



INVESTMENT GROUP

San Jose Federated City Employees' Retirement System

Second Quarter 2022

Private Markets Program
PUBLIC

San Jose Federated City Employees' Retirement System Private Markets Program

Program Snapshot | As of June 30, 2022

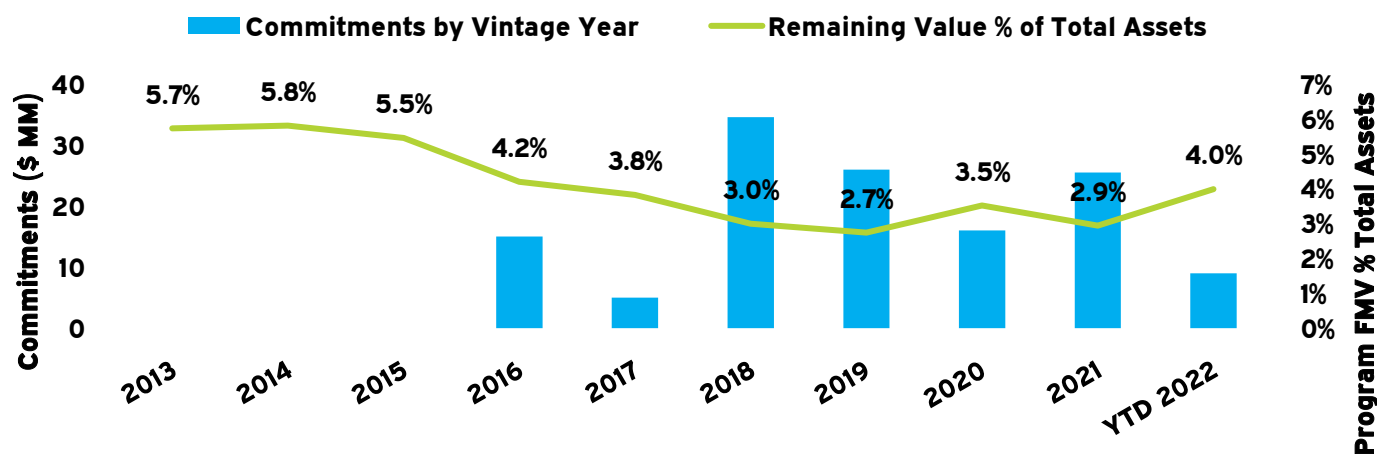
Snapshot

By Account

Account Type	Inception Year	Committed (\$ MM)	Unfunded (\$ MM)	Contributed (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	IRR (%)	PME IRR (%)
Legacy Private Equity	2005	174.3	0.0	160.9	215.3	38.2	1.58	8.1	6.9
NB Fund of One	2017	325	136.5	188.5	42.5	305.3	1.85	29.1	2.2
Private Debt	2010	281.1	52.4	281.2	235.4	107.4	1.22	6.2	5.0
Real Estate	2007	248.5	51.4	227.5	197.1	106.2	1.33	7.4	3.5
Real Assets	2016	72.3	31.7	44.2	12.6	50.5	1.43	13.5	8.6
Venture Capital	2021	64.8	51.0	13.9	0.0	14.0	1.01	NM	NM
Total		1,166.0	323.0	916.3	702.8	621.7	1.45	9.4	NA

Introduction

As of June 30, 2022, the San Jose Federated City Employees' Retirement System had committed \$281.1 million to 14 private debt partnerships and two co-investments. The reported fair value of the aggregate Private Debt Program was \$107.4 million at June 30, 2022, which equates to 4.0% of the overall Retirement System, slightly above the 3.0% policy target.



Program Status

No. of Investments	16
Committed (\$ MM)	281.1
Contributed (\$ MM)	281.2
Distributed (\$ MM)	235.4
Remaining Value (\$ MM)	107.4

Performance Since Inception

	Program
DPI	0.84x
TVPI	1.22x
IRR	6.2%

Commitments

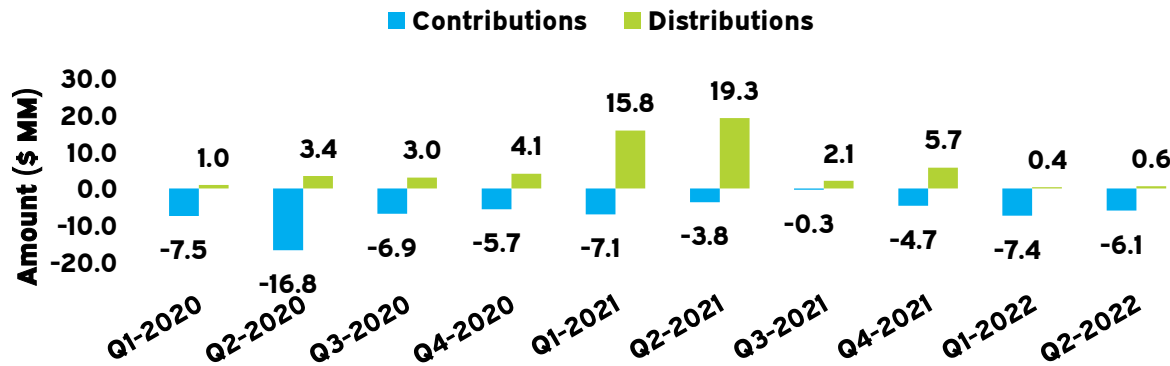
Commitments This Quarter

Fund	Strategy	Region	Amount (MM)
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None to report.

Cash Flows

Recent Quarterly Cash Flows



Largest Contributions This Quarter

Fund	Vintage	Region	Amount (\$MM)
Eagle Point Income	2020	North America	1.98
Octagon Fund IV	2022	North America	1.80
AG Credit Fund II	2021	North America	1.12

Largest Distributions This Quarter

Fund	Vintage	Region	Amount (\$MM)
Cross Ocean ESS II	2016	Western Europe	0.47
Eagle Point Income	2020	North America	0.07
Crestline Fund II	2020	North America	0.02

By Vintage

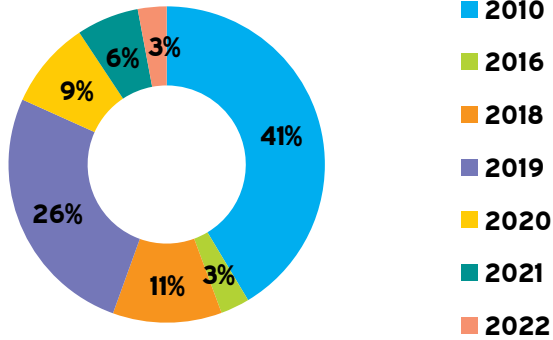
Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)	Peer IRR (%)
2010	3	150.0	181.8	0.0	179.3	44.4	44.4	0.99	1.23	5.3	10.9
2016	1	15.0	12.0	12.7	11.1	3.2	15.9	0.93	1.19	5.6	11.6
2017	1	5.0	5.0	0.0	6.1	0.0	0.0	1.22	1.22	12.9	11.2
2018	3	34.6	38.2	3.8	34.4	12.0	15.8	0.90	1.22	16.8	15.0
2019	2	26.0	21.9	5.1	1.5	28.1	33.3	0.07	1.35	18.6	13.3
2020	2	16.0	12.1	6.5	2.9	9.6	16.1	0.24	1.04	3.6	14.8
2021	3	25.5	7.0	18.5	0.0	6.8	25.3	0.00	0.98	NM	NM
2022	1	9.0	3.2	5.9	0.0	3.2	9.0	0.00	1.00	NM	NM
Total	16	281.1	281.2	52.4	235.4	107.4	159.8	0.84	1.22	6.2	NA

Fund Performance: Sorted By Vintage And Strategy

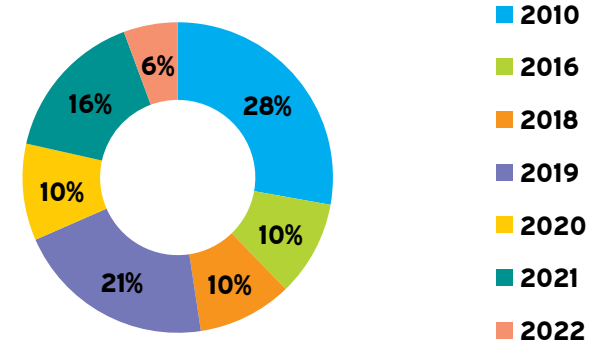
By Investment	Vintage	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
GSO Direct Lending	2010	50.0	43.4	0.0	45.0	3.4	1.12	1.48	3.9	10.9
Medley II	2010	50.0	50.0	0.0	52.0	4.9	1.14	1.48	2.4	10.9
White Oak DL	2010	50.0	88.3	0.0	82.3	36.2	1.34	1.48	8.2	10.9
Cross Ocean ESS II	2016	15.0	12.0	12.7	11.1	3.2	1.19	1.27	5.6	11.6
ArrowMark Sep Acct	2017	5.0	5.0	0.0	6.1	0.0	1.22	1.24	12.9	11.2
Arbour Lane II	2018	8.0	15.4	0.0	7.6	10.7	1.19	1.21	18.0	15.0
Crestline Co-Inv. I	2018	1.6	1.6	0.0	0.9	1.3	1.38	1.21	13.5	15.0
Octagon CLO III	2018	25.0	21.3	3.8	25.9	0.0	1.22	1.21	16.8	15.0
Cross Ocean ESS III	2019	18.0	17.2	1.4	1.2	22.5	1.37	1.19	17.6	13.3
HPS Special Sits.	2019	8.0	4.7	3.7	0.4	5.7	1.28	1.19	NM	13.3
Crestline Fund II	2020	8.0	5.2	5.4	2.7	2.8	1.05	1.09	NM	14.8
Eagle Point Income	2020	8.0	7.0	1.0	0.3	6.9	1.02	1.09	1.7	14.8
Arbour Lane III	2021	9.0	2.5	6.5	0.0	2.2	0.88	1.04	NM	NM
Strategic Value V	2021	7.5	2.4	5.1	0.0	2.7	1.11	1.04	NM	NM
AG Credit Fund II	2021	9.0	2.0	7.0	0.0	1.9	0.95	1.04	NM	NM
Octagon Fund IV	2022	9.0	3.2	5.9	0.0	3.2	1.00	1.01	NM	NM
Total		281.1	281.2	52.4	235.4	107.4	1.22	NA	6.2	NA

