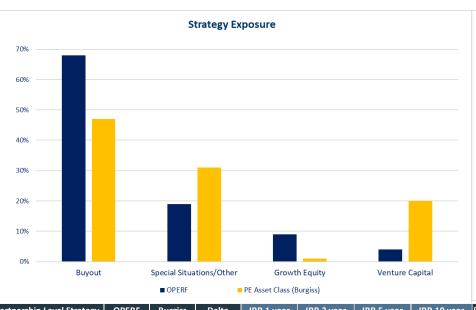
Security Selection Factor: manager/ fund selection

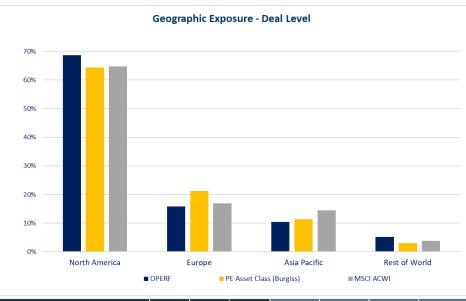


Return Attribution – Asset Allocation

The asset allocation factor is positive

- **Geography:** OPERF's overweight exposure to North America is a positive across all timeframes
- **Strategy:** OPERF's meaningful underweight exposure to VC is a detractor across longer timeframes, but it is slowly turning into a positive over the short and medium term





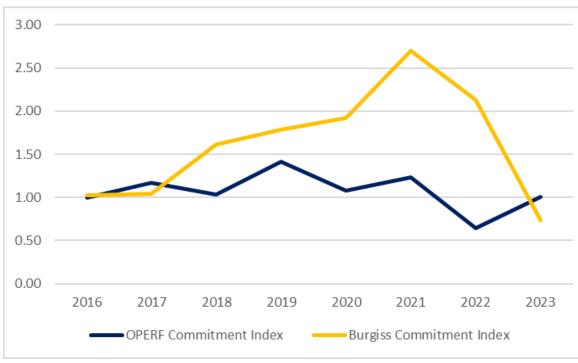
Partnership Level Strategy	OPERF	Burgiss	Delta	IRR 1 year	IRR 3 year	IRR 5 year	IRR 10 year	Partnership Level Geography	OPERF	Burgiss	Delta	IRR 1 year	IRR 3 year	IRR 5 year	IRR 10 year
Burgiss - All Funds Ex. RA	100%	100%	0%	4.1%	14.8%	14.2%	13.8%	Burgiss - All Funds Ex. RA	100%	100%	0%	4.1%	14.8%	14.2%	13.8%
Burgiss - Buyout	68%	47%	20%	9.2%	17.4%	15.7%	15.0%	Burgiss All Fund Ex RA - Latin America	1%	1%	-1%	(1.6%)	12.4%	7.5%	4.4%
0 ,	9%	1%	8%	3.4%	6.4%	6.4%	7.9%	Burgiss All Fund Ex RA - North America	54%	58%	-4%	2.8%	17.0%	16.0%	15.0%
Burgiss - Expansion								Burgiss All Fund Ex RA - Europe	9%	19%	-10%	11.5%	13.1%	12.0%	11.9%
Burgiss - Other Ex RA	19%	31%	-13%	6.1%	12.1%	10.4%	9.9%	Burgiss All Fund Ex RA - Asia	7%	10%	-3%	2.2%	7.8%	10.1%	12.7%
Burgiss - VC	4%	20%	-16%	(8.7%)	13.4%	17.0%	17.3%	Burgiss All Fund Ex RA - Generalist	28%	11%	17%	5.9%	12.2%	11.6%	10.9%



Return Attribution –Timing

The timing factor continues to normalize as we move further away from 2021

- OPERF's smooth pacing strategy results in markedly different vintage year exposures as compared to the asset class given growth in fundraising
- This has been a drag on OPERF's relative performance due to the strong, early performance from recent vintage years where OPERF is underweight
- While valuations have not come down meaningfully, the passage of time alone lessens the impact



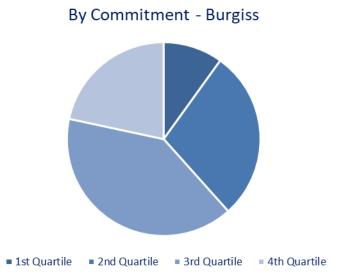
Burgiss All Funds Ex- RA Horizon IRR								
Vintage	1 Year	3 Year	5 Year	10 Year				
2013	2.0%	13.0%	11.6%	12.5%				
2014	-0.9%	15.7%	16.6%	N/A				
2015	1.1%	16.7%	15.4%	N/A				
2016	3.1%	17.8%	17.3%	N/A				
2017	3.8%	19.4%	19.0%	N/A				
2018	5.5%	17.6%	17.5%	N/A				
2019	6.4%	16.7%	16.5%	N/A				
2020	6.0%	12.2%	N/A	N/A				
2021	5.9%	5.5%	N/A	N/A				
2022	6.0%	N/A	N/A	N/A				
2023	-11.0%	N/A	N/A	N/A				

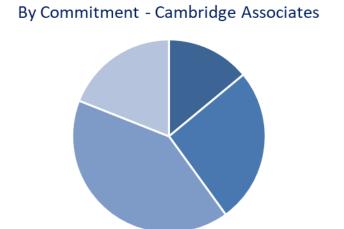


Return Attribution – Security Selection

The security selection factor is negative

- For mature commitments (2010-2020 vintages), ~60% of OPERF's fund investments as measured by commitment ranked below median as compared to funds pursuing a similar strategy in the same vintage
- Fund size continues to have an outsized impact on quartile rankings, particularly with respect to OPERF's core allocation to North America buyout funds





■ 2nd Quartile ■ 3rd Quartile

1st Quartile

Partnership Level Strategy	IRR 1 year	IRR 3 year	IRR 5 year	IRR 10 year
Burgiss All Fund Ex Real Assets	4.1%	14.8%	14.2%	13.8%
Burgiss North America Buyout - All Funds	8.1%	19.0%	17.1%	16.3%
Burgiss North America Buyout - Large Funds (Min \$3bn)	8.4%	16.9%	16.1%	15.7%
Burgiss North America Buyout - Small Funds (Max \$3bn)	7.8%	22.8%	18.8%	17.2%
Fund Size Impact	0.5%	-6.0%	-2.7%	-1.6%

4th Quartile

Portfolio Review

Markets are still digesting violent shifts in monetary policy...

- 1. Implementation Plan
- 2. Current Portfolio Positioning
- 3. Pathway Update

The portfolio is well positioned for a normalized environment...



Implementation Plan Review

OPERF's PE implementation plan is built on three core principles:

1. Focused Primary Program

- 1. ~45 General Partner relationships emphasizing an average commitment of ~\$250 million per fund to create a portfolio that is balanced by style, geography, sector, size, etc.
- 2. Focus on managers capable of generating consistently strong returns via earnings/cash flow growth

2. Fee Mitigation

- 1. Co-investment (via the outsourced program with Pathway) currently represents 20% of pacing
- 2. Negotiate and structure discounts where possible

3. Smooth Pacing

- 1. Commit to balance vintage year pacing current pacing plan is **\$2.5-3.5 billion per annum** of new commitments to 10-15 opportunities
- 2. The Enhanced Monitoring & Liquidity Program with Pathway is available to dynamically manage legacy investments/relationships as well as vintage exposures



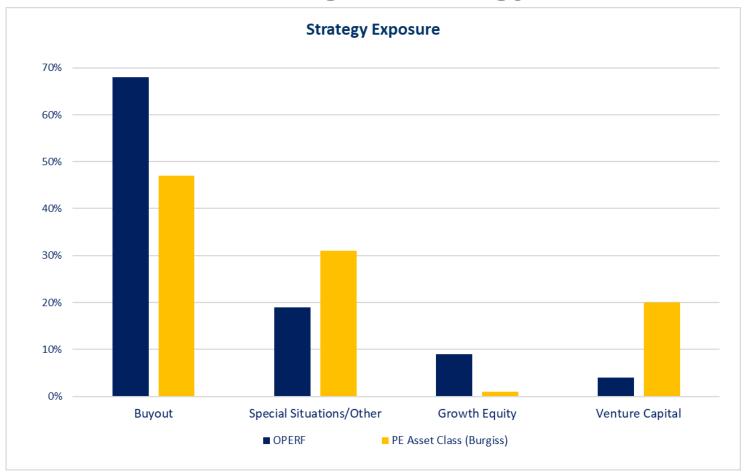
Rollforward Portfolio

Based on the active manager roster & the most recent generation of commitments, OPERF's anticipated forward exposures are:

- **Implementation:** ~80% primary fund commitments & ~20% co-investments
- **Asset Class:** ~80-85% buyout & ~15-20% growth equity/venture capital
- **Strategy:** Upper middle market bias and a "growth" tilt
- Geography: ~67% North America, ~23% Europe, ~7% Asia & ~2% ROW
- **Sector:** ~33% TMT, ~13% industrial, ~10% business services, ~16% consumer, ~15% healthcare & ~11% financial services
- Manager: the current, active roster is light relative to plan at less than 35 managers



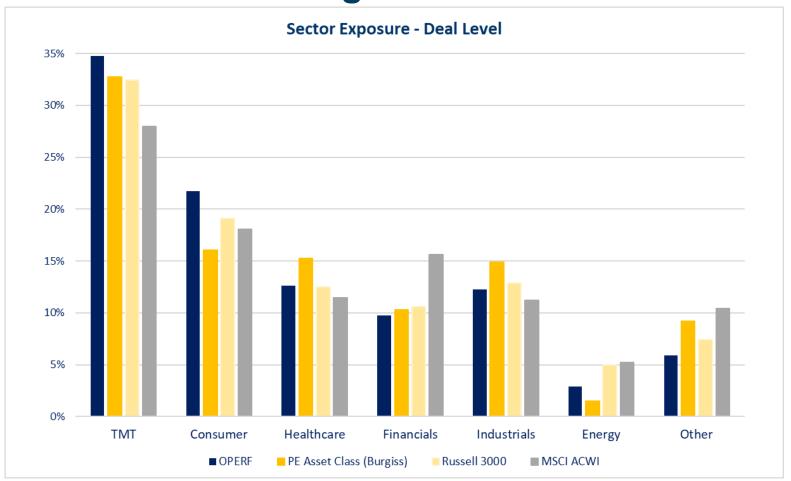
Portfolio Positioning – Strategy



- OPERF's secondary benchmark (Burgiss All Funds Ex. Real Assets) is beginning to reflect the ongoing secular growth of private credit as a strategy
- The massive run-up in VC continues to result in an outsized exposure for the asset class



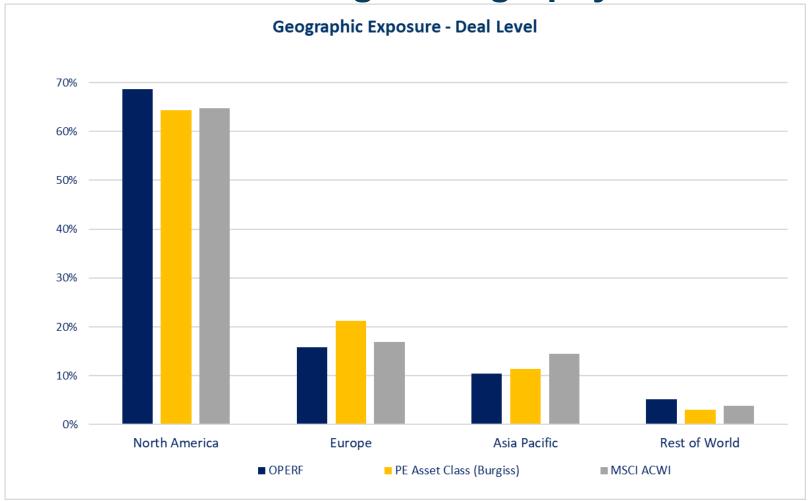
Portfolio Positioning – Sector



- As the data continues to settle out, OPERF now has a modest overweight to the TMT sector for the first time
- OPERF continues to carry higher consumer exposure



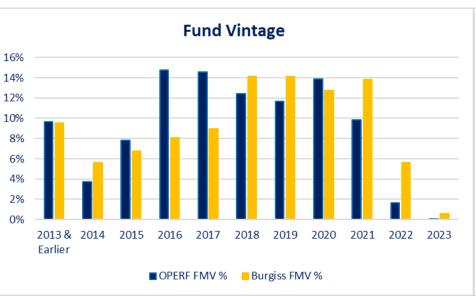
Portfolio Positioning – Geography

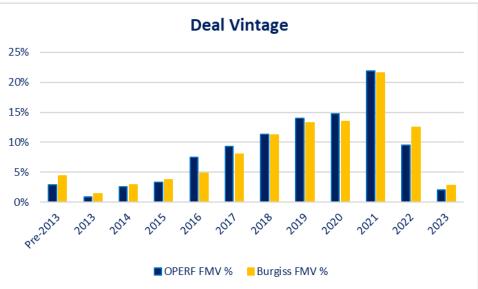


 OPERF continues to carry a domestic market bias as compared to the asset class and MSCI ACWI



Portfolio Positioning – Time

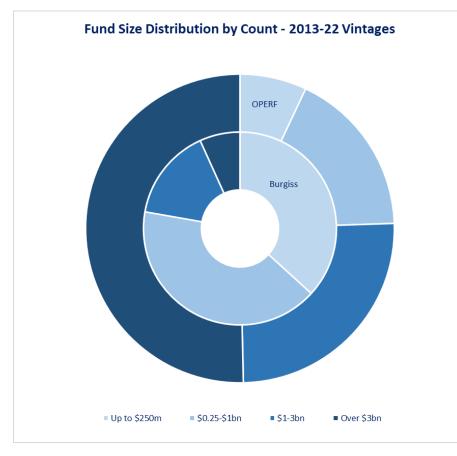


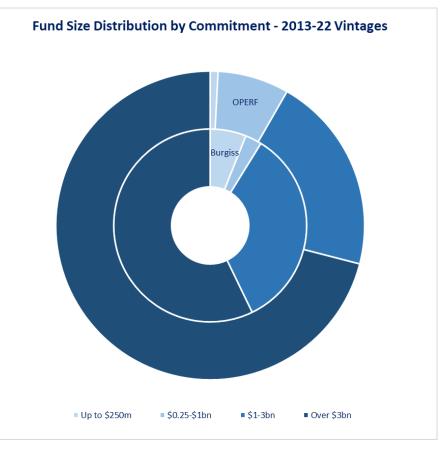


- Due to controlled commitment pacing, OPERF's fund level vintage exposure carries a bias to maturing vintages as compared to the asset class (though the picture is somewhat skewed by an evergreen commitment in the 2016 vintage)
- Despite controlled pacing, OPERF's deal level vintage exposure looks comparable to the asset class



Portfolio Positioning – Size





- From 2013-2022, 50% of OPERF fund investments by count and 71% by commitment are in funds with \$3 billion or more of total commitments
- Of the ~5.2k funds in the asset class composite from 2013-2022, only 352 funds raised \$3 billion plus of committed capital







to the second se					
1991	100%	244	>\$85 billion	23 years'	
Founded	owned by its	Staff	in global AUM ^b	average investment	

21 partners



^aStrategic alliance with Tokio Marine Asset Management. ^bRepresents roll-forward market value plus undrawn capital as of September 30, 2023. ^cRepresents Pathway's 21 investment partners.

experience^c

Pathway Program Overview

Pathway provides custom solutions to OPERF to address key strategic focus areas:

- Mitigating gross-to-net spread
- Leveraging the OPERF private equity team's capacity
- Managing private equity NAV

PRIVATE EQUITY CO-INVESTMENTS: PPEF III-CO (Commenced in 2019)









MONITORING AND LIQUIDITY SOLUTIONS: PATHWAY IMA (Commenced in 2020)









^bAs of September 30, 2023. Includes rolled-forward market values, which represent 2.6% of total market value.



^aIncludes one co-investment pending close.

