

# MSCI Private Capital Benchmarks Report

Data through Q3 2024



# Contents



Interactive page



# Introduction

**MSCI Private Capital Benchmarks are designed to cut through the complexity of private assets and equip LPs, GPs and service providers with clear, precise, impartial benchmarks and insights to inform investment decisions and optimize performance.**

Through this report, we will explore key benchmarks across the spectrum of private capital strategies including private equity, venture capital, private credit, real estate, infrastructure and natural resources.

We welcome the opportunity to answer any questions related to the findings in the report, benchmarking best practices or custom requirements.



- Solutions:**
- Private Capital Intel**
  - Private Capital Indexes**
  - Private Capital Portfolio Management**
  - Private Capital Transparency**
  - Private Capital Emissions Footprinting**
  - Total Plan Manager**

## 2 | Methodology and Data Coverage

# Methodology



## MSCI Private Capital Benchmarks

- Are sourced solely from the cash flows and investments of hundreds of LPs globally who rely on MSCI's products to manage their private capital portfolios. No data is sourced via voluntary manager data submissions, web scraping, or Freedom of Information Act requests resulting in greater impartiality and representation.
- Every fund has since inception quarterly returns and cash flow data.
- Only include private equity-style funds that are closed-end with manager discretion over cash flows; hedge funds, open-end funds, and other related vehicles such as directs and co-investments are excluded.
- Returns are net of all fees and represent the actual investment experience from the perspective of LPs e.g. adjustments for the use of subscription lines of credit (SLOC) are not made.
- The dataset is reconstructed on a quarterly basis, on average approximately 90 days post quarter-end. This process is designed to maximize the representative aspect of the dataset by reflecting all data available at the time of each update, typically between 70-80% of reported valuations.
- All classifications are assigned based on MSCI's rules-based Private Capital Classification System (PCCS), resulting in greater transparency, standardization, and precision.
- All amounts are converted where necessary from local currency to the designated pooled currency using prevailing spot rates that are sourced from the Federal Reserve Bank of New York.

## Data Update Schedule

Results Through	Update Date
Q4 2024	26-Apr-2025
Q1 2025	21-Jun-2025
Q2 2025	20-Sep-2025
Q3 2025	20-Dec-2025
Q4 2025	26-Apr-2026

# Data Coverage

Updated through Sept 30, 2024

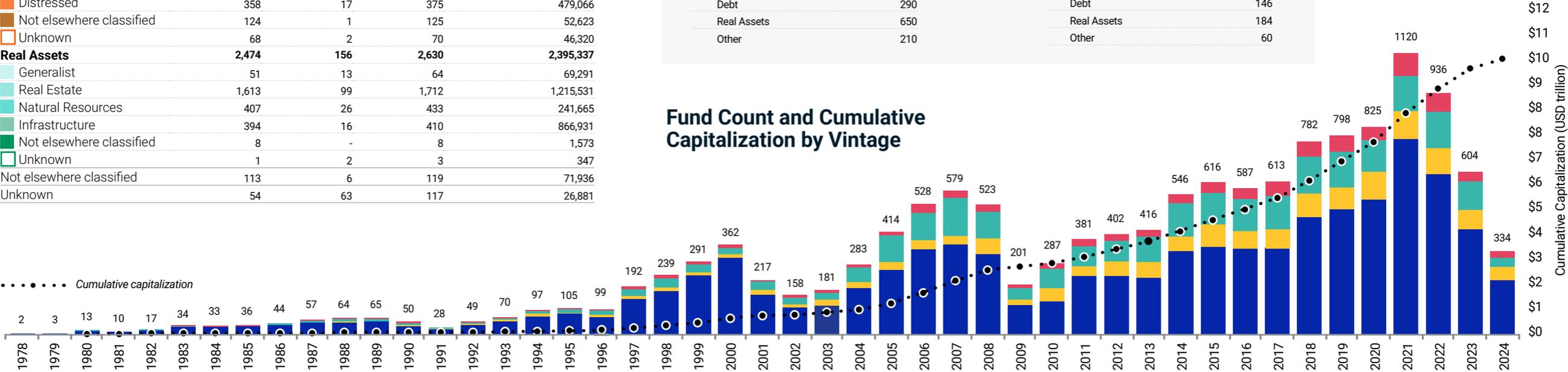
## Fund Count and Capitalization by Asset Class

Asset Class	Funds	FoFs	Total	Cap. (\$M)
<b>Private Capital</b>	<b>12,964</b>	<b>1,489</b>	<b>14,453</b>	<b>\$12,030,612</b>
<b>Generalist</b>	513	177	690	578,565
<b>Equity</b>	<b>8,305</b>	<b>1,053</b>	<b>9,358</b>	<b>7,335,382</b>
Generalist	1,026	460	1,486	1,156,669
Venture Capital	3,969	300	4,269	1,362,176
Expansion Capital	193	4	197	133,346
Buyout	2,999	272	3,271	4,623,863
Unknown	118	17	135	59,328
<b>Debt</b>	<b>1,505</b>	<b>34</b>	<b>1,539</b>	<b>1,622,510</b>
Generalist	327	8	335	400,162
Senior	230	-	230	305,897
Mezzanine	398	6	404	338,442
Distressed	358	17	375	479,066
Not elsewhere classified	124	1	125	52,623
Unknown	68	2	70	46,320
<b>Real Assets</b>	<b>2,474</b>	<b>156</b>	<b>2,630</b>	<b>2,395,337</b>
Generalist	51	13	64	69,291
Real Estate	1,613	99	1,712	1,215,531
Natural Resources	407	26	433	241,665
Infrastructure	394	16	410	866,931
Not elsewhere classified	8	-	8	1,573
Unknown	1	2	3	347
Not elsewhere classified	113	6	119	71,936
Unknown	54	63	117	26,881

## Count by Fund Size Range

Fund Size / Asset Class	# of Funds	Fund Size / Asset Class	# of Funds
<b>&lt;\$100M</b>	<b>2477</b>	<b>\$500M-\$1.0B</b>	<b>2,538</b>
Equity	1,842	Equity	1,474
Debt	166	Debt	356
Real Assets	286	Real Assets	556
Other	183	Other	152
<b>\$100M-\$250M</b>	<b>3383</b>	<b>\$1.0B-\$2.5B</b>	<b>1,769</b>
Equity	2,343	Equity	953
Debt	262	Debt	319
Real Assets	574	Real Assets	380
Other	204	Other	117
<b>\$250M-\$500M</b>	<b>3,315</b>	<b>&gt;\$2.5B</b>	<b>971</b>
Equity	2,165	Equity	581
Debt	290	Debt	146
Real Assets	650	Real Assets	184
Other	210	Other	60

## Fund Count and Cumulative Capitalization by Vintage



# 3 | Key Takeaways for Q3 2024



# Key Takeaways

## Private Equity

2.0%

Venture capital funds returned 2.0% during Q3 2024, posting only the third positive quarterly result of the past 11 quarters.

After several years of outperformance, venture capital has lagged buyout in recent quarters and, as of Q3 2024, cumulatively since the end of 2019.

3.3%

Buyout funds were among the highest-performing asset classes for the third quarter, returning 3.3%.

## Private Credit

Private-credit funds still posted positive quarterly returns but lagged private equity in the third quarter, having outshone private equity in Q1 and Q2. Private-credit annual returns had eclipsed private equity and private real assets in 2023.

While showing relatively lower performance in 2020–2021 versus other asset classes, returns for senior debt funds have been among the most stable.



## Private Real Assets

0.7%

Real-estate funds turned positive with a 0.7% return after nine consecutive quarters of decline.

4.2%

Private infrastructure returned 4.2% in the quarter, the strongest of any asset class.

# 4 | Fund Benchmarks



# Fund Benchmarks



Calendar Year Returns

2024

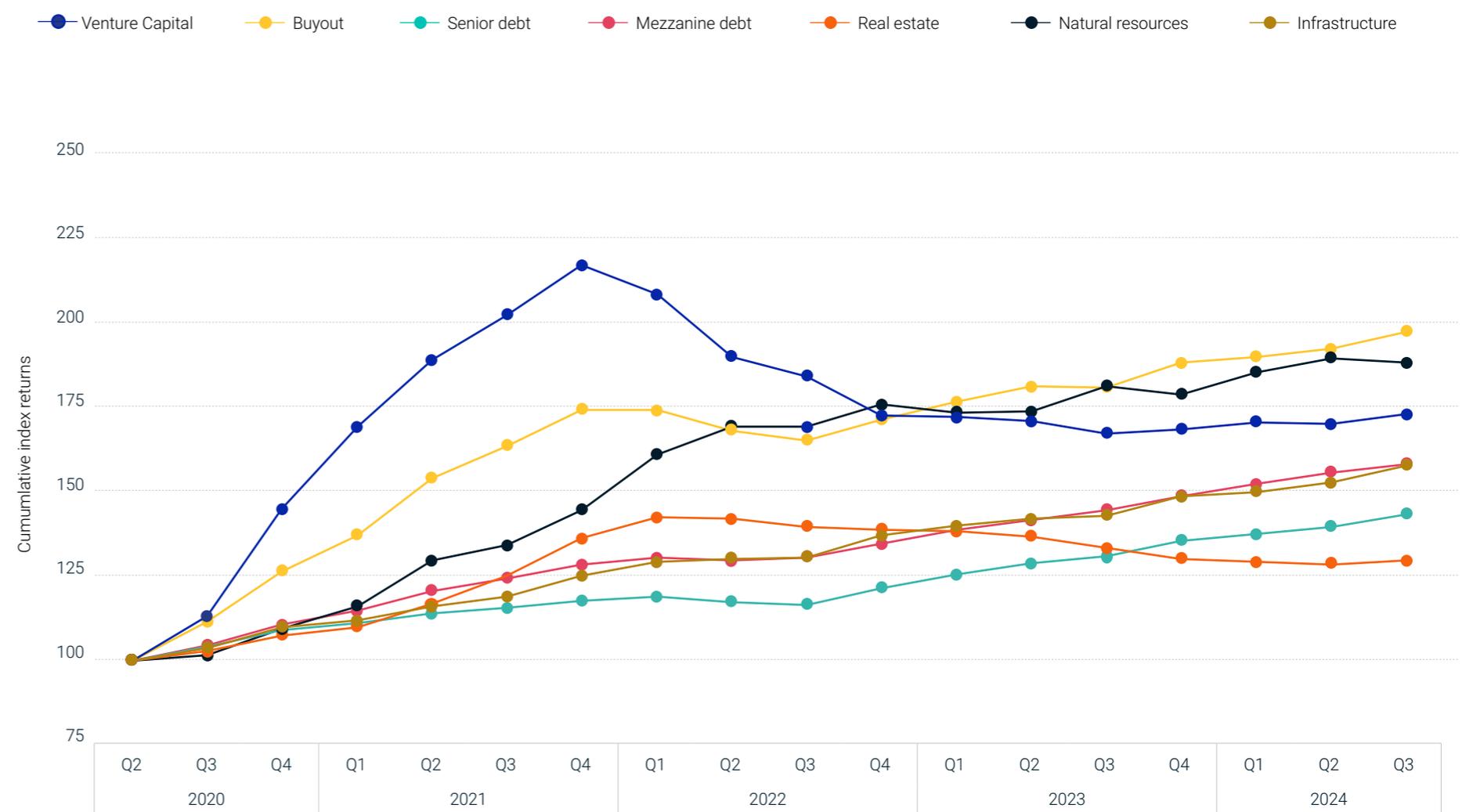
	2019	2020	2021	2022	2023	Q1	Q2	Q3
<b>Global Private Equity</b>	<b>17.6%</b>	<b>33.7%</b>	<b>40.4%</b>	<b>-8.4%</b>	<b>5.8%</b>	<b>1.0%</b>	<b>0.9%</b>	<b>2.9%</b>
Venture Capital	20.4%	58.1%	49.8%	-20.5%	-2.2%	1.2%	-0.4%	2.0%
Expansion Capital	7.5%	18.4%	27.9%	-11.1%	4.1%	-0.2%	1.7%	4.0%
Buyout	16.8%	24.7%	37.6%	-1.5%	9.6%	1.1%	1.2%	3.3%
MSCI ACWI IMI	27.0%	16.8%	19.1%	-18.1%	22.0%	7.4%	3.1%	6.0%
MSCI World Small Cap	26.8%	16.5%	16.6%	-18.5%	16.1%	3.5%	-2.3%	9.1%
<b>Global Private Credit</b>	<b>7.0%</b>	<b>7.1%</b>	<b>15.5%</b>	<b>3.9%</b>	<b>10.1%</b>	<b>1.7%</b>	<b>1.9%</b>	<b>2.5%</b>
Senior	6.8%	7.5%	7.9%	3.4%	11.6%	1.3%	2.2%	3.0%
Mezzanine	9.4%	8.5%	16.0%	4.8%	10.5%	2.4%	2.5%	2.0%
Distressed	4.3%	7.7%	21.7%	3.5%	8.9%	1.9%	1.3%	2.4%
MSCI USD High Yield Corporate Bond Index	13.4%	7.2%	4.5%	-11.7%	12.8%	1.2%	1.4%	5.5%
MSCI USD Investment Grade Corporate Bond Index	14.1%	10.2%	-1.8%	-14.7%	8.3%	-1.1%	0.4%	6.6%
<b>Global Private Real Assets</b>	<b>4.5%</b>	<b>0.9%</b>	<b>22.8%</b>	<b>8.4%</b>	<b>1.3%</b>	<b>0.6%</b>	<b>1.0%</b>	<b>2.2%</b>
Real Estate	8.4%	1.4%	26.6%	2.0%	-6.3%	-0.8%	-0.4%	0.7%
Natural Resources	-5.0%	-9.4%	32.4%	21.9%	1.7%	3.7%	2.4%	-1.3%
Infrastructure	8.1%	7.8%	13.8%	9.6%	8.6%	1.0%	1.8%	4.2%
MSCI ACWI Natural Resources	16.9%	-4.0%	23.9%	8.2%	8.9%	5.8%	-1.9%	4.3%
MSCI ACWI Infrastructure	21.1%	0.3%	5.9%	-3.8%	4.6%	2.8%	3.1%	15.4%

# Fund Benchmarks

## Cumulative Returns



Cumulative Returns Since 2019



# Fund Benchmarks Quarterly Returns



## Q3 2024 Pooled Quarterly Return

Private Capital Fund Indexes	Global	Global ex-U.S.	North America	Europe	APAC
Private Capital	2.7%	4.0%	1.9%	4.9%	3.1%
Private Equity	2.9%	4.1%	2.2%	5.2%	3.0%
Venture Capital	2.0%	2.3%	1.8%	4.8%	1.5%
Expansion Capital	4.0%	1.8%	5.7%	3.3%	2.3%
Buyout	3.3%	5.3%	2.3%	5.4%	5.1%
Private Credit	2.5%	3.7%	1.7%	4.9%	2.2%
Senior	3.0%	4.5%	1.8%	4.7%	NM
Mezzanine	2.0%	2.8%	1.6%	2.7%	NM
Distressed	2.4%	3.4%	1.6%	3.8%	0.8%
Private Real Assets	2.2%	3.8%	0.7%	4.1%	3.9%
Real Estate	0.7%	2.7%	(0.2%)	3.0%	1.2%
Natural Resources	(1.3%)	2.3%	(2.3%)	NM	1.8%
Infrastructure	4.2%	4.5%	3.6%	4.8%	9.3%

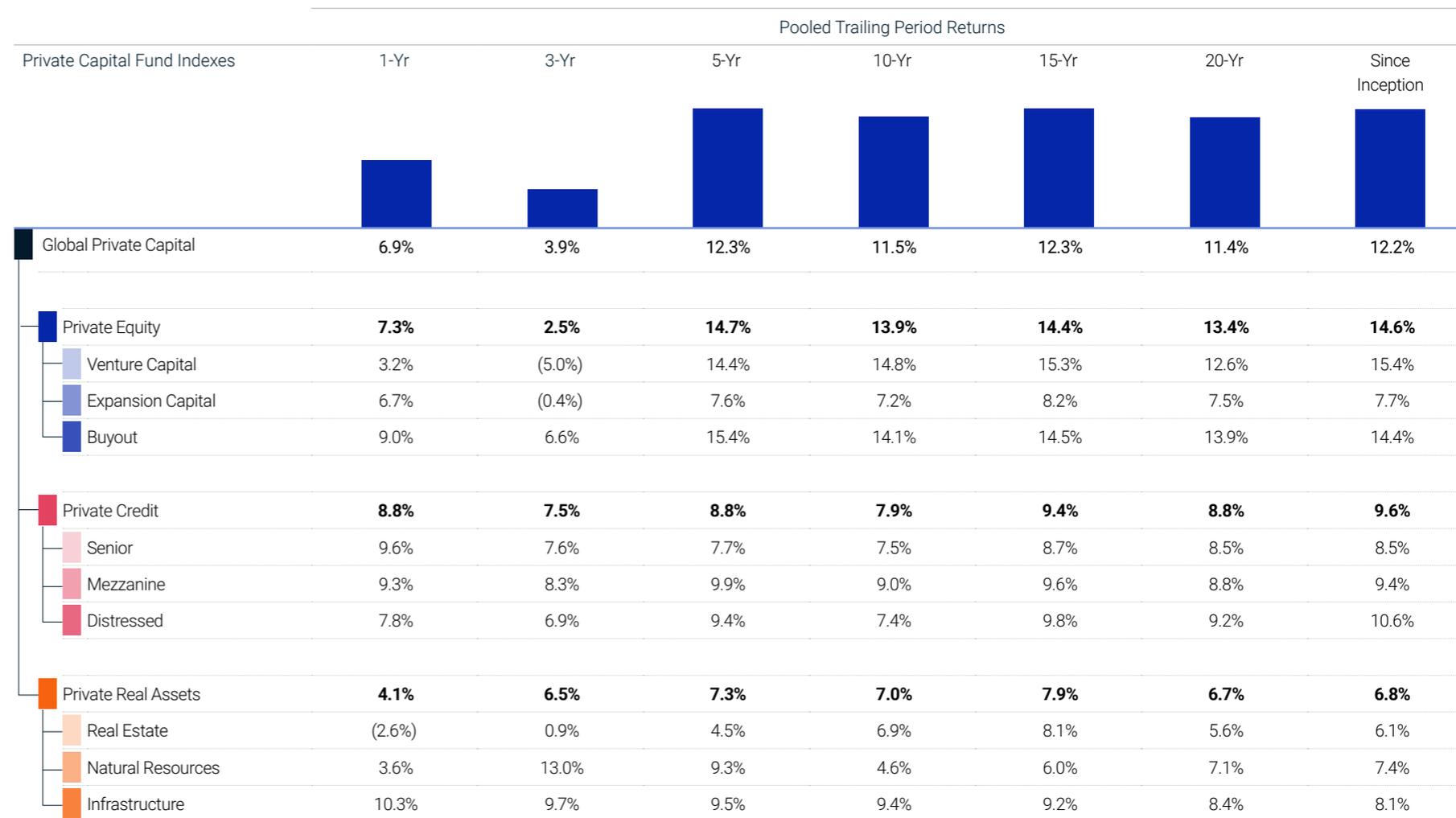
NA, EMEA and APAC represent 83% of active global capitalization