By Vintage

Percent of FMV

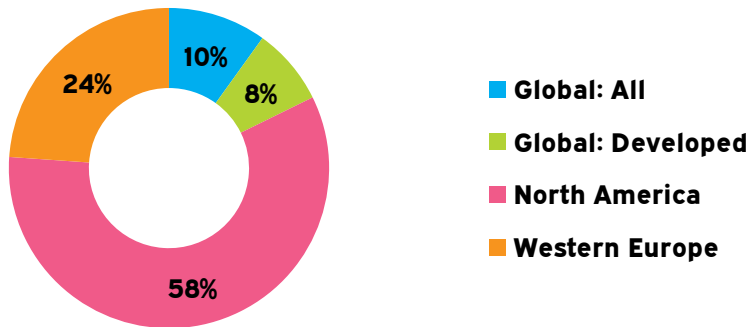


Percent of Exposure

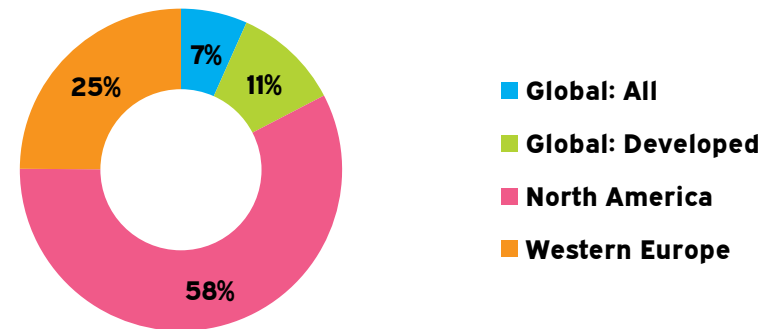


By Geographic Focus

Percent of FMV

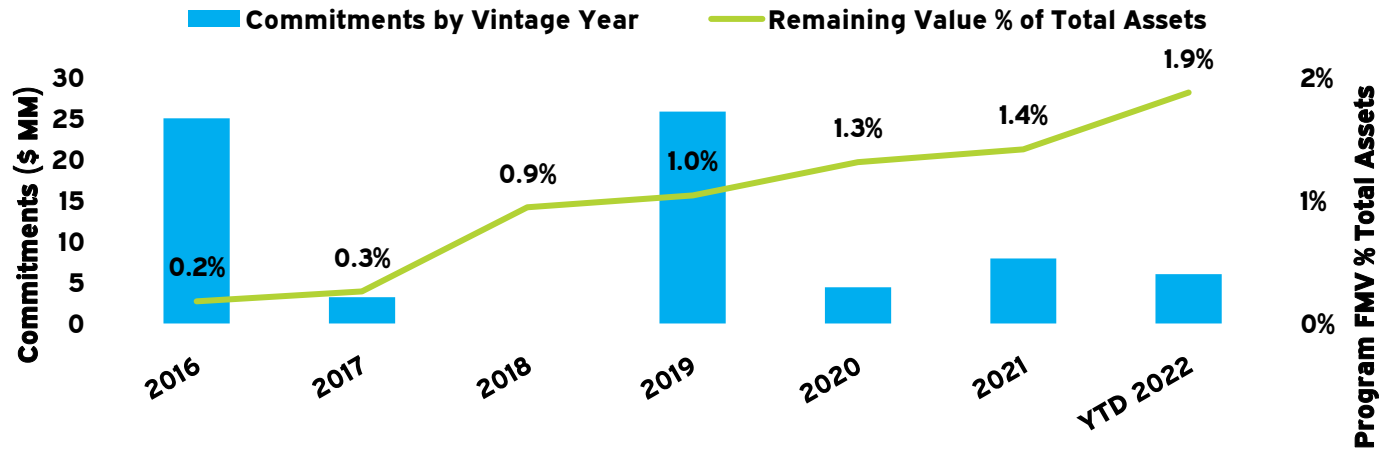


Percent of Exposure



Introduction

As of June 30, 2022, the Retirement System had committed \$72.3 million to ten real assets funds and two co-investments. The total reported fair value of real assets investments was \$50.5 million at June 30, 2022, which equates to 1.9% of the overall Retirement System, versus a 3.0% policy target.



Program Status

No. of Investments	12
Committed (\$ MM)	72.3
Contributed (\$ MM)	44.2
Distributed (\$ MM)	12.7
Remaining Value (\$ MM)	50.5

Performance Since Inception

	Program
DPI	0.29x
TVPI	1.43x
IRR	13.5%

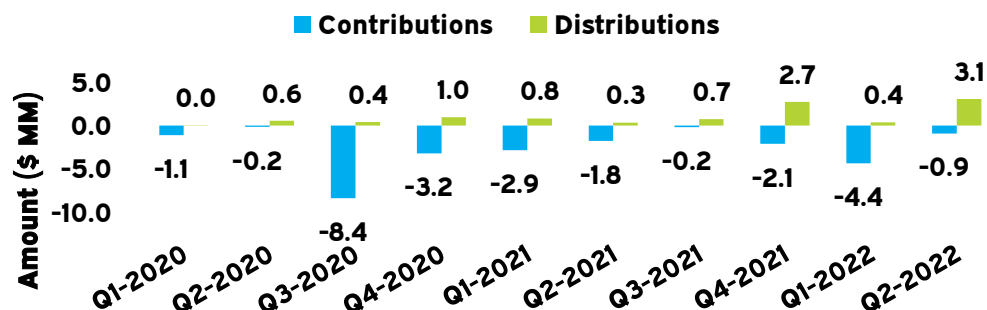
Commitments

Commitments This Quarter

Fund	Region	Amount (MM)
Aether Seed Partners	Global: All	6.00

Cash Flows

Recent Quarterly Cash Flows



Largest Contributions This Quarter

Fund	Vintage	Region	Amount (\$MM)
Orion Mine III	2019	Global: All	0.46
Lime Rock VIII	2017	North America	0.21
Aether Seed Partners	2022	Global: All	0.16

Largest Distributions This Quarter

Fund	Vintage	Region	Amount (\$MM)
Kimmeridge Energy V	2019	North America	1.67
Global IS III	2016	Global: Developed	1.08
Mountain Capital II	2019	North America	0.19

By Vintage

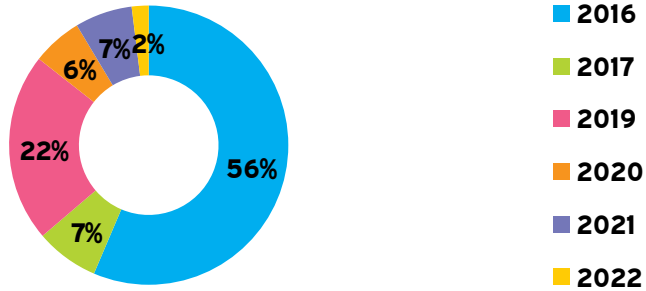
Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)	Peer IRR (%)
2016	1	25.0	24.8	3.1	7.5	28.5	31.6	0.30	1.46	11.0	10.3
2017	1	3.2	3.0	0.6	0.5	3.7	4.3	0.18	1.43	13.1	13.1
2019	5	25.8	11.5	14.4	4.7	11.0	25.5	0.40	1.36	22.4	13.0
2020	2	4.4	2.9	1.6	0.0	2.9	4.6	0.00	1.00	0.4	18.3
2021	2	7.9	1.9	6.0	0.0	3.4	9.4	0.00	1.77	NM	NM
2022	1	6.0	0.2	5.8	0.0	1.0	6.8	0.00	6.38	NM	NM
Total	12	72.3	44.2	31.7	12.7	50.5	82.2	0.29	1.43	13.5	NA

Fund Performance: Sorted By Vintage And Strategy

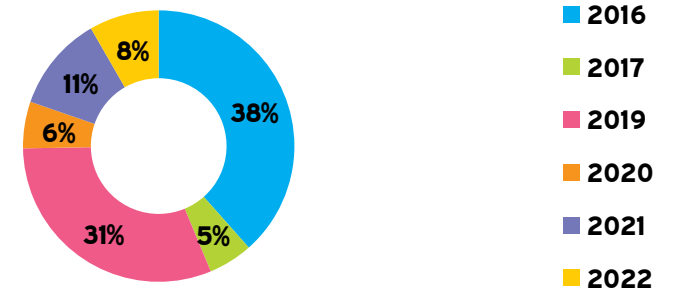
By Investment	Vintage	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
Global IS III	2016	25.0	24.8	3.1	7.5	28.5	1.46	1.38	11.0	10.3
Lime Rock VIII	2017	3.2	3.0	0.6	0.5	3.7	1.43	1.28	13.1	13.1
Kimmeridge Energy V	2019	3.8	3.4	0.4	2.5	4.0	1.91	1.17	42.7	13.0
Mountain Capital II	2019	6.0	1.2	4.8	0.2	1.2	1.11	1.17	NM	NM
Orion Mine III	2019	5.0	3.1	1.8	0.0	3.5	1.11	1.17	NM	NM
Tembo Capital III	2019	6.0	1.4	4.6	0.0	1.3	0.90	1.17	NM	NM
Lime Rock New Energy	2019	5.0	2.3	2.9	1.9	1.1	1.32	1.17	NM	NM
Energy Co-Invest	2020	1.2	1.2	0.0	0.0	1.2	1.00	1.11	NM	NM
GIP IV	2020	3.2	1.7	1.6	0.0	1.7	1.01	1.11	1.0	18.3
Crestline Co-Inv. II	2021	1.9	1.9	0.0	0.0	3.4	1.77	1.00	NM	NM
Hull Street II	2021	6.0	0.0	6.0	0.0	0.0	NM	1.00	NM	NM
Aether Seed Partners	2022	6.0	0.2	5.8	0.0	1.0	6.38	0.94	NM	NM
Total		72.3	44.2	31.7	12.7	50.5	1.43	NA	13.5	NA

By Vintage

Percent of FMV

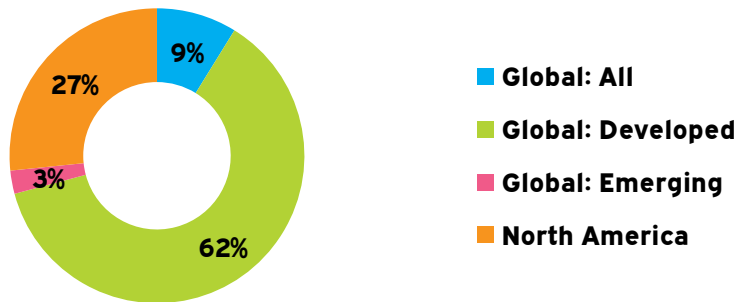


Percent of Exposure

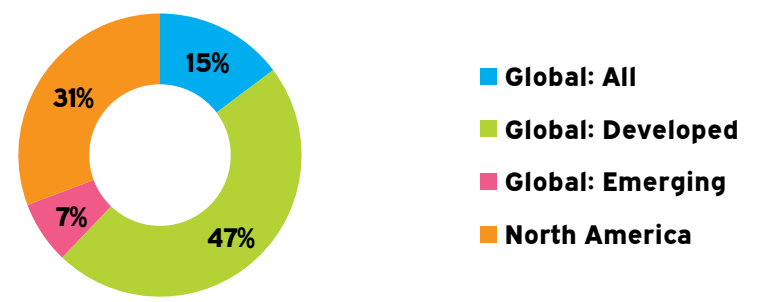


By Geographic Focus

Percent of FMV

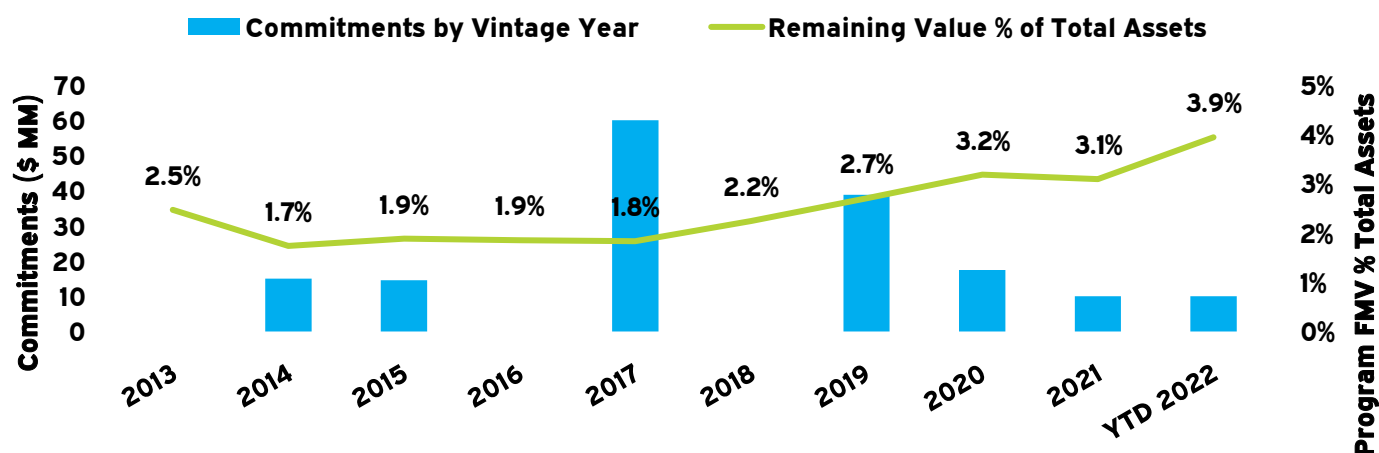


Percent of Exposure



Introduction

As of June 30, 2022, the Retirement System had committed a total of \$248.5 million to 19 closed-end real estate funds. The Real Estate Program's reported fair value of real estate investments was \$106.2 million at June 30, 2022, which equates to 3.9% of the overall Retirement System, versus a 3.0% policy target.



