



**OREGON
STATE
TREASURY**

Oregon Investment Council

January 25, 2023

Cara Samples
Chair

Tobias Read
State Treasurer

Rex Kim
Chief Investment Officer



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

Main Office
867 Hawthorne Ave SE
Salem, OR 97301

oregon.gov/treasury
oregon.treasurer@state.or.us



OREGON INVESTMENT COUNCIL

Agenda

January 25, 2023
9:00 AM

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

<u>Time</u>		<u>Presenter</u>	<u>Tab</u>
9:00	1. Review & Approval of Minutes December 7, 2022	Cara Samples <i>OIC Chair</i>	1
	2. Committee Reports	Rex Kim <i>Chief Investment Officer</i>	2
	3. <u>Action Item</u>: 2024 OIC Calendar Approval	Cara Samples <i>OIC Chair</i>	3
9:10-10:10	4. Private Equity Market Review	Martin Escobari <i>Co-President, General Atlantic</i> Graves Tompkins <i>Global Head of Capital Partnering, General Atlantic</i> Andrea Joseph <i>Managing Director, Capital Partnering, General Atlantic</i>	4
10:10-11:30	5. OPERF Private Equity Annual Review (<u>Action Item</u>: Liquidity Program Recycling)	Michael Langdon <i>Director of Private Markets</i> Thomas Martin <i>Head of Private Equity & Real Assets, Aksia</i> Karen Jacobi <i>Senior Managing Director, Pathway Capital Management</i> Derrek Ransford <i>Managing Director, Pathway Capital Management</i> Pete Veravanich <i>Managing Director, Pathway Capital Management</i>	5

Cara Samples
Chair

John Russell
Vice-Chair

Lorraine Arvin
Member

Pia Wilson-Body
Member

Tobias Read
State Treasurer

Kevin Olineck
PERS Director

11:30-12:00	6. OPERF Opportunity Portfolio Annual Review (<u>Action Item</u>: INV 703 Updates)	Mike Mueller <i>Investment Officer, Alternatives</i> Ben Bronson <i>Senior Portfolio Advisor, Aksia</i>	6
12:00	7. Asset Allocation & NAV Updates a. Oregon Public Employees Retirement Fund b. SAIF Corporation c. Common School Fund	Rex Kim	7
	8. Calendar — Future Agenda Items	Rex Kim	8
12:00	9. Open Discussion	OIC Member Staff Consultants	
12:00	10. Public Comments		

O I C



OREGON
STATE
TREASURY

TAB 1
REVIEW & APPROVAL OF MINUTES



**OREGON
STATE
TREASURY**

State of Oregon

Office of the State Treasurer

16290 SW Upper Boones Ferry Road
Tigard, Oregon 97224

OREGON INVESTMENT COUNCIL

December 7, 2022

Meeting Minutes

Members Present: Cara Samples, Lorraine Arvin, Tobias Read, Kevin Olineck, John Russell, Pia Wilson-Body

Staff Present: Rex Kim, John Hershey, Michael Langdon, David Randall, Karl Cheng, Michael Mueller, Chris Ebersole, Alli Gordon, Louise Howard, Wil Hiles, Claire Illo, Kenny Bao, Doug Greiner

Staff Participating Virtually: Aaron Schaffer, Ahman Dirks, Aliese Jacobsen, Amanda Kingsbury, Amy Bates, Andrew Coutu, Andrew Hillis, Andrew Robertson, Andrey Voloshinov, Austin Carmichael, Ben Mahon, Bradley Curran, Caitlyn Wang, Chuck Christopher, Dana Millican, David Elott, Debra Day, Deena Bothello, Eric Messer, Faith Sedberry, Ian Huculak, Jen Plett, Jeremy Knowles, Jo Recht, John Lutkehaus, Josh Jones, Krystal Korthals, Lisa Pettinati, Mark Selfridge, Mohammed Quraishi, Paul Koch, Perrin Lim, Philip Larrieu, Roy Jackson, Ryan Auclair, Ryan Mann, Sam Spencer, Scott Robertson, Sebrina Gridley, Sommer May, Tan Cao, Taylor Bowman, Tiffany Zahas, Tim Miller, Tim Powers, Tyler Bernstein, Will Hampson

Consultants Present: Colin Bebee, Allan Emkin, Paola Nealon, Mika Malone, Christy Fields (Meketa Investment Group, Inc); Ada Lin (Milliman); Raneen Jalajel (Aon), Ben Bronson, Trevor Jackson, Tom Martin, (Akesia)

PERS Present: Kevin Olineck

Legal Counsel Present: Steve Malone (Department of Justice)

The December 7, 2022 OIC meeting was called to order at 9:00 am by Cara Samples, Chair.

I. 9:00 am Review and Approval of Minutes

MOTION: Chair Samples asked for approval of the November 2, 2022 OIC regular meeting minutes. Chair Samples moved approval at 9:01 am, and Treasurer Read seconded the motion which then passed by a 5/0 vote.

II. 9:01 am Committee Reports

Private Equity Committee:

December 6	GGV IX, IX Plus & Discovery IV	\$150M
December 6	GTCR XIV	\$250M



**OREGON
STATE
TREASURY**

Real Estate Committee:

None

Opportunity Committee:

None

Alternatives Portfolio Committee:

November 8 Marshall Wace Alpha Plus (US) Fund II \$200M

Staff Discretion:

Common School Fund

November 8 Marshall Wace Alpha Plus (US) Fund II \$7.5M

December 6 GTCR XIV \$15M

III. 9:02 am OPERF Asset Allocation/Liability Analysis

Karl Cheng, Senior Investment Officer, Portfolio Risk & Research introduced the presenters. Allan Emkin, Managing Principal, Meketa and Raneen Jalajel, Associate Partner, Aon, provided a presentation about OPERF Asset and Liability Analysis, including a review of liquidity risk under the various proposed options.

Staff and consultants provided to the Council for consideration three options, with each at a different level of risk. Each of the three options provides a varying degree of allocation to public equity and fixed income, which provides for different levels of portfolio volatility. Staff recommends approval of one of three asset allocation options and associated policy revisions.

At the November board meeting, investment consultants and staff presented three options for OPERF asset allocation, including a recommendation for what was then labeled "Option 2". At the conclusion of that presentation, the Council requested analyses by the investment consultants of two additional asset allocations, labeled "Option 2A" with more Public Equity and "Option 2B" with more Fixed Income. Each of the options removes Risk Parity, adding that amount to Public Equity and Fixed Income rather than Private Equity.

MOTION: Chair Samples moved approval of "Option 2A", the motion was seconded by Member Russell and passed by a vote of 5/0.

Staff recommended approval of the proposed revision to INV 1203 updated with the asset allocation just approved by OIC.

MOTION: Treasurer Read moved approval of staff recommendation, the motion was seconded by Member Russell and passed by a vote of 5/0.

IV. 9:13 am OPERF Opportunity Portfolio Consultant Approval

Mike Mueller, Investment Officer, Alternatives gave an update on the OPERF Opportunity Portfolio Investment Policy.

On July 12, 2022, the OST Investment Division issued an RFP for Opportunity Portfolio Consulting services on behalf of the OIC. A total of three proposals were received and independently reviewed and scored by the Committee members who met on September 15, 2022. Subject to the satisfactory negotiation of terms and conditions with Staff working in concert with legal counsel, the Opportunity Portfolio Consulting services search Committee unanimously recommends that the OIC pursue a non-discretionary, consulting contract with Aksia LLC beginning January 1, 2023. The Committee further recommends pursuing an initial three-year contract term with two pre-negotiated two-year extensions, available at the Council's discretion.



MOTION: Member Russell moved approval of staff recommendation, the motion was seconded by Treasurer Reed passed by a vote of 5/0.

V. 9:15 am OPERF Public Equity Annual Review

Louise Howard, Senior Investment Officer, Public Equity introduced the presenters in addition two new members to the Public Equity Team, Kenny Bao and Doug Greiner. Louise Howard, Senior Investment Officer, Wil Hiles, Investment Officer, Public Equity, Claire Illo, Investment Officer, Public Equity, Raneen Jalajel, Associate Partner, Aon, Paola Nealon, Managing Partner, Meketa presented the OPERF Public Equity Portfolio Annual Review.

Public equity represented 19.4% of OPERF as of September 30, 2022. Total Public Equity is \$18.1 Billion and 32 Accounts. Internally-managed portfolios comprise 39.1 % of public equity assets. Staff continues to evaluate exposures with respect to size and value along with low volatility.

VI. 10:20 am OPERF Q3 Performance Review

Mika Malone, Managing Partner, Meketa, Allan Emkin, Managing Partner, Meketa, Paola Nealon, Managing Partner, Meketa presented the OPERF Q3 Performance Review.

Meketa provided a review of the Economic and Market Update, Executive Summary for Q3 and a Performance Update all as of September 30, 2022.

VII. 10:48 am Asset Allocation & NAV Updates

Rex Kim, Chief Investment Officer presented the asset allocation and NAV updates.

VIII. 10:49 am Calendar – Future Agenda Items

Rex Kim presented the forward calendar. Some modest changes are being made to the forward calendar and several topics will remain the same. The updated forward calendar will be presented during January's board meeting.

IX. 10:50 am Open Discussion

Chair Samples opened the floor for discussion.

Chair Samples thanked Treasurer Reed for bringing forth the issue of decarbonization of the portfolio and requested establishing a workplan for how the OIC can prepare for an educated and well considered debate on the issue when more details are brought forward by the Treasurer.

Member Arvin noted studies will need to be incorporated and associated costs reviewed.

Member Russell read a statement pertaining to the Treasury and staff.

Kevin Olineck stated that at the most recent PERS board meeting, Milliman presented their 2022 Financial Modeling Presentation which is currently available on the PERS website for review.

X. 10:57 am Public Comments

Chair Samples opened the floor to public comments. Public comments have also been submitted electronically and included with the public meeting book.

Ms. Samples adjourned the meeting at 11:18 pm.



**OREGON
STATE
TREASURY**

Respectfully submitted,
Alli Gordon
Executive Support Specialist

O I C



OREGON
STATE
TREASURY

TAB 2
COMMITTEE REPORTS

O I C



OREGON
STATE
TREASURY

TAB 3

2024 OIC CALENDAR APPROVAL

OREGON INVESTMENT COUNCIL

2024 Meeting Schedule

Meetings Begin at 9:00 am

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

Wednesday, January 24

Wednesday, March 6

Wednesday, April 17

Wednesday, May 29

Wednesday, July 17

Wednesday, September 4

Wednesday, October 23

Wednesday, December 4

O I C



OREGON
STATE
TREASURY

TAB 4
PRIVATE EQUITY
MARKET REVIEW

O I C

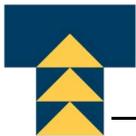


OREGON
STATE
TREASURY

TAB 5
OPERF PRIVATE EQUITY
ANNUAL REVIEW

January 25, 2023

OPERF Private Equity Annual Review & 2023 Plan



OREGON
STATE
TREASURY

Agenda

Section	Pages	OIC Investment and Management Beliefs Mapping																	
		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																		
Investment Environment	6																		
Implementation Review	7																		
Private Equity Portfolio Positioning	8-13																		
Pathway Update	14-19																		
2022 Year In Review	20-24																		
Relative Returns & Attribution	25-31																		
Allocation Relative to Target	32-37																		
Rollforward Portfolio & 2023 Plan	38-39																		
Closing	40																		
Appendix	41-61																		

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.
- 8 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.



Private Equity Strategic Role

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

- 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

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

- 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

9/30/2022	1 Yr.	3 Yr.	5 Yr.	10 Yr.
OPERF Private Equity	-3.9%	17.4%	15.9%	14.0%
Russell 3000 + 3%	-14.7%	12.8%	13.1%	15.9%
<i>OPERF Value-Add:</i>	10.8%	4.6%	2.8%	-1.9%
MSCI ACWI + 3%	-17.9%	8.7%	8.9%	11.8%
<i>OPERF Value-Add:</i>	14.0%	8.7%	7.0%	2.2%
Burgiss All Funds Ex. Real Assets	-1.5%	19.9%	17.3%	15.1%
<i>OPERF Value-Add:</i>	-2.4%	-2.5%	-1.4%	-1.1%



Private Equity Portfolio Positioning

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

- 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

As is the case in volatile markets...

1. Activity has slowed meaningfully due to a lack of financing, price discovery and confidence in the macro
2. There is currently an extreme disconnect between public and private equity markets from a valuation and, consequently, trailing return perspective
3. The resulting impact on the broader portfolio's asset allocation and liquidity is meaningful, and short-term solutions are costly

Patience and consistency are rewarded over the long-term in private markets



Investment Environment

- **M&A Activity**

- Transaction volumes through Q3-22 appear strong on the surface, but 2022 activity is buttressed by deals announced in 2021 and closed in 2022. Quarter-by-quarter results in 2022 reflect a meaningful slowdown in deal activity as the year progressed
- Private equity sponsors account for ~40% of YTD activity, and ~70% of sponsor backed M&A deals are add-on acquisitions for existing platforms

- **Corporate Leveraged Finance**

- New issue volumes are off ~70% from a record 2021, reflecting the realities of higher rates and greater uncertainty
- Likewise, private equity sponsor backed new issue volumes are roughly a third of what they were in 2021

- **Private Equity Returns**

- Due to recent public market volatility and the vagaries of private market valuations, there is a temporary disconnect between the two markets with the private equity asset class down only 2% LTM through 9/30/22
- This phenomenon is most acute in the VC asset class, which is down only 7% for the YE 9/30/22 despite a massive correction in the valuation of unprofitable technology companies in the public markets

- **Private Equity Activity**

- The data suggests continued strength in fundraising, deployment and transaction multiples through the first three quarters of the year, but scrutiny of the quarter-by-quarter data suggest that momentum is coming out of the market meaningfully
- Exits have already started to reflect the realities of the current environment, as suggested by the shuttering of what had been a welcoming market for IPOs

- **Additional materials on investment environment available in the appendix**

Recent momentum is still buttressing 1H-22 data, but the realities of the current environment are starting to come through in the numbers



Implementation 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



Private Equity Portfolio Positioning

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

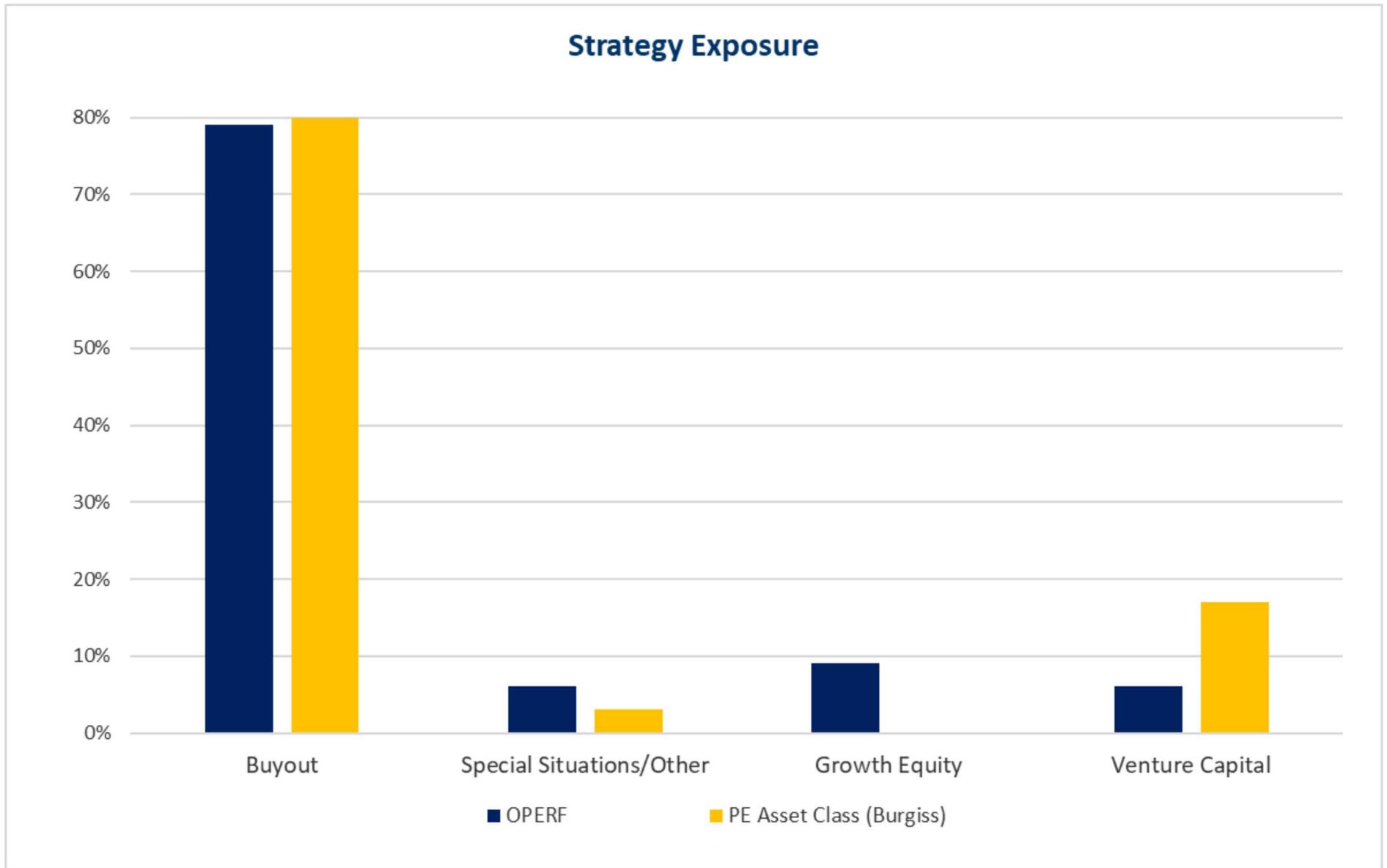
- Diversification reduces risk among Program investments. The following types of diversification should be considered by Staff, including, but not limited to stage (strategy), sector, size, geography and time

Because of OPERF's scale, flexibility is limited from a portfolio construction perspective

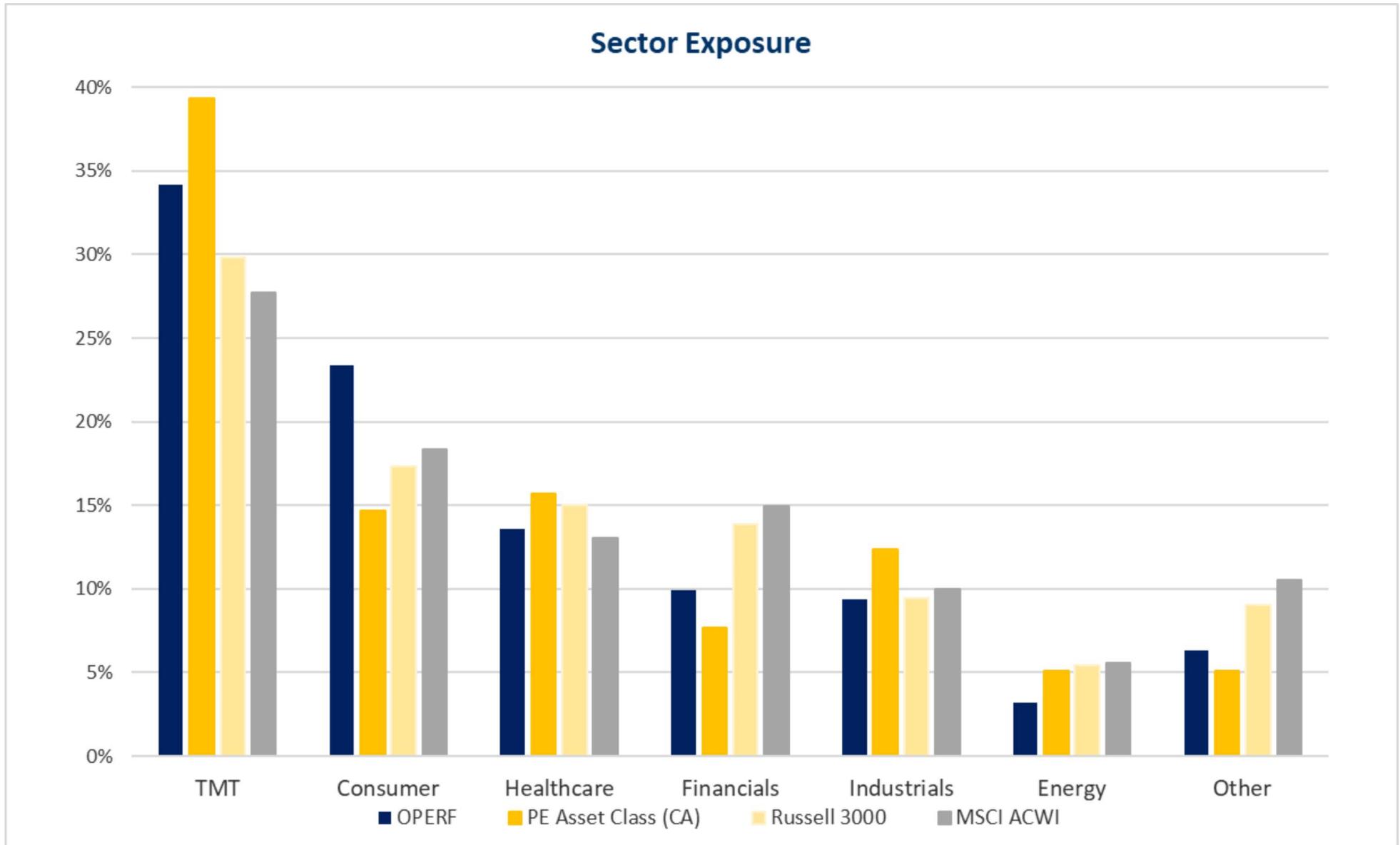
- Strategy – the portfolio's venture capital exposure is underweight, but, to gain analogous exposure to innovative companies and investment themes, OPERF targets excess exposure to growth equity
- Sector – projected sector exposures have been carefully managed as the asset class has pivoted to tech resulting in a modest underweight
- Size – the addressable manager universe is limited by the scale of OPERF's target commitment. Despite this reality, the GP roster emphasizes the upper middle market segment
- Geography – current exposures are index like, but the manager roster has been curated to maintain projected exposure of at least 20% to Europe
- Time – the portfolio is most differentiated from the asset class with respect to pacing consistency



