



INVESTMENT GROUP

San Jose Federated City Employees' Retirement System

Fourth Quarter 2022

Private Markets Program
PUBLIC

San Jose Federated City Employees' Retirement System Private Markets Program

Program Snapshot | As of December 31, 2022

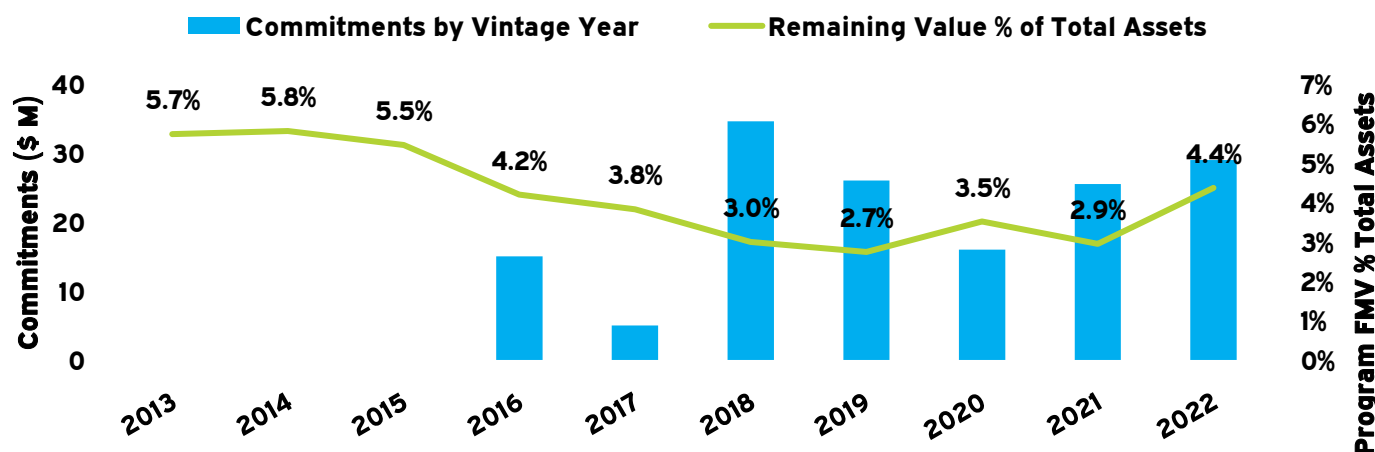
Snapshot

By Account

Account Type	Inception Year	Committed (\$ M)	Unfunded (\$ M)	Contributed (\$ M)	Distributed (\$ M)	Remaining Value (\$ M)	TVPI (X)	IRR (%)	PME IRR (%)
Legacy Private Equity	2005	174.3	0.0	161.9	218.9	35.8	1.57	8.1	6.8
NB Fund of One	2017	350.1	159.8	198.2	45.1	314.6	1.81	24.7	2.6
Private Debt	2010	301.1	60.8	294.4	238.0	121.7	1.22	6.2	5.0
Real Estate	2007	279.5	67.8	242.8	207.1	109.9	1.31	7.1	2.1
Real Assets	2016	92.3	40.3	57.6	18.4	61.2	1.38	13.3	8.6
Venture Capital	2021	64.8	49.3	15.6	0.0	15.3	0.98	NM	NM
Total		1,262.1	378.0	970.5	727.5	658.5	1.43	9.1	NA

Introduction

As of December 31, 2022, the San Jose Federated City Employees' Retirement System had committed \$301.1 million to 16 private debt partnerships and 2 co-investments. The reported fair value of the aggregate Private Debt Program was \$121.7 million at December 31, 2022, which equates to 4.4% of the overall Retirement System, above the 3.0% policy target.



Program Status

No. of Investments	18
Committed (\$ M)	301.1
Contributed (\$ M)	294.4
Distributed (\$ M)	238.0
Remaining Value (\$ M)	121.7

Performance Since Inception

	Program
DPI	0.81x
TVPI	1.22x
IRR	6.2%

Commitments

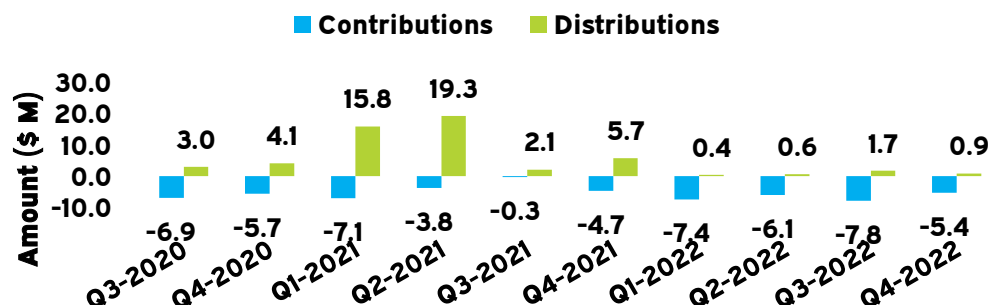
Commitments This Quarter

Fund	Region	Amount (\$ M)
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None to report.

Cash Flows

Recent Quarterly Cash Flows



Largest Contributions This Quarter

Fund	Vintage	Region	Amount (\$ M)
Octagon Fund IV	2022	North America	1.35
HPS Opps II	2022	North America	1.00
HPS Special Sits.	2019	Global: Developed	0.99

Largest Distributions This Quarter

Fund	Vintage	Region	Amount (\$ M)
Crestline Fund II	2020	North America	0.53
HPS Special Sits.	2019	Global: Developed	0.14
Eagle Point Income	2020	North America	0.12

By Vintage

Group	Number	Committed (\$ M)	Contributed (\$ M)	Unfunded (\$ M)	Distributed (\$ M)	Remaining Value (\$ M)	Exposure (\$ M)	DPI (X)	TVPI (X)	IRR (%)	Peer IRR ¹ (%)
2010	3	150.0	181.8	0.0	179.3	47.0	47.0	0.99	1.25	5.4	10.6
2016	1	15.0	12.0	12.7	11.7	2.6	15.3	0.98	1.19	5.5	9.4
2017	1	5.0	5.0	0.0	6.1	0.0	0.0	1.22	1.22	12.9	8.7
2018	3	34.6	38.2	3.8	34.4	12.2	16.0	0.90	1.22	15.7	10.4
2019	2	26.0	23.6	4.5	2.5	29.6	34.0	0.11	1.36	15.7	10.7
2020	2	16.0	12.6	6.5	3.7	9.4	15.9	0.29	1.04	3.1	9.5
2021	3	25.5	11.3	14.2	0.2	10.9	25.1	0.02	0.98	NM	8.2
2022	3	29.0	9.9	19.1	0.0	10.0	29.2	0.00	1.02	NM	NM
Total	18	301.1	294.4	60.8	238.0	121.7	182.5	0.81	1.22	6.2	NA

¹ Source: Burgiss

Fund Performance: Sorted By Vintage And Strategy

By Investment	Vintage	Committed (\$ M)	Contributed (\$ M)	Unfunded (\$ M)	Distributed (\$ M)	Remaining Value (\$ M)	TVPI (X)	Peer TVPI ¹ (X)	IRR (%)	Peer IRR ² (%)
GSO Direct Lending	2010	50.0	43.4	0.0	45.0	4.4	1.14	1.39	4.4	10.6
Medley II	2010	50.0	50.0	0.0	52.0	4.9	1.14	1.39	2.4	10.6
White Oak DL	2010	50.0	88.3	0.0	82.3	37.8	1.36	1.39	8.2	10.6
Cross Ocean ESS II	2016	15.0	12.0	12.7	11.7	2.6	1.19	1.29	5.5	9.4
ArrowMark Sep Acct	2017	5.0	5.0	0.0	6.1	0.0	1.22	1.23	12.9	8.7
Arbour Lane II	2018	8.0	15.4	0.0	7.6	10.8	1.20	1.24	14.5	10.4
Crestline Co-Inv. I	2018	1.6	1.6	0.0	0.9	1.4	1.43	1.24	13.6	10.4
Octagon CLO III	2018	25.0	21.3	3.8	25.9	0.0	1.22	1.24	16.8	10.4
Cross Ocean ESS III	2019	18.0	17.2	2.3	2.0	22.0	1.40	1.18	14.9	10.7
HPS Special Sits.	2019	8.0	6.4	2.2	0.5	7.5	1.26	1.18	21.0	10.7
Crestline Fund II	2020	8.0	5.2	5.9	3.2	2.4	1.09	1.12	10.9	9.5
Eagle Point Income	2020	8.0	7.4	0.6	0.5	7.0	1.01	1.12	0.6	9.5
Arbour Lane III	2021	9.0	3.8	5.2	0.0	3.6	0.93	1.06	NM	8.2
Strategic Value V	2021	7.5	3.0	4.5	0.0	3.2	1.08	1.06	NM	8.2
AG Credit Fund II	2021	9.0	4.5	4.5	0.2	4.1	0.96	1.06	NM	8.2
Eagle Point II	2022	10.0	1.2	8.8	0.0	1.3	1.04	NM	NM	NM

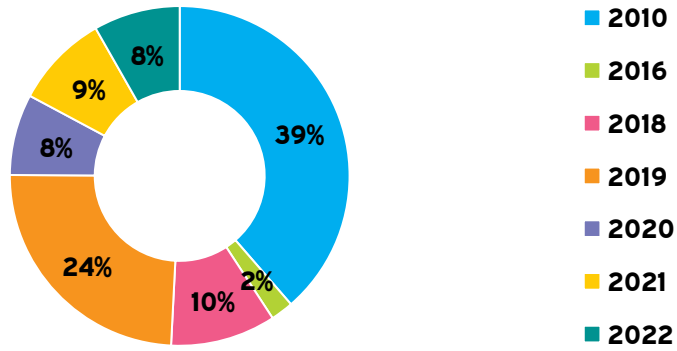
¹ Source: Burgiss

² Source: Burgiss

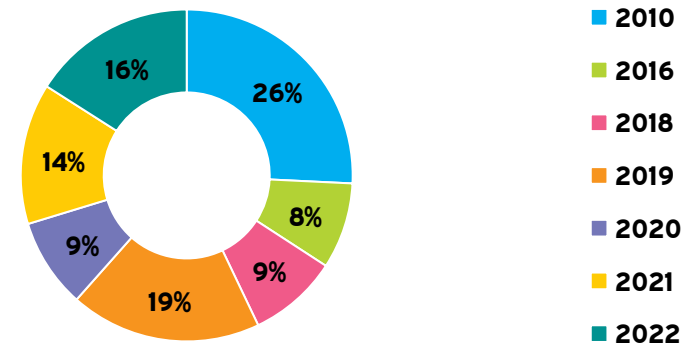
By Investment	Vintage	Committed (\$ M)	Contributed (\$ M)	Unfunded (\$ M)	Distributed (\$ M)	Remaining Value (\$ M)	TVPI (X)	Peer TVPI ¹ (X)	IRR (%)	Peer IRR ² (%)
Octagon Fund IV	2022	9.0	7.7	1.4	0.0	7.8	1.02	NM	NM	NM
HPS Opps II	2022	10.0	1.0	9.0	0.0	1.0	0.97	NM	NM	NM
Total		301.1	294.4	60.8	238.0	121.7	1.22	NA	6.2	NA

By Vintage

Percent of FMV

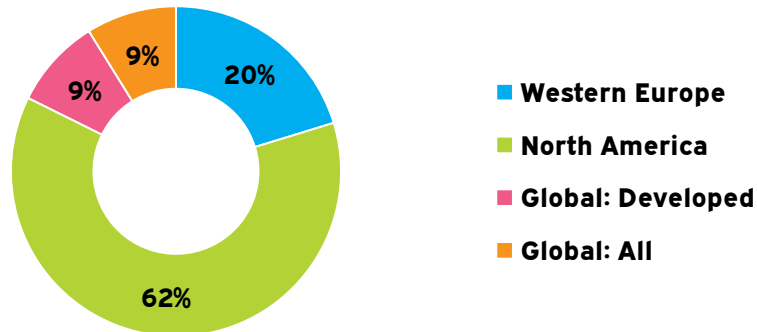


Percent of Exposure

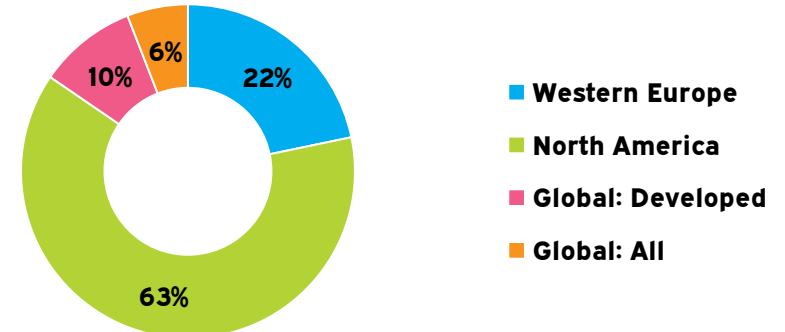


By Geographic Focus

Percent of FMV

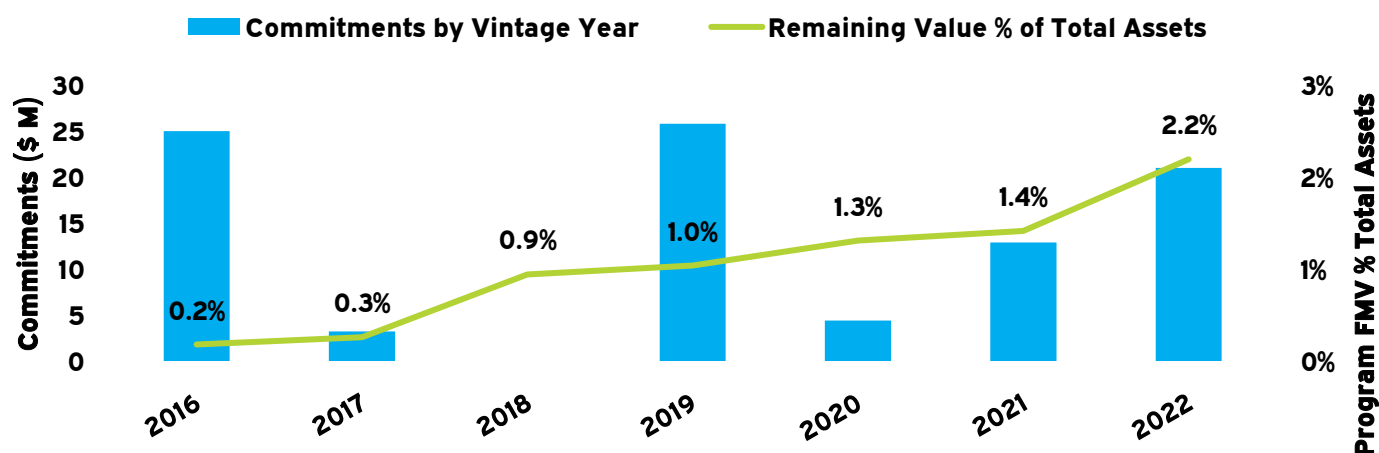


Percent of Exposure



Introduction

As of December 31, 2022, the Retirement System had committed \$92.3 million to 12 real assets funds and 2 co-investments. The total reported fair value of real assets investments was \$61.2 million at December 31, 2022, which equates to 2.2% of the overall Retirement System, versus a 3.0% policy target.



Program Status

No. of Investments	14
Committed (\$ M)	92.3
Contributed (\$ M)	57.6
Distributed (\$ M)	18.4
Remaining Value (\$ M)	61.2

Performance Since Inception

	Program
DPI	0.32x
TVPI	1.38x
IRR	13.3%

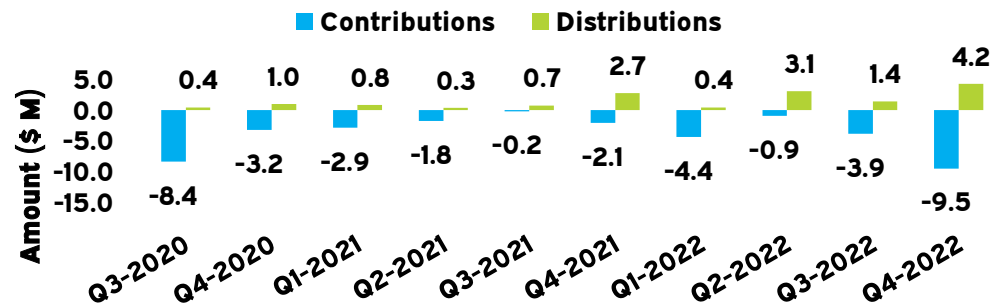
Commitments

Commitments This Quarter

Fund	Region	Amount (M)
H.I.G. IS Partners	Global: Developed	11.00

Cash Flows

Recent Quarterly Cash Flows



Largest Contributions This Quarter

Fund	Vintage	Region	Amount (\$ M)
Kimmeridge Fund VI	2022	North America	7.65
GIP III	2016	Global: Developed	0.54
GIP IV	2020	Global: Developed	0.41

Largest Distributions This Quarter

Fund	Vintage	Region	Amount (\$ M)
GIP III	2016	Global: Developed	3.14
Kimmeridge Energy V	2019	North America	0.65
Lime Rock VIII	2017	North America	0.39

By Vintage

Group	Number	Committed (\$ M)	Contributed (\$ M)	Unfunded (\$ M)	Distributed (\$ M)	Remaining Value (\$ M)	Exposure (\$ M)	DPI (X)	TVPI (X)	IRR (%)	Peer IRR ¹ (%)
2016	1	25.0	25.4	2.6	11.6	26.0	28.6	0.46	1.48	10.7	10.0
2017	1	3.2	3.3	0.5	1.1	3.9	4.3	0.32	1.48	13.8	10.8
2019	5	25.8	15.0	12.5	5.7	15.0	27.5	0.38	1.38	22.9	12.5
2020	2	4.4	3.7	0.9	0.0	3.8	4.6	0.00	1.02	1.6	10.0
2021	2	12.9	1.9	11.0	0.0	3.5	14.5	0.00	1.84	NM	5.5
2022	3	21.0	8.3	12.8	0.0	9.1	21.9	0.00	1.10	NM	NM
Total	14	92.3	57.6	40.3	18.4	61.2	101.5	0.32	1.38	13.3	NA