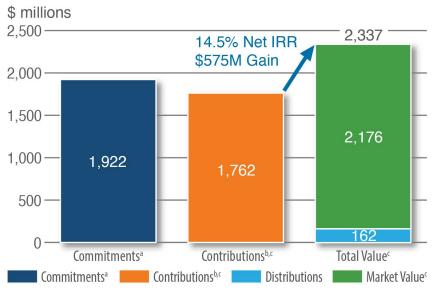
Co-investment Program

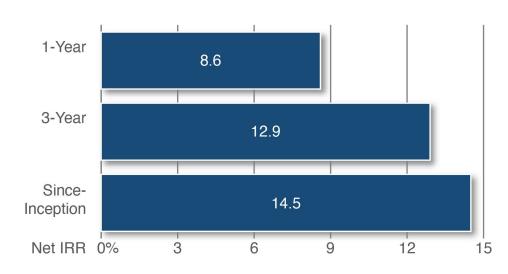
- Sourcing: 100% from OPERF GP relationships
- Selectivity: Completed 110 of 183 co-investments reviewed¹
- Co-invested alongside 30 of OPERF's GPs
- Capital-weighted age of 2.2 years²

PPEF III-CO PERFORMANCE

At September 30, 2023

- Selective and systematic deployment of capital, with risk-based approach
- No annual management fee or carried interest on any co-investment to date
- The program is developing well and generating attractive returns.





^aCommitments to non-USD-denominated investments are accounted for by multiplying unfunded commitments by the quarter-ending exchange rate, then adding the result to cumulative capital contributions, causing commitments to non-USD-denominated investments to fluctuate quarterly.

blincludes capital contributed for management fees called outside of the total commitment.

Includes one co-investment pending close.
 As of September 30, 2023.



OREGON



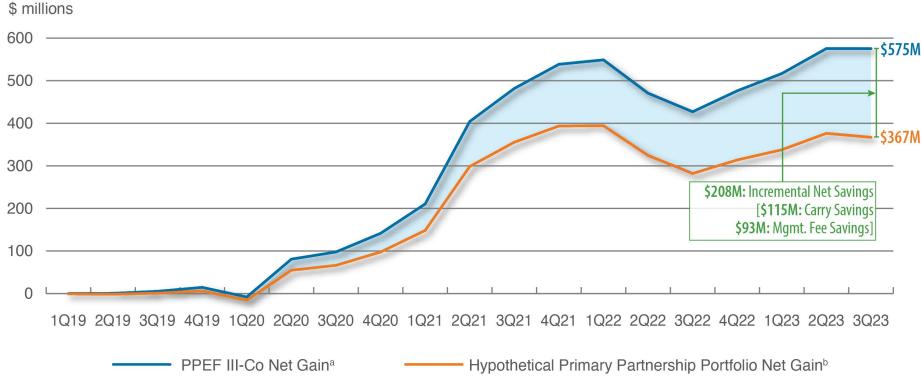
clucludes contributions and market values of underlying co-investments that were funded using the Fund's line of credit; the Fund had outstanding borrowings of \$185.5 million on its line of credit as of September 30, 2023. Includes rolled-forward market values, which represent 2.6% of total market value.



Incremental Gains from Fee & Carry Savings

At September 30, 2023

Estimated since-inception net fee and carry savings of \$208 million to date



NOTE: Amounts may not foot due to rounding.

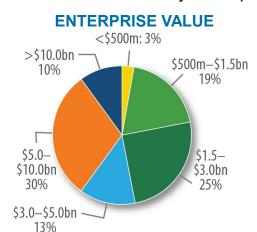
^aPPEF III-Co Net Gain includes rolled-forward market values, which represent 2.6% of total market value.

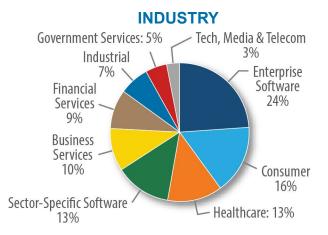
^bReflects the impact of potential management fees and carried interest that would have been charged if the co-investment commitments made through PPEF III-Co were made through a private equity limited partnership structure charging a 1.75% annual management fee and 20% carried interest based on actual PPEF III-Co tranche commitments to date and net gain generated, as of September 30, 2023.



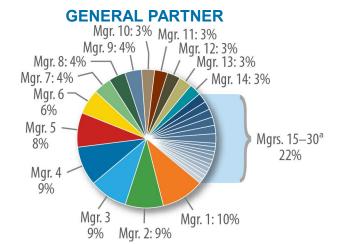
Co-investment Program

The portfolio is well-diversified by enterprise value, industry, region, and general partner.





China: 1% Singapore: 1% France: 1% Australia: 1% Switzerland: 2% Japan 1% UK 8% United States 81%



NOTES: Presented as a percentage of committed capital. Includes one co-investment pending close.

^aEach general partner accounts for less than 3% of total commitments.





Enhanced Monitoring and Managed Liquidity Program Update

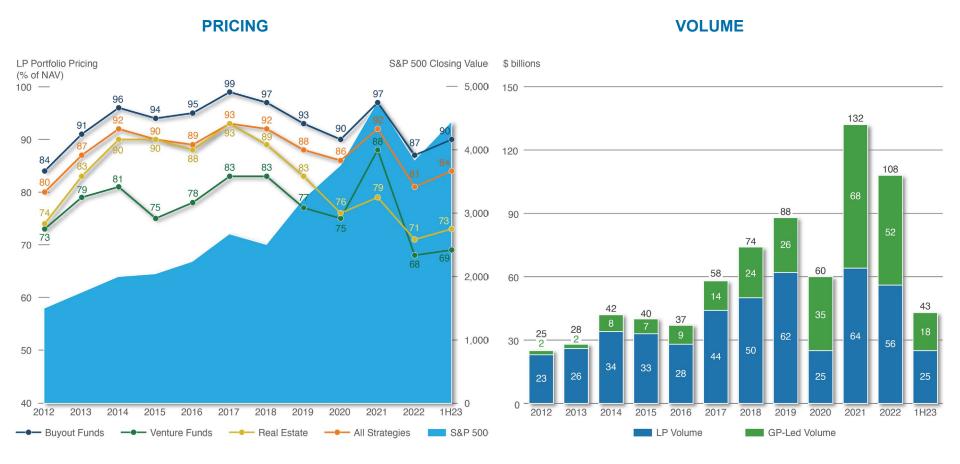
Since 2020, Pathway has assisted OPERF with monitoring and exploring accelerated liquidity options for portions of its legacy portfolio.

- The program included 91 partnerships from 47 general partners for the 1999–2015 vintage years.
- Since 2020, the liquidity program managed by Pathway has resulted in approximately \$3.3 billion in proceeds being accelerated and distributed to OPERF.
- Pathway's managed-sale process has assisted OPERF with progress toward achieving its strategic goals of
 - smoothing vintage year exposure,
 - reducing the number of general partners and active partnerships in its portfolio,
 - generating accelerated liquidity to reduce the current market value of the portfolio.
- In addition to exploring liquidity options, Pathway assists OPERF staff with
 - advisory board coverage;
 - analysis and execution of advisory board consents, extensions, amendments, etc.;
 - annual meeting participation;
 - market value reporting.





Secondary Market Pricing and Volume



Source: Jefferies estimates.

NOTE: The information presented has been developed internally and/or obtained from sources believed to be reliable; however, Pathway does not guarantee the accuracy, adequacy, or completeness of such information. Pathway has not independently verified such information and accepts no responsibility or liability for any error, omission, or inaccuracy of such information.



Allocation Relative to Target

Markets are still digesting violent shifts in monetary policy...

- 1. Historical Projections
- 2. Forward Pacing Plan
- 3. 2024 Priorities

The portfolio is well positioned for a normalized environment...



Historical Projections

• OPERF's current NAV is ~\$11 billion above where it was projected to be five years ago. That delta is roughly half cash flows and half gains:

	5 Yr.		5 Yr.				
	Fo	recast	A	ctual	De	elta (\$)	Delta (%)
Commitments	\$	16.6	\$	15.4	\$	(1.2)	-7%
06/30/18 NAV	\$	16.2	\$	16.2		N/A	N/A
Capital Calls	\$	16.7	\$	18.5	\$	1.8	11%
Distributions	\$	(27.0)	\$	(22.4)	\$	4.6	-17%
Gain	\$	8.9	\$	14.0	\$	5.0	57%
06/30/23 NAV	\$	14.8	\$	26.2	\$	11.4	77%



The Challenge of Modelling Private Equity

 Pacing models are used to project PE exposure over time, but these models are based on a series of assumptions that interact with each other in complex ways

<u>Commitments:</u> The size and timing of new commitments is the only variable that can be controlled. All other assumptions reference the scale and pace of commitments, and each additional step in the process becomes more complex and interwoven

<u>Capital Calls:</u> The rate at which commitments are deployed by managers into new portfolio company investments. A 3–4 year deployment period is common, but real experience may span 1-7 years

Returns: The compound growth rate in the value of portfolio company investments during the holding period

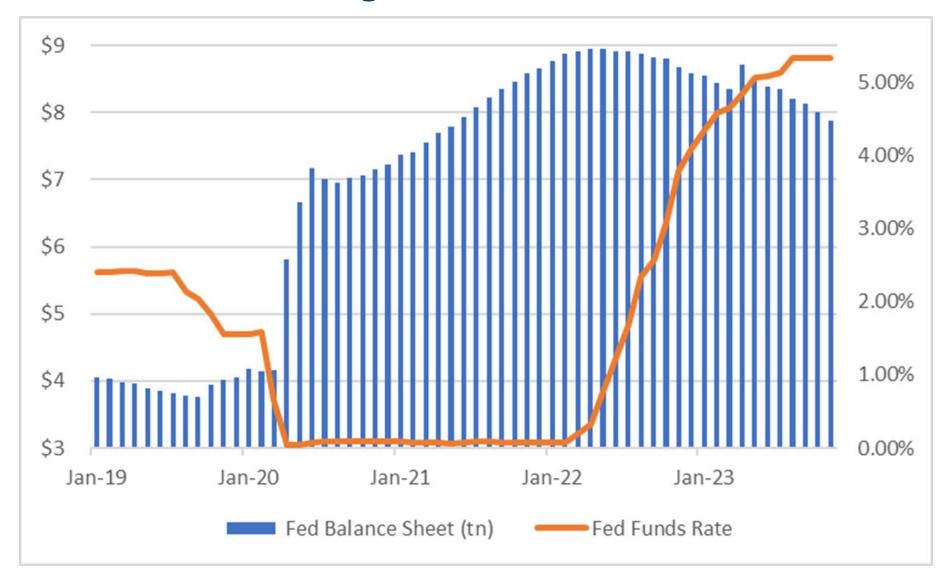
Distributions: Proceeds from the exit of portfolio company investments. A 3-7 year holding period at the portfolio company level is common, but actual outcomes may vary widely from that norm

<u>Growth of the overall portfolio:</u> The assumptions above are used to project net asset value for the private equity portfolio. Further assumptions on returns and net cash flows are required at the total portfolio level to project the Fund's allocation to the PE asset class



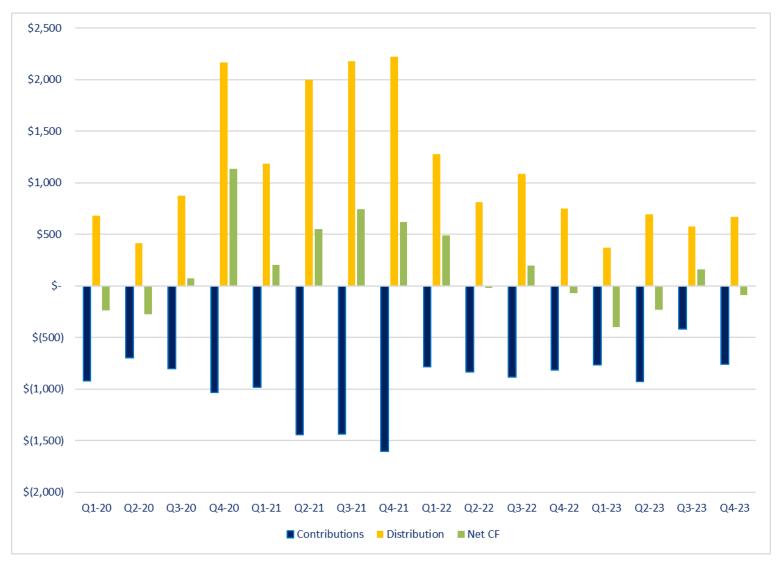
Source: OST, Aksia

What went wrong?





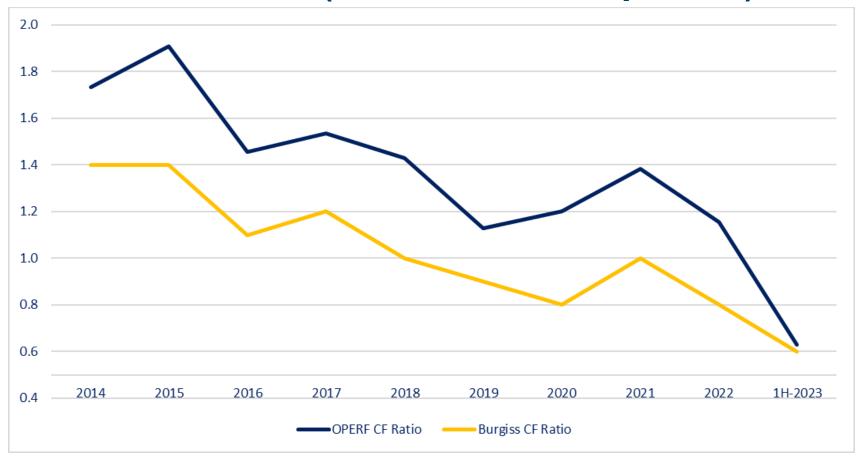
Quarterly Cash Flows Since Covid-19 (millions)





Source: OST Staff & Aksia

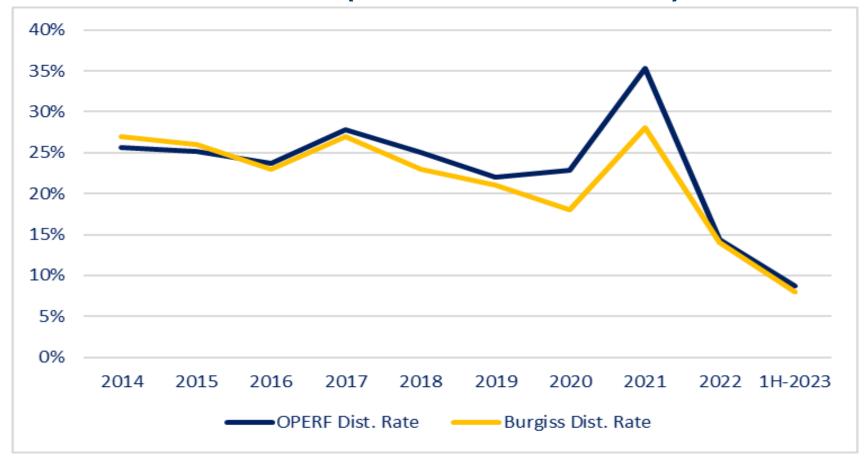
Cash Flow Ratio (Distributions/Cap Calls)



- OPERF's CF Ratio for the 9.5 years ending 6/30/23 is 1.4x, which is below the ~1.5x projected per capital market and pacing assumptions
- The asset class' CF Ratio for the same period is 1.0x



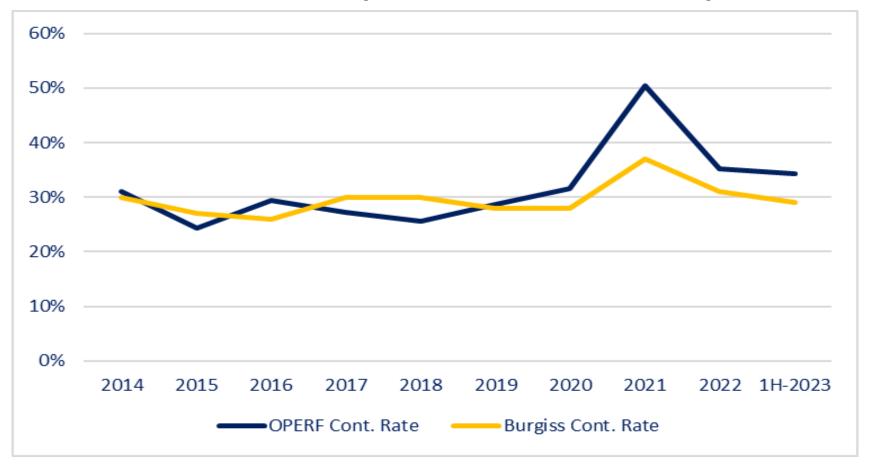
Distribution Rate (Distributions/NAV)



- While aided by secondary sales, OPERF's distribution rate was better than the asset class at the peak
- A return to ~25% would generate ~\$6.5 billion of calendar year distributions based on OPERF's current NAV