Program Status

No. of Investments	19
Committed (\$ MM)	248.5
Contributed (\$ MM)	227.5
Distributed (\$ MM)	194.6
Remaining Value (\$ MM)	106.2

Performance Since Inception

	Program
DPI	0.86x
TVPI	1.32x
IRR	7.4%

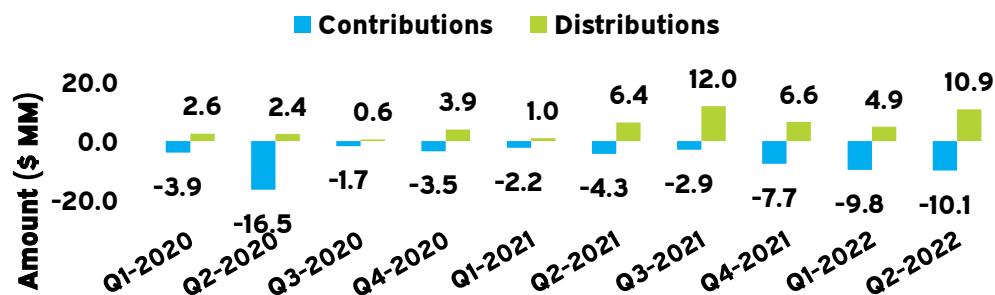
Commitments

Commitments This Quarter

Fund	Strategy	Region	Amount (MM)
Praedium X	Value-Added	North America	10.00
AIGGRE U.S. Fund IV	Value-Added	North America	10.00

Cash Flows

Recent Quarterly Cash Flows



Largest Contributions This Quarter

Fund	Vintage	Region	Amount (\$MM)
AIGGRE U.S. Fund IV	2022	North America	4.57
Praedium X	2019	North America	2.23
EPISO 5	2019	Western Europe	1.09

Largest Distributions This Quarter

Fund	Vintage	Region	Amount (\$MM)
Torchlight VI	2017	North America	6.30
GEM VI	2017	North America	1.38
DRA IX	2017	North America	1.24

By Vintage

Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)	Peer IRR (%)
2005	1	20.0	30.5	0.0	40.3	0.0	0.0	1.32	1.32	5.2	3.4
2006	1	20.0	18.2	0.0	8.8	0.0	0.0	0.48	0.48	-10.9	3.7
2007	2	27.6	28.4	0.0	41.2	0.0	0.0	1.45	1.45	8.8	5.9
2011	1	15.0	16.0	0.0	35.8	1.2	1.2	2.24	2.31	21.5	18.7
2014	1	15.0	17.8	0.7	18.4	5.3	6.0	1.04	1.34	8.8	14.8
2015	1	14.6	13.3	1.3	5.5	12.7	13.9	0.42	1.37	8.8	13.3
2017	3	60.0	67.8	6.5	40.3	46.8	53.4	0.59	1.29	14.2	13.4
2019	4	38.9	23.3	17.1	2.9	24.3	41.4	0.12	1.16	17.4	17.9
2020	3	17.5	7.6	10.2	1.4	9.8	20.0	0.19	1.47	NM	NM
2021	1	10.0	0.0	10.0	0.0	0.0	10.0	0.00	NM	NM	NM
2022	1	10.0	4.6	5.6	0.0	6.1	11.7	0.00	1.33	NM	NM
Total	19	248.5	227.5	51.4	194.6	106.2	157.6	0.86	1.32	7.4	NA

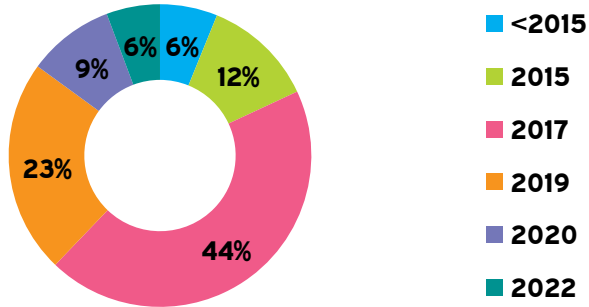
Fund Performance: Sorted By Vintage And Strategy

By Investment	Vintage	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
DRA V	2005	20.0	30.5	0.0	40.3	0.0	1.32	1.09	5.2	3.4
GEAM Value Add	2006	20.0	18.2	0.0	8.8	0.0	0.48	1.18	-10.9	3.7
DRA VI	2007	9.7	10.6	0.0	17.5	0.0	1.65	1.21	10.6	5.9
Fidelity RE III	2007	17.9	17.9	0.0	23.7	0.0	1.33	1.21	7.3	5.9
DRA VII	2011	15.0	16.0	0.0	35.8	1.2	2.31	1.62	21.5	18.7
DRA VIII	2014	15.0	17.8	0.7	18.4	5.3	1.34	1.59	8.8	14.8
EPISO 4	2015	14.6	13.3	1.3	5.5	12.7	1.37	1.45	8.8	13.3
Torchlight VI	2017	30.0	39.3	2.2	16.6	26.4	1.10	1.44	8.7	13.4
GEM VI	2017	10.0	7.3	2.8	4.9	5.0	1.36	1.44	19.3	13.4
DRA IX	2017	20.0	21.3	1.6	18.8	15.5	1.61	1.44	18.8	13.4
Rockpoint VI	2019	6.5	4.8	2.0	0.7	5.4	1.27	1.26	27.8	17.9
DRA X	2019	10.0	6.1	5.2	2.1	6.0	1.33	1.26	36.0	17.9
EPISO 5	2019	12.4	10.2	2.2	0.0	10.6	1.04	1.26	3.5	17.9
Praedium X	2019	10.0	2.2	7.8	0.0	2.3	1.06	1.26	NM	NM
Torchlight Debt VII	2020	6.0	2.1	4.2	0.3	1.9	1.05	1.11	NM	NM
HIG Realty IV	2020	6.0	1.7	4.4	1.1	1.5	1.53	1.11	NM	NM
Exeter V	2020	5.5	3.9	1.7	0.0	6.4	1.67	1.11	NM	NM
Centerbridge RE II	2021	10.0	0.0	10.0	0.0	0.0	NM	1.06	NM	NM

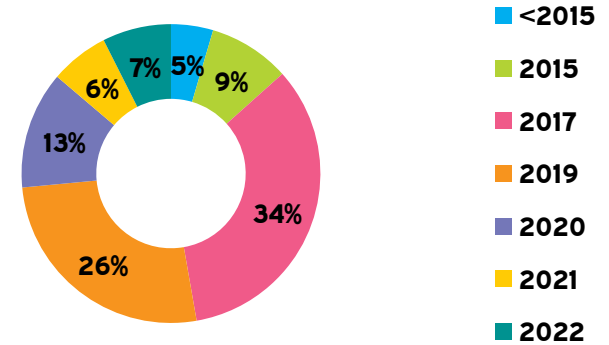
By Investment	Vintage	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
AIGGRE U.S. Fund IV	2022	10.0	4.6	5.6	0.0	6.1	1.33	1.0	NM	NM
Total		248.5	227.5	51.4	194.6	106.2	1.32	NA	7.4	NA

By Vintage

Percent of FMV

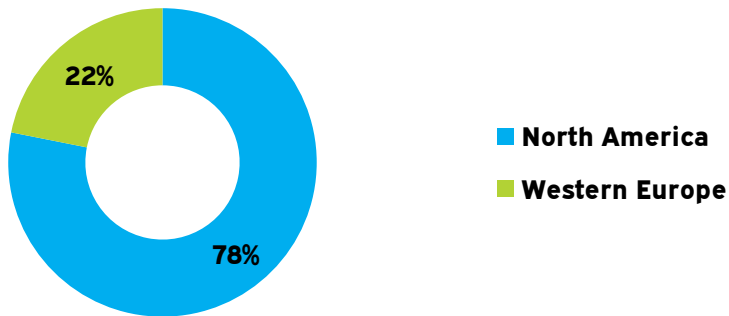


Percent of Exposure

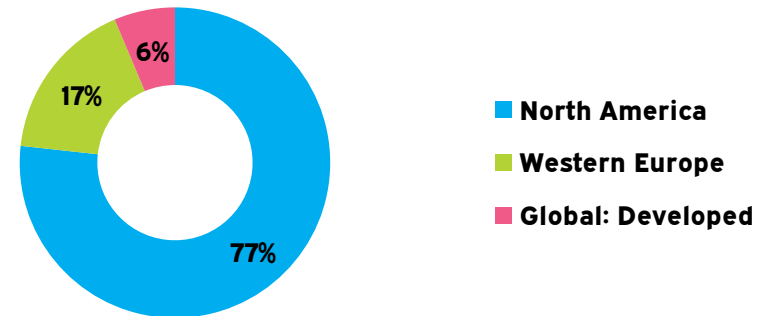


By Geographic Focus

Percent of FMV

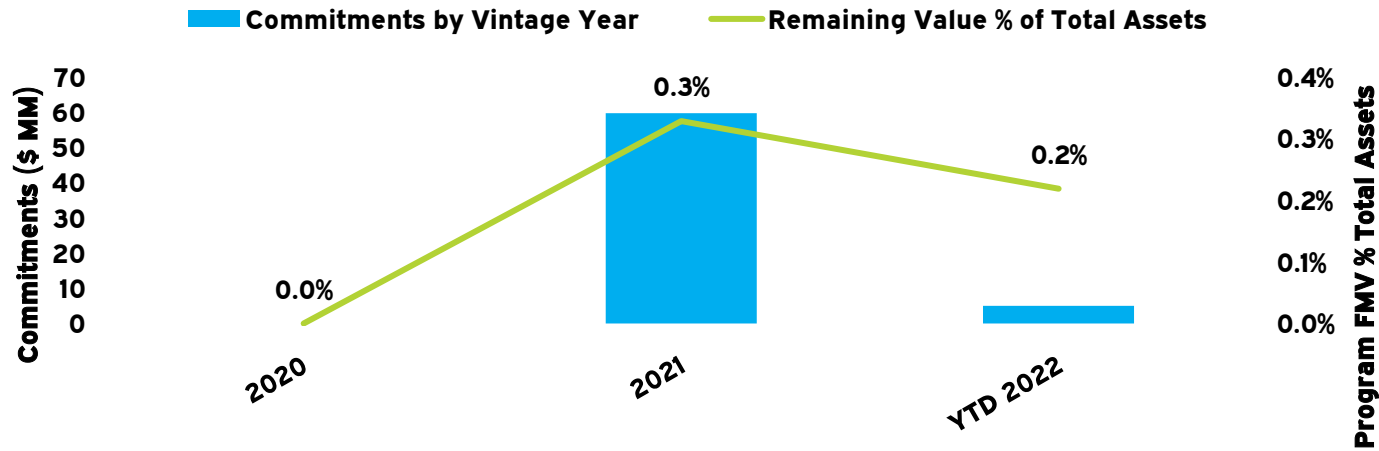


Percent of Exposure



Introduction

As of June 30, 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 \$14.0 million at June 30, 2022, which equates to 0.2% of the overall Retirement System, versus a 4.0% policy target.



