

Investment Committee Meeting May 28, 2024

Meeting Items

- Agenda
- Private Equity Quarterly Review for period ending December 31, 2023
- Educational Presentation: Risk Budgeting (continued)
- Approval of Minutes – February 20, 2024

Board Packet Documents are available to the public for inspection on the Employees' Retirement System's Website: <https://ers.ehawaii.gov/board-and-committee-agendas-and-meeting-packets>, and in the Employees' Retirement System's Office, 201 Merchant Street, Suite 1400, Honolulu, HI 96813

NOTICE OF REGULAR MEETING

AGENCY: Investment Committee of the Board of Trustees of the
Employees' Retirement System of the State of Hawaii

PLACE: City Financial Tower, 201 Merchant Street, Suite 1200, Honolulu, Hawaii 96813

The meeting will be conducted pursuant to HRS § 92-3.7, under which Members of the Investment Committee of the Board of Trustees may participate via interactive conference technology; and members of the public may also participate via interactive conference technology or in person at the meeting place stated above.

DATE: Tuesday, May 28, 2024; 9:00 a.m.

AGENDA

CALL TO ORDER/QUORUM

Motion to hold the meeting allowing Trustees and members of the public to participate by interactive conference technology, pursuant to HRS § 92-3.7, with at least one meeting location open to the public that has audiovisual connection.

PUBLIC COMMENT

Members of the public may submit written testimony on these agenda items via e-mail or postal mail with receipt recommended by 4:30 p.m. on Friday, May 24, 2024, in order to ensure it is distributed in time for consideration. Please address written testimony if by e-mail to diana.gomes@hawaii.gov or by postal mail to: Employees' Retirement System of the State of Hawaii, Investment Committee, 201 Merchant Street, Suite 1400, Honolulu, Hawaii 96813. Members of the public may also attend the meeting in person to testify or provide testimony by teleconference either audio or video, at the following link and phone number:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_Zjm4ZmQ1MDktZmRkNS00NzJhLTg4YjMtMjU3NjIwZDU0NTBj%40thread.v2/0?context=%7b%22Tid%22%3a%223847dec6-63b2-43f9-a6d0-58a40aaa1a10%22%2c%22Oid%22%3a%228f795840-377f-479d-bb5d-6ec41c4a01bc%22%7d

or

+1 808-829-4853,,992132085# United States, Honolulu
Phone Conference ID: 992 132 085#

Individuals testifying at the meeting are requested to limit their testimony to three minutes or an amount of time otherwise designated by the Chairperson.

PRESENTATIONS

1. Total Fund Performance Review for period ending March 31, 2024.
Kristin Varela, ERS Chief Investment Officer and Meketa Investment Group, Inc.

Pursuant to HRS § 88-27.5(a)(1) and HRS § 92-5(a)(4), the Board of Trustees may enter into Executive Session to conduct discussions and deliberations relating to, and if appropriate, to make a decision on investments or prospective investments by the system that requires the consideration of information or records that are exempt from disclosure under HRS Chapter 92F, including information and records that are proprietary information or confidential business information, and to consult with the Board's attorneys on questions and issues pertaining to the Board's powers, duties, privileges, immunities, and liabilities with respect to this matter.

ERS Investment Committee Meeting Agenda

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2. Rotating Alternative Asset Class Review: Private Equity Quarterly Review for period ending December 31, 2023.

Aaron Au, ERS Investment Officer and Hamilton Lane Advisors, LLC

Pursuant to HRS § 88-27.5(a)(1) and HRS § 92-5(a)(4), the Board of Trustees may enter into Executive Session to conduct discussions and deliberations relating to, and if appropriate, to make a decision on investments or prospective investments by the system that requires the consideration of information or records that are exempt from disclosure under HRS Chapter 92F, including information and records that are proprietary information or confidential business information, and to consult with the Board's attorneys on questions and issues pertaining to the Board's powers, duties, privileges, immunities, and liabilities with respect to this matter.

3. Educational Presentation: Risk Budgeting (continued).

Kristin Varela, ERS Chief Investment Officer and Meketa Investment Group, Inc.

Pursuant to HRS § 88-27.5(a)(1) and HRS § 92-5(a)(4), the Board of Trustees may enter into Executive Session to conduct discussions and deliberations relating to, and if appropriate, to make a decision on investments or prospective investments by the system that requires the consideration of information or records that are exempt from disclosure under HRS Chapter 92F, including information and records that are proprietary information or confidential business information, and to consult with the Board's attorneys on questions and issues pertaining to the Board's powers, duties, privileges, immunities, and liabilities with respect to this matter.

REPORTS BY STAFF

1. Chief Investment Officer Update

Staffing Update: New Hire – Lynn Kamimoto, Investment Risk Officer

APPROVAL OF MINUTES – February 20, 2024.

EXECUTIVE SESSION

1. Executive Session, pursuant to HRS § 88-27.5(a)(1), and HRS § 92-5(a)(4), to conduct discussions and deliberations relating to, and if appropriate, to make a decision on investments or prospective investments by the system that require the consideration of information or records that are exempt from disclosure under HRS Chapter 92F, including information and records that are proprietary information or confidential business information, and to consult with the Board's attorneys on questions and issues pertaining to the Board's powers, duties, privileges, immunities, and liabilities with respect to Updates on Status or Issues Related to Confidential ERS Investment Portfolio activity to include (1) Manager pipelines and activity, (2) Manager organizational updates, and (3) Investment Office staffing updates.
2. Executive Session, pursuant to HRS § 88-27.5(a)(1) and HRS § 92-5(a)(8), to Review and Approval of Executive Session Minutes of February 20, 2024.

ADJOURNMENT

If you require auxiliary aid/service or other accommodation due to a disability, contact Diana Gomes at (808) 586-0175 or diana.gomes@hawaii.gov as soon as possible, preferably by Friday, May 24, 2024, and the ERS will try to obtain the auxiliary aid/service or accommodation, but cannot guarantee that the request can be fulfilled.

Upon request, this notice can be made available in large print.



Employees' Retirement System of the State of Hawaii

May 2024 Private Equity Program Update

Biographies



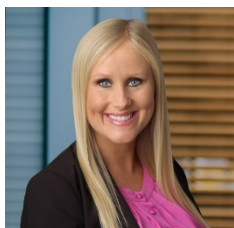
Paul Yett | Managing Director

Paul is a Managing Director at Hamilton Lane, based in the San Francisco office, working closely with clients. Paul is the Chair of the Responsible Investment Committee, providing oversight for Hamilton Lane's responsible investment activities (as defined by ESG Risk Framework, Sustainable and Impact investments). Previously, Paul was the Director of ESG & Sustainability.

Paul began his career with Hamilton Lane in 1998 in the Due Diligence Department, where he managed the firm's global venture capital practice and real estate. He later took on the role of Relationship Manager, managing a number of the firm's key client accounts. Prior to joining Hamilton Lane, Paul spent four years with Stone Pine Asset Management, LLC, a Denver, Colorado-based private equity firm. Paul began his career in Denver as a Lease Accountant with Bramalea U.S. Properties.

For nine years, Paul served on the Board of Directors of the Robert Toigo Foundation, focused on building stronger, more diverse organizations through the inclusion and advancement of under-represented diverse talent across finance.

Paul received a B.S. in Finance from San Diego State University.



Natalie Fitch | Principal

Natalie is a Principal at Hamilton Lane, based in the firm's San Diego office, where she is a Portfolio Specialist and member of the Investment Team. In her role, she is responsible for all aspects of client relations including portfolio management and strategic planning. She has experience in manager due diligence and monitoring activities as well. Natalie was named to Chief Investment Officer's 2019 Knowledge Brokers list of the industry's top consultants. This list is curated directly from the recommendations of top chief investment officers. Importantly, the list only includes consultants whom CIOs would recommend to their peers.

Prior to joining Hamilton Lane in 2010, Natalie was a Senior Analyst at PCG Asset Management where she was a member of the client service team that supported five Pension Systems with approximately \$12 billion of private equity assets under management.

Natalie received a B.S. in Applied Economics and Management from Cornell University.

Agenda

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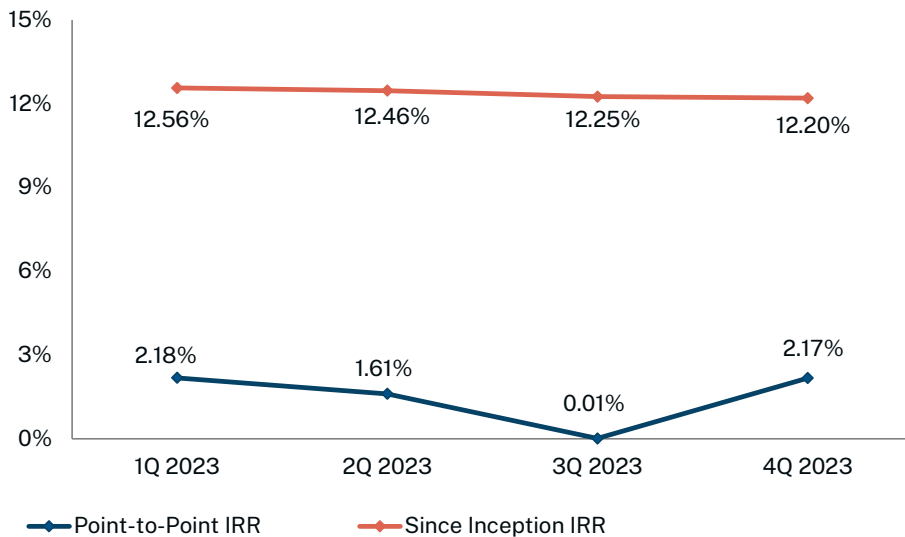
Portfolio Review

PE Portfolio Highlights – December 31, 2023

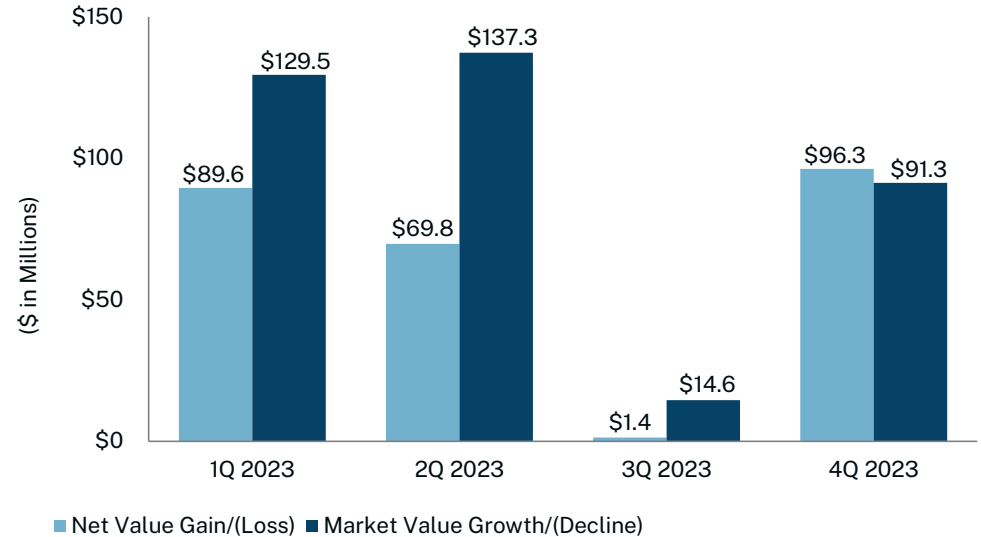
Performance

- Portfolio generated quarterly net IRR of 2.17%, or net value increase of \$96.3M
- Since inception performance declined 5 bps during the quarter but continues to generate performance above pre-Covid levels
 - The Portfolio outperformed its public benchmark, MSCI ACWI IMI + 200 bps, by 370 bps on a since inception basis
- Portfolio generated positive performance during one-year period with gains of \$257.1M

PE Portfolio Returns:



PE Portfolio Value Created:



Portfolio Snapshot

- Q4 2023: Positive performance and continued liquidity
 - Quarterly IRR of 2.17%
 - Distributions of \$145.7M drove first cash flow-positive quarter since Q4 2020

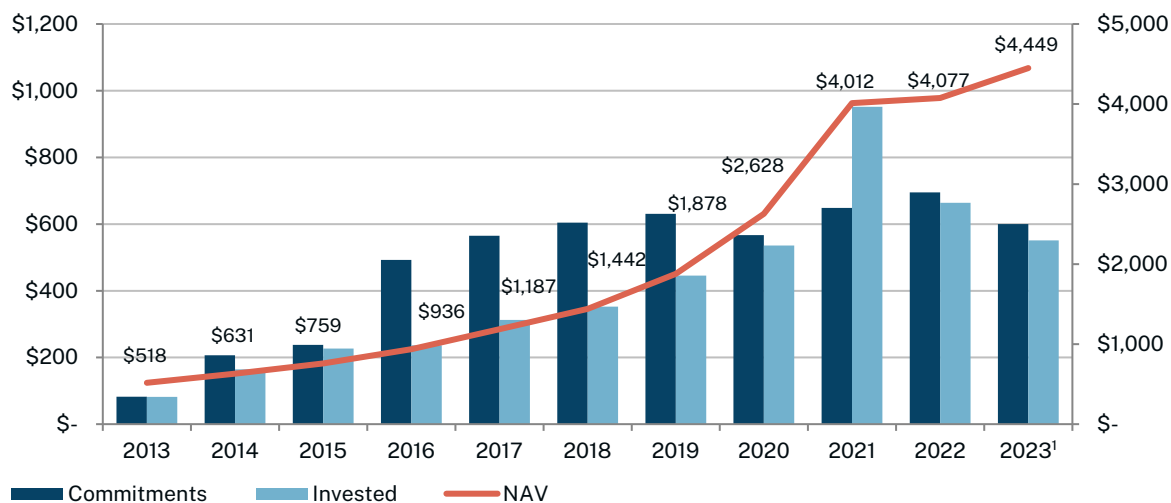
Portfolio Snapshot			
(USD in Millions)	9/30/2023	12/31/2023	Change
Total Active Partnerships	253	254	1
Liquidated Partnerships	87	89	2
Active GP Relationships	103	102	(1)
Capital Committed ¹	\$6,929.6	\$7,075.3	\$145.7
Unfunded Commitment	\$2,203.1	\$2,225.2	\$22.1
Paid-In Capital	\$5,188.4	\$5,329.1	\$140.7
Capital Distributed	\$3,835.0	\$3,980.7	\$145.7
Market Value	\$4,357.9	\$4,449.2	\$91.3
Total Value Multiple	1.6x	1.6x	-
Realized Value Multiple	0.7x	0.8x	0.1x
Since Inception IRR	12.25%	12.20%	(5 bps)

Note: Change over the period may not sum due to rounding.

¹ HIERS made four new commitments during the quarter ended September 30, 2023. The change in capital committed represents this new commitments in addition to currency fluctuations from foreign denominated partnerships.