# Fund Benchmarks

## Global Trailing Period IRRs

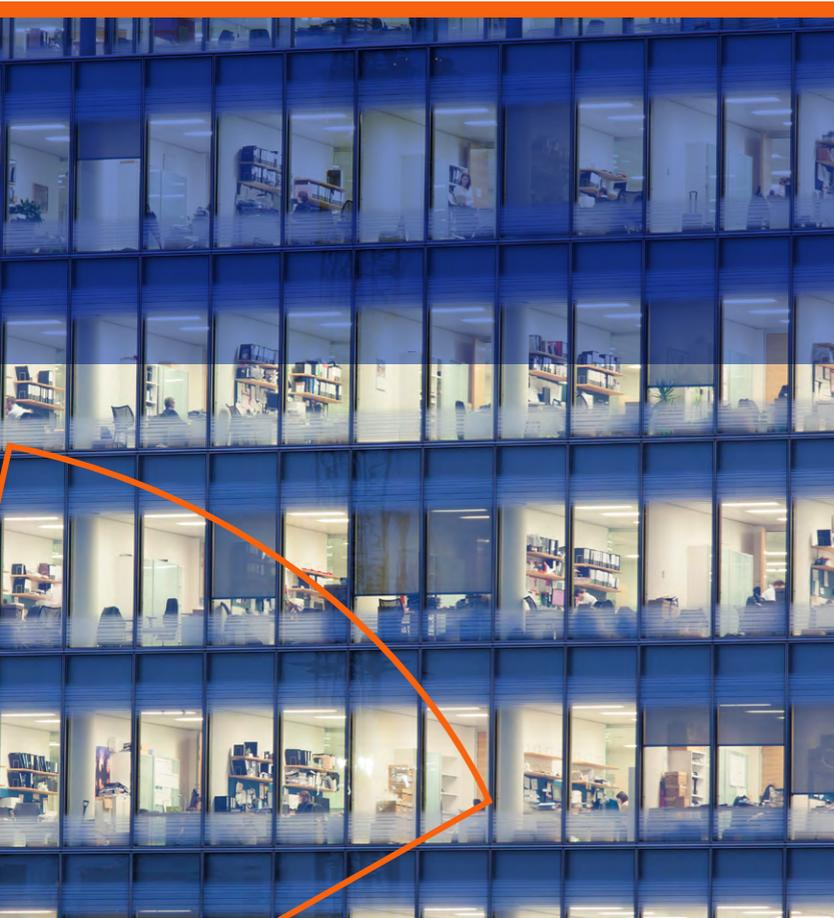


Global Trailing Period IRRs as of 9/30/2024

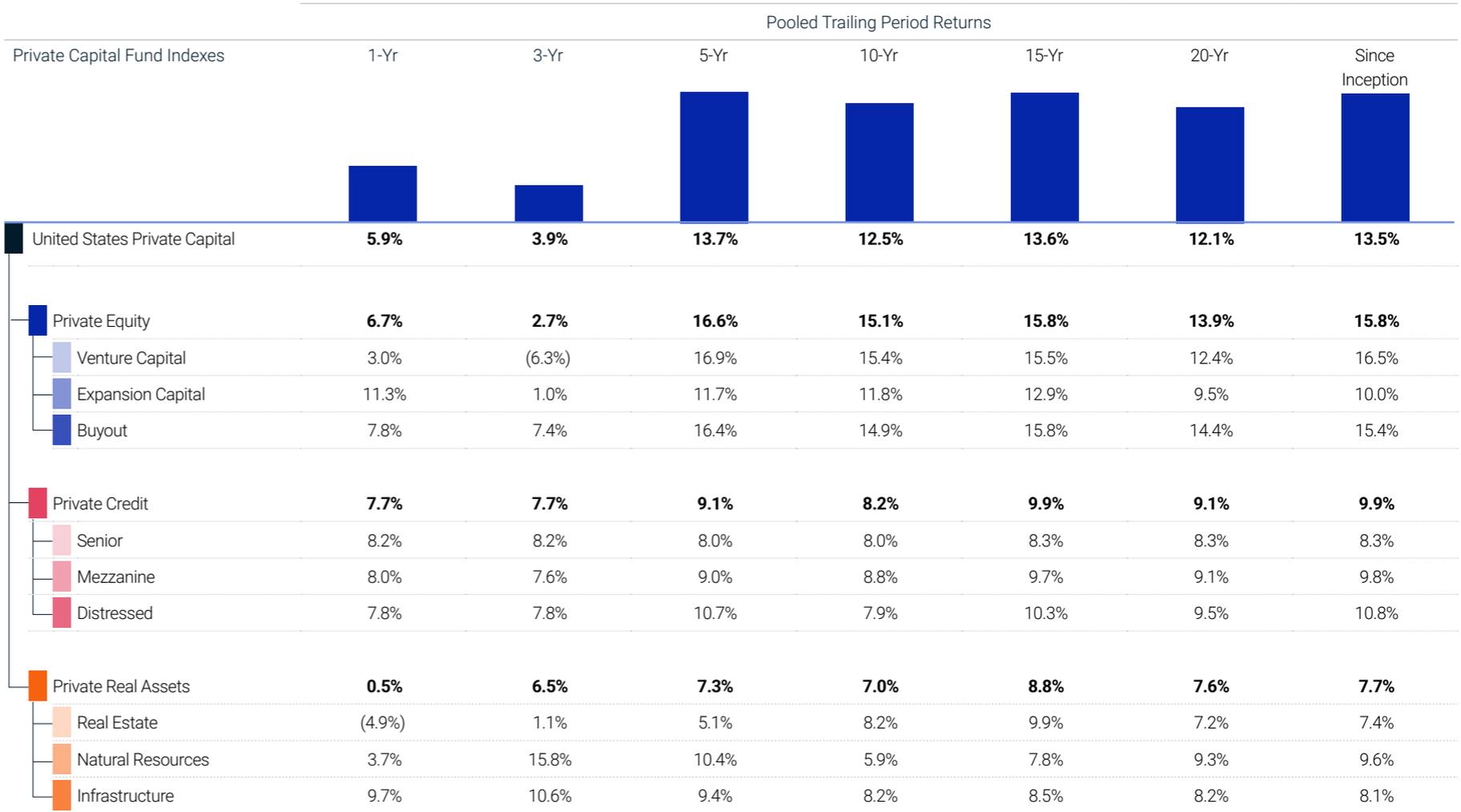


# Fund Benchmarks

## United States Trailing Period IRRs



United States Trailing Period IRRs as of 9/30/2024

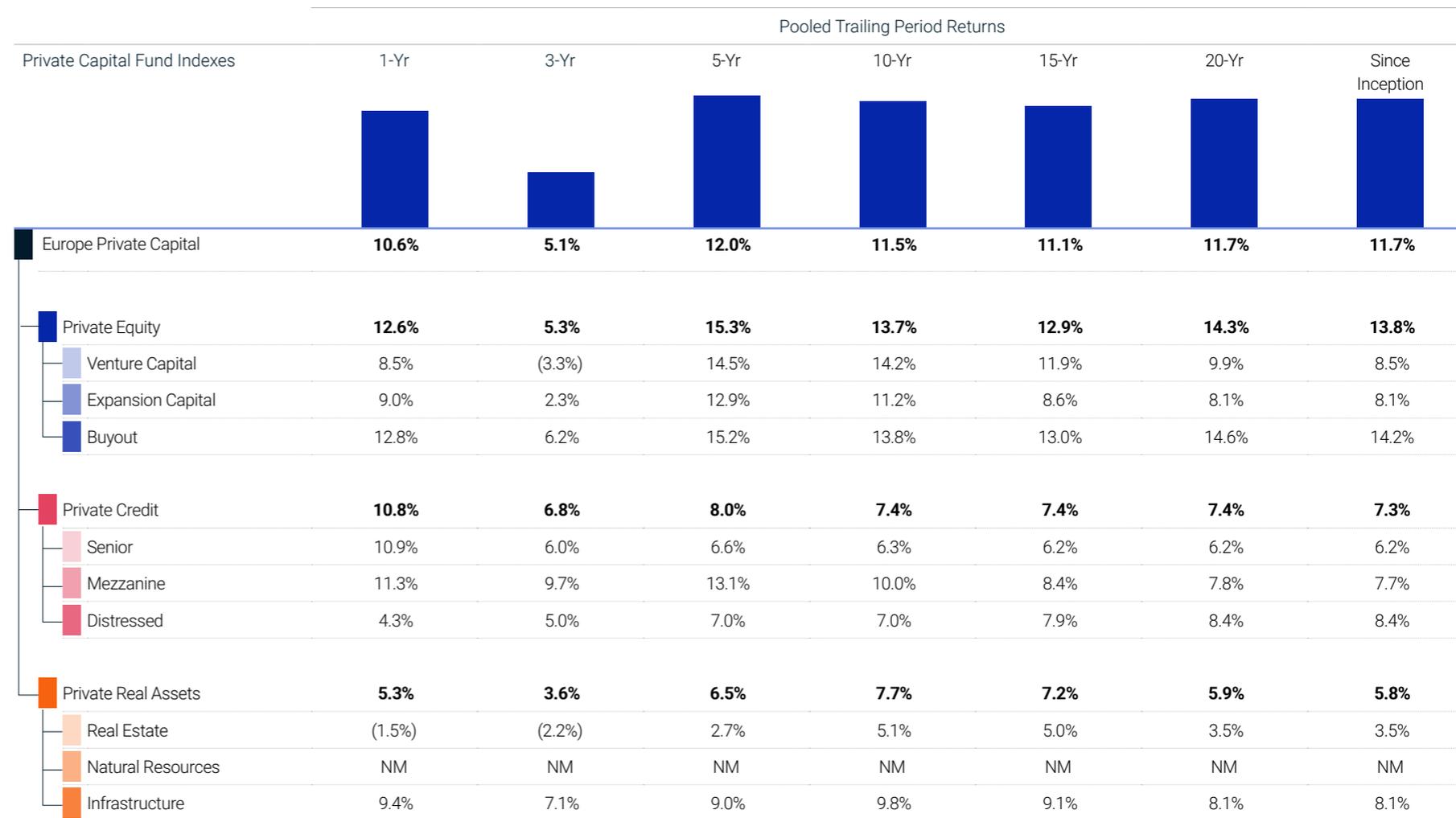


# Fund Benchmarks

## Europe Trailing Period IRRs



Europe Trailing Period IRRs as of 9/30/2024



# Fund Benchmarks

## Asia Trailing Period IRRs



Asia Trailing Period IRRs as of 9/30/2024

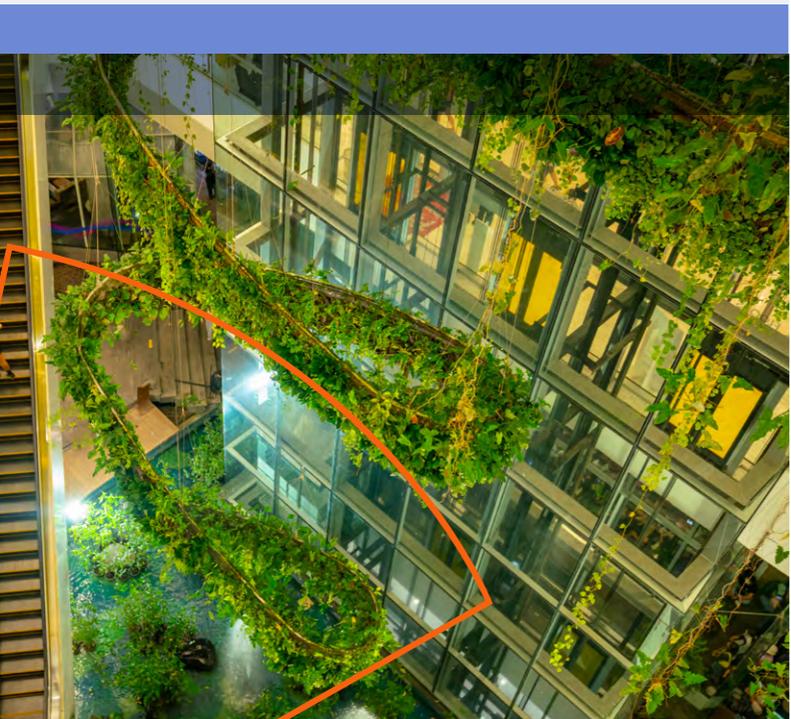
Private Capital Fund Indexes	Pooled Trailing Period Returns						
	1-Yr	3-Yr	5-Yr	10-Yr	15-Yr	20-Yr	Since Inception
<b>Asia Private Capital</b>	<b>2.0%</b>	<b>(1.1%)</b>	<b>8.2%</b>	<b>10.0%</b>	<b>10.6%</b>	<b>9.6%</b>	<b>9.3%</b>
Private Equity	1.7%	(1.5%)	8.7%	11.0%	12.0%	11.6%	11.0%
Venture Capital	(0.4%)	(3.3%)	10.7%	15.2%	16.5%	15.9%	14.5%
Expansion Capital	(3.9%)	(3.2%)	4.8%	5.2%	6.2%	6.8%	6.9%
Buyout	7.3%	4.4%	10.2%	10.0%	11.6%	10.7%	10.4%
Private Credit	5.2%	3.6%	4.8%	4.7%	5.9%	24.0%	24.5%
Senior	NM	NM	NM	NM	NM	NM	NM
Mezzanine	NM	NM	NM	NM	NM	NM	NM
Distressed	4.2%	2.9%	4.6%	1.3%	4.1%	4.9%	10.5%
Private Real Assets	4.1%	2.7%	4.2%	4.1%	5.0%	1.6%	1.5%
Real Estate	1.1%	1.0%	3.1%	3.7%	5.2%	1.3%	1.4%
Natural Resources	NM	NM	NM	NM	NM	NM	NM
Infrastructure	22.0%	13.3%	10.4%	7.8%	4.6%	3.9%	2.6%

# Fund Benchmarks Calendar Year IRRs

## Global Private Capital Performance by Calendar Year

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024 YTD
Private Equity			Buyout 23%							
Venture Capital	Venture Capital 15%	Private Natural Resources 23%		Venture Capital 21%	Venture Capital 20%	Venture Capital 58%	Venture Capital 50%	Private Natural Resources 22%	Senior 12%	Mezzanine 6%
Expansion Capital										
Buyout		Buyout 12%	Private Infrastructure 17%	Buyout 9%	Buyout 17%	Buyout 25%	Buyout 38%	Private Infrastructure 10%	Mezzanine 11%	Private Infrastructure 6%
Private Credit		Distressed 10%		Private Infrastructure 9%	Mezzanine 9%	Expansion Capital 18%	Private Natural Resources 32%	Mezzanine 5%	Buyout 10%	Senior 6%
Senior			Venture Capital 15%							
Mezzanine		Mezzanine 8%	Private Real Estate 14%	Mezzanine 7%	Private Real Estate 8%	Mezzanine 9%	Expansion Capital 28%	Senior 3%	Distressed 9%	Private Natural Resources 5%
Distressed			Expansion Capital 13%	Private Real Estate 7%	Private Infrastructure 8%	Private Infrastructure 8%	Private Real Estate 27%	Distressed 3%	Private Infrastructure 9%	Distressed 5%
Private Real Assets		Private Infrastructure 8%	Mezzanine 12%	Senior 6%	Expansion Capital 7%	Distressed 8%	Distressed 22%	Private Real Estate 2%	Expansion Capital 4%	Buyout 5%
Real Estate		Expansion Capital 7%	Senior 12%	Distressed 3%	Senior 7%	Senior 8%	Mezzanine 16%	Buyout -1%	Private Natural Resources 2%	Expansion Capital 4%
Natural Resources		Private Real Estate 7%	Distressed 10%	Expansion Capital 2%	Distressed 4%	Private Real Estate 1%	Private Infrastructure 14%	Expansion Capital -11%	Venture Capital -2%	Venture Capital 2%
Infrastructure	Private Natural Resources -14%	Venture Capital 1%	Private Natural Resources 6%	Private Natural Resources -3%	Private Natural Resources -5%	Private Natural Resources -9%	Senior 8%	Venture Capital -21%	Private Real Estate -6%	Private Real Estate 0%

# Fund Benchmarks Private Equity - IRR & Multiples by Vintage

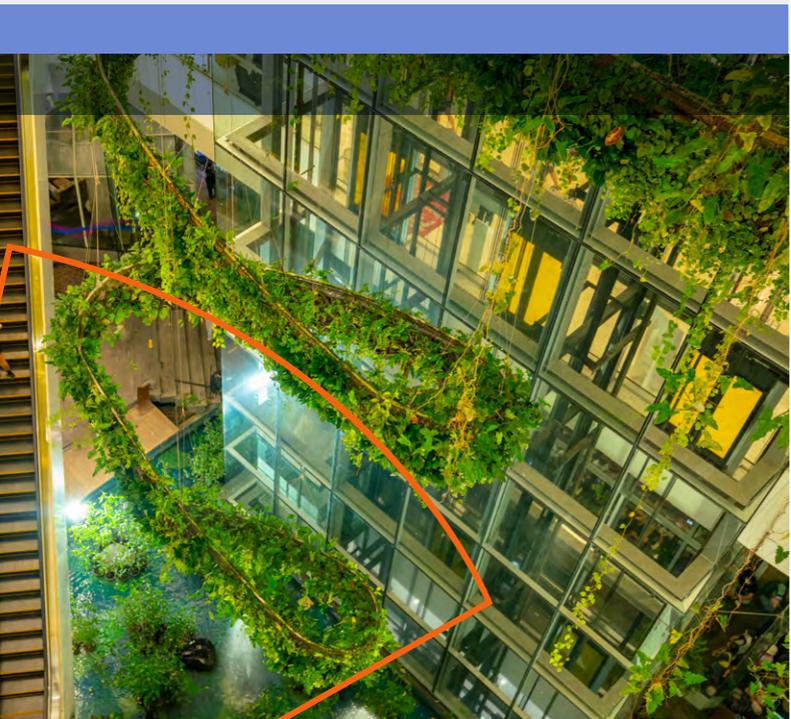


Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	IRR*	# of Results	95th	75th	50th	25th	5th
(All)	6,674,125	8305	14.6	8263	38.5	18.4	9.4	0.2	-16.8
2024	235,354	204	-0.5	181	34.6	-1.8	-10.2	-28.9	-77.8
2023	509,669	393	8.0	385	42.5	10.7	-6.3	-19.9	-59.4
2022	619,923	602	8.2	600	36.4	10.4	-0.2	-9.3	-25.2
2021	770,354	735	7.3	735	29.9	13.14	5.0	-2.0	-13.3
2020	452,903	506	11.9	506	33.3	17.0	9.7	2.7	-8.9
2019	446,997	464	15.0	464	34.2	20.0	12.6	5.8	-5.8
2018	414,085	435	16.9	435	38.8	21.5	15.5	9.1	-3.3
2017	233,446	313	18.9	313	39.8	24.7	17.8	10.5	-0.8
2016	241,844	306	17.7	306	39.0	23.2	16.4	8.8	2.4
2015	231,029	318	17.1	318	31.1	20.2	14.9	8.7	-2.0
2014	220,730	301	17.7	301	35.2	23.0	14.2	7.6	-3.6
2013	152,704	186	14.5	185	36.9	21.7	13.1	8.0	-2.5
2012	153,018	205	16.5	205	37.9	22.0	14.5	7.5	-1.3
2011	159,769	202	15.3	202	44.6	21.8	14.7	7.9	-4.3
2010	64,362	117	13.7	117	38.5	21.6	12.1	4.2	-7.3

Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	TVPI*	# of Results	95th	75th	50th	25th	5th
All	6,674,125	8305	1.66	8275	3.57	1.95	1.40	1.01	0.55
2024	235,354	204	1.00	183	1.33	0.99	0.91	0.76	0.38
2023	509,669	393	1.06	385	1.36	1.09	0.95	0.85	0.56
2022	619,923	602	1.12	601	1.53	1.14	1.00	0.89	0.74
2021	770,354	735	1.16	735	1.71	1.28	1.11	0.96	0.77
2020	452,903	506	1.35	506	1.92	1.50	1.27	1.07	0.81
2019	446,997	464	1.50	464	2.43	1.72	1.43	1.19	0.86
2018	414,085	435	1.73	435	3.12	2.04	1.62	1.34	0.89
2017	233,446	313	1.98	313	3.50	2.43	1.91	1.52	0.96
2016	241,844	306	2.03	306	4.50	2.40	1.90	1.48	1.11
2015	231,029	318	2.02	318	4.00	2.44	1.90	1.54	0.90
2014	220,730	301	2.22	301	5.66	2.69	1.96	1.51	0.78
2013	152,704	186	1.91	186	4.49	2.61	1.92	1.42	0.84
2012	153,018	205	2.10	205	5.94	2.69	1.89	1.46	0.95
2011	159,769	202	2.07	202	5.67	2.78	1.94	1.50	0.76
2010	64,362	117	2.04	117	5.36	2.47	1.73	1.34	0.56

# Fund Benchmarks

## Buyout - IRR & Multiples by Vintage



Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	IRR*	# of Results	95th	75th	50th	25th	5th
(All)	4,421,415	2999	14.4	2981	38.1	21.3	13.1	6.4	-15.6
2024	161,276	81	3.2	71	33.2	0.9	-16.6	-36.8	-79.8
2023	381,530	166	9.6	162	50.2	16.3	-0.3	-19.8	-69.2
2022	354,867	161	11.0	159	43.4	17.2	7.7	-5.3	-28.5
2021	429,722	197	11.0	197	40.3	19.5	12.3	6.1	-6.9
2020	252,827	140	14.1	140	37.8	22.8	17.0	11.0	1.7
2019	325,917	175	16.0	175	37.0	24.0	16.3	10.4	0.0
2018	263,980	139	18.0	139	39.8	23.1	17.5	13.2	7.2
2017	159,706	112	18.6	112	39.5	26.6	20.0	15.2	6.7
2016	177,368	133	17.0	133	37.6	23.3	18.0	12.6	5.5
2015	134,375	105	17.6	105	30.1	21.2	16.5	11.4	2.2
2014	148,884	122	17.0	122	35.2	24.0	16.1	9.7	-2.3
2013	116,357	79	13.8	79	35.2	22.6	14.0	8.9	0.4
2012	102,169	88	15.7	88	39.6	23.0	14.8	8.5	-3.3
2011	114,471	83	13.6	83	37.7	20.9	16.0	8.9	-6.6
2010	35,202	46	12.6	46	29.5	22.4	13.0	7.6	-10.5

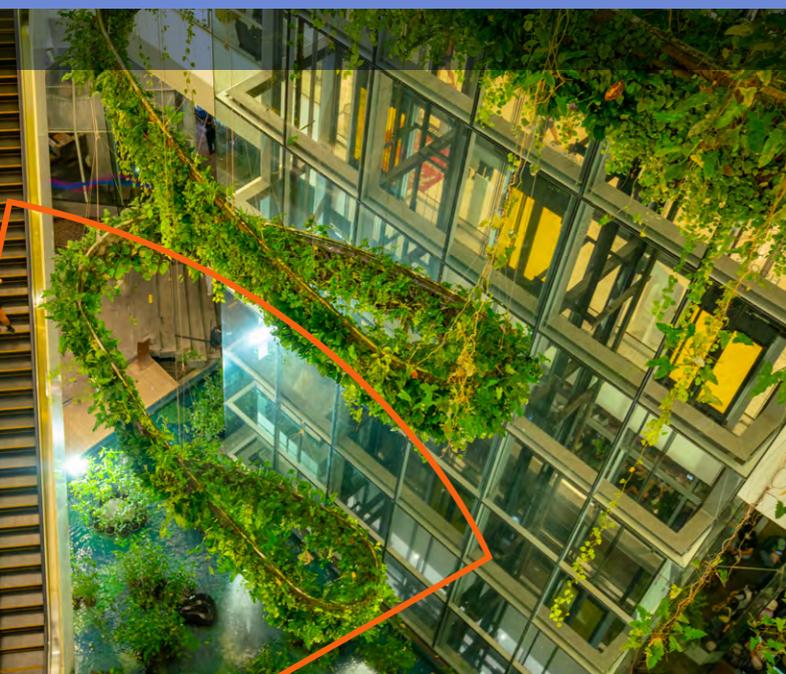
Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	TVPI*	# of Results	95th	75th	50th	25th	5th
All	4,421,415	2999	1.63	2985	2.98	1.98	1.55	1.19	0.72
2024	161,276	81	1.02	72	1.40	1.02	0.91	0.70	0.35
2023	381,530	166	1.07	162	1.43	1.12	1.00	0.85	0.54
2022	354,867	161	1.16	160	1.54	1.24	1.09	0.94	0.68
2021	429,722	197	1.24	197	1.89	1.40	1.24	1.11	0.89
2020	252,827	140	1.40	140	1.90	1.60	1.42	1.27	1.05
2019	325,917	175	1.51	175	2.23	1.77	1.51	1.32	1.00
2018	263,980	139	1.73	139	2.68	1.94	1.64	1.47	1.23
2017	159,706	112	1.91	112	3.28	2.22	1.89	1.66	1.25
2016	177,368	133	1.96	133	3.13	2.32	1.91	1.62	1.23
2015	134,375	105	1.89	105	2.72	2.24	1.86	1.60	1.06
2014	148,884	122	1.99	122	3.58	2.32	1.83	1.54	0.91
2013	116,357	79	1.80	79	3.28	2.40	1.82	1.45	1.03
2012	102,169	88	1.87	88	3.02	2.22	1.79	1.51	0.89
2011	114,471	83	1.81	83	3.50	2.17	1.87	1.49	0.71
2010	35,202	46	1.84	46	3.69	2.46	1.90	1.44	0.62

# Fund Benchmarks

## Venture Capital - IRR & Multiples by Vintage

Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	IRR*	# of Results	95th	75th	50th	25th	5th
(All)	1,275,752	3969	15.4	3955	39.1	15.7	6.0	-2.8	-17.9
2024	45,051	89	-2.5	81	25.3	-3.4	-9.3	-17.9	-42.7
2023	67,655	166	0.7	165	26.1	-2.8	-12.6	-21.3	-45.5
2022	155,598	349	4.6	349	30.8	5.5	-1.9	-10.3	-25.0
2021	198,614	422	0.1	422	22.4	8.0	1.6	-4.1	-13.7
2020	118,328	283	6.8	283	24.7	12.8	6.3	-0.1	-10.1
2019	67,345	228	12.6	228	29.0	16.6	8.9	3.9	-6.8
2018	74,865	210	15.1	210	37.8	19.9	13.9	6.8	-4.5
2017	42,107	140	20.4	140	39.0	22.5	17.3	8.1	-1.1
2016	36,700	121	20.7	121	43.5	20.8	13.6	6.5	1.2
2015	41,341	151	19.1	151	37.6	19.9	14.3	8.4	-2.2
2014	43,917	132	19.4	132	34.2	23.2	13.2	6.7	-8.8
2013	14,512	67	18.8	67	37.7	22.4	12.9	8.6	-2.7
2012	21,284	80	21.3	80	38.0	23.2	15.8	8.0	-0.5
2011	23,375	79	21.6	79	47.9	25.6	14.5	6.6	-3.0
2010	13,593	41	19.0	41	47.9	24.6	13.0	3.6	-2.3

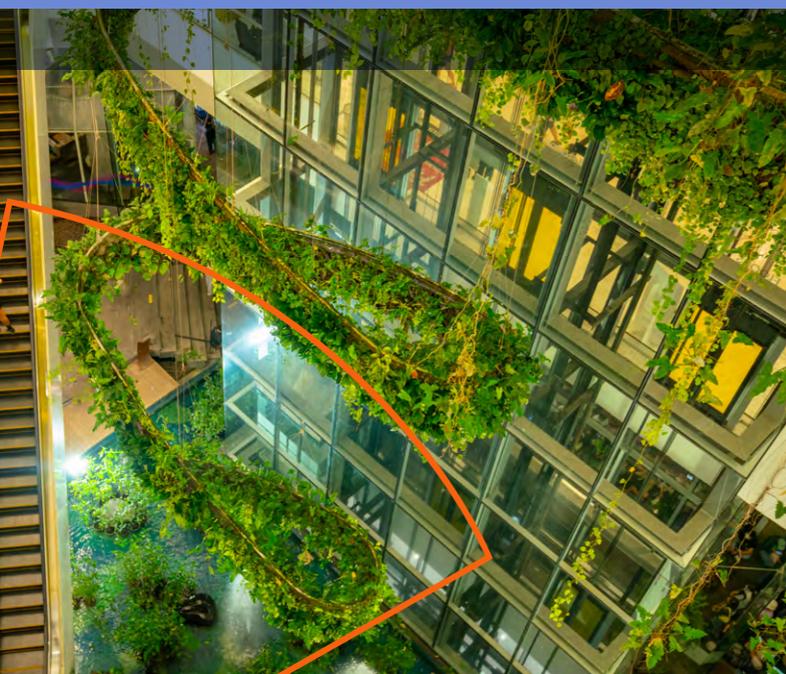
Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	TVPI*	# of Results	95th	75th	50th	25th	5th
All	1,275,752	3969	1.82	3960	4.7405	1.97	1.24	0.93	0.46
2024	45,051	89	0.99	81	1.25	0.97	0.92	0.86	0.58
2023	67,655	166	1.00	165	1.22	0.99	0.90	0.83	0.69
2022	155,598	349	1.06	349	1.45	1.08	0.97	0.87	0.74
2021	198,614	422	1.00	422	1.55	1.16	1.03	0.92	0.74
2020	118,328	283	1.22	283	1.87	1.40	1.18	1.00	0.78
2019	67,345	228	1.51	228	2.54	1.69	1.35	1.13	0.85
2018	74,865	210	1.79	210	3.23	2.18	1.66	1.26	0.83
2017	42,107	140	2.30	140	3.86	2.61	2.07	1.45	0.95
2016	36,700	121	2.53	121	5.95	2.69	1.93	1.39	1.06
2015	41,341	151	2.69	151	4.68	2.88	2.00	1.62	0.90
2014	43,917	132	3.14	132	7.25	3.56	2.21	1.54	0.62
2013	14,512	67	2.77	67	8.22	3.14	2.33	1.53	0.84
2012	21,284	80	3.75	80	9.51	4.17	2.68	1.74	0.98
2011	23,375	79	3.58	79	14.19	3.79	2.15	1.56	0.81
2010	13,593	41	3.16	41	7.95	3.53	2.27	1.24	0.78



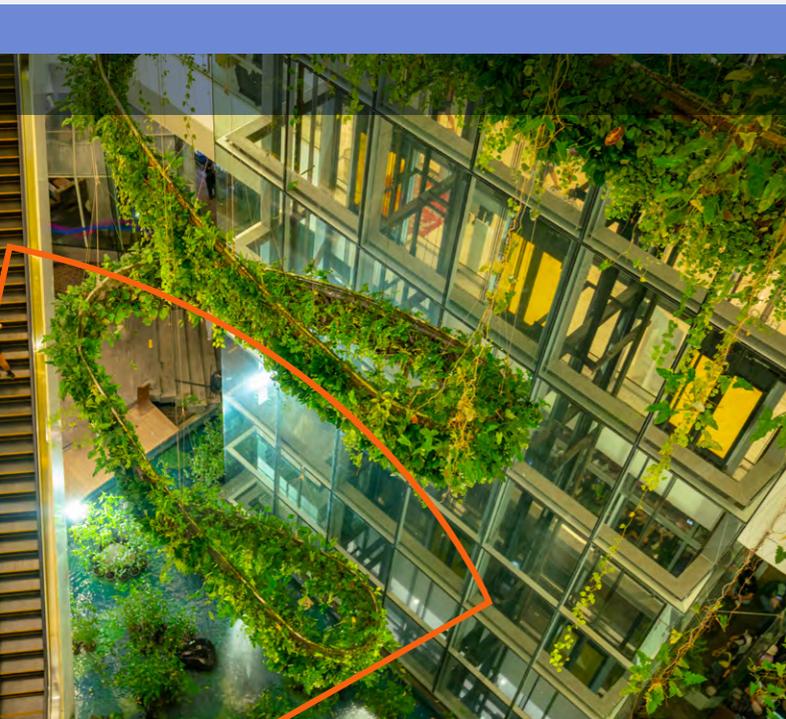
# Fund Benchmarks Private Credit - IRR & Multiples by Vintage

Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	IRR*	# of Results	95th	75th	50th	25th	5th
(All)	1,605,574	1505	9.6	1501	22.9	12.6	9.0	6.1	-4.6
2024	83,894	51	15.7	50	38.3	7.5	3.4	-1.6	-20.9
2023	88,765	76	12.4	75	38.9	20.4	11.4	4.5	-15.7
2022	158,365	106	11.8	106	32.9	14.7	11.3	8.0	-1.5
2021	159,725	112	9.6	112	30.3	12.8	9.9	7.2	-1.4
2020	169,859	107	9.9	106	25.3	14.1	10.2	8.0	4.0
2019	95,255	88	9.9	88	16.8	12.3	10.1	7.0	1.6
2018	110,735	95	9.5	95	17.5	12.0	9.5	8.0	5.5
2017	86,200	77	8.6	77	16.6	10.9	8.0	6.3	-2.1
2016	72,348	68	8.0	68	15.9	10.0	8.2	5.8	0.2
2015	74,202	89	8.4	89	15.9	10.3	8.2	7.1	-1.5
2014	60,636	61	7.0	61	14.4	10.9	8.3	3.5	-0.6
2013	57,766	61	6.6	61	15.7	10.1	7.3	5.2	0.1
2012	49,409	59	6.6	59	14.6	11.0	8.0	4.5	-9.5
2011	34,158	38	12.1	38	22.3	12.9	9.3	6.7	1.2
2010	38,103	53	10.0	53	20.4	13.4	10.6	7.9	1.7

Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	TVPI*	# of Results	95th	75th	50th	25th	5th
All	1,605,574	1505	1.29	1503	1.88	1.42	1.26	1.13	0.90
2024	83,894	51	1.05	50	1.38	1.06	1.03	0.99	0.83
2023	88,765	76	1.09	76	1.30	1.12	1.08	1.03	0.89
2022	158,365	106	1.16	106	1.30	1.19	1.14	1.08	0.99
2021	159,725	112	1.18	112	1.42	1.25	1.17	1.11	0.97
2020	169,859	107	1.23	106	1.54	1.33	1.22	1.17	1.07
2019	95,255	88	1.28	88	1.57	1.35	1.25	1.16	1.04
2018	110,735	95	1.34	95	1.64	1.43	1.33	1.23	1.14
2017	86,200	77	1.31	77	1.70	1.42	1.27	1.17	0.96
2016	72,348	68	1.30	68	1.76	1.40	1.30	1.19	1.01
2015	74,202	89	1.36	89	1.99	1.45	1.32	1.20	0.96
2014	60,636	61	1.27	61	1.77	1.42	1.29	1.16	0.97
2013	57,766	61	1.28	61	2.03	1.47	1.30	1.20	1.00
2012	49,409	59	1.25	59	1.73	1.45	1.27	1.15	0.68
2011	34,158	38	1.47	38	2.39	1.64	1.34	1.16	1.04
2010	38,103	53	1.36	53	2.21	1.54	1.36	1.24	1.04



# Fund Benchmarks Real Estate - IRR & Multiples by Vintage



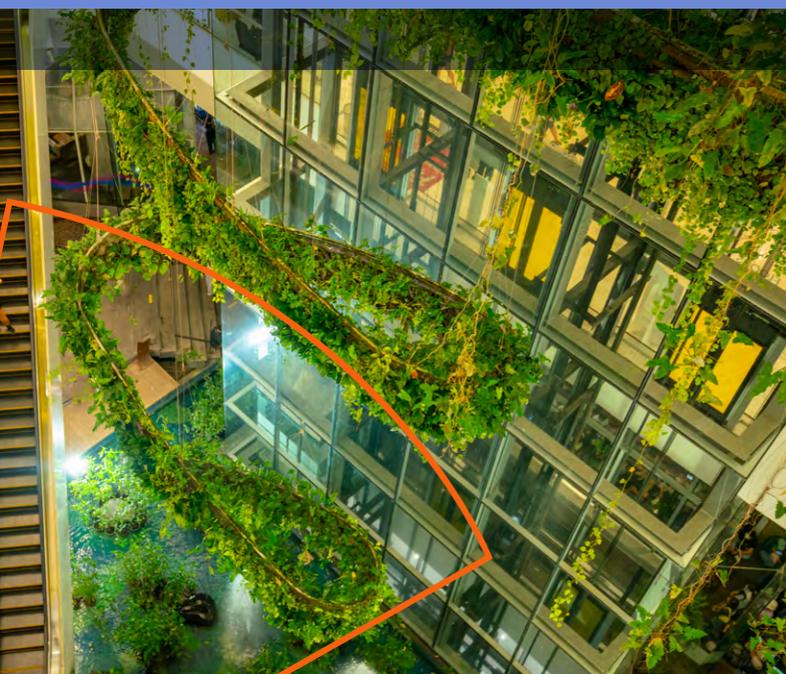
Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	IRR*	# of Results	95th	75th	50th	25th	5th
(All)	1,176,779	1613	6.1	1607	23.9	12.3	6.4	-1.9	-21.4
2024	12,925	21	-14.0	20	17.4	-2.0	-9.2	-16.9	-35.9
2023	86,636	70	-0.6	70	11.9	0.46	-8.6	-23.3	-61.6
2022	117,387	101	0.5	101	16.7	7.8	-2.0	-12.5	-38.0
2021	66,708	90	4.7	90	15.4	9.9	4.8	-2.0	-15.0
2020	54,031	77	6.7	77	24.3	12.5	8.7	0.4	-14.9
2019	108,620	93	8.0	93	20.8	11.0	4.8	-1.3	-14.5
2018	59,983	88	7.4	88	24.3	13.2	8.2	4.6	-16.9
2017	51,260	71	9.0	71	25.7	13.7	8.6	2.56	-9.3
2016	45,173	72	7.8	72	23.2	11.5	6.9	1.1	-12.5
2015	63,764	76	7.9	76	22.7	13.2	8.5	2.1	-17.1
2014	41,562	69	6.4	68	24.4	13.3	7.5	0.7	-23.6
2013	52,615	62	9.9	61	24.1	15.4	9.9	3.6	-5.7
2012	30,250	44	12.0	44	20.9	16.4	11.6	8.3	-7.6
2011	24,723	47	11.8	47	24.4	18.0	11.1	6.7	-8.0
2010	15,056	28	9.8	28	22.8	16.7	11.4	7.6	-1.7

Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	TVPI*	# of Results	95th	75th	50th	25th	5th
All	1,176,779	1613	1.24	1612	2.15	1.51	1.23	0.95	0.45
2024	12,925	21	0.92	20	1.17	0.98	0.93	0.88	0.69
2023	86,636	70	1.00	70	1.13	1.00	0.94	0.83	0.57
2022	117,387	101	1.01	101	1.31	1.10	0.97	0.88	0.68
2021	66,708	90	1.09	90	1.34	1.20	1.09	0.96	0.77
2020	54,031	77	1.15	77	1.53	1.27	1.16	1.01	0.68
2019	108,620	93	1.22	93	2.00	1.34	1.13	0.97	0.67
2018	59,983	88	1.24	88	1.83	1.49	1.30	1.17	0.61
2017	51,260	71	1.34	71	2.24	1.62	1.32	1.13	0.70
2016	45,173	72	1.34	72	2.27	1.57	1.26	1.04	0.61
2015	63,764	76	1.32	76	1.80	1.52	1.28	1.10	0.48
2014	41,562	69	1.25	69	2.09	1.61	1.29	1.03	0.23
2013	52,615	62	1.41	62	1.91	1.57	1.40	1.12	0.63
2012	30,250	44	1.52	44	2.10	1.61	1.45	1.28	0.61
2011	24,723	47	1.49	47	2.52	1.81	1.44	1.23	0.56
2010	15,056	28	1.44	28	2.43	1.69	1.49	1.35	0.88