¹ Source: Burgiss

Fund Performance: Sorted By Vintage And Strategy

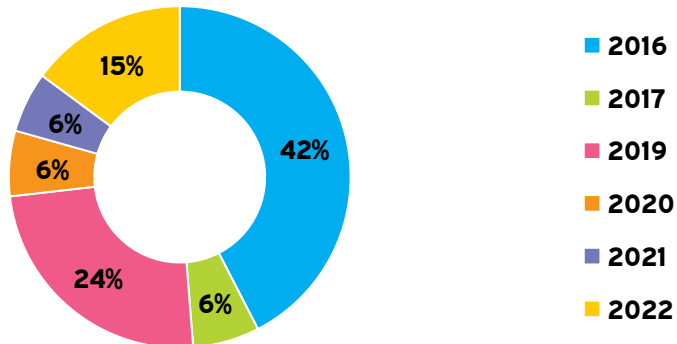
By Investment	Vintage	Committed (\$ M)	Contributed (\$ M)	Unfunded (\$ M)	Distributed (\$ M)	Remaining Value (\$ M)	TVPI (X)	Peer TVPI ¹ (X)	IRR (%)	Peer IRR ² (%)
GIP III	2016	25.0	25.4	2.6	11.6	26.0	1.48	1.44	10.7	10.0
Lime Rock VIII	2017	3.2	3.3	0.5	1.1	3.9	1.48	1.37	13.8	10.8
Kimmeridge Energy V	2019	3.8	5.1	0.0	3.1	5.8	1.75	1.22	40.9	12.5
Mountain Capital II	2019	6.0	1.3	4.7	0.3	1.0	1.04	1.22	NM	12.5
Orion Mine III	2019	5.0	3.8	1.3	0.2	4.5	1.22	1.22	12.1	12.5
Tembo Capital III	2019	6.0	1.9	4.2	0.0	1.9	1.02	1.22	NM	12.5
Lime Rock New Energy	2019	5.0	2.9	2.3	2.0	1.8	1.33	1.22	15.8	12.5
Energy Co-Invest	2020	1.2	1.2	0.0	0.0	1.2	1.00	1.14	0.0	10.0
GIP IV	2020	3.2	2.5	0.9	0.0	2.6	1.03	1.14	3.5	10.0
H.I.G. IS Partners	2021	11.0	0.0	11.0	0.0	NM	NM	1.04	NM	5.5
Crestline Co-Inv. II	2021	1.9	1.9	0.0	0.0	3.6	1.89	1.04	NM	5.5
Kimmeridge Fund VI	2022	9.0	7.6	1.5	0.0	7.9	1.03	NM	NM	NM
Aether Seed Partners	2022	6.0	0.3	5.7	0.0	1.0	2.91	NM	NM	NM
Hull Street II	2022	6.0	0.3	5.7	0.0	0.2	0.69	NM	NM	NM
Total		92.3	57.6	40.3	18.4	61.2	1.38	NA	13.3	NA

¹ Source: Burgiss

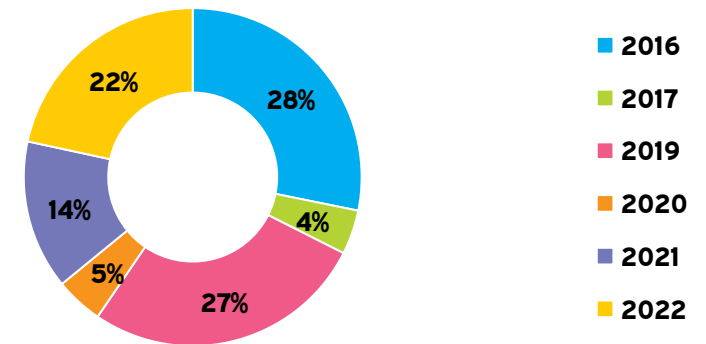
² Source: Burgiss

By Vintage

Percent of FMV

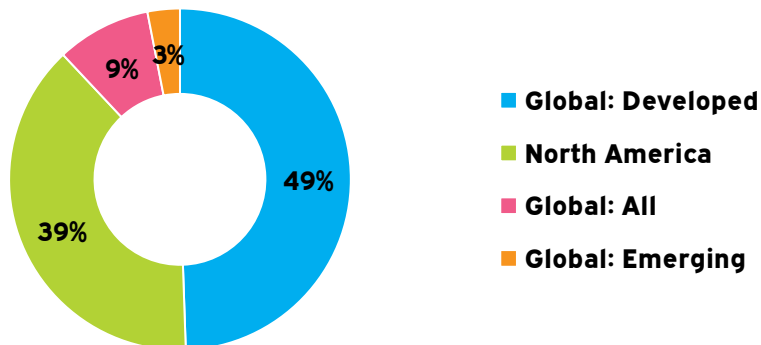


Percent of Exposure

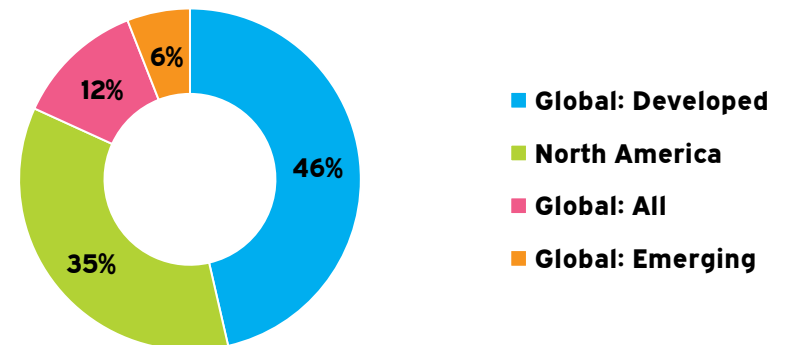


By Geographic Focus

Percent of FMV

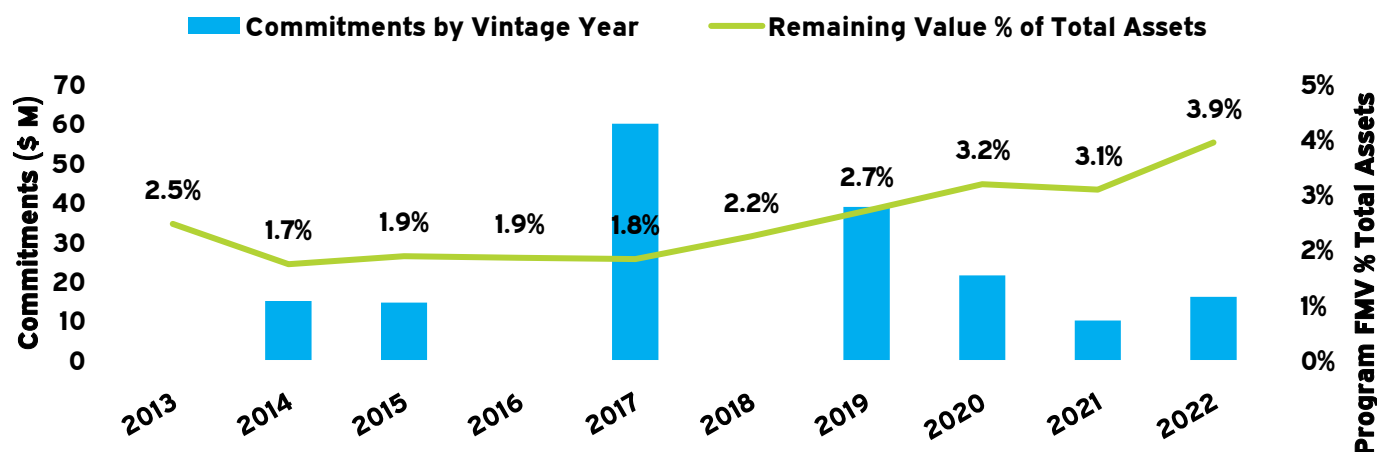


Percent of Exposure



Introduction

As of December 31, 2022, the Retirement System had committed a total of \$279.5 million to 22 closed-end real estate funds. The Real Estate Program's reported fair value of real estate investments was \$109.9 million at December 31, 2022, which equates to 3.9% of the overall Retirement System, versus a 3.0% policy target.



Program Status

No. of Investments	22
Committed (\$ M)	279.5
Contributed (\$ M)	242.8
Distributed (\$ M)	207.1
Remaining Value (\$ M)	109.9

Performance Since Inception

	Program
DPI	0.85x
TVPI	1.31x
IRR	7.1%

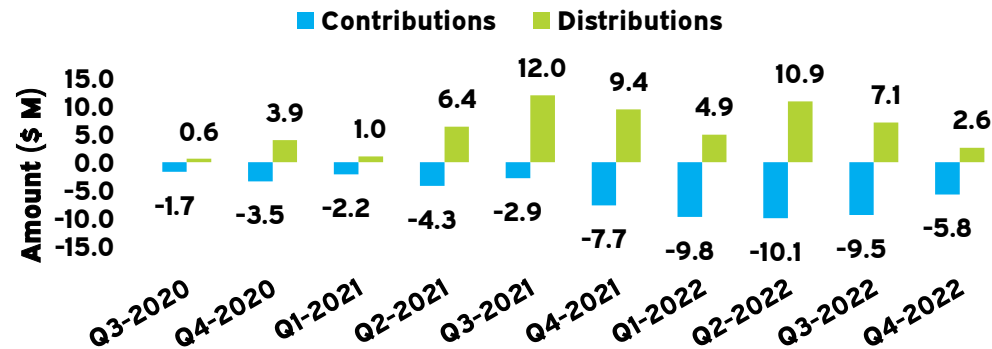
Commitments

Commitments This Quarter

Fund	Region	Amount (M)
DRA Master XI	North America	13.00

Cash Flows

Recent Quarterly Cash Flows



Largest Contributions This Quarter

Fund	Vintage	Region	Amount (\$ M)
Exeter V	2020	North America	1.57
Praedium X	2019	North America	1.17
DRA X	2019	North America	0.87

Largest Distributions This Quarter

Fund	Vintage	Region	Amount (\$ M)
Torchlight VI	2017	North America	0.85
GEM VI	2017	North America	0.50
EPISO 5	2019	Western Europe	0.41

By Vintage

Group	Number	Committed (\$ M)	Contributed (\$ M)	Unfunded (\$ M)	Distributed (\$ M)	Remaining Value (\$ M)	Exposure (\$ M)	DPI (X)	TVPI (X)	IRR (%)	Peer IRR ¹ (%)
2005	1	20.0	30.5	0.0	40.3	0.0	0.0	1.32	1.32	5.2	1.4
2006	1	20.0	18.2	0.0	8.8	0.0	0.0	0.48	0.48	-10.9	-1.7
2007	2	27.6	28.4	0.0	41.2	0.0	0.0	1.45	1.45	8.8	2.9
2011	1	15.0	16.0	0.0	35.8	1.3	1.3	2.24	2.32	21.7	12.2
2014	1	15.0	17.8	0.7	18.4	5.0	5.7	1.04	1.32	8.2	8.4
2015	1	14.6	13.3	1.3	5.5	12.5	13.8	0.42	1.36	7.9	9.2
2017	3	60.0	68.9	5.4	50.0	41.5	46.9	0.72	1.33	12.9	13.0
2019	4	38.9	27.7	13.3	5.2	24.6	38.0	0.19	1.08	6.5	11.8
2020	3	21.5	13.6	8.2	1.6	16.3	24.5	0.11	1.31	35.6	13.6
2021	1	10.0	1.5	8.5	0.0	1.4	9.9	0.00	0.90	NM	13.8
2022	2	16.0	6.8	9.4	0.4	7.3	16.7	0.06	1.13	NM	NM
2023	2	21.0	0.0	21.0	0.0	NM	21.0	0.00	NM	NM	NM
Total	22	279.5	242.8	67.8	207.1	109.9	177.7	0.85	1.31	7.1	NA

¹ Source: Burgiss

Fund Performance: Sorted By Vintage And Strategy

By Investment	Vintage	Committed (\$ M)	Contributed (\$ M)	Unfunded (\$ M)	Distributed (\$ M)	Remaining Value (\$ M)	TVPI (X)	Peer TVPI ¹ (X)	IRR (%)	Peer IRR ² (%)
DRA V	2005	20.0	30.5	0.0	40.3	0.0	1.32	1.05	5.2	1.4
GEAM Value Add	2006	20.0	18.2	0.0	8.8	0.0	0.48	0.86	-10.9	-1.7
DRA VI	2007	9.7	10.6	0.0	17.5	0.0	1.65	1.15	10.6	2.9
Fidelity RE III	2007	17.9	17.9	0.0	23.7	0.0	1.33	1.15	7.3	2.9
DRA VII	2011	15.0	16.0	0.0	35.8	1.3	2.32	1.41	21.7	12.2
DRA VIII	2014	15.0	17.8	0.7	18.4	5.0	1.32	1.37	8.2	8.4
EPISO 4	2015	14.6	13.3	1.3	5.5	12.5	1.36	1.40	7.9	9.2
Torchlight VI	2017	30.0	39.3	2.2	24.5	22.0	1.19	1.40	8.3	13.0
GEM VI	2017	10.0	8.3	1.8	5.7	4.7	1.25	1.40	13.9	13.0
DRA IX	2017	20.0	21.4	1.4	19.8	14.8	1.61	1.40	17.7	13.0
Rockpoint VI	2019	6.5	5.3	1.5	0.8	5.5	1.19	1.20	14.4	11.8
DRA X	2019	10.0	8.5	3.4	3.0	7.6	1.25	1.20	25.3	11.8
EPISO 5	2019	12.4	10.5	1.9	1.2	8.6	0.94	1.20	-4.1	11.8
Praedium X	2019	10.0	3.4	6.6	0.1	2.9	0.89	1.20	NM	11.8
Torchlight Debt VII	2020	6.0	3.3	3.0	0.3	3.2	1.06	1.16	NM	13.6
HIG Realty IV	2020	10.0	4.9	5.1	1.3	5.0	1.28	1.16	NM	13.6

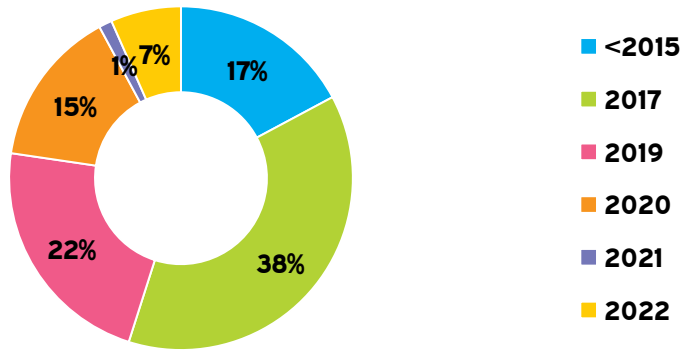
¹ Source: Burgiss

² Source: Burgiss

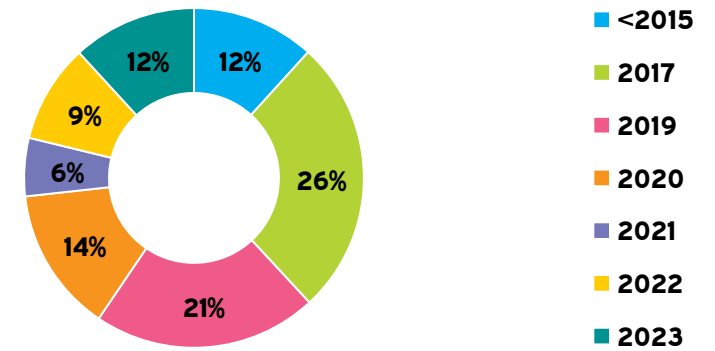
By Investment	Vintage	Committed (\$ M)	Contributed (\$ M)	Unfunded (\$ M)	Distributed (\$ M)	Remaining Value (\$ M)	TVPI (X)	Peer TVPI ¹ (X)	IRR (%)	Peer IRR ² (%)
Exeter V	2020	5.5	5.4	0.1	0.0	8.0	1.48	1.16	37.6	13.6
Centerbridge RE II	2021	10.0	1.5	8.5	0.0	1.4	0.90	1.12	NM	13.8
AIGGRE U.S. Fund IV	2022	10.0	5.0	5.2	0.0	6.2	1.24	NM	NM	NM
GCP SecureSpace	2022	6.0	1.8	4.2	0.4	1.1	0.83	NM	NM	NM
DRA Master XI	2023	13.0	0.0	13.0	0.0	NM	NM	NM	NM	NM
Exeter Industrial VI	2023	8.0	0.0	8.0	0.0	0.0	NM	NM	NM	NM
Total		279.5	242.8	67.8	207.1	109.9	1.31	NA	7.1	NA

By Vintage

Percent of FMV

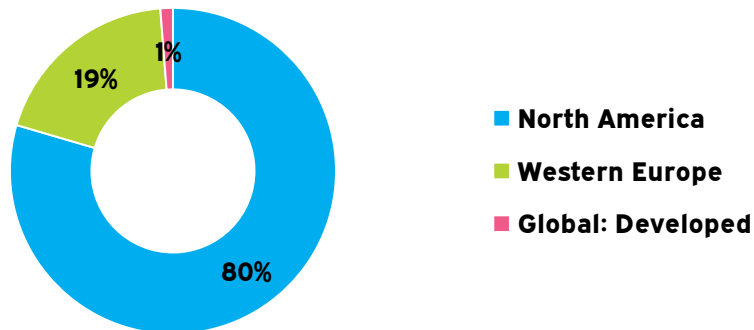


Percent of Exposure

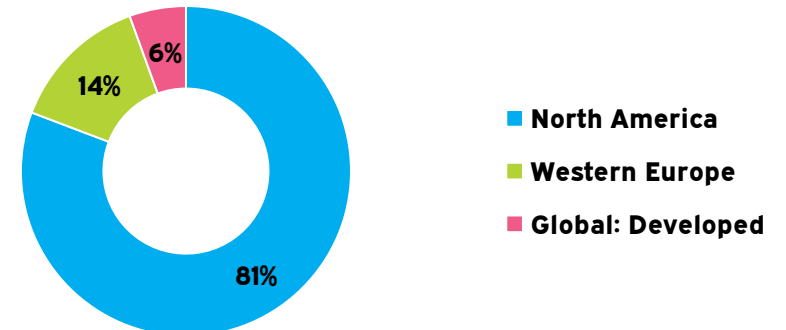


By Geographic Focus

Percent of FMV

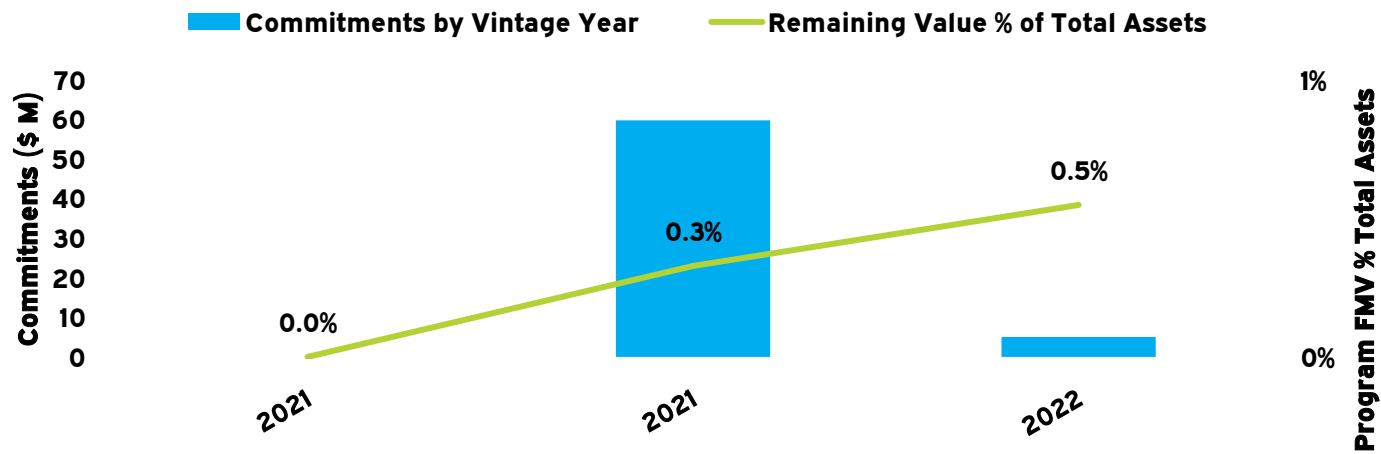


Percent of Exposure



Introduction

As of December 31, 2022, the Plan had committed \$64.8 million to four venture capital funds. The total reported fair value of the Venture Capital Program's investments was \$15.3 million at December 31, 2022, which equates to 0.5% of the overall Retirement System, versus a 4.0% policy target.