Program Status

No. of Investments	4
Committed (\$ MM)	64.8
Contributed (\$ MM)	13.9
Distributed (\$ MM)	0.0
Remaining Value (\$ MM)	14.0

Performance Since Inception

	Program
DPI	0.00x
TVPI	1.01x
IRR	NM

Commitments

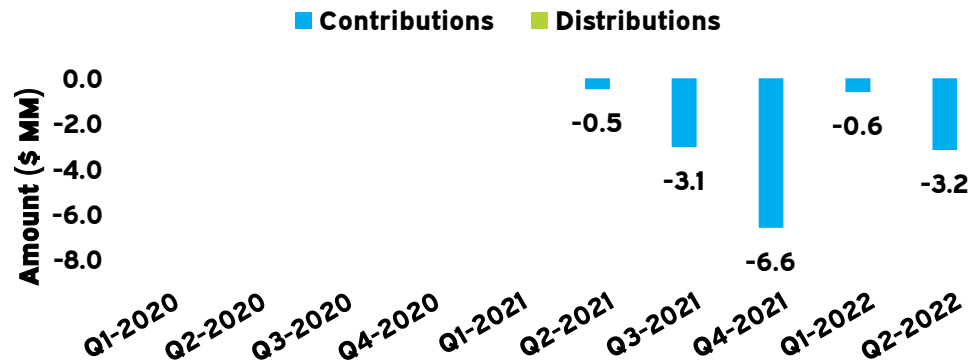
Commitments This Quarter

Fund	Strategy	Region	Amount (MM)
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None to report.

Cash Flows

Recent Quarterly Cash Flows



Largest Contributions This Quarter

Fund	Vintage	Region	Amount (\$MM)
Fin VC Horizons II	2022	Global: All	3.17

Largest Distributions This Quarter

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

By Vintage

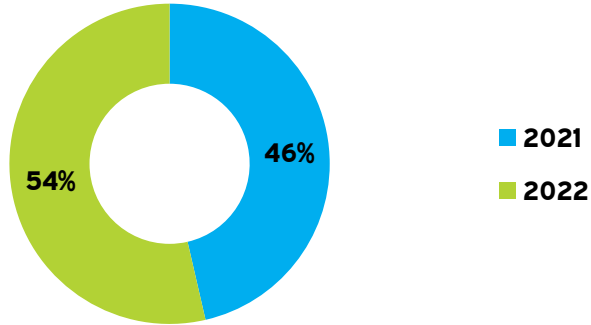
Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)
2021	3	59.8	10.7	49.1	0.0	10.9	59.9	0.00	1.01	NM
2022	1	5.0	3.2	1.9	0.0	3.2	5.1	0.00	0.99	NM
Total	4	64.8	13.9	51.0	0.0	14.0	65.0	0.00	1.01	NM

Fund Performance: Sorted By Vintage And Strategy

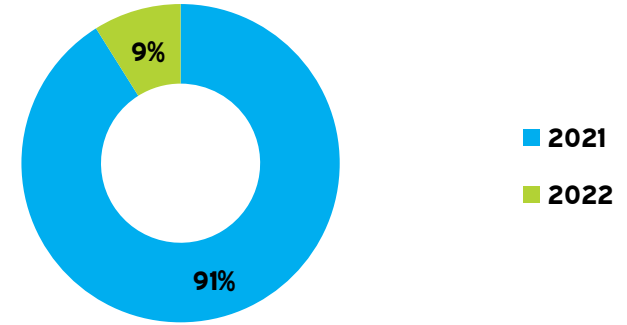
By Investment	Vintage	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
Innovation Endeavors VC	2021	4.8	1.2	3.6	0.0	1.2	0.96	1.01	NM	NM
Soma Capital III	2021	5.0	1.5	3.5	0.0	1.6	1.05	1.01	NM	NM
TI Platform SJFED	2021	50.0	8.1	42.0	0.0	8.1	1.01	1.01	NM	NM
Fin VC Horizons II	2022	5.0	3.2	1.9	0.0	3.2	0.99	0.97	NM	NM
Total		64.8	13.9	51.0	0.0	14.0	1.01	NA	NM	NA

By Vintage

Percent of FMV

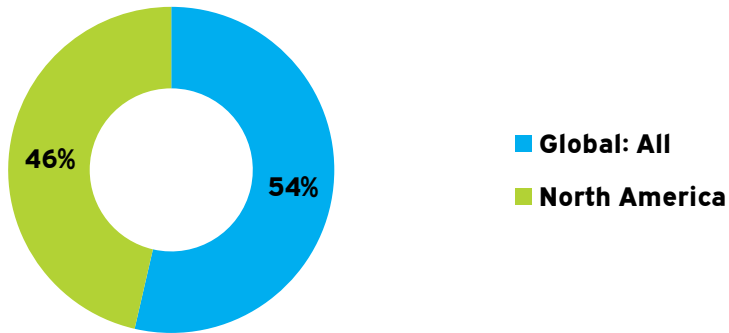


Percent of Exposure

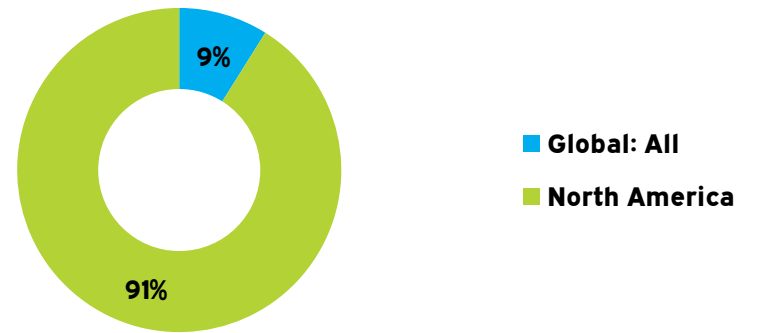


By Geographic Focus

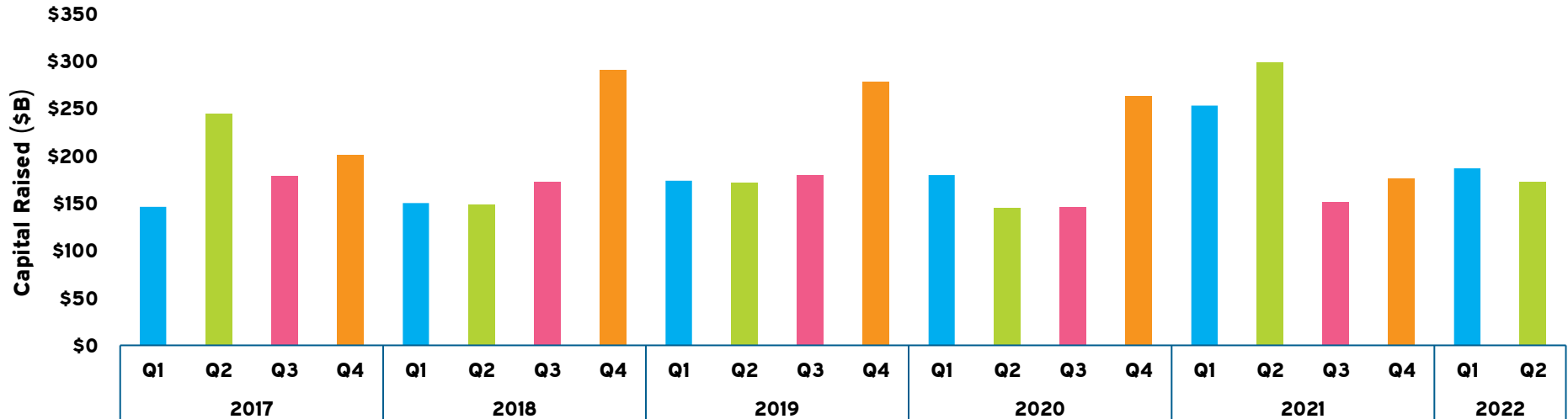
Percent of FMV



Percent of Exposure



Private Equity
Global Fundraising¹

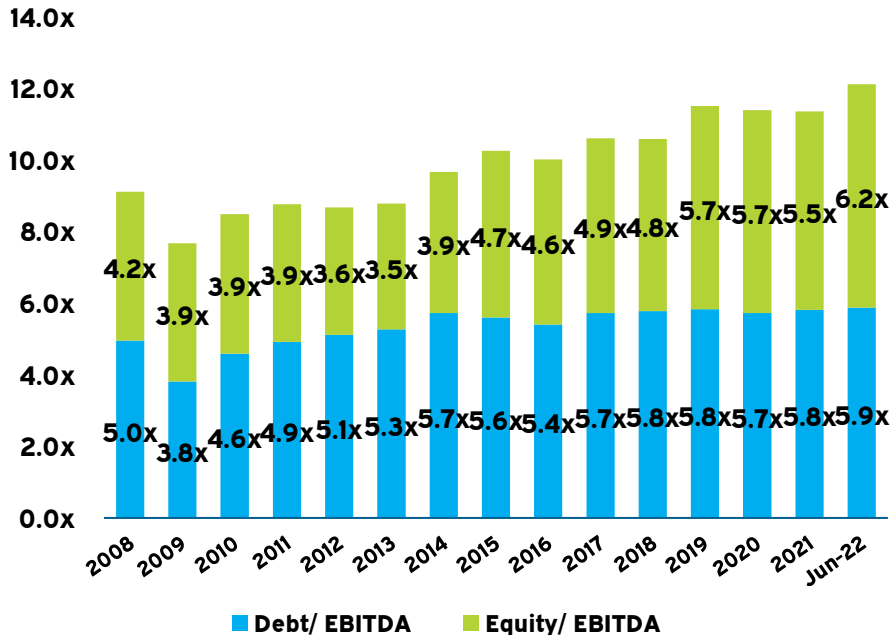


Fundraising activity for private equity funds in the second quarter of 2022 decreased by 8% compared to the previous quarter, with \$172.3 billion raised. It also represents a decrease of 42% from the same period in 2021. The number of fund closings also decreased 19%, to 363 funds, relative to the previous quarter and 57% compared to Q2 2021. The second quarter of 2022 represents the fewest amount of fund closings in a quarter over the last five years. While 2021 was an exceptional year for private equity markets, there are signs of moderation of activity in 2022. While the post-COVID boost in fundraising activity has come to an end, evidence may now be growing of a sustained slowdown on the back of macroeconomic and geopolitical concerns resulting from the outbreak of war in Ukraine, inflationary pressures, and rising interest rates. Funds that closed in the first half of 2022 had been on the road for longer on average compared with funds closing beforehand with 31% having been in market for over two years relative to 25% in 2021 and 19% in 2020. This may suggest that the poor fundraising environment may have prompted some funds to close sooner. There remains a record number of private equity funds in market, as of the start of July 2022. There are currently 2,845 funds² looking to raise \$1.1 trillion in capital, which is equivalent to 2.24x the level of trailing twelve month (TTM) global private equity fundraising. Coming quarters may see additional pressure on fundraising, as LPs delay allocations due to the strong correction in risk assets, which has left private equity higher as a percentage of their portfolios. The exit environment will also remain challenging, especially in the IPO market. GPs will likely still be reluctant to accept exits at depressed valuations, so there may be additional use of continuation vehicles in coming quarters.