Contribution Rate (Cap Calls/Uncalled)



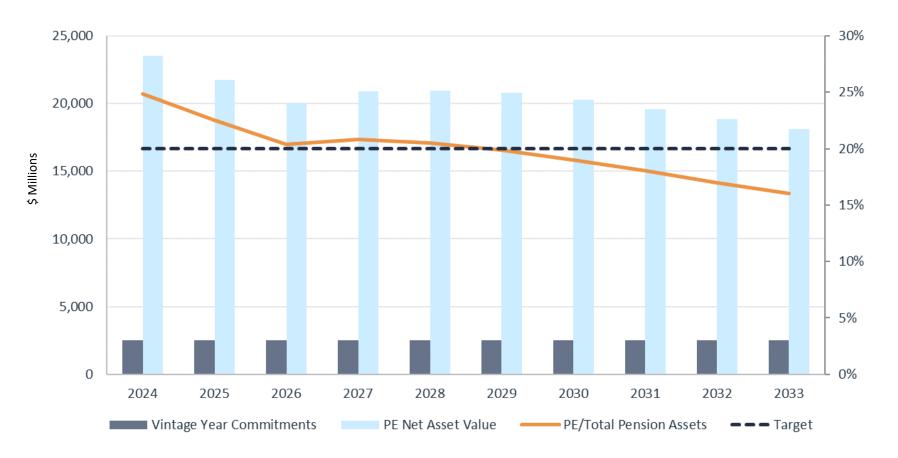
- Despite controlled commitment pacing, OPERF's managers appear to have behaved more aggressively than the broader asset class in 2021
- With OPERF's current uncalled balance, a normalized contribution rate (~30%)
 would amount to \$3.0 billion of calendar year capital calls



Forward Pacing Plan

In keeping with the principal of maintaining flat pacing, Staff is planning \$2.5-3.5 billion of new commitments again in 2024

• Staff and Aksia modelled multiple scenarios, homing in on an assumed commitment pace of \$2.5 billion per annum and 2% growth in total plan assets





Source: OST, Aksia

2024 Initiatives

2024 OST Private Equity Staff Priorities

1. \$2.5-3.5 billion of new commitments

• 10-15 commitments of \$100-350 million

2. Leverage portfolio & pacing management tools

Carefully consider additional enhanced liquidity opportunities

3. Examine security selection attribution factor

Reconsider benchmarking methodologies

4. Private equity team capacity

Recruit to fill open position(s)

5. Continue enhancements to due diligence and monitoring capabilities

Implement and leverage portfolio management tools



Closing

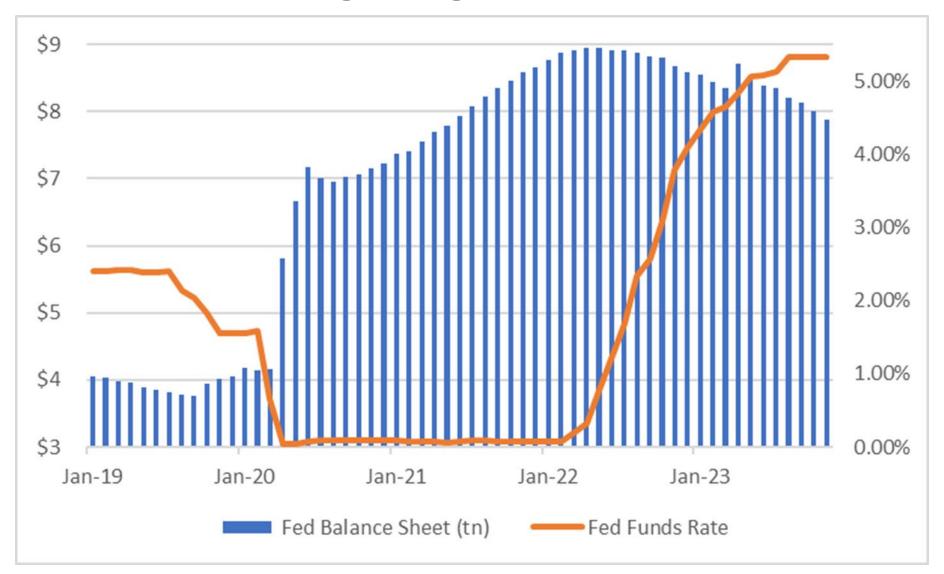
Markets are still digesting violent shifts in monetary policy...

- 1. M&A activity remains extremely depressed
- 2. Continued market volatility creates benchmarking challenges
- 3. OPERF's private equity exposure remains stubbornly high

The portfolio is well positioned for a normalized environment...



Markets Still Digesting...





Looking Back Further...





Portfolio is well positioned...

OPERF's PE implementation plan is built on three core principles:

1. Focused Primary Program

- 1. ~45 General Partner relationships emphasizing an average commitment of ~\$250 million per fund to create a portfolio that is balanced by style, geography, sector, size, etc.
- 2. Focus on managers capable of generating consistently strong returns via earnings/cash flow growth

2. Fee Mitigation

- 1. Co-investment (via the outsourced program with Pathway) currently represents 20% of pacing
- 2. Negotiate and structure discounts where possible

3. Smooth Pacing

- 1. Commit to balance vintage year pacing current pacing plan is **\$2.5-3.5 billion per annum** of new commitments to 10-15 opportunities
- 2. The Enhanced Monitoring & Liquidity Program with Pathway is available to dynamically manage legacy investments/relationships as well as vintage exposures



Appendix – 2023 Private Equity Market Review

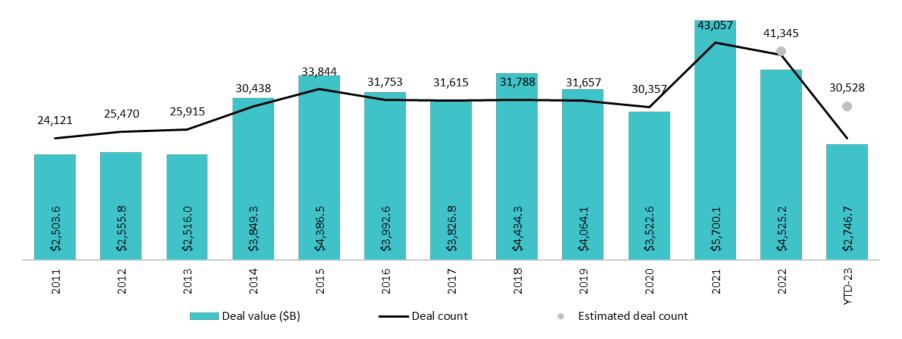
Investment Environment Agenda

- M&A Activity
- Corporate Leveraged Finance
- Private Equity Returns
- U.S. Private Equity Update
- Europe Private Equity Update
- U.S. Venture Capital Update



M&A Activity – Developed Market Volumes

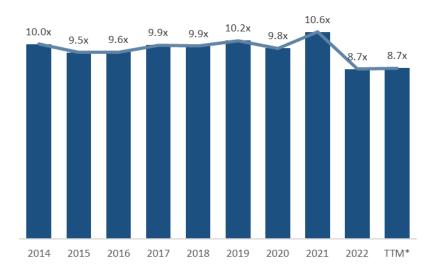
- Through 3Q 2023, Pitchbook recorded nearly 31k M&A transactions with an aggregate value of \$2.7 trillion
 - In total, activity through 3Q 2023 was on pace to be roughly 10% behind 2022 volumes, and 28% behind 2021 volumes
 - Developed markets continue to dominate the activity with \$1.4 trillion of transactions in North America and \$1.0 trillion in Europe
 - The chart below presents the annual M&A volumes since 2011

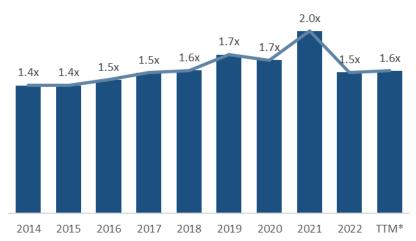




M&A Activity – Transaction Multiples

- Through 3Q 2023, median transaction multiples stood at 8.7x EBITDA and 1.6x revenue
 - Multiples remain down from record levels seen in 2021
 - Assets in the IT and healthcare sectors continue to trade at premium valuations while the energy and materials sectors continue to transact at depressed multiples
 - The charts below presents median EBITDA (left) and revenue (right) multiples since 2013 from M&A transactions in North America and Europe







M&A Activity – Private Equity Market Share

- At ~34% by count and ~42% by value, the share of PE driven M&A activity remains broadly in line with record levels seen since 2021
 - More than 70% of PE sponsor deals by count were add-on acquisitions for existing platforms. This compares to 68% in 2021 and ~60% on average from 2016-2020
 - Add-on acquisitions continue to represent more than 70% of sponsor backed M&A deals (by count)
 - The chart below presents PE sponsors' share of global M&A activity (by value) per year since 2011





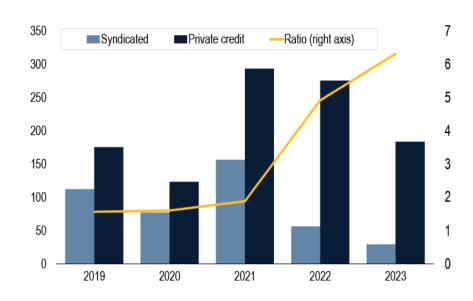
Corporate Leveraged Finance

- <u>In 2023, new issue volumes (through 12/14/23) remained well off</u> the record pace seen in 2021
 - Total institutional new issue volumes in the U.S. were ~\$234 billion, which is broadly in line with a similarly depressed 2022. The chart on the left presents institutional new issue volumes since 2014
 - The private credit market continues to take share from the syndicated market as depicted on the chart to the right

US institutional loan issuance volume (\$B)

\$700 Other \$600 Refinancing \$500 Other M&A I BO \$400 \$300 \$200 \$100 \$0 2017 2019 2014 2015 2016 2018 2020 2021 2022 2023

Count of LBOs financed in BSL vs private credit markets

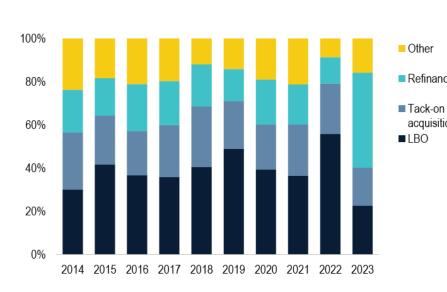




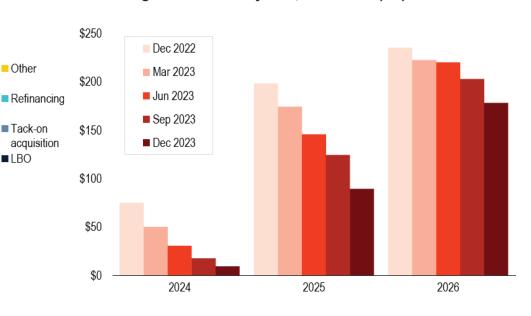
Corporate Leveraged Finance

- The primary financing need for PE sponsors in 2023 was refinancing
 - In total, refinancings accounted for nearly 60% on new issue volumes, and refinancings account for nearly half of sponsor backed new issuance, as depicted below on the left
 - Refinancing should remain a theme as companies seek to deal with a wall of maturities starting in 2025, as depicted below on the right

US institutional loan issuance volume — PE backed borrowers



US leveraged loan maturity wall, 2024-2026 (\$B)





Private Equity Returns

- The chart below presents trailing horizon net IRRs for the Private Equity industry as of September 30, 2023
 - The experience in 2023 has been the inverse of 2022 with private equity trailing public equities strongly rebounding from the previous year's drawdown
 - North America continues to be the strongest performing region over the past decade, but Europe has posted solid results in the most recent year
 - While venture returns remain strong over the long-term, the challenges of the past two years are starting to show up in the results of more recent periods

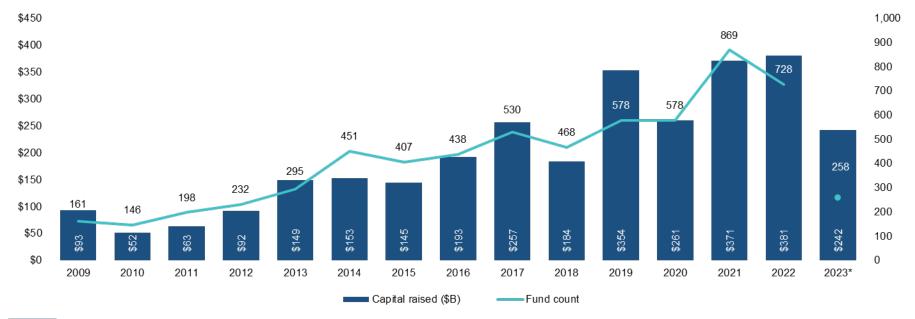
Partnership Level Strategy	IRR 1 year	IRR 3 year	IRR 5 year	IRR 10 year
Burgiss All Fund Ex Real Assets	4%	15%	14%	14%
Russell 3000 ICM IRR	20%	9%	9%	12%
MSCI ACWI ICM IRR	20%	9%	8%	10%
GEOGRAPHY				
Burgiss All Fund Ex Real Assets - North America	3%	17%	16%	15%
Burgiss All Fund Ex Real Assets - Europe	11%	13%	12%	12%
Burgiss All Fund Ex Real Assets - Asia Pacific	2%	8%	10%	13%
Burgiss All Fund Ex Real Assets - Generalist	6%	12%	12%	11%
ASSET CLASS				
Burgiss - Buyout	9%	17%	16%	15%
Burgiss - Expansion Capital	3%	6%	6%	8%
Burgiss - Venture Capital	-9%	13%	17%	17%
Burgiss - Other Ex Real Assets	6%	12%	10%	10%



Source: Burgiss 9/30/23

U.S. Private Equity Update – Fundraising

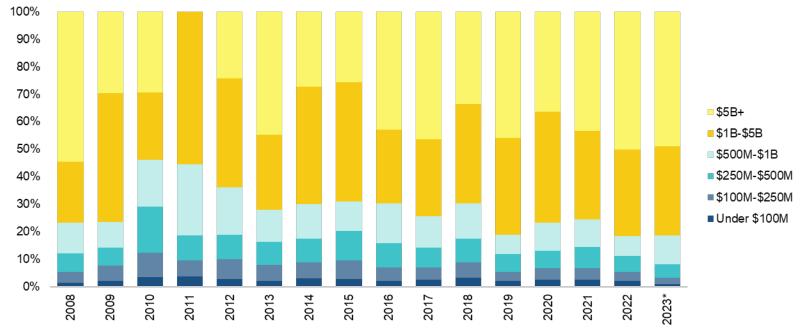
- Through 3Q 2023, ~\$242 billion had been raised across 258 U.S. private equity funds
 - Fundraising through the first three quarters of 2023 was on pace to reach ~95% of record levels seen in 2022 and 2021, but the number of funds raised is half what it was in 2021
 - On average, experienced managers came back only 2.8 years after their prior fundraise. This represented the continuation of a significant acceleration in activity
 - However, average time to close has reached 16 months. This is a level not seen since 2011
 - The chart below presents annual U.S. private equity fundraising activity since 2009





U.S. Private Equity Update – Fundraising

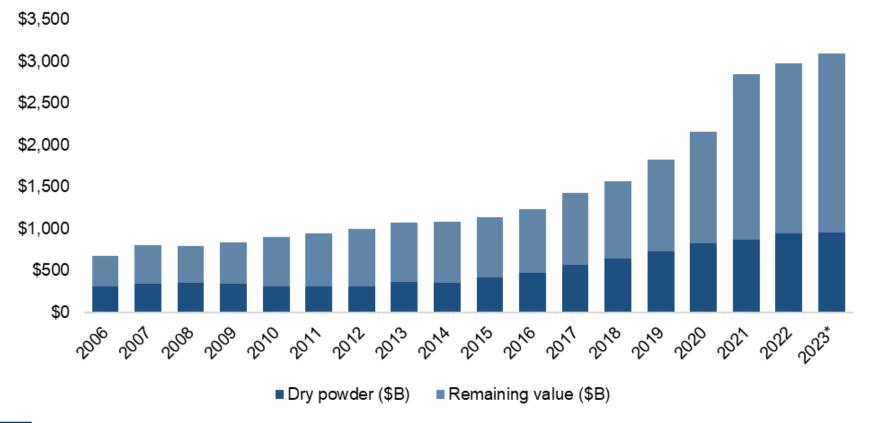
- <u>Larger funds continued to play a dominant role in U.S. PE fundraising</u>
 - ~81% of capital raised through the first three quarters of 2022 went to funds targeting \$1 billion or more of capital commitments
 - Average fund size came in at a historically high ~\$988 million for the first three quarters
 - As always, smaller funds dominate by count with ~80% of funds formed receiving less than \$1 billion of commitments
 - The chart below shows the fund size mix for U.S. private equity fundraising activity since 2008