Program Status

No. of Investments	4
Committed (\$ M)	64.8
Contributed (\$ M)	15.6
Distributed (\$ M)	0.0
Remaining Value (\$ M)	15.3

Performance Since Inception

	Program
DPI	0.00x
TVPI	0.98x
IRR	NM

Commitments

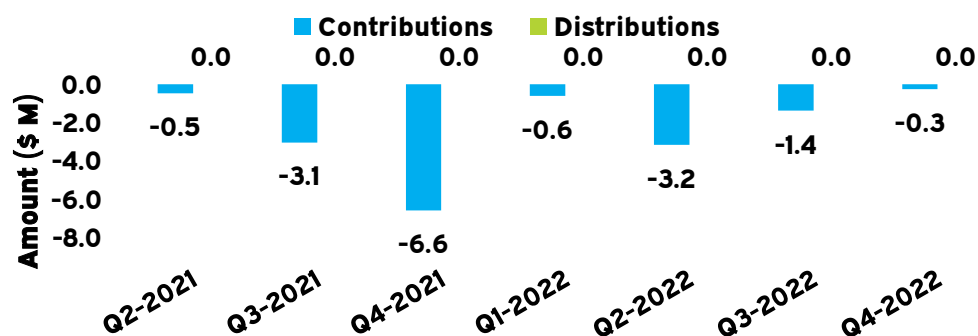
Commitments This Quarter

Fund	Region	Amount (M)
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None to report.

Cash Flows

Recent Quarterly Cash Flows



Largest Contributions This Quarter

Fund	Vintage	Region	Amount (\$ M)
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Soma Capital III	2021	North America	0.25
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Largest Distributions This Quarter

Fund	Vintage	Region	Amount (\$ M)
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None to report.

By Vintage

Group	Number	Committed (\$ M)	Contributed (\$ M)	Unfunded (\$ M)	Distributed (\$ M)	Remaining Value (\$ M)	Exposure (\$ M)	DPI (X)	TVPI (X)	IRR (%)	Peer IRR ¹ (%)
2021	3	59.8	11.6	48.2	0.0	11.8	59.9	0.00	1.01	NM	0.4
2022	1	5.0	3.9	1.1	0.0	3.5	4.7	0.00	0.90	NM	NM
Total	4	64.8	15.6	49.3	0.0	15.3	64.6	0.00	0.98	NM	NA

¹ Source: Burgiss

Fund Performance: Sorted By Vintage And Strategy

By Investment	Vintage	Committed (\$ M)	Contributed (\$ M)	Unfunded (\$ M)	Distributed (\$ M)	Remaining Value (\$ M)	TVPI (X)	Peer TVPI ¹ (X)	IRR (%)	Peer IRR ² (%)
Innovation Endeavors IV	2021	4.8	1.6	3.2	0.0	1.5	0.95	1.00	NM	0.4
Soma Capital III	2021	5.0	2.0	3.0	0.0	2.2	1.08	1.00	NM	0.4
Transpose Platform	2021	50.0	8.1	42.0	0.0	8.1	1.01	1.00	NM	0.4
Fin VC Horizons II	2022	5.0	3.9	1.1	0.0	3.5	0.90	NM	NM	NM
Total		64.8	15.6	49.3	0.0	15.3	0.98	NA	NM	NA

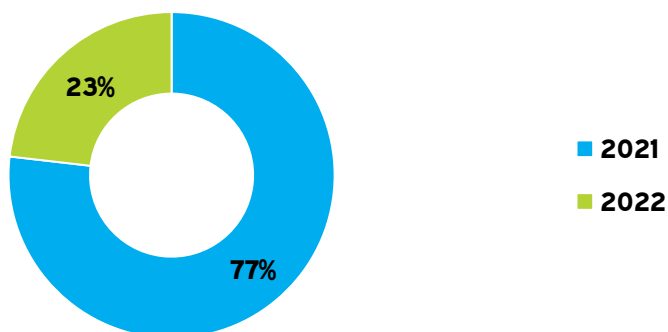
¹ Source: Burgiss

² Source: Burgiss

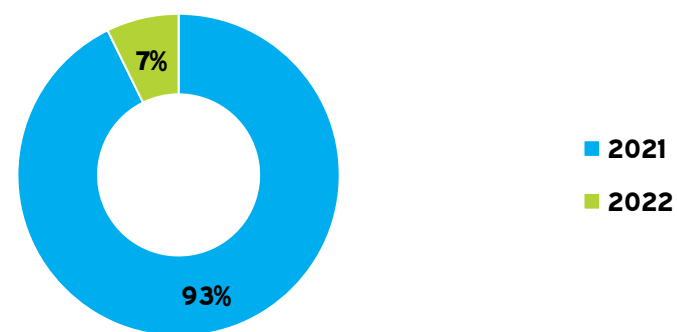
Fund Diversification As of December 31, 2022

By Vintage

Percent of FMV

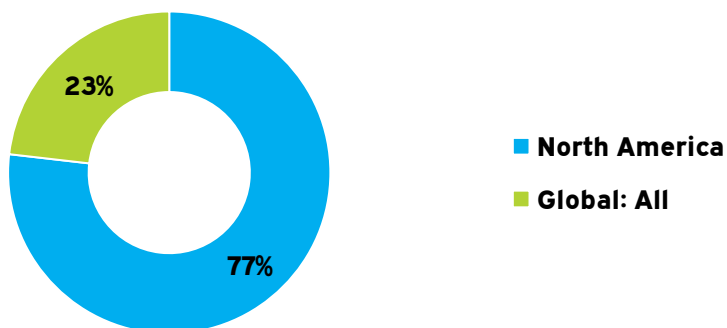


Percent of Exposure

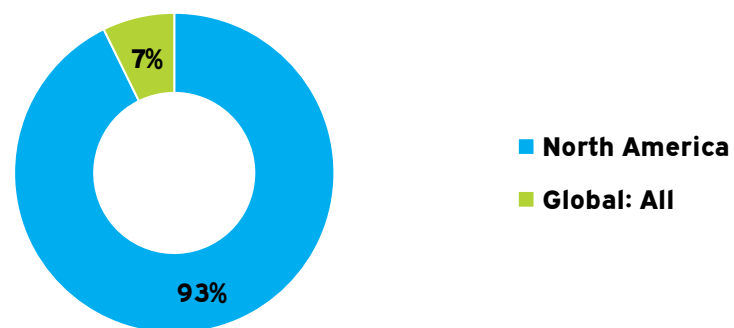


By Geographic Focus

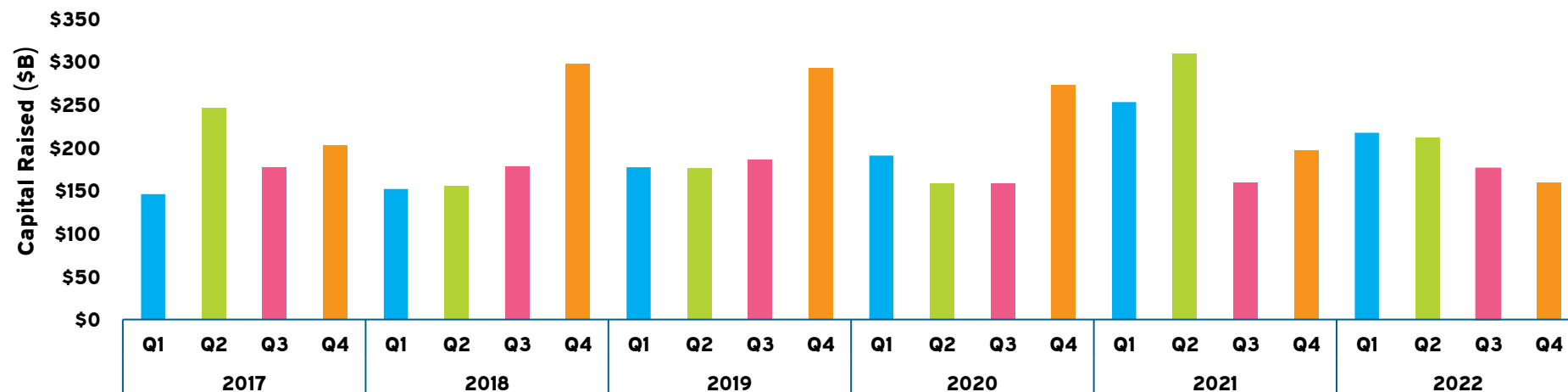
Percent of FMV



Percent of Exposure



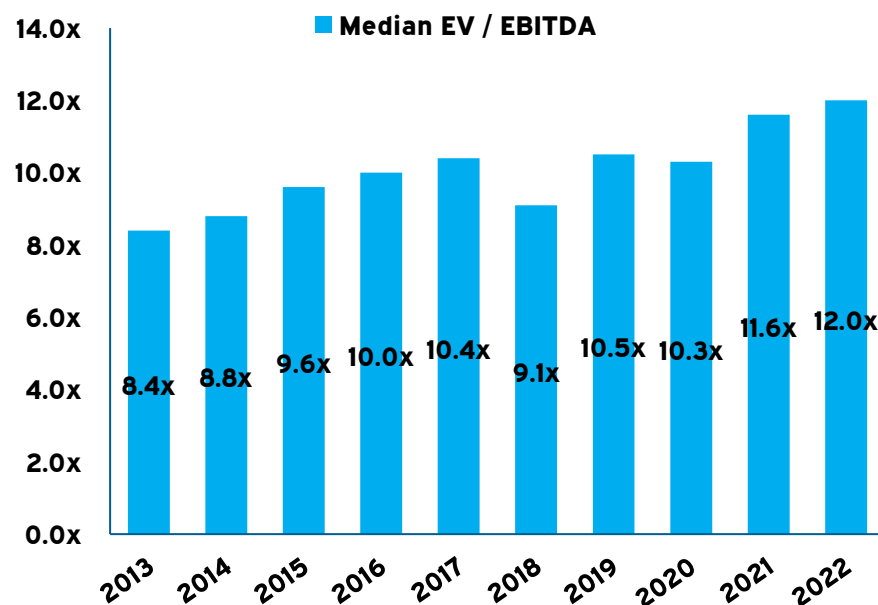
Private Equity Global Fundraising¹



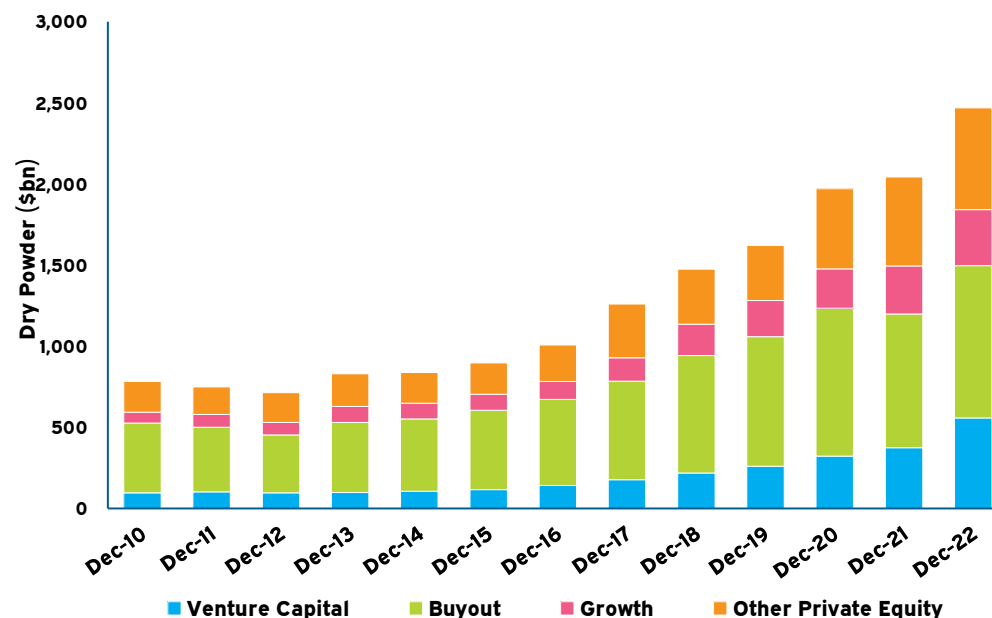
Fundraising activity for private equity funds in the fourth quarter of 2022 decreased by 9% compared to the previous quarter, with \$159.2 billion raised, and represents the lowest amount of capital raised for the fourth quarter over the last six years. While 2021 was an exceptional year for private equity markets, there have been signs of moderation of activity throughout 2022, especially in the second half of the year. On an annual basis, fundraising was down 17% in 2022 compared to 2021, with \$764.0 billion raised. The post-COVID boost in fundraising activity has diminished, and evidence is growing of a sustained slowdown on the back of macroeconomic and geopolitical concerns resulting from the war in Ukraine, inflationary pressures, and rising interest rates. Additionally, the denominator effect on investors' portfolios is among the factors expected to continue driving softer fundraising in coming quarters. As public equity and fixed income markets declined in 2022, private equity allocations are proportionately higher as a percentage of investors' overall portfolios, given the delay in private equity valuations reflecting those of public markets. Therefore, some investors have found themselves relatively closer to long-term target allocations, which could curb their appetite for fresh allocations. That said, the fourth quarter saw some optimism return, as public markets managed a gentle rebound from the year's lows, making it the only up quarter of the year. Per Preqin, despite overall concerns with public markets, most investors still plan to continue committing capital to private equity in 2023 even as the aggregate amount of fundraising is expected to remain weak. According to Preqin data, there were 9,080 funds raising in the market as of year-end, with aggregate capital targeted of over \$1.7 trillion. Both metrics are pushing record highs and therefore paint a picture of highly competitive fundraising. As a result, funds have been spending more time on the road than ever, with 57% of private equity funds (and 45% of venture capital funds) closed having been in market for more than 18 months compared to an average of 30% (and 31% for venture capital) from 2017-2021.

¹ Preqin

Purchase Price Breakdown, All LBOs¹



Dry Powder by Fund Type²

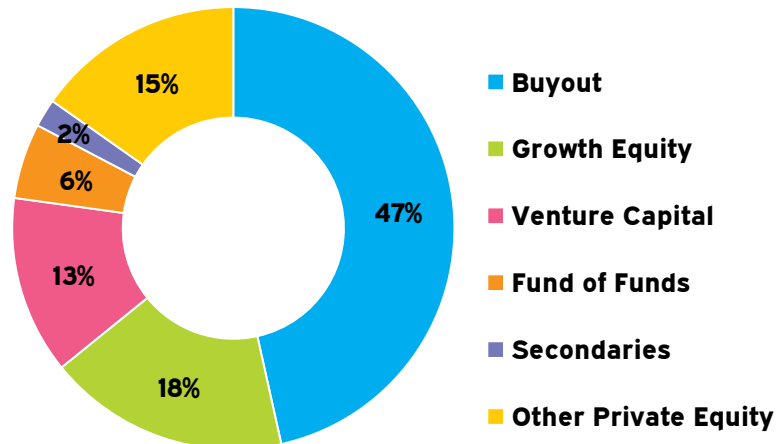


Relative to 2021, the median private equity purchase price multiple has increased from 11.6x EBITDA to 12.0x EBITDA in 2022. This represents a 3% increase from 2021 relative to the 13% increase observed in 2021 from 2020. Despite the continued rise of purchase price multiples on the year, there appear to be signs of downward pressure on private equity valuations as deal activity slowed in the second half of 2022 as a result of rising interest rates, the decrease in public market valuations, and an imbalance between expectations of buyers and sellers. Dry powder levels have increased by approximately 21% from Q4 2021 and remain at all-time highs. Dry powder will remain high as long as more capital is being raised than is being deployed, and in the near-term, investors may expect to continue to see high purchase prices as a result of the high levels of capital competing for deals. That said, private equity deal valuation multiples have also experienced downward pressure and started to lower with depressed valuations in the public markets as well as higher interest rates, which have increased borrowing costs.

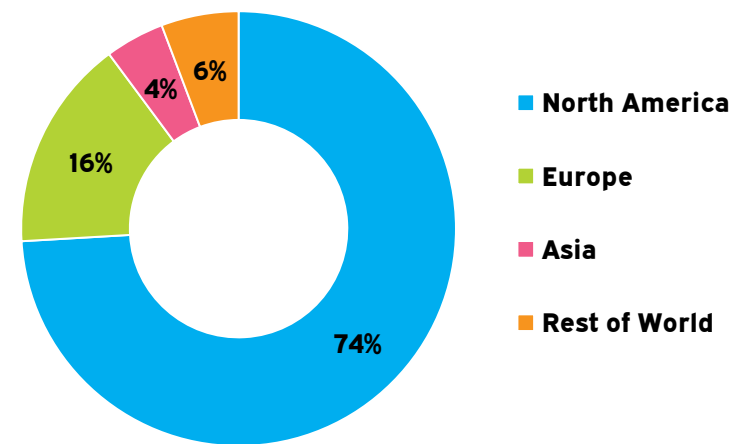
¹ Preqin. Data pulled on April 7, 2023.

² Preqin. Data pulled on April 7, 2023.

Capital Raised by Strategy¹



Capital Raised by Geography²



Buyout (47% of all private equity capital raised) and Growth Equity (18%) funds represented the most popular private equity sub-strategies during the fourth quarter of 2022. Buyout funds increased from 43% of capital raised in Q3 2022 to 47% in the fourth quarter of 2022, and Growth Equity increased from 15% to 18% of capital raised. Venture Capital strategies, as a percentage of total capital raised, decreased by 14% from Q3 2022. Fund of Funds, Secondaries, and Other Private Equity, which includes co-investment and hybrid vehicles, increased from 15% to 23%, collectively, through the fourth quarter compared to the previous quarter.