Annual NAV Growth

USD in Millions, as of December 31, 2023



- PE allocation of 19.2% slightly above 19.0% target
 - PE market value is up 9.1% over the one-year period ending 12/31/2023

¹2023 NAV as of 12/31/2023. 2023 Invested represents contributions from 1/1/2023 to 12/31/2023.

Quarterly Performance

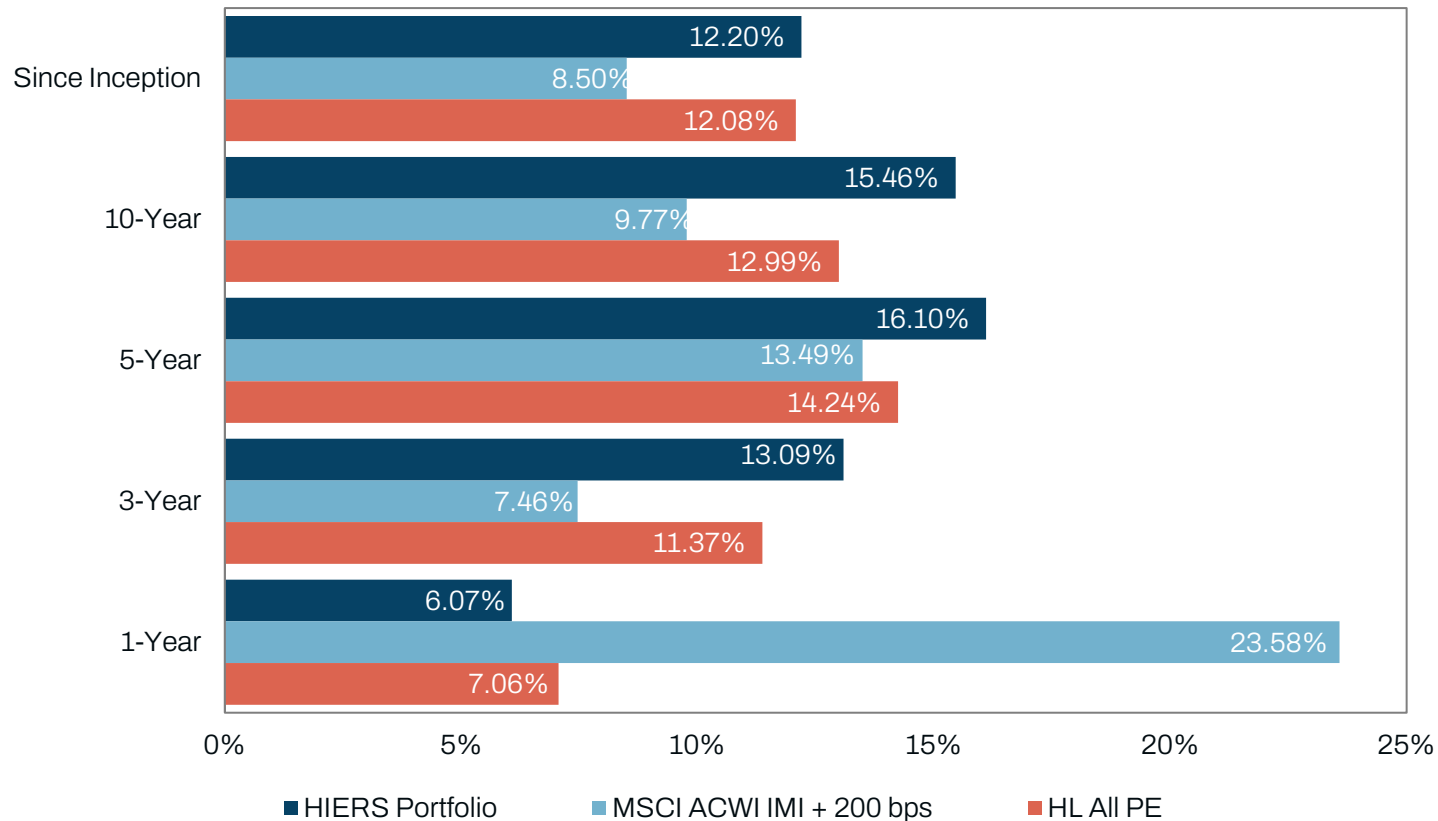
Quarterly Performance Summary					
\$ millions	Quarter Ended				Year Ended
	3/31/2023	6/30/2023	9/30/2023	12/31/2023	12/31/2023
Beginning Market Value	\$4,076.5	\$4,206.0	\$4,343.3	\$4,357.9	\$4,076.5
Paid-In Capital	114.8	161.1	134.8	140.7	551.4
Distributions	74.9	93.6	121.6	145.7	435.8
Net Value Change	\$89.6	\$69.8	\$1.4	\$96.3	\$257.1
Ending Market Value	4,206.0	4,343.3	4,357.9	4,449.2	4,449.2
Unfunded Commitments	2,020.3	2,237.8	2,203.1	2,225.2	2,225.2
Total Exposure	\$6,226.3	\$6,581.1	\$6,561.0	\$6,674.4	\$6,674.4
Point-to-Point IRR	2.18%	1.61%	0.01%	2.17%	6.07%
Since Inception IRR	12.56%	12.46%	12.25%	12.20%	12.20%

- Q4 2023 represents the 43rd quarter of positive net value gain out of the last 46 quarters
- \$257.1M net value increase over LTM period with all four quarters generating gains

Performance Against Benchmarks

HIERS' Portfolio outperforming public and peer benchmarks on since inception basis

IRR Performance as of December 31, 2023:



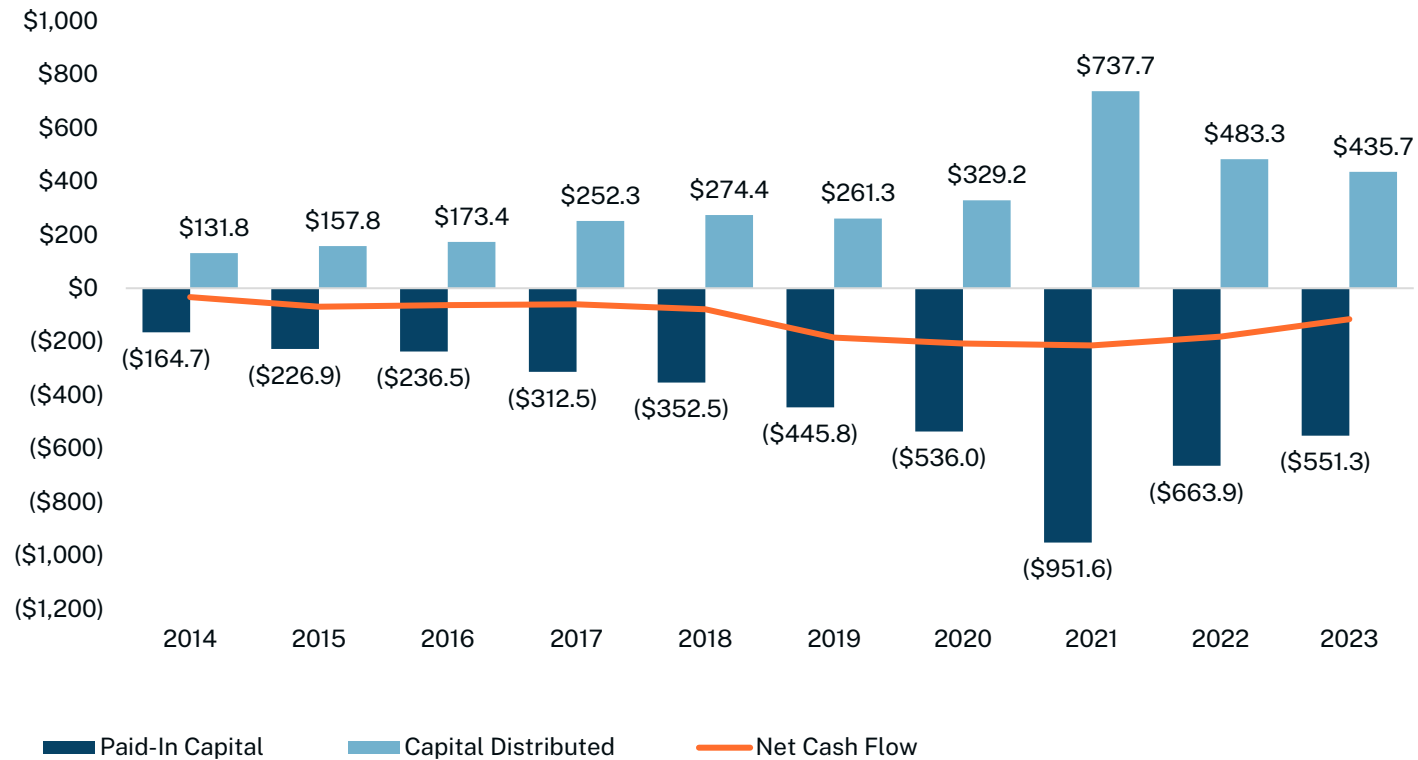
- Portfolio outperforming benchmark, MSCI ACWI IMI + 200 bps, across all longer-term time periods
 - Portfolio outperforms public benchmark by 370 bps on a since inception basis
 - Average premium above MSCI + 200 bps of 441 bps across all longer-term time periods¹
- Portfolio generated double digit performance across all longer-term time periods

Note: IRR Straight Return methodology used for MSCI ACWI Public Benchmarks.

¹ Average premium is the average difference between HIERs Portfolio and MSCI ASWI IMI + 200 bps for the time horizons shown above excluding the 1-Year

Cash Flow Activity

Annual Contributions and Distributions



- Contributions outweighed distributions by \$116 million in 2023
 - Annual contributions down 17% from 2022 and 42% from record 2021
 - Annual distributions down 10% from 2022 and 40% from record 2021

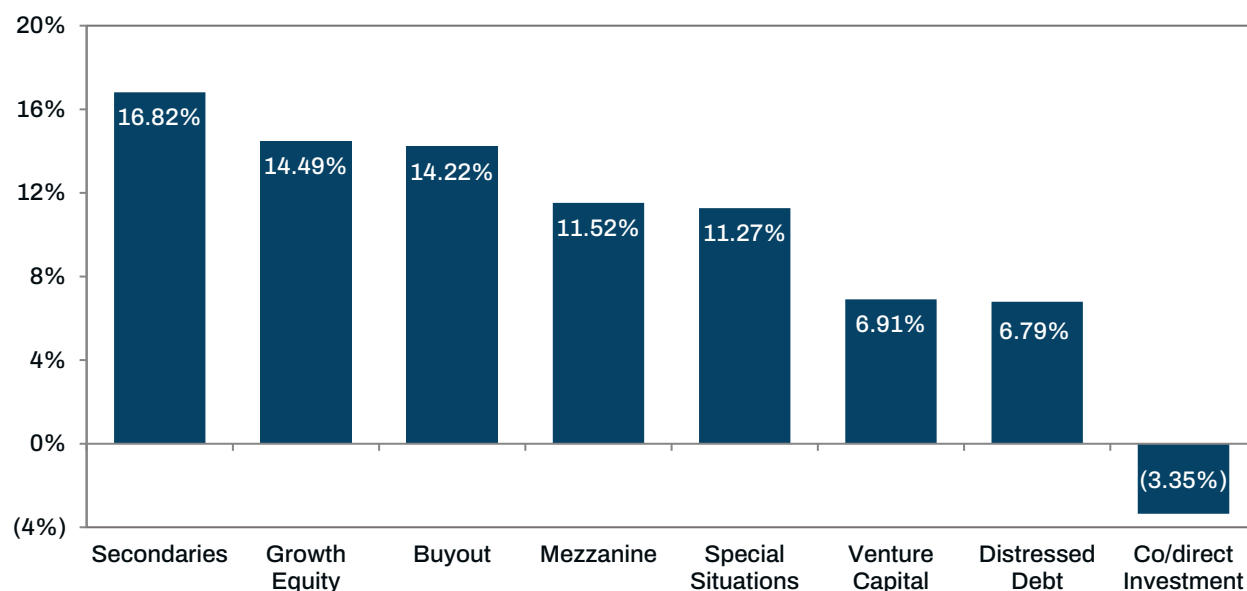
Foundation Manager Performance – September 30, 2023

Manager	Number of Funds	Commitment	Paid-In Capital	Unfunded Commitment	Distributions	Market Value	D/PI	Multiple	IRR
Manager 1	7	\$181.5	\$144.7	\$36.8	\$118.9	\$127.5	0.82x	1.70x	17.31%
Manager 2	2	85.0	83.1	8.4	34.0	103.1	0.41x	1.65x	15.01%
Manager 3	2	85.0	21.5	63.5	0.0	26.5	0.00x	1.23x	13.52%
Manager 4	2	95.0	81.2	20.2	6.5	102.5	0.08x	1.34x	18.28%
Manager 5	10	370.8	268.9	160.4	186.2	218.5	0.69x	1.50x	14.74%
Manager 6	2	100.1	42.5	57.7	4.0	57.5	0.09x	1.45x	15.70%
Manager 7	2	117.8	70.9	47.0	57.4	55.2	0.81x	1.59x	20.33%
Manager 8	3	150.0	81.8	73.6	8.8	111.8	0.11x	1.47x	21.27%
Manager 9	8	231.3	164.0	76.0	135.2	152.0	0.82x	1.75x	21.36%
Manager 10	2	85.0	72.9	23.1	22.0	78.3	0.30x	1.38x	13.80%
Manager 11	7	85.0	71.6	13.4	0.5	77.2	0.01x	1.09x	3.98%
Manager 12	3	144.6	89.4	60.7	24.6	109.4	0.27x	1.50x	24.78%
Manager 13	8	143.5	92.2	52.2	172.7	31.4	1.87x	2.21x	14.17%
Manager 14	5	216.0	146.0	75.6	40.2	179.1	0.28x	1.50x	14.82%
Manager 15	2	80.0	34.3	45.7	0.0	50.6	0.00x	1.47x	21.60%
Manager 16	6	104.8	106.3	6.2	90.2	98.7	0.85x	1.78x	22.00%
Manager 17	2	95.0	65.6	30.9	1.8	93.6	0.03x	1.46x	13.66%
Manager 18	5	167.0	129.9	49.7	109.4	118.2	0.84x	1.75x	15.61%
Manager 19	8	186.9	139.5	67.7	113.2	141.3	0.81x	1.82x	15.46%
Manager 20	5	80.0	63.2	16.7	0.0	83.4	0.00x	1.32x	10.19%
Manager 21	11	180.0	148.7	31.3	127.3	119.9	0.86x	1.66x	8.68%
Manager 22	3	102.5	71.6	33.2	2.3	91.1	0.03x	1.30x	12.68%
Manager 23	3	80.0	77.2	4.3	47.3	67.8	0.61x	1.49x	11.09%
Manager 24	4	223.3	185.0	53.4	92.8	215.9	0.50x	1.67x	20.27%
Manager 25	5	110.0	80.7	29.4	23.1	103.8	0.29x	1.57x	12.44%
Manager 26	4	87.9	26.8	60.9	15.3	20.7	0.57x	1.34x	19.00%
Manager 27	2	94.0	96.0	7.8	28.4	102.2	0.30x	1.36x	12.78%
Manager 28	5	168.5	168.0	24.0	114.5	198.0	0.68x	1.86x	17.17%
Manager 29	12	196.3	138.0	67.2	150.0	98.6	1.09x	1.80x	18.12%
Manager 30	7	255.0	251.9	40.7	185.5	216.9	0.74x	1.60x	18.48%
Manager 31	2	100.0	58.9	42.1	1.3	61.0	0.02x	1.06x	3.12%
Manager 32	4	160.0	173.4	20.1	88.3	196.4	0.51x	1.64x	17.11%
Manager 33	6	171.3	146.0	36.3	157.3	66.5	1.08x	1.53x	9.94%
Manager 34	2	85.0	92.4	8.1	157.5	113.6	1.70x	2.93x	26.58%
Total Foundation Managers (34)	161	\$4,818.2	\$3,684.2	\$1,444.2	\$2,316.1	\$3,688.3	0.63x	1.63x	14.85%
Total HL Portfolio	129	\$5,070.4	\$3,718.5	\$1,766.6	\$1,757.7	\$3,888.6	0.47x	1.52x	15.95%
Total Portfolio	343	\$7,075.3	\$5,329.1	\$2,225.2	\$3,980.7	\$4,449.2	0.75x	1.58x	12.20%