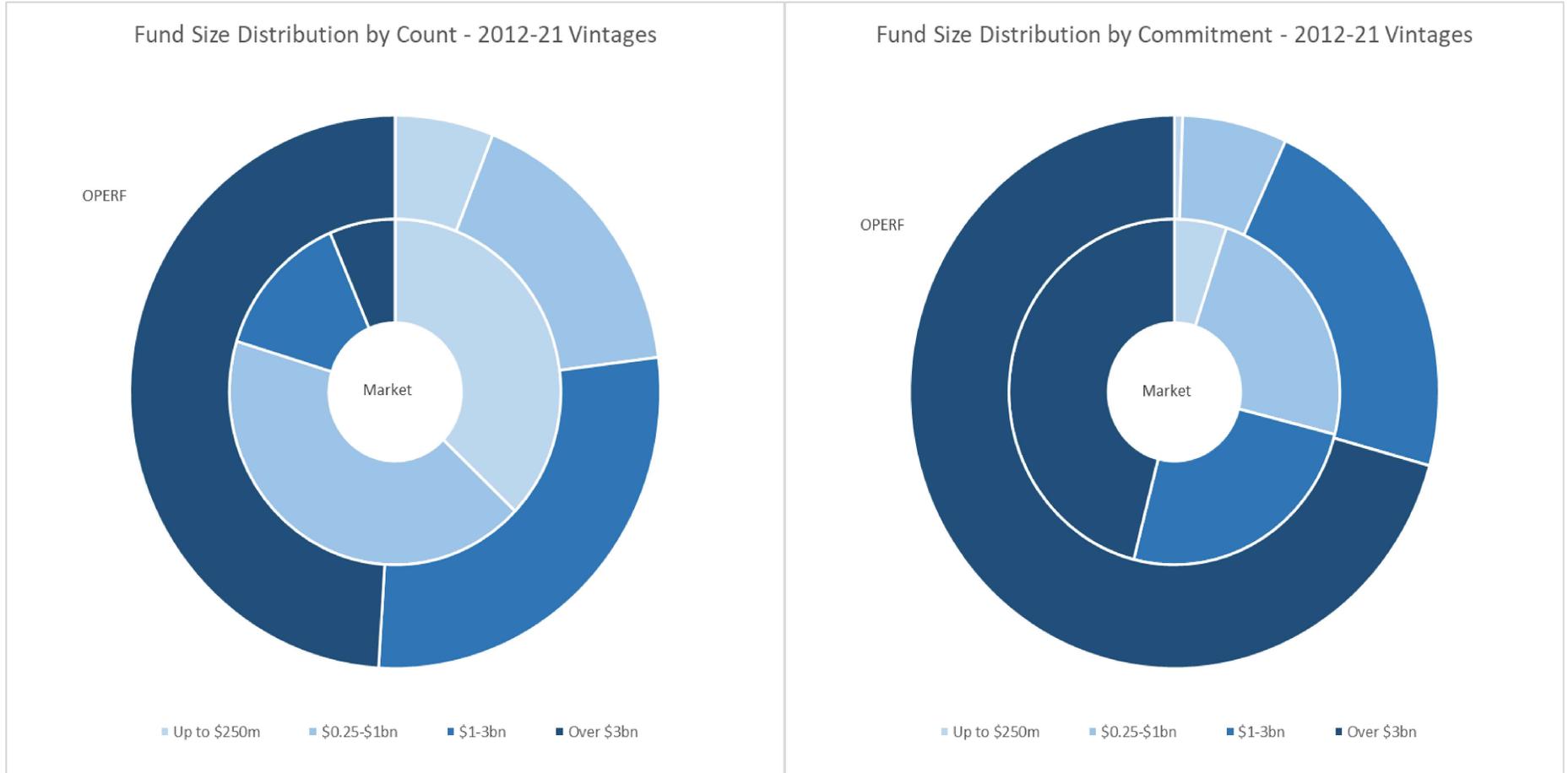
Private Equity Portfolio Positioning



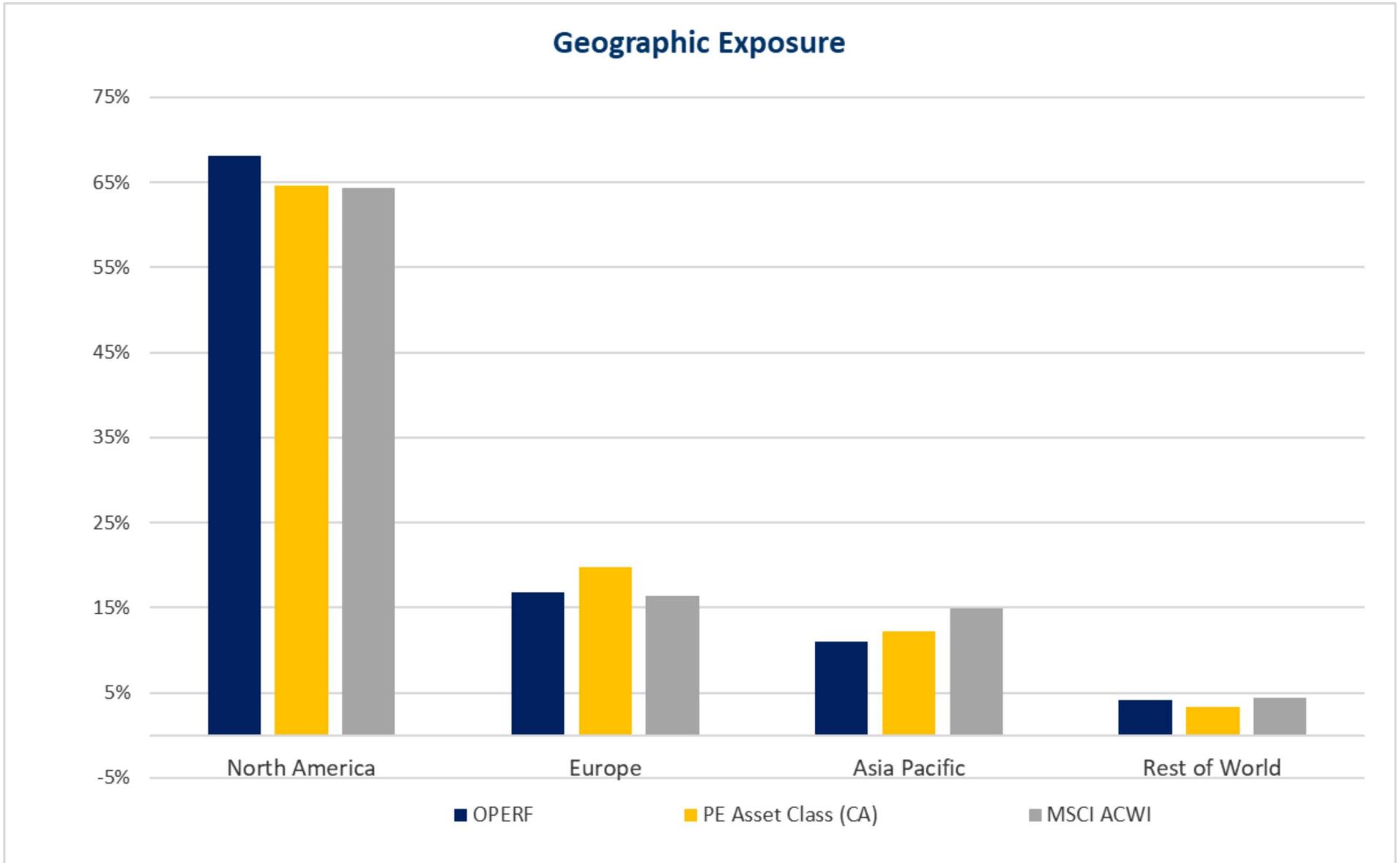
Private Equity Portfolio Positioning



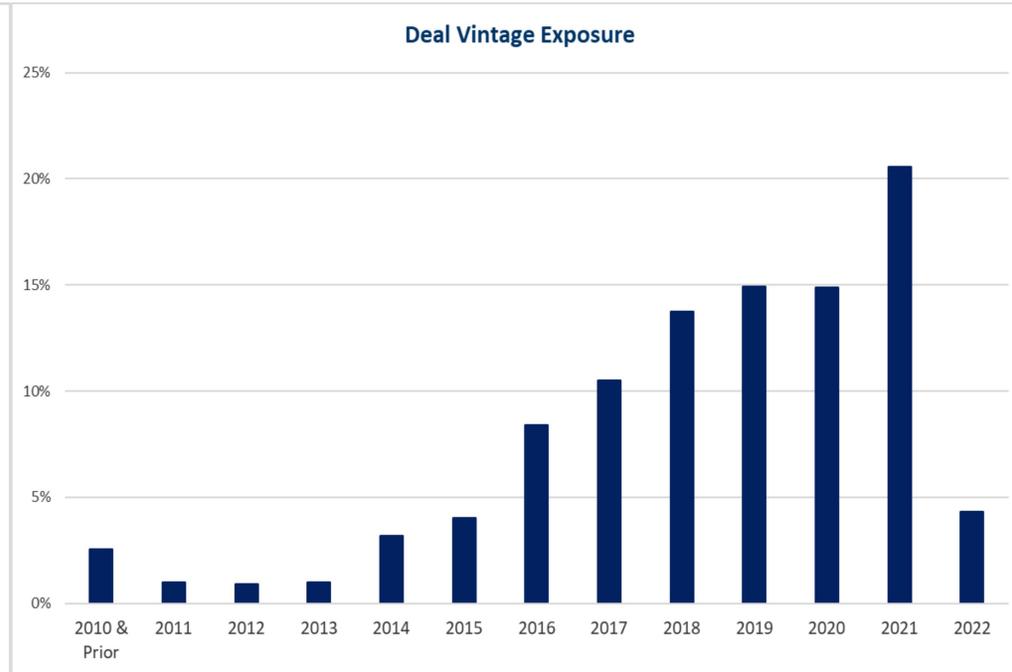
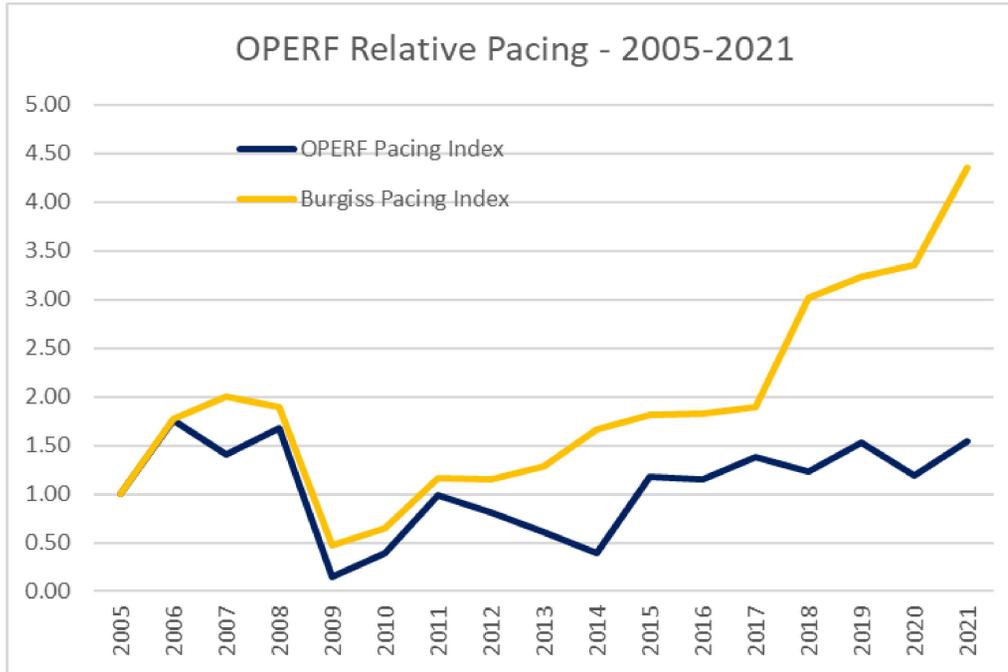
Private Equity Portfolio Positioning



Private Equity Portfolio Positioning



Private Equity Portfolio Positioning



Pathway Update



Pathway at a Glance



PRIVATE MARKET SPECTRUM		GLOBAL REACH		FULL-SERVICE MODEL
1991 Founded	100% owned by its 23 partners	220 Staff	>\$85 billion in global AUM ^b	22 years' average investment experience ^c

^aStrategic alliance with Tokio Marine Asset Management. ^bRepresents roll-forward market value plus undrawn capital as of September 30, 2022. ^cRepresents Pathway's 21 investment partners.



Pathway Update



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)



^aAs of September 30, 2022.



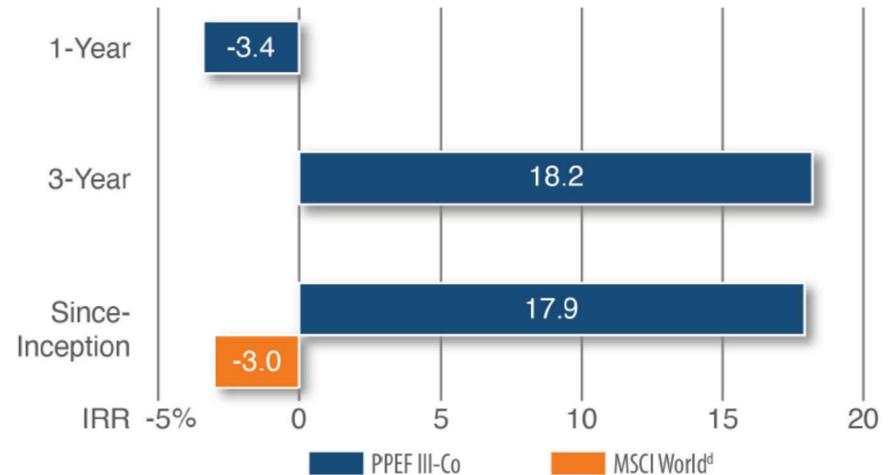
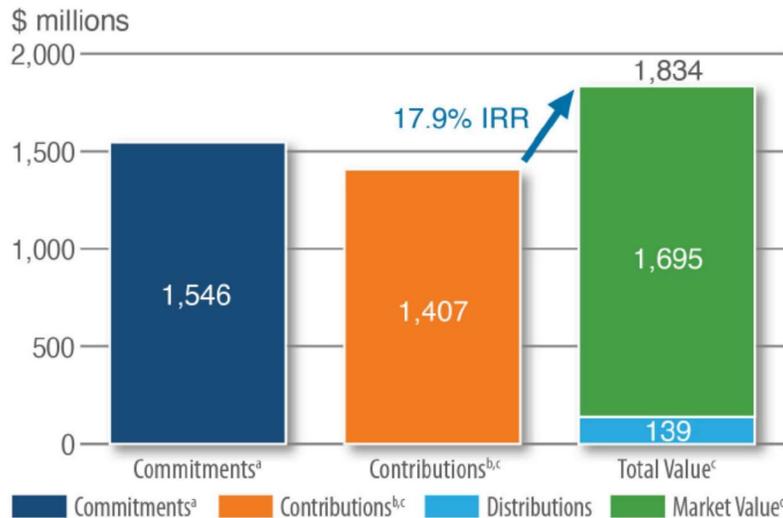
Pathway Update



Co-investment Program

- Sourcing: 100% from OPERF GP relationships
- Selectivity: Completed 86 of 148 co-investments reviewed¹
- Co-invested alongside 27 of OPERF's GPs
- 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

PPEF III-CO PERFORMANCE



^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.
^bIncludes capital contributed for management fees called outside the total commitment.
^cIncludes contributions and market values of underlying co-investments that were funded using the Fund's line of credit; the Fund had outstanding borrowings of \$88.9 million on its line of credit as of September 30, 2022.
^dDollar-weighted according to the cash flows of Pathway Private Equity Fund III-Co, LP.
 1. Includes pending co-investments.



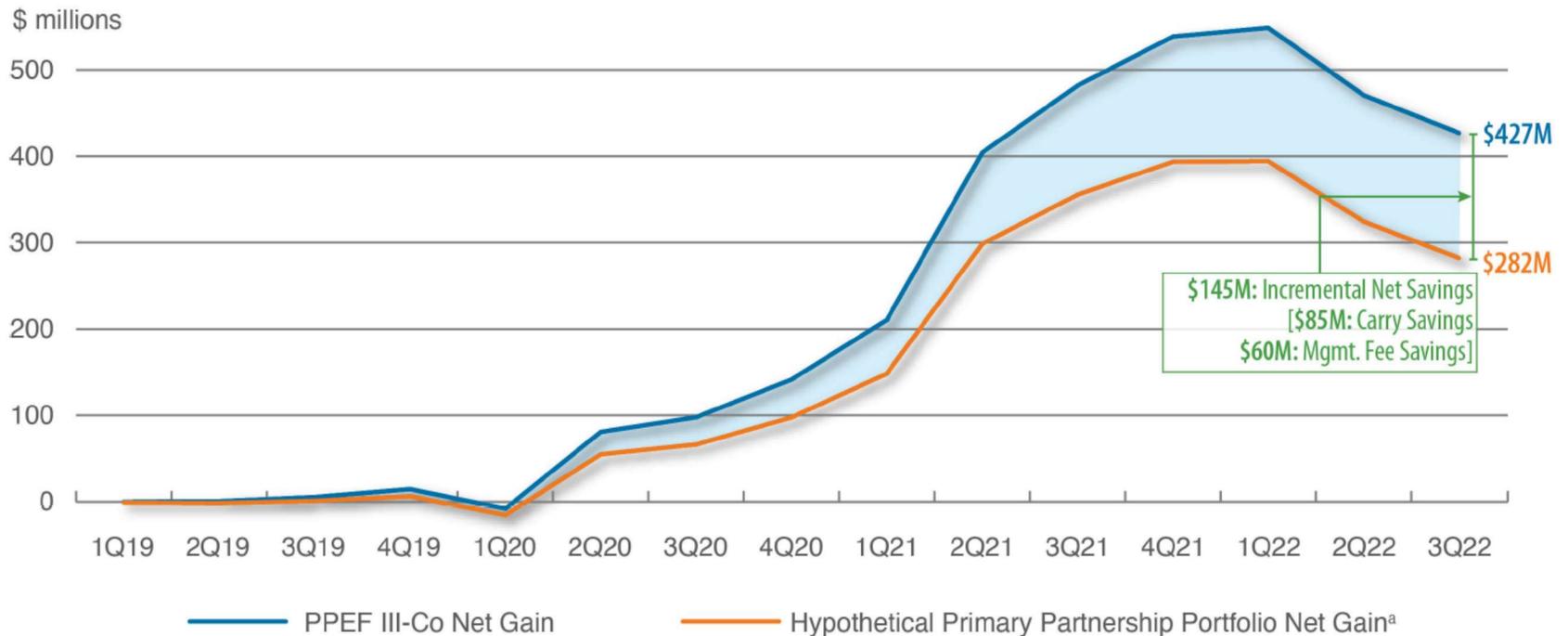
Pathway Update



Incremental Gains from Fee & Carry Savings

At September 30, 2022

- Estimated since-inception net fee and carry savings of \$145 million to date



^aReflects 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, 2022.

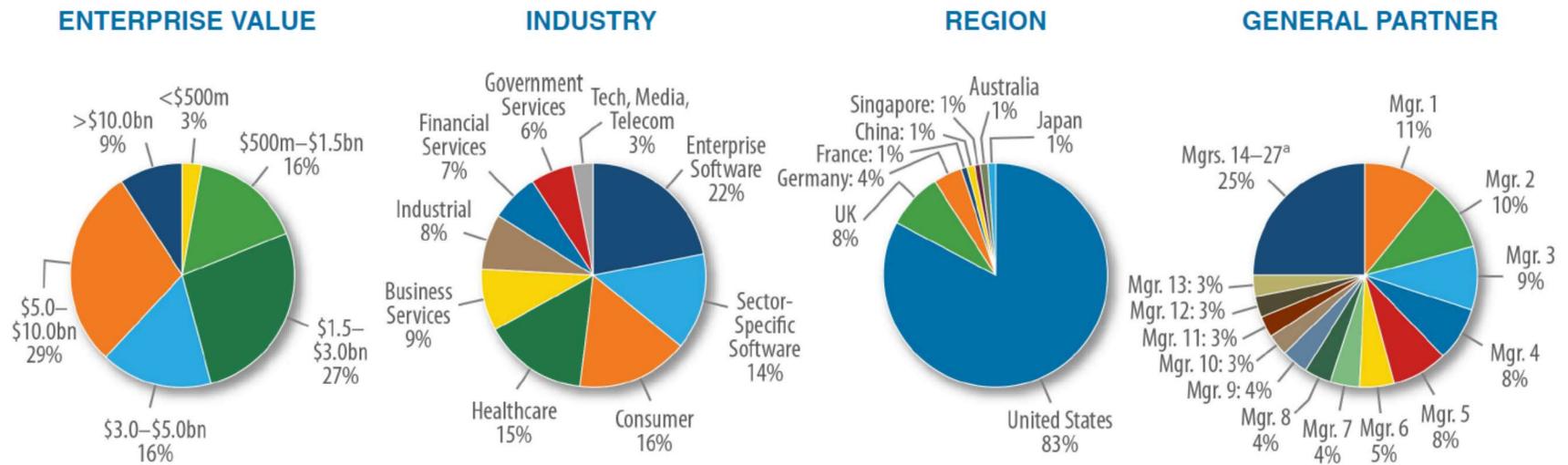


Pathway Update



Co-investment Program

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



NOTES: Presented as a percentage of committed capital, as of December 31, 2022.
 Includes two co-investments representing \$4.7 million of expected committed capital that have been approved by Pathway’s Investment Committee but are pending close.
^aEach general partner accounts for less than 3% of total commitments



Pathway Update



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.

- Program has included 91 partnerships from 47 general partners across 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.



2022 Year in Review – Priorities

OST Staff made progress on all five initiatives set out in the 2022 PE Annual Review & Plan:

2022 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. 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

2022 Year in Review – Approvals

Over the course of 2022, the OIC approved 14 new private equity commitments totaling \$3.1 billion

- **Pacing** – \$3.5 billion with evergreen commitments
- **Strategy** – 17% growth/VC & 83% buyout
- **Geography** – 58% North America, 30% Europe, 10% Asia & 1% ROW
- **Manager** – All approved managers were in the existing GP roster

	FUND NAME	SEGMENT	STRATEGY	GEOGRAPHY	COMMIT (MM)
1	Advent GPE X	Buyout	Diversified	Global	\$ 200
2	Aquiline V	Buyout	Financial Services	NA / Europe	\$ 200
3	Cinven VIII	Buyout	Diversified	Europe	€ 225 *
4	CVC Asia VI	Buyout	Diversified	Asia	\$ 150
5	Francisco Partners VIII & Agility III	Buyout	TMT	NA / Europe	\$ 300
6	GTCR XIV	Buyout	Diversified	North America	\$ 250
7	Permira VIII	Buyout	Diversified	Global	€ 225 *
8	TDR V	Buyout	Value buyout - diversified	Europe	€ 225 *
9	TPG Partners IX & Healthcare Partners II	Buyout	Diversified	NA / Europe	\$ 350
10	Veritas Capital Partners VIII	Buyout	Government Related & Regulated Industries	North America	\$ 250
11	Vista Equity Partners VIII	Buyout	TMT	North America	\$ 250
BUYOUT TOTAL					\$ 2,672
12	GGV 2022 Funds	Growth/VC	Multi-stage Venture Capital	Global	\$ 150
13	USV 2022, Opps 2022 & Climate II	Growth/VC	Multi-stage Venture Capital	North America	\$ 49
14	Vitruvian Investment Partners V	Growth/VC	Growth Equity & Growth Buyout	Europe	€ 225 *
GROWTH/VC TOTAL					\$ 440
TOTAL APPROVALS					\$ 3,112
15	General Atlantic SMA	Growth/VC	Diversified	Global	\$ 150
16	Pathway Co-Inv - Recycling	Co-Invest	Co-invest with OPERF GP roster	Global	\$ 250
TOTAL PACING					\$ 3,512

* - Euro/USD - 0.94



2022 Year in Review – Commitment Pacing

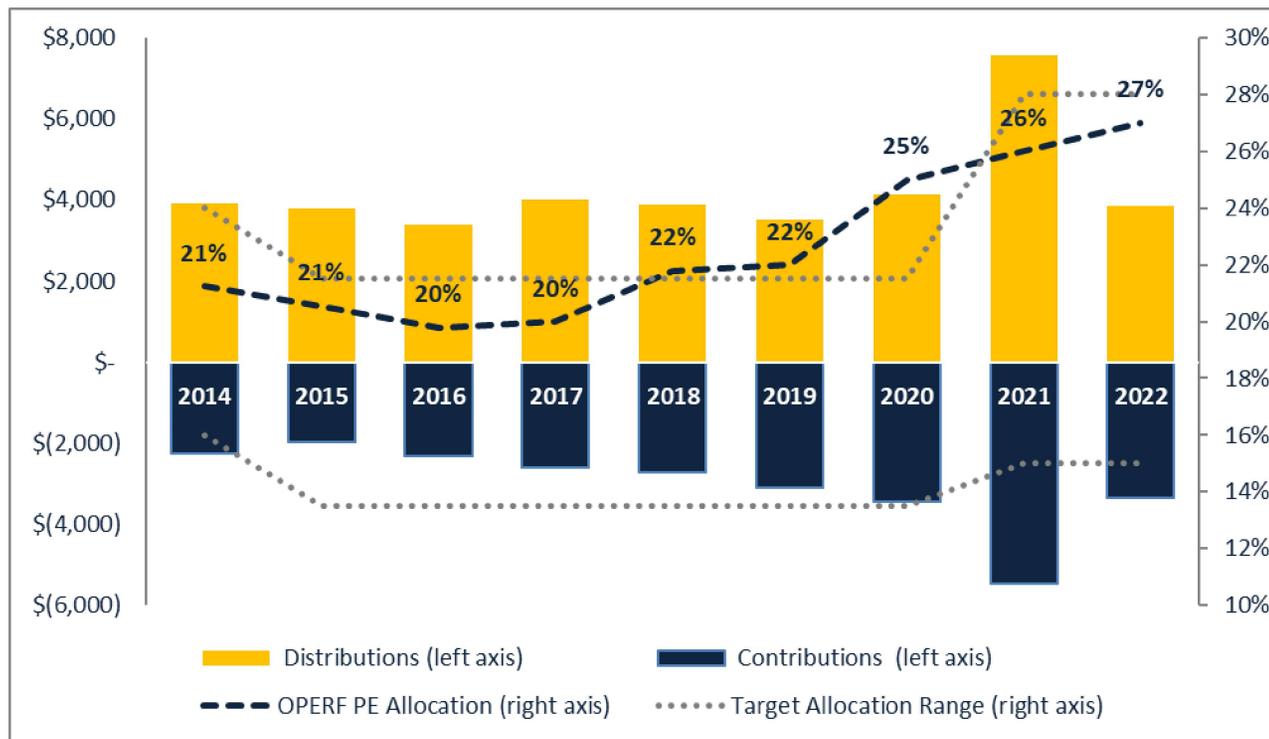
At \$3.5 billion of total pacing, the 2022 vintage is modestly above the target range, but medium-term pacing remains on plan



2022 Year in Review – Cash Flows

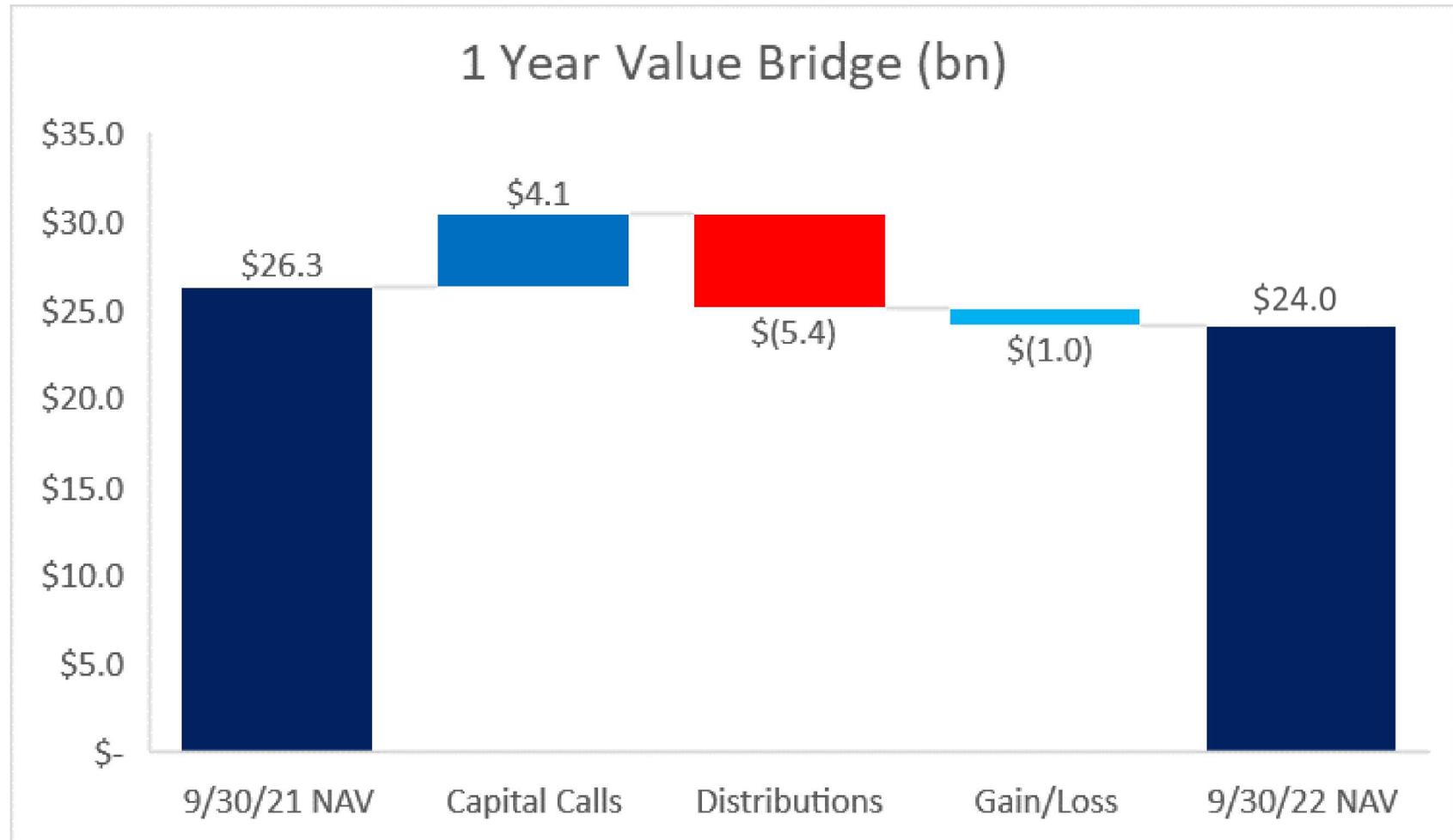
For the calendar year 2022, the private equity portfolio processed capital calls totaling \$3.3 billion and distributions totaling \$3.9 billion for net distributions of \$519 million

- OPERF’s capital calls remained somewhat elevated in 2022, but this activity is largely attributable to 2021 transactions given the broad-based adoption of subscription lines. Staff anticipates a slowdown reflecting the delayed impact of low new deal volumes in 2022
- OPERF’s distributions were half what was realized in 2021, immediately reflecting the slowdown in activity. Absent costly intervention via the secondary markets, distributions will remain low until markets stabilize
- As of December 31, 2022 (9/30/22 valuations adjusted for cash flows), the portfolio’s net asset value of \$24 billion represented roughly 27% of the full OPERF portfolio. This is at the top end of the OPERF’s target allocation range (15-28%)



2022 Year in Review – Value Bridge

In 2022, the private equity portfolio's net asset value declined by \$2.3 billion



Relative Returns – Horizon

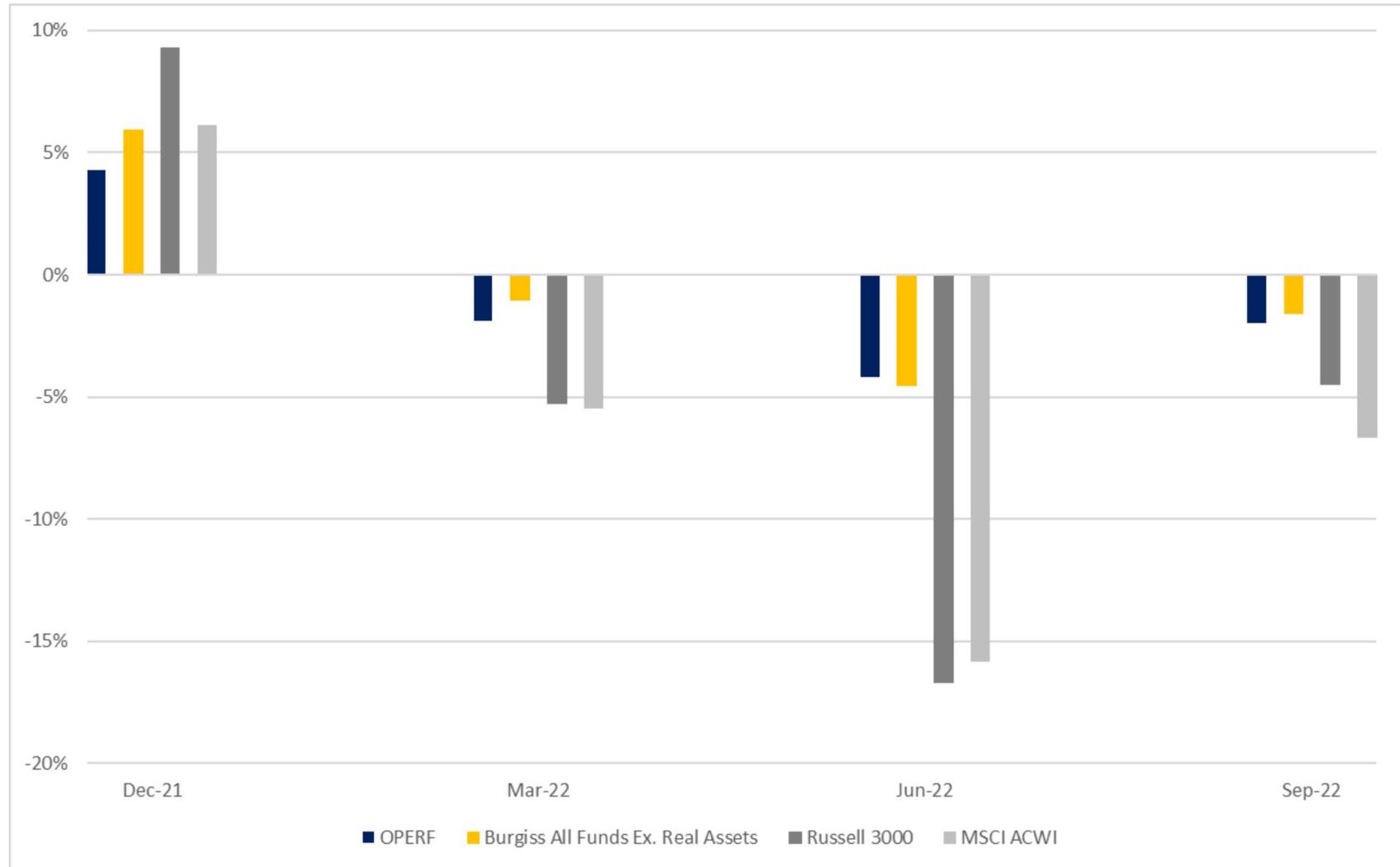
Current OPERF results meaningfully outpace public equity benchmarks, but OPERF now trails the private equity benchmarks across all timeframes