North America-focused vehicles continued to represent the majority of funds raised during the fourth quarter, representing 74% of total capital. This represents an increase from 66% in the prior quarter. Alternatively, as a percentage of total capital raised, commitments to Europe and Asia decreased by 2% and 10%, respectively, during the fourth quarter. As China-focused funds have made up the lion's share of funds raised in the region in recent years, the decrease in capital raised by Asia-focused funds highlights investors' risk aversion toward China in the wake of China's zero-COVID-19 policy, among other geopolitical and economic challenges. Overall, private equity investors continued to favor commitments to North America-focused funds, and investor appetite for Rest of World increased slightly over the quarter while commitments to Europe- and Asia-focused vehicles decreased.

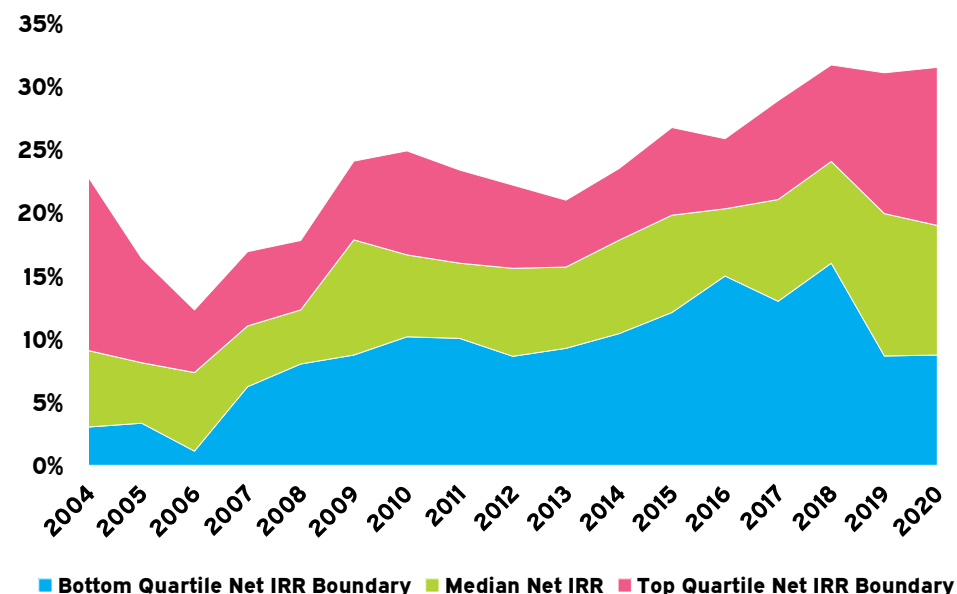
¹ Preqin

² Preqin

Private Equity Performance by Horizon¹

Horizon	Private Equity	Buyout	Venture Capital	Growth Equity
1 Year to 9/2022	3.5%	5.1%	(4.7)%	(5.5)%
3 Years to 9/2022	20.5	20.8	19.0	19.4
5 Years to 9/2022	18.2	18.2	17.0	18.6
10 Years to 9/2022	16.5	17.1	14.7	17.2

Private Equity Performance by Vintage Year²



As of September 30, 2022, private equity returns weakened significantly, generating a 3.5% IRR over the trailing 12 months through Q3 2022. This represents an ~11% drop from the trailing one-year returns as of Q2 2022, which shows that private equity returns are starting to reflect the decline of valuations observed in the public markets throughout 2022 and the dampening effects of inflationary pressures, rising interest rates, and geopolitical concerns on performance. One-year returns have decreased significantly across each private equity strategy with Growth funds experiencing the largest drop of 10.4% from 4.9% one-year returns as of Q2 2022 to (5.5)% as of Q3 2022. In general, however, performance has been strong in each vintage year since the Global Financial Crisis. Buyout, Venture, and Growth funds have all generally performed well over the various horizons on an absolute basis, with Buyout and Growth funds slightly outperforming Venture funds across longer time periods as of Q3 2022. Lastly, the spread between first and third quartile performance in private equity has grown consistently since the Global Financial Crisis; 2007 vintage funds reported an 10.7% spread while 2020 vintage funds reported a 22.8% spread.

¹ Preqin Horizon IRRs as of 9/30/2022. Data as of 12/31/2022 not yet available.

² Preqin, Private Equity – All, Quartile Returns as of 12/31/2022. Data pulled on April 7, 2023.

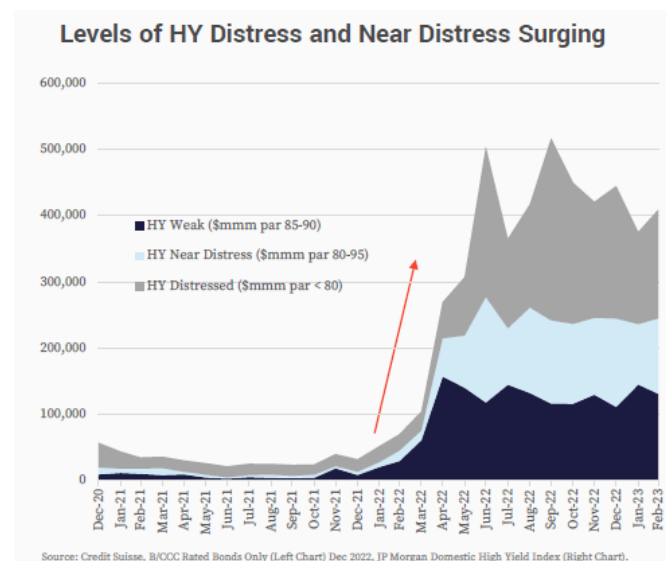
Private Credit: Q4 Market Review

After a tumultuous 2022 where credit markets weathered the fastest rate hike in history (Chart 1), private credit assets generally displayed resilience with respect to rising rates and deteriorating liquidity conditions. The default rate ticked up from historically low levels to 2.1% from the prior quarter's 1.6%.¹ Forward looking estimates for loan defaults range from 2.5% to 6.0% depending on the rating agency or sell side research group. Despite marginal credit deterioration, valuations modestly rebounded in the fourth quarter possibly reflecting improvement in the broader inflation outlook. The high yield market which suffered one of its worst years in 2022 with an increasing volume of issues trading at stressed or distressed levels (Chart 2) reversed price momentum early in the first quarter of 2023 as risk appetites recovered.

Chart 1: Fed Funds Rate Hiking Cycles



Chart 2: High Yield Trading at Stressed/Distressed Levels²



¹ Proskauer's Private Credit Default Index Q4 2022 (as quoted in Private Debt Investor, March 2023).

² Source: MidOcean Partners (Q1 2023)

Private Credit: Market Environment

Prior to the collapse of Silicon Valley Bank and Silvergate Bank in 2023, private credit managers across strategy groups reported increased deal flow coming to private markets as even the largest money center banks were suffering balance sheet mark-to-market losses on securities held for sale or to maturity (Chart 3). In addition, the decline in new CLO issuance corresponding to lower M&A volumes left fewer options for borrowers in need of capital (Chart 4).

Chart 3: Bank Balance Sheet Weakness¹

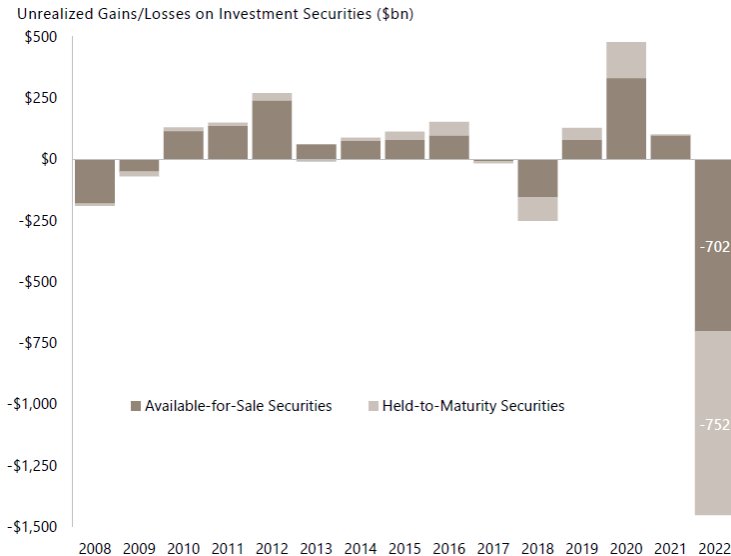
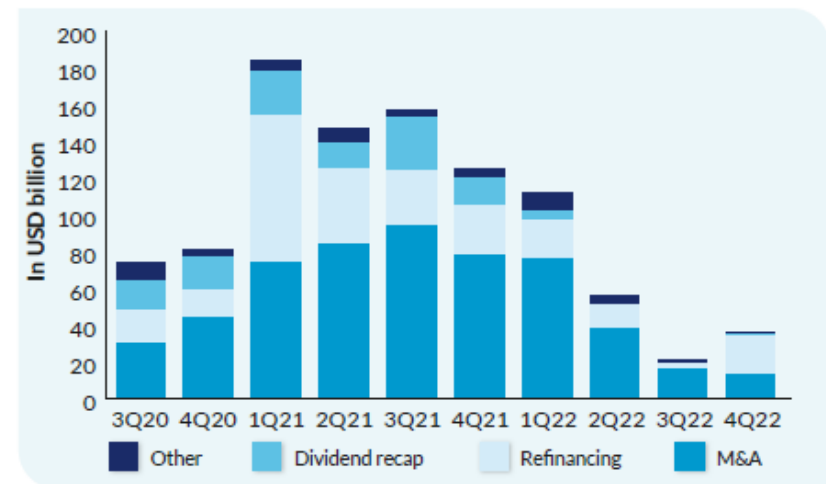


Chart 4: US New Issue Institutional Loan Volume²



Source: S&P LCD, January 2023. For illustrative purposes only

¹ Source: Apollo Global Management (March 2023): FDIC as of September 2022.

² Source: Partners Group, Quarterly Loan Commentary (Q4 2022)

Private Credit: Deal Activity

Private credit managers across strategy groups are seeing increased deal activity with generally improved lender terms. The most straight forward case is senior secured corporate direct lending which is benefiting not only from the lift in base rates (ex. SOFR, Euribor, LIBOR) but also from an increase in the spread earned over that base rate which has expanded by 50-150 basis points to SOFR+625-700bps.¹ The interest outlook is uncertain, but market participants are still not generally forecasting any near-term retrenchment in rates. Outside of economic terms, private credit fund managers are reporting an improvement in the ability extract stronger covenants and downside protective deal terms such as amortization, cash sweeps, and upfront fees.

Chart 5: Yield-to-Maturity at Deal Close¹

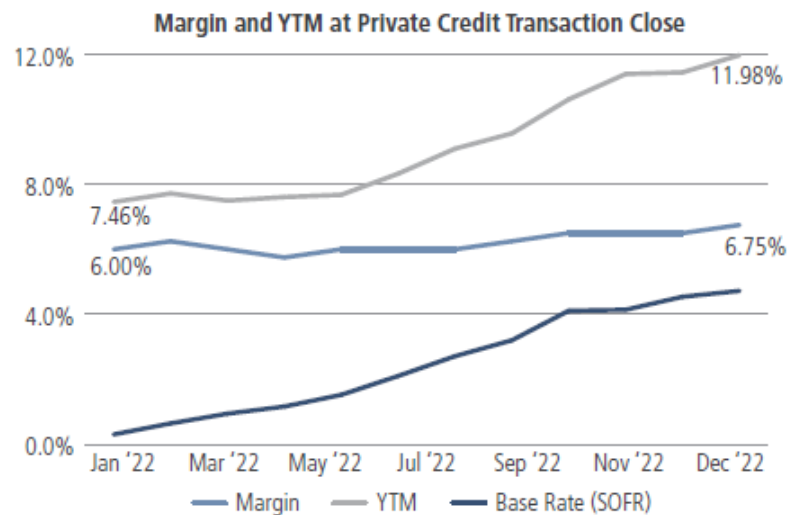
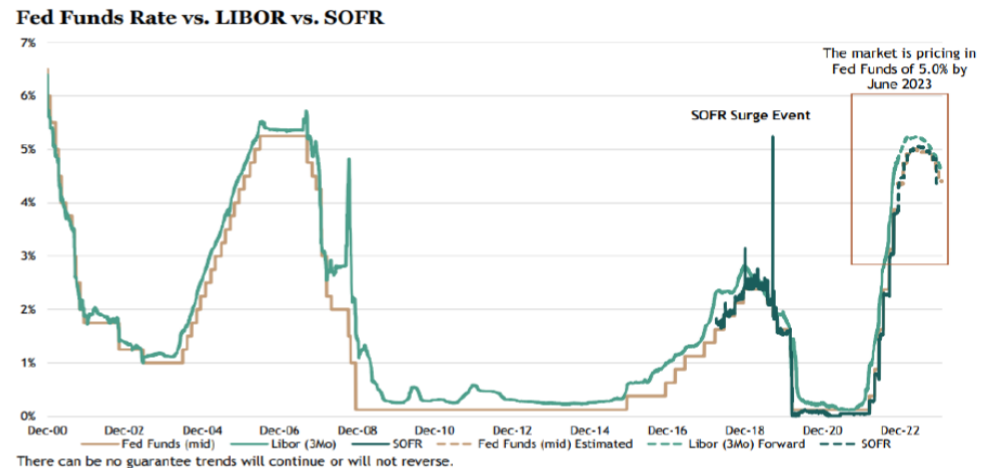


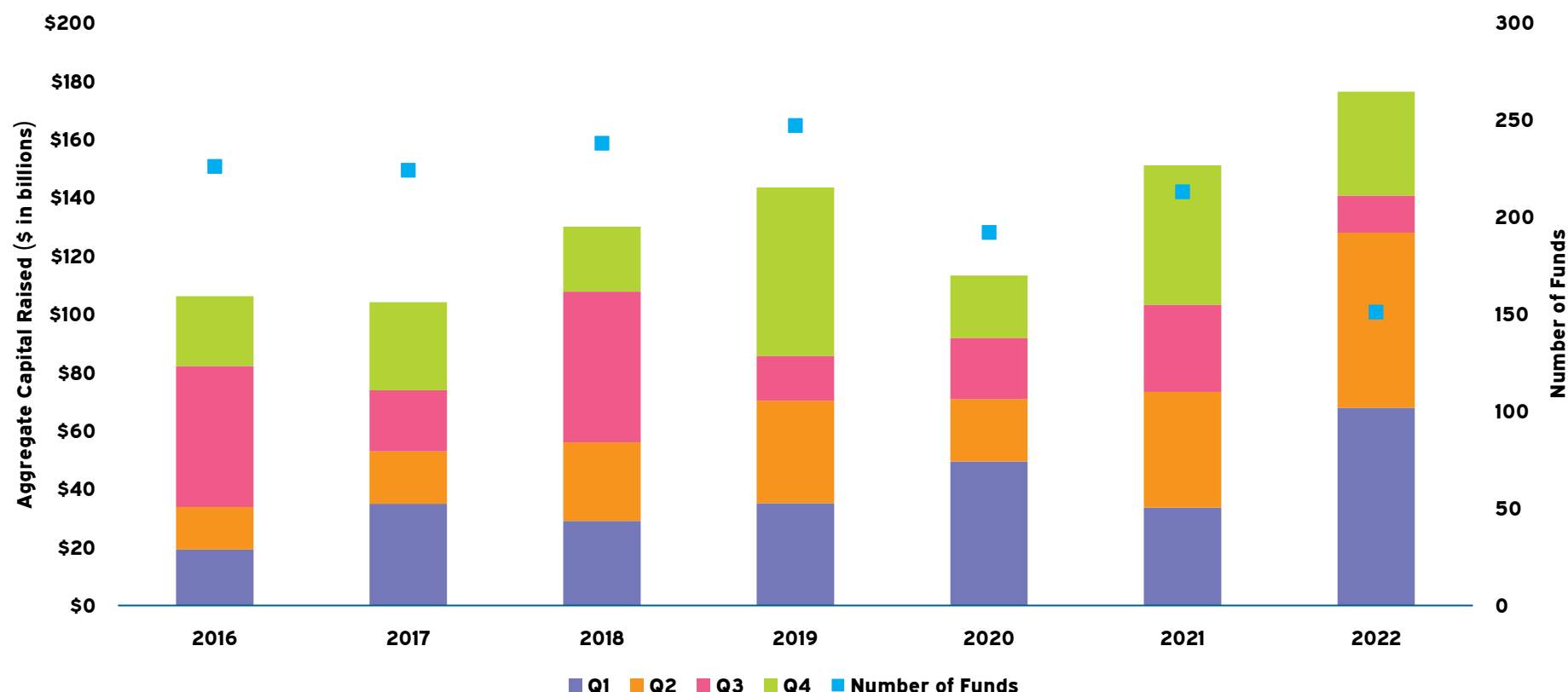
Chart 6: Market Expects Further Rate Hikes²



¹ Neuberger Berman: "Private Credit: An All Weather Asset Class "(White Paper, March 2023)

² Bloomberg, S&P/LCD. Forecast produced by Blackstone (as of January 4, 2023).