- Foundation Managers continue to represent majority of Portfolio value
 - 68% of committed capital and 83% of NAV
- Foundation Managers outperforming total Portfolio by 265 bps
- HL Portfolio outperforming total Portfolio by 375 bps

Performance Review by Strategy

As of December 31, 2023 (\$M)	Committed	% of Committed	Paid-In Capital	% Paid-In Capital	Capital Distributed	% Distributed	NAV	Multiple	IRR
Investment Strategy¹									
Growth Equity	\$723.1	10.2%	\$623.6	86.2%	\$483.2	77.5%	\$506.2	1.59x	14.49%
Buyout	4,600.7	65.0%	3,426.5	74.5%	2,586.8	75.5%	3,077.2	1.65x	14.22%
Small	288.9	4.1%	170.3	59.0%	116.9	68.6%	140.0	1.51x	13.20%
Mid	1,168.7	16.5%	745.4	63.8%	735.0	98.6%	574.0	1.76x	15.50%
Large	1,487.1	21.0%	1,320.0	88.8%	1,101.5	83.5%	1,141.0	1.70x	13.40%
Mega	1,656.1	23.4%	1,190.8	71.9%	633.4	53.2%	1,222.2	1.56x	14.51%
Special Situations	287.0	4.1%	223.7	78.0%	201.5	90.1%	131.2	1.49x	11.27%
Mezzanine	51.6	0.7%	49.8	96.4%	75.7	152.0%	1.1	1.54x	11.52%
Venture Capital	970.5	13.7%	674.4	69.5%	413.6	61.3%	547.3	1.42x	6.91%
Distressed Debt	204.8	2.9%	222.8	108.8%	178.4	80.1%	91.7	1.21x	6.79%
Co/Direct Investment	102.4	1.4%	23.3	22.8%	0.6	2.4%	21.7	0.96x	(3.35%)
Secondaries	135.0	1.9%	85.0	63.0%	40.9	48.1%	72.7	1.34x	16.82%
Total	\$7,075.3	100.0%	\$5,329.1	75.3%	\$3,980.7	74.7%	\$4,449.2	1.58x	12.20%



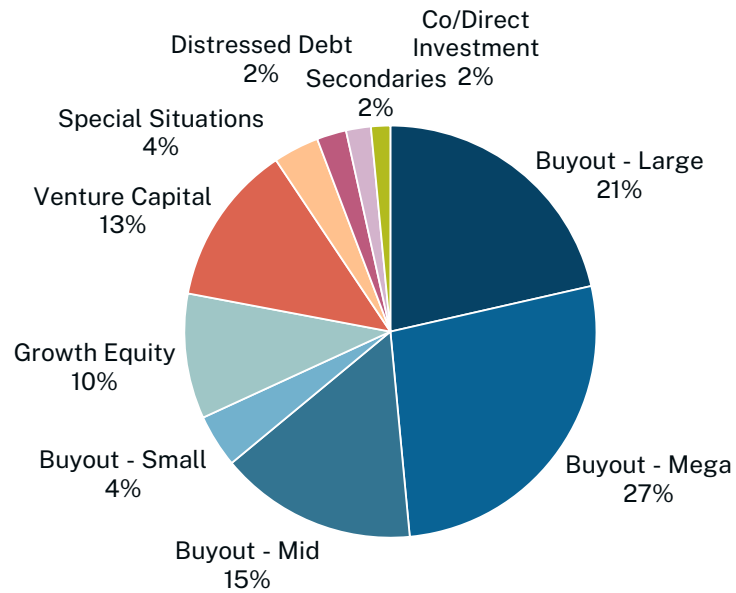
- Buyout accounts for 65% of commitments and 69% of NAV
 - Mid Buyout is Buyout's top sub-strategy by IRR at 15.50%
- Growth Equity continues to generate strong performance on an IRR and TVPI basis
- Distressed Debt fund performance lags other strategies as there have been limited distressed opportunities over the last decade as of 12/31/2023

¹ Secondary purchases presented within their respective investment strategy except for \$100M commitment to Landmark Equity Partners XVI, L.P. and \$35M commitment to Landmark Equity Partners XVII, L.P.

Portfolio Diversification

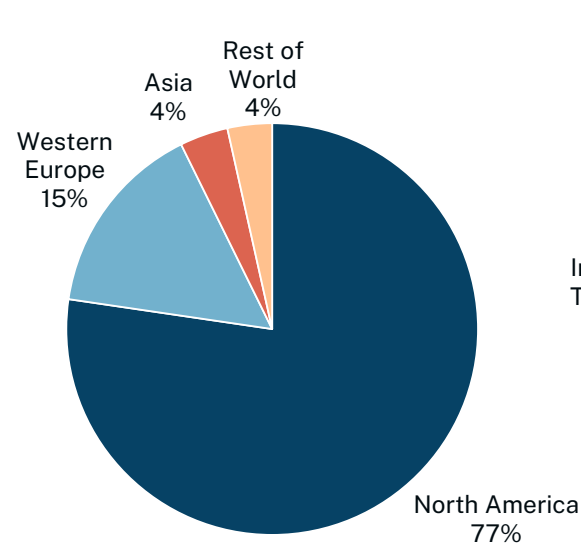
Strategic Diversification by Total Exposure

As of December 31, 2023



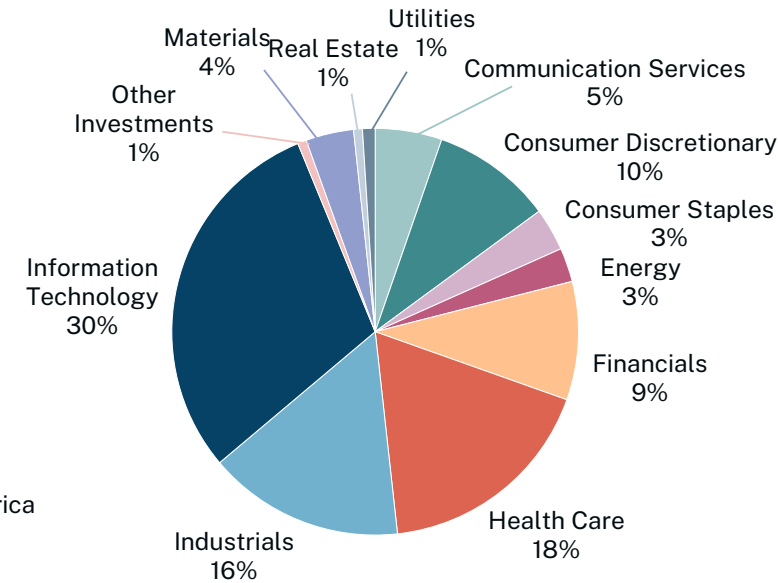
Underlying Investment Diversification by Geography¹

As of December 31, 2023



Underlying Investment Diversification by Industry¹

As of December 31, 2023



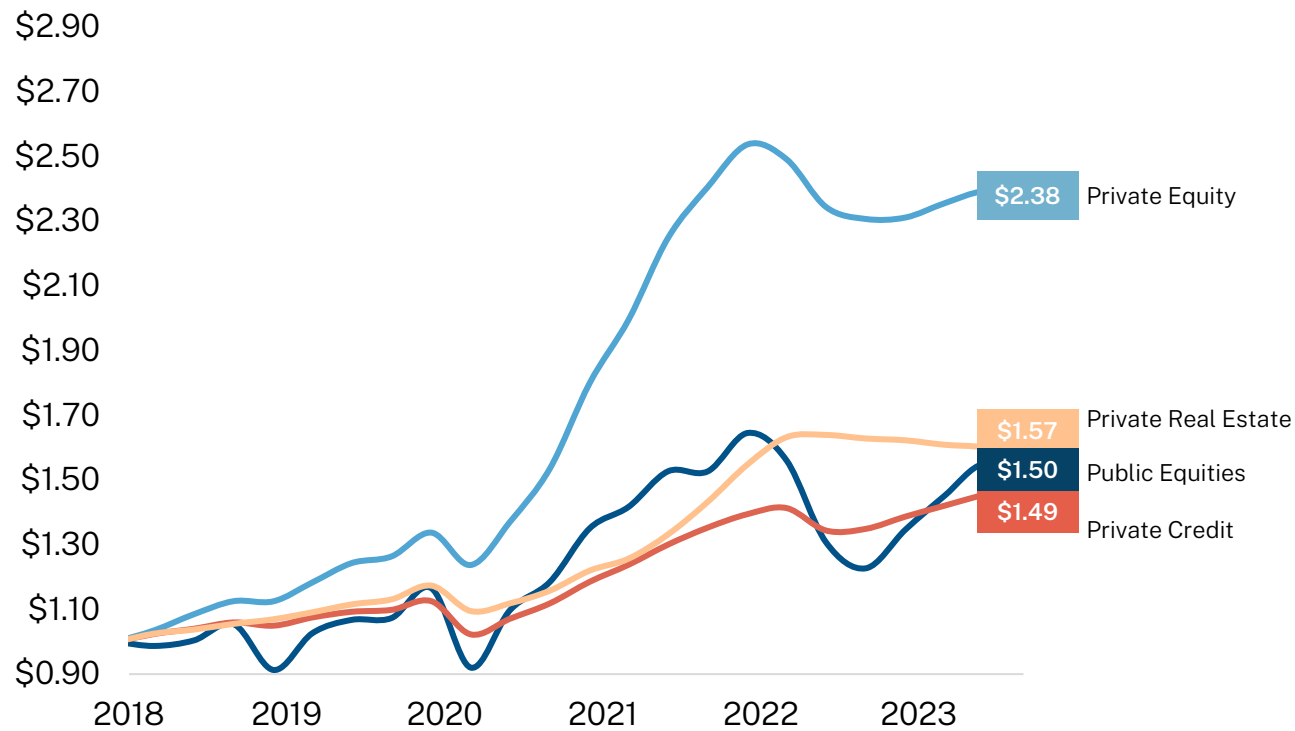
- Portfolio is prudently diversified by strategy, geography, and sector
- Strategy, geography and industry diversification remained relatively consistent QoQ and YoY
- Information Technology (30%) and Health Care (18%) remain the top two sector exposures

¹Analysis excludes FoF holdings.

Market Overview

What the Markets Have Done Over the Last Five Years

Growth of \$1



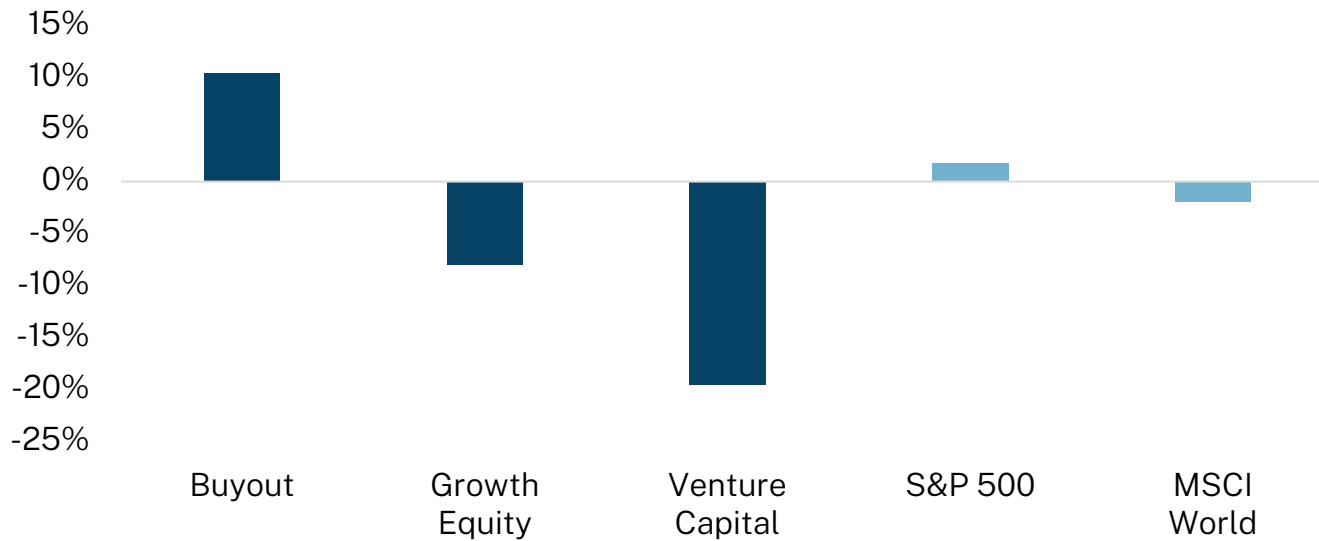
- Over this five-year period, private equity has had greater upside and less downside across all the cycles experienced in the last five years
- Private markets, generally, have had far less volatility than public markets