U.S. Private Equity Update – Fundraising

- In total, U.S. PE AUM is now above \$3 trillion, having grown at a 9% CAGR since the asset class reached scale in 2006
 - Dry powder stands at nearly \$1 trillion with 90% of those commitments sitting in funds raised since 2020
 - The capital overhang represents roughly three years of deal activity using the 2023 pace





U.S. Private Equity Update – Deployment

- Through 3Q 2023, roughly 6,100 private equity deals have been announced with a total value of \$612 billion
 - The volume through 3Q 2023 represented ~80% of 2022 activity (by value) and ~60% of 2021 activity
 - Deals with enterprise values at or above \$1 billion represent only ~26% of total transaction volume, which is the lowest allocation since 2010
 - The chart below presents annual U.S. investment activity since 2013

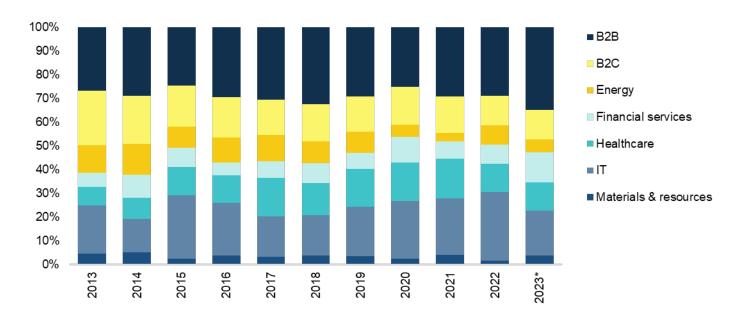


PE Annual Review & 2024 Plan – Appendix



U.S. Private Equity Update – Deployment

- <u>Deals in the IT sector account for the lowest percentage of total deal volume (by value) since 2018</u>
 - The allocation to IT represented ~19% of overall volume through 3Q 2023, but IT continued to represent nearly a third of deal volume for transactions at enterprise values at or above \$1 billion
 - In total, deals in the IT sector are on track to amount to roughly half of the volume in the sector in 2022 and 2021
 - The chart below presents the sector mix (by \$) for annual U.S. investment activity since 2013

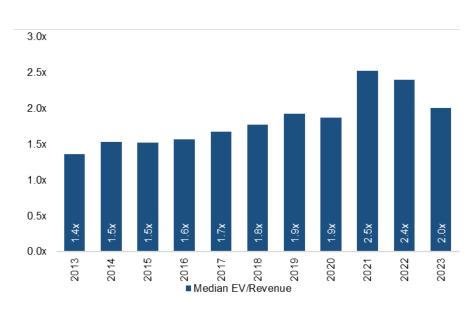




U.S. Private Equity Update – Deployment

- At a median entry multiple of 12x enterprise value/EBITDA and 2x enterprise value/revenue, PE backed transaction pricing remains at peak levels
 - Equity contribution as a percentage of the going-in capital structure stands at nearly 56%
 - The chart below presents median EV/EBITDA (left) and EV/revenue (right) multiples for U.S. and European investment activity since 2013







U.S. Private Equity Update – Exits

- Through 3Q 2023, nearly 885 exits of U.S. private equity backed companies had been consummated for a total value of \$183 billion
 - Exit pace through 3Q 2023 was ~25% below the pace seen in 2022 and ~75% below the pace seen in 2021
 - Exits at enterprise values at or above \$1 billion account for ~40% of total transaction volume. This is in line with 2022, but below the ~60% seen in 2021. Exit volume in the IT sector rebounded to ~25% of volume from less than 15% in 2022







Europe Private Equity Update – Fundraising

- Through 3Q 2023, €86 billion had been raised across 79 funds
 - Fundraising for the first three quarters of the year was on pace to exceed 2022 by 50% and possibly match record fundraising levels seen in 2021
 - Funds with commitments of €5 billion or more account for nearly 60% of the capital formation through the first three quarters of the year
 - The chart below presents annual European private equity fundraising activity since 2013

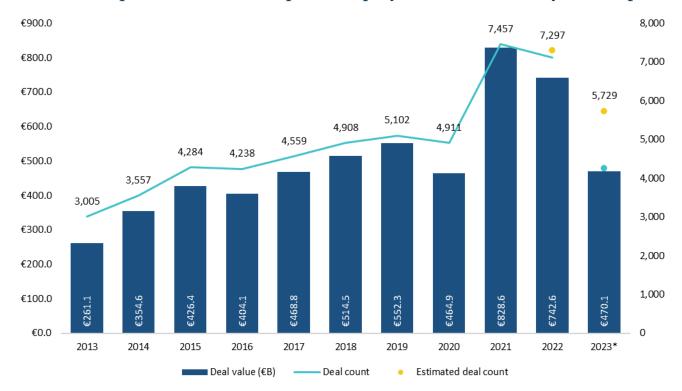


PE Annual Review & 2024 Plan – Appendix



Europe Private Equity Update – Deployment

- Through 3Q 2023, more than 5,700 private equity deals have been announced with a total value of €470 billion
 - Activity through the first three quarters of the year was ~15% below 2022 pace and ~25% below 2021
 - Add-on acquisitions represented 55% of deal count and 51% of transaction volume through the first three quarters of the year
 - The chart below presents the annual private equity investment activity in Europe since 2013

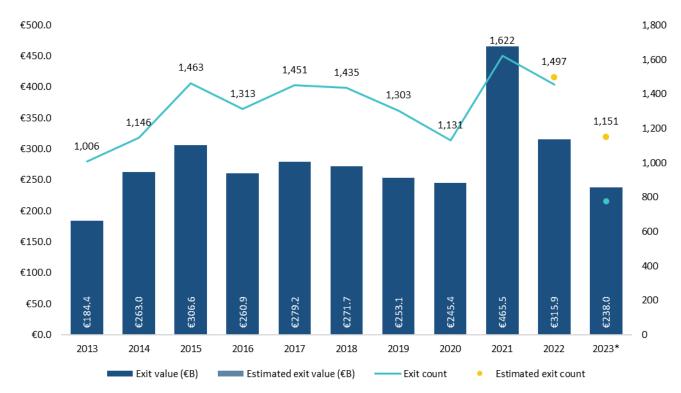


PE Annual Review & 2024 Plan – Appendix



Europe Private Equity Update – Exits

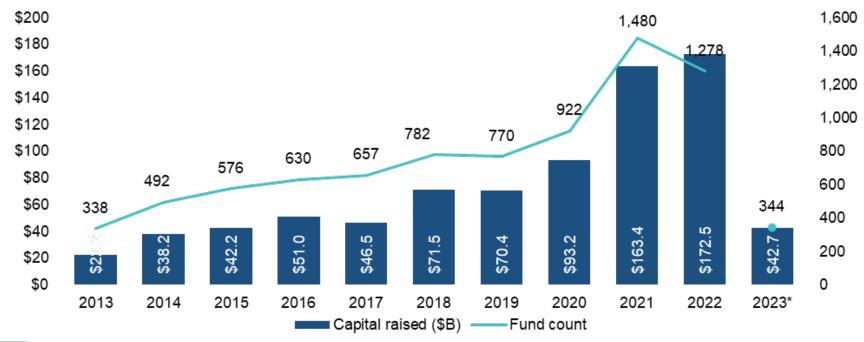
- Through 3Q 2023, more than 1,100 exits of private equity backed companies have been announced with a total value of €238 billion
 - Exit pace through the first three quarters of the year was on par with 2022 but ~33% below 2021
 - At nearly 20% of total volume, IPOs were more active in Europe than in the U.S.
 - The chart below presents the annual private equity exit activity in Europe since 2013





U.S. Venture Capital Update – Fundraising

- Through 3Q 2023, \$43 billion had been raised across 344 U.S. venture capital funds
 - Fundraising through the first three quarters was on pace to total less than a third of what was raised in 2022. U.S. VC dry powder currently totals more than \$300 billion
 - Funds with commitments at or above \$1 billion represent ~20% of all fundraising volumes having represented half of aggregate commitment in 2022
 - The chart below presents annual U.S. venture capital fundraising activity since 2013

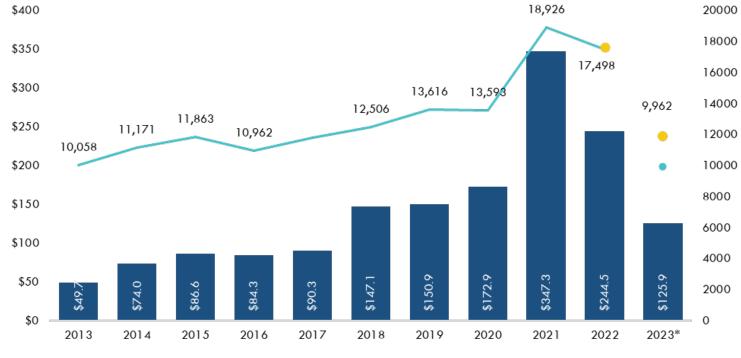




U.S. Venture Capital Update – Deployment

- Through 3Q 2023, nearly 10,000 venture capital rounds have been announced with a total value approaching \$126 billion
 - Volumes through 3Q 2023 are ~33% below 2022 and half of what they were in 2021
 - Volume continues to be largely driven by fundraising at "unicorn" valuations (\$1 billion plus), which represent a third of volume but less than 2% by count. There are more than 700 unicorns with a post money valuation of ~\$2.3 trillion
 - The chart below presents annual U.S. investment activity since 2013

Deal value (\$B)





U.S. Venture Capital Update – Exits

- Through 3Q 2023, nearly 900 exits of U.S. venture capital backed companies have been consummated for a total value of \$52 billion
 - Exit activity through 3Q 2023 was on pace to come in ~10% below the already anemic levels seen in 2022. 2023 volumes are likely to represent less than 10% of the record exits seen in 2021
 - In the past two years, the U.S. VC industry has funded roughly 13 new investment rounds for every portfolio company exit
 - The chart below presents the annual U.S. exit activity since 2013







OREGON STATE TREASURY





TAB 7 OPERF PUBLIC EQUITY ANNUAL REVIEW

OPERF Public Equity Portfolio Annual Review and Forward Plan

Louise Howard

Director of Capital Markets

Wil Hiles

Investment Officer, Public Equity

Philip Larrieu

Investment Officer, Stewardship

Paola Nealon

Managing Principal, Meketa

Raneen Jalajel

Associate Partner, Aon





Agenda

				OIC Investment and Management Beliefs Mapping															
Section	Pages	1A	1B	1C	1D	2A	2B	3A	4A	4B	5A	5B	6A	6B	7A	7B	8A	8B	9A
Portfolio Overview	3-9	Χ	X	Χ	Χ	Χ	Χ	Χ			X	X							
Markets	10-14							Χ			Χ	X			Χ				
Year in Review	15-24	Χ	Χ	Χ	X	Χ	Χ	Χ			Χ	X	Χ	Χ					
Spotlight: Internally Managed Portfolios	25-26	X	X	Χ	Χ		Χ	Χ			Χ	X	Χ						
Spotlight: Stewardship	27-29	Χ	Χ	Χ	Χ										Χ	Χ	Χ	Χ	
2024 Preview	30	X	X	Χ	Χ	X	Χ	Χ			Χ	X	Χ						X
Staff Recommendation	31	Χ	Χ	Χ	Χ							Χ							

LEGEND: OIC INVESTMENT AND MANAGEMENT BELIEFS

1 THE OIC SETS POLICY AND IS ULTIMATELY RESPONSIBLE FOR THE INVESTMENT PROGRAM

- A. Investment management is dichotomous -- part art and part science.
- B. The OIC is a policy-setting council that largely delegates investment management activities to the OST and qualified external fiduciaries.
- C. The OIC is vested with the authority to set and monitor portfolio risk. Both short-term and long-term risks are critical.
- D. To exploit market inefficiencies, the OIC should be long term, contrarian, innovative, and opportunistic in its investment approach.

2 ASSET ALLOCATION DRIVES RISK AND RETURN

- A. Asset allocation is the OIC's primary policy tool for managing the investment program's long-term risk/return profile.
- B. Portfolio construction, including diversification and correlation considerations, is essential to maximizing risk-adjusted returns.

3 THE EQUITY RISK PREMIUM WILL BE REWARDED

A. Over the long-term, equity-oriented investments provide reliable return premiums relative to risk-free investments.

4 PRIVATE MARKET INVESTMENTS CAN ADD SIGNIFICANT VALUE AND REPRESENT A CORE OIC/OST COMPETENCY

- A. The OIC can capitalize on its status as a true, long-term investor by making meaningful allocations to illiquid, private market investments.
- B. Dispersion in private market investment returns is wide; accordingly, top-quartile manager selection, diversification across vintage year, strategy type, and geography, and careful attention to costs are paramount.

5 CAPITAL MARKETS HAVE INEFFICIENCIES THAT CAN BE EXPLOITED

- A. Inefficiencies that can be exploited by active management may exist in certain segments of the capital markets.
- B. Passive investment management in public markets will outperform the median active manager in those markets over time.

6 COSTS DIRECTLY IMPACT INVESTMENT RETURNS AND SHOULD BE MONITORED AND MANAGED CAREFULLY

- A. All fees, expenses, commissions, and transaction costs should be diligently monitored and managed in order to maximize net investment returns
- B. External incentive structures should be carefully evaluated to ensure proper alignment with investment program objectives.

7 FAIR AND EFFICIENT CAPITAL MARKETS ARE ESSENTIAL FOR THE LONG-TERM INVESTMENT SUCCESS

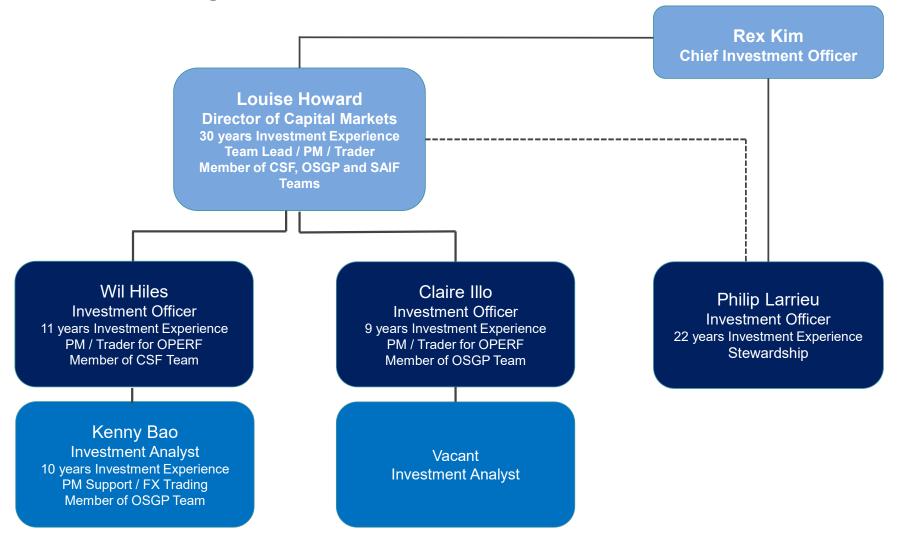
- A. The OIC recognizes that the quality of regulation and corporate governance can affect the long-term value of its investments.
- B. The OIC also recognizes that voting rights have economic value.

THE INTEGRATION OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) FACTORS, SIMILAR TO OTHER INVESTMENT FACTORS, MAY HAVE A BENEFICIAL IMPACT ON THE ECONOMIC OUTCOME OF AN INVESTMENT AND AID IN THE ASSESSMENT OF RISKS ASSOCIATED WITH THAT INVESTMENT

- A. The consideration of ESG factors within the investment decision-making framework is important in understanding the near-term and long-term impacts of investment decisions.
- B. Over time, there has been an evolution of multi-factor, or more holistic approaches, to identify opportunities and remediate risks, in a large globally-diversified investment portfolio.
- 9 DIVERSITY. IN ALL ASPECTS. IS ACCRETIVE TO MEETING OIC OBJECTIVES
 - A. By embracing and enhancing diversity and inclusion efforts, the OIC ensures that the investment program will be exposed to and informed by a wide range of perspectives, ideas and opinions.