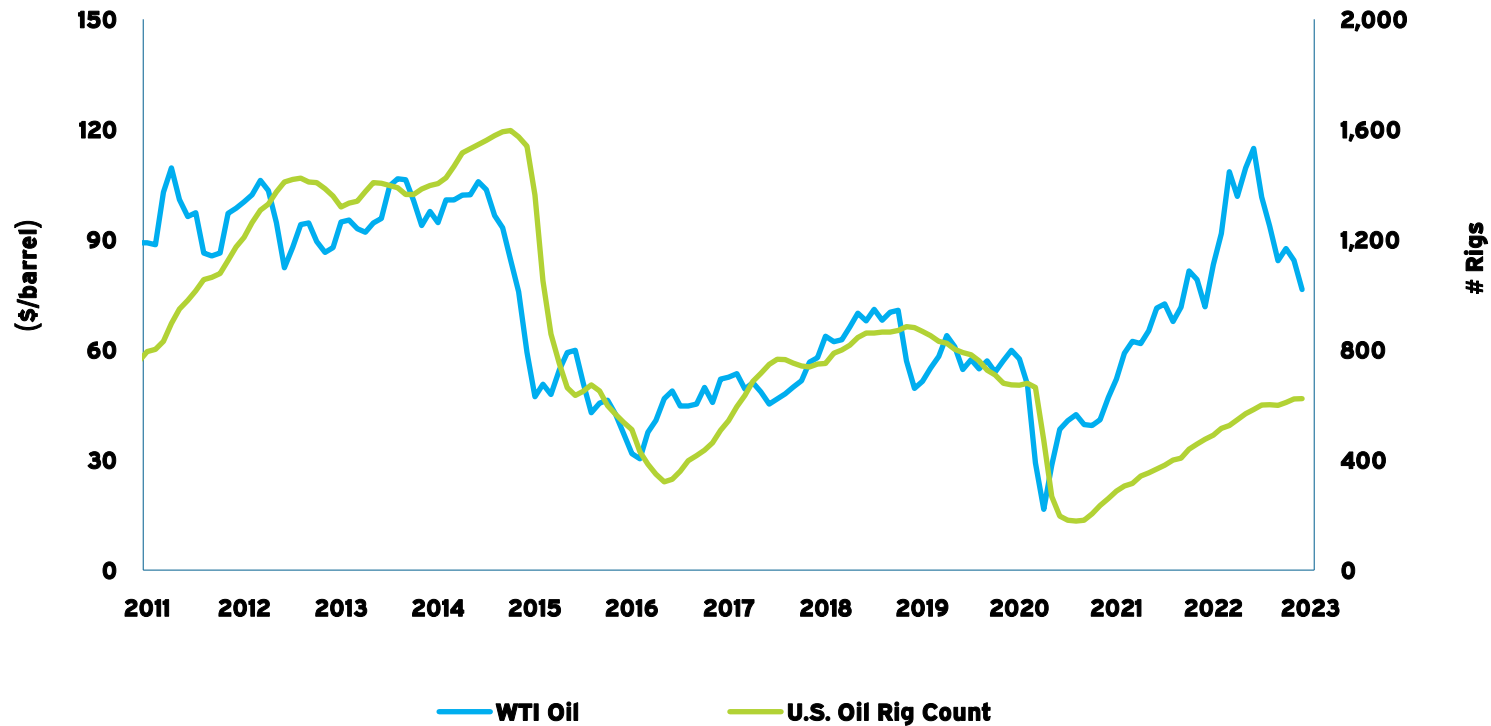
Global Quarterly Unlisted Natural Resources Fundraising¹



During the fourth quarter, \$36 billion was raised across 37 funds with the average fund size totaling approximately \$1.0 billion of commitments. Fourth quarter activity was a rebound from a slow third quarter, but fundraising was still well below the pace set in the first half of 2022. With the strong fourth quarter, 2022 ended with nearly \$180 billion in commitments raised. The total came from a smaller number of funds, as the average fund size raised in 2022 was \$1.2 billion versus \$0.7 billion in 2021.

¹ Source: Preqin Private Capital Fundraising Update, 4Q 2022.

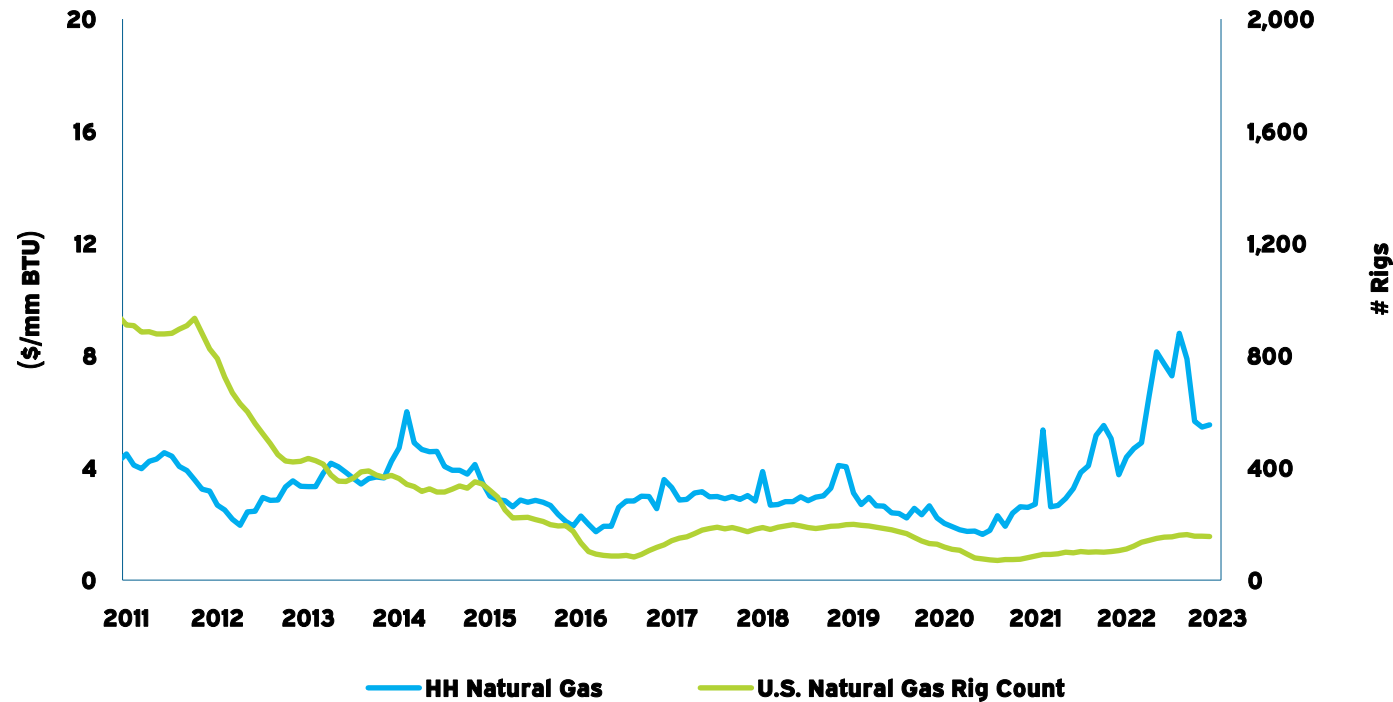
Oil Price vs. Active US Rigs¹



Inflationary pressures during 2022 helped send oil and gasoline prices above \$100 and \$5, respectively, during the summer. In response to high energy prices, the Biden Administration began releasing inventories of oil from the Strategic Petroleum Reserve (“SPR”). The SPR releases, along with global recessionary concerns, helped drive oil and gasoline prices lower during the fourth quarter. However, the SPR is at its lowest levels since the mid 1980s. WTI oil prices were down 9% during the quarter at \$76 per barrel but were up 7% relative to one year prior. The number of rigs increased by 148 from one year prior to a total of 623. The U.S. produced approximately 12.1 million boepd in December 2022. While gasoline prices for regular blend in the U.S. dropped 13% to an average of \$3.49 per gallon, they are still up 3% from one year prior.

¹ Source: EIA and Baker Hughes.

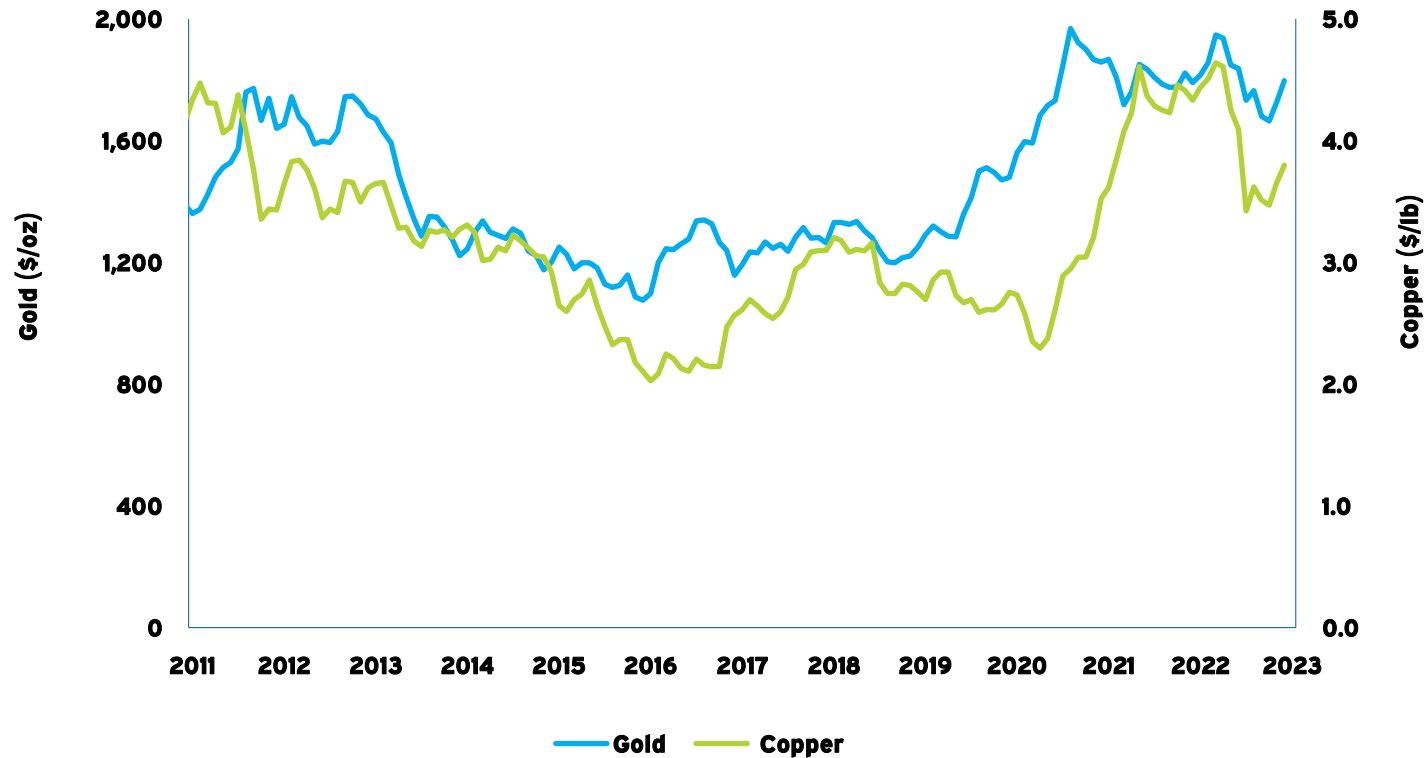
Natural Gas Price vs. Active US Rigs¹



Winter weather in Europe and the U.S. was warmer than expected, and natural gas demand to heat homes was down. Natural gas held in storage has been building, and an energy crisis in Europe has so far been averted. LNG export terminal projects continue to be developed in the U.S., and import terminals continue to be constructed in Europe. Henry Hub gas prices ended the quarter at \$5.53/mm BTU, a quarterly decrease of 30% and an annual increase of 47%. The U.S. natural gas rig count decrease by seven to 155 during the quarter. The U.S. produced a record 113.1 billion cubic feet of natural gas per day in October 2022.

¹ Source: EIA and Baker Hughes.

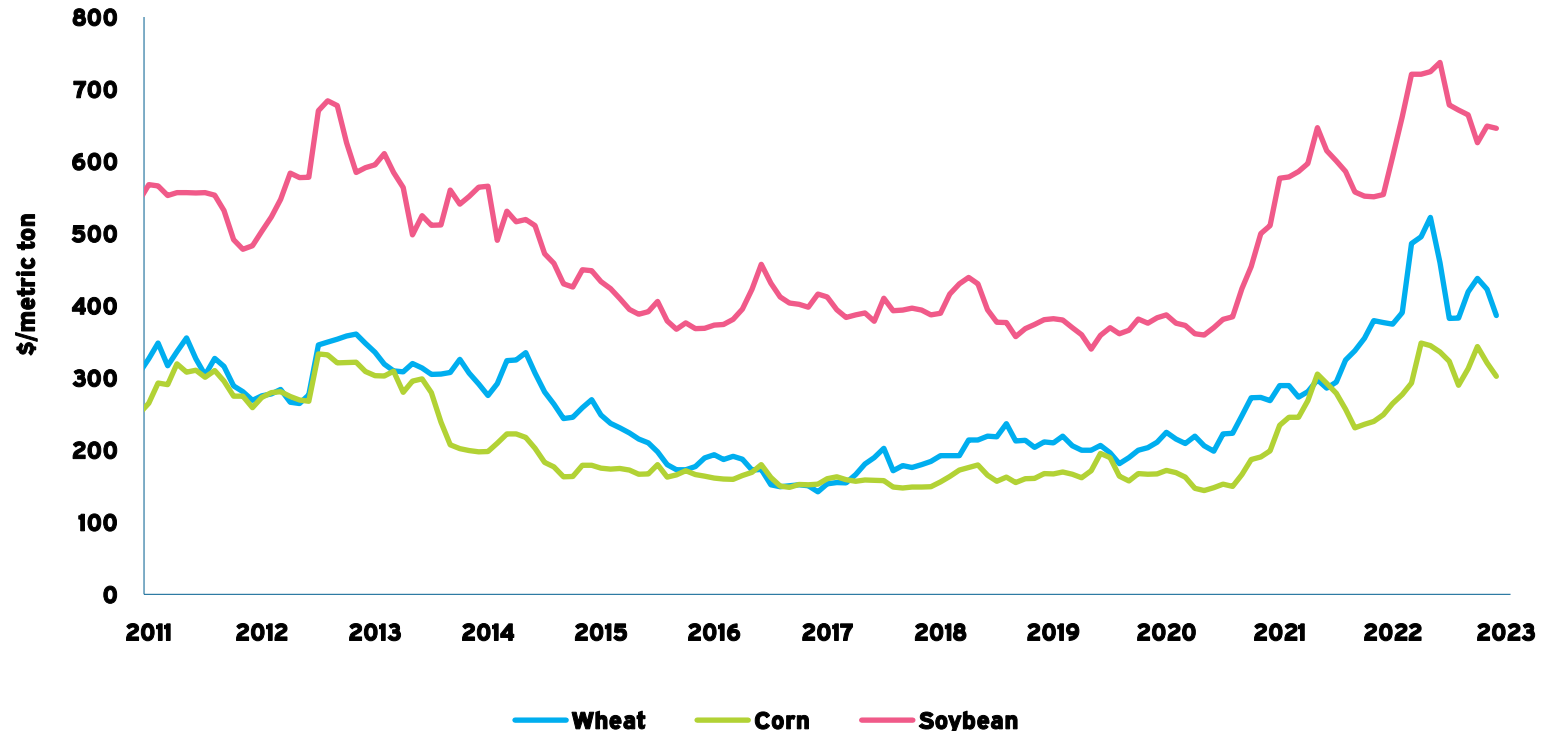
Metals Prices¹



Metal prices remained highly volatile during the year. Copper prices increased 8% during the quarter, while gold was up 7%. Relative to one year prior, gold was flat, and copper was down 12%. Governments are seeking to increase the number of electric vehicles on the road through tax credit incentives and mandates to help reduce global transportation emissions. The increase in EV demand will necessitate increased mining activities and its associated processing into battery chemical inputs.

¹ Source: World Bank

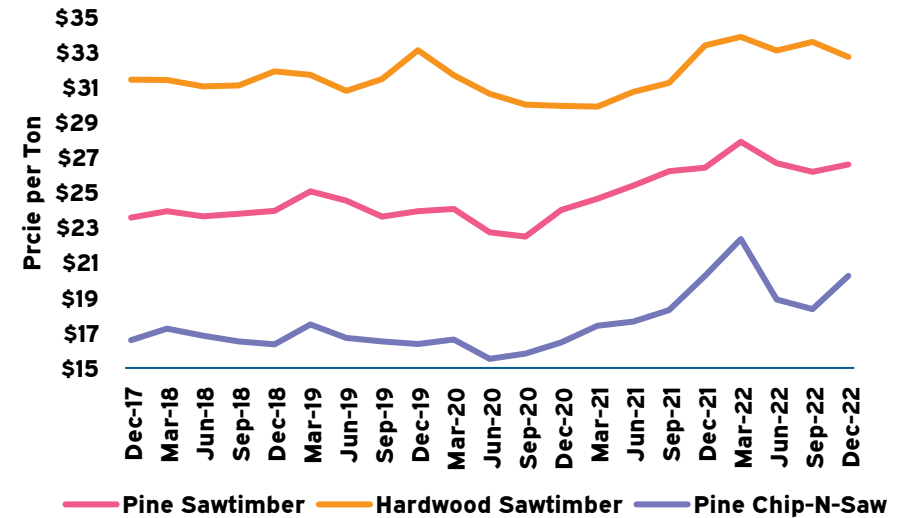
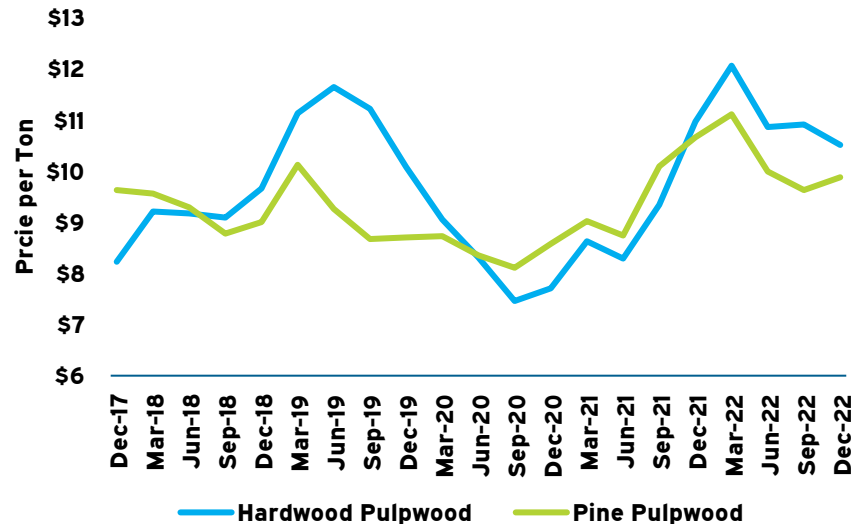
Wheat, Corn, and Soybean¹



During the 2022 year, adverse weather conditions contributed to challenging crop harvests in the U.S., particularly along the West Coast. However, general inflationary pressures contributed to overall price increases. During the quarter, wheat, corn, and soybean prices were down 8%, 3%, and 3%, respectively. Relative to one year prior, they were up 3%, 22%, and 17%, respectively. The NCREIF Farmland index increased by 3.0% during the quarter driven by income returns of 1.0% and appreciation of 2.0%.