Private vs. Public Performance

Private & Public Market Returns

Q4 2021 – Q3 2023

■ Private Markets ■ Public Markets

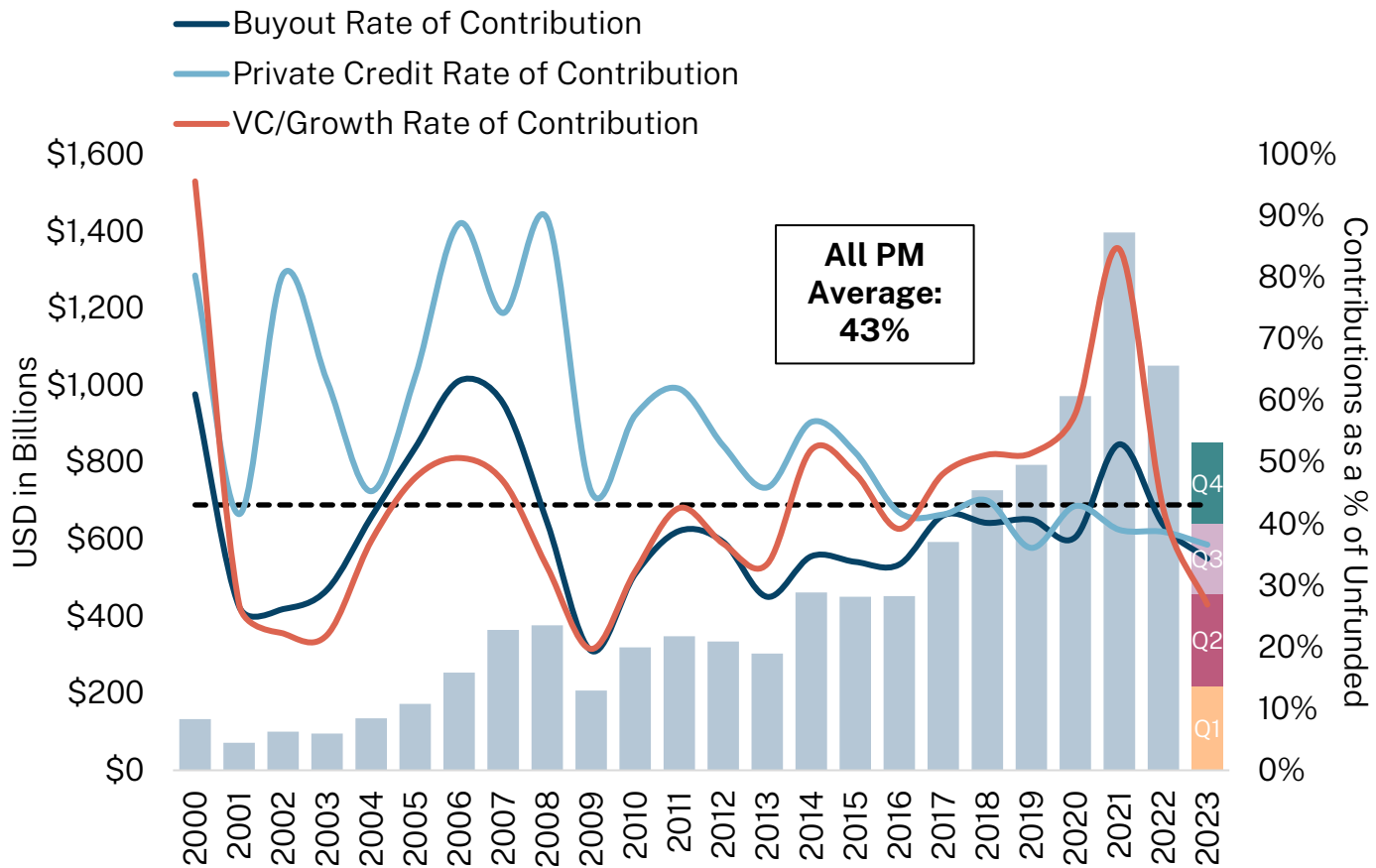


- Despite stronger public markets, buyout continues to perform better than public indices
- Growth and venture continue to underperform both buyout and public markets

Source: Hamilton Lane Data, Bloomberg (January 2024)

Annual Private Equity and Credit Contributions

Contributions

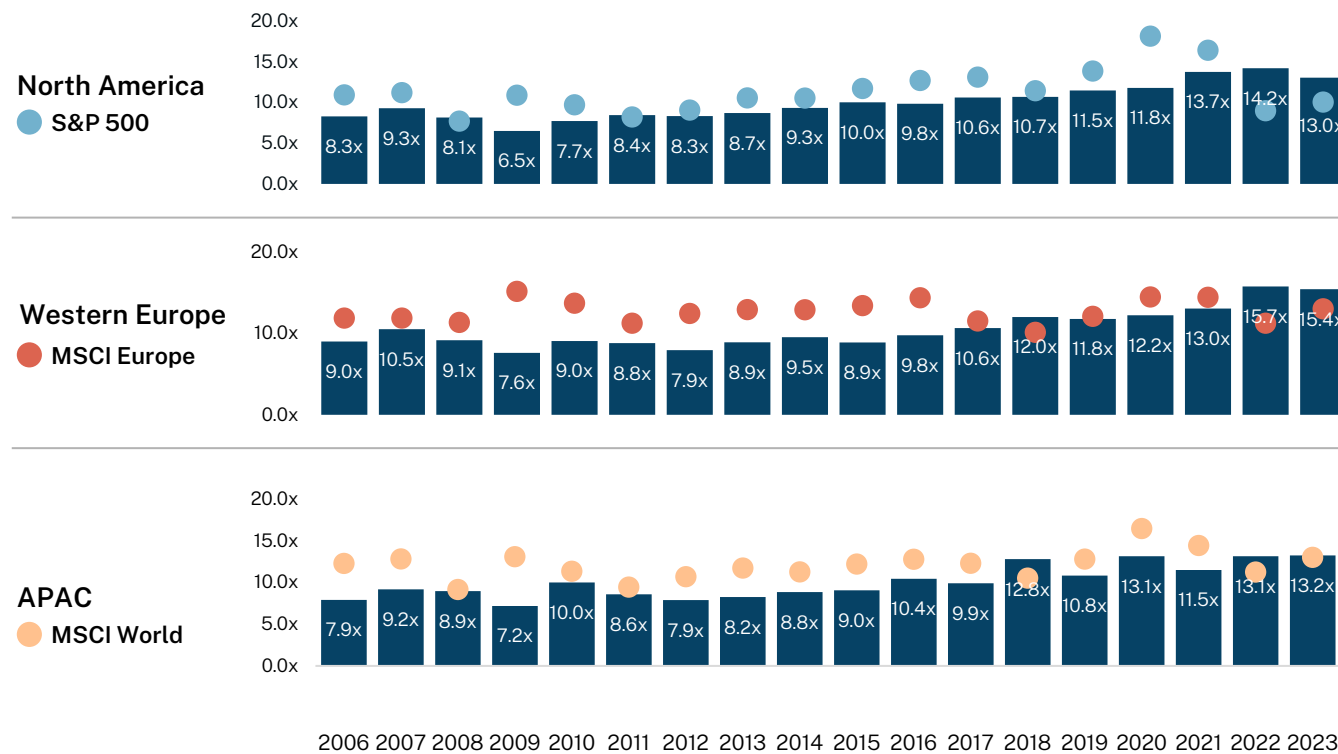


- Credit and Equity investment pacing continues to drop lower than historic averages and is now near levels last seen during the GFC

Purchase Price Multiples at Acquisition

Buyout Purchase Prices

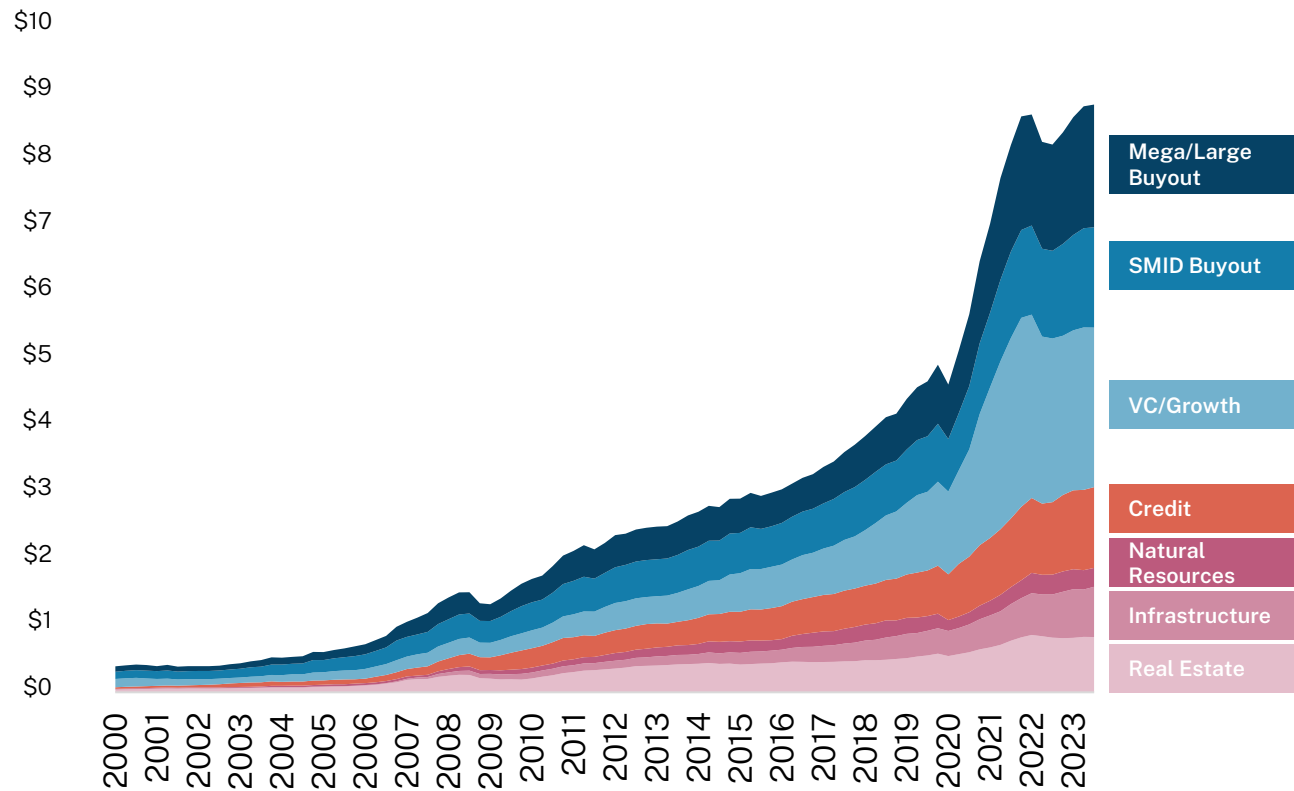
Median EV/EBITDA by Deal Year



- Purchase price multiples for new deals reached record heights in 2022 across geographies, though most geographies are seeing a slight decline in 2023
- On average everything remains expensive, with figures showing that private markets were more expensive than publics in 2023

USD in Trillions

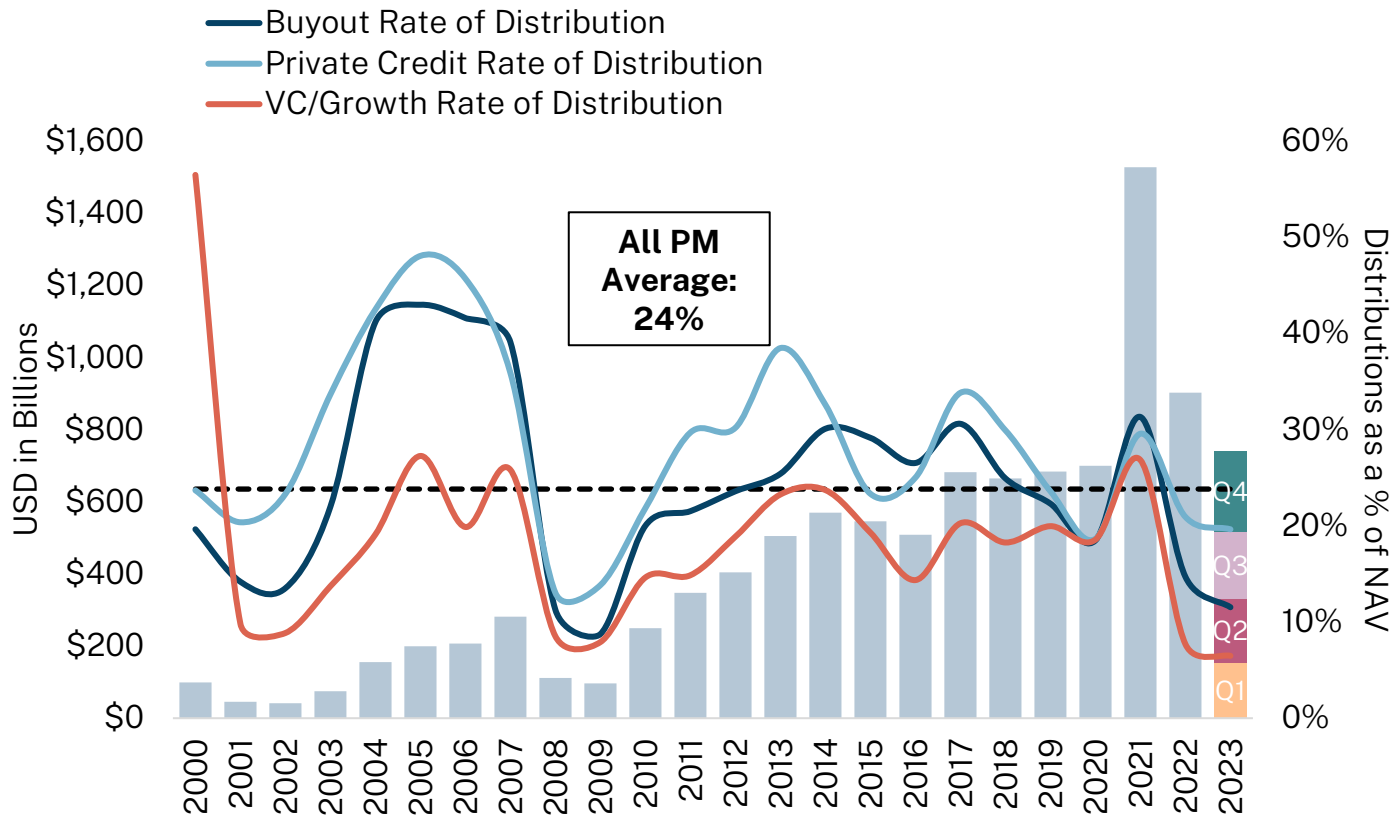
NAV by Strategy



- After a NAV decline in 2022, market NAV has steadily surpassed 2021 peaks
- Buyout funds are driving the 2023 NAV “recovery”