# Fund Benchmarks Infrastructure - IRR & Multiples by Vintage

Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	IRR*	# of Results	95th	75th	50th	25th	5th
(All)	844,890	394	8.1	389	25.8	13.0	8.4	2.6	-20.1
2024	30,120	11	-16.9	10	12.1	-0.8	-8.7	-57.8	-88.1
2023	94,417	33	11.1	31	45.3	19.2	7.0	-3.9	-22.7
2022	95,520	30	8.3	30	24.2	13.8	7.2	-2.0	-13.2
2021	111,717	35	10.3	35	24.2	13.5	8.4	5.0	-7.9
2020	73,679	30	11.9	30	28.5	13.5	10.3	6.2	-8.5
2019	73,995	27	9.0	27	18.8	11.1	6.9	1.7	-8.5
2018	73,429	27	9.8	27	21.4	13.2	10.3	7.9	-5.1
2017	39,753	28	8.6	28	20.5	12.4	8.7	6.3	2.4
2016	43,722	19	10.7	19	16.3	12.9	9.6	7.3	-7.6
2015	20,446	14	9.0	14	32.6	11.8	7.7	4.4	0.4
2014	30,856	22	12.4	22	18.9	12.9	10.5	7.9	-0.4
2013	17,947	14	9.1	14	15.1	10.9	6.6	2.9	-43.2
2012	23,271	18	12.0	17	31.6	14.8	10.3	5.9	-17.4
2011	8,280	7	3.7	7	22.9	14.6	8.0	-2.3	-32.8
2010	15,774	17	7.9	16	16.0	11.6	5.1	1.0	-8.9

Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	TVPI*	# of Results	95th	75th	50th	25th	5th
All	844,890	394	1.35	391	2.10	1.52	1.25	1.06	0.63
2024	30,120	11	0.90	10	1.11	1.00	0.94	0.82	0.14
2023	94,417	33	1.11	31	1.39	1.20	1.06	0.97	0.88
2022	95,520	30	1.11	30	1.24	1.14	1.09	0.967	0.86
2021	111,717	35	1.21	35	1.50	1.26	1.16	1.09	0.89
2020	73,679	30	1.28	30	1.71	1.31	1.24	1.14	0.84
2019	73,995	27	1.27	27	1.62	1.33	1.17	1.06	0.70
2018	73,429	27	1.38	27	1.78	1.51	1.42	1.21	0.82
2017	39,753	28	1.42	28	1.89	1.58	1.41	1.25	1.07
2016	43,722	19	1.59	19	2.32	1.65	1.51	1.27	0.68
2015	20,446	14	1.41	14	2.35	1.54	1.42	1.17	1.01
2014	30,856	22	1.64	22	2.40	1.81	1.60	1.34	0.97
2013	17,947	14	1.70	14	2.12	1.77	1.35	1.22	0.16
2012	23,271	18	1.68	18	2.34	1.71	1.49	1.24	0.15
2011	8,280	7	1.17	7	2.15	1.76	1.36	0.94	0.47
2010	15,774	17	1.60	17	2.20	1.98	1.25	1.01	0.19



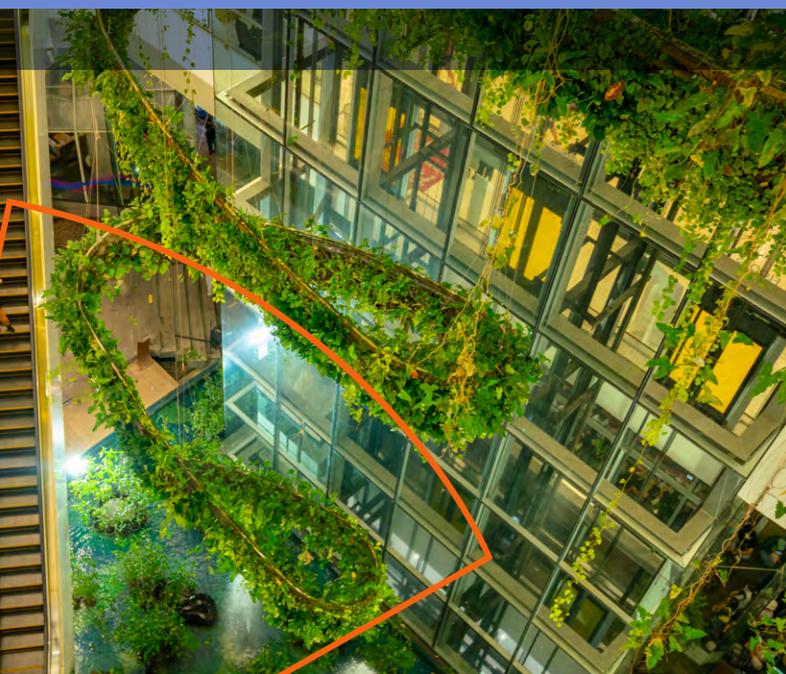
# Fund Benchmarks

## Natural Resources

### - IRR & Multiples by Vintage

Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	IRR*	# of Results	95th	75th	50th	25th	5th
(All)	235,886	407	7.4	403	35.8	13.1	6.4	0.15	-19.0
2024		4	-3.5	3	0.6	-5.0	-11.9	-12.3	-12.7
2023	6,166	10	25.8	10	47.5	8.1	-1.1	-5.6	-24.5
2022	10,937	13	10.5	13	49.7	18.2	12.6	1.0	-38.2
2021	4,536	9	14.7	9	57.9	27.1	16.1	13.5	-0.8
2020	6,648	13	11.2	13	42.1	14.9	7.1	-4.0	-48.8
2019	5,839	18	15.4	18	35.1	21.0	12.4	10.3	7.4
2018	7,312	17	15.5	17	52.5	22.3	10.3	7.7	1.4
2017	22,069	24	15.1	24	21.2	15.4	10.5	5.6	-1.7
2016	14,629	26	9.8	26	327.8	9.7	6.8	4.0	-10.1
2015	23,321	31	10.3	31	24.1	14.0	8.0	2.7	-7.2
2014	33,252	30	5.3	30	17.6	8.02	4.2	-0.4	-17.4
2013	14,529	19	3.4	18	15.1	7.9	4.0	0.4	-13.8
2012	12,453	15	3.6	14	14.2	8.0	2.	-1.3	-8.1
2011	8,535	18	-2.1	18	12.3	2.8	-6.2	-19.12	-39.2
2010	10,538	17	0.0	17	15.1	5.2	-2.5	-5.4	-29.9

Vintage	Capitalization (M)*	Pooled		Percentiles					
		# of Funds	TVPI*	# of Results	95th	75th	50th	25th	5th
All	235,886	407	1.39	406	3.19	1.72	1.36	1.00	0.33
2024		4	0.97	3	1.02	0.97	0.90	0.89	0.88
2023	6,166	10	1.21	10	1.37	1.06	1.00	0.96	0.83
2022	10,937	13	1.10	13	1.65	1.22	1.12	1.01	0.67
2021	4,536	9	1.28	9	2.17	1.49	1.34	1.19	1.01
2020	6,648	13	1.24	13	1.98	1.42	1.23	0.88	0.50
2019	5,839	18	1.58	18	2.31	1.78	1.53	1.41	1.19
2018	7,312	17	1.61	17	3.11	1.79	1.47	1.26	1.13
2017	22,069	24	1.66	24	2.02	1.79	1.59	1.31	0.96
2016	14,629	26	1.43	26	2.94	1.57	1.35	1.22	0.57
2015	23,321	31	1.64	31	3.13	1.77	1.52	1.19	0.61
2014	33,252	30	1.34	30	2.00	1.6.0	1.31	0.98	0.24
2013	14,529	19	1.21	19	2.11	1.5.0	1.22	1.00	0.30
2012	12,453	15	1.21	15	1.95	1.40	1.04	0.90	0.27
2011	8,535	18	0.85	18	1.97	1.23	0.64	0.40	0.18
2010	10,538	17	1.00	17	2.47	1.67	0.85	0.65	0.27



## 5 | Asset and Holdings Metrics

# Asset & Holdings Metrics

## Current Buyout Revenue Growth



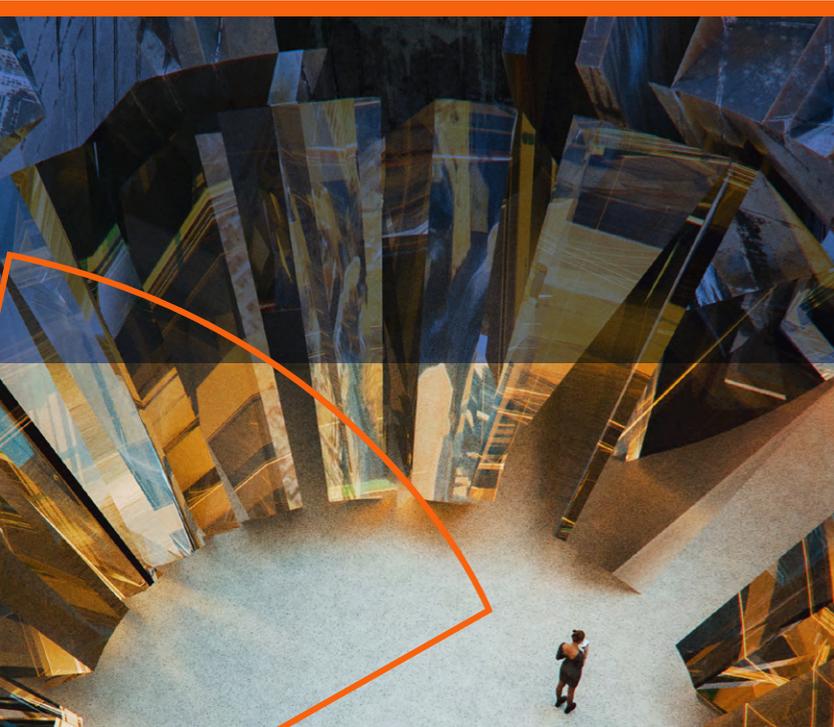
### Median Revenue Growth

(Annual change through each end date)

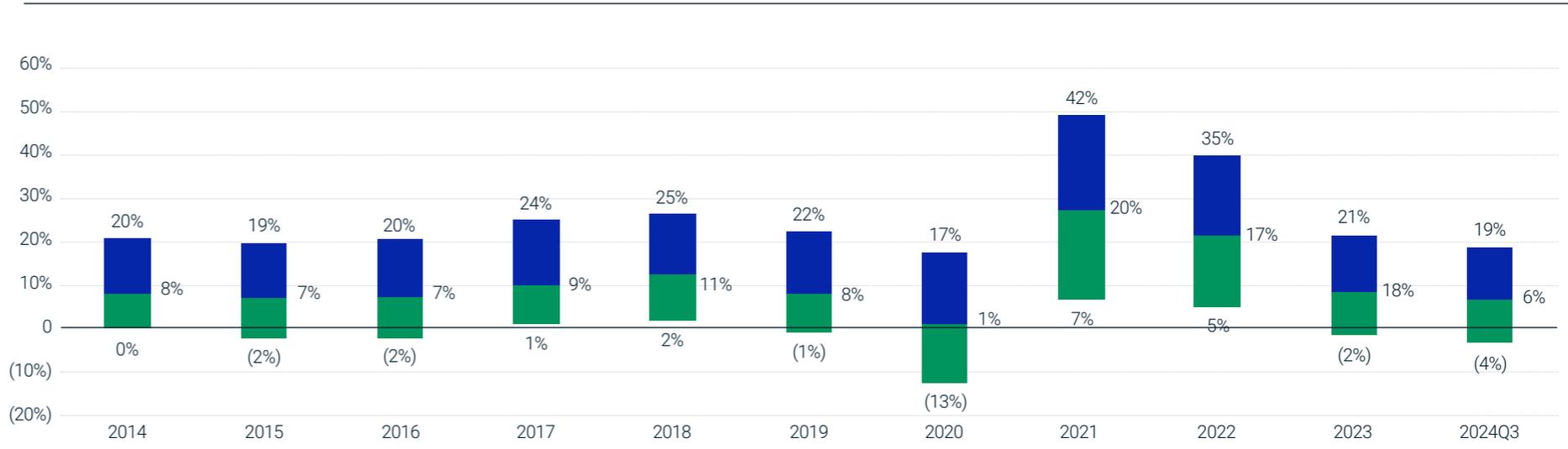
Company Sector	12/31/2023	03/31/2024	06/30/2024	09/30/2024
Communication Services	4.8%	5.2%	4.8%	4.8%
Consumer Discretionary	6.8%	5.0%	5.3%	3.5%
Consumer Staples	6.3%	4.9%	4.1%	4.9%
Energy	4.3%	-0.9%	-1.5%	-1.3%
Financials	14.5%	15.7%	13.5%	13.7%
Health Care	10.8%	9.9%	8.4%	8.4%
Industrials	8.3%	5.9%	5.2%	5.1%
Information Technology	10.7%	9.4%	8.7%	7.3%
Materials	-5.1%	-5.5%	-3.0%	-0.4%
Real Estate	1.7%	2.2%	1.9%	1.4%
Utilities	2.5%	3.6%	0.1%	-5.7%
<b>Total</b>	<b>8.4%</b>	<b>7.1%</b>	<b>6.4%</b>	<b>6.0%</b>

# Asset & Holdings Metrics

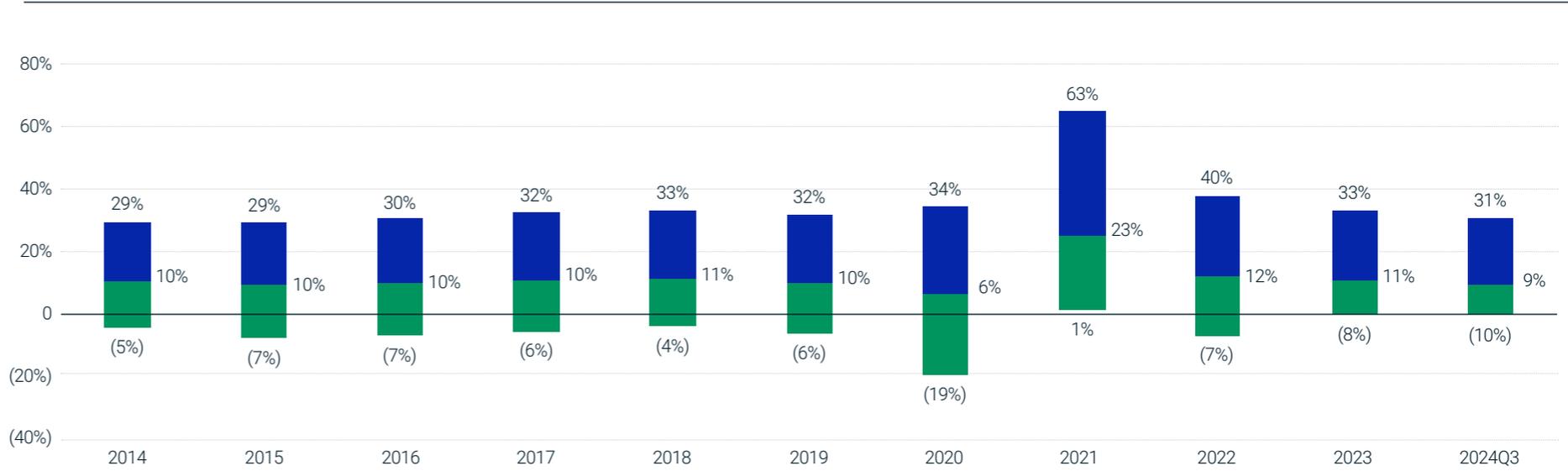
## Historical Buyout Revenue and EBITDA Growth



1-Year Revenue Growth (%)



1-Year EBITDA Growth (%)