¹ Source: World Bank

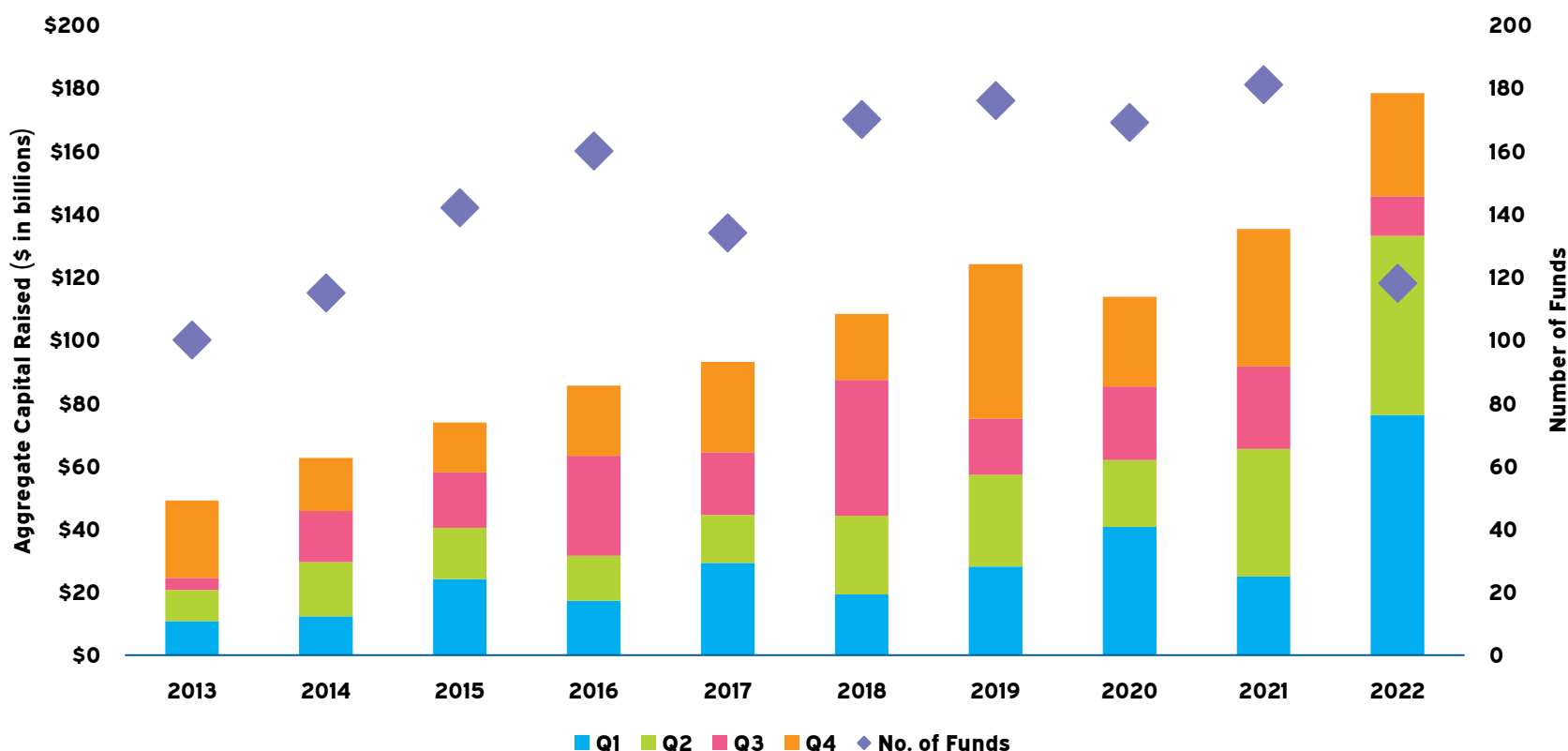
U.S. South Timber Prices¹



U.S. South average timber prices for pine sawtimber, pulpwood, and pine chip-n-saw) were up during the fourth quarter, while hardwoods (pulpwood and sawtimber) were down. Pulpwood continued to experience more volatility than sawtimber since 2017 and saw 2022 decreases of 4% in hardwood pulpwood and 7% in pine pulpwood. Pine Chip-N-Saw had the largest increase during the quarter at 10%. The NCREIF Timberland index increased by 5.0% during the quarter driven by income returns of 1.0% and appreciation of 4.0%.

¹ Source: Bloomberg and TimberMart South

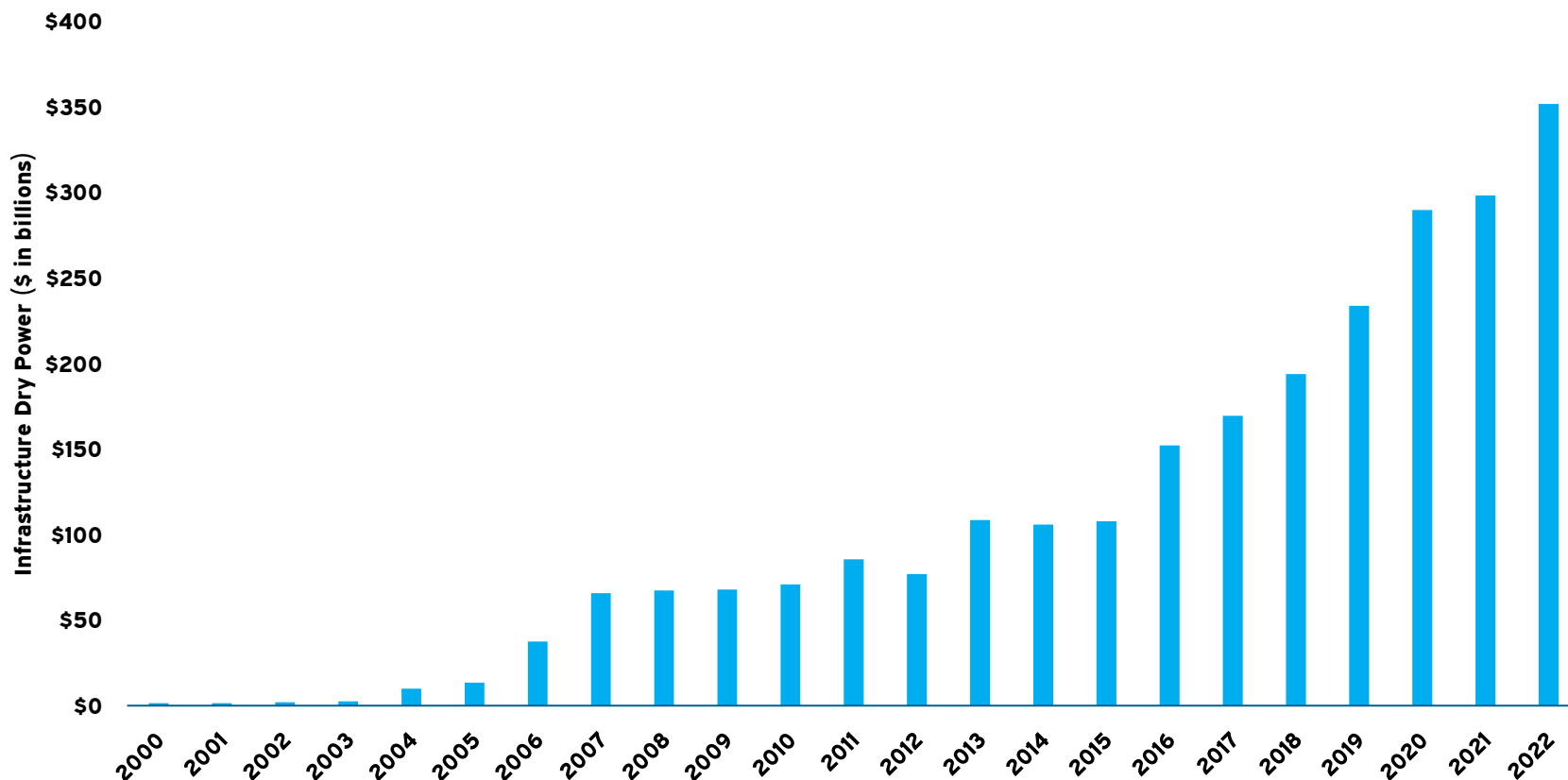
Global Quarterly Unlisted Infrastructure Fundraising¹



In 2022, infrastructure has raised 30% more capital than 2021 raising nearly \$180 billion across 118 funds. This capital was raised by a significantly smaller number of partnerships averaging \$1.5 billion per fund. This was an increase over the 2021 average of \$0.7 billion per fund.

¹ Source: Preqin 4Q 2022.

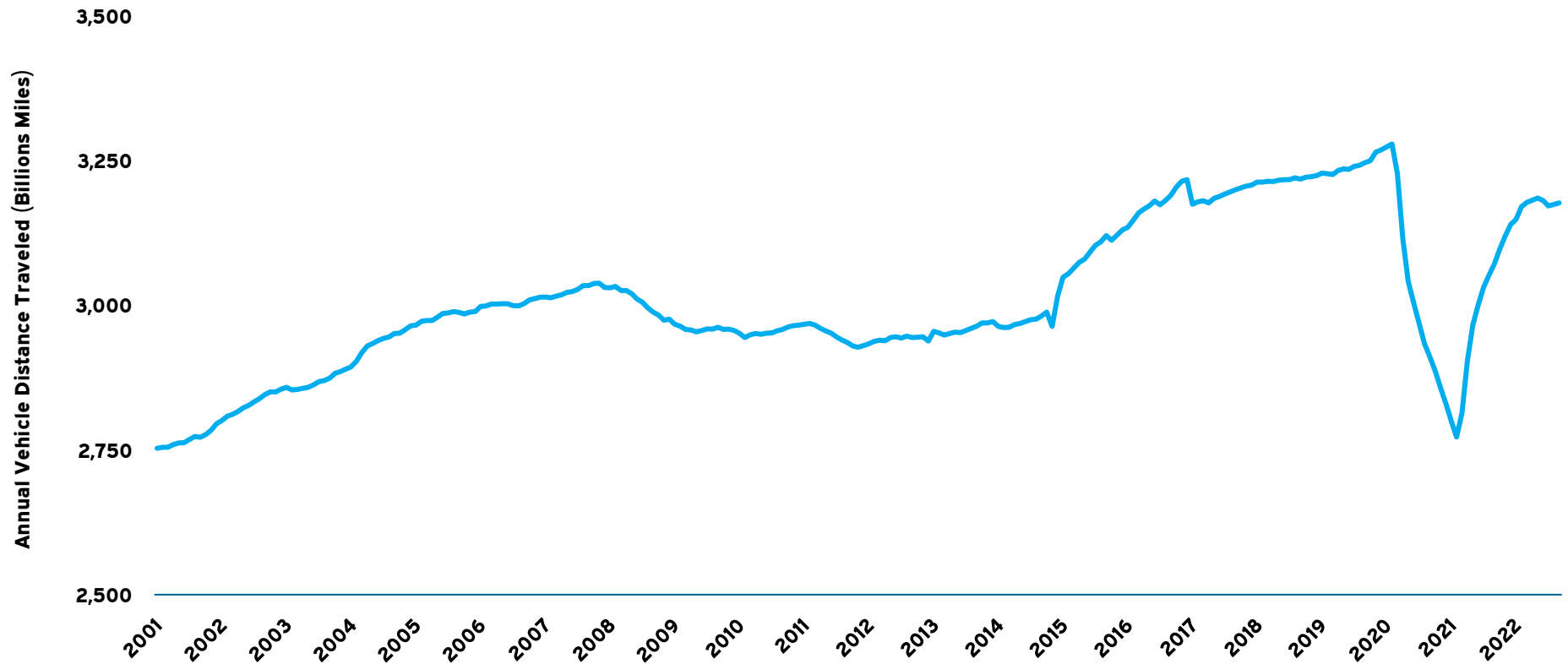
Global Infrastructure Dry Powder¹



Infrastructure dry powder remains at an all-time high, with an increase year-over-year since 2015. The early days of the asset class are evident in the sub-\$50 billion levels until 2007, after which levels stayed between \$50 billion and \$100 billion until they reached \$150 billion in 2016. After that, the level began to climb to the over \$350 billion today.

¹ Source: Preqin Dry Powder downloaded January 2023.

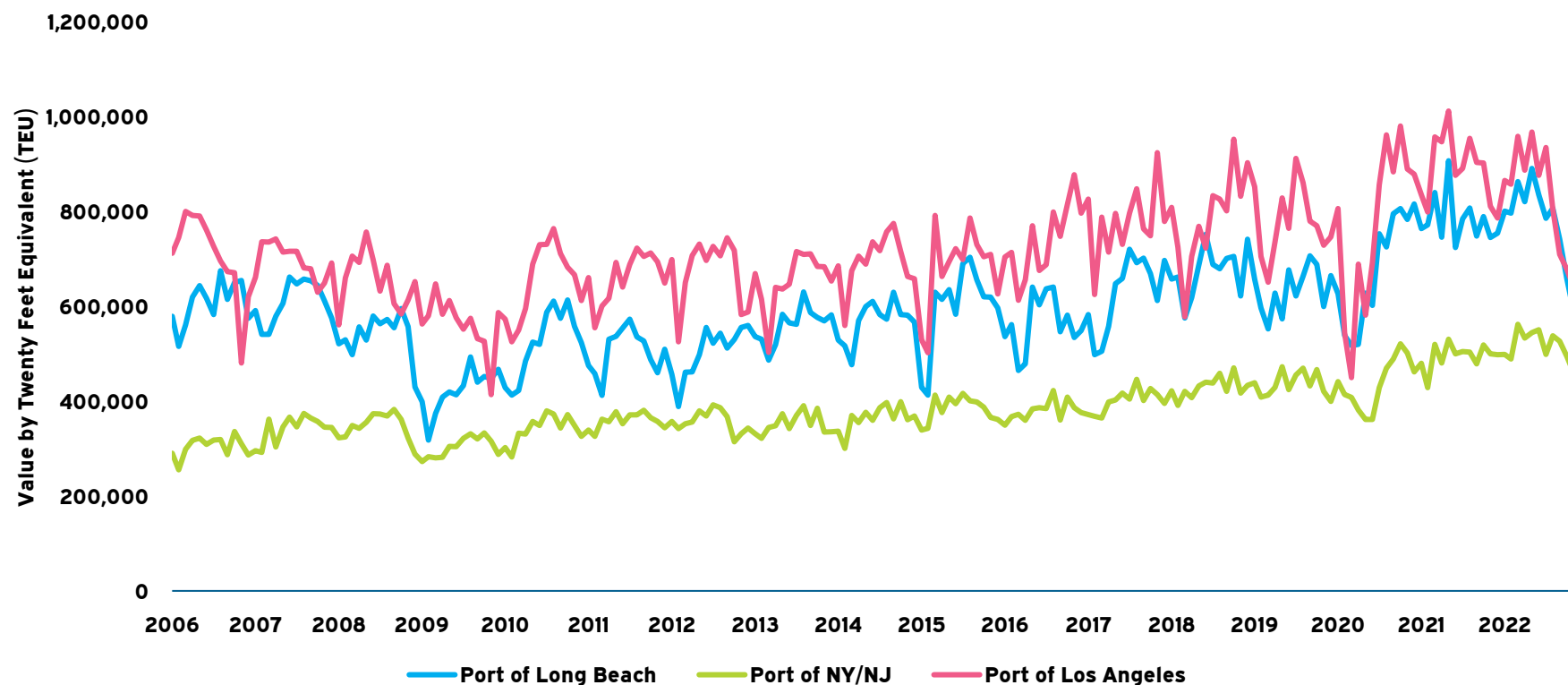
Trailing 12-month Annual Vehicle Miles on All US Roads¹



The fourth quarter continued post-pandemic travel recovery with a total of approximately 791 billion miles. This represented a slight decrease of 1.0% over the same period in 2021. The trailing 12-month travel mileage is effectively back to where it was pre-COVID, indicating a welcome and positive return to movement as COVID-19 restrictions loosened and people continue going back to offices, etc. The third quarter continued to show an increase in the US price of a gallon of gas, which steadily increased to an average price of \$4.06 per gallon. This compares to \$3.09 per gallon average in 2021.

¹ Source: US Department of Transportation, Federal Highway Administration: Office of Highway Policy Information.

US Port Activity – Container Trade in TEUs¹

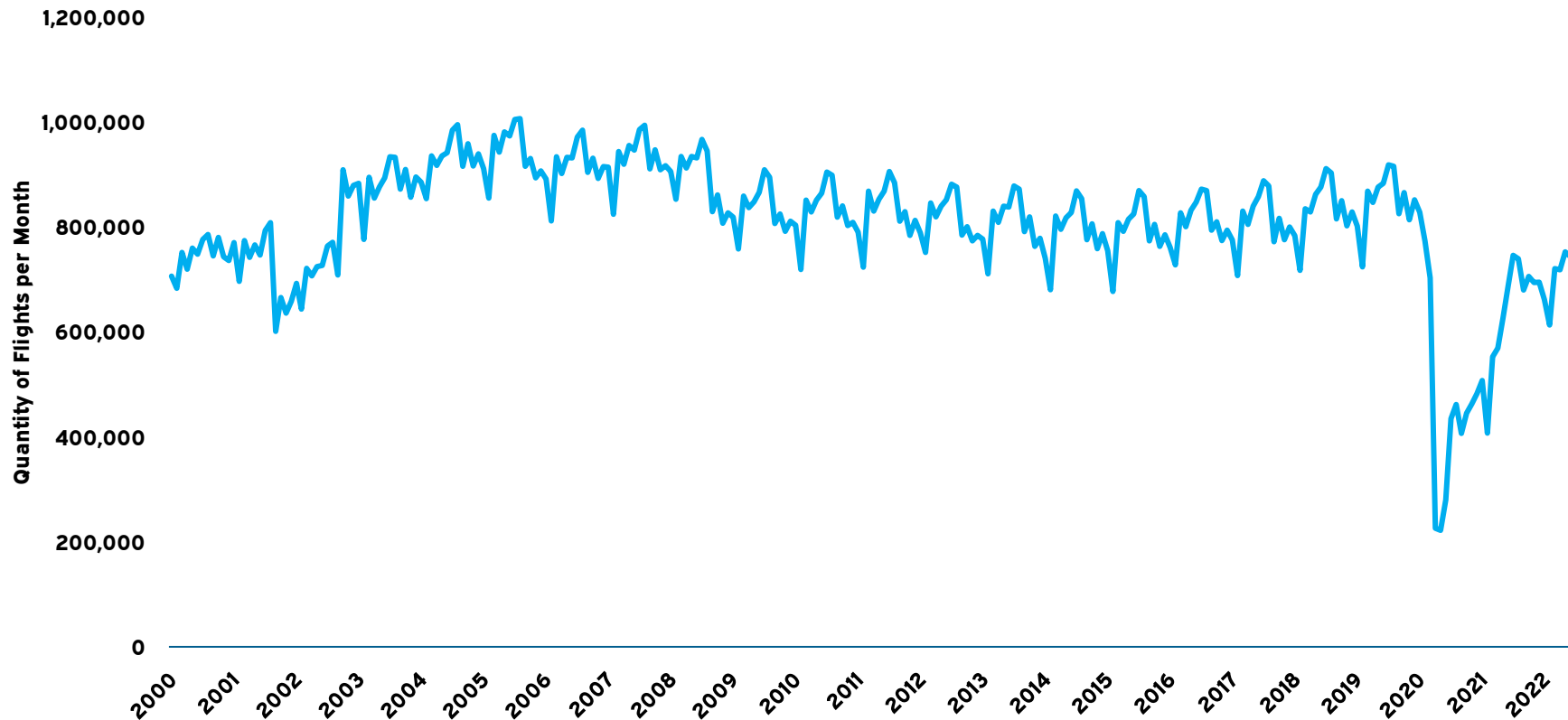


The chart presents the top three US ports by container volume, as measured by twenty-foot equivalent units (TEU). Activity at the three ports provides a high-level representation of the volume at US ports more broadly.