Portfolio Overview Public Equity Team





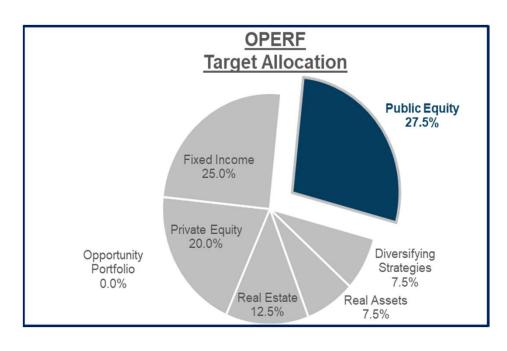
Please see Staff biographies on pages 33-34.

3

Portfolio Overview Strategic Role

The strategic role of OPERF public equity investments is outlined in OIC INV 1203 – Statement of OIC Investment and Management Beliefs and OIC Policy INV 601 – Strategic Role of Public Equity Securities within OPERF.

As outlined in those policy documents, the strategic role of public equity is to generate a return premium relative to risk-free investments, while providing liquidity in support of OPERF's cash flow requirements.



- ➤ As of September 30, 2023, Public Equity physical exposure was 19.6%.
- ➤ With the overlay, that exposure was reduced to 15.6% to bring the overall exposure of the Growth bucket (Private and Public Equity) within its target range of 47.5%.



Source: Russell Investments, as of September 30, 2023

Portfolio Overview Portfolio Objectives

Portfolio Objectives

Return and risk objectives for the Public Equity Portfolio outlined in OIC Policy INV 601 – Strategic Role of Public Equity Securities within OPERF are as follows:

- 1) To achieve an excess portfolio return of 0.50 percent or more above the MSCI All Country World Investable Market Index (net) over a market cycle of three to five years on a net-of-fee basis; and
- 2) To manage active risk to a target annualized tracking error of 0.75 to 2.0 percent, relative to the MSCI ACWI IMI (net).

Performance & Risk

	Market Value	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
OPERF Public Equity Portfolio	\$17.9B	-2.59	8.07	20.80	8.90	6.32	7.70	6.97	7/1/1997
MSCI ACWI IMI (Net)		-3.40	9.39	20.16	6.88	6.09	7.39	6.11	
Excess Return		0.81	-1.32	0.64	2.02	0.23	0.31	0.86	
Tracking Error (ex post)				2.46	2.54	2.16	1.66		



Portfolio Overview Executive Summary

- Strong absolute performance, weak relative performance
 - Year to date, the Public Equity Portfolio returned 8.07%, trailing the MSCI ACWI IMI benchmark.
 - The domestic equity portfolio trailed the Russell 3000 Index due in large part to the performance of the Magnificent 7, which the portfolio was underweight.
 - The developed markets (ex-US) was the best performing segment of the portfolio on a relative and absolute basis. The global sleeve lagged due to factor exposure.
 - The portfolio has outperformed its benchmark over longer time frames.
 - Over the last 12 months, Staff has brought the portfolio's forward looking tracking error within the policy range.

Teamwork

- None of what the Public Equity Team was able to accomplish in 2023 was done in a vacuum. The support of the following teams is vital to the work we do:
 - Internally Legal, Portfolio Risk & Research, Investment Operations, Investment Accounting, Compliance, Stewardship
 - Externally Meketa and Aon



Portfolio Overview Public Equity Structure

Total Public Equity \$17.9B | 18.8% of OPERF 23 Accounts

U.S. Equity \$8.9B 8 Accounts International Equity \$5.6B 8 Accounts

Emerging Markets \$0.7B 3 Accounts Global Equity \$2.7B 4 Accounts

4 Internally Managed

1 Passive Manager

1 Systematic Managers

2 Fundamental Managers

1 Internally Managed

3 Systematic Managers

4 Fundamental Managers

1 Systematic Manager

2 Fundamental Managers

2 Systematic Managers

2 Fundamental Manager

➤ Internally-managed strategies comprise 40.6% of Total Public Equity assets.



Portfolio Overview

Public Equity Benchmark

MSCI All Country World Investable Market Index (MSCI ACWI IMI)

Market Coverage

Holdings: 9,216 Countries: 47

U.S. Equities: 61.0%

International Developed Equities: 27.9% across 22

countries

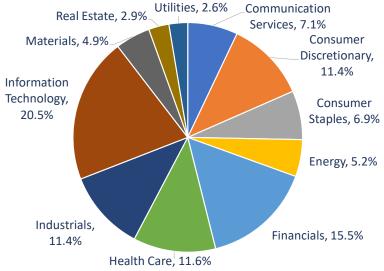
Emerging Markets Equities: 11.1% across 24 countries

Top 10 Constituents

Issuer	Mkt Cap (USD BB)	Index Wt. (%)	Sector
Apple	2,693	3.93	Information Technology
Microsoft Corp	2,230	3.25	Information Technology
Amazon.com	1,174	1.71	Consumer Discretionary
Nvidia	1,074	1.57	Information Technology
Alphabet A	777	1.13	Communication Services
Tesla	714		Consumer Discretionary
Alphabet C	697	1.02	Communication Services
Meta Platforms A	664	0.97	Communication Services
Exxon Mobil Corp	475	0.69	Energy
Unitedhealth Group	469	0.68	Health Care







Portfolio Overview Public Equity Positioning

Strategic Allocation Targets

OPERF Regional Allocation	Market Value (\$M)	Market Value (%)	OIC Target (%)	OIC Ranges (%)
U.S.	10,395	59.7	61	+/- 10
International Developed	4,406	25.3	27.9	+/- 10
Emerging	1,978	11.4	11.1	+/- 4
Other (Cash, FX, etc.)	622	3.6	0	N/A

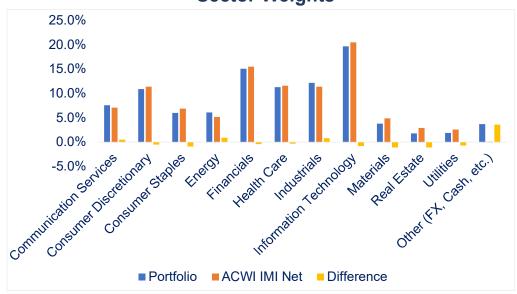
Top 10 Manager Strategies

Fund	Market Value (\$M)	Market Value (%)
OST S&P 500 Index	2,810	15.7
OST U.S. Risk Premia	2,218	12.4
DFA All Cap Core	1,647	9.2
OST International Risk Premia	1,303	7.3
Arrowstreet International 130/30	1,023	5.7
BlackRock Russell 3000	947	5.3
Lazard International Discounted Assets	862	4.8
Arrowstreet Global Low Volatility	811	4.5
Acadian International Value	778	4.4
LA Capital Management Global Low Volatility	773	4.3

Market Capitalization Weights

OPERF Market Capitalization	Market Value (\$M)	Market Value (%)	ACWI IMI Net (%)	Diff (%)
Mega Cap > \$200B	4,140	23.8	29.6	-5.8
Large Cap \$10B-\$200B	9,079	52.2	53.6	-1.5
Mid Cap \$6B-\$10B	1,213	7.0	5.5	1.4
Small/Mid \$2B-\$6B	1,417	8.1	7.3	8.0
Small Cap \$300M-\$2B	807	4.6	3.8	8.0
Micro Cap <\$300M	114	0.7	0.0	0.6
Other	630	3.6	0.0	3.6
Total	17,400	100	100	0

Sector Weights

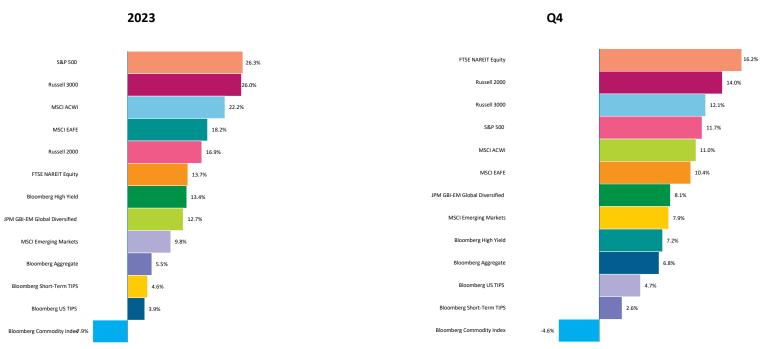


Source: State Street, BRS Aladdin & MSCI, as of September 30, 2023







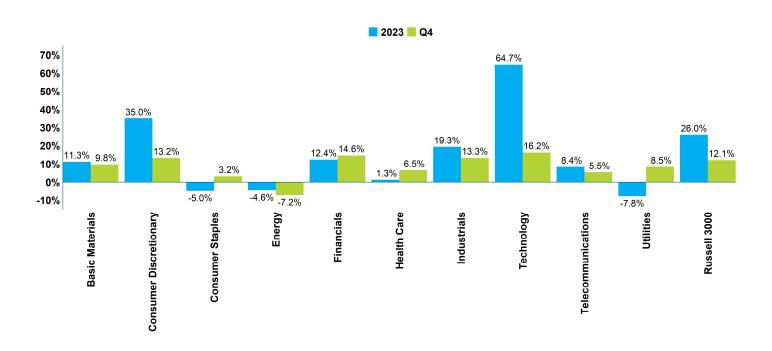


- → After a tough start to the quarter on lingering fears that the Federal Reserve might keep interest rates "higher for longer" markets rallied in November and December. Economic data generally coming in below expectations sparked expectations that the Federal Reserve might really be done raising policy rates.
- → Strong results for the quarter built on gains for the year with all asset classes finishing in positive territory in 2023, except commodities.

Source: Bloomberg. Data is as of December 31, 2023.



Russell 3000 Sector Returns¹



- → All sectors posted gains for the fourth quarter, except for energy (-7.2%) given oil's recent declines. Technology (+16.2%) led the way for the quarter followed by financials (+14.6%).
- → In 2023, technology (+64.7%) and consumer discretionary (+35.0%) sectors had the best results, helped respectively by artificial intelligence optimism and a healthy US consumer. Traditionally defensive sectors like utilities (-7.8%) and consumer staples (-5.0%) trailed.

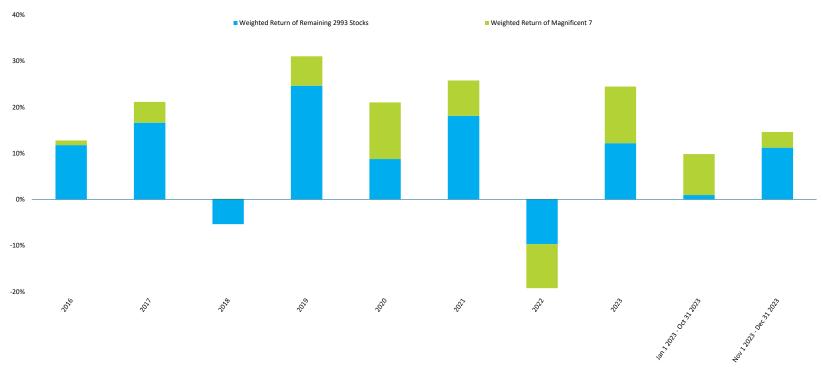
Source: Bloomberg. Data is as of December 31, 2023.



Is the Magnificent Seven Driving the Stock Market?

- \rightarrow It is not unusual for the largest stocks in the market to represent an outsized share of performance.
- → The Magnificent Seven represented nearly all of the Russell 3000's return from January to October 2023.
- → This was somewhat atypical and has led to concerns about market concentration.
- → However, in the rally at the end of 2023 (November through December), their influence declined.





Source: FactSet, as of December 31, 2023. Alphabet Class A and C were combined into one category for this analysis. In 2018, the Russell 3000 returned -5.21% while the Magnificent 7 returned 0.16%.







Summary

Key Trends:

- → The impact of inflation still above policy targets will remain key, with bond market volatility likely to stay high.
- → Global monetary policies could diverge going forward. The risk of policy errors remains elevated as central banks try to further reduce inflation back toward targets while not tipping their economies into recession. In the case of the US the resolution of the disparity between market expectations for the path of interest rates versus the Fed's dot plot will be key.
- → Global growth is expected to slow next year, with some economies forecasted to tip into recession. However, optimism has been building that certain economies could experience soft landings. Inflation, monetary policy, and geopolitical issues will remain key in 2024.
- → US consumers could feel pressure as certain components of inflation (e.g., shelter), remain high, borrowing costs are elevated, and the job market may weaken.
- → The key for US equities going forward, will be whether earnings can remain resilient if growth continues to slow. Also, the future paths of the large technology companies that have driven market gains will be important.
- → Equity valuations remain lower in emerging and developed markets, but risks remain, including the potential for China's economic slowdown and on-going weakness in the real estate sector could spill over into key trading partners' economies. Japan's recent hint at potentially tightening monetary policy along with changes in corporate governance in the country could influence relative results.
- → Recent, heightened tensions in Israel could add to overall uncertainty and drive safe haven flows.

Year in Review 2023 Recap

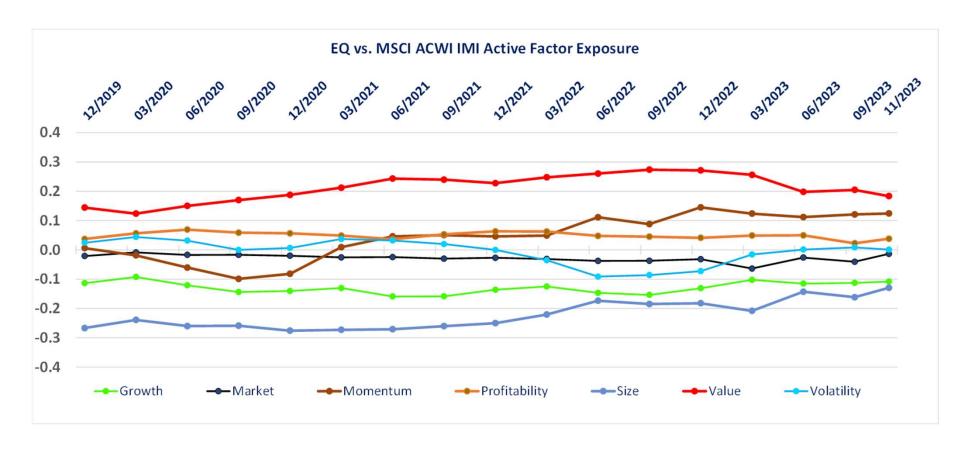
OPERF Public Equity Goals

- Reduce outsized portfolio exposures along dimensions of style, capitalization and factors relative to the policy benchmark
- Maintain passive core exposure in the US sleeve, consider adding passive in the non-US sleeve, and revisit factor selection for risk premia portfolios
- Emphasis on alpha generation from high conviction active managers
- Optimize portfolio weights to risk and exposure characteristics relative to policy benchmark and risk budget through rebalancing



Year in Review

Active Risk Factor Exposures

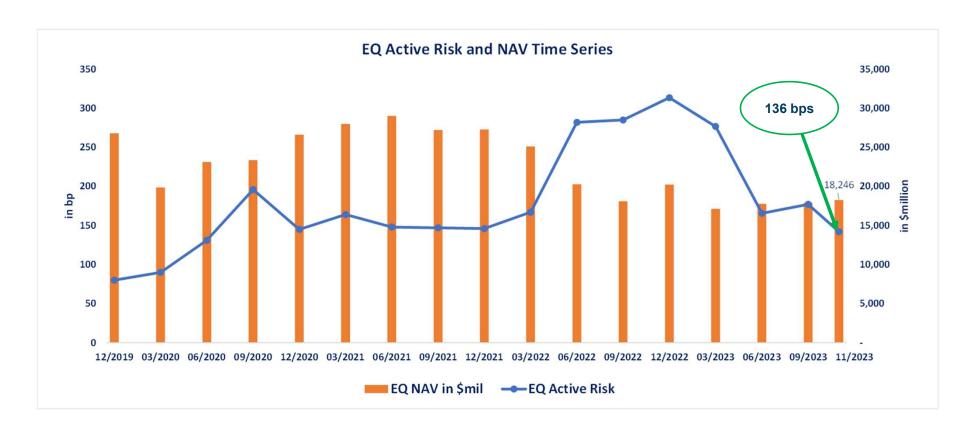


> Continued reduction in value and small size factors – the most pronounced portfolio exposures