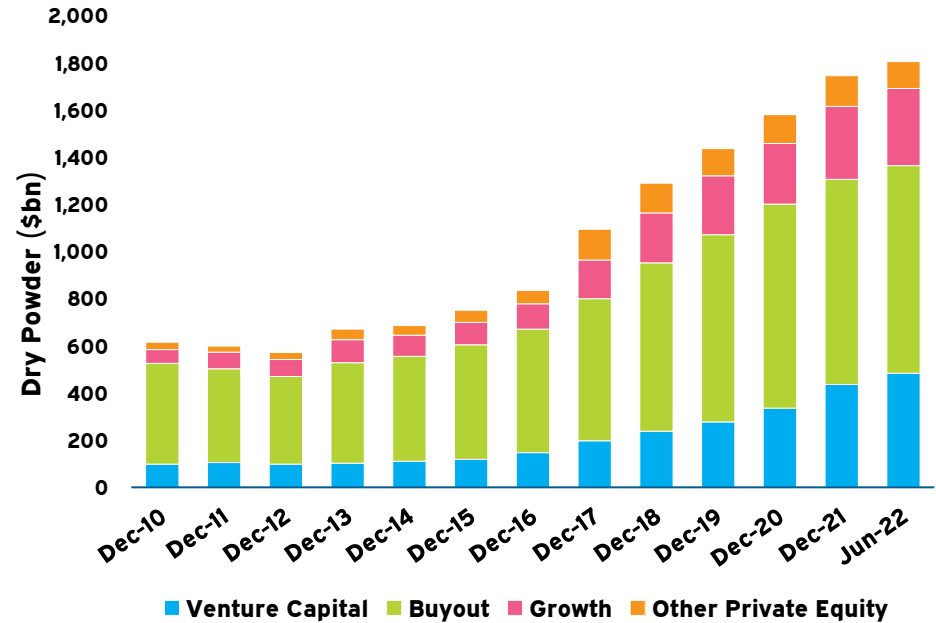
¹ Preqin

² Includes Buyout, Growth, Fund of Funds, Secondaries, and Other Private Equity (Balanced, Co-Investment, Direct Secondaries, Hybrid, PIPE, and Turnaround). It excludes Venture Capital.

Purchase Price Breakdown, All LBOs¹



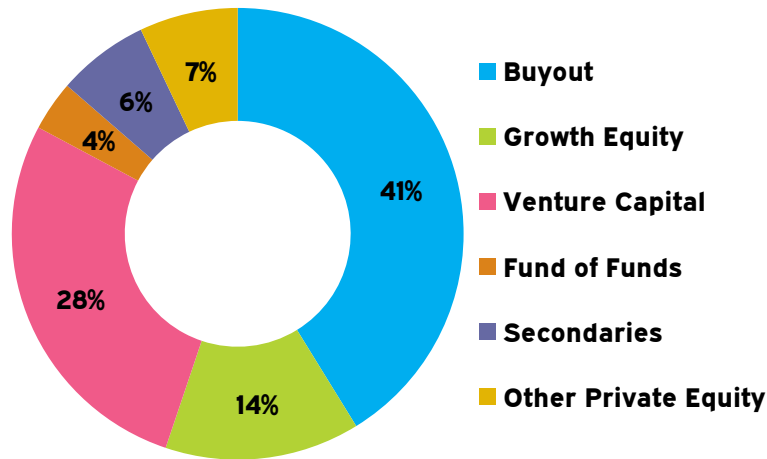
Dry Powder by Fund Type²



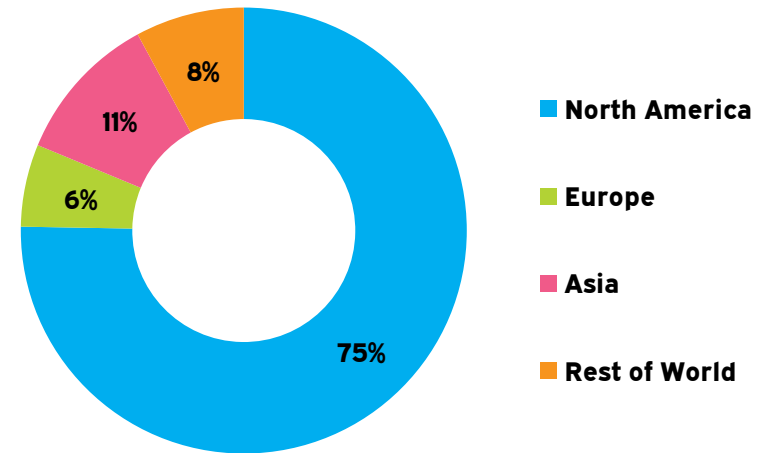
Relative to 2021, the average private equity purchase price multiple has increased from 11.4x EBITDA to 12.1x EBITDA in the first half of 2022. However, relative to the first quarter of 2022, the average purchase price multiple has decreased from 12.2x EBITDA to 11.5x EBITDA in Q2 2022. Equity contribution (relative to total purchase price) in the first half of 2022 has increased to approximately 52% from 49% in 2021, indicating that total purchase prices now comprise more equity than debt. That said, in the second quarter alone, equity contribution relative to total purchase price was 49%. Dry powder levels have increased by approximately 3% from Q4 2021 (and 6% from Q1 2022) 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 S&P
² Preqin

Capital Raised by Strategy¹



Capital Raised by Geography²



Buyout (41% of all private equity capital raised) and Venture Capital (28%) funds represented the most popular private equity sub-strategies during the second quarter of 2022. Buyout funds increased from 27% of capital raised in Q1 2022 to 41% in the first quarter of 2022, and Growth Equity dipped from 29% to 14% of capital raised. Venture Capital strategies, as a percentage of total capital raised, decreased by 3% from Q1 2022. Fund of Funds, Secondaries, and Other Private Equity, which includes co-investment and hybrid vehicles, increased from 13% to 17%, collectively, through the second quarter compared to the previous quarter, driven primarily by growing appetite from LPs in secondaries funds.

North America-focused vehicles continued to represent the majority of funds raised during the second quarter, representing 75% of total capital. This is a notable increase from the 57% in the prior quarter. Alternatively, commitments to Europe and Rest of World decreased by 12% and 8%, respectively, during the second quarter. Commitments to Asia represented 16% of capital raised for Venture Capital funds, specifically, which is a 10% increase from the Q1 2022 total. Overall, private equity investors continued to favor commitments to North America-focused funds, and investor appetite for Europe and Rest of World decreased over the quarter while commitments to Asia-focused vehicles remained relatively consistent in aggregate.

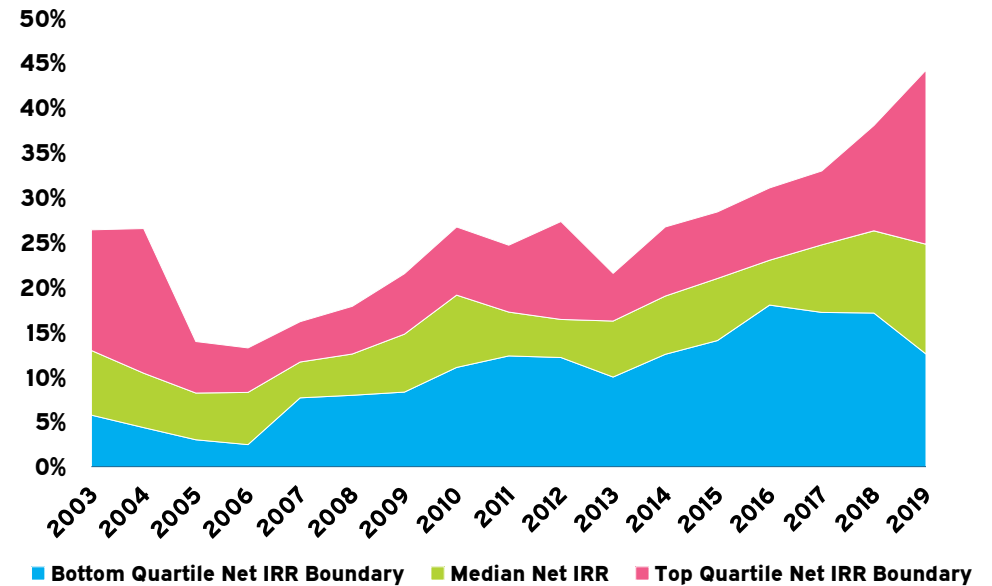
¹ Preqin

² Preqin

Private Equity Performance by Horizon¹

Horizon	Private Equity	Buyout	Venture Capital	Growth Equity
1 Year to 3/2022	29.3%	28.1%	17.0%	29.3%
3 Years to 3/2022	25.4	24.8	25.2	31.0
5 Years to 3/2022	21.5	21.4	20.8	24.9
10 Years to 3/2022	17.6	18.1	15.9	19.3

Private Equity Performance by Vintage Year²



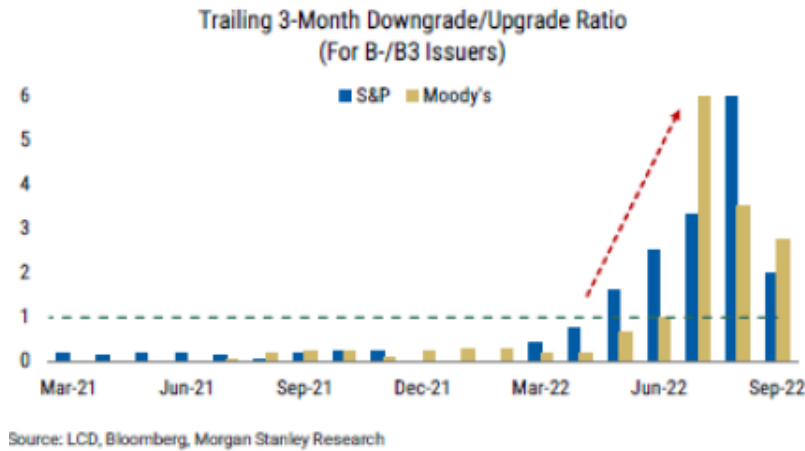
As of March 31, 2022, private equity returns have remained strong with Private Equity generating a 29.3% IRR over the past year through Q1 2022, following the outbreak of the COVID-19 pandemic in Q1 2020 and write-downs across most portfolios at that time related to the associated uncertainty. However, returns have decreased across each private equity strategy since year-end 2021 with Venture funds experiencing the largest drop from 46.8% one-year returns as of Q4 2021 to 17.0% as of Q1 2022. In general, performance has been strong in each vintage year since the Global Financial Crisis. Buyout, Venture Capital, and Growth Equity funds have all generally performed well over the various horizons on an absolute basis, with Growth funds outperforming Buyout and Venture funds. The spread between first and third quartile performance in private equity has grown consistently since the Global Financial Crisis; 2007 vintage funds reported an 8.5% spread while 2019 vintage funds reported a 31.6% spread.