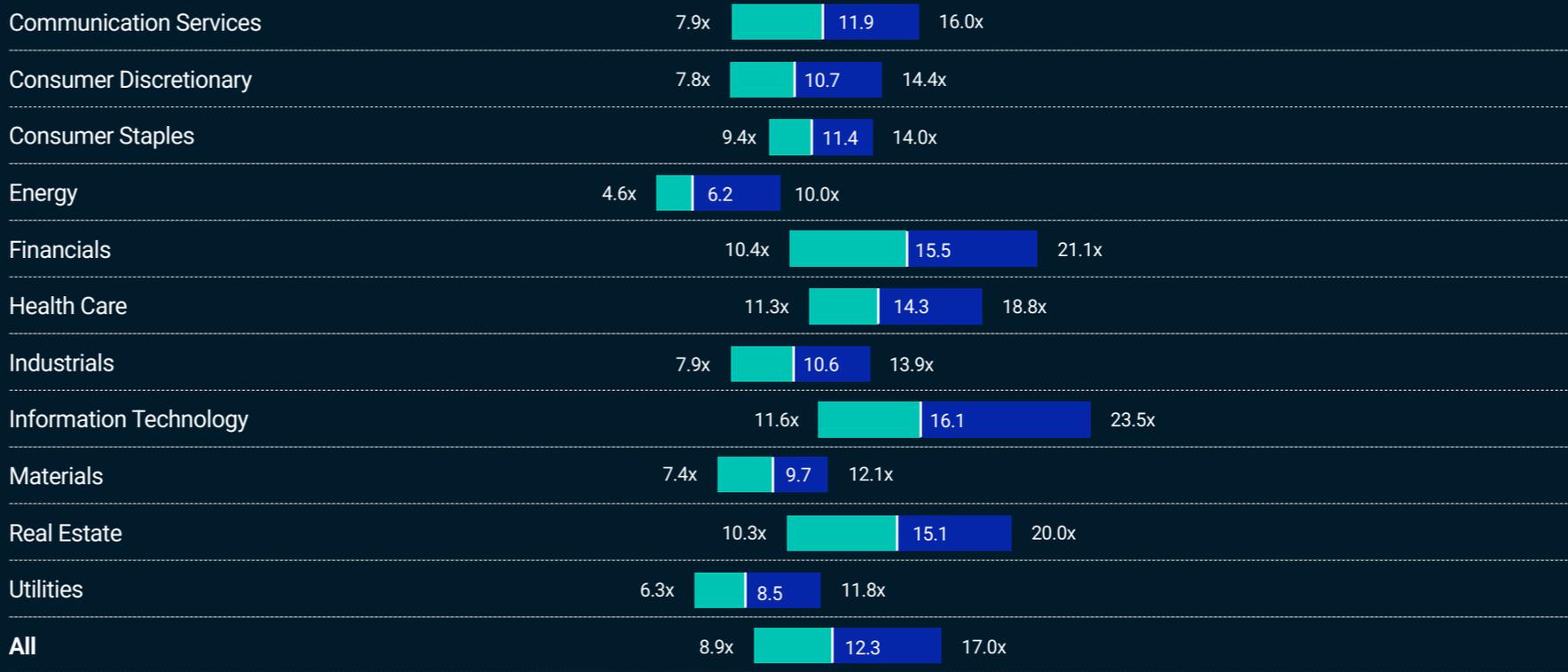


# Asset & Holdings Metrics Current Buyout EBITDA Multiples

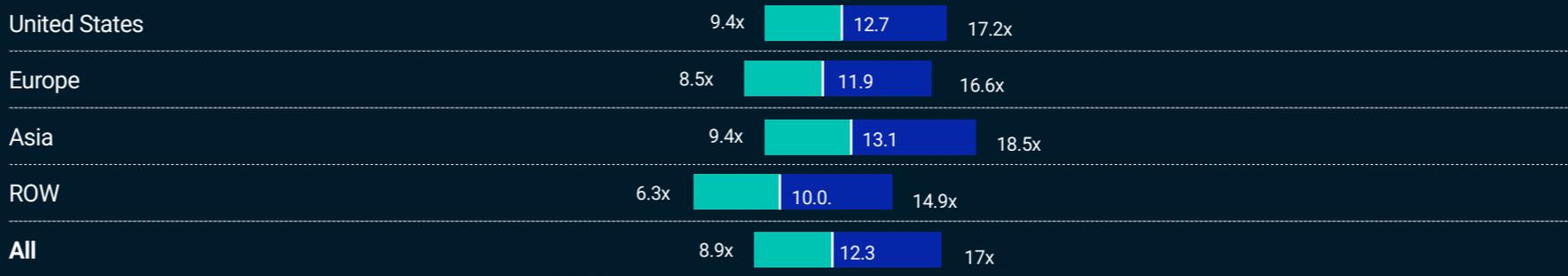


75th 50th 25th

### Company Sector



### Company Geography



# Asset & Holdings Metrics

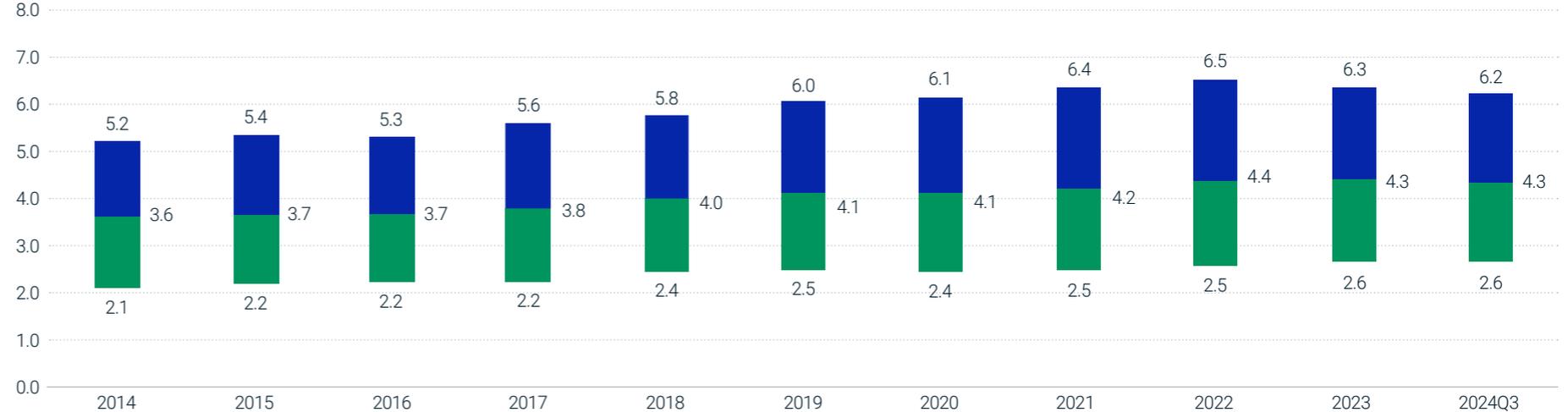
## Historical Buyout EBITDA and Net Debt Multiples



EBITDA Multiple Over Time



Net Debt Multiple Over Time

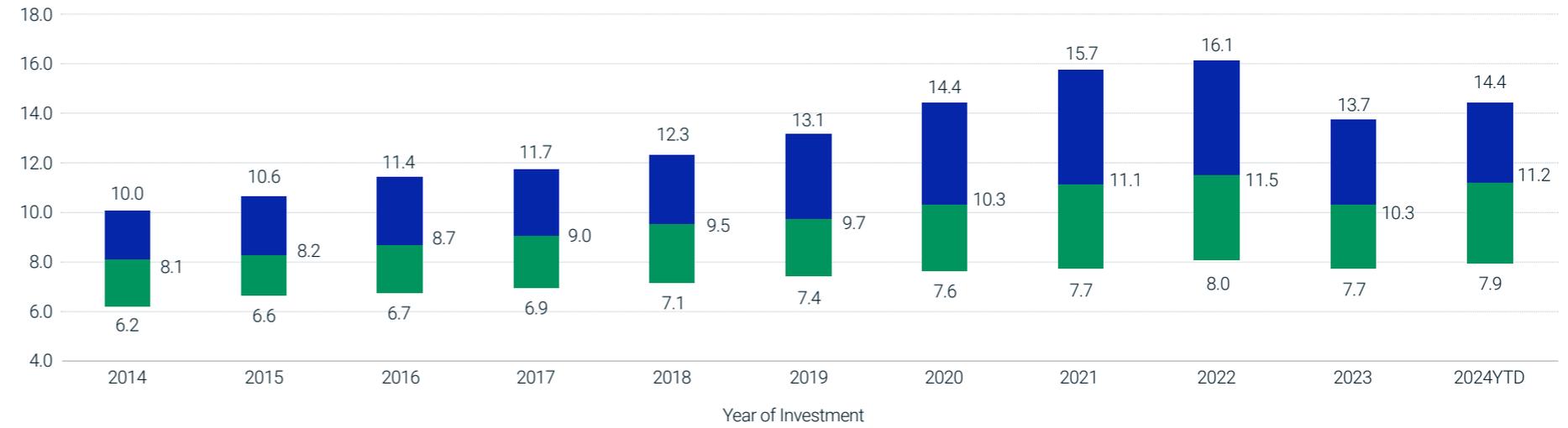


# Asset & Holdings Metrics

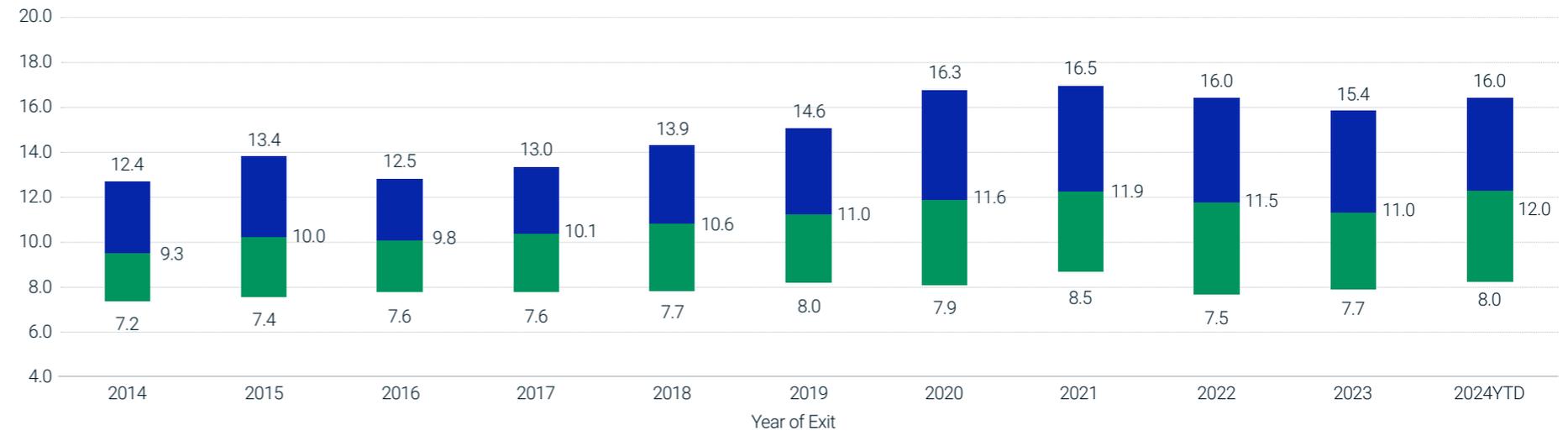
## Historical Buyout Entry and Exit Multiples



EBITDA Multiple at Entry



EBITDA Multiple at Exit



# Asset & Holdings Metrics

## Global Buyout IRR and TVPI by Vintage

Global Buyout Holdings Performance as of 09/30/2024

Fund Vintage	TVPI Percentiles			IRR Percentiles			% Realized	Loss Ratio	Capital Weighted Loss Ratio
	75th	50th	25th	75th	50th	25th			
2023	1.33	1.07	1.00	28.0	8.0	0.0	3%	10%	8%
2022	1.41	1.09	1.00	27.3	8.2	0.0	3%	14%	10%
2021	1.69	1.22	1.00	29.5	11.1	0.0	5%	19%	18%
2020	2.00	1.41	1.01	28.4	13.7	0.8	9%	16%	14%
2019	2.40	1.50	1.04	32.7	15.0	1.6	15%	16%	14%
2018	2.88	1.78	1.12	33.8	17.2	3.6	20%	17%	17%
2017	3.42	2.18	1.18	38.8	20.2	5.4	36%	19%	16%
2016	3.42	2.21	1.10	36.7	19.0	2.8	43%	20%	19%
2015	3.48	2.17	1.04	35.8	18.7	1.5	49%	22%	23%
2014	3.52	2.24	1.11	37.3	19.1	2.6	59%	21%	23%



# Asset & Holdings Metrics

## United States Buyout IRR and TVPI by Vintage



United States Buyout Holdings Performance as of 09/30/2024

Fund Vintage	TVPI Percentiles			IRR Percentiles			% Realized	Loss Ratio	Capital Weighted Loss Ratio
	75th	50th	25th	75th	50th	25th			
2023	1.34	1.06	1.00	26.9	6.5	0.0	2%	7%	4%
2022	1.40	1.07	1.00	24.6	7.1	0.0	3%	15%	12%
2021	1.67	1.22	1.00	28.2	10.5	0.0	6%	19%	17%
2020	2.00	1.40	1.00	26.8	12.2	0.0	10%	17%	15%
2019	2.58	1.54	1.03	34.1	15.6	1.1	17%	17%	13%
2018	2.95	1.81	1.15	34.7	18.1	5.0	20%	16%	16%
2017	3.44	2.24	1.27	41.3	21.6	7.5	39%	17%	16%
2016	3.75	2.38	1.11	40.7	21.8	3.8	45%	18%	16%
2015	3.70	2.44	1.13	39.1	21.8	2.8	48%	20%	22%
2014	3.52	2.22	1.06	39.8	19.1	2.5	62%	22%	25%

# Asset & Holdings Metrics

## Europe Buyout IRR and TVPI by Vintage



Europe Buyout Holdings Performance as of 09/30/2024

Fund Vintage	TVPI Percentiles			IRR Percentiles			% Realized	Loss Ratio	Capital Weighted Loss Ratio
	75th	50th	25th	75th	50th	25th			
2023	1.30	1.09	1.00	30.5	9.7	0.0	4%	17%	15%
2022	1.42	1.15	1.00	33.0	11.8	0.0	2%	14%	6%
2021	1.69	1.20	1.00	31.1	12.2	0.0	4%	18%	20%
2020	1.95	1.43	1.05	28.9	16.4	4.9	8%	16%	13%
2019	2.20	1.45	1.05	31.0	13.9	2.2	12%	14%	14%
2018	3.00	1.89	1.17	38.4	19.2	4.4	22%	17%	15%
2017	3.46	2.17	1.12	35.9	19.5	3.9	34%	21%	16%
2016	3.02	2.21	1.23	33.5	18.3	3.3	41%	20%	22%
2015	3.26	2.02	0.88	33.3	16.5	0.0	50%	26%	24%
2014	3.66	2.31	1.14	35.8	20.1	2.4	55%	20%	22%

# Asset & Holdings Metrics

## Asia Buyout IRR and TVPI by Vintage



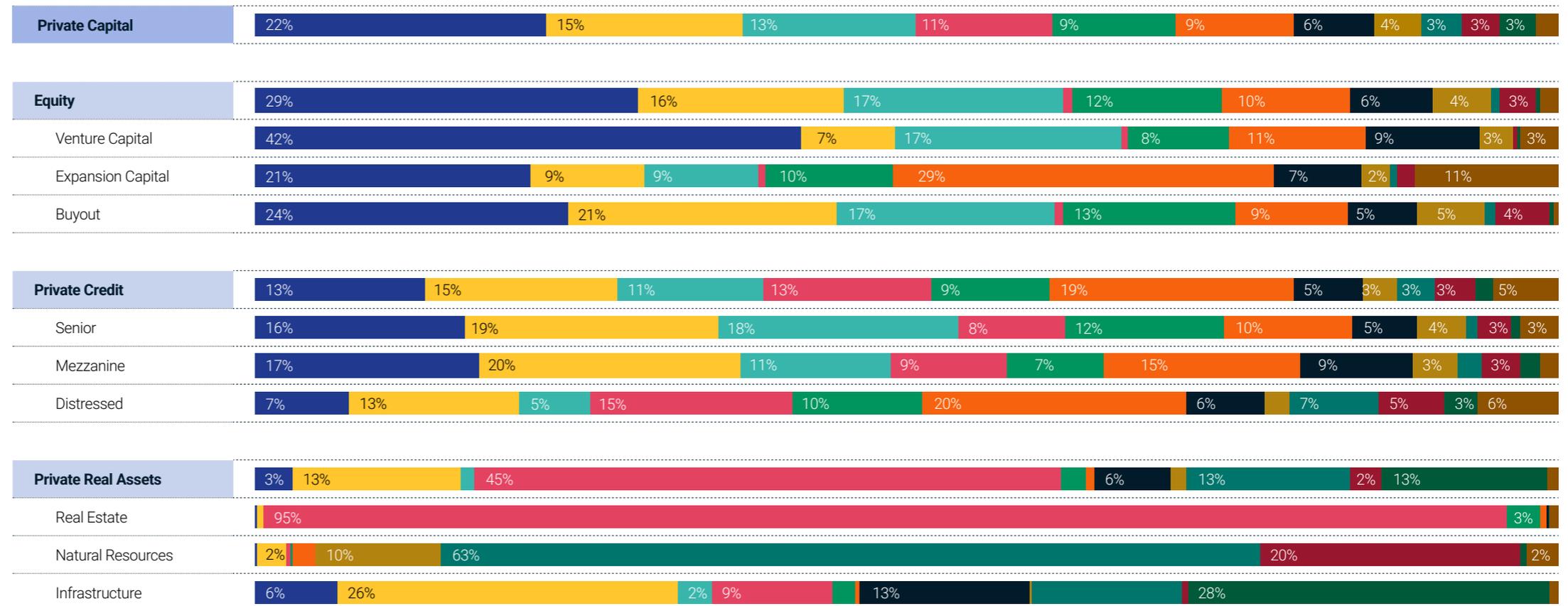
Asia Buyout Holdings Performance as of 09/30/2024

Fund Vintage	TVPI Percentiles			IRR Percentiles			% Realized	Loss Ratio	Capital Weighted Loss Ratio
	75th	50th	25th	75th	50th	25th			
2023	1.35	1.09	1.00	24.9	12.5	0.0	10%	9%	0%
2022	1.51	1.26	1.01	28.5	17.7	1.0	0%	0%	0%
2021	1.70	1.30	1.01	32.7	14.6	1.9	6%	10%	6%
2020	2.42	1.42	1.00	37.8	14.2	0.0	12%	16%	18%
2019	1.87	1.32	1.04	28.3	11.1	1.8	16%	18%	13%
2018	1.93	1.33	0.97	21.9	7.6	-0.3	15%	27%	25%
2017	2.57	1.44	1.01	30.4	7.9	0.3	30%	24%	32%
2016	2.63	1.86	1.11	22.3	11.6	3.3	37%	21%	20%
2015	2.51	1.94	1.37	25.2	14.0	-1.0	53%	16%	8%
2014	2.73	2.02	1.17	34.3	18.4	3.9	57%	17%	20%

# Asset & Holdings Metrics Composition by Industry

Global Valuation Breakdown by Industry as of 09/30/2024

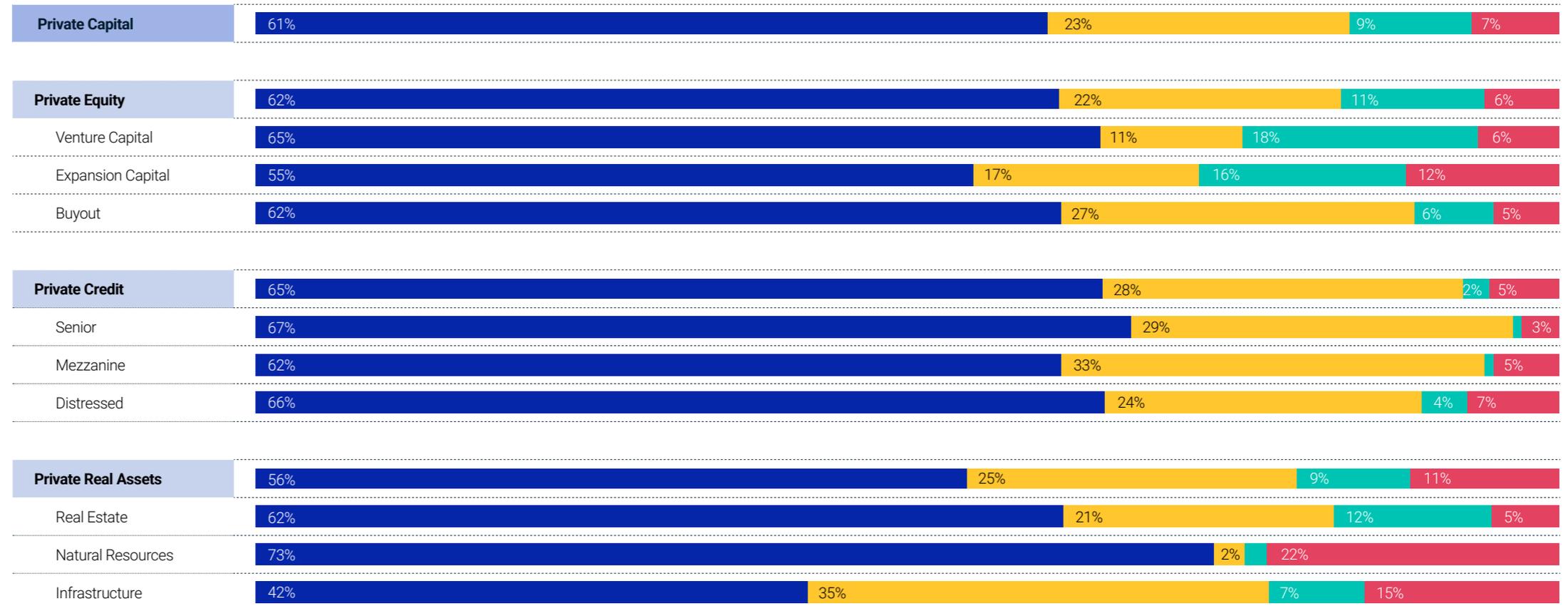
- Information Technology
- Industrials
- Health Care
- Real Estate
- Consumer Discretionary
- Financials
- Communication Services
- Energy
- Consumer Staples
- Materials
- Utilities
- Unknown