9/30/2022	IRR 1 year	IRR 3 year	IRR 5 year	IRR 10 year
OPERF Private Equity	-3.9%	17.4%	15.9%	14.0%
Russell 3000 + 3%	-14.7%	12.8%	13.1%	15.9%
<i>Value-Added</i>	10.8%	4.6%	2.8%	-1.9%
Russell 3000	-17.2%	9.6%	9.9%	12.7%
Value-Added	13.3%	7.8%	6.0%	1.3%
Russell 2000 + 3%	-20.9%	9.7%	8.2%	13.6%
<i>Value-Added</i>	17.0%	7.7%	7.7%	0.4%
Russell 2000	-23.2%	6.6%	5.2%	10.6%
<i>Value-Added</i>	19.3%	10.8%	10.7%	3.4%
MSCI ACWI + 3%	-17.9%	8.7%	8.9%	11.8%
Value-Added	14.0%	8.7%	7.0%	2.2%
MSCI ACWI	-20.2%	5.7%	5.8%	8.8%
<i>Value-Added</i>	16.3%	11.7%	10.1%	5.2%
Burgiss All Funds Ex RA	-1.5%	19.9%	17.3%	15.1%
<i>Value-Added</i>	-2.3%	-2.5%	-1.4%	-1.1%
Cambridge Associates	-2.2%	19.2%	16.1%	14.2%
<i>Value-Added</i>	-1.7%	-1.8%	-0.2%	-0.2%



Relative Returns – Horizon

There is currently an extreme disconnect between public and private equity markets from a valuation and, consequently, return perspective



Return Attribution – Summary

The driving factor in OPERF’s relative performance remains timing

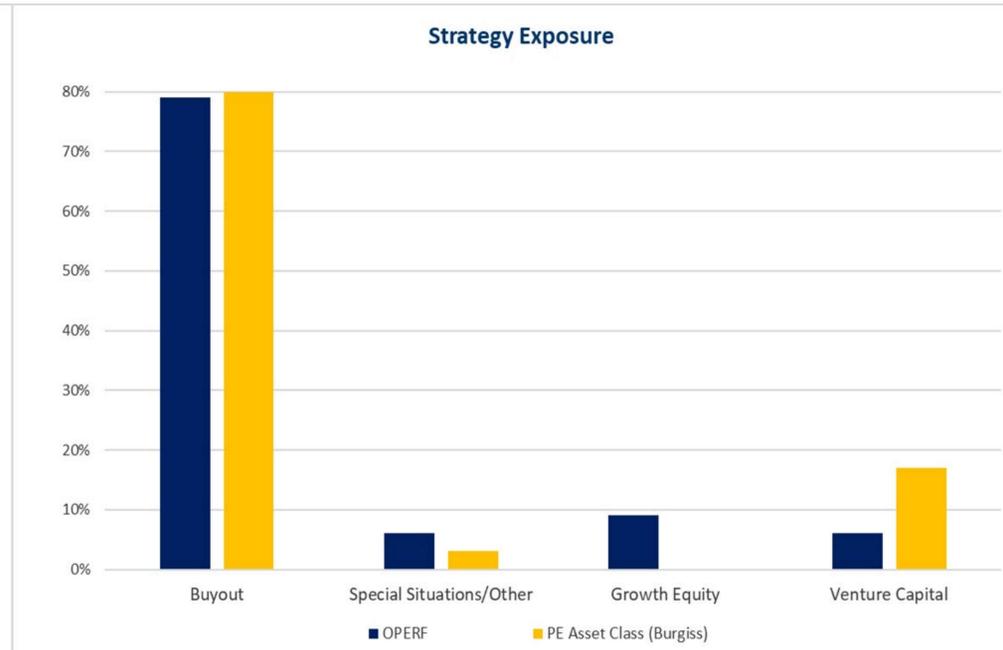
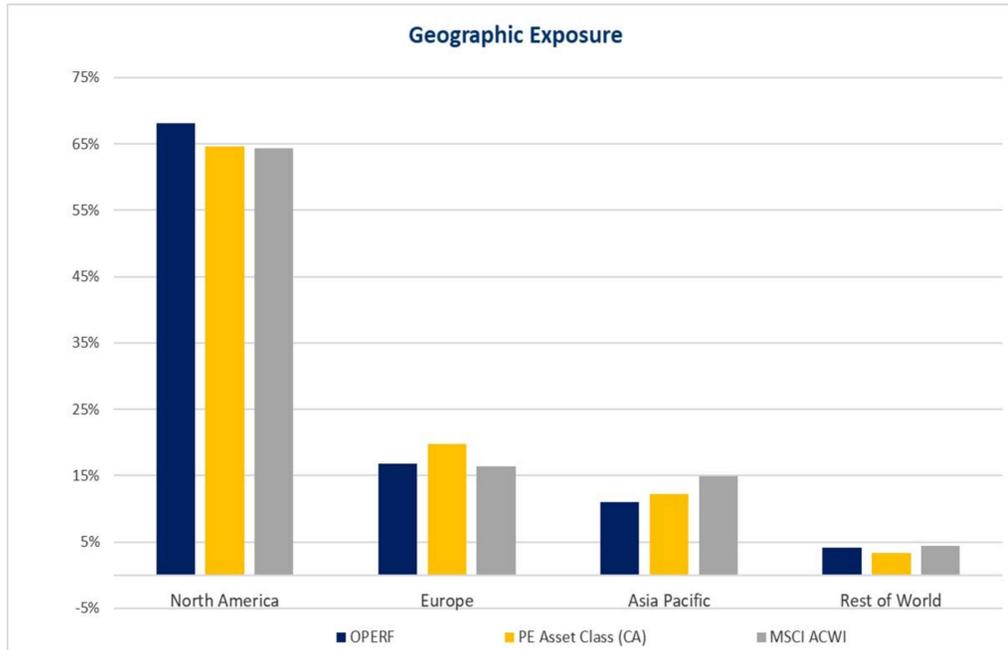
- **Asset Allocation Factor:** sub-strategy (i.e. buyout, venture capital, growth equity, etc.) and geographic allocations
- **Security Selection Factor:** manager/ fund selection
- **Timing Factor:** pacing



Return Attribution – Asset Allocation

The asset allocation factor is neutral to modestly negative

- **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. While OPERF’s overweight to Growth Equity appears to be another detractor, Staff does not feel the benchmark exposure to “Expansion Capital” accurately measures the strategy



Partnership Level Strategy	IRR 1 yr	IRR 3 yr	IRR 5 yr	IRR 10 yr
Burgiss All Fund Ex Real Assets	-2%	20%	17%	15%
Burgiss All Fund Ex Real Assets - North America	1%	23%	19%	16%
Burgiss All Fund Ex Real Assets - Europe	-7%	15%	13%	13%
Burgiss All Fund Ex Real Assets - Asia Pacific	-4%	15%	14%	14%
Burgiss All Fund Ex Real Assets - Generalist	-8%	16%	14%	12%

Partnership Level Strategy	IRR 1 yr	IRR 3 yr	IRR 5 yr	IRR 10 yr
Burgiss All Fund Ex Real Assets	-2%	20%	17%	15%
Burgiss - Buyout	1%	20%	17%	16%
Burgiss - Expansion Capital	-15%	12%	11%	11%
Burgiss - Venture Capital	-7%	29%	25%	20%
Burgiss - Other Ex Real Assets	4%	10%	9%	9%

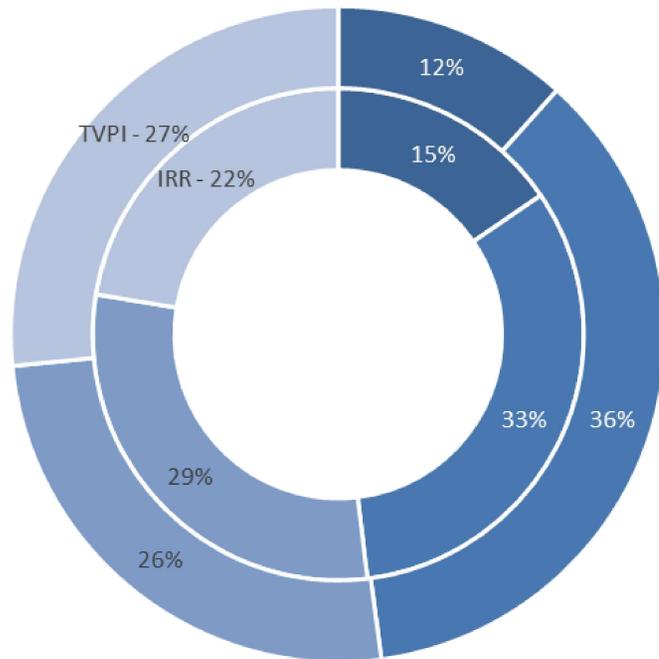


Return Attribution – Security Selection

The security selection factor is neutral

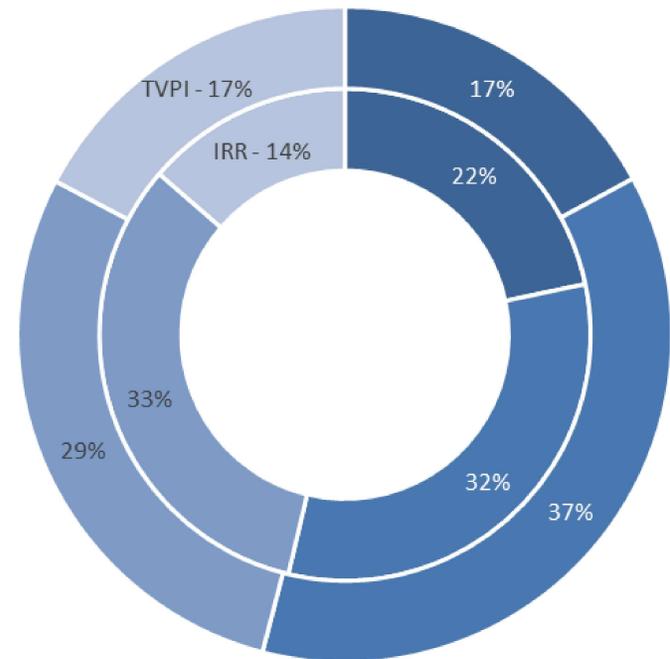
- For mature commitments (2010-2019 vintages), 48% of OPERF’s fund investments as measured by commitment and 54% by net asset value (NAV) ranked above median as compared to funds pursuing a similar strategy in the same vintage

Quartile Allocation by Commitment - 2010-2019



■ 1st Quartile ■ 2nd Quartile ■ 3rd Quartile ■ 4th Quartile

Quartile Allocation by NAV - 2010-2019



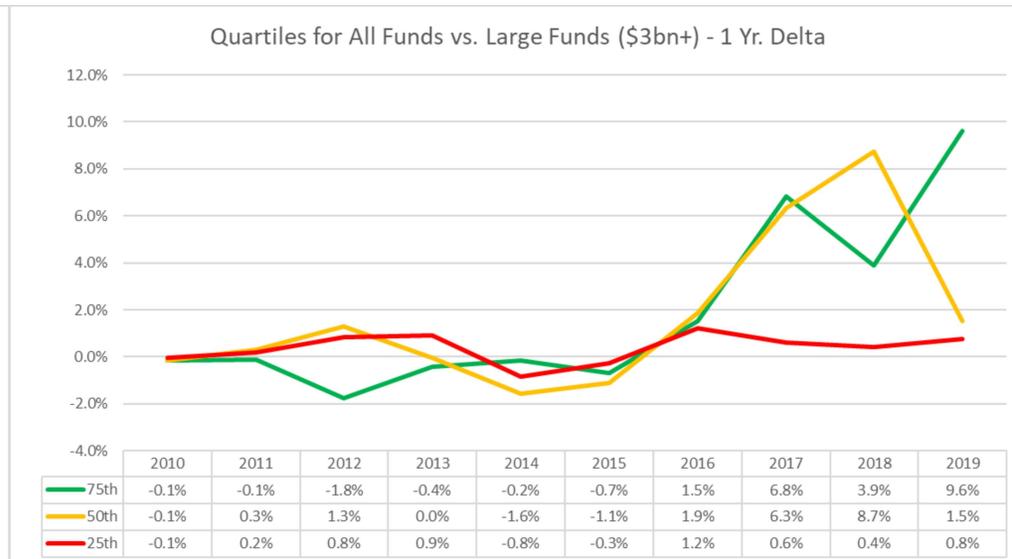
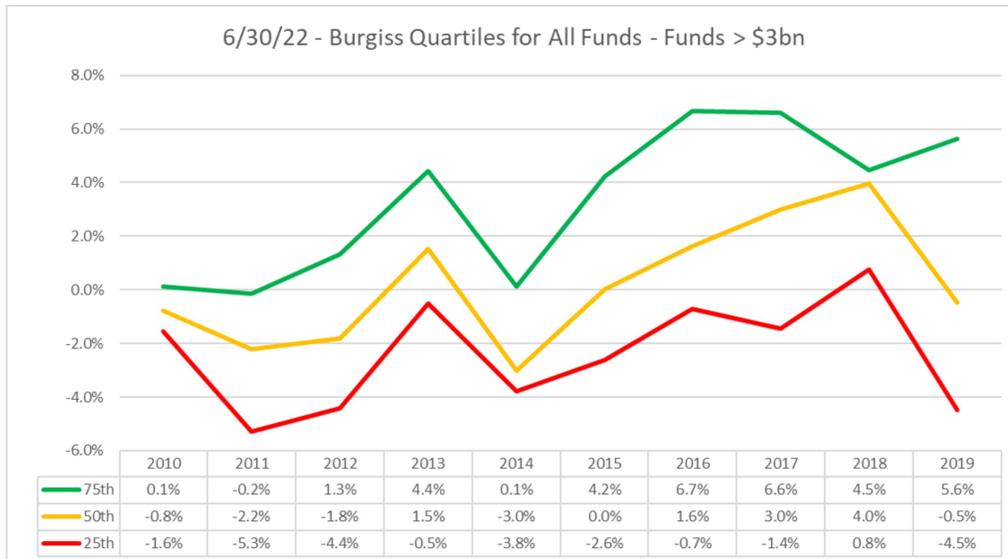
■ 1st Quartile ■ 2nd Quartile ■ 3rd Quartile ■ 4th Quartile



Return Attribution – Security Selection

The security selection factor went from positive to neutral over the past 12 months, primarily due to OPERF’s bias to “large funds”

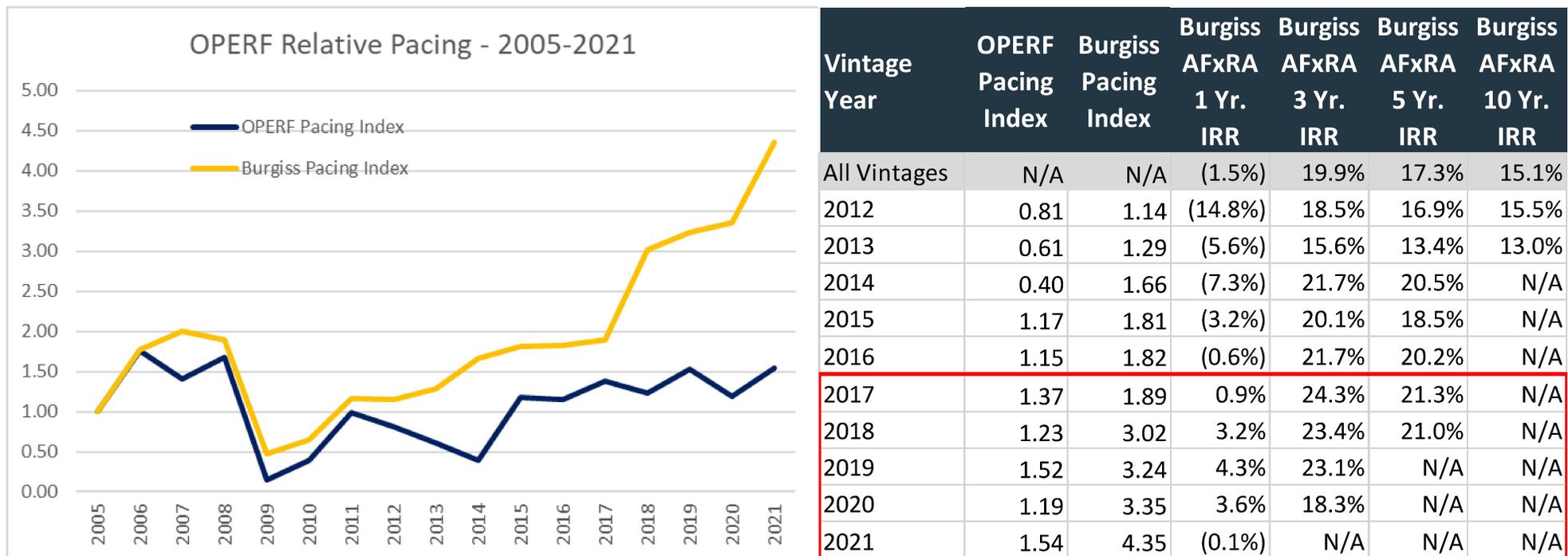
- At 6/30/21, 67% by commitment and 80% by NAV ranked above median, but in the past 12 months there was meaningful divergence between large and small funds for maturing vintage years
- Staff anticipates that this is likely a transient impact as maturing funds are expected to experience material valuation movements in the coming quarters



Return Attribution –Timing

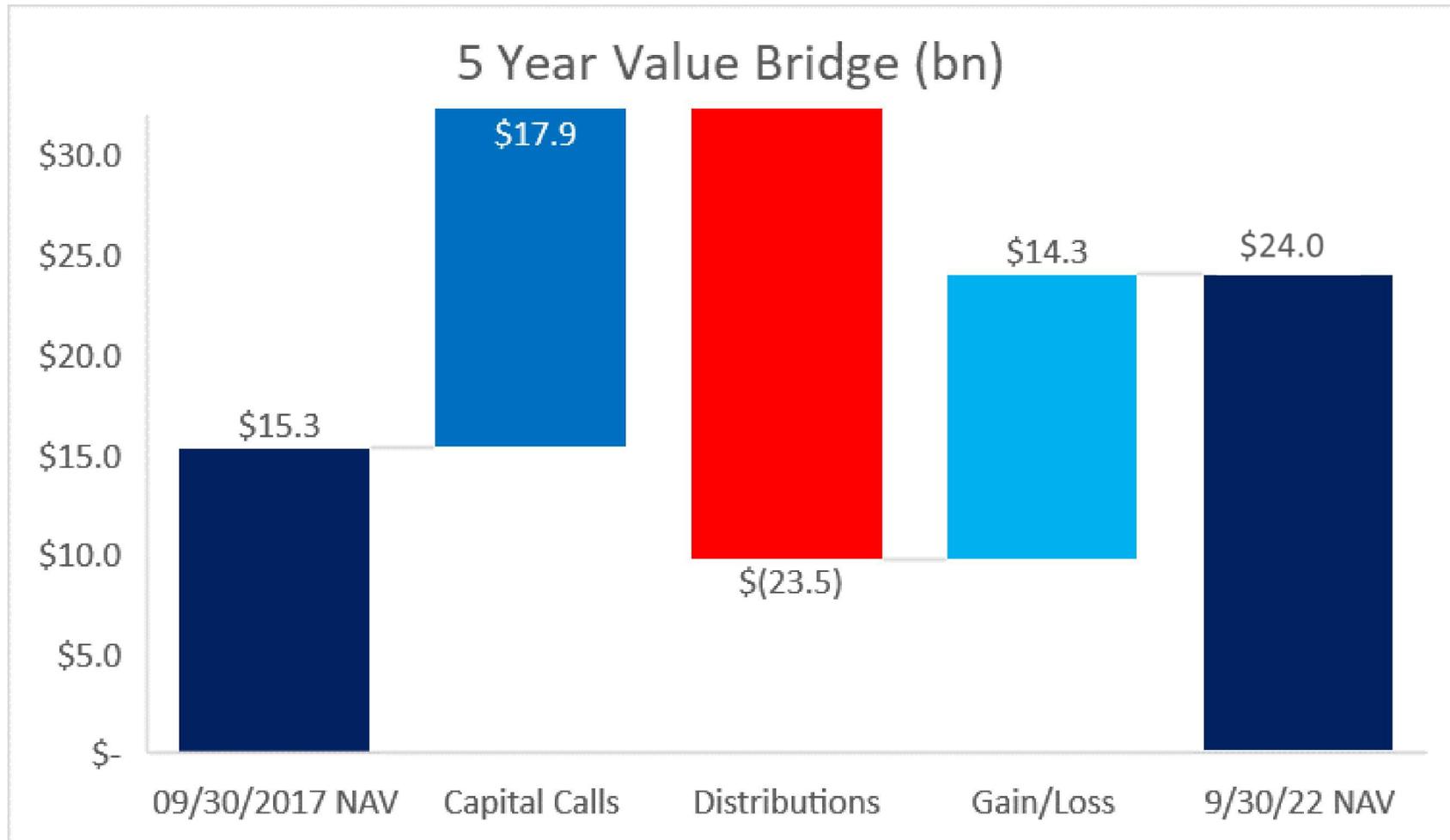
The timing factor remains a detractor as recent vintages continue to show extremely strong performance

- OPERF’s smooth pacing strategy results in markedly different vintage year exposures as compared to the asset class given growth in fundraising
- This creates a drag on OPERF’s relative performance due to the strong performance from recent vintage years where OPERF is underweight
- The impact of this factor could change meaningfully as valuations move to reflect the current environment in the coming quarters



PE Allocation Relative to Target

- The portfolio's NAV has increased ~\$9 billion over the past five years due mostly to mark-ups late in this timeframe



PE Allocation Relative to Target

- That ~\$9 billion increase in NAV is effectively the exact delta between projected and actual exposure from the 2018 pacing exercise

2018 Pacing Forecast (bn)				
	5 Yr. Forecast	5 Yr. Actual	Delta (\$)	Delta (%)
Commitments	\$ 16.0	\$ 15.9	\$ (0.1)	-1%
09/30/17 NAV	\$ 15.3	\$ 15.3	N/A	N/A
Capital Calls	\$ 16.9	\$ 17.9	\$ 1.0	6%
Distributions	\$ (26.4)	\$ (23.5)	\$ 2.8	-11%
Gain	\$ 9.5	\$ 14.3	\$ 4.9	52%
09/30/22 NAV	\$ 15.3	\$ 24.0	\$ 8.7	57%



PE Allocation Relative to Target

- 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

Commitments: The size and timing on 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

Capital Calls: 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 investment. A 3-7 year holding period at the portfolio company level is common, but actual outcomes can differ massively from that norm

Growth of the overall portfolio: 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

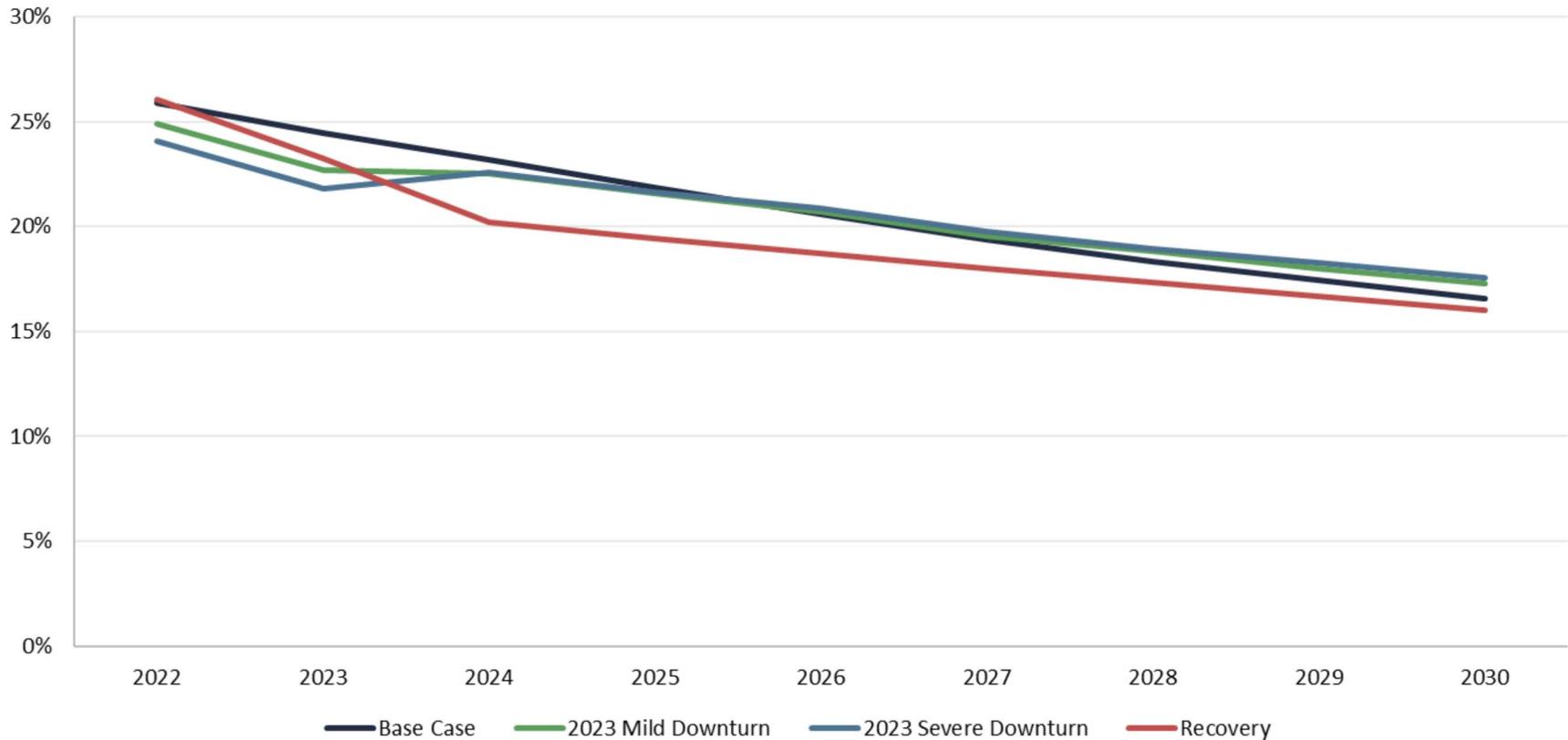


Forward Pacing Plan

In keeping with the principal of maintaining flat pacing, Staff is recommending \$2.5-3.5 billion of new commitments again in 2023

- 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
- The most impactful and unpredictable element of this analysis is the trajectory of private equity valuations in the coming quarters