Distributions

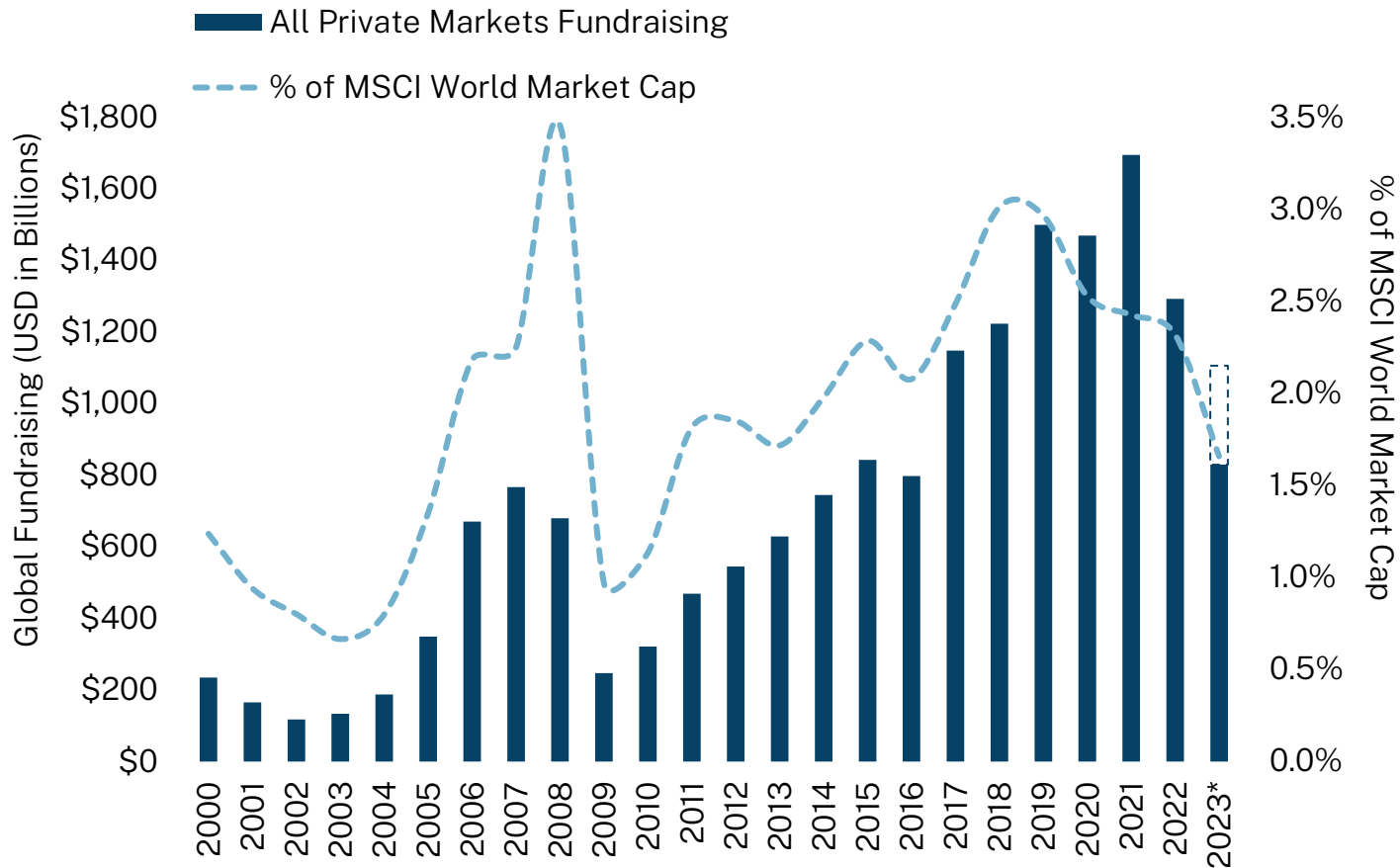
Annual Private Equity and Credit Distributions



- The slowing of the rate of distribution is consistent across private equity and private credit strategies

Global Private Markets Fundraising

Global Private Markets Fundraising



- Fundraising has slipped in 2023, though, in an absolute sense, it will still be among the strongest fundraising years on record

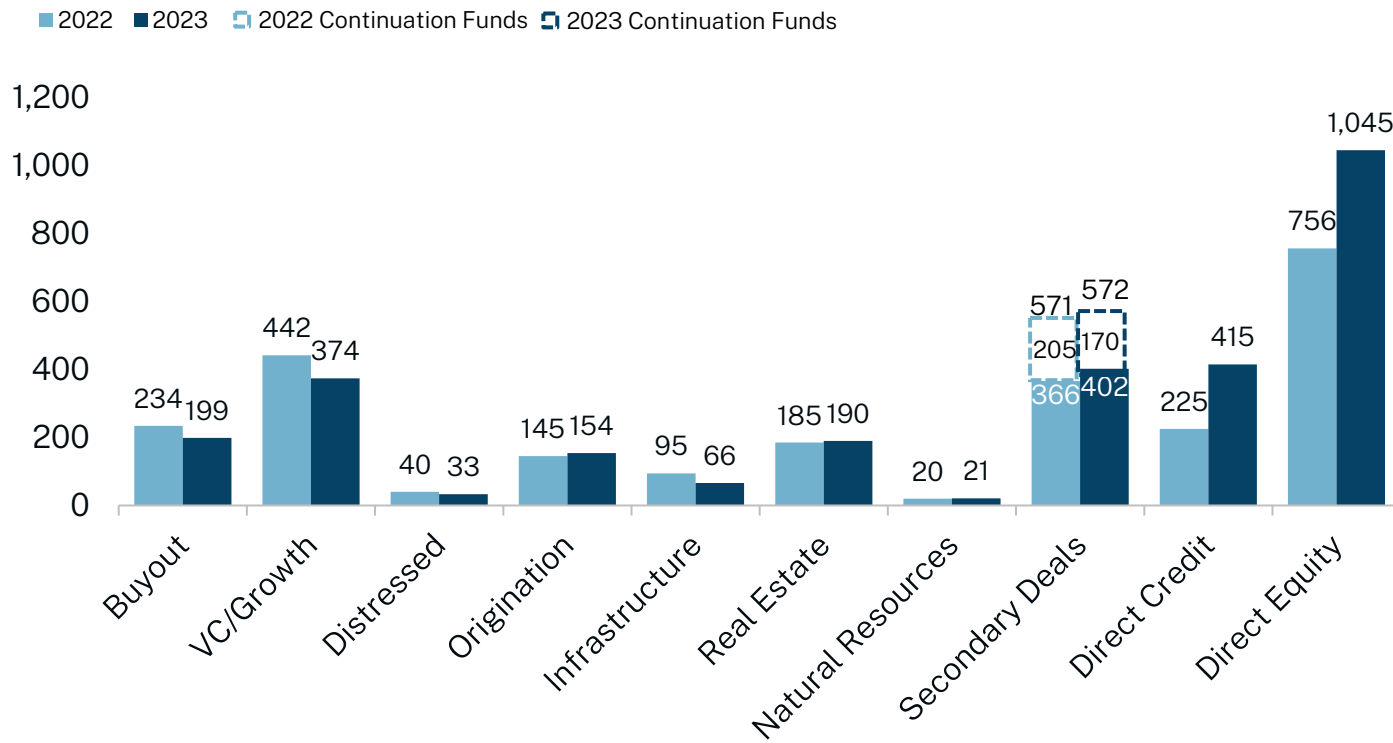
Source: Hamilton Lane Data, Pitchbook, Cobalt (January 2023)

*2023 fundraising estimates annualized from Q3

Excludes Fund-of-funds, secondary fund-of-funds, co-investment funds and core real estate

Private Markets Opportunities by Strategy

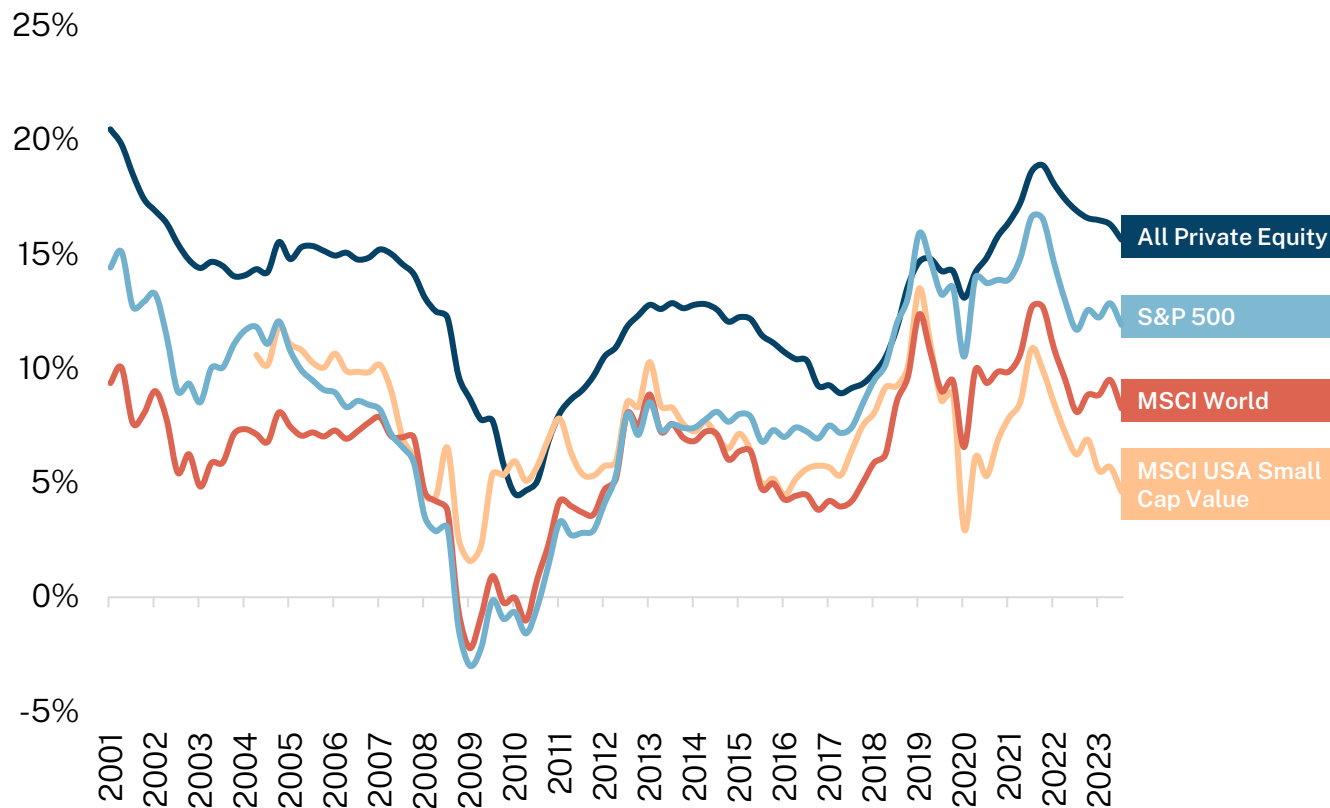
Opportunities Received by Hamilton Lane



- It's been another record year so far in 2023 for direct investment opportunities received
- Most strategies are seeing a slight decline in the number of opportunities screened in 2023

Rolling Performance

All Private Equity 10-Year Rolling TWRs



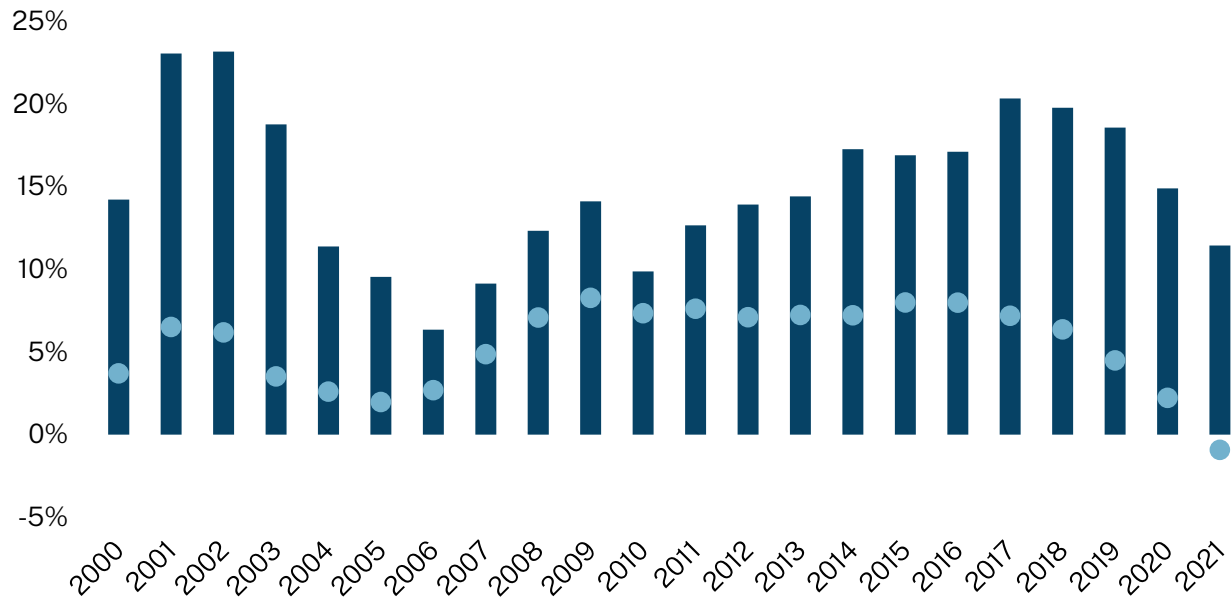
- Private equity has bested liquid equities over most 10-year time periods
- Private equity has even done so in the most recent period of turbulent market conditions