¹ Prequin Horizon IRRs as of 3/31/2022. Data as of 6/30/2022 not yet available.

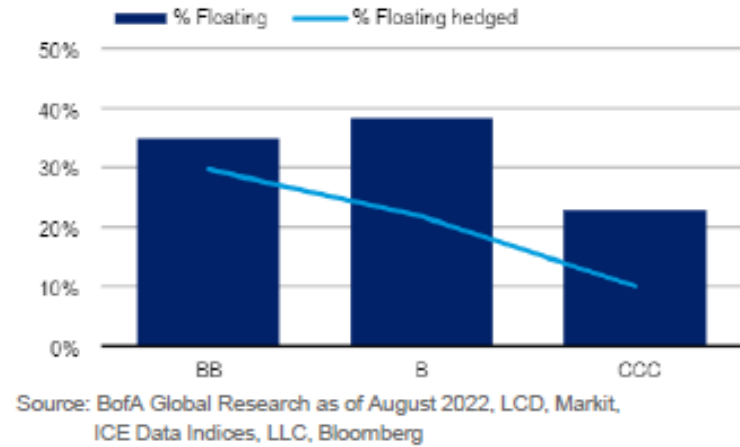
² Prequin, Private Equity – All, Quartile Returns as of 6/30/2022. Data pulled on October 19, 2022.

Credit Market Outlook

Credit rating downgrade pace picks up for B-/B3 issuers



Percentage of debt by credit rating that is floating and hedged

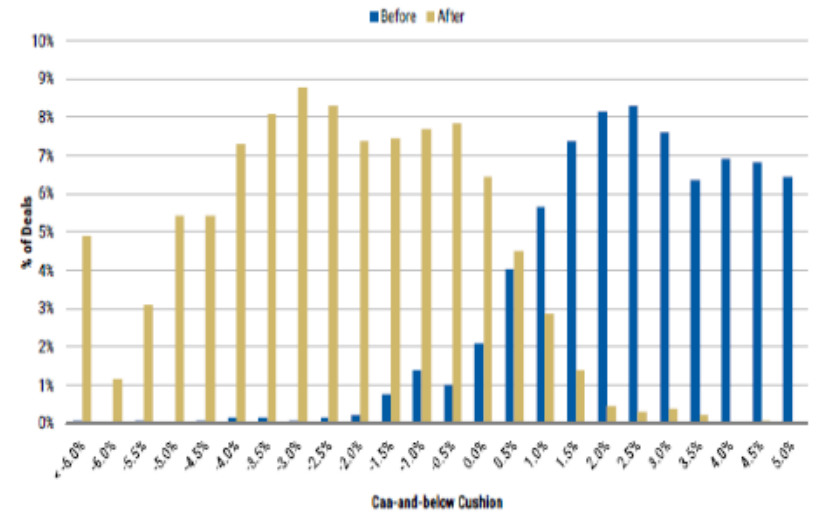
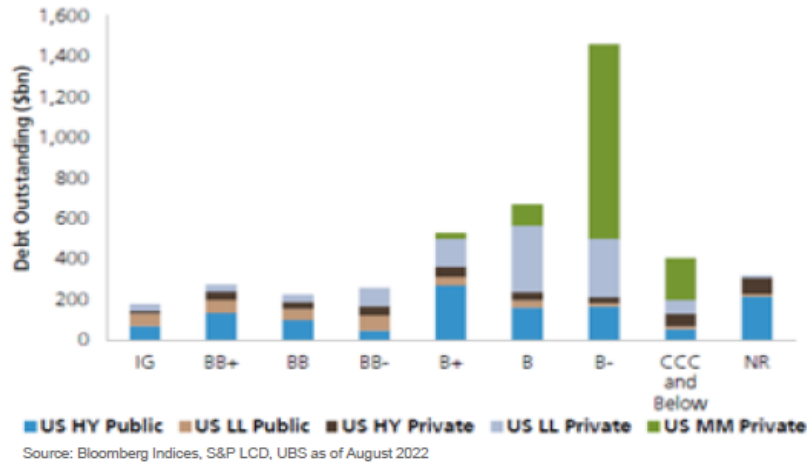


Since the end of the second quarter, there has been an acceleration in the rate of downgrades by rating agencies particularly for B- /B3 rated issuers. The ratio of credit downgrades to upgrades provides an indication of fundamental credit deterioration with the potential to spread more broadly within private credit. The leveraged loan market reflects the same trend in credit downgrades. Compounding the potential headwinds facing these issuers is the high percentage of lower rated issuers with unhedged floating rate debt obligations. Lower rated issuers with floating rate debt must contend not only with rising debt service costs, but potentially declining margins associated with rising labor costs and supply chain related price increases.

Leveraged Loan Markets

Debt outstanding by market and issuer status as public or private credit scenario

Percentage of CLOs breaching CCC limits in downside credit scenario

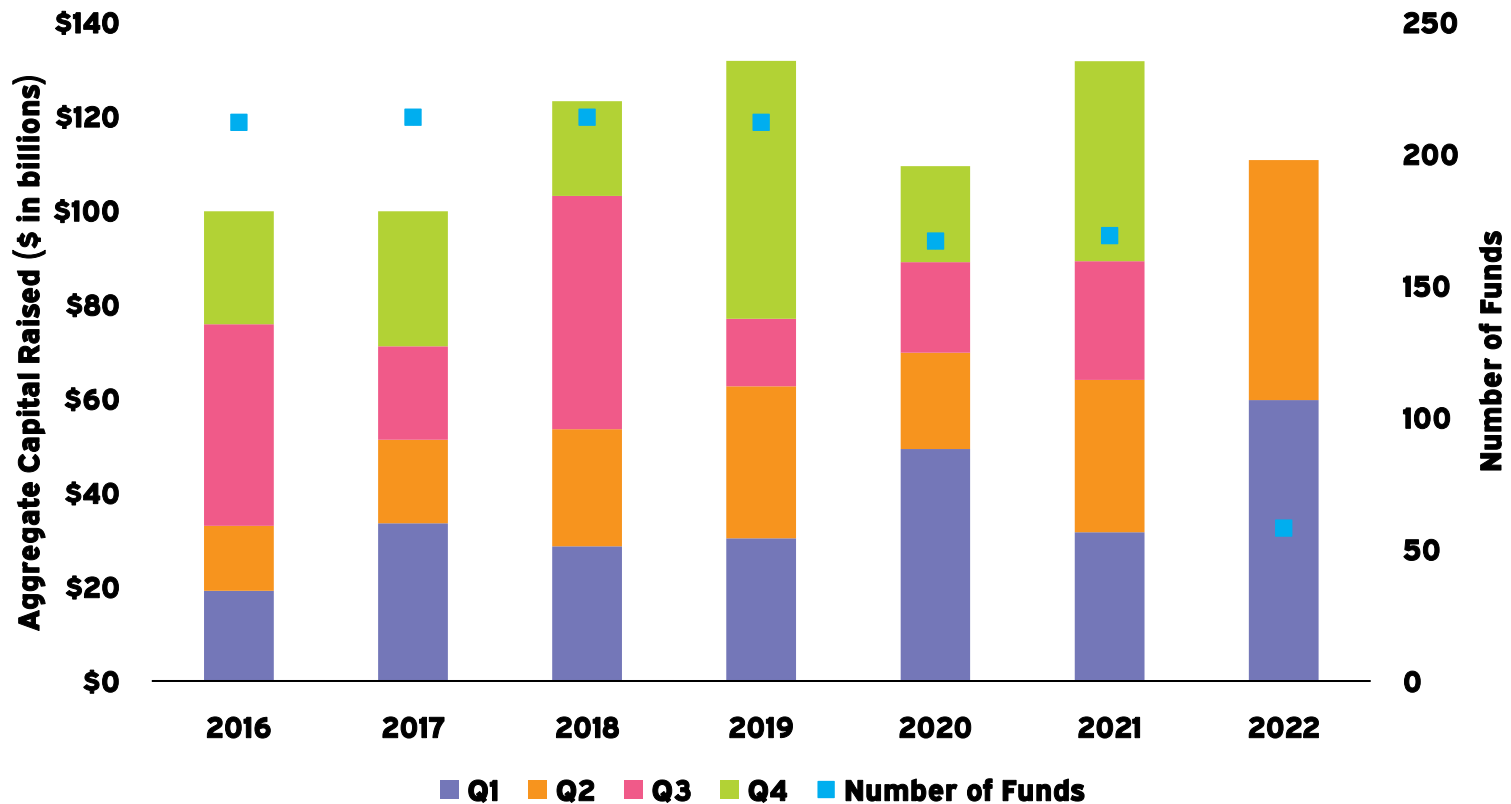


The combined size of the leveraged loan market including private middle market and broadly syndicated loans is considerably larger than the U.S. high yield market. An estimated \$1.5T in debt outstanding with the lowest credit rating is tied to private companies.¹ The deterioration in credit fundamentals in both high yield and loan markets has potential implications for cumulative default rates over the longer term, and for broader pricing volatility in the near term. CLOs are one potential source of uneconomic selling as CLO deals breach their mandated limit of CCC and below credits, managers will be forced to reduce their exposure to remain compliant. According to a recent Morgan Stanley report, the percentage of CLOs failing their CCC limits could increase to 83% from 4% in a downside credit scenario.²

¹Source: Bloomberg, S&P LCD, UBS as of August 2022

²Source: Morgan Stanley Leveraged Finance and CLO Strategy (October 3, 2022)