Private Equity Percentage of Pension Assets

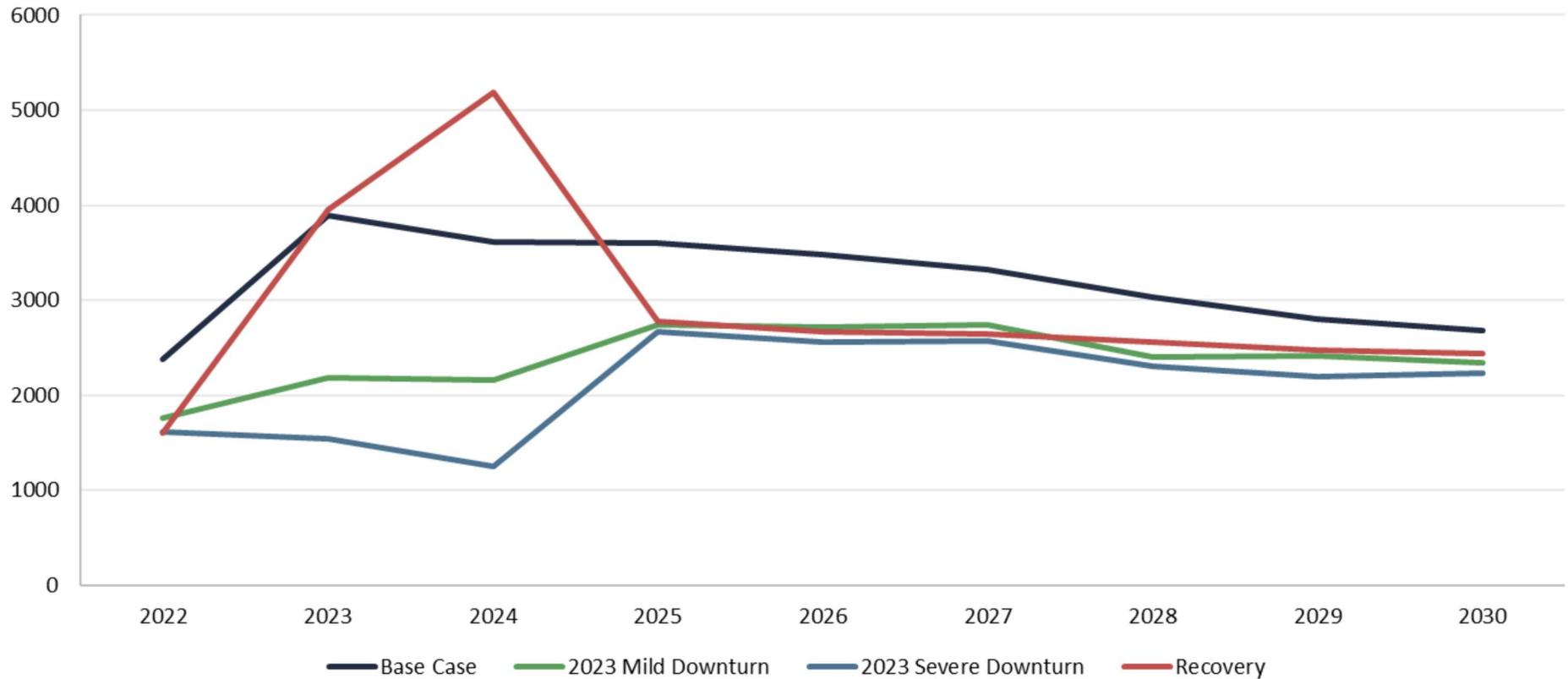


Forward Pacing Plan

The private equity portfolio is projected to generate net distributions in all scenarios, but the precision of this exercise in any given year is limited

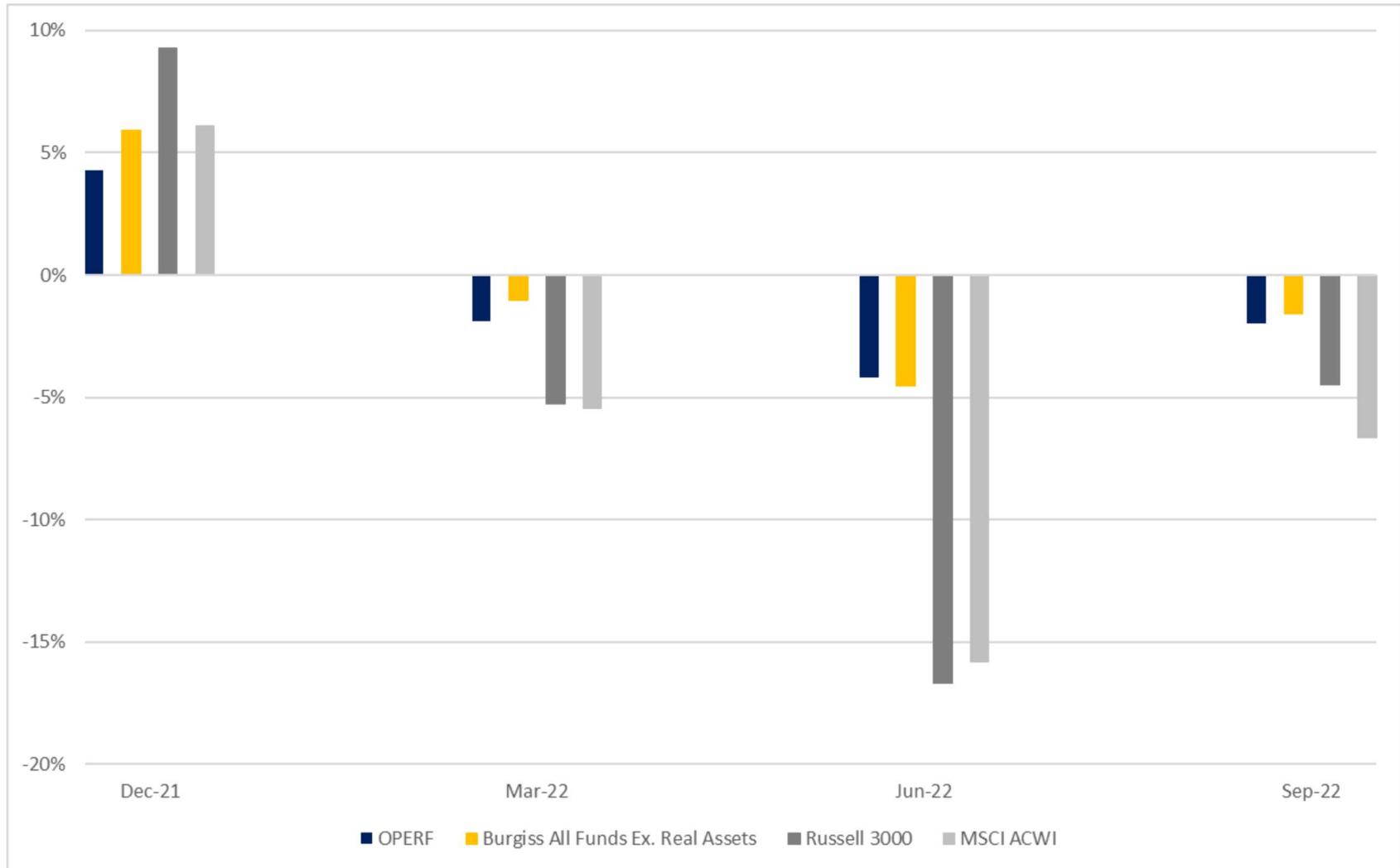
- This analysis assumes no accelerated liquidity proceeds in any scenario

Private Equity Program Cash Flows



PE Allocation Relative to Target

There is currently an extreme disconnect between public and private equity markets from a valuation and, consequently, return perspective



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% buyout, ~15% growth equity & ~5% venture capital
- **Strategy:** Upper middle market bias and a “growth” tilt
- **Geography:** ~65% North America, ~21% Europe, ~10% Asia & ~2% ROW
- **Sector:** ~32% TMT, ~12% industrial, ~10% business services, ~18% consumer, ~16% healthcare & ~11% financial services
- **Manager:** the current, active roster is light relative to plan at less than 35 managers



2023 Initiatives

2023 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. 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



Closing

As is the case in volatile markets...

1. Activity has slowed meaningfully due to a lack of financing, price discovery and confidence in the macro
2. There is currently an extreme disconnect between public and private equity markets from a valuation and, consequently, trailing return perspective
3. The resulting impact on the broader portfolio's asset allocation and liquidity is meaningful, and short-term solutions are costly

Patience and consistency are rewarded over the long-term in private markets



Appendix – 2022 Private Equity Market Review

- **Investment Environment Agenda**

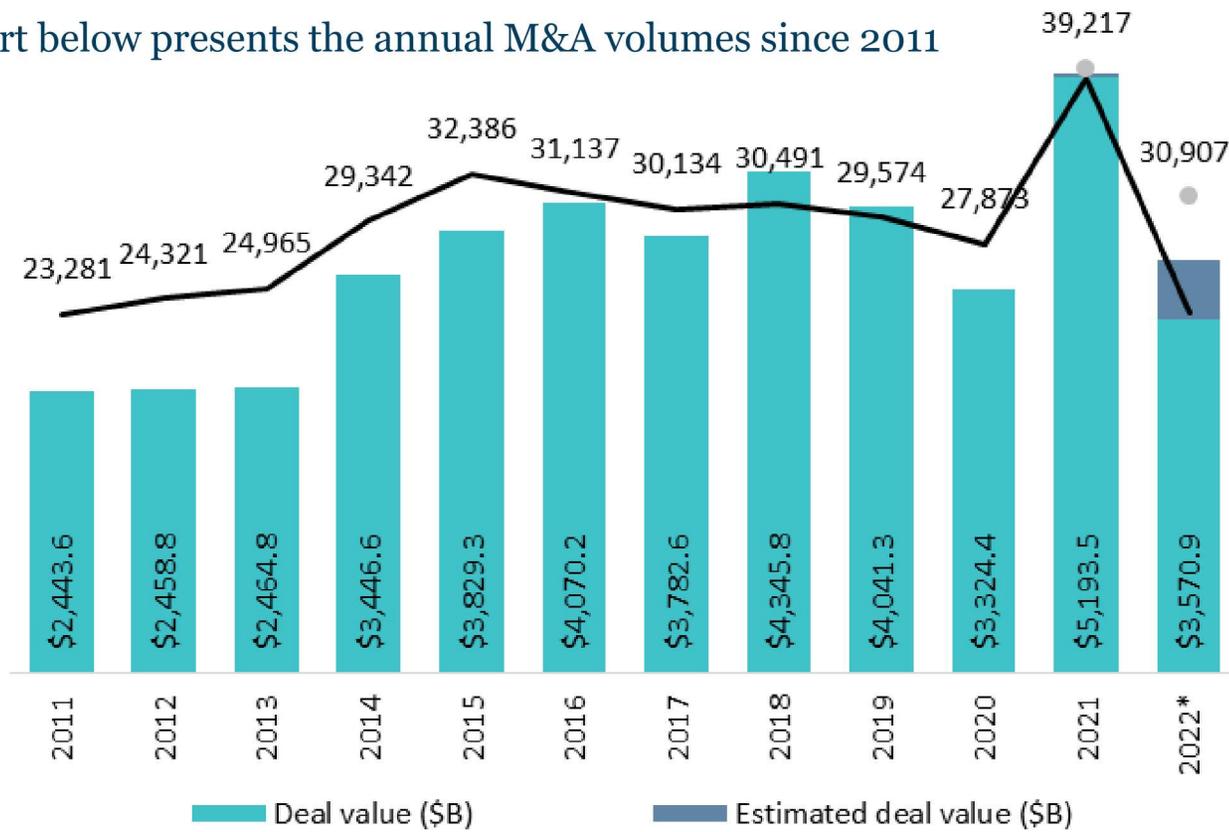
- M&A Activity
- Corporate Leveraged Finance
- Private Equity Returns
- U.S. Private Equity Update
- Europe Private Equity Update
- U.S. Venture Capital Update



M&A Activity – Developed Market Volumes

- Through 3Q 2022, Pitchbook recorded nearly 31k M&A transactions with an aggregate value of \$3.5 trillion

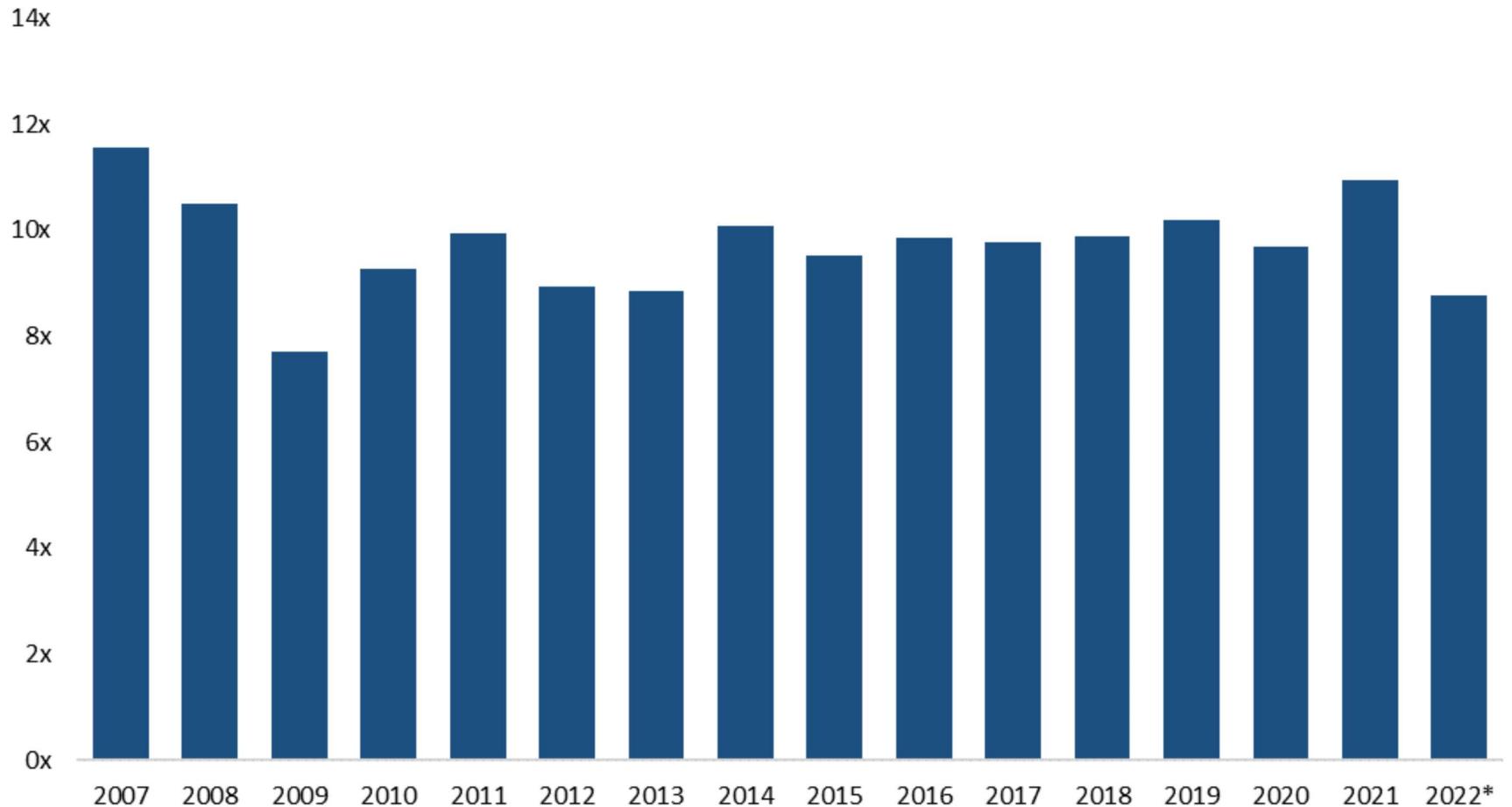
- In total, activity through 3Q 2022 was on pace to be roughly 10% behind 2021 volumes. However, 2022 volumes reflect a large cohort of transactions announced in 2021, masking a meaningful slowdown in new deal activity (e.g. Q3-22 was ~25% below Q3-21)
- Developed markets continue to dominate the activity with \$1.7 trillion of transactions in North America and \$1.3 trillion in Europe
- The chart below presents the annual M&A volumes since 2011



M&A Activity – Transaction Multiples

- Through 3Q 2022, median transaction multiples stood at 8.8x

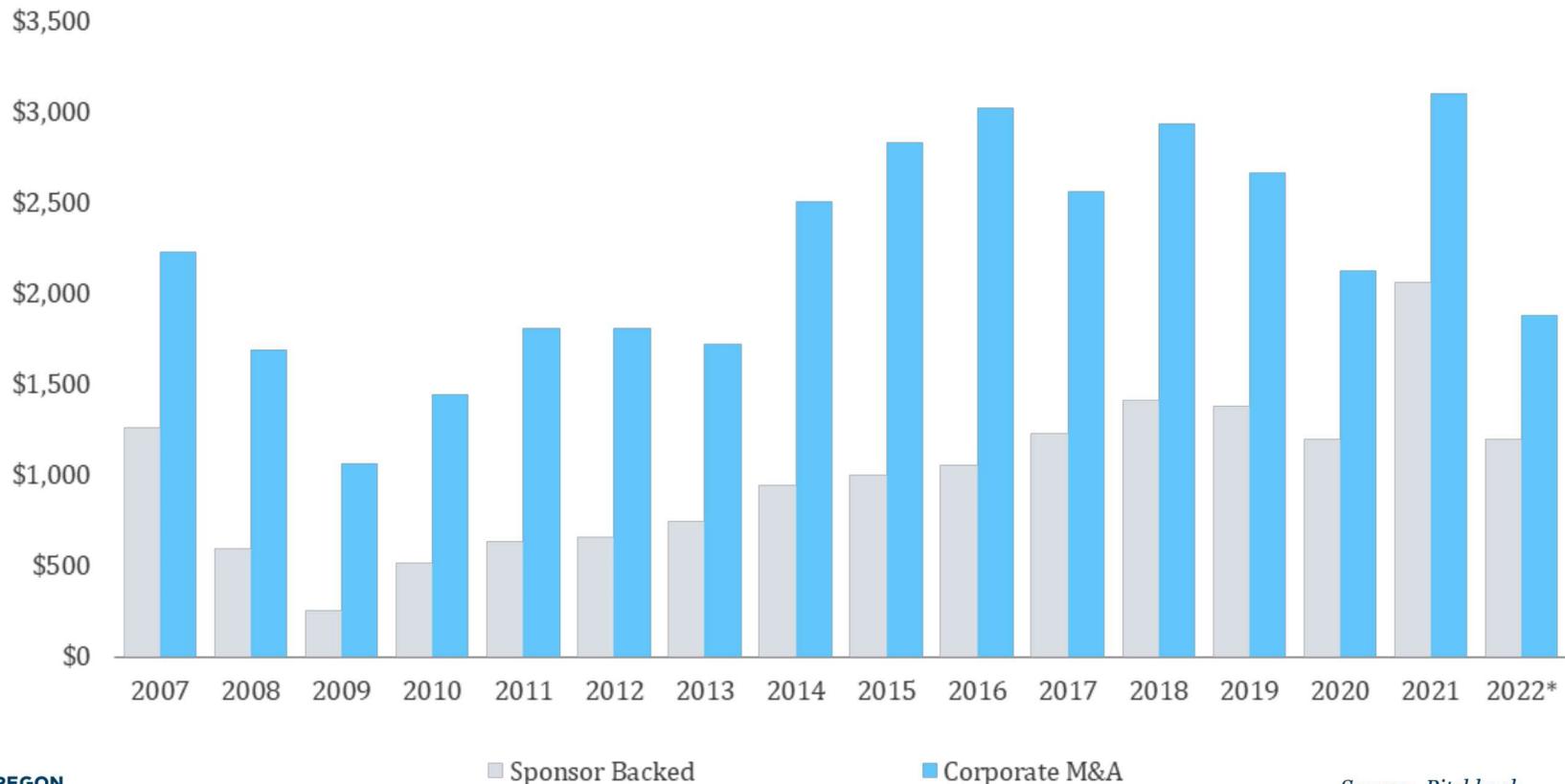
- Median EBITDA multiples are down from ~11x in 2021 and ~10x from 2016-2020. Revenue multiples remained elevated at ~2x, which is equivalent to levels seen in 2021
- The chart below presents median EBITDA multiples since 2007 in North America



M&A Activity – Private Equity Market Share

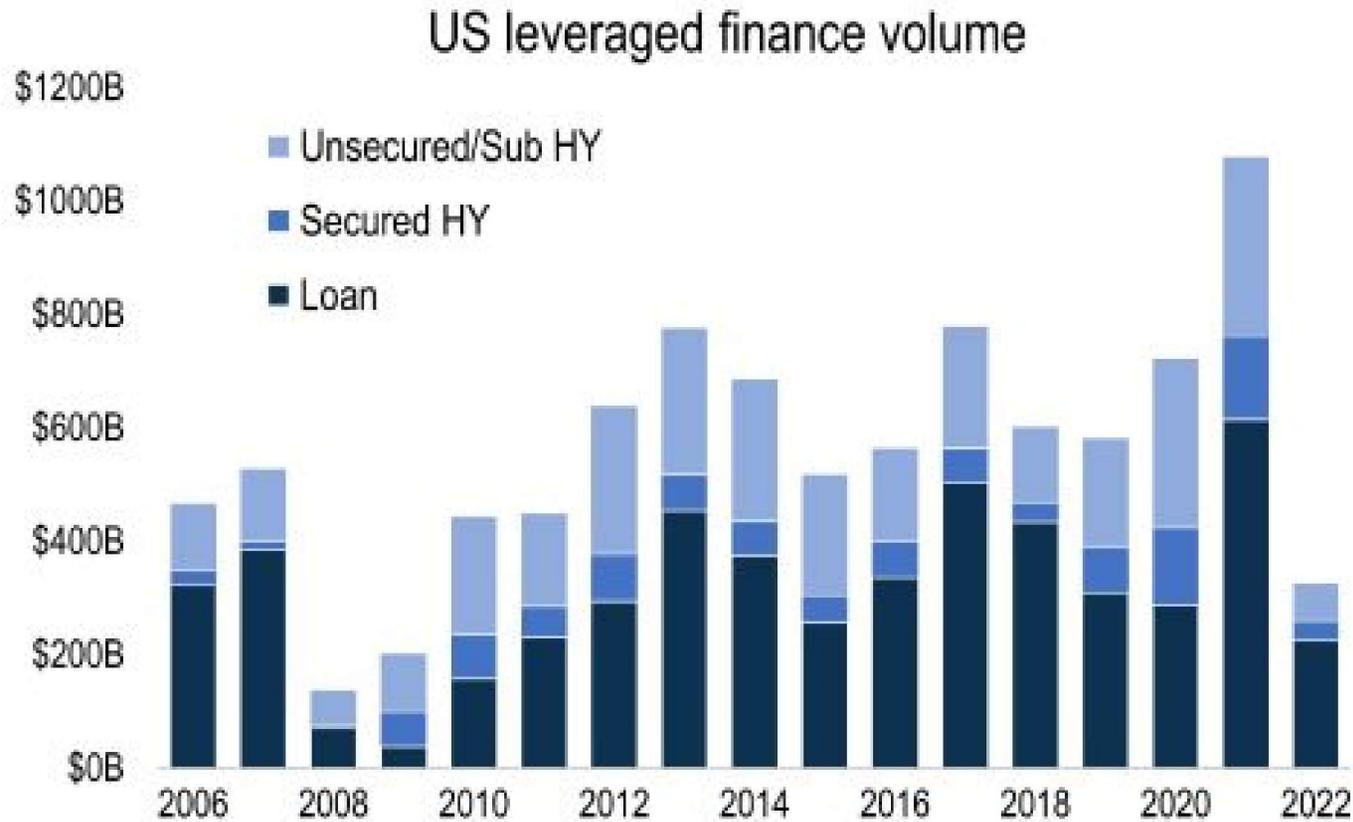
- The share of PE driven M&A activity reached record levels through the first three quarters of 2022

- Consistent with levels seen in 2021, PE sponsors led nearly 40% of deal activity (as measured by value) through 3Q 2022
- 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
- The chart below presents PE sponsors’ share of global M&A activity per year since 2007



Corporate Leveraged Finance

- In 2022, new issue volumes (through 12/15/22) declined by ~70% as compared to 2021
 - Total new issue volumes in the U.S. were ~\$325 billion versus nearly \$1.1 trillion in 2021
 - The chart below presents new issue volumes since 2006



Data through Dec. 15, 2022.