Pooled Returns by Vintage Year

Buyout IRR vs. PME

By Vintage Year

■ Buyout IRR ● MSCI World PME



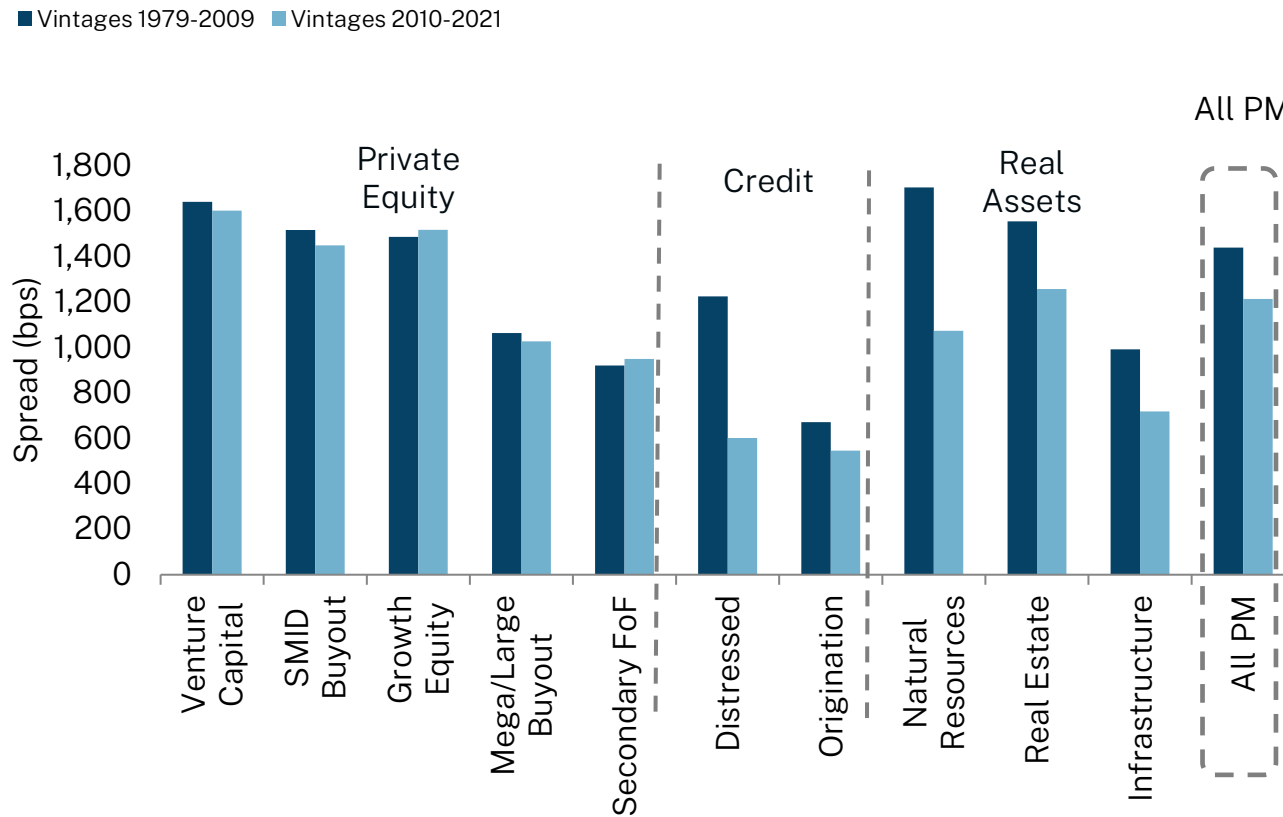
- Buyout has outperformed global equities in the last 22 vintage years by an average margin of 956 bps

Source: Hamilton Lane Data via Cobalt, Bloomberg (January 2024)

Dispersion of Returns

Dispersion of Returns by Strategy

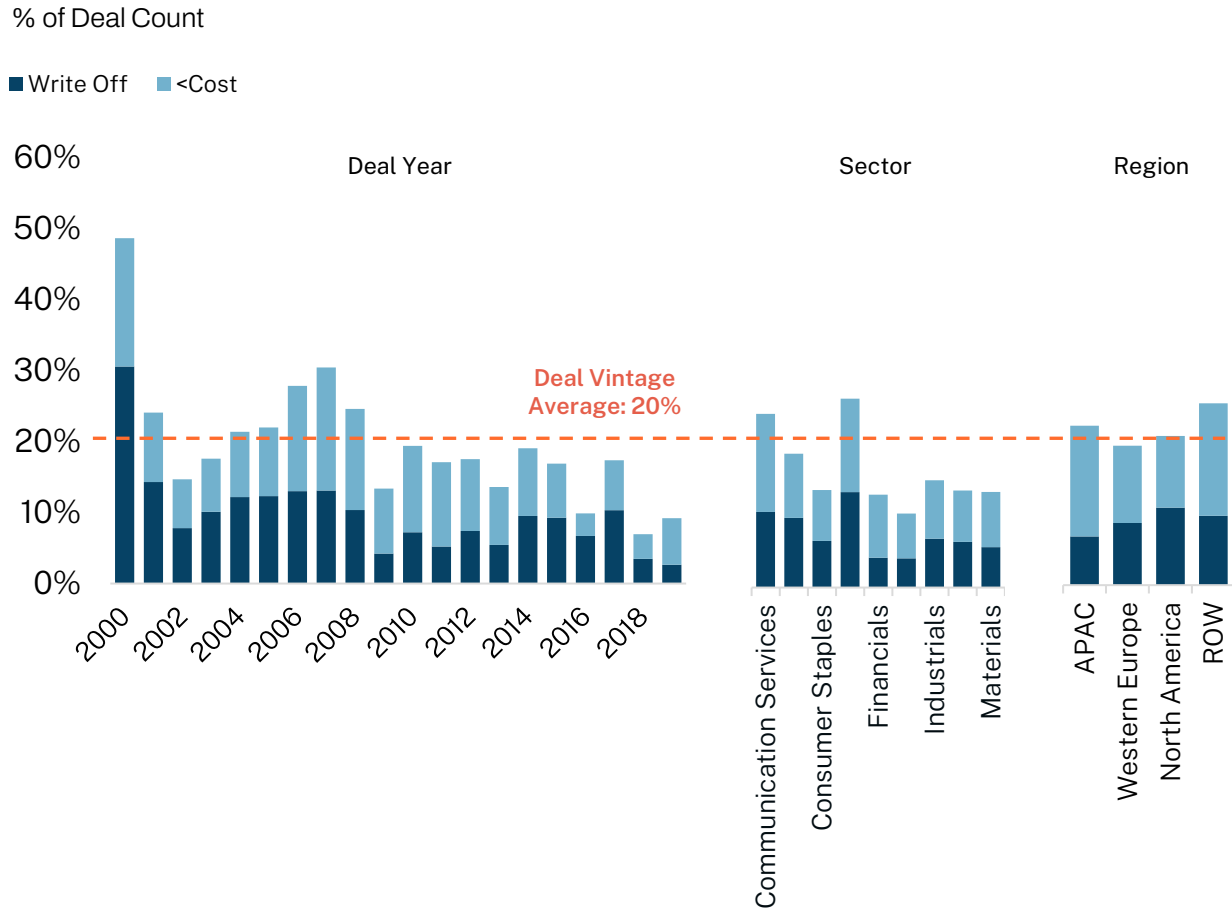
By Vintage Year Groupings; Ordered by Long-Term Spread of Returns



- Wide spreads between top- and bottom-performing managers provide opportunities as well as risks
- Spreads have remained wide over industry history across asset classes. Growth of the industry has not, by this measure, led to a more efficient market in equity; however, credit and private real assets have seen a smaller dispersion in more recent vintages

Company Loss Ratio

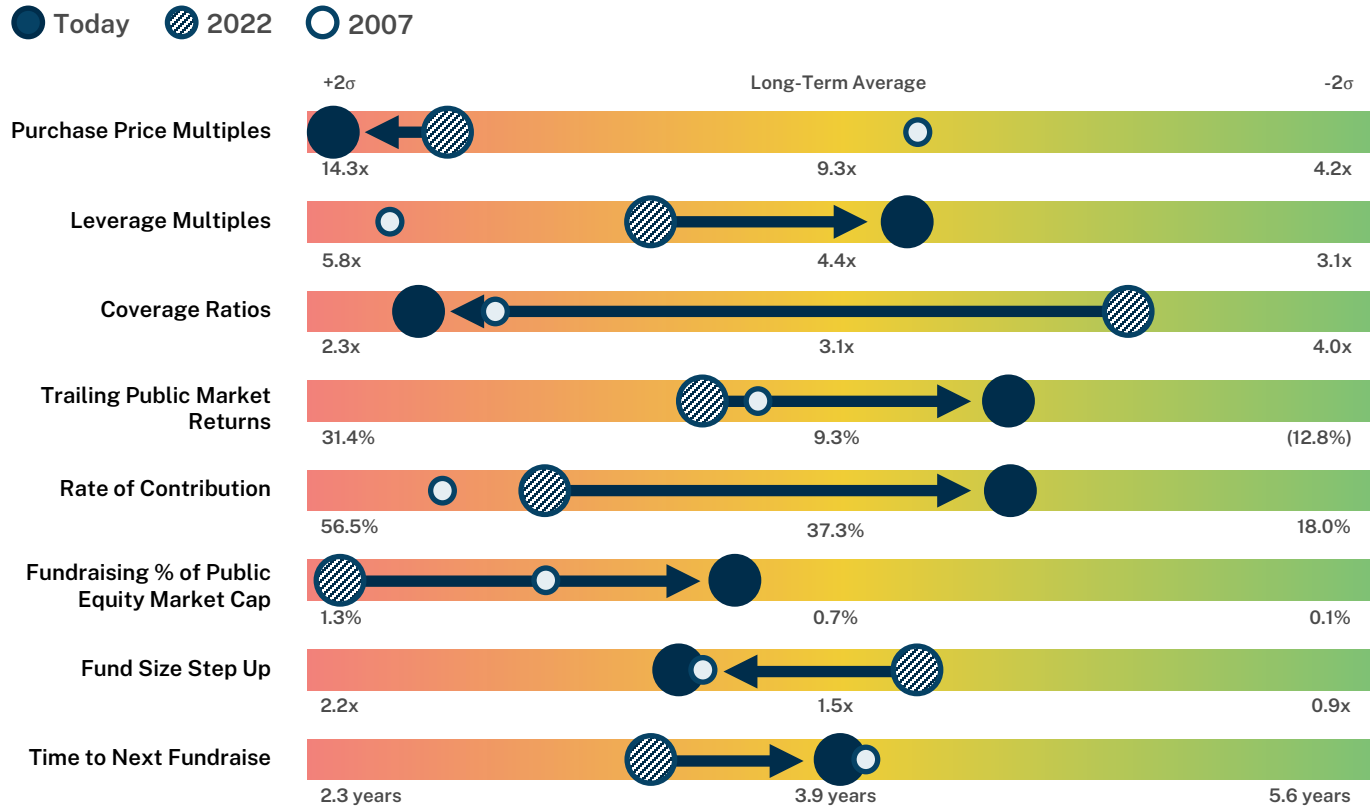
Loss Ratio of Realized Buyout Deals



- Risk of loss can vary greatly by deal year and sector, with 20% of deals losing some amount of capital

Hamilton Lane Sentiment Indicators

Buyout



- The Buyout market is trending slightly positive

Source: Hamilton Lane Data, Bloomberg, Cobalt, Pitchbook, S&P (January 2024)

Appendix

2024 Strategic Plan

Commitment Pacing

- **2024 commitment pacing of \$800-\$1,000M**
 - Year-over-year increase due to new target allocation of 19% effective 1/1/2024

- Includes:
 - Hamilton Lane: Core \$630 to \$750M
 - Ho'oulu \$50M per year over four years (\$200M program)
 - Includes Co-investments, Small-to-Mid Venture and Growth primaries
 - Staff Discretion \$120M to \$200M (15% to 20%)
 - Includes HiTIP Program

2024 Strategic Plan (cont.)

General Partner Relationships

- Concentrate commitments with Foundation Managers
- Thoughtfully manage pipeline of re-ups

Commitment Sizing

- Continue to increase commitment sizes due to increased annual pacing
 - Maintain larger average commitment size for Foundation Managers

Strategic Diversification

- Primary commitment focus on Buyout investments
- Opportunistically invest in high-conviction Venture Capital & Growth Equity managers
- No Credit/Distressed Debt investments
- Limited conventional energy

Geographic Diversification

- Maintain current geographic exposure, with primary commitments to North America
- Opportunistically assess additional Western Europe and Asia relationships

Statement of Investments

Statement of Investments as of December 31, 2023

Investment Name	Committed	Paid-In Capital ¹	Capital Distributed	Reported Market Value	Net IRR
Total Core Portfolio	\$6,949,426,844	\$5,246,284,695	\$3,950,519,023	\$4,366,743,737	12.23%
Total Stafford HiTip Fund I, L.P.	25,250,000	24,542,039	26,810,678	10,363,487	7.44%
Total Stafford HiTip Fund II, L.P.	31,075,000	26,169,135	2,975,020	37,552,815	14.27%
Total Stafford HiTip Fund III, L.P.	69,500,000	32,072,473	418,079	34,524,283	4.88%
Total Portfolio	\$7,075,251,844	\$5,329,068,342	\$3,980,722,800	\$4,449,184,322	12.20%

Note: The analysis was completed using available information provided by the general partner of each investment, unless otherwise noted. Cash flows are representative of HIERS' actual cash paid and received. Market values reflect HIERS' unrealized interest in each investment. The information provided is from the HIERS' custodial bank and/or its consultants and has not been provided or approved by any of the Funds' General Partners or members.

¹ Paid-in Capital includes both commitment and non-commitment reducing capital calls

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Employees' Retirement System of the State of Hawaii

May 28, 2024

Risk Budgeting

Part 3



Employees' Retirement System of the State of Hawaii

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Table of Contents

1. Review and Goals for Today
2. ERS-specific Considerations
3. Peer Examples
4. Conclusion and Next Steps

Review and Goals for Today



Employees' Retirement System of the State of Hawaii

Review

Review

- Risk budgeting refers to the concept of managing a portfolio based on risk contributions/levels.
- While there are many definitions of risk, we are focused on the volatility of returns.
- For the purposes of this presentation and the ERS Investment Committee, we will generally focus on risk budgeting at the Total Portfolio level.
- Risk budgeting is closely related to the concept of “active risk.”
 - Active risk is the risk to be budgeted
 - Active risk and tracking error are synonymous
- At its core, active risk stems from weighting deviations compared to the benchmark:
 1. Over/underweight asset classes
 - i.e., allocation or weighting risk
 2. Within asset classes, managers holding different securities than the benchmark
 - i.e., manager or selection risk

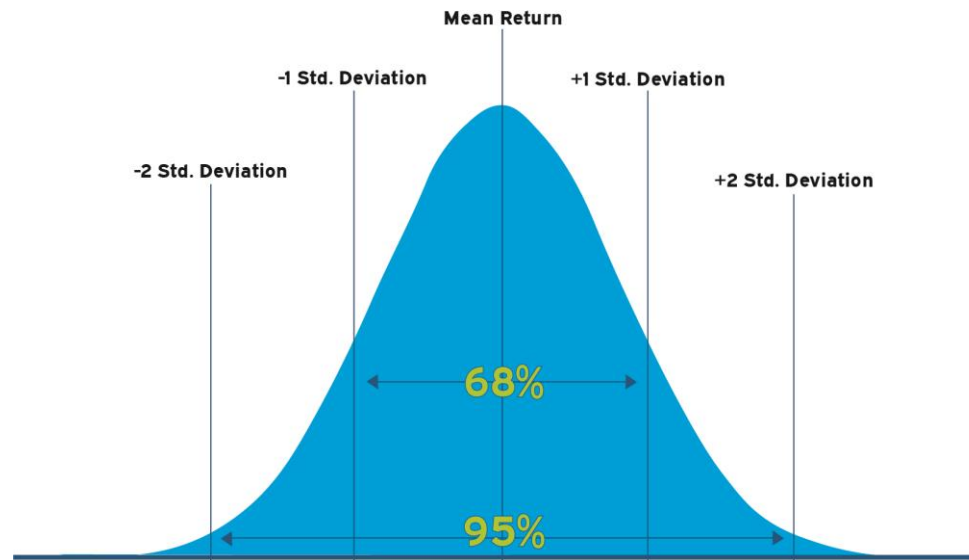


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Review

Volatility

- Volatility is a measure of risk. It measures the variability of returns around an average.
- The higher the volatility, the greater the variation around the midpoint (e.g., average excess return).