Year in Review

Active Risk Time Series



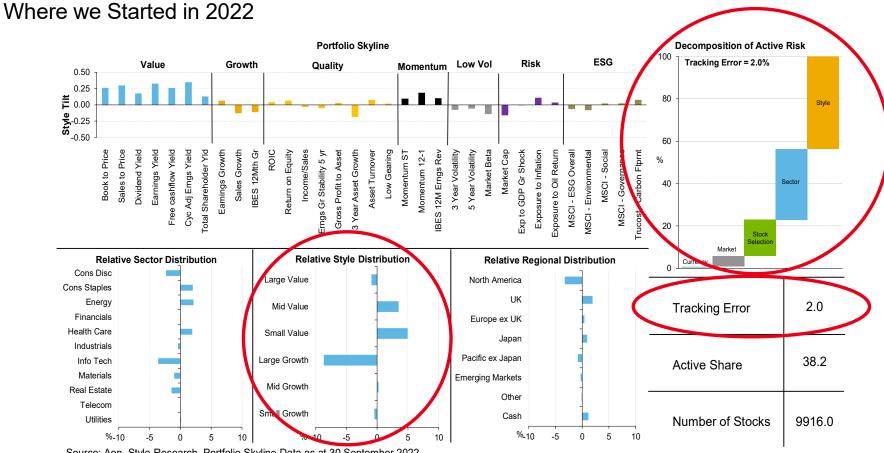
Continued reduction in ex-ante active risk (tracking error)

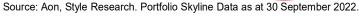


Year in Review

Portfolio Structure Analysis

Portfolio 1: Baseline Total Public Equity Portfolio





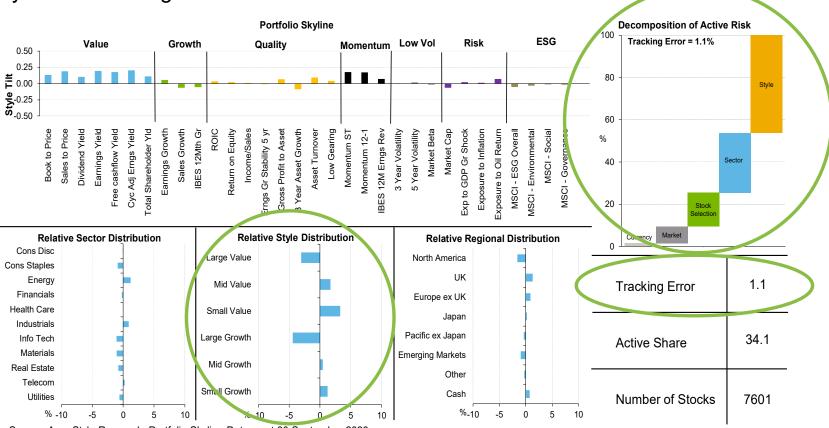
Distribution and TE Data as at 30 September 2022. Benchmark: MSCI ACWI IMI



Portfolio Structure Analysis

Portfolio 2: Current Total Public Equity

Majority of restructuring was made in 2023



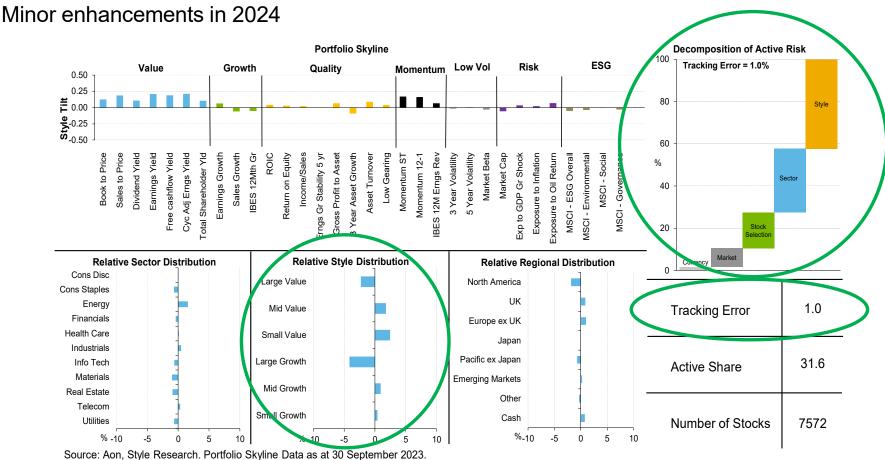
Source: Aon, Style Research. Portfolio Skyline Data as at 30 September 2023.

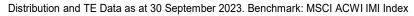
Distribution and TE Data as at 30 September 2023. Benchmark: MSCI ACWI IMI Index



Portfolio Structure Analysis

Portfolio 3: Proposed New Total Public Equity







Portfolio Structure Analysis

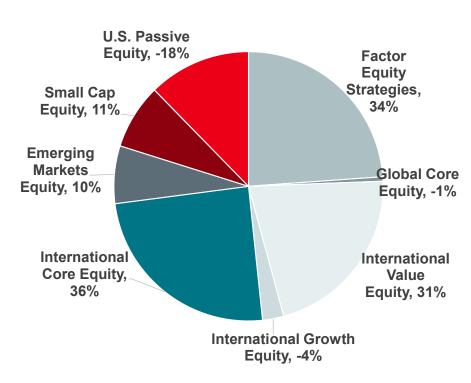
Tracking Error Contribution

Baseline 2022 Total Public Equity vs. Proposed New Total Public Equity

Baseline 2022 Total Public Equity

U.S. Passive Equity, -11% Factor Equity Small Cap Equity, 4% Strategies, 52% **Emerging** Markets Equity, 8% International / Core Equity, 23% International Growth Global Equity, 1% International Equity, 2% Value Equity, 21%

Proposed New Total Public Equity



January 2024 | Proprietary & Confidential | Investment advice and consulting services provided by Aon Investment USA Inc., an Aon Company



Conclusions

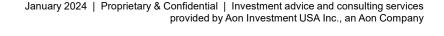
The OST has restructured the equity portfolio in a meaningful way in 2023 to deliver a more balanced portfolio reducing biases across market capitalization, style, and factors.

- Market Capitalization/ Style/ Factor Tilts
 - Reducing small cap bias through a reduction in allocation and broadening micro-cap strategies
 - Inclusion of broader global equity mandates reduces the emphasis on low volatility factors
 - Broadening risk premia strategies to represent multi-factor approach and reducing its allocation
 - Reducing underweight tilts to large-cap growth equity driven by the above enhancements and adding an international growth mandate

The proposed new total public equity portfolio captures modest enhancements to achieve the above restructuring objectives

As a result, the efficiency of the portfolio improves as tracking error decreases from 2.0% to 1.0% while the contribution to active risk is more balanced representing a range of diversified sources of alpha potential

- Active Risk
 - The key contributor to tracking error for the proposed new total public equity portfolio continues to be style, however, this risk decreases in the proposed portfolio
 - Driven by reducing portfolio structure biases
 - Style risk is a key contributor to active risk due to:
 - High conviction active managers that are dynamic in nature where active risk can be driven by security selection as well as sector/style positioning
 - o The portfolio's holdings in risk premia/factor strategies where style risk is prevalent
 - o The portfolio has a large cap growth underweight, however the proposed portfolio helps reduce these tilts





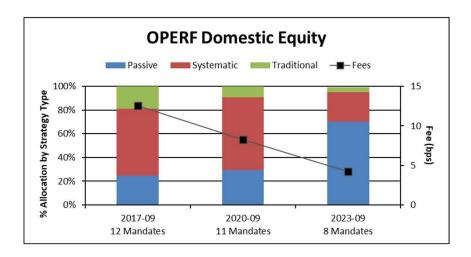
Public Equity by the Numbers

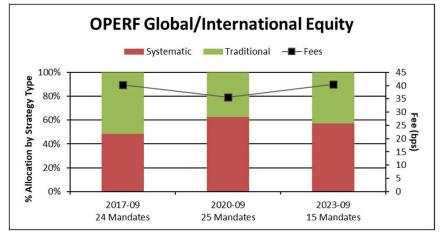
- Portfolio Cash Raise For the 12-month period ending September 30, 2023, Staff raised \$3.51B for the increased allocation to Fixed Income within OPERF, PERS benefit payments, and private market capital calls.
- Foreign Exchange (FX) Facilitation Program For the 12-month period ending September 30, 2023, Staff executed \$717M in FX trades on behalf of private markets activity. Since its inception in May 2019, the program has executed \$3.76B in FX trades through an electronic platform that allows for multiple counterparties to compete through a real-time auction process.
- Manager Meetings For the 12-month period ending September 30, 2023, Staff held 69 "open door" meetings with prospective managers and conducted 105 existing manager meetings including onsite diligence meetings.
- Global Peer Meetings Over the last year, Staff conducted 9 meetings as a forum for sharing ideas around internal trading, investment managers and portfolio design.
- Conferences Staff attended a variety of industry conferences in 2023 from global investor conferences hosted by existing managers to research-oriented conferences by index providers and a foreign exchange trading conference.



Year in Review Public Equity Fees

- Staff has continued to move away from traditional active and systematic mandates in the domestic equity sleeve of the portfolio, reallocating the proceeds in favor of low-cost passive and systematic strategies.
- Staff has reduced exposure to systematic strategies in favor of high conviction, fundamental stock pickers (Cantillon, GQG) where alpha generation is the focus.
- Across the portfolio the number of mandates has continued to decrease.





- Portfolio Management costs in the Domestic Equity portfolio decreased by more than 60% (from 12.5 bps to 4.25 bps/annum).
- The number of mandates decreased from 12 to 8.
- Portfolio Management costs in the International/Global Equity portfolio remained at 40bps.
- The number of mandates decreased from 24 to 15.



Spotlight: Internally Managed Portfolios Performance

- Over the trailing 5-year period, four of the five portfolios have outperformed their respective, primary benchmarks,
 with one performing in-line
- Since inception, four of the five portfolios have outperformed their respective, primary benchmarks

	Marke	et Value	3 Months	YTD	1 Year	3 Years	5 Years	10 Years	Since Inception	Inception Date
	(\$M)	(% of EQ)	3 Months							
OST US Risk Premia	\$2,218	12.4%	-2.27	6.32	18.40	7.20	6.93		10.32	1/1/2014
Risk Premia Custom Index			-2.26	6.30	18.41	7.20	6.93		10.34	
Excess Return			-0.01	0.02	-0.01	0.00	0.00		-0.02	
MSCI USA Index			-3.07	13.53	21.62	9.52	9.87			
Excess Return			0.80	-7.21	-3.22	-2.32	-2.94			
OST S&P 500 Index	\$2,810	15.7%	-3.26	13.09	21.63	10.13	9.94	11.94	12.75	10/1/2009
S&P 500 Index	. ,		-3.27	13.07	21.62	10.15	9.92	11.91	12.71	
Excess Return			0.01	0.02	0.01	-0.02	0.02	0.03	0.04	
OST S&P 400 Index	\$638	3.6%	-4.19	4.32	15.57	12.04	6.10	8.89	9.11	10/1/2009
S&P 400 Index			-4.20	4.27	15.51	12.05	6.06	8.77	8.94	
Excess Return			0.01	0.05	0.06	-0.01	0.04	0.12	0.17	
OST S&P 600 Index	\$294	1.6%	-4.91	0.92	10.19	12.13	3.34	7.36	7.47	4/1/2010
S&P 600 Index*			-4.93	0.81	10.08	12.10	3.18	7.20	7.06	
Excess Return			0.02	0.11	0.11	0.03	0.16	0.16	0.41	
OST Int'l Risk Premia	\$1,303	7.3%	-0.57	11.18	25.90	8.02	5.70		5.68	6/1/2017
MSCI World Ex US Cust Multi-Factor Index	, ,		-0.54	10.89	25.49	7.66	5.32		5.36	
Excess Return			-0.03	0.29	0.41	0.36	0.38		0.32	
MSCI World Ex US Index			-4.10	6.73	24.00	6.07	3.44			
Excess Return			3.53	4.45	1.90	1.95	2.26			



Spotlight: Internally Managed Portfolios Portfolio Management Activity

- Rebalance Activity Quarterly index rebalances resulted in 7,000+ equity trades over the trailing 12 months
- Index Changes For the 12-month period ending September 30, 2023, index changes, which occur outside of
 the quarterly rebalance cycle and include additions to, deletions from, and weight changes within the index,
 resulted in over 350 additional equity trades to maintain benchmark weights
- Corporate Actions For the 12-month period ending September 30, 2023, Staff manually elected on 220 corporate actions with approximately 4,400 being automatically submitted
- Process Improvements Implemented algo wheel trading enhancement, which improves trading efficiency by reducing time involved and automates decision-making process, while reducing risk of manual errors
- Internal Program Evaluation Completed comprehensive evaluation of Internal Equity Program through interdepartmental effort, including Investment Operations, Investment Accounting, and Portfolio Risk & Research teams, which validated current portfolios' value-add, with a single exception (OST U.S. Risk Premia)
 - Estimated 5-year value added per \$1 cost: \$2.18

2024 Preview:

- OST U.S. Risk Premia Liquidation providing liquidity (IAP Asset Transfer) and reducing contribution to active risk from style factor exposure
- Continued process improvements
- Broker onsites, manager due diligence, and global peer visits



Spotlight: Stewardship Strategic Role

- Stewardship Investment Officer
 - Enhance shareholder value through strategic corporate engagement, board interaction, collaborative governance, proxy voting, and advocating for independent boards aligned with shareholder interests.



Spotlight: Stewardship

Year in Review

Stewardship in 2023

ESG Integration

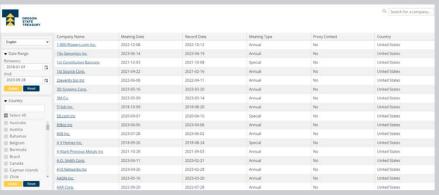
Assess and understand current managers and partners

Advocacy

- Passive Holder Active Owner
- Nomination Neutrality 2024 Proxy Initiative

Transparency

Proxy Disclosure Website





Spotlight: Stewardship Priorities/Goals

Stewardship in 2024

ESG Integration

 Develop systems for improved evaluation and integration in future relationships

Advocacy

Nomination Neutrality initiative

Transparency

Proxy Voting Principles

Operations

Proxy voting service provider RFP



2024 Preview

Priorities/Goals

- 1. Continue to meet the strategic role of the asset class
- 2. Continue to refine portfolio style factor exposure and active risk contribution
- 3. Diligence new investment themes and broader set of investment risks
- 4. Work with Meketa on DEI manager review
- 5. Securities Lending program review



Staff Recommendation

- ➤ Update INV 603: Internal Equity Portfolio Objectives & Strategies
 - Removal of reference to U.S. Risk Premia following liquidation in January 2024
 - Removal of reference to Emerging Markets Risk premia following previous liquidation and no intention to refund given operation and trading complexities



Biographies

Louise Howard

Director of Capital Markets

Investment Experience: 30 years

As Director of Capital Markets, Louise leads the Public Equity team on the oversight of the OPERF public equity portfolio, the Common School Fund, and the Oregon Savings Growth Plan. She also:

- Oversees the \$16.7 billion OPERF fixed income program comprised of a mix of 11 internal and external investment strategies
- Directs the management of five internally managed portfolios totaling approximately \$7.3 billion
- Leads the monitoring and evaluation efforts for the external and prospective investment managers
- Evaluates portfolio structure and makes recommendations to improve risk-adjusted returns
- Responsible for managing and coordinating the liquidity needs of OPERF by liquidating public equity assets for pension payments and private market capital calls
- Participates in private market Committee Meetings (Real Estate, Private Equity, Alternative, and Opportunistic)

Education & Certifications: BA University of New Orleans, MBA University of New Orleans, CFA Charterholder, CAIA Charterholder



Wil Hiles

Investment Officer, Public Equity Investment Experience: 11 years

As Investment Officer, Wil supports the Public Equity team's day-to-day activities surrounding OPERF by serving as a key contact for internal groups, external investment managers, the custodian bank, and other third-party providers. Wil also assists in overseeing the Oregon Common School Fund and the Oregon Savings Growth Plan.