# Asset & Holdings Metrics Composition by Geography

Global Valuation Breakdown by Geography as of 09/30/2024

- United States
- Europe
- Asia
- Rest of World



# 6 | Capital Flows

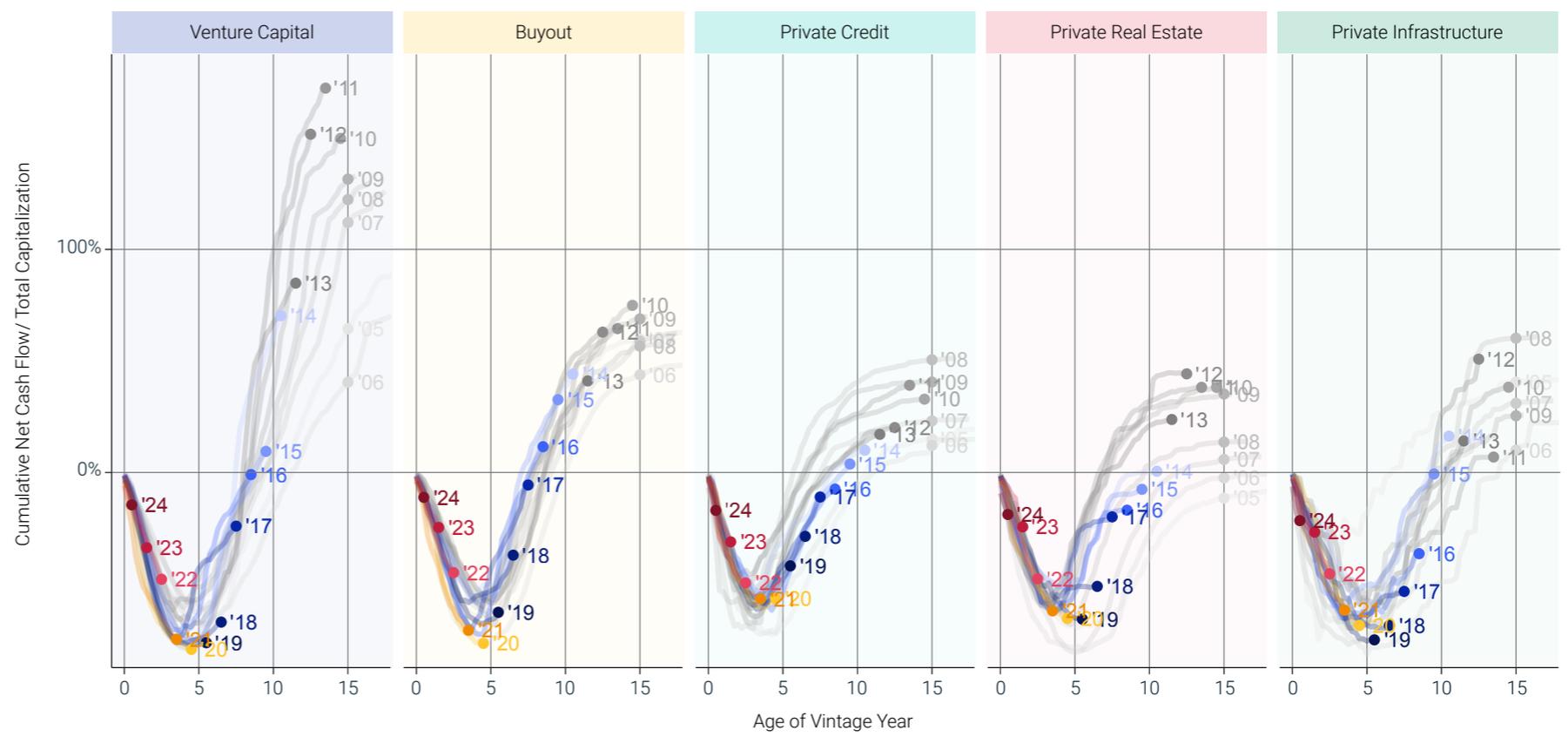


# Cash Flows



### Cumulative Net Cash Flow by Vintage

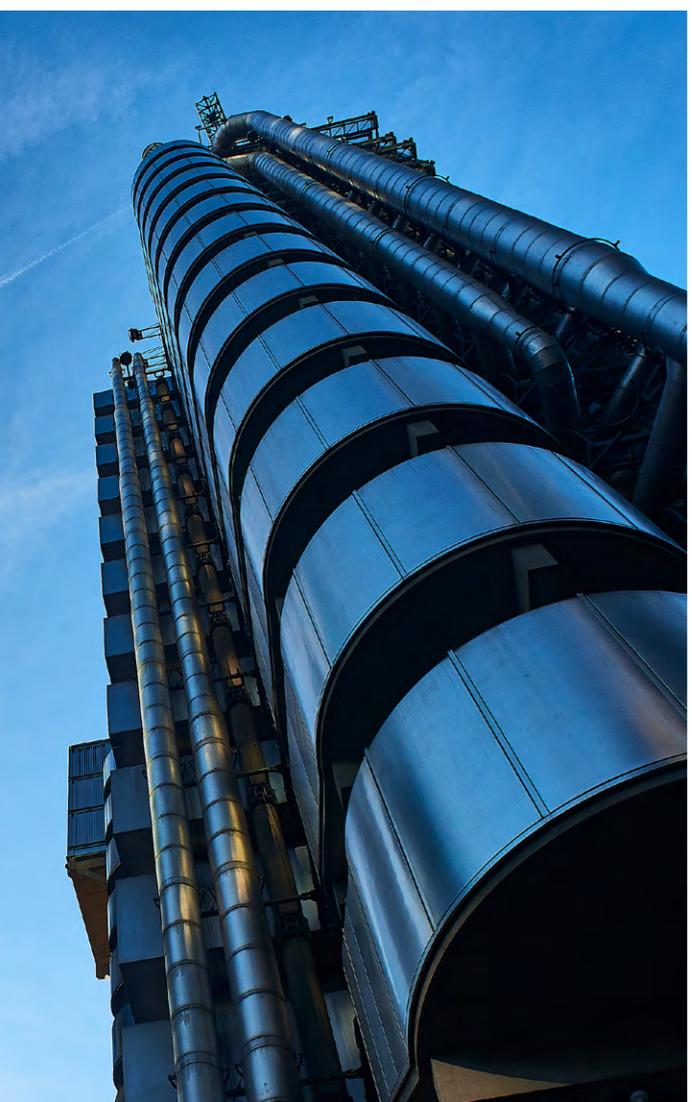
Vintage 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014  
 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024



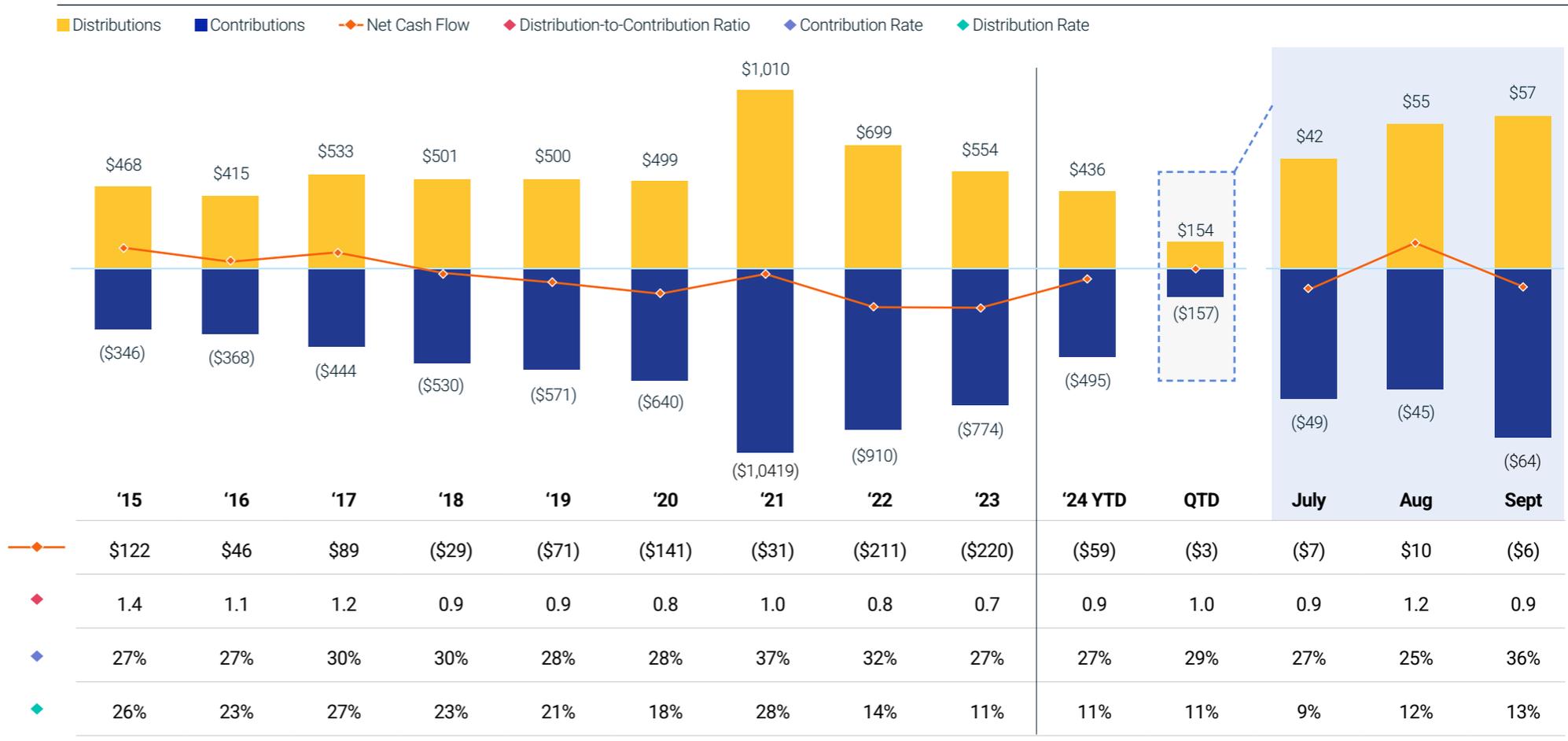
Pooled results in USD.

# Cash Flows

## Private Capital Calendar Year Cash Flows

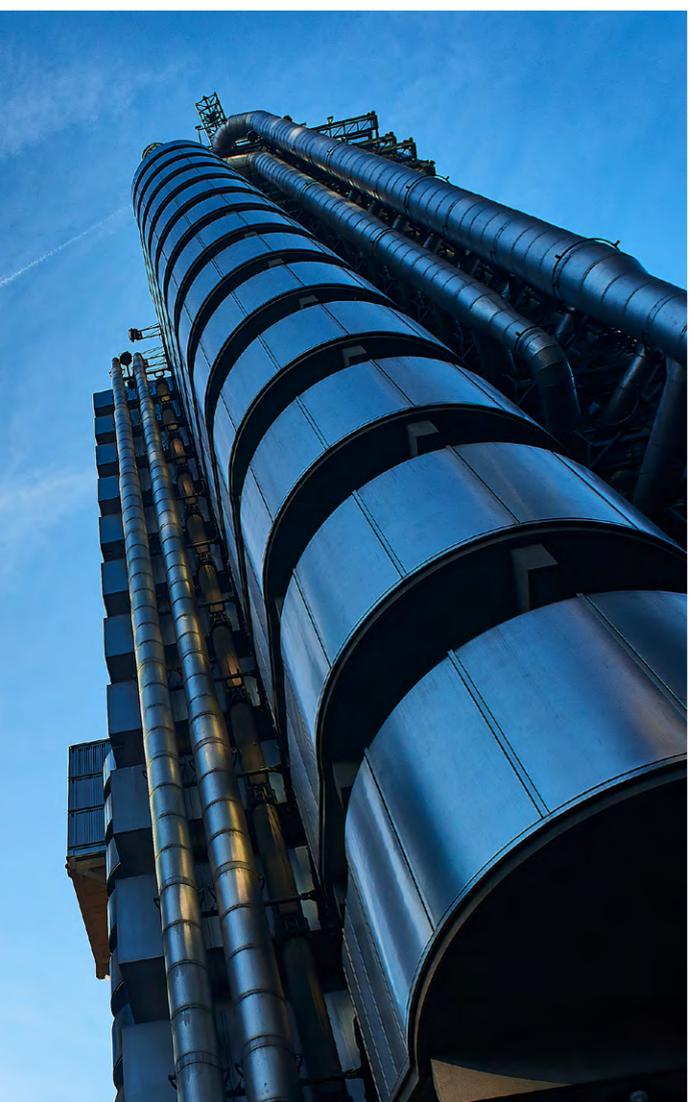


Global Private Capital Cash Flows by Calendar Year (\$Billions)



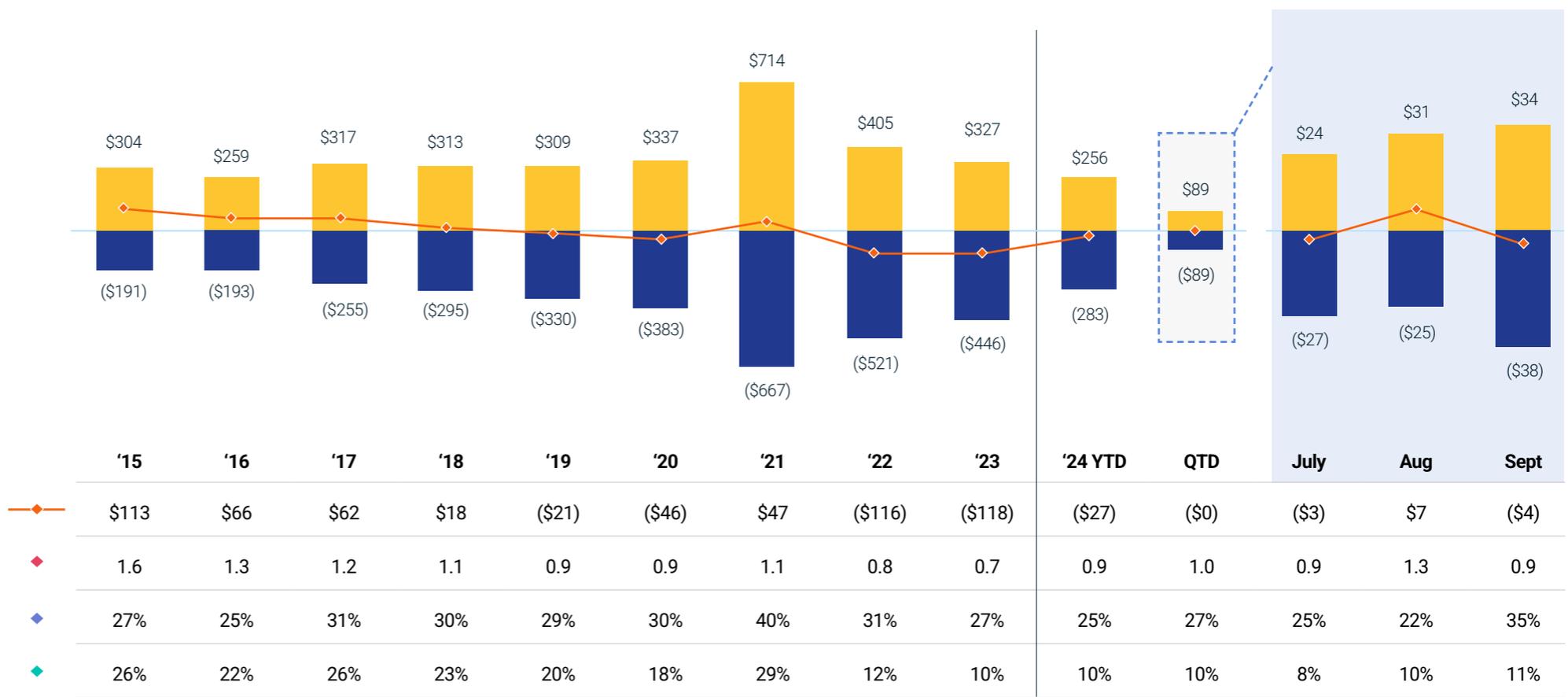
# Cash Flows

## Private Equity Calendar Year Cash Flows



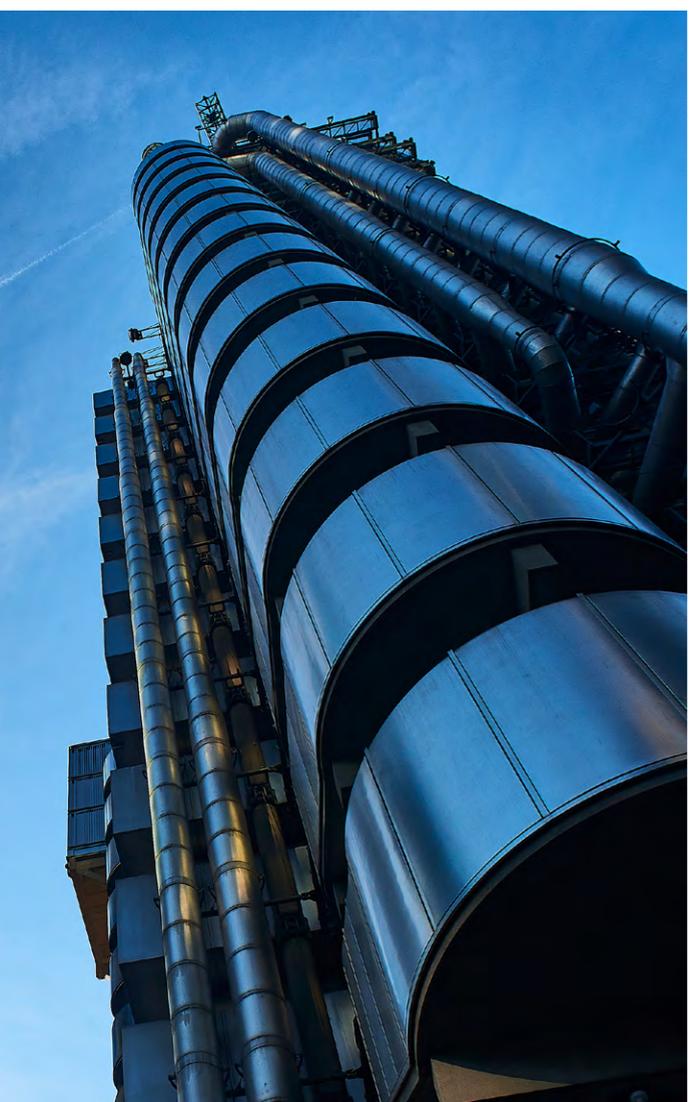
Global Private Equity Cash Flows by Calendar Year (\$Billions)

■ Distributions   
 ■ Contributions   
 —◆— Net Cash Flow   
 ◆ Distribution-to-Contribution Ratio   
 ◆ Contribution Rate   
 ◆ Distribution Rate