- Volatility includes above-average returns as well as below-average; it measures dispersion.
- Returns are commonly assumed to follow a “normal distribution” as shown by the “bell curve.”
 - About 2/3rds of returns fall within one standard deviation above or below the average.



How is Tracking Error Generated?

- Tracking error is generated by holding positions differently than a given benchmark.
- These differences can be the result of different weights or different securities (i.e., out-of-benchmark) altogether.

Levels of Tracking Error	Mechanisms to Modify Tracking Error
Individual Manager vs. Benchmark <i>Ex: Longview vs. MSCI ACWI</i>	<ul style="list-style-type: none">- Different portfolio weights of individual securities compared to the benchmark.- Ex: higher allocation to Amazon, lower allocation to Financials, allocation to non-benchmark securities, etc.
ERS Asset Class vs. Class Benchmark <i>Ex: Public Equity vs. MSCI ACWI IMI</i>	<ul style="list-style-type: none">- Changes to manager/strategy weights- Increase/decrease to passive mandates
ERS actual portfolio vs. policy benchmark	<ul style="list-style-type: none">- Over/under allocation to asset classes compared to policy.- Incorporation of strategies that are not held in the policy portfolio/benchmark.

These mechanisms are additive: changes at the manager level can impact the asset class level tracking error which, in turn, can impact the total portfolio tracking error.



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Goals for Today

Goals for Today

- The focus of this presentation is to illustrate the multitude of considerations and measurement levels in which risk can be budgeted.
- We will discuss three items:
 1. ERS-specific areas of consideration
 2. Examples of other public funds with risk budgeting approaches
 3. Preliminary segments of the ERS portfolio where risk budgeting will be explored first

ERS-specific Considerations



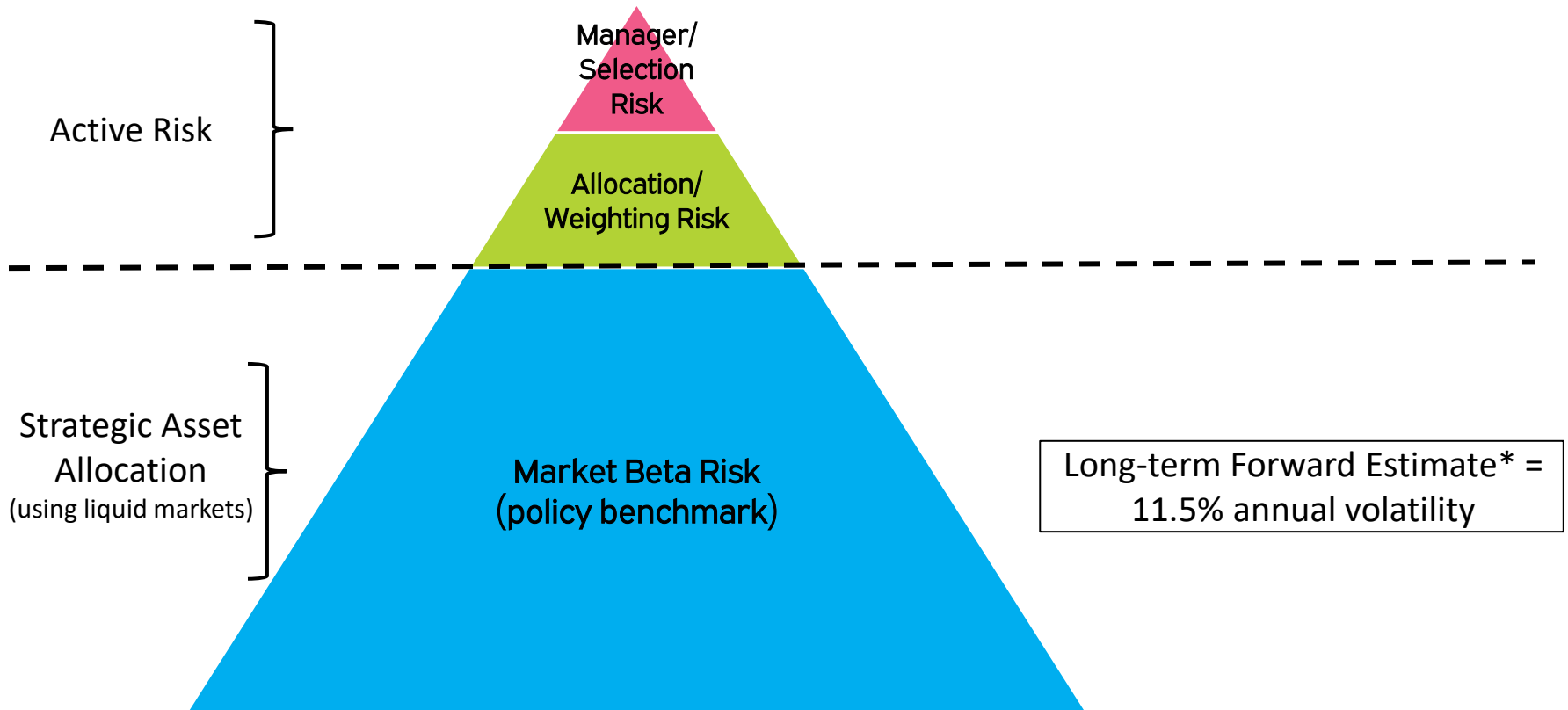
Employees' Retirement System of the State of Hawaii

Sources of Risk

Decomposing Total Portfolio Volatility

→ For the ERS, Total Portfolio volatility can be separated into *Market Beta Risk* (i.e., policy benchmark) and *Active Risk*.

- These components can be further separated into various sub-categories.



*Utilizes capital market assumptions from 2022/2023 Asset-Liability Study, other Meketa assumptions, and mean-variance analysis.



Employees' Retirement System of the State of Hawaii

Sources of Risk

Actual Implementation vs. Policy Benchmark

→ With the ERS's new benchmark, there will be consistent tracking error between the actual portfolio and the benchmark purely from strategic implementation decisions (i.e., usage of private markets that are benchmarked to public market indices).

Actual Implementations		Policy Benchmark Characteristics
Global Equity	Public Equity	Public <u>Equity</u> Indices
	Private Equity	
Global Credit	Public Credit	Public <u>Credit</u> Fixed Income Indices (High Yield and Bank Loans)
	Private Credit	
Real Assets	Real Estate	Public Real Estate (<u>REITS</u>) Index
	Infrastructure	Public <u>Equity</u> Infrastructure Index
	Timberland	Public <u>Equity</u> Timber and Forestry Index
	Agriculture	Public <u>Commodities</u> Agriculture Index
Liquid Defensive	Systematic Trend Following	Passive-like <u>Trend Following</u> Index Public <u>Fixed Income</u> Indices (US Treasuries)
	Long US Treasuries	
	Intermediate Duration Government Bonds	
	Diversifying	
Illiquid Diversifying	Reinsurance/similar	Public Catastrophe Bond Index



Despite similar levels of volatility, the expected tracking error between the two portfolios is 5.2%.*

*Utilizes capital market assumptions from 2022/2023 Asset-Liability Study and mean-variance analysis. Actual implementation assumes passive-like implementation of all classes excluding private markets, which assume median/index returns.



ERS Considerations

- The ERS's public markets-oriented benchmark introduces a baseline level of tracking error when compared to the Total Portfolio that naturally includes private markets exposure.
 - When developing Total Portfolio risk budgets, this will need to be accounted for.
- Risk budgets can be applied at numerous levels:
 - Asset class level vs. benchmark (e.g., public equity vs. public equity benchmark)
 - Higher-level asset class level vs. benchmark (e.g., global equity, which includes public and private equity, compared to the corresponding public equity benchmark)
 - Strategic class level vs. benchmark (e.g., Diversifying Strategies vs. corresponding blended benchmark)
 - Total Portfolio vs. Policy Benchmark
- Considering this complexity, Meketa and ERS Staff recommend that the ERS implement risk budgets in an incremental fashion to attain comfort/utility.
 - Risk budgets will be explored at the ERS Staff level for a subset of asset classes first.
 - These same budgets will then later be presented to/adopted by the IC.
 - Additional asset classes will be added, followed by the Total Portfolio.

Peer Examples



Employees' Retirement System of the State of Hawaii

Peer Examples

Peer Examples

- The concept of risk budgeting is common across large-scale public pensions.
- However, there is considerable variation in how peer systems incorporate risk budgets.
 - Certain plans only incorporate risk budgets for specific asset classes.
 - Others may only examine risk budgets for public markets classes.
 - Some only implement risk budgets at the total portfolio level, but utilize different benchmarks than the ERS (e.g., private market composite indices) that change the usefulness.
 - Other variations include ex-ante (i.e., forecasted) risk budgets vs. ex-post (i.e., experienced) risk budgets with additional discrepancies related to time horizons.
- Given the challenges associated with risk budgeting, it requires a deliberate timeline/process for implementation in order to provide utility and understanding by boards/committees.



Employees' Retirement System of the State of Hawaii

Peer Example #1

Example: Virginia Retirement System*

→ IPS Language, example excerpts:

- *The Board will establish a total fund active risk range that describes the degree of tolerance for yearly variation in the fund's performance relative to the Total Fund Custom Benchmark. The primary risk measure used for this purpose is Tracking Error, calculated as the standard deviation of the difference between the fund's return and the benchmark's return. From this measure, probability estimates can be derived to help the Board estimate the risk of underperforming the benchmark by certain margins. It is recognized that statistical measures, such as tracking error, are in fact just estimates and do not guarantee that observed performance will occur as expected. The higher the tracking error, the greater the potential for positive and negative excess return outcomes.*
- *The Board establishes and reviews the total fund tracking error range. The total fund tracking error range is the allowable observed tracking error calculated quarterly using 5 years of history. Should the plan experience active risk outside of the tracking error range, the CIO is responsible for communicating the variance to the Board on a timely basis. The total fund tracking error range is the amount of expected tracking error based on the total fund's current mix and strategies. The CIO establishes individual program tracking error ranges.*
- *In addition, the CIO is responsible for obtaining and/or developing appropriate systems, models, tools and reports necessary to monitor the risks of the fund and effectively communicate such risks on a regular basis to the Board.*

→ 12/31/23 Market Value = \$109.2 billion (source: <https://www.varetire.org/investments/>)

*Source: VRS Defined Benefit Plan Investment Policy Statement as of January 1, 2024



Employees' Retirement System of the State of Hawaii

Peer Example #1

Example: Virginia Retirement System*

Asset Class	Policy Target	Benchmark Style
Global Public Equity	33%	Public Equity
Fixed Income	16%	Public Fixed Income
Credit	14%	Public Fixed Income
Real Assets	14%	Private Markets Composite + CPI-related
Private Equity	16%	Public Equity
Multi-Asset Public Strategies	4%	T-Bills + 2.5%
Private Investment Partnerships	2%	Blend of Public Equity, Private Markets Composite Index, CPI-related, and Public Fixed Income
Cash	2%	T-Bills

Total Fund Tracking Error

*100-300 basis points
(calculated quarterly using 5-years of history)*

*Source: VRS Defined Benefit Plan Investment Policy Statement as of January 1, 2024



Employees' Retirement System of the State of Hawaii

Peer Example #2

Example: Missouri State Employees Retirement System*

→ IPS Language, example excerpts:

- *A risk-budgeting process, based on advice by the Board Investment Consultant working with the CIO, will be employed to identify the public markets active-risk target and the reasonable range for expectations around that target.*
- *This process will be a “bottom-up” process, as opposed to the “top-down” process used to set the asset allocation policy, as risk budgeting will take into consideration the individual public markets strategies being utilized for implementation of the asset allocation policy. As such, this process will occur after the Board sets the asset allocation.*
- *The Board will approve an ex-post public markets active-risk target and a reasonableness range.*
- *The current public markets ex-post active risk target is 2% and the reasonableness range is between 0% to 3.5%.*
- *The Risk Manager will provide a written report that addresses Total Fund risk management findings and initiatives (“Risk Report”), which includes detail on Total Fund exposure levels, cash levels, active risk, and various other risk statistics.*

→ 12/31/23 Market Value = ~\$9.1 billion (source: Meketa calculations)

*Source: MOSERS Investment Policy Statement, effective as of November 17, 2022



Employees' Retirement System of the State of Hawaii

Peer Example #2

Example: Missouri State Employees Retirement System*

Asset Class	Policy Target	Benchmark Style
Public Equity	30%	Public Equity
Private Equity	15%	Public Equity and Private Markets Composite
Fixed Income	35%	Public Fixed Income
Inflation Hedge	40%	Blend of Private Markets Composites, Public Commodities, Public Equity, and Public Fixed Income
Absolute Return	20%	Hedge Fund Composite and Public Fixed Income
<i>Public Markets Tracking Error</i>		<i>2% with a 0-3.5% reasonable range (measured quarterly on trailing 3-year basis)</i>

- The allocations above add up to more than 100% due to their usage of leverage.
- Of note, MOSERS recently adopted a new policy portfolio as part of their asset-liability study. Their policies have not been updated as they are still discussing transition plans.

*Source: MOSERS Investment Policy Statement, effective as of November 17, 2022



Employees' Retirement System of the State of Hawaii

Peer Example #3

Example: State of Wisconsin Investment Board*

→ IPS Language, example excerpts:

- *As part of the strategic asset allocation, the Trustees approve a fund level active risk target for the WRS. Active risk represents a measurement of the added risk of actively investing the assets rather than replicating the benchmark to achieve returns beyond market returns. The active risk target for the Core Fund is 120 bps +/- 60 bps.*
- *Guidelines for individual portfolios will be constructed so that the aggregate risk of the portfolios is within the range established for the fund level risk objective. The Investment Committee approves an active risk budget that allocates the active risk target to the Core Trust Fund's portfolios and monitors the allocation of active risk.*
- *The Risk Management Division will also measure soft risk parameters established by the IC Guidelines for asset classes and portfolios. Soft risk parameters refer to desired characteristics and/or risk exposures. Investment staff are permitted to deviate from soft risk parameters in pursuit of excess return. However, anything outside of the soft risk parameters will be discussed with the Investment Committee to determine whether the exposure should be maintained.*

→ 3/31/24 Market Value = \$125.9 billion (source: <https://www.swib.state.wi.us/wrs-performance>)

*Sources:

Board of Trustees Wisconsin Retirement System Investment Policy, June 15, 2022 (updated with 2024 Asset Allocation Summary Memo)

SWIB Investment Committee Wisconsin Retirement System Investment Guidelines, March 21, 2024



Employees' Retirement System of the State of Hawaii

Peer Example #3

Example: State of Wisconsin Investment Board*

Asset Class	Policy Target	Benchmark Style
Public Equity	40%	Public Equity
Public Fixed Income	27%	Public Fixed Income
Inflation Sensitive Assets	19%	Public Fixed Income
Private Equity/Debt	18%	Blend of Private Markets Composites, actual portfolio returns, and Public Fixed Income
Real Estate	8%	Private Markets Composite
Leverage	-12%	---
<i>Total Fund Tracking Error</i>		<i>60-180 basis points (focused on ex-ante measurements)</i>

→ The WRS portfolio is highly complex. In addition to a total fund tracking error assumption, they maintain a variety of ex-ante tracking error limits for specific asset classes, sub-asset classes, and specific portfolios. Ex: 1.5%, 3%, and 1.5% ex-ante tracking error limits for investment grade credit, high yield, and long treasury portfolios, respectively.