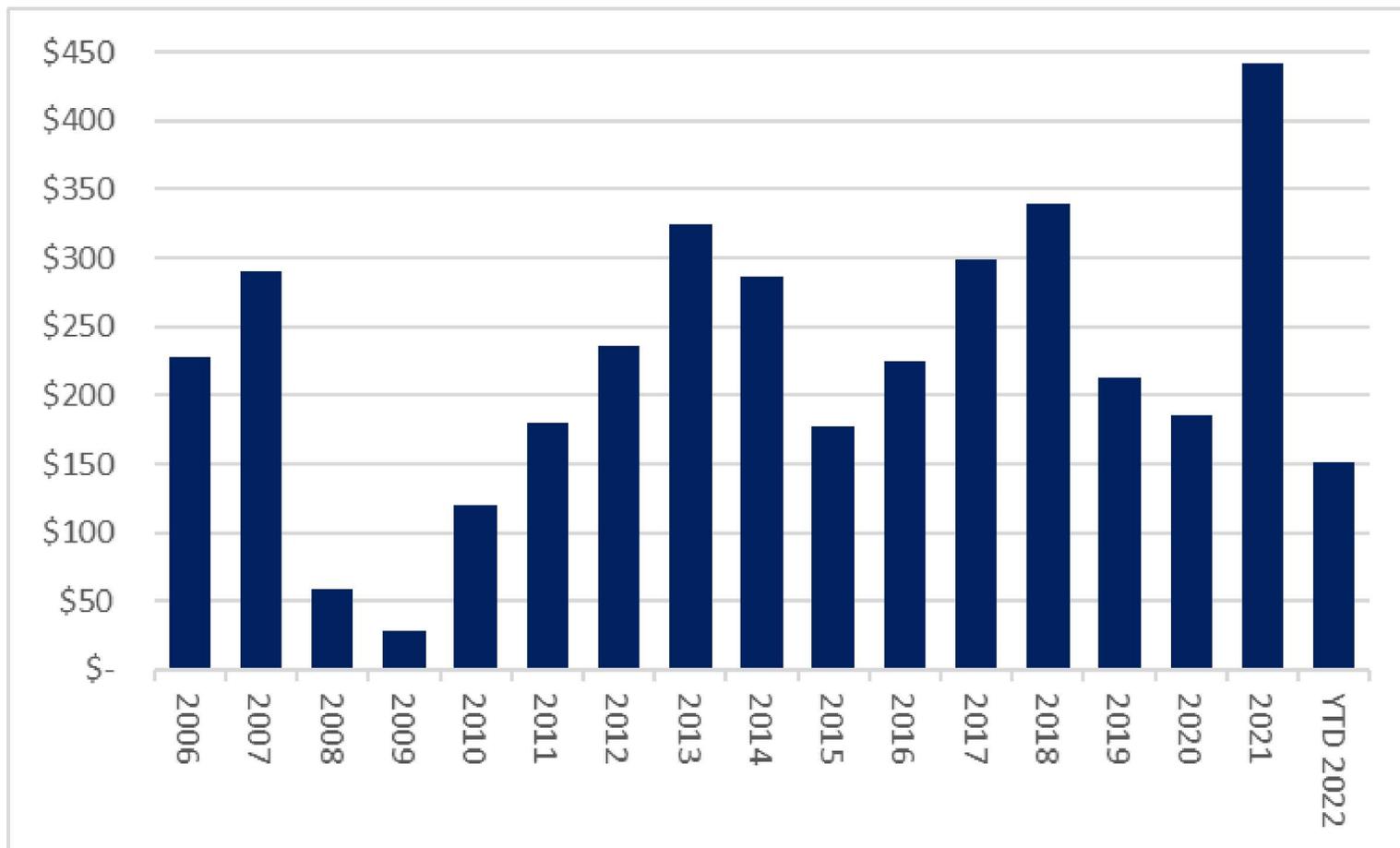
Source: Leveraged Commentary & Data (LCD)



OREGON
STATE
TREASURY

Corporate Leveraged Finance

- **As of 11/30/22, PE sponsor backed leverage loan volumes in 2022 represented roughly a third of 2021 volumes**
 - ~60% of volumes were used to finance leveraged buyouts and an additional ~20% was used to finance M&A
 - The chart below presents new issue volumes for sponsor loans since 2006



Private Equity Returns

- The chart below presents trailing horizon net IRRs for the Private Equity industry as of September 30, 2022

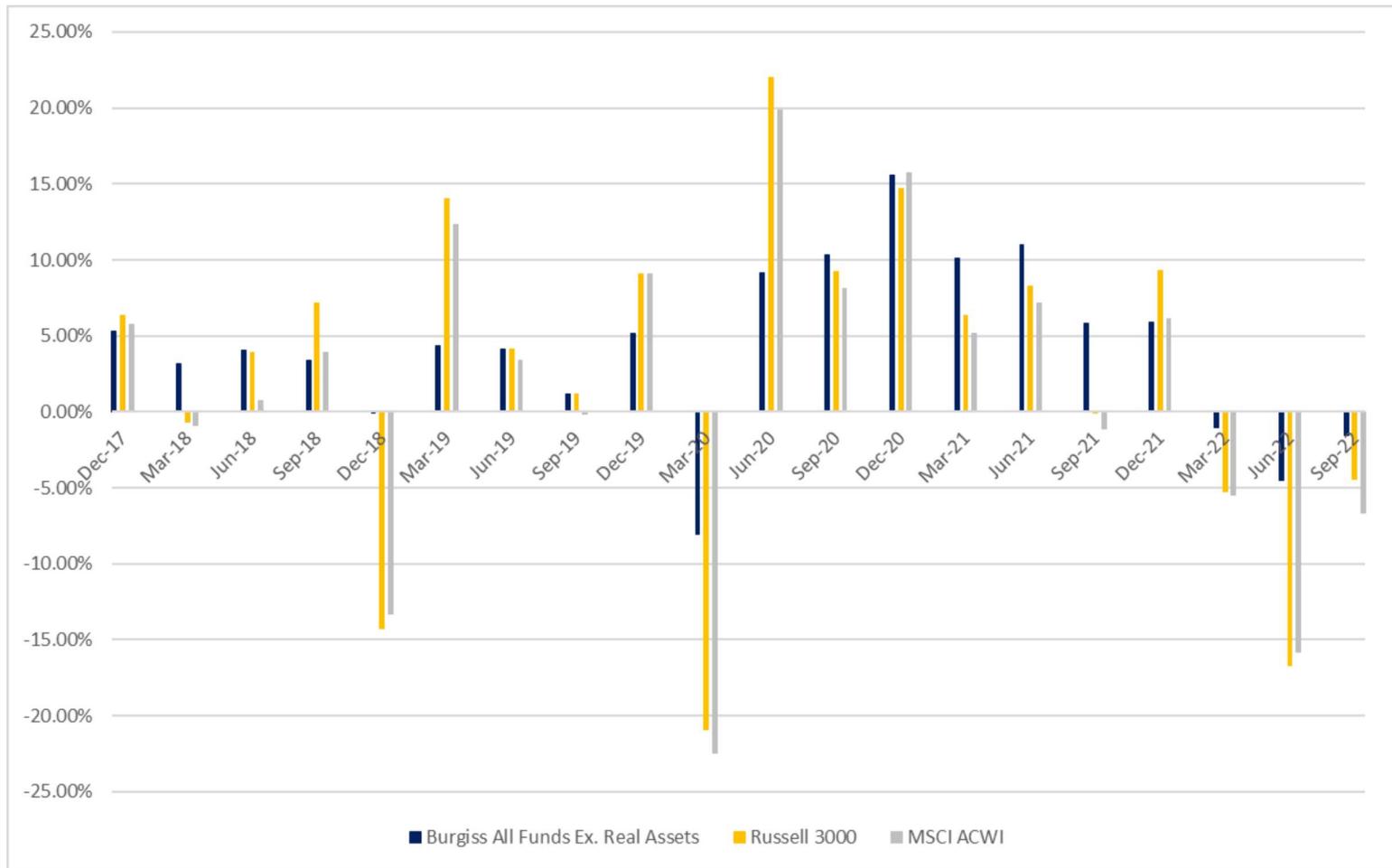
- Due to the vagaries of private market valuations, public market comparisons are rendered temporarily meaningless in periods of heightened volatility. This is certainly the case today with the PE asset class down only 2% for the YE 9/30/22
- North America continues to be the strongest performing region over the past decade, extending the advantage over other geographies in the last year
- Despite a route in non-profitable, publicly traded technology equities, VC has only been marked down -7% and remains the strongest performing asset class for the 3-, 5- and 10-year periods

Partnership Level Strategy	IRR 1 year	IRR 3 year	IRR 5 year	IRR 10 year
Burgiss All Fund Ex Real Assets	-2%	20%	17%	15%
Russell 3000 ICM IRR	-18%	8%	9%	12%
MSCI ACWI ICM IRR	-16%	6%	7%	0%
GEOGRAPHY				
Burgiss All Fund Ex Real Assets - North America	1%	23%	19%	16%
Burgiss All Fund Ex Real Assets - Europe	-7%	15%	13%	13%
Burgiss All Fund Ex Real Assets - Asia Pacific	-4%	15%	14%	14%
Burgiss All Fund Ex Real Assets - Generalist	-8%	16%	14%	12%
ASSET CLASS				
Burgiss - Buyout	1%	20%	17%	16%
Burgiss - Expansion Capital	-15%	12%	11%	11%
Burgiss - Venture Capital	-7%	29%	25%	20%
Burgiss - Other Ex Real Assets	4%	10%	9%	9%



Private Equity Returns

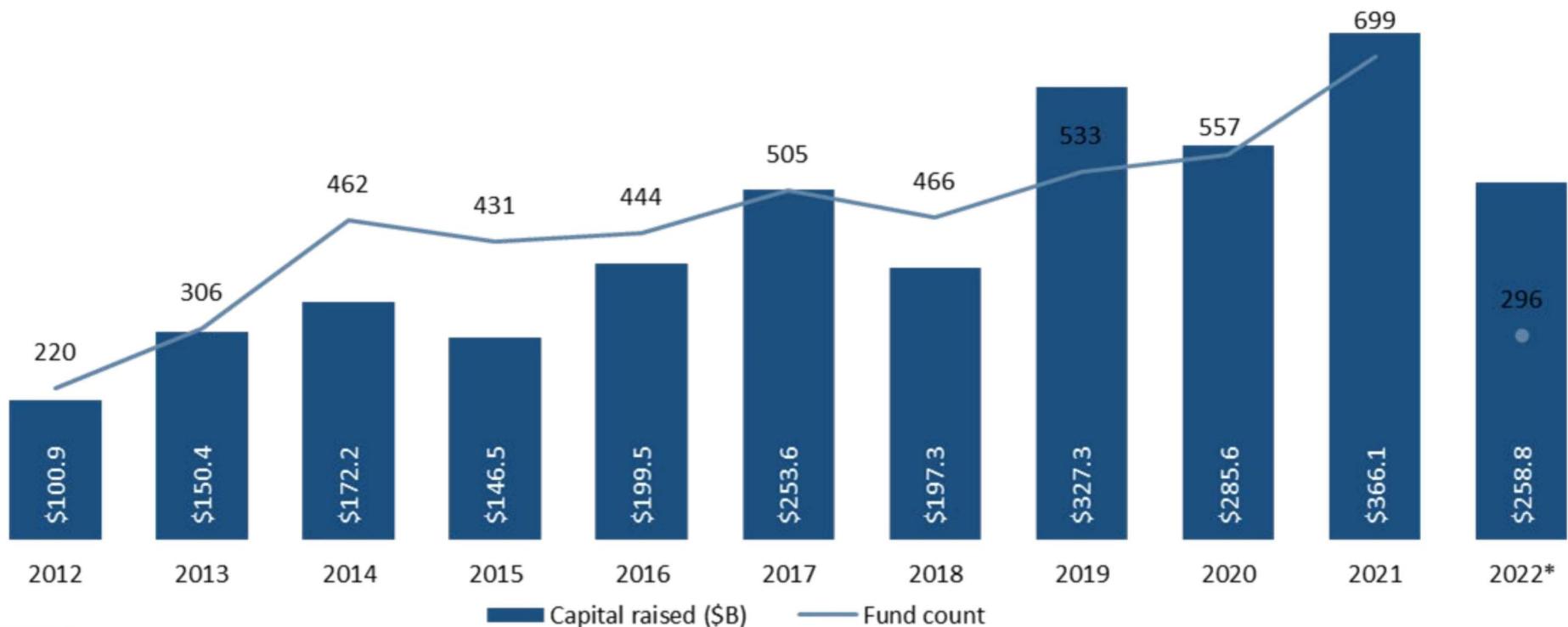
- The chart below presents the past five years of quarterly return data for public and private equity markets
 - Private equity has not kept pace during periods of extreme volatility in public markets (e.g. Q4-18 to Q1-19, Q4-19 to Q2-20), and the asset class has yet to fully participate in the market correction that commenced at the beginning of 2022



U.S. Private Equity Update – Fundraising

- Through 3Q 2022, ~\$260 billion had been raised across 296 U.S. private equity funds

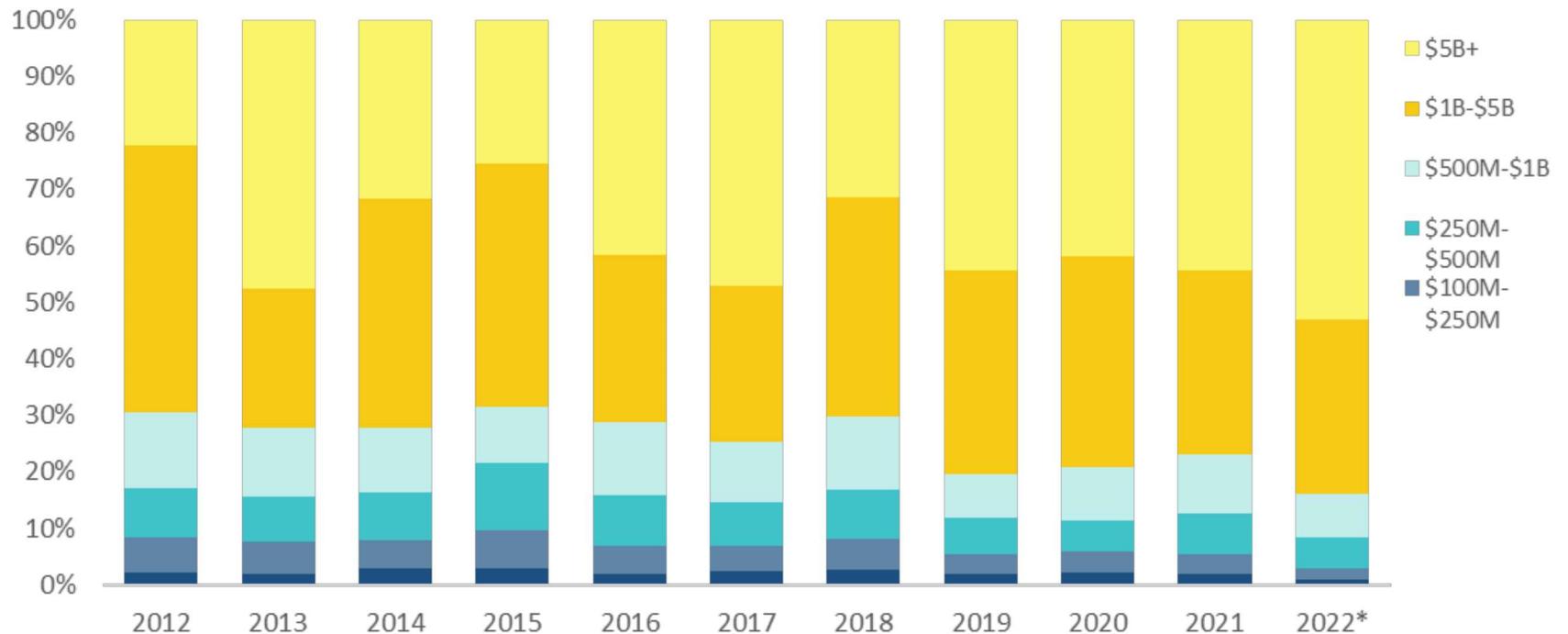
- Fundraising through the first three quarters of 2022 was roughly on pace to match record fundraising in 2021
- On average, experienced managers came back only 2.8 years after their prior fundraise. This represented the continuation of a significant acceleration in activity
- The chart below presents annual U.S. private equity fundraising activity since 2012



U.S. Private Equity Update – Fundraising

- Larger funds continued to play a dominant role in U.S. PE fundraising

- ~83% 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 ~\$928 million for the first three quarters
- As always, smaller funds dominate by count with ~82% 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 2012



U.S. Private Equity Update – Deployment

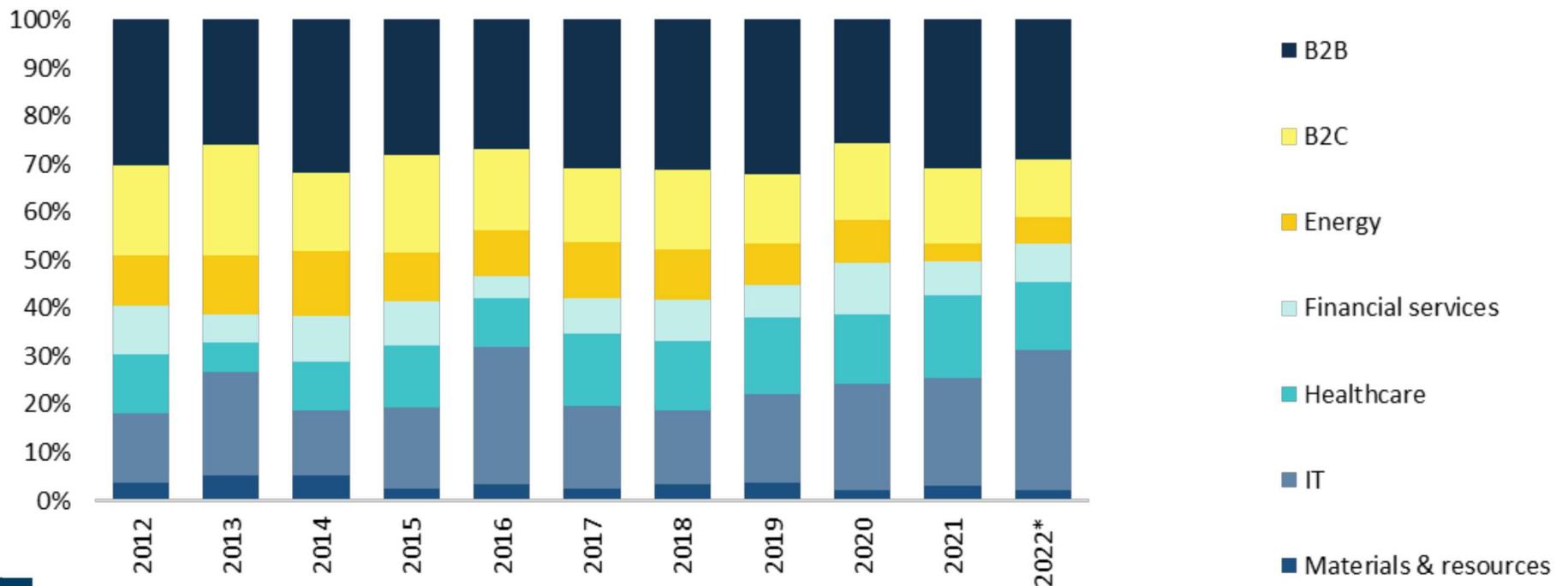
- Through 3Q 2022, roughly 6,500 private equity deals have been announced with a total value of \$819 billion
 - The volume through 3Q 2022 represented ~95% of activity through the first three quarters of 2021, but annualized volume was only 75% of 2021 activity due to a prolific Q4 of 2021
 - Add-on acquisitions represented ~78% of all deals done in the first nine months of the year setting a new all-time high
 - Deals with enterprise values at or above \$1 billion represent ~34% of total transaction volume approaching levels seen in 2016 (~37%) but still well below levels seen in 2007 (~60%)
 - The chart below presents annual U.S. investment activity since 2012



U.S. Private Equity Update – Deployment

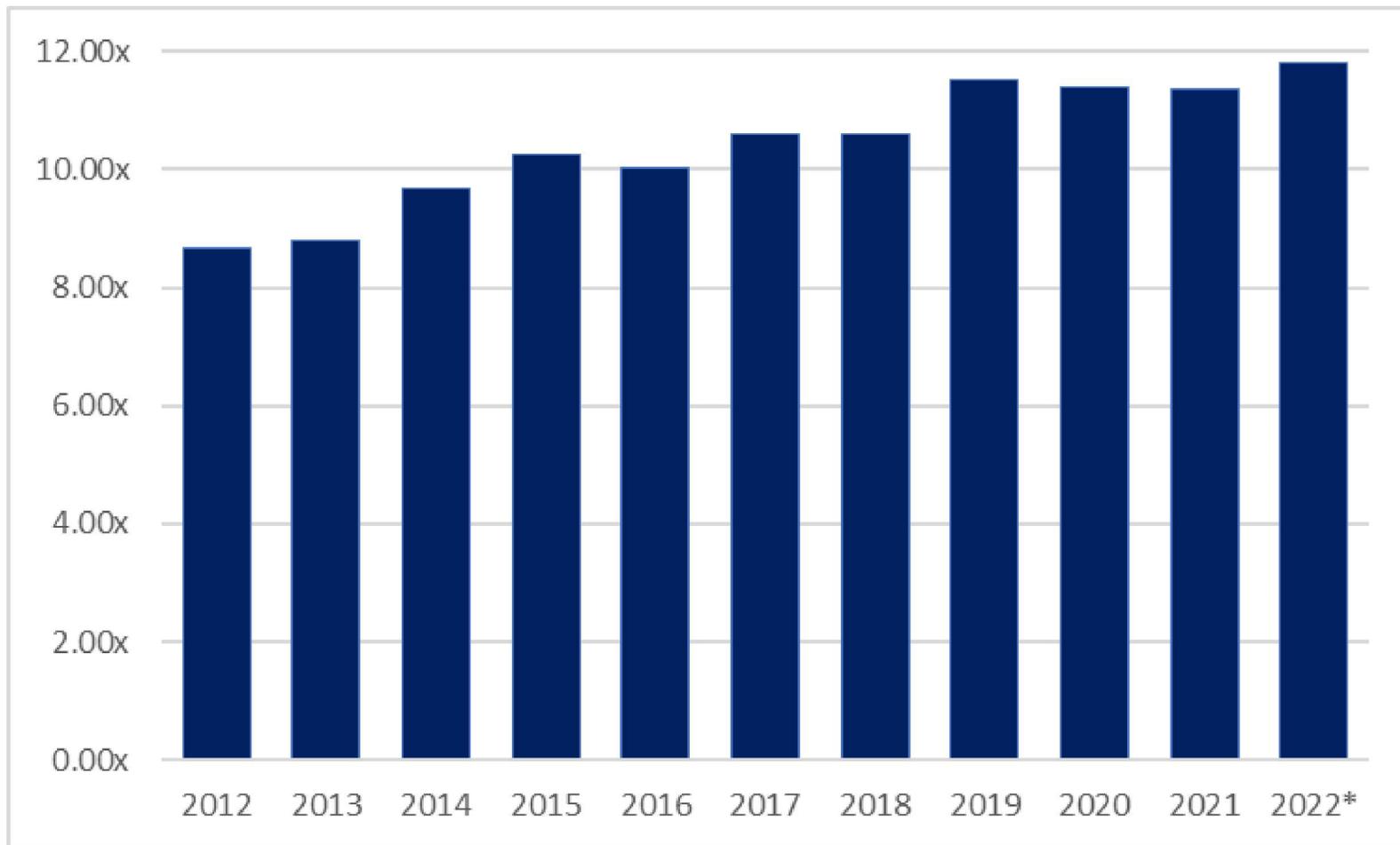
- The well-established sector shift to information technology continued through the first three quarters of 2022

- The allocation to IT represented 29% of overall volume through 3Q 2022, but IT represented more than half of deal volume for transactions at enterprise values at or above \$1 billion
- \$129 billion had already been deployed into software transactions in the first nine months of the year. This exceeds software transaction volume for all years except 2021 when \$175 billion was deployed
- The chart below presents the sector mix (by \$) for annual U.S. investment activity since 2012



U.S. Private Equity Update – Deployment

- **At a median entry multiple of 11.8x enterprise value/EBITDA, PE backed transaction pricing remained at peak levels in 2022**
 - Equity contribution as a percentage of the going-in capital structure stands at nearly 45%
 - The chart below presents median transaction multiples for U.S. investment activity since 2012



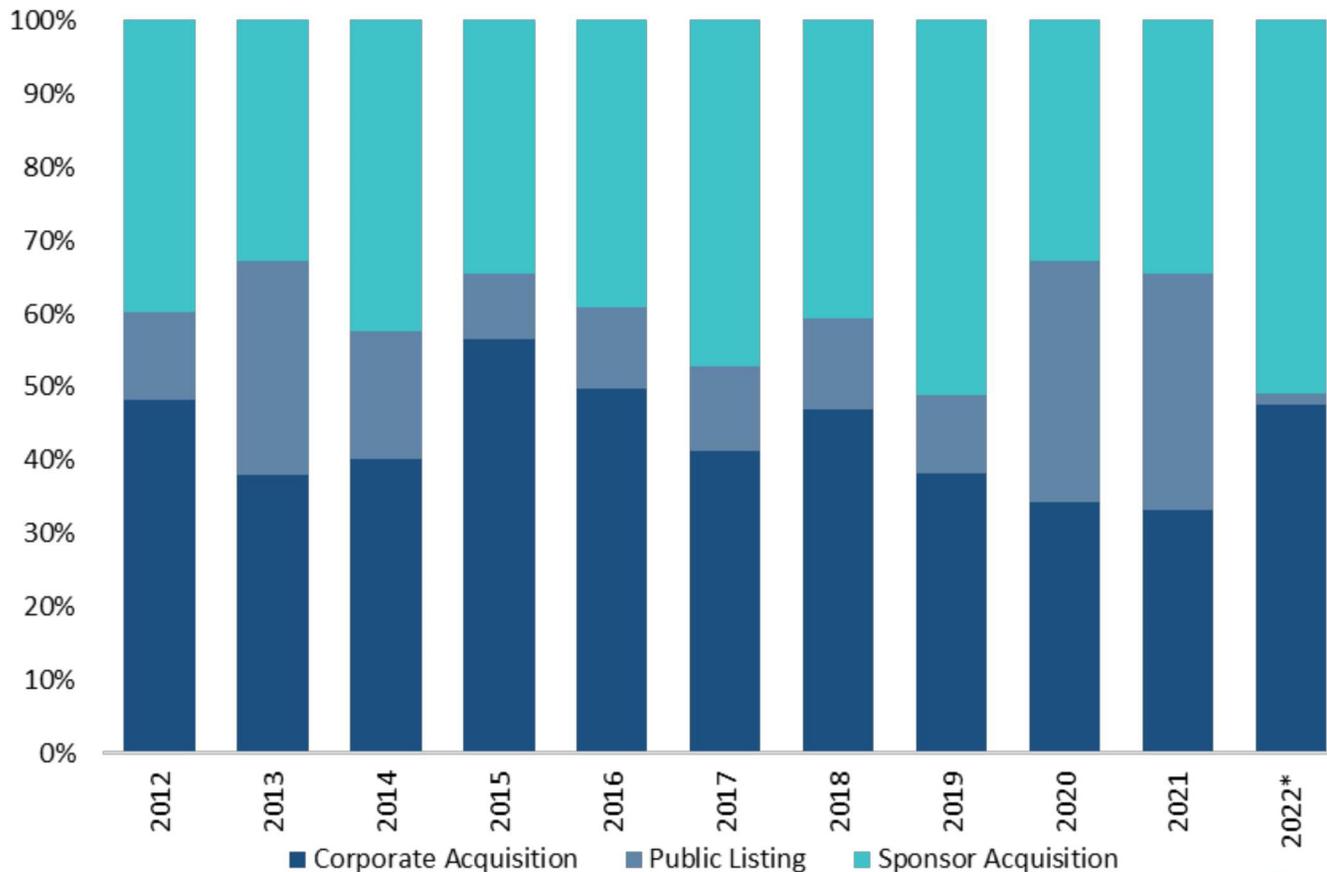
U.S. Private Equity Update – Exits

- Through 3Q 2022, nearly 950 exits of U.S. private equity backed companies had been consummated for a total value of \$293 billion
 - Exit pace through 3Q 2022 was less than half the record pace seen in 2022
 - Exits at enterprise values at or above \$2.5 billion account for ~25% of total transaction volume. This compares to 45% and 42% in 2020 and 2021, respectively
 - Exit volume in IT sector collapsed to ~\$33 billion (14% of total exits by value) through three quarters having totaled ~\$235 billion (28%) in 2021
 - The chart below presents the annual U.S. exit activity since 2012



U.S. Private Equity Update – Exits

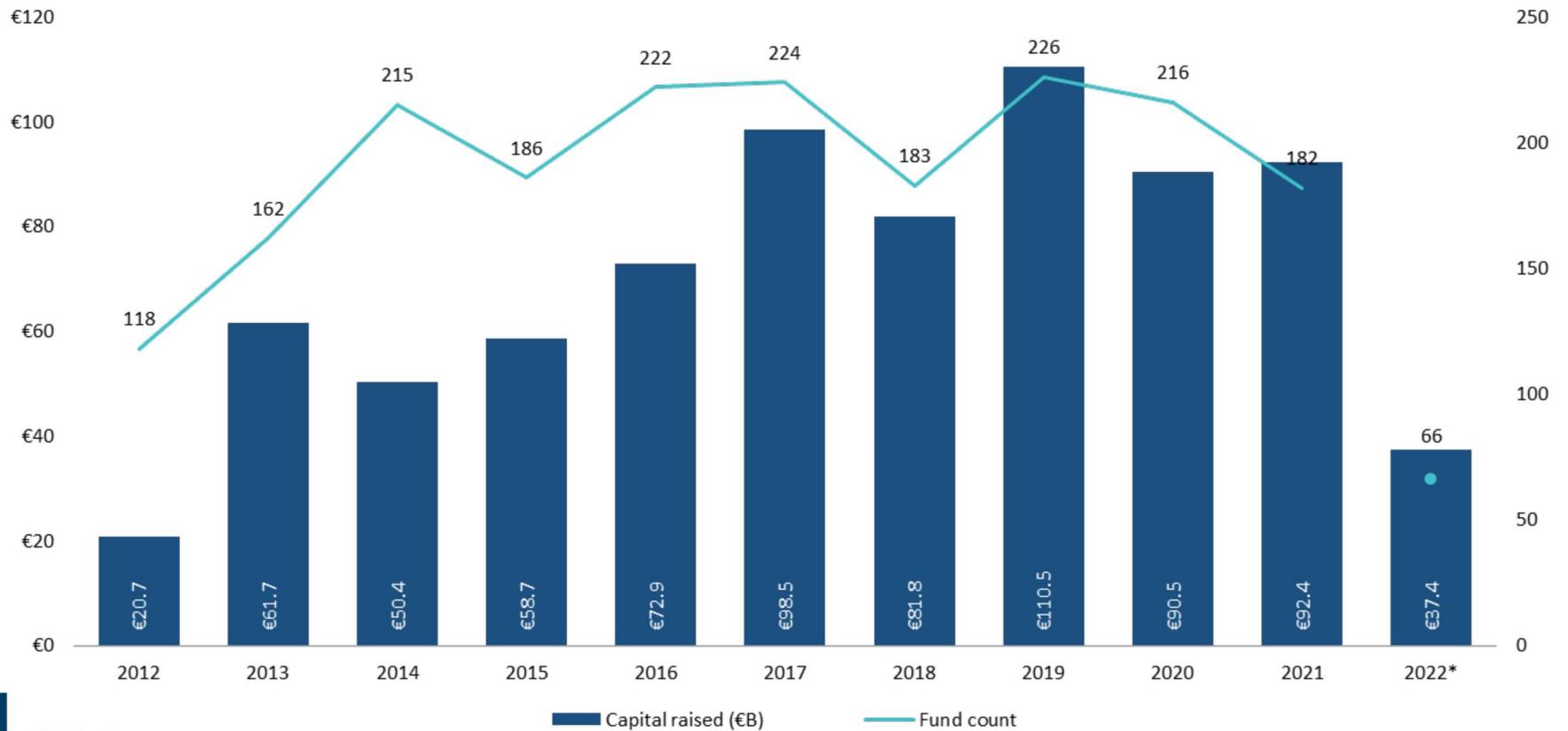
- Through 3Q 2021, IPO activity collapsed representing less than 2% of exit volume (by \$)
 - The \$4 billion realized through the first three quarters of the year via public market exits compares to \$272 billion in 2021. Importantly, while IPOs are counted as “exits”, they result in limited liquidity to PE fund investors as share sell downs can take multiple years
 - The charts below presents annual U.S. exits by type since 2012