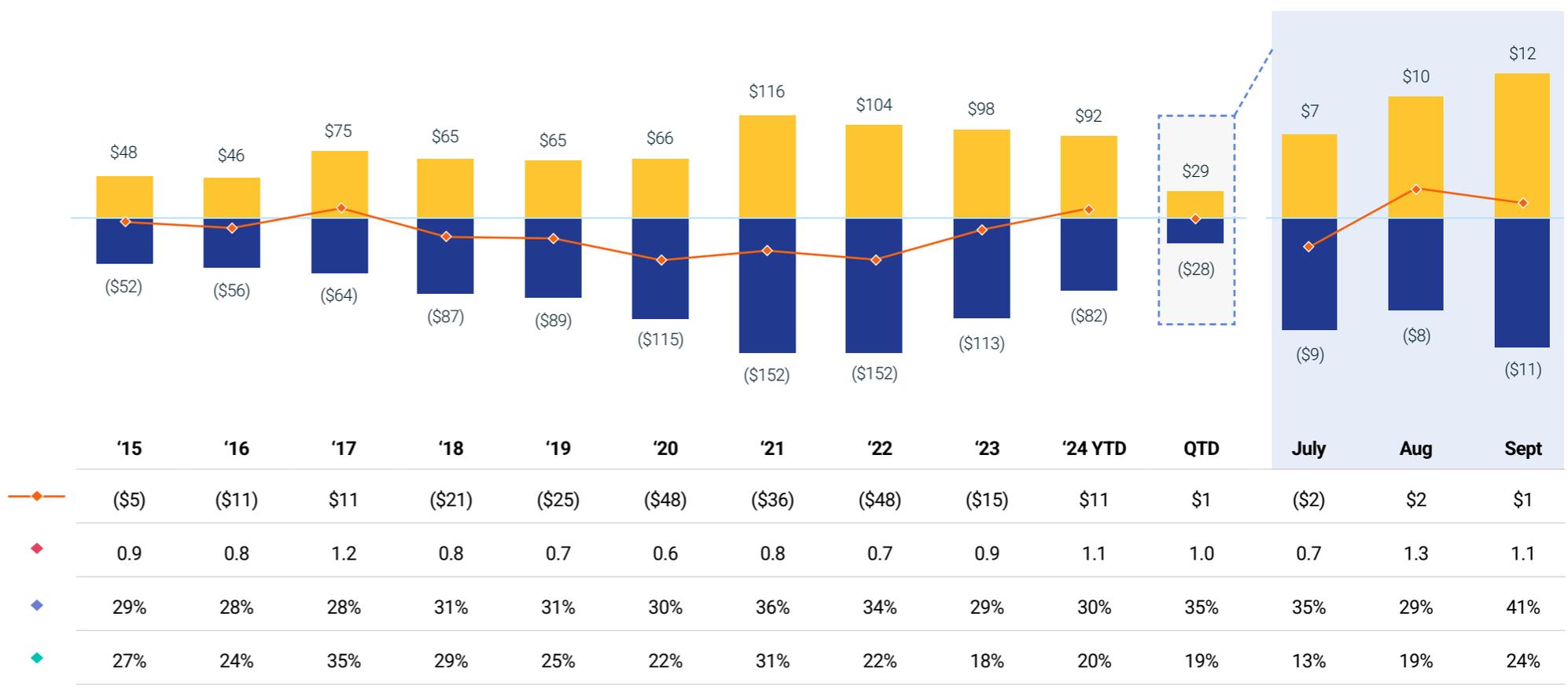
# Cash Flows

## Private Credit Calendar Year Cash Flows



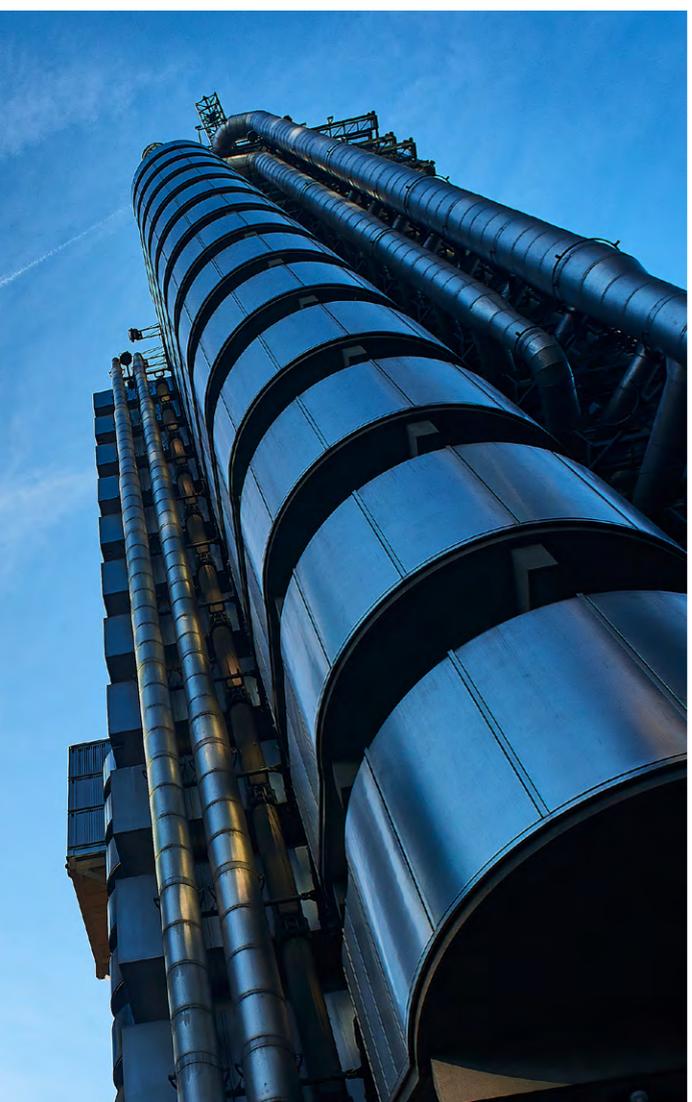
Global Private Credit Cash Flows by Calendar Year (\$Billions)

■ Distributions   
 ■ Contributions   
 —◆— Net Cash Flow   
 ◆ Distribution-to-Contribution Ratio   
 ◆ Contribution Rate   
 ◆ Distribution Rate



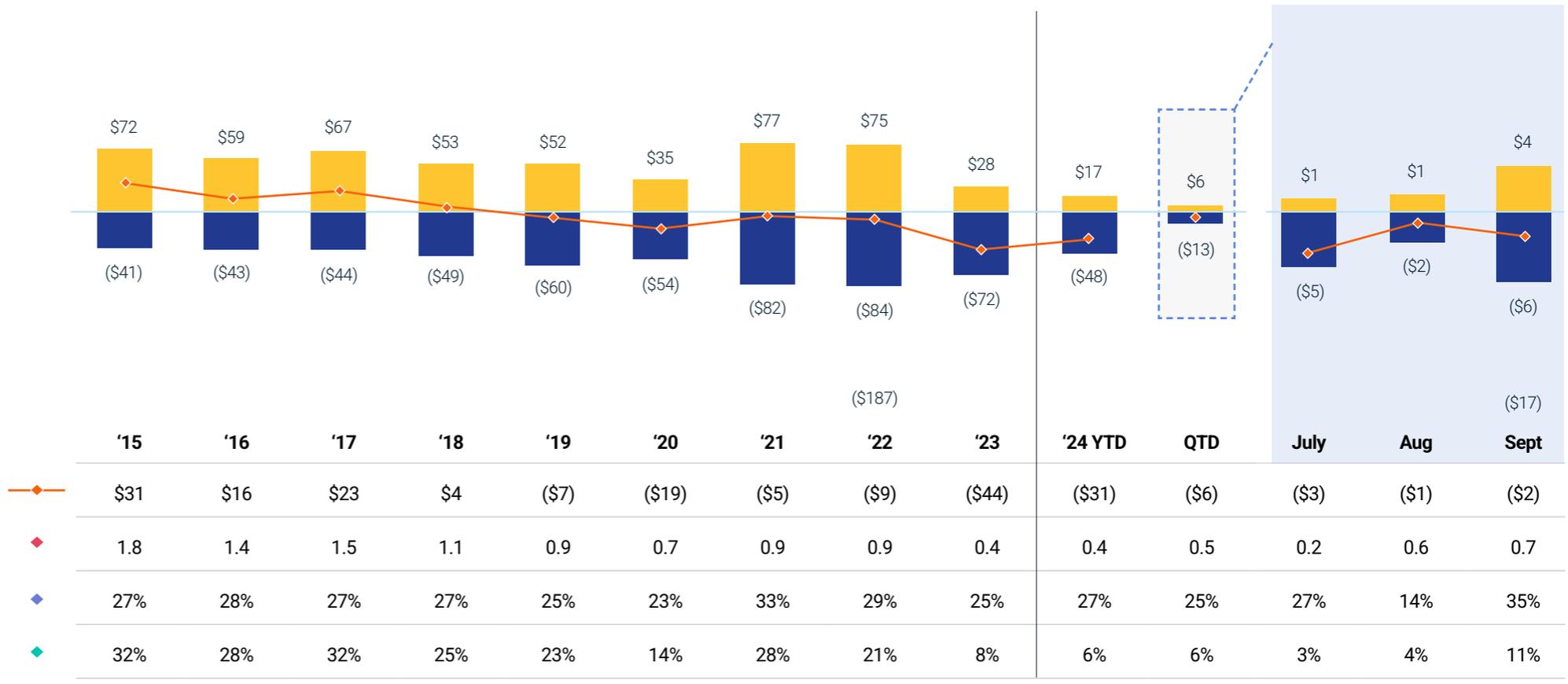
# Cash Flows

## Private Real Estate Calendar Year Cash Flows



Global Private Real Estate Cash Flows by Calendar Year (\$Billions)

■ Distributions   
 ■ Contributions   
 —◆— Net Cash Flow   
 ◆ Distribution-to-Contribution Ratio   
 ◆ Contribution Rate   
 ◆ Distribution Rate

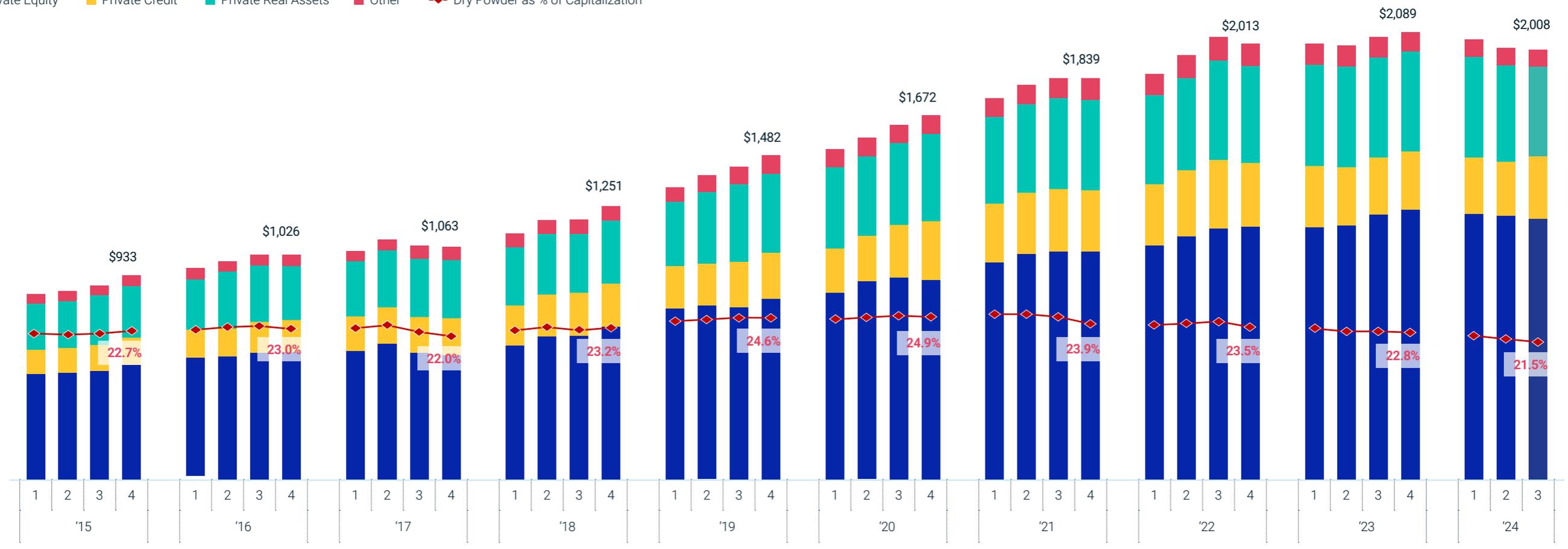


# Cash Flows

## Dry Powder by Asset Class

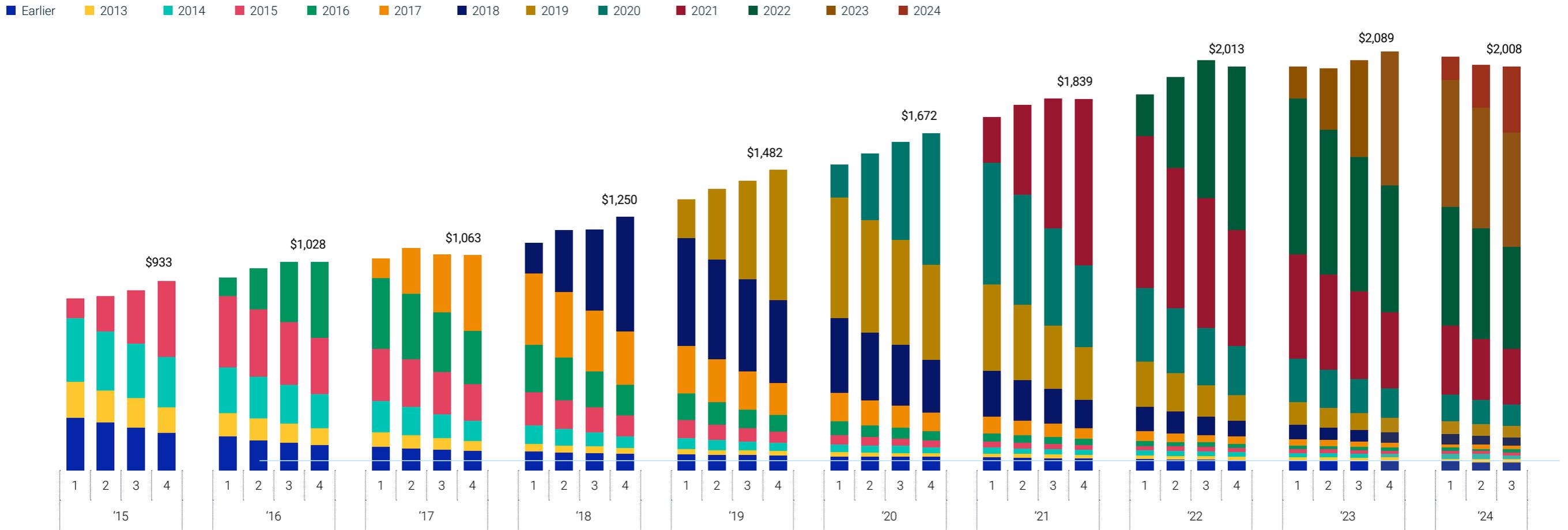
Global Private Capital Dry Powder by Calendar Year (\$Billions)

■ Private Equity   ■ Private Credit   ■ Private Real Assets   ■ Other   ◆ Dry Powder as % of Capitalization



# Cash Flows Dry Powder by Vintage

Global Private Capital Dry Powder by Calendar Year (\$Billions)



# 7 | Climate and Sustainability Benchmarks

# Climate and Sustainability Benchmarks

## Global Carbon Footprint

	Gross Valuation (\$bn)	# of Funds	Carbon Data Coverage	Revenue Intensity (tCO <sub>2</sub> e / \$mm Sales)		Investment Intensity (tCO <sub>2</sub> e / \$mm EVIC)		Financed Emissions (Coverage Adjusted) (million tCO <sub>2</sub> e)	
				Scope 1+2	Scope 3	Scope 1+2	Scope 3	Scope 1+2	Scope 3
<b>Global Private Equity Funds</b>	\$4,209.5	5,535	~95%	80.0	438.0	25.8	185.6	108.6	781.3
Venture Capital	\$1,027.3	2,625	~90%	24.9	410.7	8.4	116.5	8.7	119.7
Early Stage	\$491.1	1,671	~90%	25.4	287.1	8.9	102.3	4.4	50.2
Late Stage	\$275.2	442	~95%	22.6	530.9	8.0	109.0	2.2	30.0
Expansion Capital	\$80.4	140	~85%	36.2	406.6	18.0	108.3	1.4	8.7
Buyout	\$2,538.1	1,986	~95%	111.5	470.0	34.9	225.3	88.6	571.7
<b>Global Private Debt Funds</b>	\$822.9	935	~55%	93.0	492.2	42.3	260.1	34.8	214.0
Senior	\$189.1	164	~65%	45.1	393.6	22.4	206.3	4.2	39.0
Mezzanine	\$155.5	216	~80%	64.9	389.4	32.3	211.2	5.0	32.8
Distressed	\$211.5	216	~40%	186.9	783.2	83.1	437.3	17.6	92.5
<b>Global Infrastructure Funds</b>	\$510.4	313	~75%	274.3	627.6	90.5	280.4	46.2	143.1
<b>Global Natural Resources Funds</b>	\$124.5	255	~55%	401.5	7,124.3	193.1	2,257.0	24.0	281.1
<b>Global Ex-US Private Equity Funds</b>	\$1,620.7	2,247	~90%	143.4	472.9	31.4	193.8	50.9	314.1
Venture Capital	\$366.7	935	~90%	26.7	368.6	10.5	129.2	3.9	47.4
Early Stage	\$154.4	549	~90%	29.0	283.9	11.1	111.7	1.7	17.2
Late Stage	\$105.7	161	~95%	24.3	362.2	10.9	123.5	1.1	13.1
Expansion Capital	\$40.5	94	~85%	53.0	595.7	26.0	148.0	1.1	6.0
Buyout	\$945.6	817	~90%	216.7	536.4	42.4	223.6	40.1	211.5
<b>Global Ex-US Private Debt Funds</b>	\$305.8	351	~65%	94.9	494.0	43.0	264.7	13.1	81.0
Senior	\$189.1	164	~65%	45.1	393.6	22.4	206.3	4.2	39.0
Mezzanine	\$155.5	216	~80%	64.9	389.4	32.3	211.2	5.0	32.8
Distressed	\$211.5	216	~40%	186.9	783.2	83.1	437.3	17.6	92.5
<b>Global Ex-US Infrastructure Funds</b>	\$382.7	189	~80%	233.7	580.4	68.6	229.8	26.2	88.0
<b>Global Ex-US Natural Resources Funds</b>	\$32.9	98	~50%	369.1	11,940.6	211.6	1,291.5	7.0	42.5

Source: Private Capital Transparency Data, MSCI ESG Research.

Valuation and carbon estimate data as of 06/30/2024.

Carbon estimates available for companies. Carbon data includes both reported and estimated emissions for companies. Estimates sourced from MSCI ESG Research. Carbon estimates and other figures are provided in alignment with Partnership for Carbon Accounting Financials (PCAF) standards.