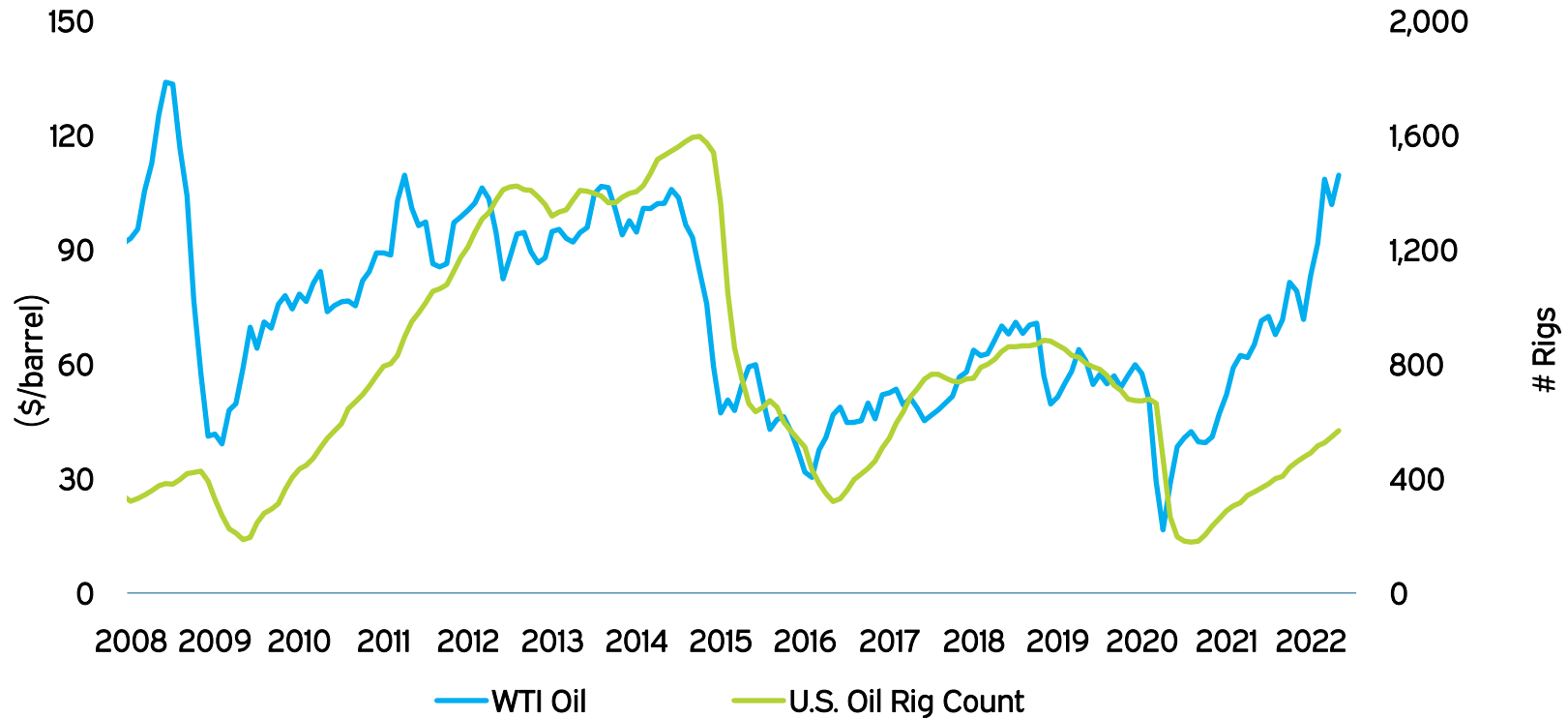
Global Quarterly Unlisted Natural Resources Fundraising¹



During the second quarter, \$51 billion was raised across 25 funds with the average fund size raised just over \$2.0 billion of commitments. This represented a near record fundraising quarter just shy of the record \$60 billion from the prior quarter. Energy-related funds raised almost all the capital comprising 99% of commitments. Most natural resources managers raising capital during the quarter were focused on North America, accounting for over half of cumulative targeted capitalization in the market.

¹ Source: Preqin Private Capital Fundraising Update, 2Q 2022.

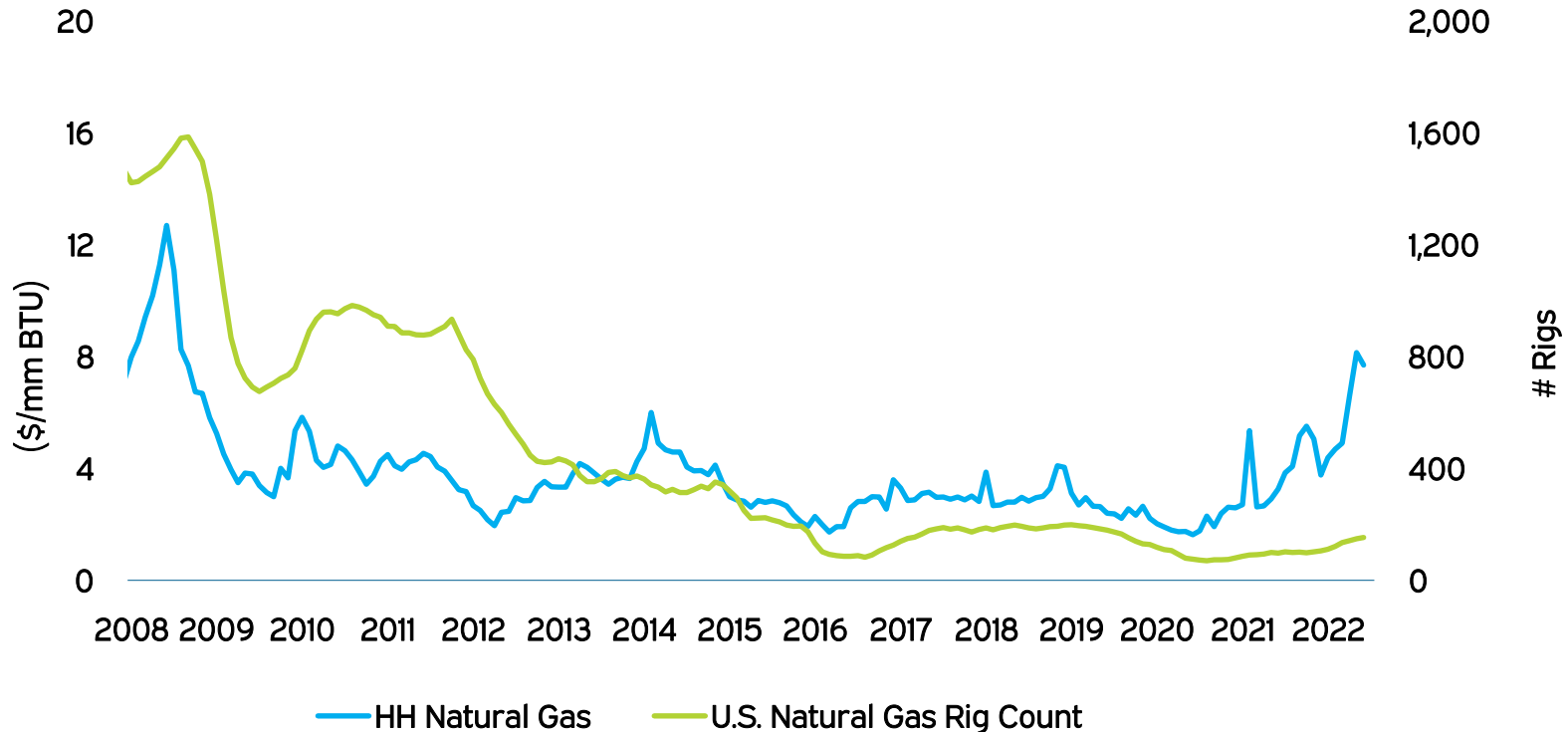
Oil Price vs. Active US Rigs¹



The conflict between Russia and Ukraine continued into second quarter of 2022 bringing uncertainty to global energy supplies. For much of the quarter, West Texas Intermediate (WTI) and Brent oil prices were over \$100 a barrel. WTI ended the quarter at \$115 per barrel while Brent ended at \$123 per barrel. Relative to one year prior, WTI prices were 61% higher. The number of rigs increased by 216 from one year prior to a total of 583. The U.S. produced approximately 11.8 million boepd in June 2022. Gasoline prices for regular blend in the U.S. reached an average of \$5.29 per gallon representing a 17% quarterly increase and a 77% increase from one year prior. In an effort to quell soaring gasoline prices, President Biden announced 1 million barrels of oil to be released from the Strategic Petroleum Reserve daily for 6 months.

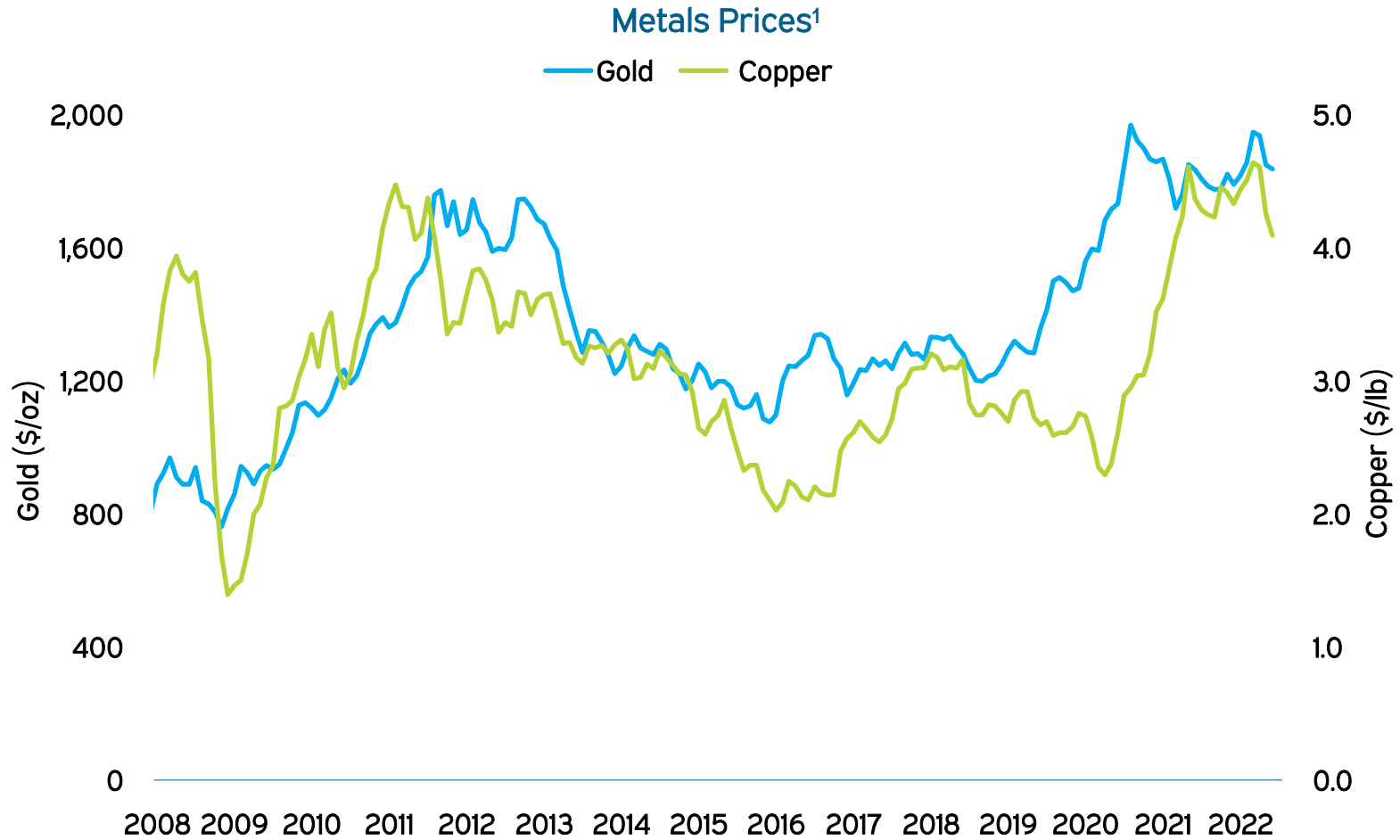
¹ Source: EIA and Baker Hughes.

Natural Gas Price vs. Active US Rigs¹



European countries, highly dependent on Russian oil and natural gas, are exploring various near-term options, including the restart of coal and nuclear power plants, to help build natural gas inventories for the upcoming winter season. Henry Hub gas prices ended the quarter at \$7.70/mm BTU, a quarterly and annual increase of 57% and 167%, respectively. The U.S. natural gas rig count increased by 18 to 153 during the quarter. The U.S. produced a record 109 billion cubic feet of natural gas per day in May 2022. Natural gas prices remain significantly higher in the Asia and European markets.