Europe Private Equity Update – Fundraising

- Through 3Q 2022, €37 billion had been raised across 66 funds

- Fundraising for the first three quarters of the year was on pace to represent just more than half of fundraising volume in 2021
- Funds with commitments of €1 billion or more account for roughly two thirds of total fundraising, which is consistent with recent precedent
- The chart below presents annual European private equity fundraising activity since 2012



Europe Private Equity Update – Deployment

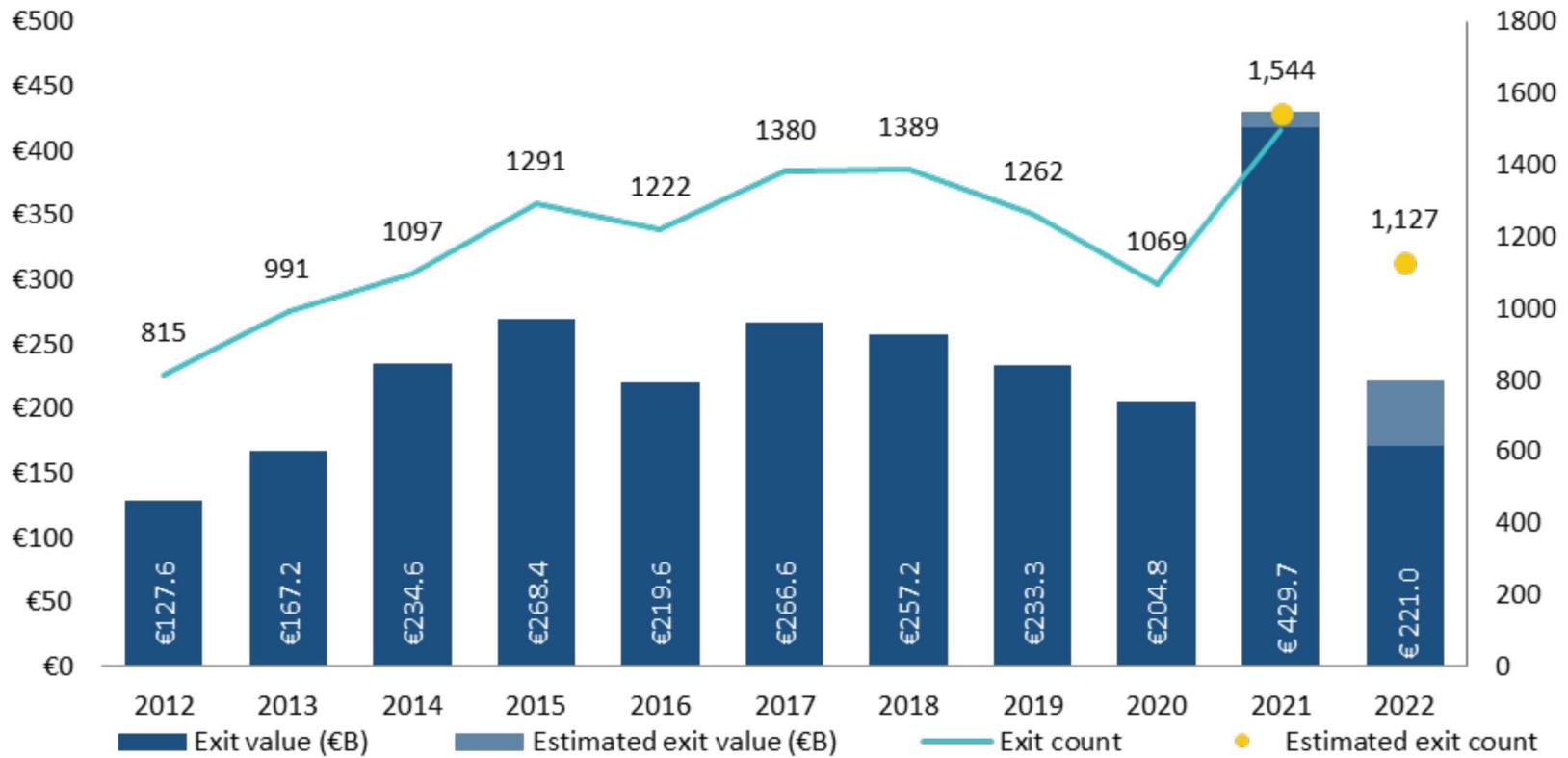
- Through 3Q 2022, nearly 6,000 private equity deals have been announced with a total value of €624 billion
 - Activity through the first three quarters of the year was ~20% above the same period in 2021, but activity was decelerating meaningfully in the second half of 2022
 - Add-on acquisitions represented 55% of deal count and 38% of transaction volume through the first three quarters of the year
 - The chart below presents the annual private equity investment activity in Europe since 2012



Europe Private Equity Update – Exits

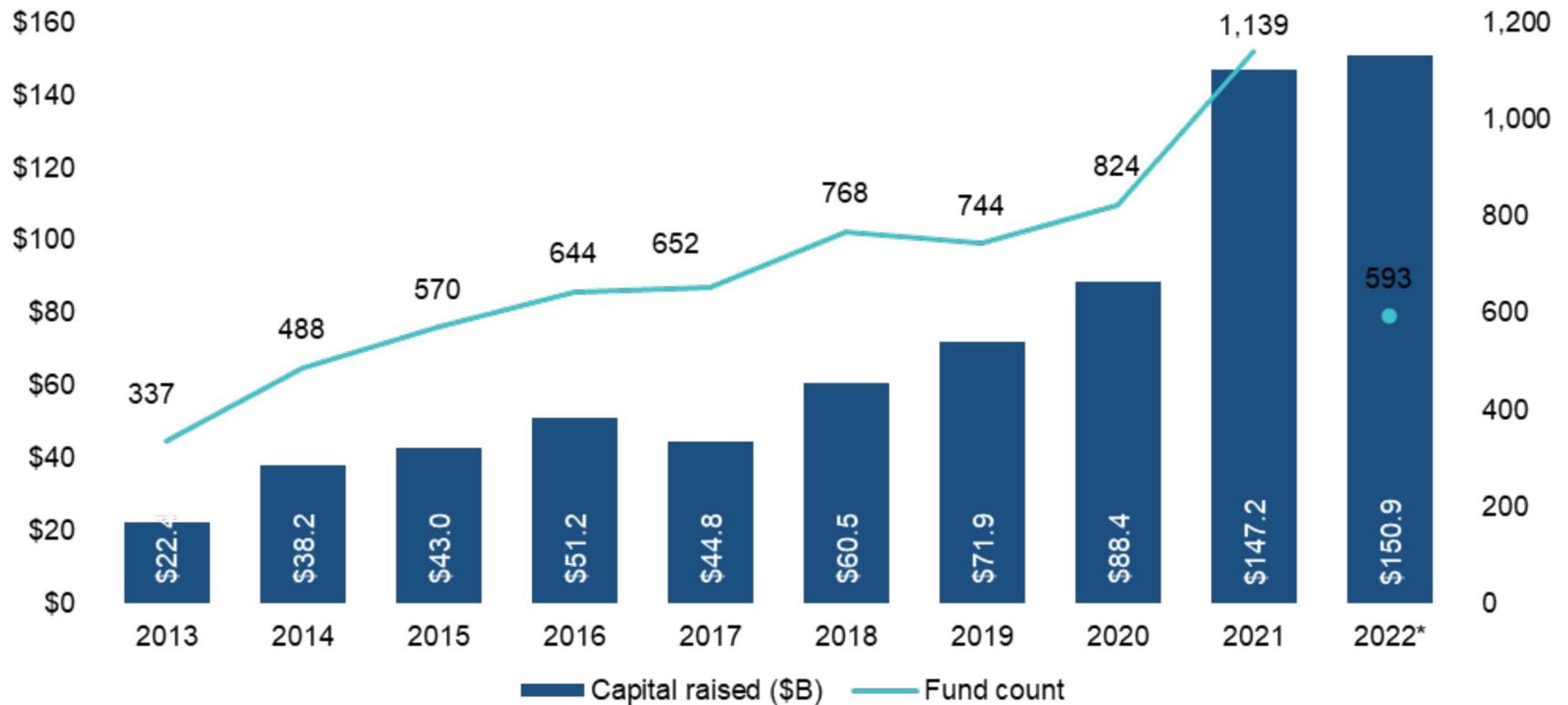
- Through 3Q 2022, more than 1,100 exits of private equity backed companies have been announced with a total value of €221 billion

- Exit pace through the first three quarters of the year represented two thirds the record pace seen in 2021
- As with deployment, exit pace declined meaningfully during 2022 with Q3-22 volume representing half of Q3-21 volume
- The chart below presents the annual private equity exit activity in Europe since 2012



U.S. Venture Capital Update – Fundraising

- Through 3Q 2022, \$151 billion had been raised across 593 U.S. venture capital funds
 - Fundraising through the first three quarters already exceeded record fundraising in 2021
 - Funds with commitments at or above \$1 billion represent ~60% of all fundraising volumes having represented only 28% of aggregate commitment from 2017-2021
 - The chart below presents annual U.S. venture capital fundraising activity since 2013

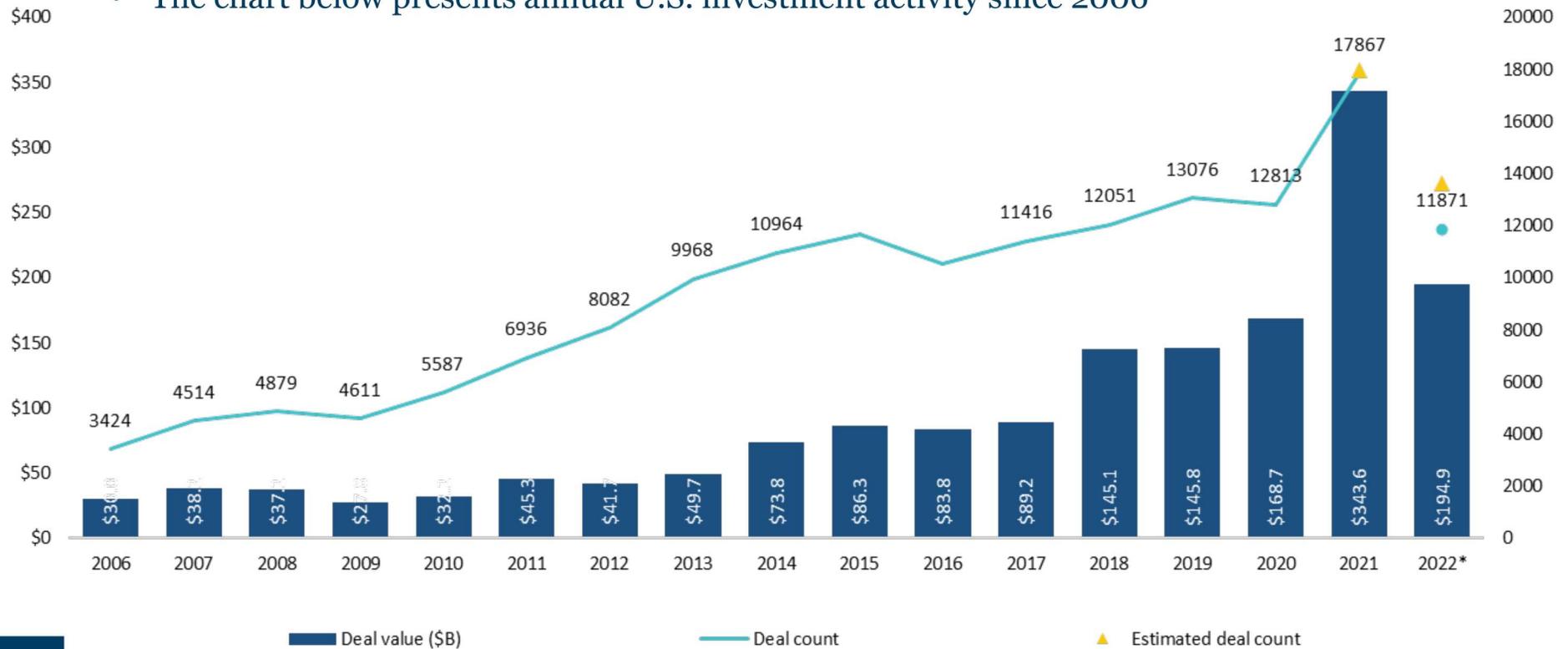


U.S. Venture Capital Update – Deployment

- Through 3Q 2022, nearly 12,000 venture capital rounds have been announced with a total value approaching \$195 billion

- Volumes through 3Q 2021 are 22% below volumes through the first three quarters of 2021, but 2021 activity easily exceeds all other years in recent history
- Volume continues to be largely driven by fundraising at “unicorn” valuations (\$1 billion plus), which represent 32% by volume but 3% by count. This is down from 41% of deal value and 3% of deal count in 2021

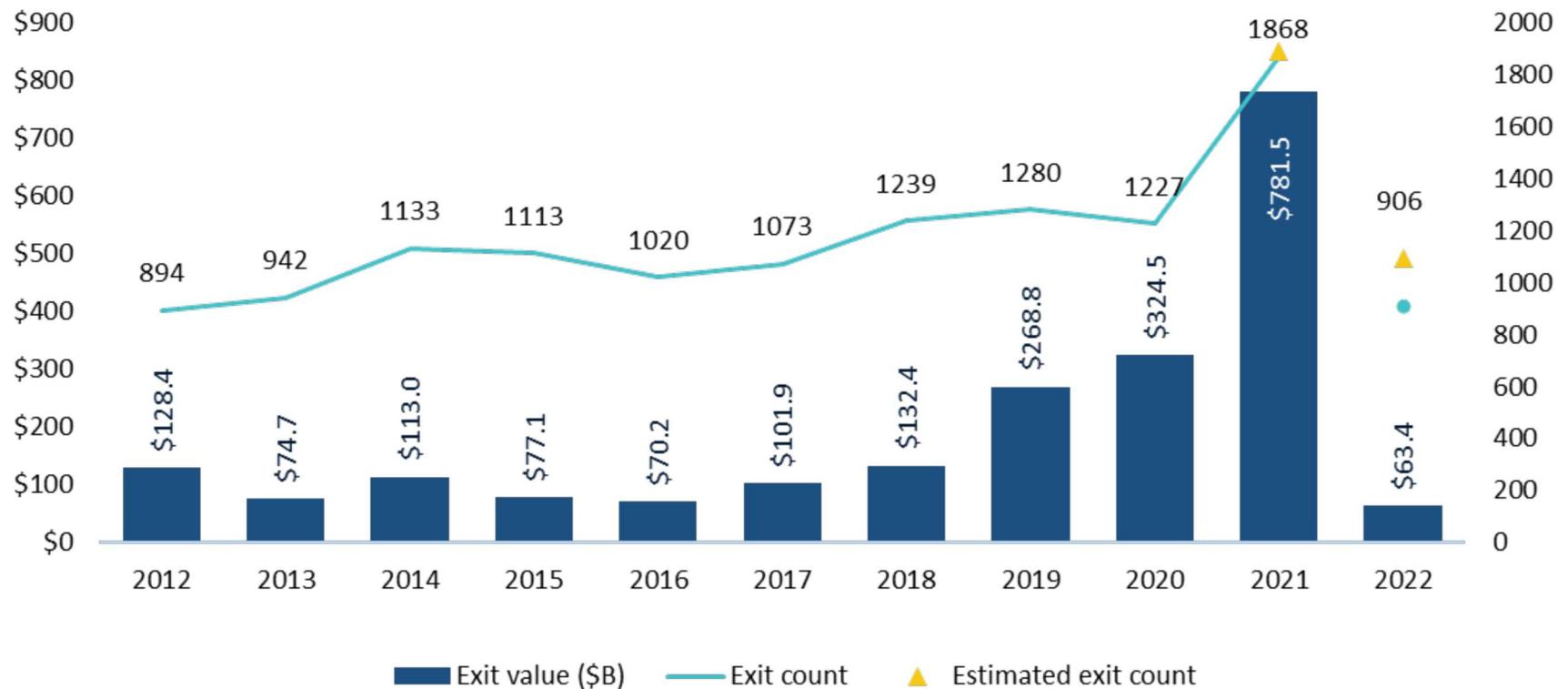
- The chart below presents annual U.S. investment activity since 2006



U.S. Venture Capital Update – Exits

- **Through 3Q 2022, over 900 exits of U.S. venture capital backed companies have been consummated for a total value of \$63 billion**

- Exit activity through 3Q 2022 was on pace to represent only ~10% of exit volume in 2021
- IPO volume stands at ~\$30 billion YTD 2022 having totaled \$670 billion in 2021. As noted previously, while counted as “exits”, IPOs typically produce limited immediate liquidity for VC fund investors
- The chart below presents the annual U.S. exit activity since 2012





OREGON STATE TREASURY

Tobias Read
Oregon State Treasurer

350 Winter St NE, Suite 100
Salem, OR 97301-3896

oregon.gov/treasury

Pathway Private Equity Monitoring & Liquidity Management Solutions

Purpose

Subject to the satisfactory negotiation of all terms and conditions with Staff working in concert with legal counsel, Staff recommends approval to recycle half of any accelerated liquidity proceeds generated by the Private Equity Monitoring & Liquidity Management Program (the “Program”) for a period of five years and up to a maximum of \$1 billion into new commitments to OPERF’s co-investment program (Pathway Private Equity Fund C-III, L.P., the “Co-Invest Vehicle”). Approval of this proposal would represent the continuation and extension of the OIC’s existing relationship with Pathway dating back to 2001 and spanning multiple investment mandates.

Background

Pathway was established in 1991 as a spin-out of Wilshire Associates private markets investment team. The Firm currently oversees more than \$85 billion of discretionary assets under management across private equity, private credit, and infrastructure, including primary fund investments, co-investments, and secondary transactions. Pathway remains owned and led by 23 Partners who oversee a team of more than 220 professionals based in Irvine, Providence, Hong Kong, and Tokyo. The team is highly cohesive with an average tenure among the 21 investing Partners of 22 years.

Program Overview

The Private Equity Monitoring & Liquidity Management Program augments Staff’s existing monitoring protocols creating much needed leverage given the extensive restructuring of the manager roster that has taken place in recent years. Secondly, and at Pathway’s discretion, the Program may be used to opportunistically pursue accelerated liquidity within the OPERF private equity portfolio as a pacing and portfolio management tool. In Staff’s view, this program has been a great success since it was launched in 2020. As part of the initial launch, the exact recycling provision under consideration today was approved, and the final tranche of recyclable commitment will likely be activated during 2023. That recycling provision proved to create excellent alignment in what has been a challenging environment from a pricing standpoint in the private equity secondary market.

Issues to Consider

Attributes:

- *Better Deployed Staff Resources* – Due to material trimming of OPERF’s private equity manager roster in recent years, Staff is currently monitoring a run-off portfolio that is as large by manager count as the current active General Partner roster. Reducing the monitoring burden associated with these legacy relationships increases Staff’s effectiveness with respect to executing its go-forward plan. Specifically, the Program creates leverage for OST’s limited Staff resources against the team’s highest and best use.
- *PE Portfolio Repositioning* – As an effective pacing management tool, the Program put in place the final pillar of the revised private equity implementation plan that the OIC and Staff have been working toward since 2015. Staff believes that emphasizing a refocused primary fund effort, fee mitigation, and controlled pacing best positions OPERF’s private equity portfolio to deliver on its risk/return objectives in an increasingly complex and competitive industry.
- *Total Portfolio Management* – Over the medium-term, the Program’s enhanced pacing and portfolio management features create another lever that can be used to rebalance the total OPERF portfolio maintaining closer alignment with asset allocation policy and the total fund’s target risk/return profile.

Terms

The existing legal agreements for the Pathway Programs remain unchanged, and Staff views the terms as attractive. Please note that Staff has not interacted with a placement agent in connection with this process.

Conclusion

Subject to the satisfactory negotiation of all terms and conditions with Staff working in concert with legal counsel, Staff recommends recycling half of any accelerated liquidity proceeds generated by the Program for a period of five years and up to a maximum of \$1 billion into new commitments to the Co-Invest Vehicle.

O I C



OREGON
STATE
TREASURY

TAB 6
OPERF OPPORTUNITY
PORTFOLIO REVIEW

January 25, 2023

OPERF Opportunity Portfolio 2022 Annual Review

Mike Mueller, Investment Officer



OREGON
STATE
TREASURY

Agenda

Section	Page(s)	OIC Investment and Management Beliefs Mapping																	
		1A	1B	1C	1D	2A	2B	3A	4A	4B	5A	5B	6A	6B	7A	7B	8A	8B	9A
Agenda	2																		
Overview	3		■	■	■		■		■		■								
Performance	4								■										
History	5				■						■								
Year in Review	6-8				■						■								
Investments as of 9/30/22	9				■		■			■									
Historical Cash Flows & Commitments	10																		
Portfolio Manager Snapshot	11						■		■										
Portfolio Strategy Snapshot	12						■		■										
Portfolio Age Snapshot	13								■										
Portfolio Role & Geography Snapshot	14				■				■										
Portfolio Liquidity Snapshot	15				■				■										
Looking Forward	16				■				■										
Appendix & OIC Policy	17-22																	■	■

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.
- 8 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.



Opportunity Portfolio Overview

➤ Primary Role of the Opportunity Portfolio

- Enable Staff to consider investments for OPERF that are outside current strategic asset class allocations
- Provide enhanced, risk-adjusted returns and diversification to OPERF
- Investments are expected to comprise both shorter-term (1-3 years) and longer-term holdings
- No strategic target allocation; may comprise no more than 5% of total OPERF assets

➤ Objectives

- Current policy benchmark of CPI + 5% (which staff and consultants are proposing to change; see page 19)
- A low correlation between OPERF and the Portfolio is expected over time (0.38 since inception)
- Historically has incubated new strategies or portfolios (e.g., bank loans & infrastructure)
- The Portfolio may hold investments on a long-term basis
- May be non-diversified – concentration up to 25% at time of investment

➤ Strategies Types

- Niche / innovation oriented (e.g., royalties, reinsurance, intellectual property, direct lending, multi-asset)
- Tactical / dislocation oriented (historical examples: bank loans, convertible bonds, general credit)



Performance

Measure	9/30/22	9/30/21
FMV + Distributions (in millions)	\$6,456 M	\$5,839 M
FMV	\$2,434 M	\$2,124 M
Unfunded Commitments	\$1,228 M	\$1,568 M
FMV % of OPERF	2.7%	2.2%
FMV + Unfunded Commitments % of OPERF	4.1%	3.9%
Multiple [(FMV + Distributions)/Drawn]	1.3X	1.3X
IRR Since Inception Q3 2006	7.9%	8.7%

Source: Aksia. Data as of 9/30/22.

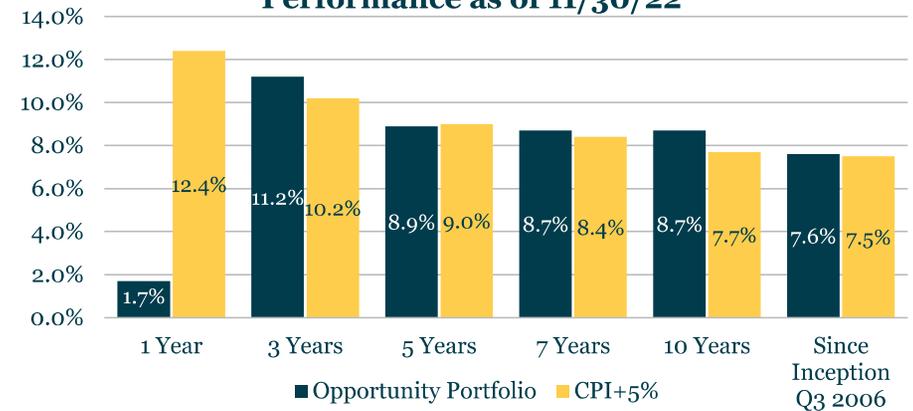
Time-Weighted Returns	Performance 11/30/2022	CPI+5%	Performance 11/30/2021	CPI+5%
1 Year	1.7%	12.4%	25.3%	12.1%
3 Years	11.2%	10.2%	12.2%	8.5%
5 Years	8.9%	9.0%	10.9%	8.0%
7 Years	8.7%	8.4%	8.8%	7.5%
10 Years	8.7%	7.7%	10.2%	7.2%
Since Inception Q3 2006	7.6%	7.5%	8.0%	7.1%

Source: State Street. Data as of 11/30/22.

One-Year Value Bridge



Performance as of 11/30/22



17-Year History

- 2005 ❖ Opportunity Portfolio inception
- 2006 ❖ Opportunity Portfolio first investment
- 2007 ❖ Early market fissures appear
 - OPERF early to levered bank loan dislocation
- 2008 ❖ Global Financial Crisis (GFC)
 - Full-time Opportunity Portfolio Investment Officer hired
 - High-water mark in new commitments (number & dollars)
 - Heavy investment in levered bank loan strategies
- 2009-2010 ❖ Relatively light deployment following significant investment post-GFC
- 2011 ❖ Three funds moved to seed new Alternatives Portfolio (now known as Real Assets Portfolio)
- 2012-2014 ❖ Commitments to multi-strategy opportunistic mandates in response to limited staff resources
- 2014 ❖ Senior Opportunity Portfolio Investment Officer promoted to Director of Alternatives Program
- 2015-2018 ❖ Relatively light to stable deployment
- 2019 ❖ Appointment of Investment Officer dedicated to Opportunity Portfolio in Q3 2019
- 2020 ❖ COVID-19 causes widespread market disruption, commitments made to two funds to pursue related investment opportunities
- 2021 ❖ Closed on four new niche investment strategies
- 2022 ❖ Lighter deployment to existing managers in recognition of overall plan-level illiquidity



2022 Year in Review

- The Opportunity Portfolio’s \$2.4 billion market value rose to approximately 2.7% of OPERF over the past year, within the 5.0% OIC Policy limit (see Appendix). As shown on Page 15, nearly 20% of the Portfolio remains very liquid.
- A key goal is serving as a clearinghouse for any strategy that does not have a strategic allocation “home.” As the OIC recently completed its asset/liability study in December (without introducing a strategic allocation to private credit), Staff expects that private credit will continue to comprise a meaningful portion of the Portfolio, which is not surprising, since “Private credit is the third-largest private capital asset class after PE and real estate”¹ (see page 12).
- The Portfolio is concentrated among four partners comprising approximately 60% of current Portfolio value across 10 different investment (see pages 9, 11).
- During 2022, the OIC authorized commitments with two existing managers. Details of the \$300 million in new commitments can be found on Page 7.
- The Portfolio has essentially been cash flow neutral for the five-year period ended September 2022 (see page 10).
- Two partnerships wrapped up in 2022, leaving 15 manager relationships in the Portfolio across 26 investments.
- Completed Request for Proposal for Portfolio consulting services with the OIC retaining Aksia at their December 2022 meeting.

¹2022 Global Private Equity Outlook, Mergermarket on behalf of Dechert LLP.