During the fourth quarter, volumes at the three ports decreased by 1.1 million units relative to the same period in 2021. On a year-over-year basis, the combined port volumes decreased by 0.9 million TEUs, or -3.3%, over the prior 12-month period. The Port of Long Beach recorded a decrease of 2.7% (0.3 million TEUs), the Port of NY/NJ reported an increase of 2.7% (0.2 million TEU), and the Port of Los Angeles recorded a decrease of 3.3% (0.9 million TEUs) over the prior 12 months.

¹ Source: www.polb.com, www.panynj.gov, and www.portoflosangeles.org.

Total US Domestic and International Flights¹

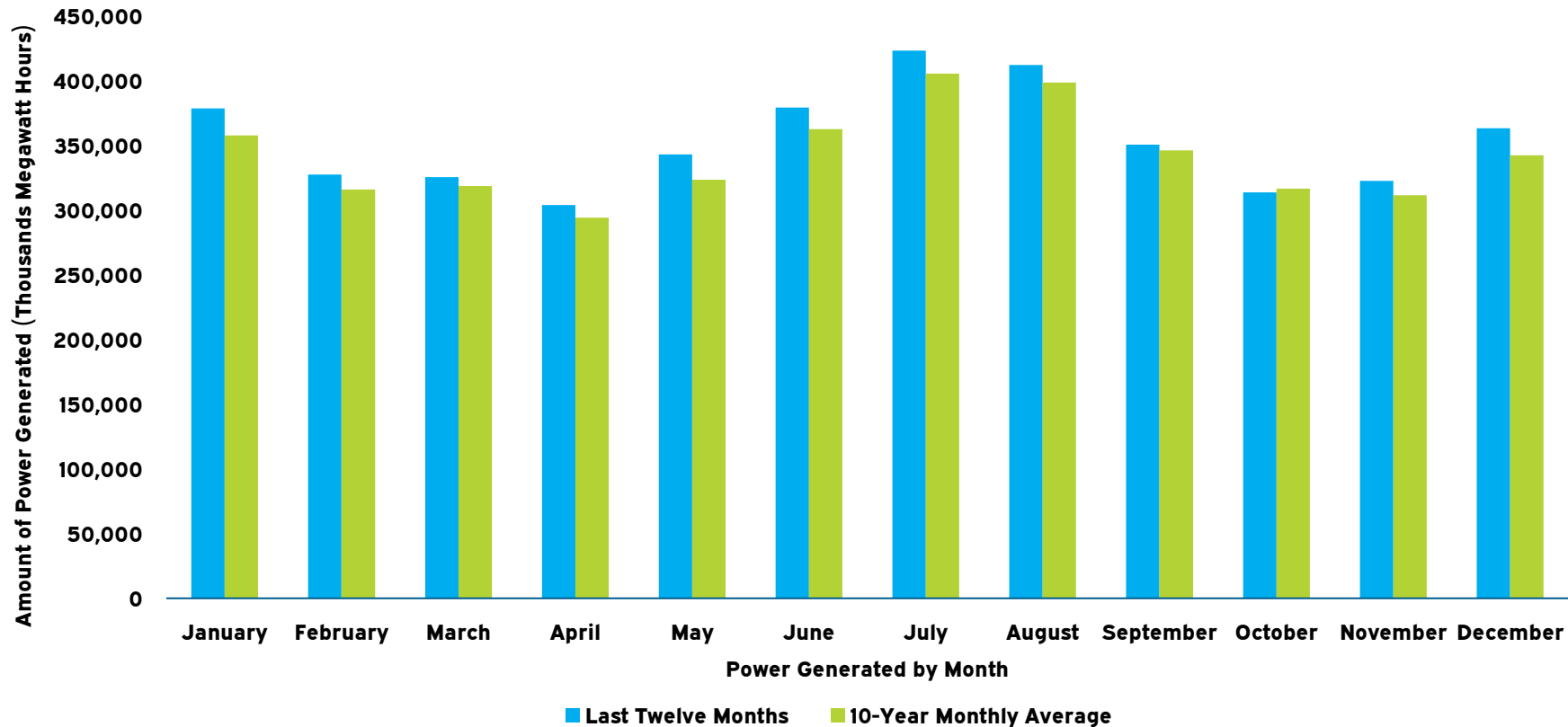


The chart above presents all US domestic and international flights, excluding foreign point-to-point flights by month. Historically, air traffic is cyclical with peaks in the summer months and troughs in the winter months.

There were 0.1 million more flights during the fourth quarter of 2022 over same period in 2021, representing a 3% increase. In addition to the number of flights, the total number of passengers travelling on US and international airlines increased by 32% for the 12 months ended December 2022 over the prior 12 months.

¹ Source: Bureau of Transportation Statistics: Flights, All US, and Foreign Carriers.

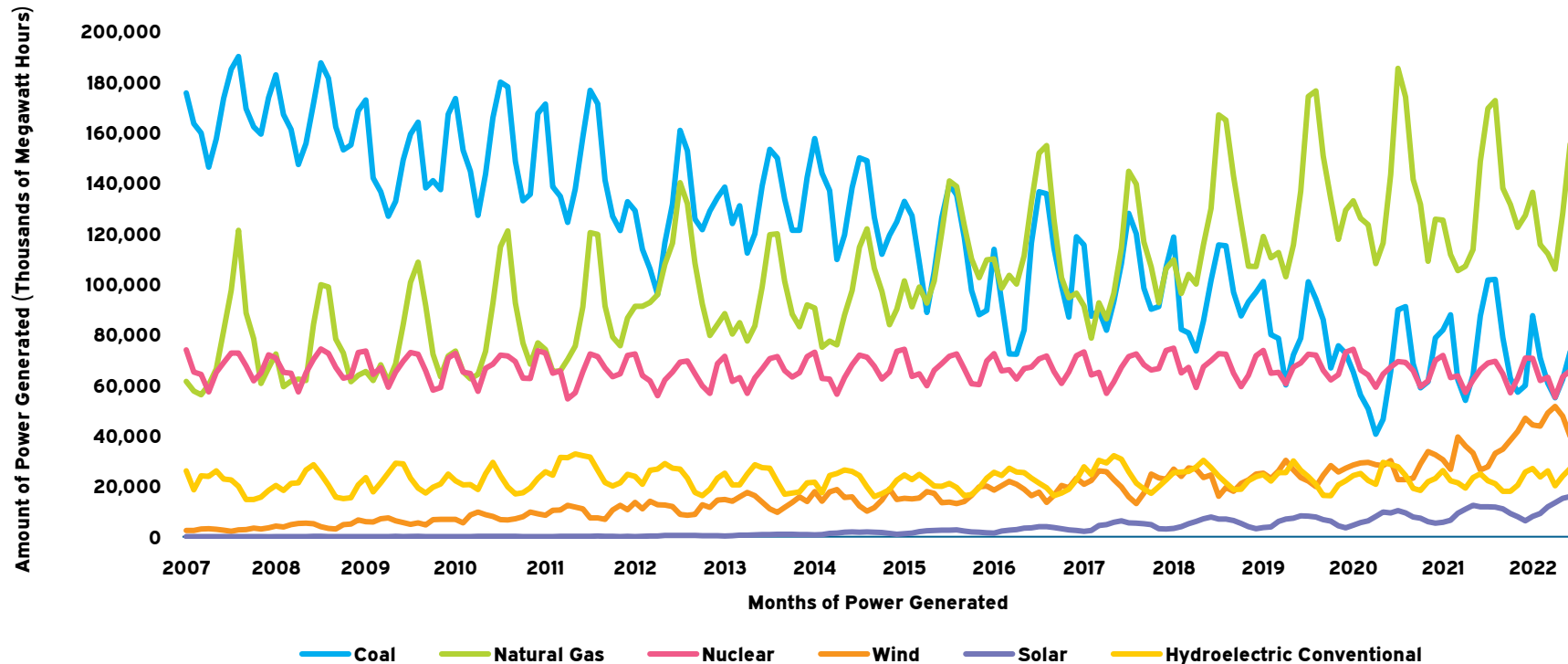
Total US Power Generation¹



The graph above presents the total net generation for the past 12 months compared to the 10-year average for each month. Net energy generation in the US increased by 3% during the fourth quarter, compared to the same period in 2021.

¹ Source: US Energy Information Administration: Electric Power Monthly, December 2022.

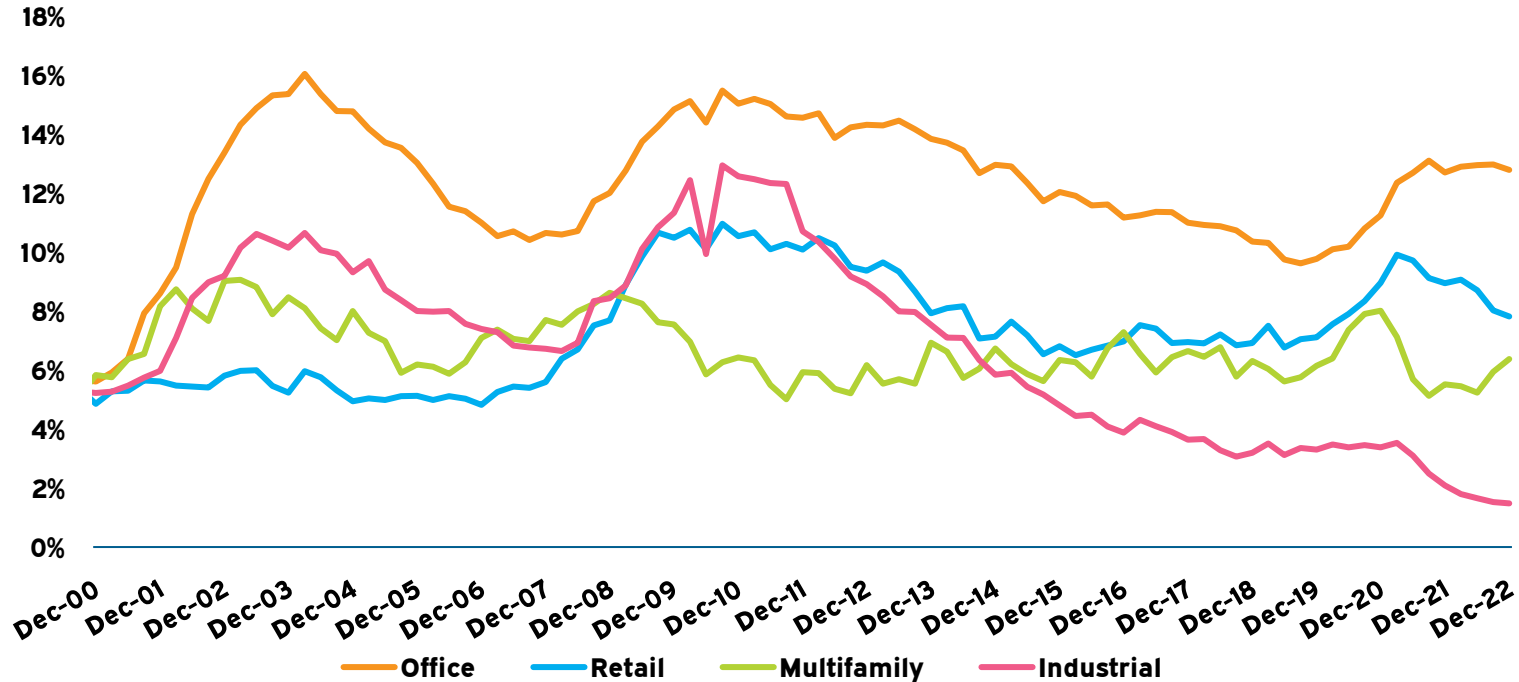
US Power Generation by Source¹



In the fourth quarter 2022, total US power generated increased by 3% over the same period in 2021 with the largest increase from the renewable sources and natural gas. Wind and utility-scale solar continue to make up a small portion of total net energy generation in the US, accounting for only 12% and 5% of energy generation, respectively. Natural gas, coal, and nuclear accounted for 40%, 20%, and 18%, respectively. However, the growth of wind and solar as sources of energy generation continues to increase at a faster rate than coal and natural gas, especially over the last several years.

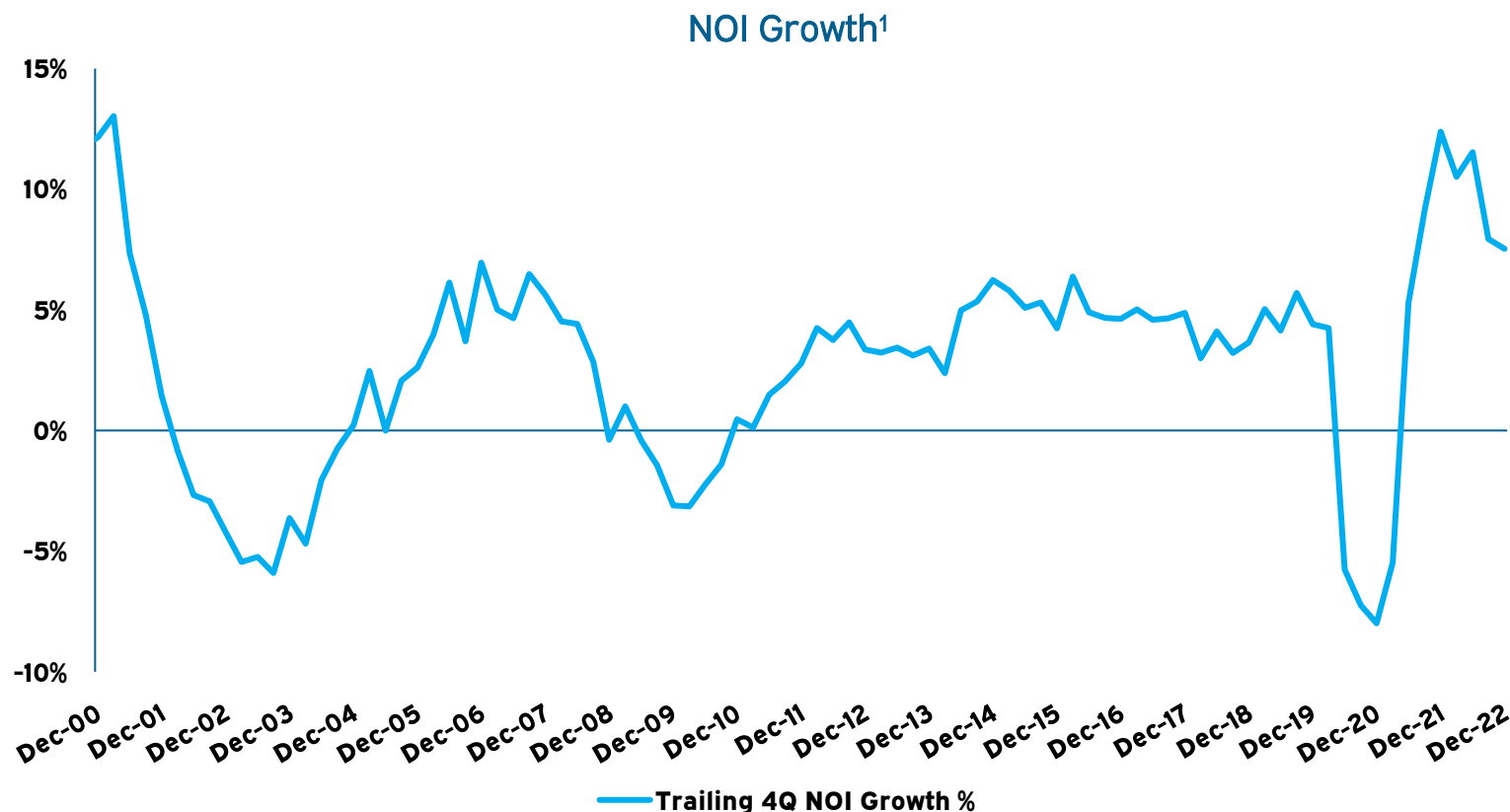
¹ Source: US Energy Information Administration: Electric Power Monthly, December 2022.

Real Estate Fundamentals Vacancy by Property Type¹



In the fourth quarter of 2022, vacancy rates increased for multifamily properties, while vacancy rates for industrial, office, and retail assets all decreased. Multifamily vacancies increased 43 basis points in Q4 2022. Industrial vacancies declined 4 bps in Q4, bringing vacancies to an all-time low of 1.48% after hitting its previous historical low of 1.52% in Q3. Office vacancies dropped by 12 bps in Q4, while retail vacancy rates declined 20 bps. Compared to one year ago, vacancy rates in multifamily increased 85 bps, industrial vacancies decreased 61 bps, office vacancy rates increased 10 bps, and retail vacancies decreased 113 bps. Overall, the vacancy rate across all property types decreased 43 bps from Q4 2021.