# Climate and Sustainability Benchmarks

## United States Carbon Footprint

	Gross Valuation (\$bn)	# of Funds	Carbon Data Coverage	Revenue Intensity (tCO <sub>2</sub> e / \$mm Sales)		Investment Intensity (tCO <sub>2</sub> e / \$mm EVIC)		Financed Emissions (Coverage Adjusted) (million tCO <sub>2</sub> e)	
				Scope 1+2	Scope 3	Scope 1+2	Scope 3	Scope 1+2	Scope 3
<b>US Private Equity Funds</b>	\$2,588.8	3,288	~95%	41.0	416.6	22.4	180.6	58.1	467.6
Venture Capital	\$660.6	1,690	~90%	23.9	433.8	7.3	109.6	4.8	72.4
Early Stage	\$336.7	1,122	~90%	23.7	288.5	7.9	98.1	2.7	33.0
Late Stage	\$169.5	281	~95%	21.5	635.8	6.3	100.0	1.1	17.0
Expansion Capital	\$39.9	46	~80%	17.9	197.4	8.9	62.1	0.4	2.5
Buyout	\$1,592.4	1,169	~95%	50.5	431.3	30.7	226.2	48.9	360.2
<b>US Private Debt Funds</b>	\$517.0	584	~50%	91.5	490.9	41.9	256.7	21.7	132.7
<b>US Infrastructure Funds</b>	\$127.6	124	~70%	408.0	783.5	160.5	441.3	20.5	56.3
<b>US Natural Resources Funds</b>	\$91.6	157	~55%	411.5	5,643.1	187.4	2,549.5	17.2	233.7

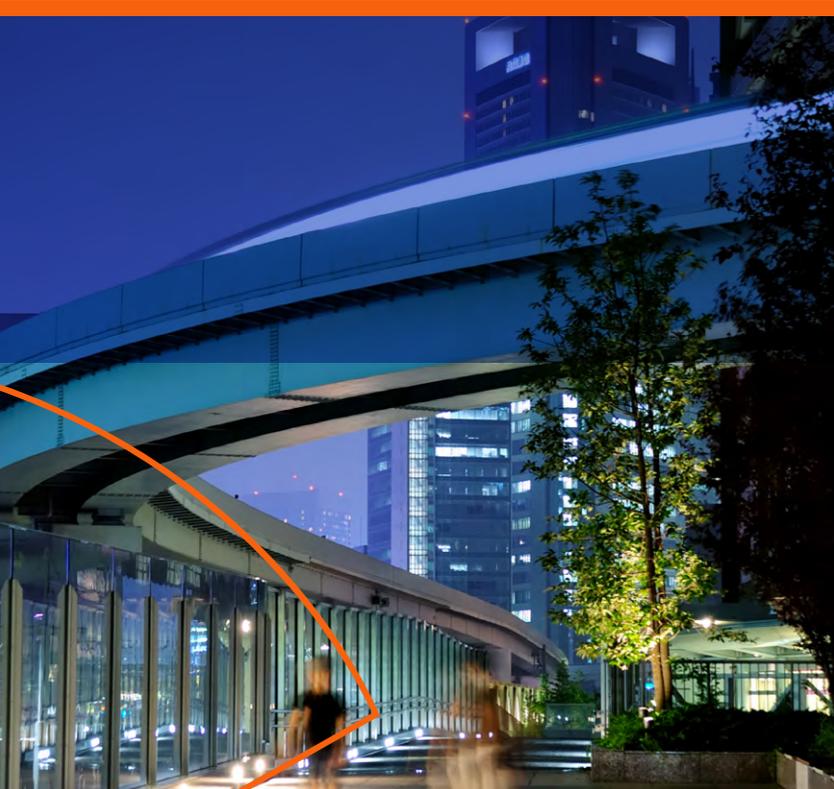
Source: Private Capital Transparency Data, MSCI ESG Research.

Valuation and carbon estimate data as of 06/30/2024.

Carbon estimates available for companies. Carbon data includes both reported and estimated emissions for companies. Estimates sourced from MSCI ESG Research. Carbon estimates and other figures are provided in alignment with Partnership for Carbon Accounting Financials (PCAF) standards

# Climate and Sustainability Benchmarks

## EMEA Carbon Footprint



	Gross Valuation (\$bn)	# of Funds	Carbon Data Coverage	Revenue Intensity (tCO <sub>2</sub> e / \$mm Sales)		Investment Intensity (tCO <sub>2</sub> e / \$mm EVIC)		Financed Emissions (Coverage Adjusted) (million tCO <sub>2</sub> e)	
				Scope 1+2	Scope 3	Scope 1+2	Scope 3	Scope 1+2	Scope 3
<b>EMEA Private Equity Funds</b>	\$653.8	837	~90%	52.3	409.5	29.6	199.0	19.3	130.1
Venture Capital	\$49.5	193	~95%	22.6	224.7	7.4	67.8	0.4	3.4
Early Stage	\$28.3	120	~95%	20.1	218.0	7.1	63.1	0.2	1.8
Expansion Capital	\$543.4	499	~90%	54.0	414.4	32.2	214.5	17.5	116.5
Buyout	\$604.3	644	~90%	54.9	425.4	31.5	210.8	19.1	127.4
<b>EMEA Private Debt Funds</b>	\$131.9	124	~80%	60.0	365.2	26.0	163.6	3.4	21.6
<b>EMEA Infrastructure Funds</b>	\$128.6	81	~80%	266.8	631.4	88.3	280.3	11.4	36.0

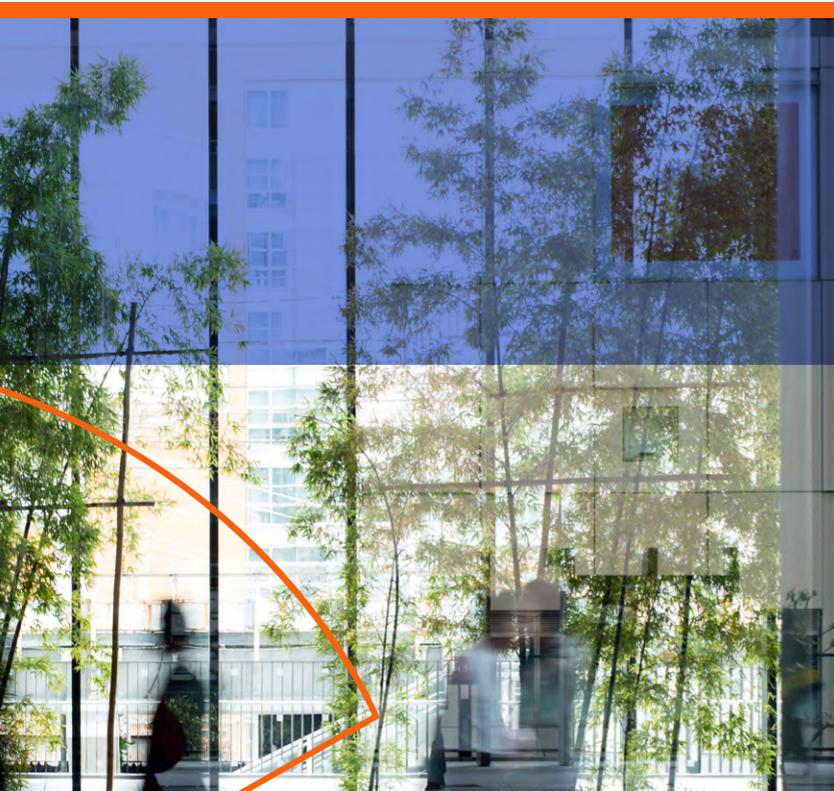
Source: Private Capital Transparency Data, MSCI ESG Research.

Valuation and carbon estimate data as of 06/30/2024.

Carbon estimates available for companies. Carbon data includes both reported and estimated emissions for companies. Estimates sourced from MSCI ESG Research. Carbon estimates and other figures are provided in alignment with Partnership for Carbon Accounting Financials (PCAF) standards.

# Climate and Sustainability Benchmarks

## APAC Carbon Footprint



	Gross Valuation (\$bn)	# of Funds	Carbon Data Coverage	Revenue Intensity (tCO <sub>2</sub> e / \$mm Sales)		Investment Intensity (tCO <sub>2</sub> e / \$mm EVIC)		Financed Emissions (Coverage Adjusted) (million tCO <sub>2</sub> e)	
				Scope 1+2	Scope 3	Scope 1+2	Scope 3	Scope 1+2	Scope 3
<b>APAC Private Equity Funds</b>	\$470.5	676	~90%	361.3	635.7	36.5	196.5	17.2	92.5
Venture Capital	\$185.6	342	~90%	27.7	421.9	12.7	171.3	2.4	31.8
Early Stage	\$69.2	200	~90%	30.2	320.5	14.2	155.2	1.0	10.7
Late Stage	\$51.9	46	~95%	25.4	299.4	13.0	142.0	0.7	7.4
Expansion Capital	\$12.3	44	~90%	70.1	349.8	42.1	160.7	0.5	2.0
Buyout	\$167.0	137	~95%	942.8	1,071.9	73.2	211.3	12.2	35.3
Private Equity Ex-Venture	\$284.9	334	~95%	574.3	776.9	52.2	213.4	14.9	60.8
<b>APAC Private Debt Funds</b>	\$20.2	42	~25%	166.5	1,040.9	96.9	625.4	2.0	12.6

Source: Private Capital Transparency Data, MSCI ESG Research.

Valuation and carbon estimate data as of 06/30/2024.

Carbon estimates available for companies. Carbon data includes both reported and estimated emissions for companies. Estimates sourced from MSCI ESG Research. Carbon estimates and other figures are provided in alignment with Partnership for Carbon Accounting Financials (PCAF) standards.

# Climate and Sustainability Benchmarks

## SASB Sustainability Dimension Analysis

Figures represent the proportion of valuation in the given Asset Class which is held in companies and properties exposed to the SASB Materiality Map Sustainability Dimensions and General Issue Categories. The SICS taxonomy categorizes all property investments under the category of IF-RE; therefore, those investments all share the same set of materiality issues.

Please refer to the Appendix for a glossary and description of methodology.

% of Asset Class Valuation Exposed to Each Sustainability Dimension as of 09/30/2024

Sustainability Dimension General Issue Category	Venture Capital	Expansion Capital	Buyout	Debt	Real Estate	Natural Resources	Infrastructure	Infrastructure
<b>Business Model &amp; Innovation</b>	35%	54%	61%	61%	99%	88%	66%	60%
Business Model Resilience	0%	1%	2%	3%	0%	59%	21%	4%
Materials Sourcing & Efficiency	9%	5%	23%	12%	0%	12%	31%	17%
Physical Impacts of Climate Change	4%	6%	9%	28%	98%	11%	13%	19%
Product Design & Lifecycle Management	20%	42%	41%	43%	98%	5%	29%	41%
Supply Chain Management	16%	11%	26%	12%	0%	14%	2%	18%
<b>Environment</b>	78%	55%	68%	71%	99%	99%	84%	75%
Air Quality	1%	3%	9%	8%	0%	71%	35%	10%
Ecological Impacts	0%	1%	4%	7%	1%	82%	23%	6%
Energy Management	76%	52%	60%	62%	99%	22%	44%	65%
GHG Emissions	3%	5%	11%	11%	0%	85%	39%	12%
Waste & Hazardous Materials Management	9%	8%	25%	18%	0%	15%	31%	19%
Water & Wastewater Management	4%	6%	17%	27%	98%	83%	36%	25%
<b>Human Capital</b>	87%	85%	74%	62%	2%	85%	58%	67%
Employee Engagement, Diversity & Inclusion	83%	74%	53%	45%	1%	1%	17%	49%
Employee Health & Safety	6%	14%	23%	20%	1%	83%	42%	20%
Labor Practices	2%	6%	10%	6%	1%	8%	6%	7%
<b>Leadership &amp; Governance</b>	87%	77%	64%	63%	1%	72%	69%	62%
Business Ethics	23%	41%	31%	31%	1%	68%	20%	26%
Competitive Behavior	62%	32%	25%	25%	0%	3%	30%	30%
Critical Incident Risk Management	1%	3%	6%	8%	0%	65%	38%	8%
Management of the Legal & Reg. Environment	0%	1%	3%	4%	0%	61%	5%	4%
Systemic Risk Management	56%	55%	26%	28%	0%	1%	34%	30%
<b>Social Capital</b>	95%	95%	90%	73%	1%	88%	52%	79%
Access & Affordability	14%	10%	13%	13%	0%	0%	20%	12%
Customer Privacy	66%	35%	26%	25%	0%	0%	19%	30%
Customer Welfare	14%	12%	19%	15%	0%	1%	3%	14%
Data Security	76%	51%	52%	44%	0%	0%	30%	48%
Human Rights & Community Relations	10%	5%	7%	6%	0%	75%	1%	7%
Product Quality & Safety	21%	20%	34%	24%	1%	11%	8%	25%
Selling Practices & Product Labeling	19%	40%	22%	25%	0%	2%	3%	18%

# 8 | Appendix



# Notes and Calculations

## Fund Benchmarks and Capital Flows

- Vintage is assigned based on the year of the initial cash flow date of the fund.
- Pooled results are calculated using the composite transaction (cash flow and valuation) activity of the underlying funds.
- Returns for periods of less than one year are not annualized.
- Valuation for fund-level figures represents the Limited Partners' share of the fund's net asset value (value of all assets - value of all liabilities).
- Distribution-to-Contribution Ratio is calculated as  $\text{Period Distributions} / \text{Period Contributions}$ .
- Contribution Rate is calculated as  $\text{Period Contributions} / (\text{Starting Dry Powder} + \text{Capitalization of Newly raised Funds})$ , and is annualized.
- Distribution Rate is calculated as  $\text{Period Distributions} / \text{Previous Valuation}$ , and is annualized.
- Net Cash Flow is calculated as  $\text{Contributions} - \text{Distributions}$ .
- Dry Powder is calculated as  $\text{Capitalization} - \text{Cumulative Contributions}$  for all active funds.

## Asset and Holdings Metrics

- Valuation for holdings level figures represents the fund's investment in a given entity and is gross of any carried interest allocation.
- Entry and exit data will default to specifically designated metrics disclosed within financial reporting. If none are available, data from two quarters after or one quarter before the event in question is used.
- Revenue and EBITDA growth rates are calculated using figures as reported by managers within financial reporting. We make no adjustments for companies that underwent corporate actions or other material events between reporting periods.
- Revenue and EBITDA Growth rates are calculated from companies that have a 12-month revenue and/or 12-month EBITDA available at both the end date (e.g., 2024-09-30) and one year prior to the end date (e.g., 2023-09-30). Negative EBITDA figures are excluded. Revenue and EBITDA Growth rates lower than -100% and higher than 1000% are excluded from both calculations.
- EBITDA Multiples are calculated as  $\text{Total Enterprise Value} / \text{12-month EBITDA}$ .

Net Debt Multiples are calculated as  $\text{Net Debt} / \text{12-month EBITDA}$ . Multiples lower than 0x and higher than 100x have been excluded from both calculations.

- TVPI (MOIC) is calculated as  $(\text{Valuation} + \text{Proceeds}) / \text{Total Invested}$ .
- % Realized is calculated as the percentage of holdings which have been fully exited through a sale, repayment, write off/shutdown, or any other realization event. Holdings in escrow are considered to be fully exited.
- Loss Ratio is calculated as the number of holdings with TVPI <1 divided by the total number of holdings.
- Capital Weighted Loss Ratio is calculated as the  $\text{Total Invested of holdings with TVPI} < 1$  divided by the  $\text{Total Invested of all holdings}$ .

## Climate and Sustainability Benchmarks

- Carbon intensity data includes both reported and estimated emissions data. Carbon estimates and other figures are provided in alignment with PCAF standards.
- Carbon estimates are sourced from MSCI ESG Research and are available for companies only; therefore, properties, infrastructure assets, and other investments are excluded from this analysis.
- Carbon figures represent the aggregate carbon intensity of the funds' underlying investments. Figures are calculated as a valuation-weighted sum with the latest available valuation and carbon intensity data for each investment.
- Revenue Intensity represents a company's annual carbon footprint per every 1 million USD in annual sales.
- Investment Intensity represents a company's annual carbon footprint per every 1 million USD in EVIC (Enterprise Value including Cash).
- Financed Emissions are adjusted for coverage and reflect the total emissions financed for each asset class (even if less than 100% of the underlying investments have available carbon figures).
- The SASB Materiality Map links the 77 SICs Industries to 26 sustainability-related business issues, called "General Issue Categories," which are organized under five Sustainability Dimensions. This framework identifies financially material issues that are likely to impact the financial condition or operating performance of a company or other operating entity. For more information, please visit: <https://www.sasb.org/standards/materiality-map/>.
- SICs: Sustainable Industry Classification System, which is a two-tiered hierarchical industry classification system. For more information, please visit: <https://www.sasb.org/standards/download/>.



# MSCI Private Capital Benchmarks

## Empowering smarter decisions in the private markets

Discover clear, precise and actionable benchmarks for private capital markets. Leverage MSCI's fund and asset-level performance data and cutting-edge private capital indexes to make informed, data-driven decisions. Gain a competitive edge, stay ahead of market trends, and act with clarity and confidence.

### **Interested in learning more?**

Subscribe to access exclusive insights and stay ahead in private markets.

# Contact us

## AMERICAS

US	+1 888 588 4567 (toll free)
Canada	+1 416 628 1007
Brazil	+55 11 4040 7830
Mexico	+52 81 1253 4020

## ASIA PACIFIC

China	North: 10800 852 1032 (toll free)	South: 10800 152 1032 (toll free)
Hong Kong	+852 2844 9333	
India	+91 22 6784 9160	
Malaysia	1800818185 (toll free)	
South Korea	00798 8521 3392 (toll free)	
Singapore	800 852 3749 (toll free)	
Australia	+612 9033 9333	
Taiwan	008 0112 7513 (toll free)	
Thailand	0018 0015 6207 7181 (toll free)	
Japan	+81 3 4579 0333	

## EUROPE, MIDDLE EAST & AFRICA

South Africa	+27 21 673 0103
Germany	+49 69 133 859 00
Switzerland	+41 22 817 9400
United Kingdom	+44 20 7618 2222
Italy	+39 025 849 0415
France	+33 17 6769 810

## About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

To learn more, please visit: [www.msci.com](http://www.msci.com)

The process for submitting a formal index complaint can be found on the index regulation page of MSCI's website at: [www.msci.com/index-regulation](http://www.msci.com/index-regulation)



# Notice and Disclaimer

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or disseminated in whole or in part without prior written permission from MSCI. All rights in the Information are reserved by MSCI and/or its Information Providers.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. **NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.**

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

The Information may include "Signals," defined as quantitative attributes or the product of methods or formulas that describe or are derived from calculations using historical data. Neither these Signals nor any description of historical data are intended to provide investment advice or a recommendation to make (or refrain from making) any investment decision or asset allocation and should not be relied upon as such. Signals are inherently backward-looking because of their use of historical data, and they are not intended to predict the future. The relevance, correlations and accuracy of Signals frequently will change materially.

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy. It is not possible to invest directly in an index. Exposure

to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. The calculation of indexes and index returns may deviate from the stated methodology. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such

security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on [www.msci.com](http://www.msci.com).

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of [msci.com](http://msci.com).

MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such, provided that applicable products or services from MSCI ESG Research may constitute investment advice. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. MSCI ESG and climate ratings, research and data are produced by MSCI ESG Research LLC, a subsidiary of MSCI Inc. MSCI ESG Indexes, Analytics and Real Estate are products of MSCI Inc. that utilize information from MSCI ESG Research LLC. MSCI Indexes are administered by MSCI Limited (UK) and MSCI Deutschland GmbH.

Please note that the issuers mentioned in MSCI ESG Research materials sometimes have commercial relationships with MSCI ESG Research and/or MSCI Inc. (collectively, "MSCI") and that these relationships create potential conflicts of interest. In some cases, the issuers

or their affiliates purchase research or other products or services from one or more MSCI affiliates. In other cases, MSCI ESG Research rates financial products such as mutual funds or ETFs that are managed by MSCI's clients or their affiliates, or are based on MSCI Inc. Indexes. In addition, constituents in MSCI Inc. equity indexes include companies that subscribe to MSCI products or services. In some cases, MSCI clients pay fees based in whole or part on the assets they manage. MSCI ESG Research has taken a number of steps to mitigate potential conflicts of interest and safeguard the integrity and independence of its research and ratings. More information about these conflict mitigation measures is available in our Form ADV, available at <https://adviserinfo.sec.gov/firm/summary/169222>.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P Global Market Intelligence. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and S&P Global Market Intelligence.

MIFID2/MIFIR notice: MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data.

Privacy notice: For information about how MSCI collects and uses personal data, please refer to our Privacy Notice at <https://www.msci.com/privacy-pledge>.

©2025 MSCI Inc. All rights reserved