2022 Year in Review (cont.)

2022 Activity

Investment Name	Authorized Date	First OPERF Drawdown	Commitment Amount
Whitehorse Liquidity Partners Fund V	April 2022	May 2022	\$200,000,000
Pathlight Capital Fund III	September 2022	December 2022	\$100,000,000
2022 Total Approved			\$300,000,000

2021 Activity

Investment Name	Authorized Date	First OPERF Drawdown	Commitment Amount
Whitehorse Liquidity Partners Fund IV	March 2021	March 2021	\$200,000,000
Blue Torch Credit Opportunities Fund II	March 2021	April 2021	\$100,000,000
Arctos Sports Partners Fund I	August 2021	October 2021	\$150,000,000
Pathlight Capital Fund II	October 2021	December 2021	\$100,000,000
2021 Total Approved			\$550,000,000

2020 Activity

Investment Name	Authorized Date	First OPERF Drawdown	Commitment Amount
Sixth Street SLE II	June 2020	November 2020	\$125,000,000
OHA Tactical Investment Fund	July 2020	July 2020	\$300,000,000
Owl Rock Capital Corporation III	July 2020	September 2020	\$150,000,000
Clearlake Flagship Plus Partners	October 2020	November 2020	\$200,000,000
2020 Total Approved			\$775,000,000



OREGON
STATE
TREASURY

2022 Year in Review (cont.)

2022 Opportunity Portfolio Deal Flow

- Scale, brand, existing relationships and open-door policy leveraged to foster solid deal flow
- Broad opportunity set has helped meeting count remain consistent over time; referrals from across OST teams
- Points of contact (in-person or calls) exceeded 110, including over 60 related to prospective investments
- While there were opportunities to deploy capital, Staff was cognizant of the current illiquid profile of OPERF and therefore slowed the pace of investment, and/or elected to move commitments to 2023 (where possible)



Investments as of 9/30/22

Fund	Vintage	Status	Strategy	Sector	Role	FMV (\$K)	Unfunded (\$K)	Commitment (\$K)
Fidelity Real Estate Opportunistic Income Fund	2007	Evergreen	Credit	Real Estate	Niche	\$132,993	\$0	\$100,000
Sanders Capital All Asset Value Fund ¹	2010	Evergreen	Equity	Diversified	Niche	\$334,679	\$0	\$200,000
Nephila Advisors Juniper & Palmetto Funds	2012	Liquidation	Insurance	P&C	Niche	\$18,431	\$0	\$100,000
Blackstone Tactical Opportunities - O ²	2013	Active	Equity	Diversified	Niche	\$121,952	\$65,739	\$460,000
Galton Onshore Mortgage Recovery Fund III	2013	Liquidation	Credit	Real Estate	Niche	\$1,143	\$0	\$50,000
Content Partners Fund III	2014	Harvest	Royalties	Media	Niche	\$11,054	\$770	\$50,000
Lone Star Residential Mortgage Fund I	2014	Harvest	Credit	Real Estate	Niche	\$1,544	\$12,201	\$43,223
Sixth Street TAO 2.0/3.0	2014	Evergreen	Credit	Diversified	Niche	\$389,092	\$205,477	\$500,000
OrbiMed Royalty Opportunities Fund II	2015	Liquidation	Royalties	Healthcare	Niche	\$2,012	\$19,461	\$35,000
Sixth Street SLE I	2015	Liquidation	Credit	Diversified	Niche	\$20,685	\$31,992	\$100,000
Lone Star Fund X	2016	Harvest	Equity	Diversified	Niche	\$64,940	\$16,301	\$150,000
Owl Rock Capital Corporation (BDC) (ORCC) ³	2016	Evergreen	Credit	Diversified	Niche	\$137,453	\$0	\$150,000
Blackstone Tactical Opportunities II - O	2020	Active	Equity	Diversified	Niche	\$30,174	\$128,807	\$40,000
Clearlake Flagship Plus Partners	2020	Active	Equity/Credit	Diversified	Tactical	\$141,545	\$69,063	\$200,000
OHA Tactical Investment Fund	2020	Active	Equity/Credit	Diversified	Tactical	\$253,694	\$64,511	\$300,000
Owl Rock Capital Corporation III (BDC) ⁴	2020	Active	Credit	Diversified	Niche	\$180,935	\$0	\$150,000
Sixth Street SLE II	2020	Active	Credit	Diversified	Niche	\$36,585	\$80,949	\$125,000
Sixth Street TAO Contingent ⁵	2020	Active	Credit	Diversified	Tactical	\$116,517	\$76,560	\$200,000
Arctos Sports Partners Fund I	2021	Active	Equity	Sports/Media	Niche	\$91,760	\$85,506	\$150,000
Blue Torch Credit Opportunities Fund II	2021	Active	Credit	Diversified	Niche	\$86,759	\$22,302	\$100,000
Pathlight Capital Fund II	2021	Active	Credit	Diversified	Niche	\$82,989	\$18,779	\$100,000
Whitehorse Liquidity Partners Fund IV	2021	Active	Preferred	Diversified	Niche	\$122,860	\$71,407	\$200,000
Pathlight Capital Fund III	2022	Active	Credit	Diversified	Niche	\$0	\$100,000	\$100,000
Whitehorse Liquidity Partners Fund V	2022	Active	Preferred	Diversified	Niche	\$51,218	\$157,797	\$200,000
Total Opportunity Portfolio:						\$2,431,016	\$1,227,622	\$3,803,223
Allocation within OPERF:						2.7%		

1 The Sanders Capital All Asset Value Fund mandate allows multi-asset holdings; however, the portfolio is currently predominately in equity securities.

2 While the fund strategy can pursue a broad range of equity and credit investments in private and public securities and instruments, the majority of fund investments have an equity component.

3 Includes Blue Owl Stock.

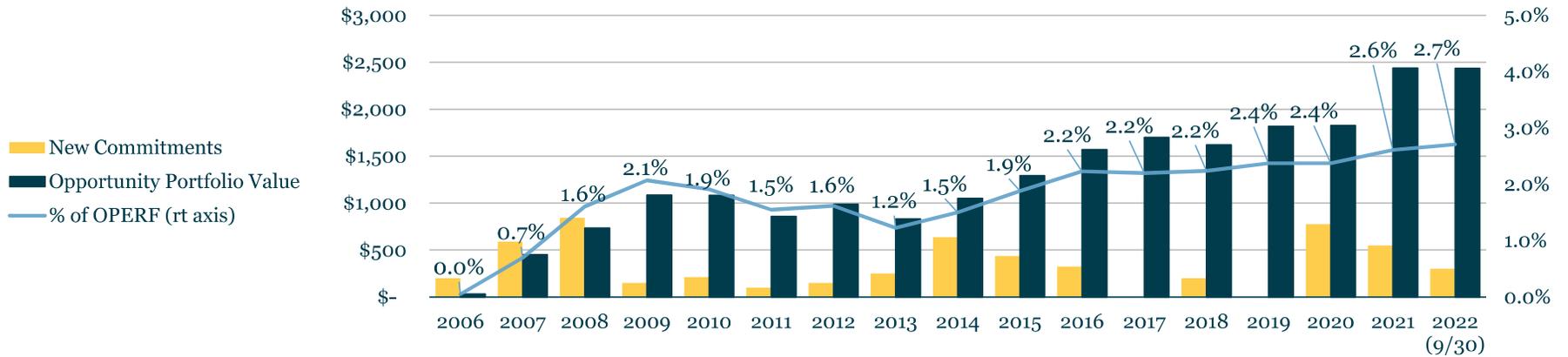
4 Includes Owl Rock Capital Diversified Holdings (ORDH).

5 The fund commitment was made in January 2018 and was activated in April 2020.

Source: Aksia and OST Staff.



Historical Cash Flows & New Commitments

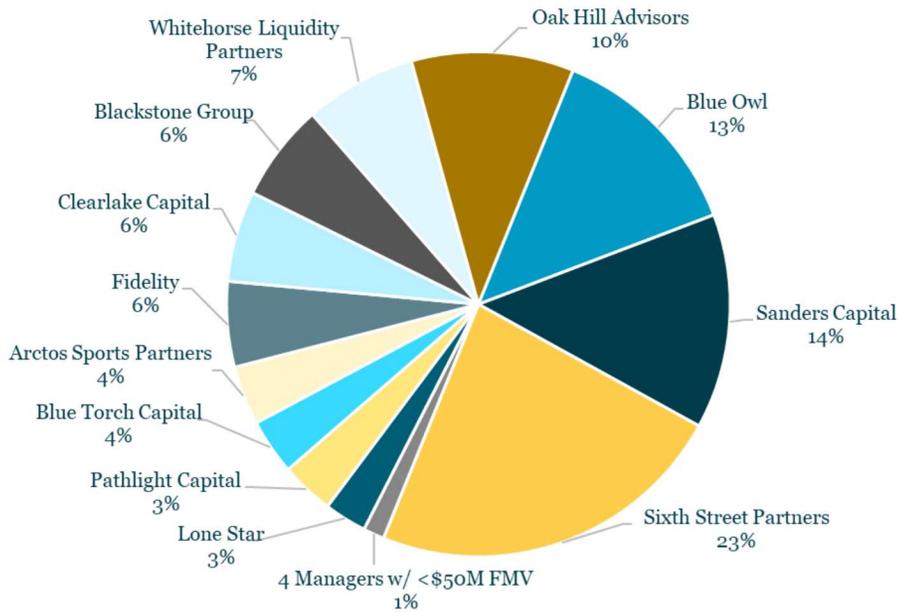


Source: Aksia and State Street. Data as of 9/30/22.

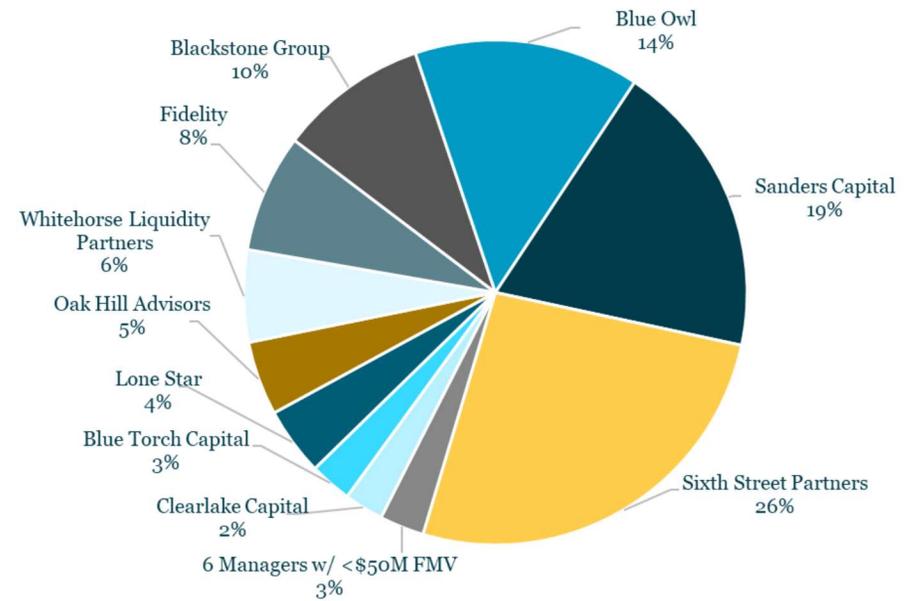


Portfolio Manager Snapshot

9/30/22
FMV \$2.4 B



9/30/21
FMV \$2.1 B

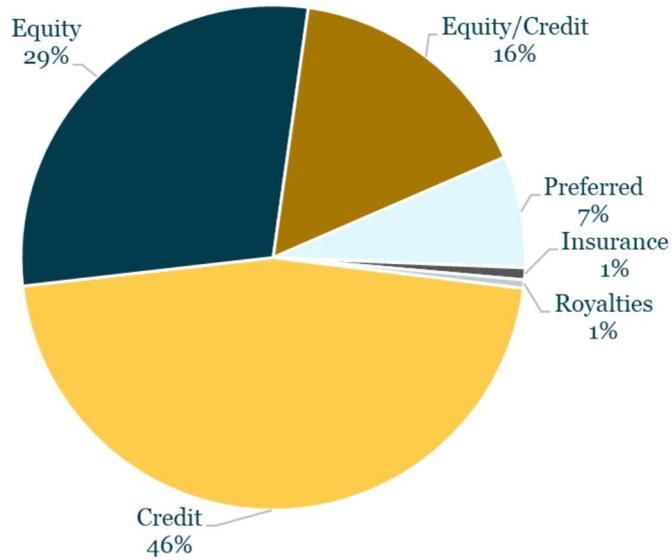


Source: Aksia and OST Staff.

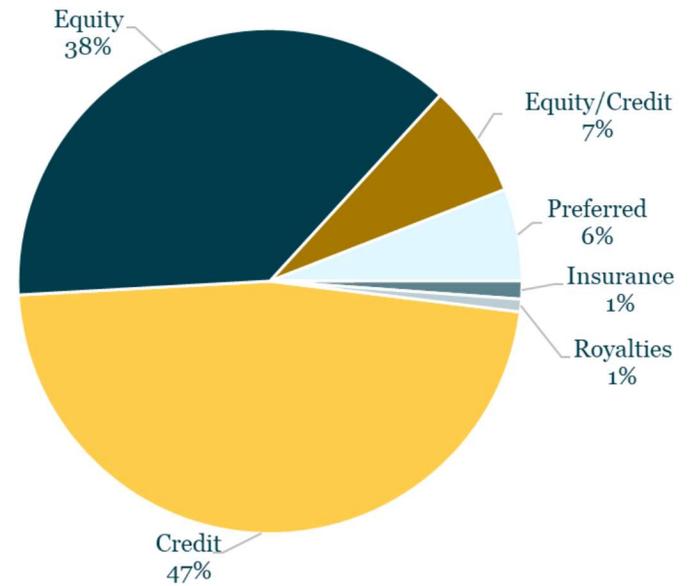


Portfolio Strategy Snapshot

9/30/22
FMV \$2.4 B



9/30/21
FMV \$2.1 B

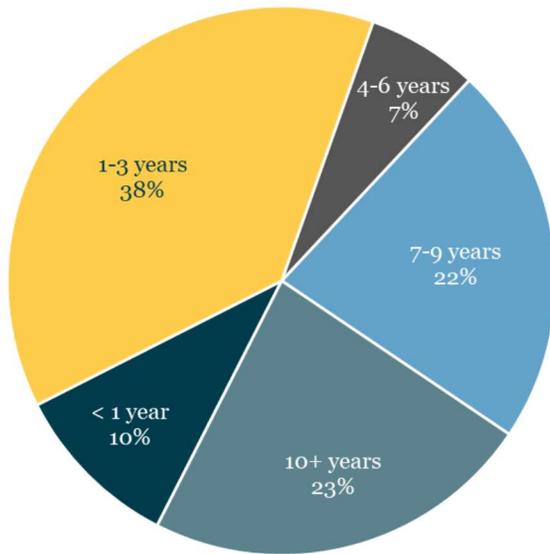


Source: Aksia and OST Staff.

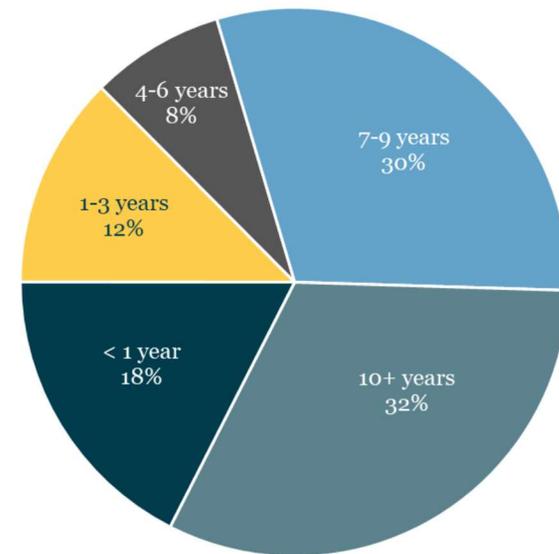


Portfolio Age Snapshot

9/30/22
FMV \$2.4 B



9/30/21
FMV \$2.1 B

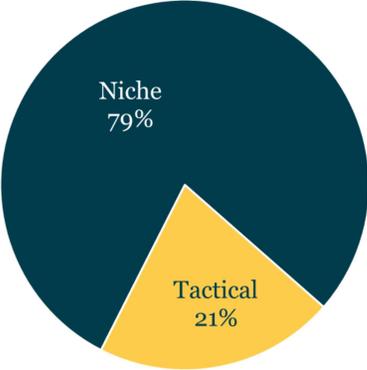


Source: Aksia and OST Staff.

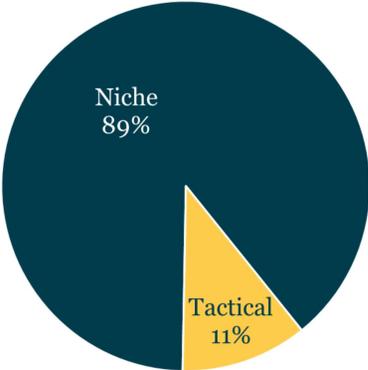


Portfolio Role & Geography Snapshot

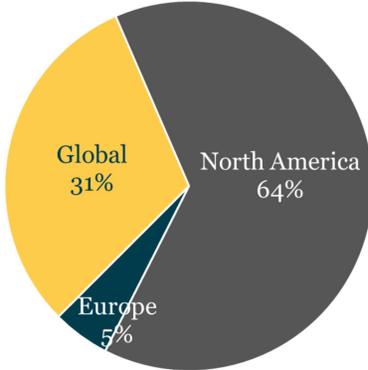
Role 9/30/22
FMV \$2.4 B



Role 9/30/21
FMV \$2.1 B



Geography 9/30/22
FMV \$2.4 B

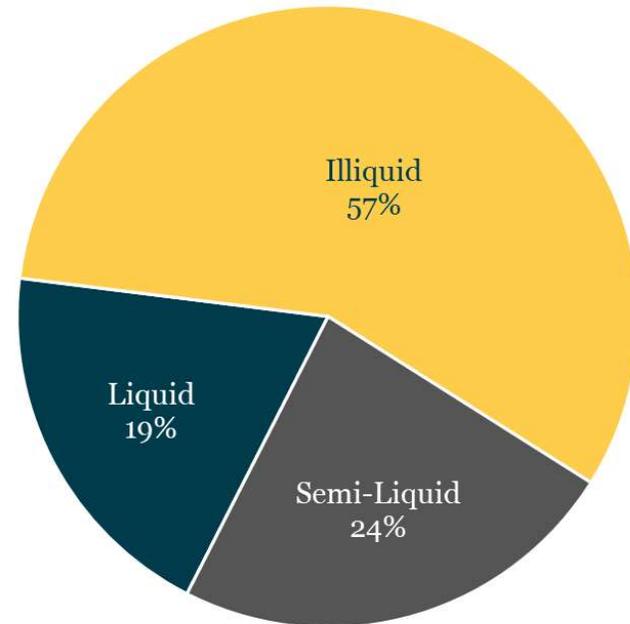


Source: Aksia and OST Staff.

**OREGON
STATE
TREASURY**

Portfolio Liquidity Snapshot

- Liquid – Primarily publicly-traded securities (<1 month).
- Semi-Liquid – Investments with quarterly or semi-annual redemption rights (1-3 years).
- Illiquid – Traditional private equity-like investment structures (>3 years).



Source: OST Staff. Data as of 9/30/22



Looking Forward

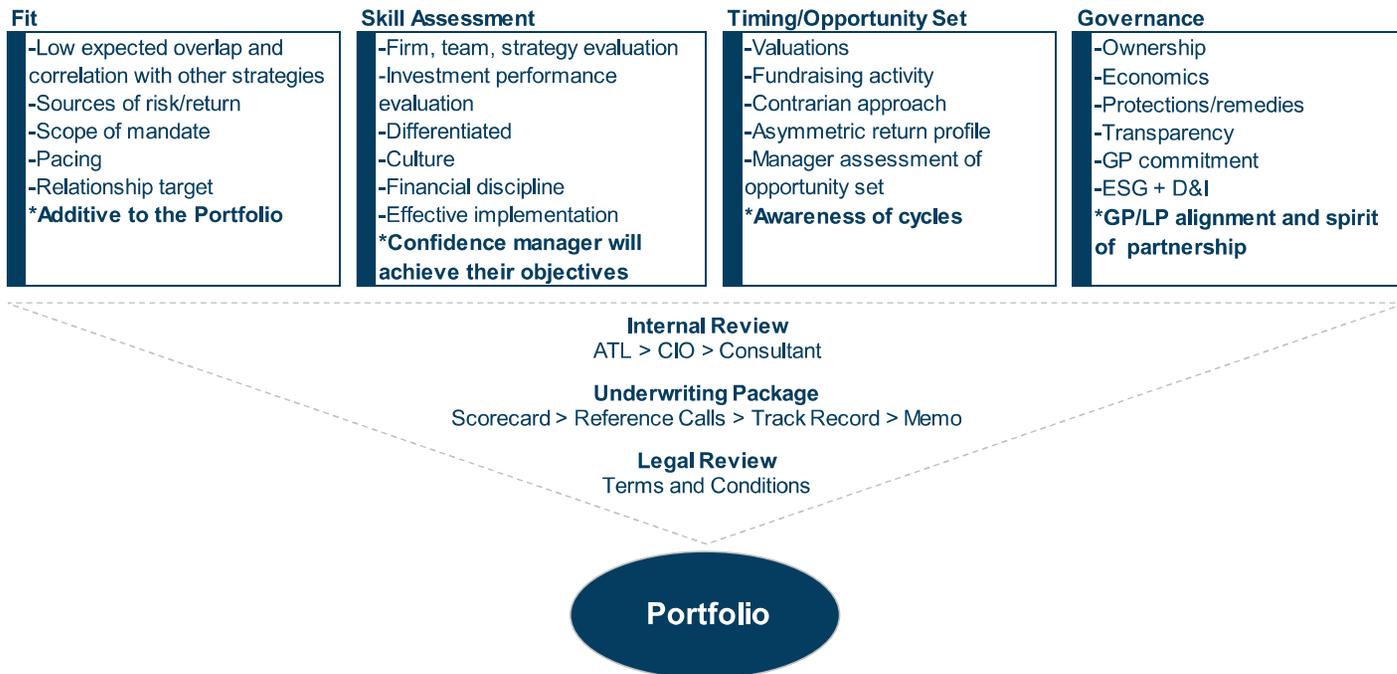
- The Opportunity Portfolio is well-positioned to continue to deploy capital if market dislocations arise. The Portfolio continues to have capacity to invest capital before the 5% policy limit would be exceeded, but we remain mindful of OPERF’s overall exposure to illiquid assets, particularly in private equity.
- Given the foregoing, for calendar year 2023, we do not expect to add new relationships to the Portfolio but will focus on existing managers that are returning to market with overall commitments not expected to exceed \$500 million for the calendar year.

Action Item

- Staff and the OIC consultants are recommending that the “OPERF Policy Benchmark” also be defined as the benchmark for the Opportunity Portfolio.
- Using the OPERF Policy Benchmark is appropriate since it represents the opportunity cost of deviating from the strategic asset allocation to fund Opportunity Portfolio investments.
- See “Appendix: OIC Policy” for additional discussion.

Appendix: Investment Process

- Evaluation framework
 - Very high-level framework summary illustrated below.
 - In practice, a non-linear process with many more variables and numerous feedback channels.



Appendix: OIC Policy



OPERF Opportunity Portfolio Proposed Benchmark Change

Background

At the March 2022 OIC meeting, Meketa provided an “Asset Class Benchmark Review and Recommendations.” That review included the following observation of the benchmark currently being used for the OPERF Opportunity Portfolio:

While not assigned a weighting within the OPERF Total Policy Benchmark, we highlight, here too, the challenges of using a CPI plus premium benchmark and the significant tracking error caused under a rapidly rising inflationary environment as witnessed most recently. Longer-term results provide a smoother reference rate to assess Program performance.

In 2007, the original Opportunity Portfolio policy statement established a “primary return objective and benchmark” as the Oregon PERS actuarial assumed rate of return plus a 100-basis premium (i.e., a nine percent net return, at the time). The Portfolio’s secondary benchmark was defined as the Consumer Price Index (CPI) plus 500 basis points, over a trailing three-year period. In 2018, the assumed earnings rate portion of the investment objectives was dropped in favor of just the CPI+5% benchmark. However, with the recent uptick in CPI, now seems to be the appropriate time to propose a benchmark more reflective and consistent with the overall performance goals of the Opportunity Portfolio.

Recommendation

Staff and the OIC consultants are recommending that the OPERF Policy Benchmark also be defined as the benchmark for the Opportunity Portfolio. Using the OPERF Policy Benchmark is appropriate since it represents the opportunity cost of deviating from the strategic asset allocation to fund Opportunity Portfolio investments. Following is a table comparing the current benchmark with the proposed benchmark.

Net as of 9/30/2022	1 Year	2 Year	3 Year	4 Year	5 Year	7 Year	10 Year
TOTAL OPPORTUNITY PORTFOLIO	3.59	14.79	11.61	8.93	8.93	8.60	8.94
CPI + 5% (Current)	13.58	12.10	10.18	9.32	8.93	8.35	7.64
Relative Performance	(9.99)	2.69	1.43	(0.39)	0.00	0.25	1.30
OPERF Policy Benchmark (Proposed)	(8.37)	5.19	6.26	6.18	6.66	7.82	8.19
Relative Performance	11.96	9.60	5.35	2.75	2.27	0.78	0.75

OIC Action

Attached is a marked-up version of the Opportunity Portfolio Standards and Procedures with the proposed benchmark change as well as some minor housekeeping updates.





Origination 03/2015
 Last Approved 11/2022
 Last Revised 04/2021
 Next Review 11/2023

Owner Mike Mueller:
 Alternatives
 Investment
 Officer
 Policy Area Investments
 References OST Policy
 4.06.03

Authority

ORS 293.726
 ORS 293.731
 ORS 293.736

POLICY PROVISIONS

Definitions

Advisor: One or more independent third party (consultant) firms retained by the OIC and working in concert with Staff to provide expert investment counsel, due diligence, and ongoing portfolio monitoring.

Benchmark: ~~The Consumer Price Index plus a premium defined as 500 basis points.~~ The Oregon Public Employees Retirement Fund Policy Benchmark.

Policy Statements

I. GENERAL POLICY

Portfolio investments provide an appropriate complement to OPERF's other investments, and are consistent with OPERF's general objectives, including:

- A. Providing a means to pay benefits to OPERF participants and their beneficiaries;
- B. Investing to produce a return based on prudent and reasonable levels of liquidity and investment risk;
- C. Attaining an adequate real return over the expected rate of inflation; and
- D. Complying with all applicable laws and regulations concerning the investment of pension assets.

Portfolio investments should exhibit differentiated (i.e., less correlated) returns relative to other Fund assets and therefore the Portfolio is expected to provide diversification benefits to the Fund.

Staff and the Advisor will provide the OST and OIC with an annual Portfolio investment review.

II. OBJECTIVES

A. Portfolio Investment Performance Objective

The Portfolio's investment performance objective is to generate long-term net returns to OPERF (i.e., after management fees and general partners' carried interest) above the Benchmark. ~~The premium portion of the Benchmark compensates for illiquidity, principal risk and related investment costs and expenses.~~ OST Staff will periodically evaluate the Portfolio's performance objective and the Benchmark.

B. Diversification

- 1. The Portfolio may be non-diversified, meaning that Staff may concentrate its investments. However, with the exception of cash, the Portfolio's allocation to a particular

INV 703: OPERF Opportunity Portfolio Standards & Procedures

INTRODUCTION & OVERVIEW

Summary Policy Statement

To accomplish the prudent and efficient implementation of investment policies established by the Oregon Investment Council ("OIC" or "Council"), Oregon State Treasury ("OST") created the Opportunity Portfolio (the "Portfolio") as an investment strategy within the Oregon Public Employees Retirement Fund ("OPERF" or the "Fund"). The Portfolio may be populated with investment approaches across a wide range of investment opportunities with no limitation on asset classes or strategies employed, subject to (i) a total current fair market value that is no more than five percent of the Fund's total value and (ii) a reporting requirement at any time that such value exceeds three percent (as described below). The Opportunity Portfolio seeks to achieve its investment objective by making investments and partnership commitments that, for any one or more reasons, do not conform to the guidelines and objectives of the OIC's previously identified asset classes (i.e., public equities, public fixed income, real estate, private equity, ~~alternative investment~~ real assets, diversifying strategies and cash). The Chief Investment Officer ("CIO") shall report to the OIC the Portfolio increase above three percent and not to exceed five percent of the Fund's total value at the next, most feasible OIC meeting.