- ❖ Monitors and evaluates current and prospective investment managers
- Evaluates portfolio structure and makes recommendations to improve risk-adjusted returns
- Coordinates new account fundings, terminations, portfolio transitions, and cash raise activity
- Assist in overseeing proxy voting and commission recapture programs
- Conducts market research and analysis
- Serves as internal equity portfolio manager and trader

Education: BA in Finance from Linfield College; Master of Science in Finance (MSF) from Pacific University



Philip Larrieu

Investment Officer of Stewardship Investment Experience: 22 years

As the Investment Officer of Stewardship, Philip leads the engagement, ESG integration, and stewardship initiatives for the Oregon State Treasury.

- ♦Integrates and enhances ESG objectives in investment processes.
- Enhances shareholder value through, board interaction and collaborative engagement
- Collaborates with other investors to advocate for governance structures that align with shareholder interests.
- ♦ Oversees Proxy Voting efforts

Education: BA Allegheny College, Chartered Financial Analyst (CFA), Chartered Alternative Investment Analyst Association (CAIA), Financial Risk Manager (FRM), Certificate in Investment Performance Measurement (CIPM), Certificate in Sustainability and Climate Risk (SCR)





Biographies

Claire IIIo

Investment Officer, Public Equity Investment Experience: 9 years

Claire assists with external manager monitoring and research, and leads other research initiatives, such as ESG and climate-focused projects for OPERF Public Equity. Claire also oversees the Oregon Savings Growth Plan.

- ❖Serves as portfolio manager and trader for internal enhanced index strategies.
- Assists in executing cash raises and transitions with OPERF's external investment managers.
- Attends meetings with and evaluate prospective managers;
- ❖Identifies new investment opportunities and leads new manager searches;
- Organizes and participates in quarterly portfolio reviews, as well as documenting quarterly analyses of all equity managers;
- *Facilitates multi-million dollar cash transfers and assists with other custody activity;

Education & Certifications: B.S. in Economics and Business Administration from University of Oregon.



Kenny Bao

Investment Analyst, Public Equity Investment Experience: 10 years

Kenny assists with prospective and external manager due diligence and overseeing OSGP.

- *Participates in quarterly portfolio reviews, as well as documenting quarterly analyses of equity managers;
- Assists in the operations of internally managed funds;
- ❖ Facilitates multi-million dollar cash transfers within OPERF accounts;
- Coordinates the opening of new equity markets (countries), which Oregon seeks to invest in; and
- ❖Produce routine reports pertaining to OPERF and OSGP.

Education & Certifications: B.S. in Economics from Portland State University.







OREGON STATE TREASURY

Oregon Public Employees Retirement Fund INV 603: Internal Equity – Portfolio Objectives & Strategies Staff Recommendation for Policy Revisions

Purpose

To revise INV 603: Internal Equity – Portfolio Objectives & Strategies

Given Staff's review of the internal equity portfolios and funding needs for IAP, Staff is liquidating the U.S. Risk Premia strategy (59GX) with prior CIO approval. Staff is seeking OIC approval to revise the current investment policy in INV 603 to reflect the removal of the strategy. Moreover, Staff would like to further revise INV 603 to reflect prior liquidations of the International Emerging Markets Risk Premia strategy and the OST Private Equity Stock Distribution Portfolio.

Staff Recommendation

Staff recommended revisions to INV 603: Internal Equity – Portfolio Objectives & Strategies as summarized above and provided in the accompanying documents.

INTRODUCTION & OVERVIEW

Summary Policy Statement

Internally managed, publicly traded investments in equity securities are permitted in the Oregon Investment Council ("OIC") Statement of Fund Governance, and the strategic role of such investments is delineated in the OIC Statement of Investment Objectives and Policy Framework for the Oregon Public Employees Retirement Fund ("OPERF" or the "Fund").

Purpose and Goals

The purpose of this policy is to specify portfolio strategies staff is authorized to manage internally, and to define governing risk, performance, and permitted investment parameters.

Applicability

Classified represented, management service, unclassified executive service.

Authority

ORS Chapter 293.

POLICY PROVISIONS

Internal Strategies

A. S&P Large Cap 500 Index Strategy

- The objective of the S&P 500 Index Strategy is to closely match the performance of the S&P 500
 Total Return Index using full index replication.
- 2. The S&P 500 Index Strategy is expected to outperform the S&P 500 Total Return Index by 5 basis points annualized over a market cycle with an expected tracking error of 10 basis points or less.
- 3. Permitted Holdings:
- a. Securities contained in the S&P 500 Index;
- b. Securities reasonably expected to be part of the S&P 500 Index at some future date;
- c. Securities that have recently been a member of the S&P 500 Index, to be liquidated within 6 months unless approved by the Chief Investment Officer (CIO) or the CIO's delegate;
- d. Exchange Traded Funds (ETFs) which replicate the S&P 500 Index such as iShares S&P 500 Index Fund (Ticker: IVV) or SPDR S&P 500 (Ticker: SPY);
- e. S&P 500 Index Futures (Large Contracts and Minis); and
- $f. \ \ U.S. \ Treasury \ Bills \ or \ other \ acceptable \ cash \ equivalents \ utilized \ for \ equity \ futures \ collateral.$

B. S&P Mid Cap 400 Index Strategy

- 1. The objective of the S&P 400 Index Strategy is to closely match the performance of the S&P 400 Total Return Index using full index replication.
- The S&P 400 Index Strategy is expected to outperform the S&P 400 Total Return Index by 10 basis points annualized over a market cycle with an expected tracking error of 30 basis points or less.
- 3. Permitted Holdings:
- a. Securities contained in the S&P 400 Index;
- b. Securities reasonably expected to be part of the S&P 400 Index at some future date;
- Securities that have recently been a member of the S&P 400 Index, to be liquidated within 6
 months unless approved by the CIO or the CIO's delegate;

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- d. ETFs which replicate the S&P 400 Index such as iShares S&P 400 Index Fund (Ticker: IJH);
- e. S&P 400 Index Futures (Large Contracts and Minis); and
- f. U.S. Treasury Bills or other acceptable cash equivalents utilized for equity futures collateral.

C. S&P Small Cap 600 Index Strategy

- 1. The objective of the S&P 600 Index Strategy is to closely match the performance of the S&P 600 Total Return Index using full index replication.
- The S&P 600 Index Strategy is expected to outperform the S&P 600 Index Total Return Index by 20 basis points annualized over a market cycle with an expected tracking of 50 basis points or less.
- 3. Permitted Holdings:
- a. Securities contained in the S&P 600 Index;
- b. Securities reasonably expected to be part of the S&P 600 Index at some future date;
- Securities that have recently been a member of the S&P 600 Index, to be liquidated within 6
 months unless approved by the CIO or the CIO's delegate;
- d. ETFs which closely track the S&P 600 Index; and
- d.e. S&P 600 Index futures and Russell 2000 Index Ffutures contracts; and
- e.a. ETFs which closely track the S&P 600 Index; and
- f. U.S. Treasury Bills or other acceptable cash equivalents used for equity futures collateral.

D. U.S. Risk Premia Strategy

- 1. The objective of the U.S. Risk Premia Strategy is to closely match the performance of the MSCI USA Multi factor Total Return Index (Bloomberg Ticker: M2CXEQM Index) using full index replication.
- 2. The MSCI USA Multi-factor Total Return Strategy has two return objectives: a) to outperform the MSCI USA Capitalization Index by 150 basis points annualized over a market cycle; b) to outperform the MSCI USA Multi-factor Total Return Index by 10 basis points annualized over a market cycle with an expected tracking error of 50 basis points or less. This strategy invests in a blend of risk premia or "factors" including momentum, value and quality. A key tenet supporting the risk premia strategy is that systematic tilts toward these and other discreet factors are rewarded in the form of excess returns over long-term investment horizons.
- 3. Permitted Holdings:
- a. Securities contained in the MSCI USA Index;
- b. Securities reasonably expected to be part of the MSCI USA Index at some future date;
- c. Securities that have recently been a member of the MSCI USA Index, to be liquidated within 6 months unless approved by the CIO or the CIO's delegate;
- d. ETFs which closely track either the MSCI USA or other U.S. Large Cap style/risk premia index;
- e. Russell 1000, Russell 2000, S&P 500, S&P 400 and S&P 600 Index Futures contracts; and
- f. U.S. Treasury Bills or other acceptable cash equivalents utilized for equity futures collateral.

DE. International Developed Risk Premia Strategy

- 1. The objective of the International Developed Risk Premia Strategy is to closely match the performance of the MSCI World ex-USA Diversified Multi-factor USD Net Total Return Index (Bloomberg Ticker: M1WOUDM) using full index replication.
- 2. The MSCI World ex-USA International Developed Risk Premia Strategy has two return objectives: a) to outperform the MSCI World ex-USA Index (net) by 150 basis points annualized over a market cycle; b) to outperform the MSCI World ex-USA Diversified Multi-factor USD Net Total Return Index (net) by 10 basis points annualized over a market cycle with an expected tracking error of 50 basis points or less. This strategy invests in a blend of risk premia or "factors" including, momentum, value, quality and low volatility. A key tenet supporting the risk premia strategy is that systematic tilts toward these and other discreet factors are rewarded in the form of excess returns over long-term investment horizons.
- 3. Permitted Holdings:

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- a. Securities contained in the MSCI World ex-USA Index;
- b. Securities reasonably expected to be part of the MSCI World ex-USA Index at some future date;
- Securities that have recently been a member of the MSCI World ex-USA Index, to be liquidated within 6 months unless approved by the CIO or the CIO's delegate;
- d. ETFs which closely track either the MSCI World ex-USA Index or other International Developed ex-U.S. style/risk premia indexes;
- e. MSCI EAFE and MSCI Canada Index Ffutures-contracts; and
- f. U.S. Treasury Bills or other acceptable cash equivalents utilized for equity futures collateral.

F. International Emerging Markets Risk Premia/ESG Strategy

- 1. The objective of the Emerging Markets Risk Premia/ESG Strategy is to closely match the MSCI EM Custom Multiple Factor ESG Net Total Return Index using full index replication.
- 2. The Emerging Markets Risk Premia/ESG Strategy has two return objectives: a) to outperform the MSCI Emerging Markets Index (net) by 150 basis points annualized over a market cycle; b) to outperform the MSCI EM Custom Multiple Factor ESG Net Total Return Index by 15 basis points with an expected tracking error of 75 basis points or less. This strategy invests in a blend of risk premia "factors" (including, momentum, value, quality and low volatility), and ESG factors. A key tenet supporting the risk premia strategy is that systematic tilts toward these and other discreet factors are rewarded in the form of excess returns over long term investment horizons.
- 3. Permitted Holdings:
- a. Securities contained in the MSCI Emerging Markets Index;
- Securities reasonably expected to be part of the MSCI Emerging Markets Index at some future date:
- Securities that have recently been a member of the MSCI Emerging Markets Index, to be liquidated within 6 months unless approved by the CIO or the CIO's delegate;
- d. ETFs which closely track either the MSCI Emerging Markets Index or other Emerging Markets style/risk premia index;
- e. MSCI Emerging Markets futures contracts; and
- f. U.S. Treasury Bills or other acceptable cash equivalents utilized for equity futures collateral.

G. OST Private Equity Stock Distribution Portfolio

- The objective of the OST Private Equity Stock Distribution Strategy is to liquidate stocks received from the OPERF Private Equity Portfolio.
- This portfolio will not have any assigned benchmark, as the main objective of this strategy is to
 liquidate stocks at a price that matches or exceeds the distribution price set by the distribution
 general partner.
- 3. Securities will be liquidated within 12 months unless approved by the CIO or the CIO's delegate.

Policy Statements

A. Best Execution

In managing funds, investment officers shall pursue "Best Execution" during the trading process; and seek to maximize a portfolio's value consistent with its stated investment objectives and any applicable constraints. As part of the Best Execution pursuit, OST investment officers will perform the following duties: (1) accurately determine portfolio trading requirements; (2) select appropriate trading techniques, venues and agents; (3) monitor and control liquidity, endeavoring to avoid excessive market impact; (4) protect beneficiaries' interests and investment managers' proprietary information; and (5) evaluate trading results and effectiveness on a continual basis.

B. Broker Selection, Monitoring, and Termination

OST staff shall maintain a list of acceptable brokers (the Authorized Broker List) with whom equity

securities trades may be executed for internally-managed portfolios. All trades for internally-managed equity portfolios shall be executed through brokers on the Authorized Broker List, and additions to the Authorized Broker List shall be approved by the CIO or the CIO's delegate. All approved brokers will adhere to the following requirements:

- 1. Brokers on the Approved Broker List must be registered with the Securities and Exchange Commission (SEC) and the Financial Industry Regulatory Authority (FINRA);
- 2. Brokers on the Authorized Broker List must not be under review for serious wrongdoing (penalties for which the broker faces severe impairment of its abilities to conduct future business) nor under suspension by the SEC, FINRA, U.S. Commodity Futures Trading Commission (CFTC), or any other U.S. securities regulatory body;
- 3. Brokers on the Authorized Broker List shall not have conflicts of interests due to direct familial relationships between a supervisory or contact/executing broker and any direct relative of any OST staff member:
- 4. The assigned representative at a broker on the Authorized Broker List must have experience servicing an institutional client with over \$1 billion of equity assets and supply at least one reference for that relationship;
- 5. OST Investment Division staff must be satisfied that a broker on the Authorized Broker List has adequate financial resources to perform the necessary services, as well as the capability to execute trades in a competent manner; and
- The CIO shall provide advance approval for any soft dollar services (as defined in INV 601) received by OST in connection with the internal portfolio management activities.

C. Absolute Restrictions

The internally-managed public equity portfolios may not make the following types of investments without the specific advanced written approval of both the CIO and OIC:

- 1. Short sales of securities;
- 2. Notional equity exposure in excess of a portfolio's Net Asset Value;
- 3. Commodities; and
- 4. Non-U.S. dollar denominated fixed income securities issued by entities incorporated or chartered outside of the United States.

D. Correction of Non-Compliance

If an internally managed public equity portfolio is found to be out of compliance with one or more adopted investment guidelines or is being managed inconsistently with its policy and objectives, Staff shall bring the portfolio into compliance as soon as is prudently feasible. Actions to bring internally managed public equity portfolios back into compliance and justification for such actions, including documentation of proposed and actual resolution strategies shall be coordinated with the Oregon State Treasury investment compliance program.

E. OST Staff Authority and Reporting

OST Staff, with approval from the CIO, has the authority to approve changes to the "Permitted Holdings" sections of this Policy.

Exceptions

None

Failure to Comply

Failure to comply with this policy may be cause for disciplinary action up to and including dismissal.

PROCEDURES and FORMS ADMINISTRATION

Feedback

Your comments are extremely important to improving the effectiveness of this policy. If you would like to comment on the provisions of this policy, you may do so by e-mailing the Policy Analyst. To ensure your comments are received without delay, please list the policy number and name in your e-mail's subject. Your comments will be reviewed during the policy revisions process and may result in changes to the policy.

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The purpose of this policy is to specify portfolio strategies staff is authorized to manage internally, and to define governing risk, performance, and permitted investment parameters.

Applicability

Classified represented, management service, unclassified executive service.

Authority

ORS Chapter 293.

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- 2. The S&P 500 Index Strategy is expected to outperform the S&P 500 Total Return Index by 5 basis points annualized over a market cycle with an expected tracking error of 10 basis points or less.
- 3. Permitted Holdings:
- a. Securities contained in the S&P 500 Index;
- b. Securities reasonably expected to be part of the S&P 500 Index at some future date;
- c. Securities that have recently been a member of the S&P 500 Index, to be liquidated within 6 months unless approved by the Chief Investment Officer (CIO) or the CIO's delegate;
- d. Exchange Traded Funds (ETFs) which replicate the S&P 500 Index such as iShares S&P 500 Index Fund (Ticker: IVV) or SPDR S&P 500 (Ticker: SPY);
- e. S&P 500 Index Futures; and
- f. U.S. Treasury Bills or other acceptable cash equivalents utilized for equity futures collateral.

B. S&P Mid Cap 400 Index Strategy

- 1. The objective of the S&P 400 Index Strategy is to closely match the performance of the S&P 400 Total Return Index using full index replication.
- 2. The S&P 400 Index Strategy is expected to outperform the S&P 400 Total Return Index by 10 basis points annualized over a market cycle with an expected tracking error of 30 basis points or less.
- 3. Permitted Holdings:
- a. Securities contained in the S&P 400 Index;
- b. Securities reasonably expected to be part of the S&P 400 Index at some future date;
- c. Securities that have recently been a member of the S&P 400 Index, to be liquidated within 6 months unless approved by the CIO or the CIO's delegate;

- d. ETFs which replicate the S&P 400 Index such as iShares S&P 400 Index Fund (Ticker: IJH);
- e. S&P 400 Index Futures; and
- f. U.S. Treasury Bills or other acceptable cash equivalents utilized for equity futures collateral.