*Sources:

Board of Trustees Wisconsin Retirement System Investment Policy, June 15, 2022 (updated with 2024 Asset Allocation Summary Memo)

SWIB Investment Committee Wisconsin Retirement System Investment Guidelines, March 21, 2024



Employees' Retirement System of the State of Hawaii

Peer Examples

Peer Summaries

- The three highlighted examples illustrate both the ubiquity of risk budgets as well as the variation in approaches:
 - Asset classes under consideration
 - Types of benchmarks used
 - Ex-ante vs. ex-post calculations
 - Etc.
- Risk budgeting is a complicated exercise that only provides value if the process is deliberate and understandable.
- The ERS's policy benchmark is unique in its exclusive use of public markets indices. However, a growing trend among peers is the incorporation of "reference portfolio benchmarks" (e.g., 70% MSCI ACWI / 30% Bloomberg Aggregate) which are similar to the ERS's new policy benchmark.
 - Meketa expects that risk budgets may eventually be applied to reference portfolio benchmarks on a wider scale among peers.

Conclusion and Next Steps

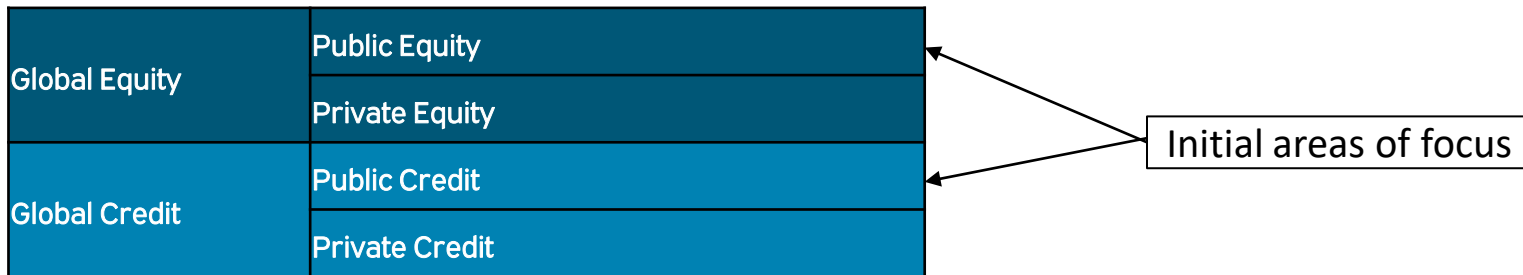


Employees' Retirement System of the State of Hawaii

Conclusion and Next Steps

Conclusion and Next Steps

- Risk budgets help provide guardrails for implementation decisions at the staff level.
- For risk budgets to be relevant, three items must exist:
 1. Clear policy benchmarks
 2. Separation of duties between policy (i.e., Board/IC) and implementation (i.e., Staff) decisions
 3. Proper reporting on historical and projected risk levels
- Items #1-2 are in place.
- Meketa and ERS Staff will begin to develop risk budget levels and processes for a subset of the ERS's portfolio. This is anticipated to focus on Public Equity and Public Credit segments.





Employees' Retirement System of the State of Hawaii

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Certain information contained in this document constitutes "forward-looking statements," which can be identified by the use of forward-looking terminology such as "may", "will", "should", "expect", "anticipate", "target", "project", "estimate", "intend", "continue" or "believe" or the negatives thereof or other variations thereon or comparable terminology. Due to various risks and uncertainties, actual events or results or the actual performance of the Funds and investments may differ materially from those reflected or contemplated in such forward-looking statements."

MINUTES OF THE INVESTMENT COMMITTEE OF THE
BOARD OF TRUSTEES OF THE EMPLOYEES' RETIREMENT SYSTEM
OF THE STATE OF HAWAII

FEBRUARY 20, 2024

CITY FINANCIAL TOWER
201 MERCHANT STREET, SUITE 1200
HONOLULU, HAWAII 96813

Committee Member
Trustees present:
(via teleconference)

Mr. Lance Mizumoto, Chair
Mr. Bennett Yap, Vice Chair
Mr. Vincent Barfield
Mr. Emmit Kane

Visiting Trustees
present:
(via teleconference)

Dr. Genevieve Ley

Attorneys present:
(via teleconference)

Ms. Jenny Nakamoto, Deputy Attorney General
Ms. Lori Tanigawa, Deputy Attorney General

Staff present:
(City Financial Tower)

Mr. Thomas Williams, Executive Director
Ms. Kanoe Margol, Deputy Executive Director
Ms. Kristin Varela, Chief Investment Officer
Mr. Anthony Goo, Deputy Chief Investment Officer
Mr. Aaron Au, Investment Officer – Illiquid Markets
Mr. Ian Wetzel, Investment Officer – Real Assets
Ms. Christine Chang, Investment Officer – Diversifying Strategies
Mr. Andrew Chen, Investment Officer - Credit
Ms. Gerri Konishi, Member Home Loan Assistant
Ms. Andrea Gaspar, Secretary
Ms. Lori Kim, Secretary
Ms. Diana Gomes, Secretary

Guest present:
(via teleconference)

Mr. Colin Bebee, Meketa Investment Group, Inc.
Ms. Samantha Rosenstock, Man Group
Mr. Jonathan Daffron, Man Group
Mr. Brendan Kelleher, Man Group

Public present:
(via teleconference)

Mr. Joe Ebisa, With Intelligence
Mr. Ryan Estalilla
Ms. Lindsay Saienni, FIN News
Mr. Roman Mahi

CALL TO ORDER

A quorum being present (Chair Mizumoto, Vice Chair Yap and Trustee Barfield), Chair Mizumoto called the Investment Committee meeting to order at 9:00 a.m. and requested Board members to identify themselves and confirm that no other individuals are present in the room. Committee members present confirmed. Chair Mizumoto read the following statement, "Motion to hold the meeting allowing Trustees and

members of the public to participate by interactive conference technology, pursuant to HRS § 92-3.7, with at least one meeting location open to the public that has audiovisual connection.” On a motion made by Vice Chair Yap, seconded by Trustee Barfield and unanimously carried, the Investment Committee meeting commenced.

PUBLIC COMMENT PERIOD

Chair Mizumoto called for public comment. There was no public comment.

NEW BUSINESS

- DISCUSSION & ELECTION OF CHAIR & VICE CHAIR OF THE INVESTMENT COMMITTEE

A discussion took place between committee members and Trustee Barfield nominated Trustee Mizumoto as Chair of the Investment Committee and Trustee Yap as Vice Chair. Trustee Barfield concurred.

On a motion made by Trustee Barfield and unanimously carried, the Investment Committee approved the election of Trustee Mizumoto for Chair and Trustee Yap for Vice Chair.

CIO Varela noted that the Investment Committee Charter provided in the packet was approved in May 2023. No changes to recommend.

On a motion made by Vice Chair Yap, seconded by Trustee Barfield and unanimously carried, the Investment Committee approved the Investment Committee Charter as presented.

- REVIEW OF THE INVESTMENT COMMITTEE CHARTER TO INCLUDE INVESTMENT COMMITTEE PERFORMANCE ASSESSMENT, AND REVIEW OF THE PRIOR YEAR'S INVESTMENT COMMITTEE ACTIVITY

CIO Varela presented the Investment Committee Annual Performance Assessment. In the Summary Assessment, present on page 2, the Committee reviewed Committee Management, Committee Effectiveness, and Notable Accomplishments over the past year.

On a motion made by Trustee Barfield, seconded by Trustee Yap and unanimously carried, the Investment Committee approved the Annual Performance Assessment as presented.

PRESENTATIONS

- ADOPTION OF ANNUAL INVESTMENT COMMITTEE WORKPLAN

The Annual Workplan has not changed from last year and subject to modifications at the discretion of the committee. This document outlines the goals and initiatives for the upcoming year.

On a motion made by Trustee Barfield, seconded by Vice Chair Yap and unanimously carried, the Investment Committee approved the Annual Investment Committee Workplan as presented.

- MEKETA INVESTMENT GROUP, INC. – TOTAL FUND PERFORMANCE REVIEW FOR PERIOD ENDING DECEMBER 31, 2023

Mr. Colin Bebee of Meketa Investment Group gave the total fund performance review. Mr. Bebee explained the report reviewed historical results and does not represent the recent actions taken by the Committee and Board over the last year. The following is a summary of the presentation:

- The ERS Total Fund, has closely paced its Actuarial Rate of Return over all time horizons, and is on track to meeting this return target over the fiscal-year measurement period.

- The portfolio has closely met or exceeded the Total Fund Policy Benchmark over longer-term time horizons. Short-term performance has lagged its benchmark, due to the defensive positioning of the ERS portfolio, and rallying market beta.
 - On a risk-unadjusted basis, the portfolio outperformed the Median Public Fund Peer Group across all time periods. On a risk-adjusted basis, the ERS has closely matched the Median Public Fund Peer Group, over longer time horizons.
 - Ending market value for the quarter is \$22,880,493,536.
- FRM – ALTERNATIVE ASSET CLASS REVIEW: DIVERSIFYING STRATEGIES QUARTERLY REVIEW FOR PERIOD ENDING DECEMBER 31, 2023

Ms. Samantha Rosenstock of Man Group presented the Diversifying Strategies Annual Review. The following is a summary of the presentation:

Diversifying Strategies – Liquid Diversifying (DS-LD):

- The DS-LD class performed slightly positive during the calendar year.
- Positive contributors for the year included: Treasury/Agency Duration Capture (TADC) and Discretionary Alpha (DA).
- Negative contributors for the year included: Defensive Return Capture (DRC) and Systematic Trend Following (STF).
- DS-LD net performance was 1.51%, compared to benchmark performance of 4.56%.
- Crisis risk status indicators finished the fiscal year in green.
- Total NAV for DS-LD at the end of December 2023 was \$5.6 billion.

Diversifying Strategies – Illiquid Diversifying (DS-ID):

- DS-ID net performance was 9.30%, compared to benchmark performance of 12.45%.
- For drawdown funds, total distributions were \$10.4 million for the year.
- As of the end of the year, total paid-in capital is \$216.2 million with a total commitment of \$400 million for the drawdown funds.

Trustee Kane joined the meeting at 9:40 a.m.

- MEKETA INVESTMENT GROUP, INC. – RISK BUDGETING EDUCATION (CONTINUED)
- Mr. Colin Bebee of Meketa Investment Group presented the continuation of education on risk budgeting at the total portfolio level. The following is a summary of the presentation:
- Risk budgeting is managing a portfolio based on risk contributions/levels.
 - Risk budgeting is closely related to the concept of active risk or tracking error and should be budgeted.
 - Risk budgets guide the decisions that the ERS Staff makes at the implementation level relative to portfolio benchmarks.
 - Risk budgeting is the process by which the Board/IC will be able to discuss, monitor, and set thresholds for various levels of active risk.
- REPORTS BY STAFF
- Benefits of risk budgeting:
 - Utilization to enhance fund returns.
 - Accountability for implementation decisions.
 - Measurement of off-benchmark decisions.

- Focuses on monitoring and adjusting active decisions.
- Reduces unintentional risk exposure.
- Allows focus on areas of opportunity where there is higher probability.

• CIO UPDATE

CIO Varela reported that the team continues to work diligently to transition the portfolio assets to the newly adopted strategic asset allocation targets, as outlined in the 2023 Asset Liability Study.

APPROVAL OF MINUTES –
NOVEMBER 20, 2023

On a motion made by Trustee Barfield and seconded by Trustee Kane, and unanimously carried, the Investment Committee approved the minutes of November 20, 2023, meeting as presented.

[Before entering Executive Session, Chair Mizumoto read the names of all authorized participants. All unauthorized participants were asked to leave the meeting.]

ENTER EXECUTIVE SESSION

On a motion made by Trustee Barfield, seconded by Trustee Kane, and unanimously carried, the Investment Committee entered Executive Session at 11:05 a.m.

EXECUTIVE SESSION

[At the beginning of Executive Session, Chair Mizumoto asked each participant individually to confirm no unauthorized person is present or able to hear them at their remote locations or via another audio or audiovisual connection. All responded they were by themselves.]

EXECUTIVE SESSION, PURSUANT TO HRS § 88-27.5(A)(1), AND HRS § 92-5(A)(4), TO CONDUCT DISCUSSIONS AND DELIBERATIONS RELATING TO, AND IF APPROPRIATE, TO MAKE A DECISION ON INVESTMENTS OR PROSPECTIVE INVESTMENTS BY THE SYSTEM THAT REQUIRE THE CONSIDERATION OF INFORMATION OR RECORDS THAT ARE EXEMPT FROM DISCLOSURE UNDER HRS CHAPTER 92F, INCLUDING INFORMATION AND RECORDS THAT ARE PROPRIETARY INFORMATION OR CONFIDENTIAL BUSINESS INFORMATION, AND TO CONSULT WITH THE BOARD'S ATTORNEYS ON QUESTIONS AND ISSUES PERTAINING TO THE BOARD'S POWERS, DUTIES, PRIVILEGES, IMMUNITIES, AND LIABILITIES WITH RESPECT TO UPDATES ON STATUS OR ISSUES RELATED TO CONFIDENTIAL ERS INVESTMENT PORTFOLIO UPDATES REGARDING CHANGES IN (1) MANAGER

PIPELINES AND ACTIVITY UPDATE
(2) STAFFING UPDATES

APPROVAL OF EXECUTIVE
SESSION MINUTES – NOVEMBER
20, 2023

On a motion made by Trustee Kane, seconded by Trustee Barfield and unanimously carried, the Investment Committee approved the confidential Executive Session minutes of the November 20, 2023, meeting as presented.

EXIT EXECUTIVE SESSION

On a motion made by Trustee Kane, seconded by Trustee Barfield, and unanimously carried, the Investment Committee exited Executive Session at 11:24 a.m.

SUMMARY OF EXECUTIVE
SESSION

Chair Mizumoto summarized what was discussed in Executive Session:

- Manager pipeline and activity update: Annual review of investment activity.
- Staffing updates: Status of Risk Officer recruitment and other Investment Office staff vacancies.
- Executive Session minutes for November 20, 2023, were approved.

ADJOURNMENT

On a motion made by Trustee Barfield, seconded by Trustee Kane, and unanimously carried, Chair Mizumoto adjourned the meeting at 11:27 a.m.

**REDACTED
SIGNATURE**

Kristin Varela
Chief Investment Officer
KV/dlg