Purpose and Goals

The goal of this policy is to provide guidance to OST staff ("Staff") and advisors regarding the Portfolio and its investment objectives.

Applicability

Classified represented, management service, unclassified executive service

2022 Opportunity Portfolio Annual Review| January 25, 2023



investment or partnership commitment cannot exceed 25%, at the time of investment.

2. Certain investments may be allocated to the Portfolio for incubation purposes and, if successful, may be recommended for transfer into one of the other, primary OPERF asset classes or into a newly created asset class. This does not preclude the Portfolio from holding strategies on a longer-term basis.

2-3. Investments selected that are short-term or tactical in nature, and are liquid, will have stated dates for review and re-evaluation, as noted in the original written investment recommendation.

3-4. Investments will be diversified among a range of commitment sizes, generally with a minimum commitment of \$50-100 million and a maximum commitment equal to 25% of any particular commingled partnership. Staff will document and report to the OIC any deviations from these guidelines.

4-5. Given the truly opportunistic nature and objective of the Portfolio, Staff expects its investments and partnership commitments may be highly episodic and inconsistent over time.

5-6. A low correlation between OPERF and Portfolio returns is expected over time.

III. OPPORTUNITY PORTFOLIO COMMITTEE

A. The Portfolio Committee ("Committee") acts on behalf of, and subject to the review of, OST. The Committee is comprised of the following individuals: the Deputy State Treasurer; the CIO; and an OIC member invited by the OST to participate as a voting member on the Committee. OST will consider input from the OIC in extending such invitations.

B. OST, through the Committee, may invest OPERF amounts up to and including \$250 million per investment for new general partner, fund sponsor or manager relationships, and an amount up to and including \$350 million for existing relationships, consistent with OIC policies (see Appendix B). If consideration of a particular investment opportunity is deemed urgent or otherwise less suited for presentation to the OIC, the CIO may seek OIC approval for Committee consideration of that particular investment opportunity.

C. The Committee will only exercise its investment authority by unanimous vote and acting upon a favorable due diligence determination by the Advisor. The Committee may only consider proposed investments if agreement exists between the Advisor and Staff that the proposed investment is consistent with Portfolio standards. Proposed investments or partnership commitments presented to the Committee are subject to review by OST, which may choose to cancel or refer such proposed investments or partnership commitments to the OIC for broader review and consideration.

D. In connection with a proposed investment or partnership commitment, Staff shall furnish any favorable due diligence determination, including the underlying rationale, market conditions and portfolio impact, to the OIC as soon as practical and at least one week prior to a Committee meeting called for purposes of considering the proposed investment or partnership commitment. If OST objects to the proposed investment or partnership commitment or is advised by any OIC member that he or she objects to the proposed investment or partnership commitment, OST will cancel the proposed investment or partnership commitment and determine whether or not Staff will bring same as a separate agenda item at a subsequent OIC meeting.

E. Staff shall report any investment or partnership commitment made by the Committee at the next, most feasible OIC meeting.

IV. OST STAFF AUTHORITY

The CIO, upon a favorable recommendation from both the Director of Alternative Investments and the Advisor, has authority to accomplish the following:

A. Approve OST administrative activities and guideline exceptions if a plan is established to conform the investment exception(s) to applicable guidelines within a reasonable period of time;

B. Acquire, retain, manage and dispose of investment or partnership interests consistent with the authority granted to the Office of the State Treasurer pursuant to ORS 293.736. Review and approve other activities as necessary to further the interests of the Portfolio consistent with its standards; and

C. Approve up to an additional \$50 million, per action, to an existing investment or partnership commitment for the following purposes: (1) recapitalize the investment or partnership with additional equity; (2) acquire all or part of another manager's or limited partner's interest in an investment or partnership; (3) re-balance between or among investments or partnership commitments; or (4) co-invest alongside a partnership in an individual investment. Any such additional investments or partnership commitments shall be on terms equal to or better than the existing terms

D. Staff shall report any of the foregoing activities at the next, most feasible OIC meeting.

V. ADVISOR AND OST REQUIREMENTS

Staff manages the Portfolio in collaboration with the Advisor. Subject to budget limitations, OST will assign an appropriate number of Staff to manage Portfolio design and construction, the Portfolio's investment decision-making schedule and process, and the Advisor's contract. The OIC will retain a qualified, independent Advisor and will delegate to that Advisor substantial duties such as performing due diligence on investment opportunities, monitoring Portfolio investments, performing Portfolio analytics and valuation analyses and preparing performance reports.

Staff retains the primary responsibility to ensure that Portfolio investments and prospective investments receive appropriate due diligence, monitoring, and valuation analyses.

VI. MONITORING

A. Reports. The Advisor will furnish Portfolio activity and performance reports to Staff on both a quarterly and annual basis.

B. Adherence to Strategy. Staff and the Advisor will evaluate the actual strategy employed by investment managers or general partners relative to stated Portfolio objectives, strategies or other industry standards. The Advisor will interact with investment managers and general partners periodically and as necessary to verify adherence to such objectives, strategies and standards.

Exceptions

None

2022 Opportunity Portfolio Annual Review| January 25, 2023



Failure to Comply

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

PROCEDURES and FORMS

Appendix A: OST Procedures for INV 703

Appendix B: OIC/OST Alternative Investments Authority

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.

Attachments

[Appendix A: OST Procedures for INV 703](#)

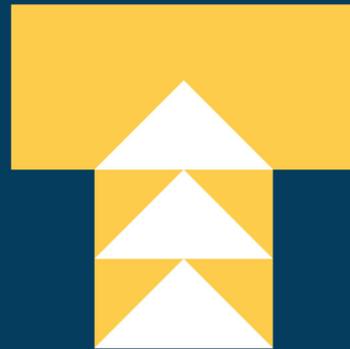
[Appendix B: OIC/OST Alternative Investments Authority](#)

Approval Signatures

Step Description	Approver	Date
	Rex Kim: Chief Investment Officer	
	Michael Langdon: Director of Private Markets	
	Deena Bothello : General Counsel	
PolicyStat Admin	Carmen Leiva : Operations Analyst	
	Ben Mahon: Senior Investment Officer Alternatives	

2022 Opportunity Portfolio Annual Review| January 25, 2023





OREGON STATE TREASURY

Tobias Read
Oregon State Treasurer

16290 SW Upper Boones Ferry Road
Tigard, OR 97224

oregon.gov/treasury

O I C



OREGON
STATE
TREASURY

TAB 7

ASSET ALLOCATION & NAV UPDATES

Asset Allocations at December 31, 2022

Regular Account								Target Date Funds	Variable Fund	Total Fund
OPERF	Policy	Target ¹	\$ Thousands	Pre-Overlay	Overlay	Net Position	Actual	\$ Thousands	\$ Thousands	\$ Thousands
Public Equity	25.0-35.0%	30.0%	20,218,824	22.0%	(629,533)	19,589,291	21.3%	1,152,043	252,100	20,993,434
Private Equity	15.0-27.5%	20.0%	24,443,148	26.6%		24,443,148	26.6%			24,443,148
Total Equity	45.0-55.0%	50.0%	44,661,972	48.6%	(629,533)	44,032,439	47.9%			45,436,581
Opportunity Portfolio	0-5%	0.0%	2,552,966	2.8%		2,552,966	2.8%			2,552,966
Fixed Income	15-25%	20.0%	15,182,681	16.5%	2,399,504	17,582,185	19.1%	2,129,005		19,711,189
Risk Parity	0.0-3.5%	2.5%	1,362,484	1.5%		1,362,484	1.5%			1,362,484
Real Estate	7.5-17.5%	12.5%	13,891,032	15.1%	(2,500)	13,888,532	15.1%			13,888,532
Real Assets	2.5-10.0%	7.5%	8,061,620	8.8%		8,061,620	8.8%			8,061,620
Diversifying Strategies	2.5-10.0%	7.5%	4,262,856	4.6%		4,262,856	4.6%			4,262,856
Cash ²	0-3%	0.0%	1,921,408	2.1%	(1,767,471)	153,938	0.2%		6,935	160,872
TOTAL OPERF		100%	\$ 91,897,020	100.0%	\$ -	\$ 91,897,020	100.0%	\$ 3,281,047	\$ 259,035	\$ 95,437,102

¹ Targets established in October 2021. Interim policy benchmark effective October 1, 2021, consists of: 30% MSCI ACWI IMI Net, 20% Bloomberg U.S. Aggregate, 20% Russell 3000+300bps (1 quarter lagged), 12.5% NCREIF ODCE net (1 quarter lagged), 7.5% CPI+400bps, 7.5% HFRI FOF Conservative & 2.5% S&P Risk Parity - 12% Target Volatility.

² Includes cash held in the policy implementation overlay program.

SAIF	Policy	Target	\$ Thousands	Actual
Total Equity	7-13%	10.0%	428,198	10.1%
Fixed Income	80-90%	85.0%	3,498,099	82.2%
Real Estate	0-7%	5.0%	308,974	7.3%
Cash	0-3%	0.0%	21,724	0.5%
TOTAL SAIF			\$ 4,256,995	100.0%

CSF	Policy	Target	\$ Thousands	Actual
Global Equities	40-50%	45.0%	976,090	47.2%
Private Equity	8-12%	10.0%	179,331	8.7%
Total Equity	58-62%	55.0%	1,155,421	55.8%
Fixed Income	20-30%	25.0%	534,597	25.8%
Real Estate	0-12%	10.0%	215,687	10.4%
Alternative Investments	0-12%	10.0%	151,128	7.3%
Cash	0-3%	0.0%	12,039	0.6%
TOTAL CSF			\$ 2,068,871	100.0%

SOUE	Policy	Target	\$ Thousands	Actual
Global Equities	0-65%	N/A	1,877	74.8%
Fixed Income	35-100%	N/A	630	25.1%
Cash	0-3%	N/A	1	0.0%
TOTAL SOUE			\$ 2,508	100.0%

WOUE	Policy	Target	\$ Thousands	Actual
Global Equities	30-65%	55.0%	1,495	55.7%
Fixed Income	35-60%	40.0%	1,055	39.3%
Cash	0-25%	5.0%	134	5.0%
TOTAL WOUE			\$ 2,684	100.0%

Oregon State Treasury Funds Managed as of December 31, 2022

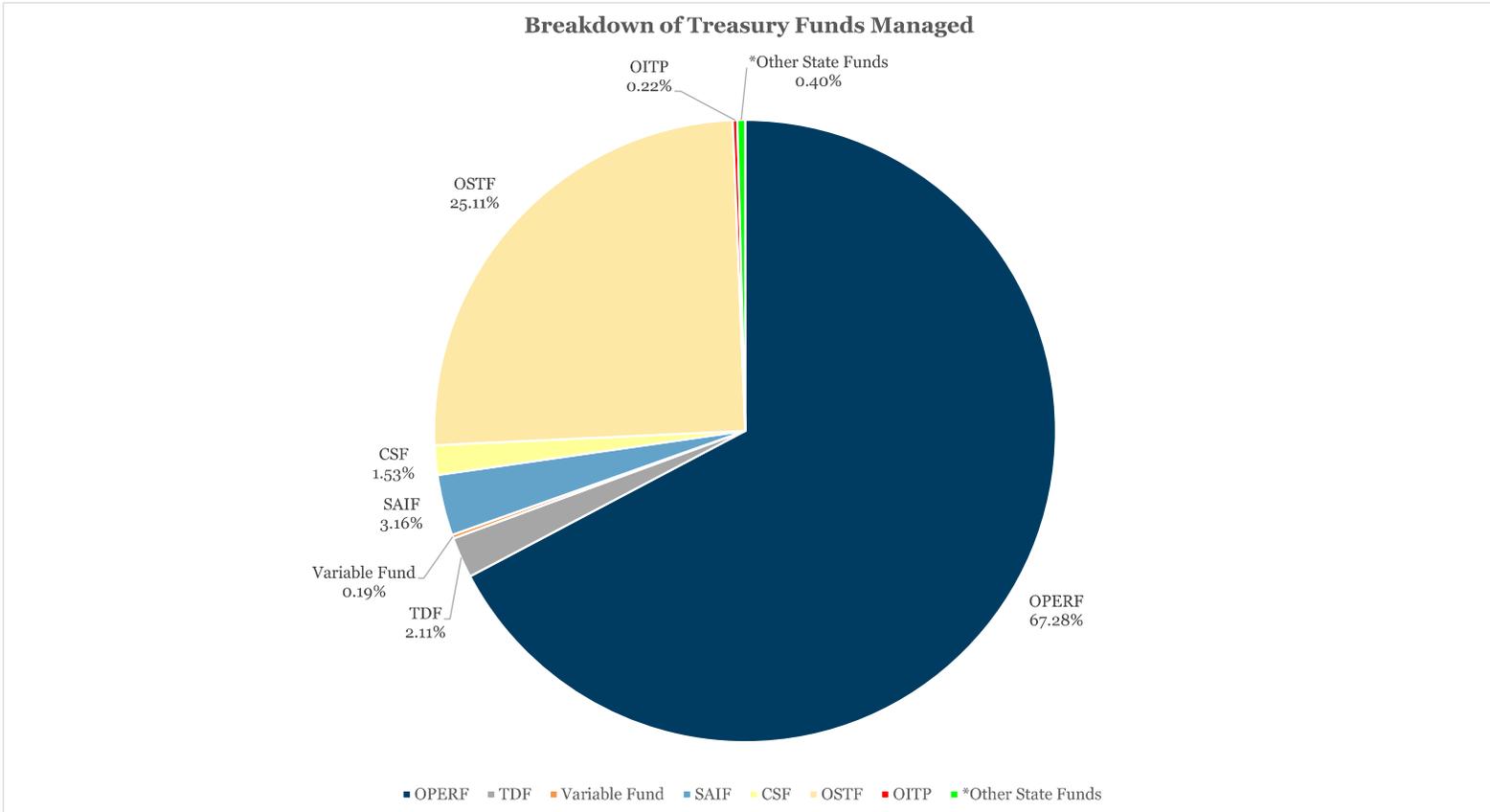
OSTF, OITP & Other State Funds*	
OSTF	
OITP	
DAS Insurance Fund	
DCBS Operating Fund	
DCBS Workers Benefit Fund	
DCHS - Elderly Housing Bond Sinking Fund	
DCHS - Other Fund	
Oregon Lottery Fund	
DVA Bond Sinking Fund	
ODOT Fund	
OLGIF	
OPUF	

\$ Thousands	Actual
33,692,355	94.5%
301,528	0.8%
112,794	0.3%
226,437	0.6%
139,030	0.4%
1,282	0.0%
13,770	0.0%
103,344	0.3%
100,322	0.3%
359,189	1.0%
232,134	0.7%
367,411	1.0%
\$ 35,649,595	100.0%

Total OSTF & Other State Funds

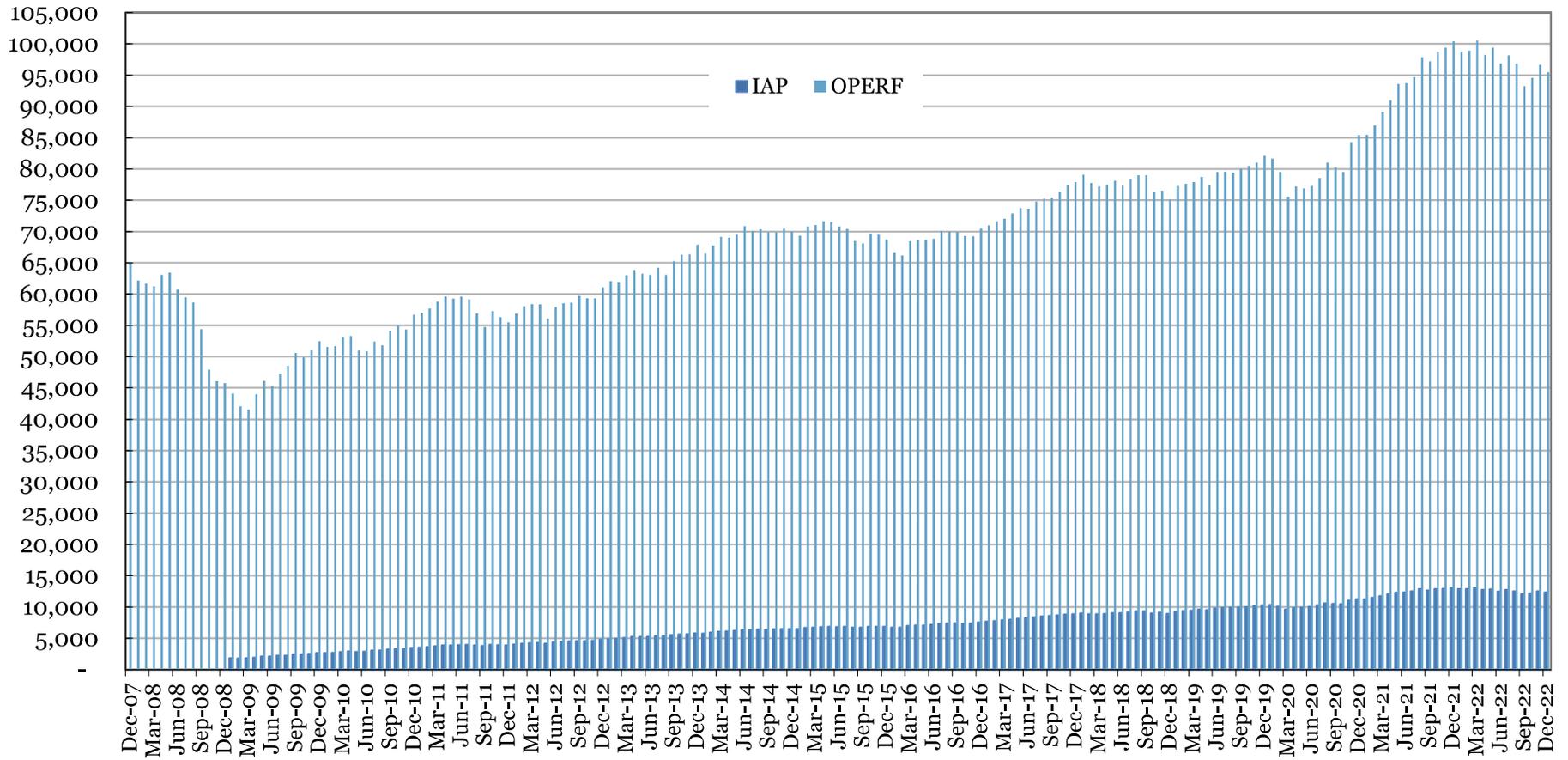
Total of All Treasury Funds**

\$ 134,162,313

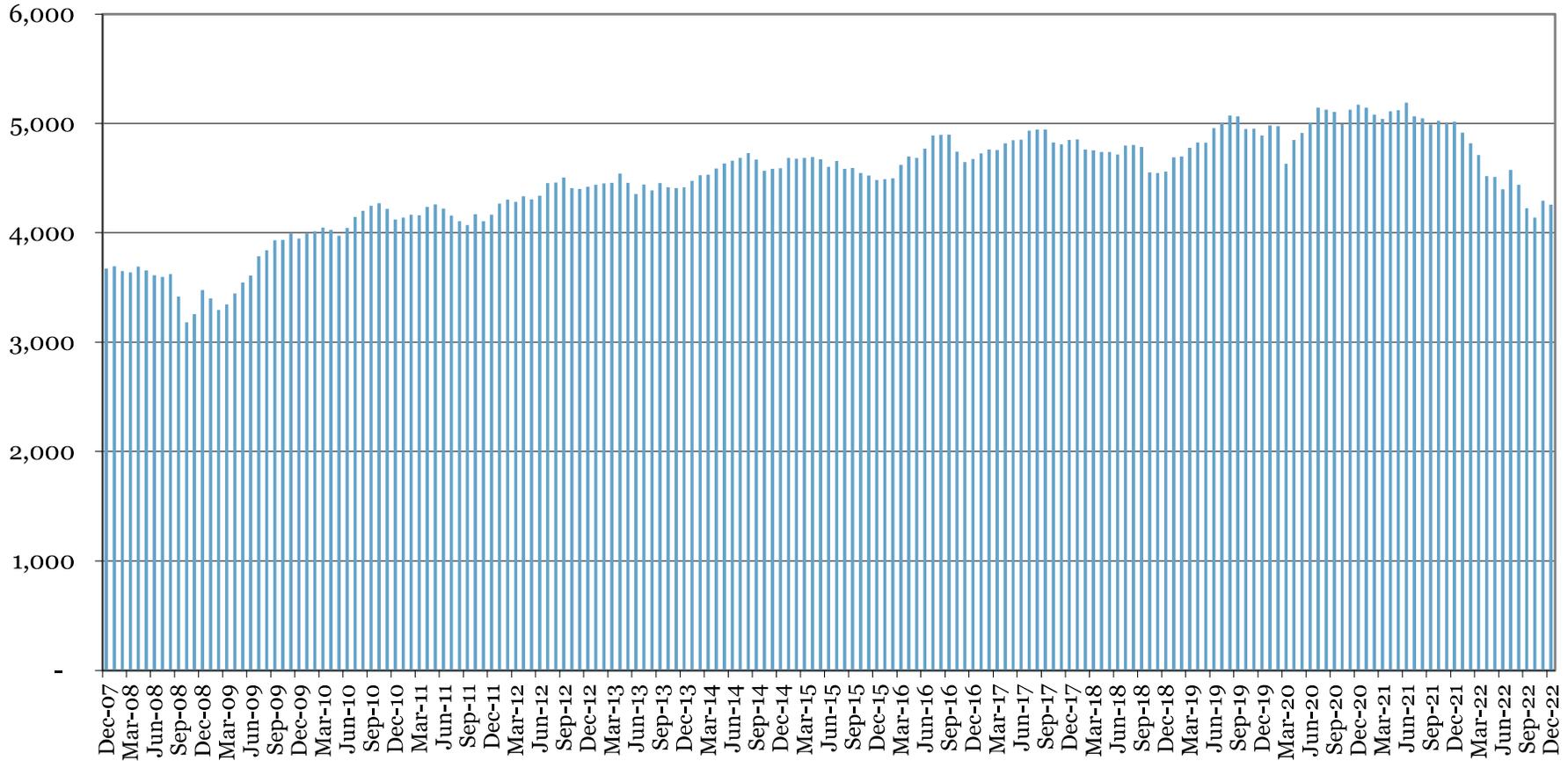


*Other State Funds include DAS Insurance Fund, DCBS Operating Fund, DCBS Workers Benefit Fund, DCHS - Elderly Housing Bond Sinking Fund, DCHS - Other Fund, Oregon Lottery Fund, DVA Bond Sinking Fund, ODOT Fund, OLGIF, & OPUF.

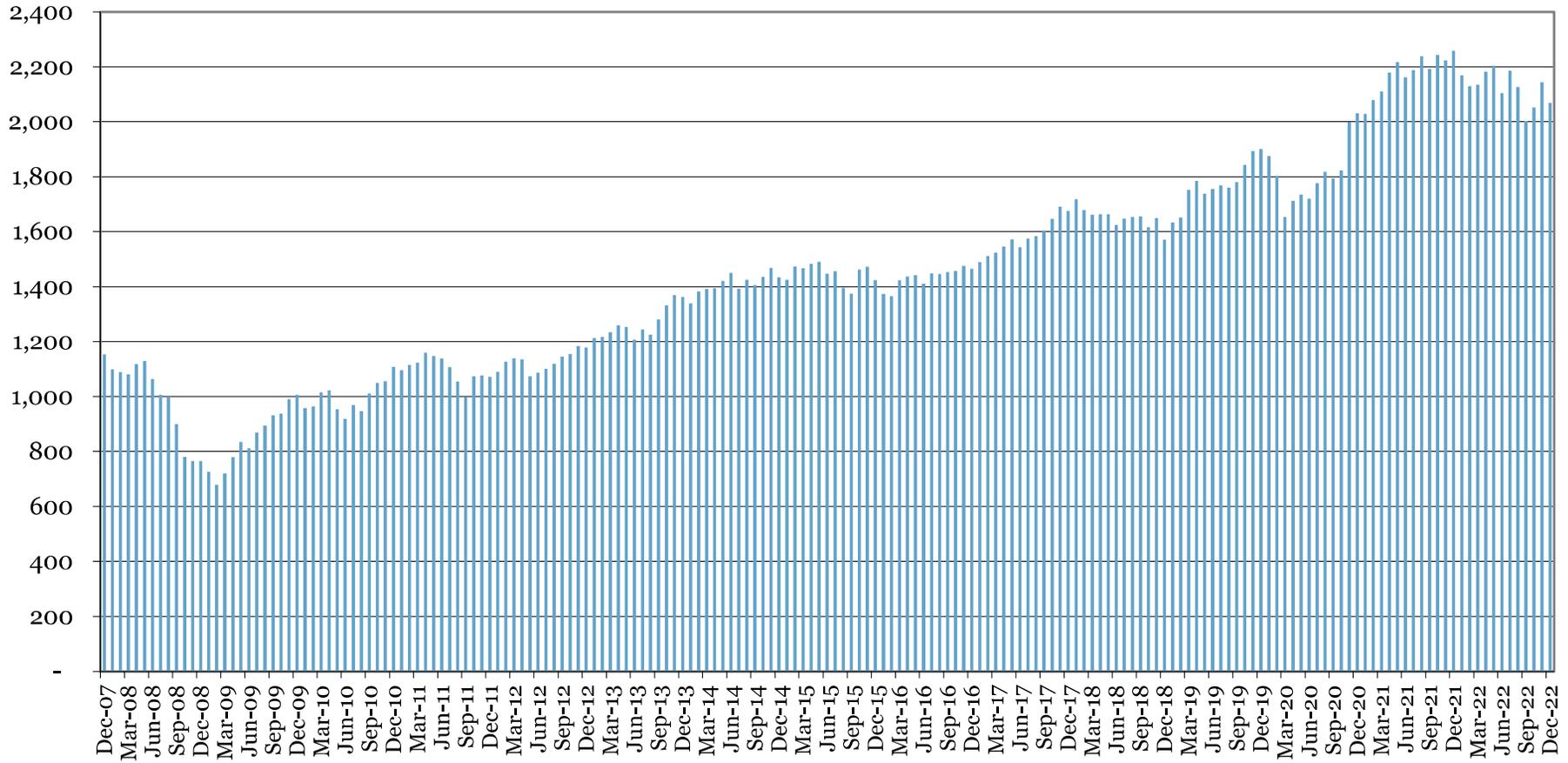
OPERF NAV
15 years ending December 31, 2022
(\$ in Millions)



SAIF NAV
15 years ending December 31, 2022
(\$ in Millions)



CSF NAV
15 years ending December 31, 2022
(\$ in Millions)



O I C



OREGON
STATE
TREASURY

TAB 8
CALENDAR – FUTURE AGENDA ITEMS

Oregon Investment Council – Regular Meeting – January 25, 2023

2023-24 OIC Forward Calendar and Planned Agenda Topics

March 8, 2023 2022 Performance Review: OPERF, CSF, SAIF
Fixed Income Portfolio Review

April 20, 2023 Real Estate Portfolio Review
Real Assets Portfolio Review
Individual Account Program (IAP) Review
OSGP Annual Review

May 31, 2023 Q1 Performance Review: OPERF

July 19, 2023 Diversifying Strategies Portfolio Review

September 6, 2023 Q2 Performance Review: OPERF, CSF, SAIF

October 25, 2023 Operations Annual Review
CEM Benchmarking

December 6, 2023 Q3 OPERF Performance
Public Equity Portfolio Review
Fixed Income Portfolio Review: OPERF, OSTF

January 24, 2024 Private Equity Portfolio Review
Opportunity Portfolio Review
2025 OIC Calendar Approval

O I C



OREGON
STATE
TREASURY

TAB 9
OPEN DISCUSSION



OREGON
STATE
TREASURY

TAB 10

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>