C. S&P Small Cap 600 Index Strategy

- 1. The objective of the S&P 600 Index Strategy is to closely match the performance of the S&P 600 Total Return Index using full index replication.
- 2. The S&P 600 Index Strategy is expected to outperform the S&P 600 Index Total Return Index by 20 basis points annualized over a market cycle with an expected tracking of 50 basis points or less.
- 3. Permitted Holdings:
- a. Securities contained in the S&P 600 Index;
- b. Securities reasonably expected to be part of the S&P 600 Index at some future date;
- c. Securities that have recently been a member of the S&P 600 Index, to be liquidated within 6 months unless approved by the CIO or the CIO's delegate;
- d. ETFs which closely track the S&P 600 Index;
- e. S&P 600 Index futures and Russell 2000 Index Futures; and
- f. U.S. Treasury Bills or other acceptable cash equivalents used for equity futures collateral.

D. International Developed Risk Premia Strategy

- 1. The objective of the International Developed Risk Premia Strategy is to closely match the performance of the MSCI World ex-USA Diversified Multi-factor USD Net Total Return Index (Bloomberg Ticker: M1WOUDM) using full index replication.
- 2. The MSCI World ex-USA International Developed Risk Premia Strategy has two return objectives: a) to outperform the MSCI World ex-USA Index (net) by 150 basis points annualized over a market cycle; b) to outperform the MSCI World ex-USA Diversified Multi-factor USD Net Total Return Index (net) by 10 basis points annualized over a market cycle with an expected tracking error of 50 basis points or less. This strategy invests in a blend of risk premia or "factors" including, momentum, value, quality and low volatility. A key tenet supporting the risk premia strategy is that systematic tilts toward these and other discreet factors are rewarded in the form of excess returns over long-term investment horizons.
- 3. Permitted Holdings:
- a. Securities contained in the MSCI World ex-USA Index;
- b. Securities reasonably expected to be part of the MSCI World ex-USA Index at some future date;
- c. Securities that have recently been a member of the MSCI World ex-USA Index, to be liquidated within 6 months unless approved by the CIO or the CIO's delegate;
- d. ETFs which closely track either the MSCI World ex-USA Index or other International Developed ex-U.S. style/risk premia indexes;
- e. MSCI EAFE and MSCI Canada Index Futures; and
- f. U.S. Treasury Bills or other acceptable cash equivalents utilized for equity futures collateral.

Policy Statements

A. Best Execution

In managing funds, investment officers shall pursue "Best Execution" during the trading process and seek to maximize a portfolio's value consistent with its stated investment objectives and any applicable constraints. As part of the Best Execution pursuit, OST investment officers will perform the following duties: (1) accurately determine portfolio trading requirements; (2) select appropriate trading techniques, venues and agents; (3) monitor and control liquidity, endeavoring to avoid excessive market impact; (4) protect beneficiaries' interests and investment managers' proprietary information; and (5) evaluate trading results and effectiveness on a continual basis.

B. Broker Selection, Monitoring, and Termination

OST staff shall maintain a list of acceptable brokers (the Authorized Broker List) with whom equity securities trades may be executed for internally-managed portfolios. All trades for internally-managed equity portfolios shall be executed through brokers on the Authorized Broker List, and additions to the Authorized Broker List shall be approved by the CIO or the CIO's delegate. All approved brokers will adhere to the following requirements:

- 1. Brokers on the Approved Broker List must be registered with the Securities and Exchange Commission (SEC) and the Financial Industry Regulatory Authority (FINRA);
- 2. Brokers on the Authorized Broker List must not be under review for serious wrongdoing (penalties for which the broker faces severe impairment of its abilities to conduct future business) nor under suspension by the SEC, FINRA, U.S. Commodity Futures Trading Commission (CFTC), or any other U.S. securities regulatory body;
- 3. Brokers on the Authorized Broker List shall not have conflicts of interests due to direct familial relationships between a supervisory or contact/executing broker and any direct relative of any OST staff member;
- 4. The assigned representative at a broker on the Authorized Broker List must have experience servicing an institutional client with over \$1 billion of equity assets and supply at least one reference for that relationship;
- 5. OST Investment Division staff must be satisfied that a broker on the Authorized Broker List has adequate financial resources to perform the necessary services, as well as the capability to execute trades in a competent manner; and
- 6. The CIO shall provide advance approval for any soft dollar services (as defined in INV 601) received by OST in connection with the internal portfolio management activities.

C. Absolute Restrictions

The internally-managed public equity portfolios may not make the following types of investments without the specific advanced written approval of both the CIO **and** OIC:

- 1. Short sales of securities;
- 2. Notional equity exposure in excess of a portfolio's Net Asset Value;
- 3. Commodities; and
- 4. Non-U.S. dollar denominated fixed income securities issued by entities incorporated or chartered outside of the United States.

D. Correction of Non-Compliance

If an internally managed public equity portfolio is found to be out of compliance with one or more adopted investment guidelines or is being managed inconsistently with its policy and objectives, Staff shall bring the portfolio into compliance as soon as is prudently feasible. Actions to bring internally managed public equity portfolios back into compliance and justification for such actions, including documentation of proposed and actual resolution strategies shall be coordinated with the Oregon State Treasury investment compliance program.

E. OST Staff Authority and Reporting

OST Staff, with approval from the CIO, has the authority to approve changes to the "Permitted Holdings" sections of this Policy.

Exceptions

None

Failure to Comply

Failure to comply with this policy may be cause for disciplinary action up to and including dismissal.

PROCEDURES and FORMS

ADMINISTRATION

Feedback

Your comments are extremely important to improving the effectiveness of this policy. If you would like to comment on the provisions of this policy, you may do so by e-mailing the Policy Analyst. To ensure your comments are received without delay, *please list the policy number and name in your e-mail's subject*. Your comments will be reviewed during the policy revisions process and may result in changes to the policy.





TAB 8 AUDITS REVIEW



Internal Audit (IA) Team, Structure & Independent Reporting

Purpose: To provide an independent, objective assurance and consulting services that facilitate improved government operations

Mission:

- (i) To enhance and protect the value of the OST by providing risk-based and objective assurance, advice and insight
- (ii) To help OST accomplish the agency objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

Reporting: To ensure independence, internal audit reports to the Deputy Treasurer and functionally to the Treasurer

Structure and Work Organization:

1. Michael MAKALE (Chief Audit Executive)

Heads the Internal audit division. Michael has a wide audit and financial services, encompassing public and private sector, banking, consulting, and not for profits, both in US and Africa. Key expertise in audit, finance, compliance and risk management.

- 2. Two auditors support the CAE in execution of audit work.
- 3. Part of audit work performed by Oregon Secretary of State and external CPA firms.



Audit Committee and Audit Charters

Charters

The IA function is governed by two charters (polices): Internal Audit Charter (approved 07-22-22), and the Audit Committee Charter (approved 02-08-23).

Mandate for the establishment of the audit committee (AC): Stipulated by the Oregon Revised Oregon Statute (ORS) 184.360

Composition of Audit Committee

- ☐ At least three and not more than five members, who must be external and independent to OST, including the Chair
- ☐ The members shall serve for two years, renewable for another two years based on performance / effective participation, and willingness to serve
- ☐ Service is voluntary i.e., no remuneration

OST Audit Committee activities:

- Current composition: Five members three external and two internal: Chair Romana Autrey, Professor of Accounting, Willamette University (Chair), Russell Casler, Deputy Director in ODOT, Jason Werts, CEO of Advantis Credit Union), Deputy Treasurer, and OST Legal Counsel
- Four meetings held: Member orientation(December 2022), and Audit Committee meetings (March,



August and December 2023)

Audit of Investment Programs

In line with the Internal Audit Plan, the Treasury Policy on internal control and operational reviews (INV 209), and state regulatory requirements on agency audits (ORS 293.776, ORS 293.721, and ORS 293.726), OST Internal Audit (IA) Services is required to undertake the following:

- 1. On an annual basis: Perform an audit over one of the major asset classes (i.e., Public Equity, Fixed Income, Real Estate, Private Equity, Alternatives, Opportunity Portfolio etc...) for each year ending June 30.
- 2. At least once every four years Perform a comprehensive operational review of OST's investment management practices in a specific portfolio or asset class as compared to the investment management practices used by institutional investors of similar size and objective. (ORS 293.776).
- 3. Audit coverage and reporting:
 - a) IA Services to audit, co-source or outsource portions, or the entirety, of work to qualified consultants through a request for proposal (RFP).
 - b) IA Services to deliver a written report on the results of the work performed to OST management.
 - c) On an annual basis, the Chief Audit Executive (CAE) to inform the OIC of audit and review results.



Completed Audits of Investment Programs

Table A – Audited Investment Programs

Name of Audit	Division (D) / Function (F)	Issuance Report Date	Conclusion	Significant Findings
Portfolio Risk & Research (PR&R)	Investment (D)	August 9 th , 2023	Satisfactory	None
Investment Management Contracts	Investment (D)	August 9 th , 2023	Satisfactory	None
Public Equity Audit	Investment (D)	December 6th, 2023	Satisfactory	None
Follow up on prior year's audit findings	OST / Treasury / Agency-wide	Continuous and Ongoing	Satisfactory remediation processes	None



Planned Audits On Other Investment Programs

Table B – Planned Audits on other Investment Programs

Name of Audit	Division	Planned Audit (Quarter / Month)	Internal / External
Investment Operations (Accounting, trading, etc)	Investment	Q3 of 2023/24 (Aug 2024)	Internal
Capital Markets – Fixed Income and Diversified Strategies	Investment	Q4 of 2023/25 (Sep 2025)	Internal
Private Markets – Real Estate	Investment	Q1 of 2024/25 (Apr 2026)	Outsource (RFP)
Private Markets – Opportunity	Investment	Q2 of 2024/25 (Sep 2026)	Outsource (RFP)
Private Markets – Real Assets	Investment	Q3 of 2024/25 (Sep 2026)	Outsource (RFP)
Private Markets – Private Equity	Investment	Q4 of 2024/25 (Sep 2026)	Outsource (RFP)



Other Audit Activities by Internal Audit

Table E (Continued) – Other Completed and Ongoing Audit Activities by Internal Audit per the Audit Plan

Name of Audit	Division	Issuance Report Date	Conclusion	Comments
OST Audit Risk Assessment 2023/24	OST / Treasury / Agency-wide	August 9 th , 2023	High level priority areas & risks	Summary in next slide (#9)
Other performed audits relate to other programs in Treasury e.g.: 1. PMO 2. Procurement 3. Debt Management 4. Incident Management (Information Security) 5. DR / BCP	Admin, DMD, IT, risk & resilience	Various dates	Satisfactory	N/A
Follow up on prior year's audit findings	OST / Treasury / Agency-Wide	Continuous	Internal Audit Plan	All findings were low-risk rated
Risk-Control assessment & mapping, and updates to the audit procedures & manual	All Programs	Continuous	Updated database & Processes	N/A



Key Priority / Risk Areas Noted During the 2023 IA Risk Assessment (2023/2024 Plan)

Potential Key Risks Identified from the 2023/24 OST Risk Assessment

- 1. **Planning for Transition at the Treasury** Expected executive leadership changes, smooth transition, knowledge transfer, etc..
- 2. **Net Zero Project** Treasurer expected to deliver a proposal to OIC in Feb 2024 meeting and facilitate discussions with Oregon legislature.
- 3. Business Continuity Planning (BCP), Disaster Recovery (DR), Continuity of Operations (COOP) and Contingency Planning Update of key policies, and contingency plans (i.e. DR plan, BIA plan, BCP plan, etc.) and agency-wide enterprise solution
- 4. **Systems' Resilience** Ongoing / needed systems enhancement of legacy systems e.g. investment, finance, debt management, accounting, IT, etc..
- 5. **Risk Management, Compliance and Reporting** Proactive and enhanced risk management, compliance and reporting requirements in Investment, Debt Management and Trust Property Divisions.
- 6. **People Management** Continued and enhanced engagement with employees and succession planning.
- 7. **Debt Management and Advisory** Popular state guaranteed debt utilized by various agencies and school bond guarantee and its impact on total state debt committed.



Comments, Questions, etc.

Thank you.

Michael Makale, CAE, Internal Audit, OST.



LaVonne Griffin-Valade Secretary of State
Cheryl Myers Deputy Secretary of State, Tribal Liaison
Kip Memmott Audits Director

COMMUNICATION WITH THOSE CHARGED WITH GOVERNANCE For the Oregon State Treasury

To Oregon Investment Council and Oregon State Treasury Management

We have audited the financial statements of the Oregon Short Term Fund (OSTF), Oregon Intermediate Term Pool (OITP), and the Oregon Local Government Intermediate Fund (OLGIF) as of and for the year ended June 30, 2023, and have issued our report thereon dated August 29, 2023, for OSTF and OLGIF and September 8, 2023 for OITP. Professional standards require that we provide you with the following matters relating to our audit.

Auditor's Responsibility

As communicated in our engagement letter dated May 23, 2023, our responsibility, as described by professional standards, is to form and express an opinion about whether the financial statements that have been prepared by management are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States. Our audit of the financial statements does not relieve you or management of your responsibilities.

Our responsibility, as prescribed by professional standards, is to plan and perform the audit to obtain reasonable, rather than absolute, assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Oregon State Treasury's internal control over financial reporting. Accordingly, we considered internal control solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control.

We are also responsible for communicating significant matters arising during the of the financial statements that are relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures for the purpose of identifying other matters to communicate to you.

Planned Scope and Timing of the Audit

We performed the audit according to the planned scope and timing previously communicated via our engagement letter and discussion with management during our audit.

Qualitative Aspects of Accounting Practices

Significant Accounting Policies

Management has the responsibility to select and use appropriate accounting policies. A summary of the significant accounting policies used by the Oregon State Treasury are described in Note 1 to the financial statements. No new accounting policies were adopted and there were no changes in the application of existing policies during the fiscal year. No matters have come to our attention that would require us, under professional standards, to inform you about (1) the methods used to account for significant unusual transactions and (2) the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.

Significant Accounting Estimates

Accounting estimates are an integral part of the financial statements/information prepared by management and are based on management's current judgments. These judgments are normally based on knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ markedly from management's current judgments. Although investment valuation can be an estimate in some circumstances, the investments in the OSTF, OLGIF, and OITP are valued by an external party and our audit procedures verified that the valuations were reasonable based upon other external pricing sources.

Financial Statement Disclosures

Certain financial statement disclosures involve significant judgment and are particularly sensitive because of their significance to the financial statement users. The disclosures in the financial statements are consistent, clear, and understandable.

Significant Audit Matters

Significant Findings or Issues

No findings or issues came to our attention that are significant and relevant to those charged with governance regarding their responsibility to oversee the financial reporting process.

Management Representations

We have requested and received certain written representations from management that are included in the management representation letter dated August 29, 2023, for OSTF and OLGIF and September 8, 2023 for OITP.

This communication is intended solely for the information and use of the Oregon Investment Council and management of the Oregon State Treasury and is not intended to be and should not be used by anyone other than these specified parties.

Office of the Secretary of State, audita Division

STATE OF OREGON





TAB 9 CALENDAR – FUTURE AGENDA ITEMS

2023-24 OIC Forward Calendar and Planned Agenda Topics

February 6, 2024 Treasurer Read Climate Plan

March 6, 2024 2023 Performance Review: OPERF, CSF, SAIF

Real Assets Portfolio Review Real Estate Portfolio Review

April 17, 2024 Diversifying Strategies Portfolio Review

Opportunity Portfolio Review

Individual Account Program (IAP) Review

OSGP Annual Review

May 29, 2024 Q1 Performance Review: OPERF

July 17, 2024 OST Fixed Income Program Review

September 4, 2024 Q2 Performance Review: OPERF, CSF, SAIF

October 23, 2024 Operations Annual Review

December 4, 2024 Q3 OPERF Performance

Fixed Income Portfolio Review: OPERF Diversifying Strategies Portfolio Review

January 22, 2025 Public Equity Portfolio Review

Private Equity Portfolio Review 2026 OIC Calendar Approval





TAB 10 OPEN DISCUSSION





TAB 11

PUBLIC COMMENTS

Public comments can now be found at the OIC website at:

https://www.oregon.gov/treasury/invested-for-oregon/pages/oregon-investment-council.aspx