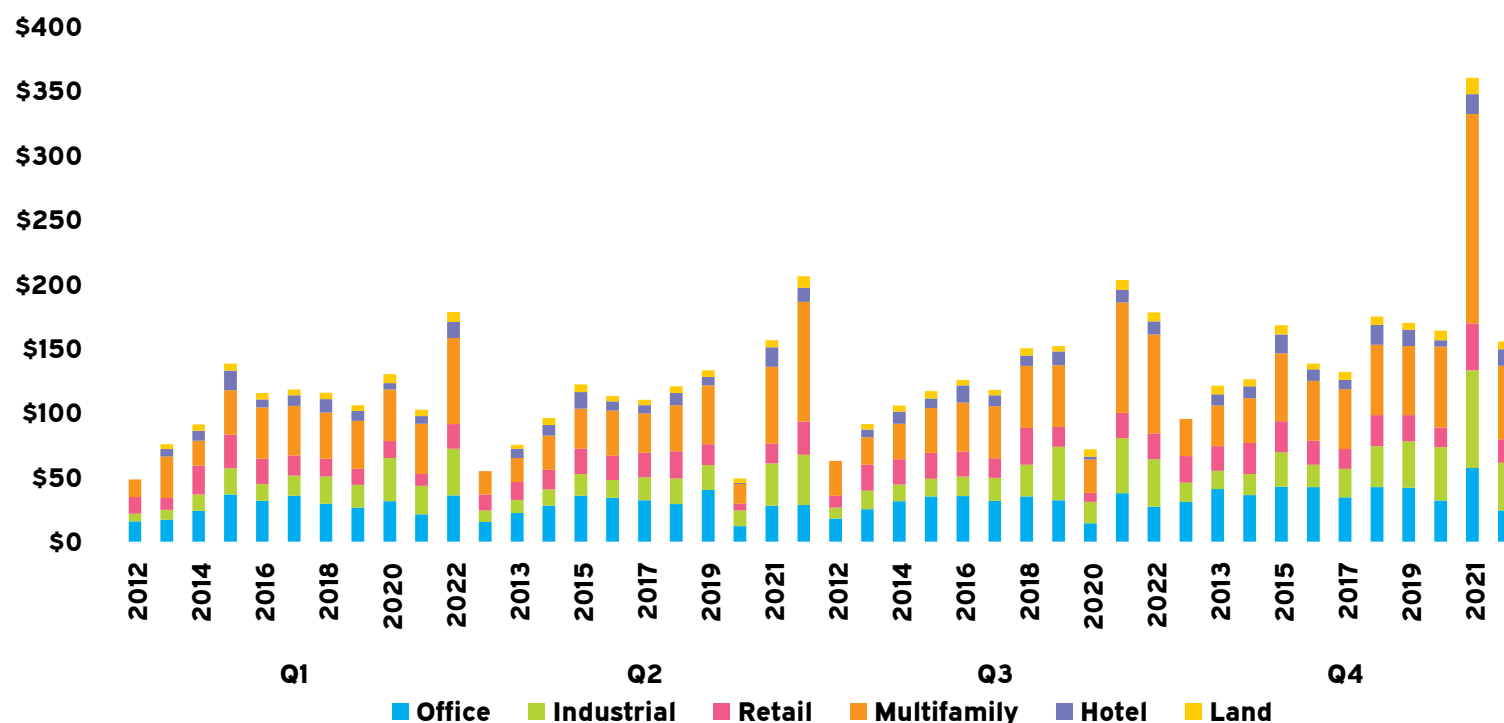
¹ Source: NCREIF



The trailing twelve-month rate of NOI growth decelerated in Q4 2022 to 7.5%, as compared to 7.9% in Q3. Resilient demand and a historically high industrial occupancy rate underpinned the continued NOI growth in industrial, which was 12% for the trailing twelve months ending Q4 2022. Multifamily NOI growth was also strong, with 10.4% growth over the trailing twelve months. Office NOI growth moved back into positive territory at 3.7% in Q4 after detracting from overall growth at -0.8% year-over-year in Q3. Retail NOI growth accelerated from Q3, and reached 4.6% year-over-year in Q4.

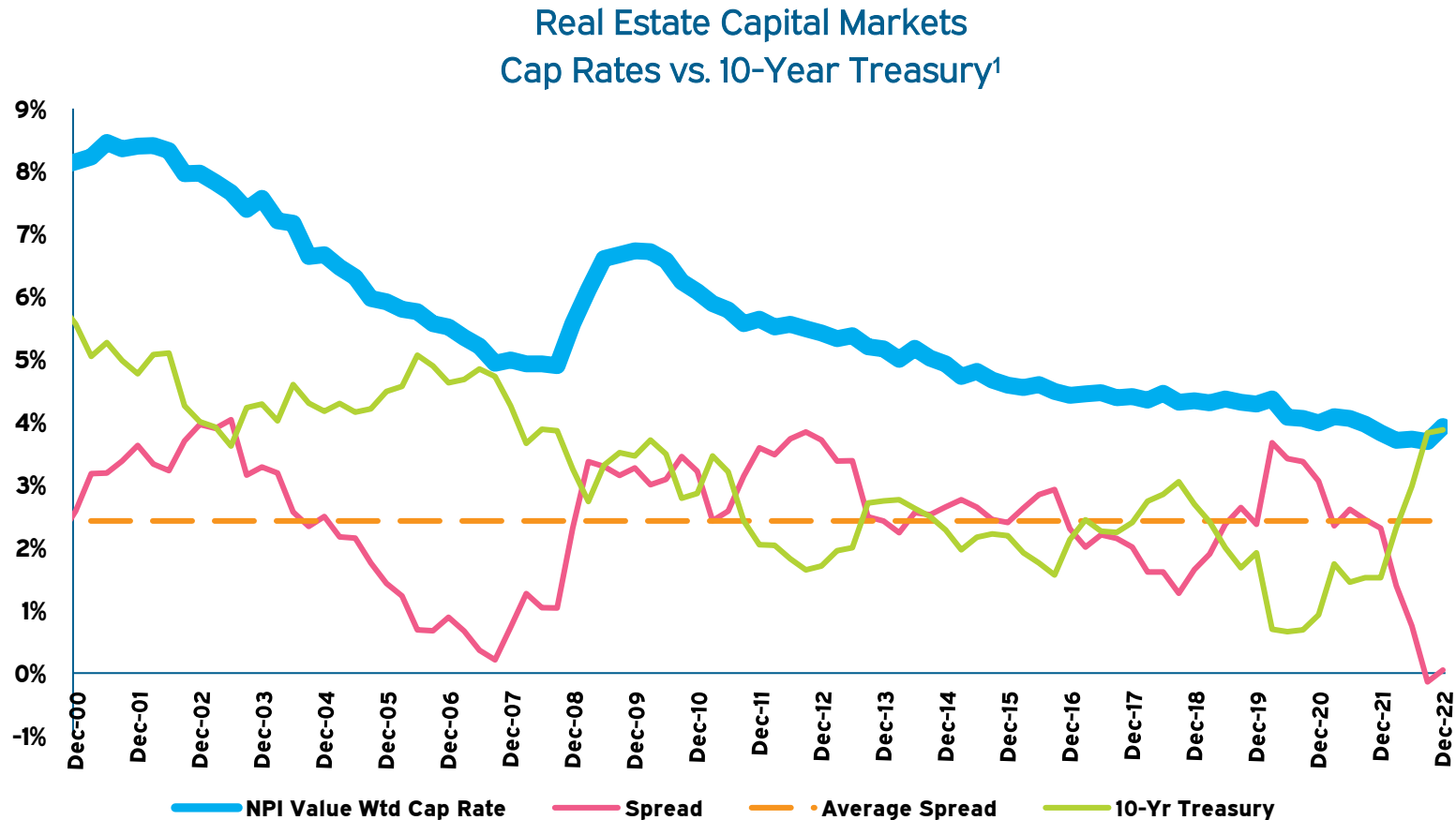
¹ Source: NCREIF

Transaction Volume (\$bn)¹



Private real estate transaction volume for properties valued over \$2.5 million was down in 4Q 2022 versus 3Q 2022. It was the slowest 4Q since 2017. Nevertheless, annual transaction volume remained healthy at \$731 billion after a record 2021 that saw \$842 billion of transactions. Compared to 2021, most property types saw decreases in transaction volume. Retail and hotel transactions increased in 2022 versus 2021. As was true in 2021, multifamily and industrial properties made up the largest share (62%) of the year's transactional volume.

¹ Source: PREA



The NPI Value Weighted Cap Rate increased from 3.7% in Q3 to 3.9% in Q4. The 10-year Treasury yield increased by 8 basis points in Q4 2022 to approximately 3.9%. The spread between cap rates and treasury yields at the end of Q4 was essentially zero, and well below the long-term average spread of 249 basis points.

¹ Source: NCREIF and US Department of the Treasury

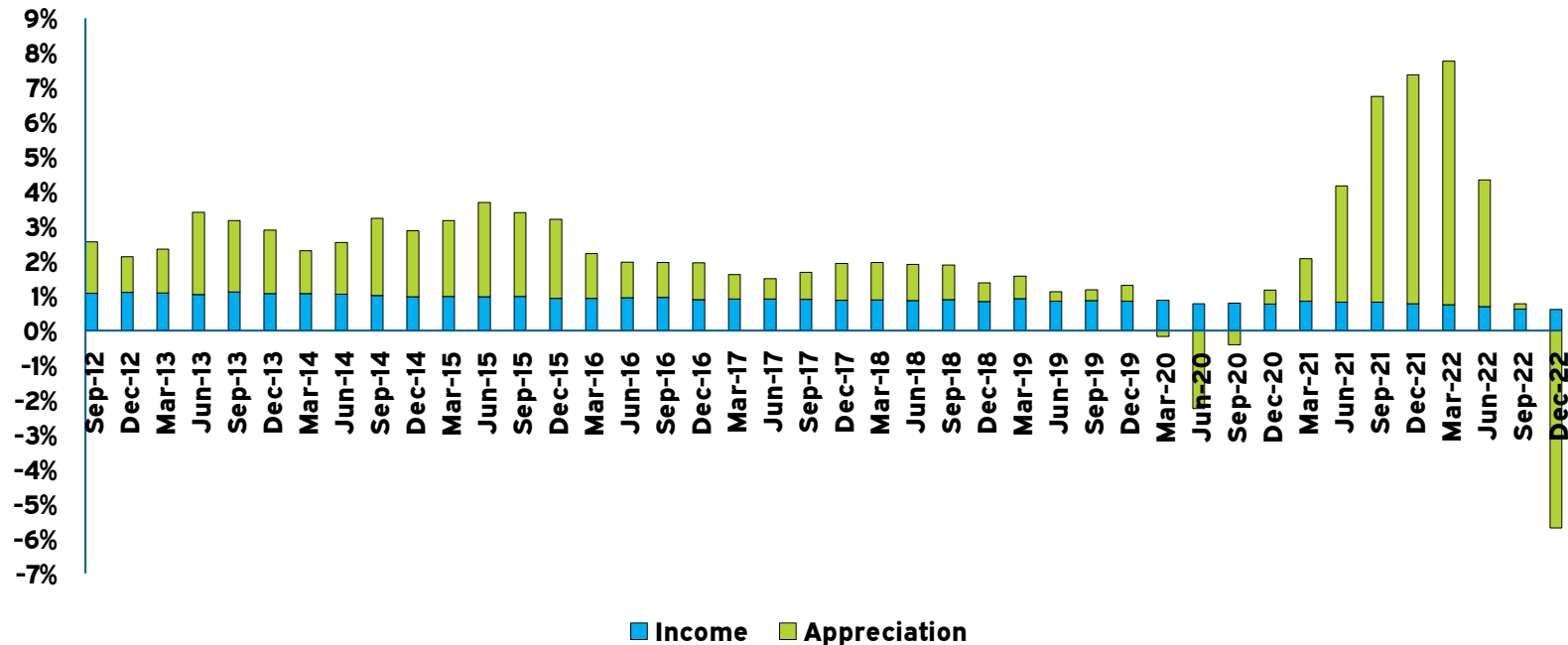
Trailing Period Returns¹

<i>As of December 31, 2022</i>	1 Year	3 Years	5 Years	10 Years
NFI-ODCE (EW, net)	7.6%	9.7%	8.3%	9.5%
NFI-ODCE (VW, net)	6.6	9.0	7.7	9.1
NCREIF Property Index	5.5	8.1	7.5	8.8
NAREIT Equity REIT Index	-25.0	0.2	4.4	7.1

Private real estate indices were negative in Q4 2022, but were positive over the 1-year, 3-year, 5-year, and 10-year time horizons. The NFI-ODCE Equal Weight Index posted a return in Q4 2022 of -5.1%, however private core real estate continued to vastly outperform the public index over the trailing one-year period. Indeed, private core real estate has outperformed the public index for all periods presented. Public real estate performance continues to be volatile, returning -25% for 2022, after posting a 16.2% return in Q4 2021.

¹ Source: NCREIF

ODCE Return Components ¹ (Equal Weight, Net)



The NFI-ODCE Equal Weight return in Q4 2022 turned negative after several quarters of continuous growth, producing a -5.1% net return for the quarter. This result was driven by a -5.7% appreciation return for the quarter, which was slightly offset by a 0.6% income return. Upward adjustments to the discount rate, used in valuations to reflect increasing interest rates and the cost of debt financing, negatively impacted the appreciation component of returns.

¹ Source: NCREIF

Below are details on specific terminology and calculation methodologies used throughout this report:

Committed	The original commitment amount made to a given fund. Some funds may be denominated in non-USD currencies, and such commitment amounts represent the sum of fund contributions translated to USD at their daily conversion rates plus the unfunded balance translated at the rate as of the date of this report.
Contributed	The amount of capital called by a fund manager against the commitment amount. Contributions may be used for new or follow-on investments, fees, and expenses, as outlined in each fund's limited partnership agreement. Some capital distributions from funds may reduce contributed capital balances. Some funds may be denominated in non-USD currencies, and such aggregate contributions represent the sum of each fund contribution translated to USD at its daily conversion rate.
Distributed	The amount of capital returned from a fund manager for returns of invested capital, profits, interest, and other investment related income. Some distributions may be subject to re-investment, as outlined in each fund's limited partnership agreement. Some funds may be denominated in non-USD currencies, and such aggregate distributions represent the sum of each fund distribution translated to USD at its daily conversion rate.
DPI	Acronym for "Distributed-to-Paid-In", which is a performance measurement for Private Market investments. The performance calculation equals Distributed divided by Contributed. DPIs for funds and groupings of funds are net of all fund fees and expenses as reported to by fund managers to Meketa. Program-level DPIs are net of both fund fees and expenses and fees paid to Meketa attributable to the Program.
Exposure	Represents the sum of the investor's Unfunded and Remaining Value.
IRR	Acronym for "Internal Rate of Return", which is a performance measurement for Private Market investments. IRRs are calculated by Meketa based on daily cash flows and Remaining Values as of the date of this report. IRRs for funds and groupings of funds are net of all fund fees and expenses as reported by fund managers to Meketa. Program-level IRRs are net of both fund fees and expenses and fees paid to Meketa attributable to the Program.
NCV	Acronym for "Net Change in Value", which is a performance measurement for Private Market investments. The performance calculation equals the appreciation or depreciation over a time period neutralized for the impact of cash flows that occurred during the time period.

NM	<p>Acronym for “Not Meaningful”, which indicates that a performance calculation is based on data over too short a timeframe to yet be meaningful or not yet possible due to inadequate data. Meketa begins reporting IRR calculations for investments once they have reached more than two years since first capital call. NM is also used within this report in uncommon cases where the manager has reported a negative Remaining Value for an investment.</p>
Peer Universe	<p>The performance for a set of comparable private market funds. The peer returns used in this report are based on data from Burgiss as of the date of this report. Fund-level peer performance represents the median return for a set of funds of the same vintage and the program's set of corresponding strategies across all regions globally. Meketa utilizes the following Burgiss strategies for peer universes:</p> <p>Real Assets (Infrastructure Funds): Infrastructure</p> <p>Natural Resources (Natural Resources Funds): Natural Resources</p> <p>Private Debt: Private Debt</p> <p>Venture Capital: Venture Capital</p> <p>Real Estate: Real Estate</p>
Public Market Equivalent (“PME”)	<p>A calculation methodology that seeks to compare the performance of a portfolio of private market investments with public market indices. The figures presented in this report are based on the PME+ framework, which represents a net IRR value based on the actual timing and size of the private market program's daily cash flows and the daily appreciation or depreciation of an equivalent public market index. Meketa utilizes the following indices for private market program PME+ calculations:</p> <p>Infrastructure: Dow Jones Brookfield Global Infrastructure Index</p> <p>Natural Resources: S&P Global Natural Resources Index</p> <p>Private Debt: Barclays Capital U.S. Corporate High Yield Bond Index</p> <p>Private Equity: MSCI ACWI Investable Market Index</p> <p>Real Assets (excluding Real Estate): Equal blend of Dow Jones Brookfield Global Infrastructure Index and S&P Global Natural Resources Index</p> <p>Real Assets (including Real Estate): Equal blend of Dow Jones Brookfield Global Infrastructure Index, S&P Global Natural Resources Index, and Dow Jones U.S. Select Real Estate Securities Index</p> <p>Real Estate: Dow Jones U.S. Select Real Estate Securities Index</p>

Remaining Value	The investor’s value as reported by a fund manager on the investor’s capital account statement. All investor values in this report are as of the date of this report, unless otherwise noted. Some funds may be denominated in non-USD currencies, and such remaining values represent the fund’s local currency value translated to USD at the rate as of the date of this report.
TVPI	Acronym for “Total Value-to-Paid-In”, which is a performance measurement for Private Market investments. The performance calculations represents Distributed plus Remaining Value, then divided by Contributed. TVPIs for funds and groupings of funds are net of all fund fees and expenses as reported to by fund managers to Meketa. Program-level TVPIs are net of both fund fees and expenses and fees paid to Meketa attributable to the Program.
Unfunded	The remaining balance of capital that a fund manager has yet to call against a commitment amount. Meketa updates unfunded balances for funds to reflect all information provided by fund managers provided in their cash flow notices. Some funds may be denominated in non-USD currencies, and such unfunded balances represent the fund’s local currency unfunded balance translated to USD at the rate as of the date of this report.

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Meketa Investment Group has prepared this report on the basis of sources believed to be reliable. The data are based on matters as they are known as of the date of preparation of the report, and not as of any future date, and will not be updated or otherwise revised to reflect information that subsequently becomes available.

If we manage your assets on a discretionary basis, please contact us if there are any changes in your financial situation or investment objectives, or if you want to impose any reasonable restrictions on our management of your account or reasonably modify existing restrictions.

In general, the valuation numbers presented in this report are prepared by the custodian bank for listed securities, and by the fund manager or appropriate General Partner in the case of unlisted securities. The data used in the market comparison sections of this report are sourced from various databases. These data are continuously updated and are subject to change.

This report does not contain all the information necessary to fully evaluate the potential risks of any of the investments described herein. Because of inherent uncertainties involved in the valuations of investments that are not publicly traded, any estimated fair values shown in this report may differ significantly from the values that would have been used had a ready market for the underlying securities existed, and the differences could be material.

This document may contain certain forward-looking statements, forecasts, estimates, projections, and opinions ("Forward Statements"). No representation is made or will be made that any Forward Statements will be achieved or will prove to be correct. A number of factors, in addition to any risk factors stated in this material, could cause actual future results to vary materially from the Forward Statements. No representation is given that the assumptions disclosed in this document upon which Forward Statements may be based are reasonable. There can be no assurance that the investment strategy or objective of any fund or investment will be achieved, or that the client will receive a return of the amount invested.

In some cases Meketa Investment Group assists the client in handling capital calls or asset transfers among investment managers. In these cases we do not make any representations as to the managers' use of the funds, but do confirm that the capital called or transferred is within the amounts authorized by the client.

Because there is no readily accessible market for private markets assets (companies and partnerships), the values placed on private markets assets are calculated by General Partners using conservative and industry standard pricing procedures. Annually, an independent auditor reviews the pricing procedures employed by the General Partner of each partnership.

The values of companies and partnerships are audited at year-end, and are not audited at other quarter-end periods. While financial information may be audited, there is some discretion as to the method employed to price private companies and, therefore, private markets partnerships. At all times, Meketa Investment Group expects General Partners to utilize conservative and industry standard pricing procedures, and requires the General Partners to disclose those procedures in their reports. However, because of the inherent uncertainty of valuation, these estimated values may differ from the values that would be used if a ready market for the investments existed, and the differences could be significant.