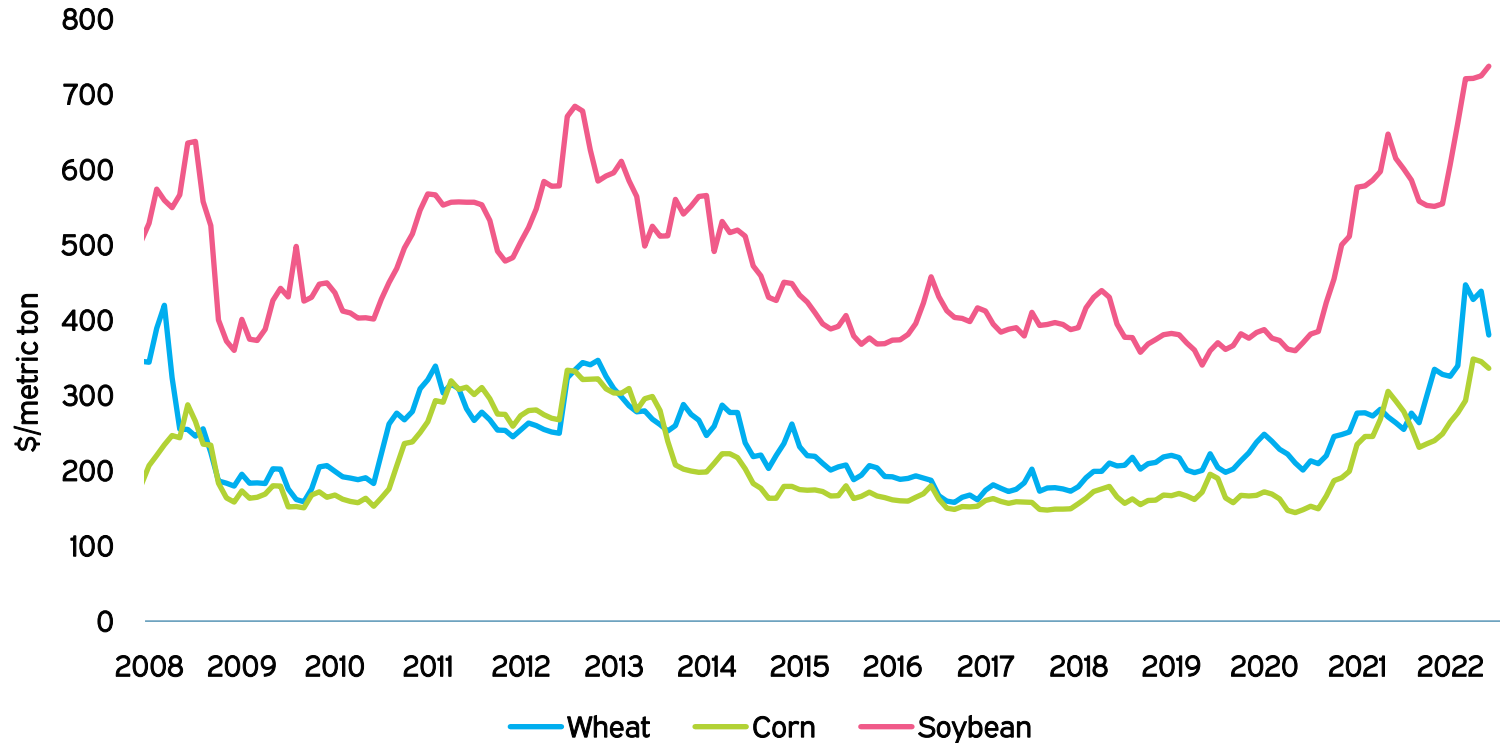
¹ Source: EIA and Baker Hughes.



Global recessionary fears contributed to a decrease in industrial metal prices during the quarter. Copper prices fell by 12% during the quarter after reaching a record in the prior quarter. Longer term, metals and minerals used in batteries for electric vehicles, renewable energy projects, infrastructure development, and commercial energy storage projects should result in robust demand.

¹ Source: World Bank

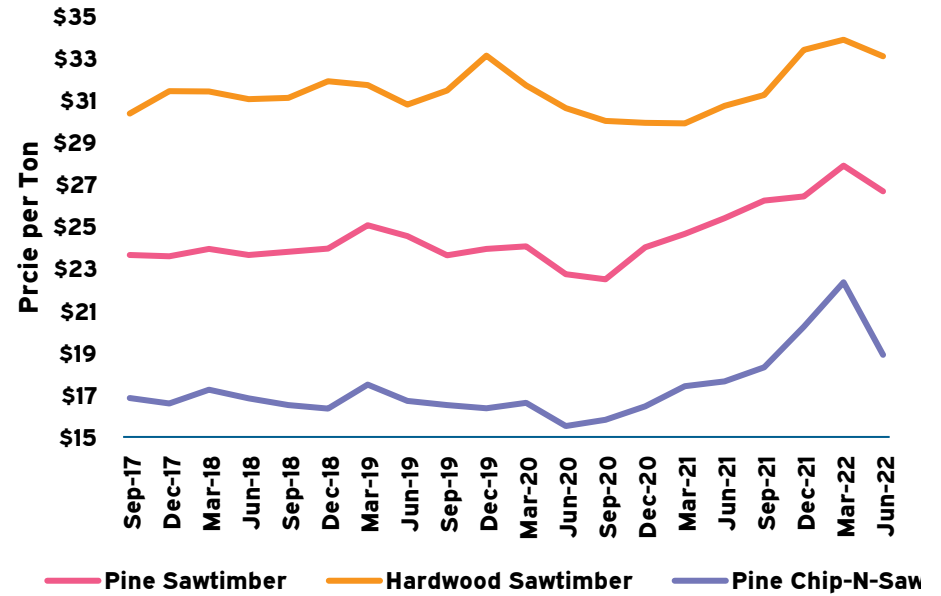
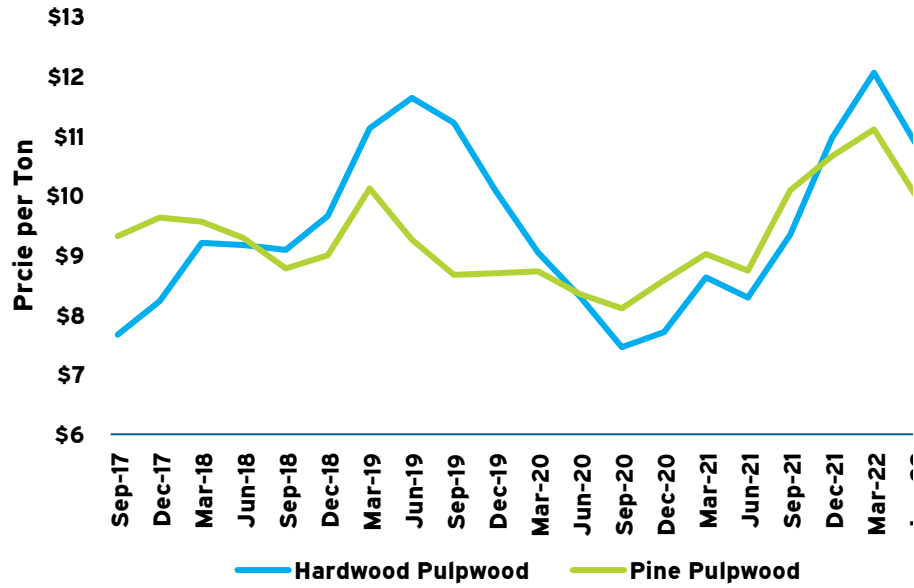
Wheat, Corn, & Soybean¹



In 2022, heat, frost, and droughts impacted crop production and yields across the U.S., particularly permanent crops along the West Coast. During the quarter, wheat prices were down 15% while corn and soybeans were up 15% and 2%, respectively. Relative to one year prior, wheat, corn, and soybean prices were up 44%, 15%, and 20%, respectively. The NCREIF Farmland index increased by 1.5% during the quarter driven by income returns of 0.6% and appreciation of 0.9%.

¹ Source: World Bank

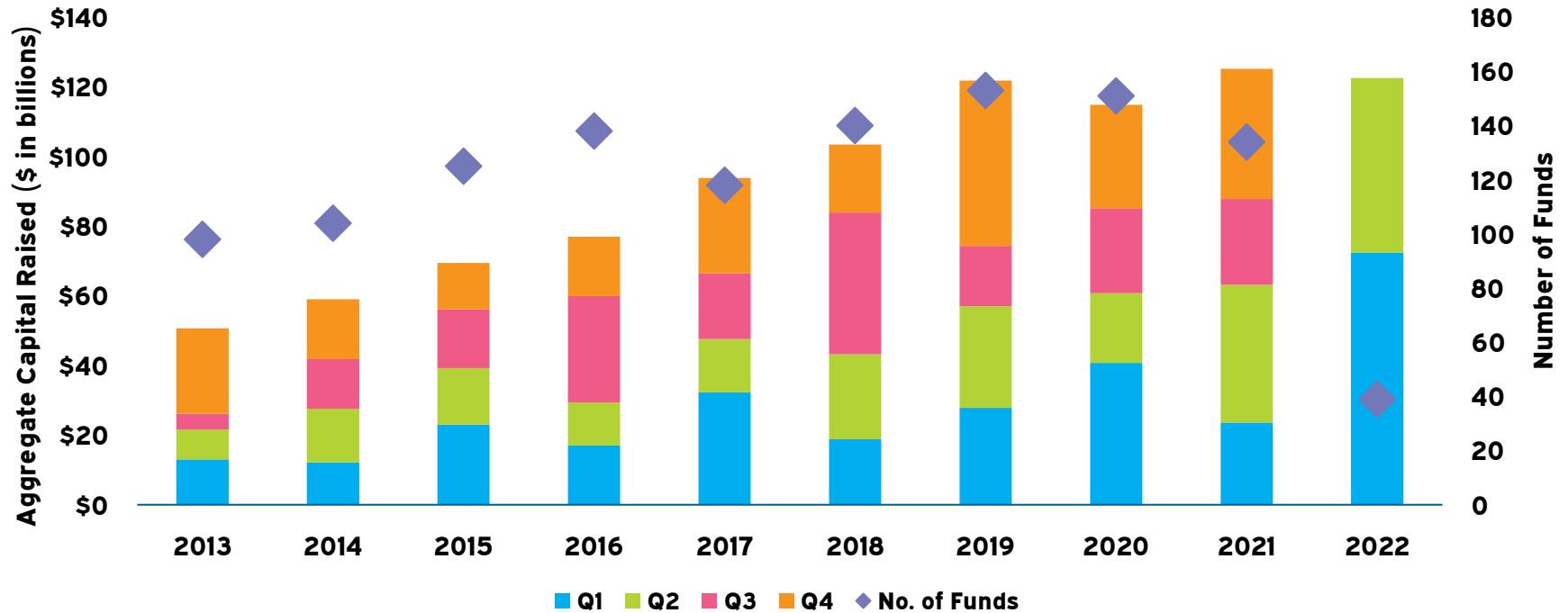
U.S. South Timber Prices¹



U.S. South average timber prices for pulpwood, sawtimber, and chip-n-saw were all down during the second quarter 2022. This comes after an upward trend over the past two years. Pulpwood has experienced more volatility than sawtimber since 2017 and saw decreases of 10% in both hardwood and pine pulpwood. Pine Chip-N-Saw had the largest decrease during the second quarter at 15.4%, but was still up 7.1% year over year. The NCREIF Timberland index increased by 1.9% during the quarter driven by income returns of 0.8% and appreciation of 1.1%.

¹ Source: Bloomberg and TimberMart South

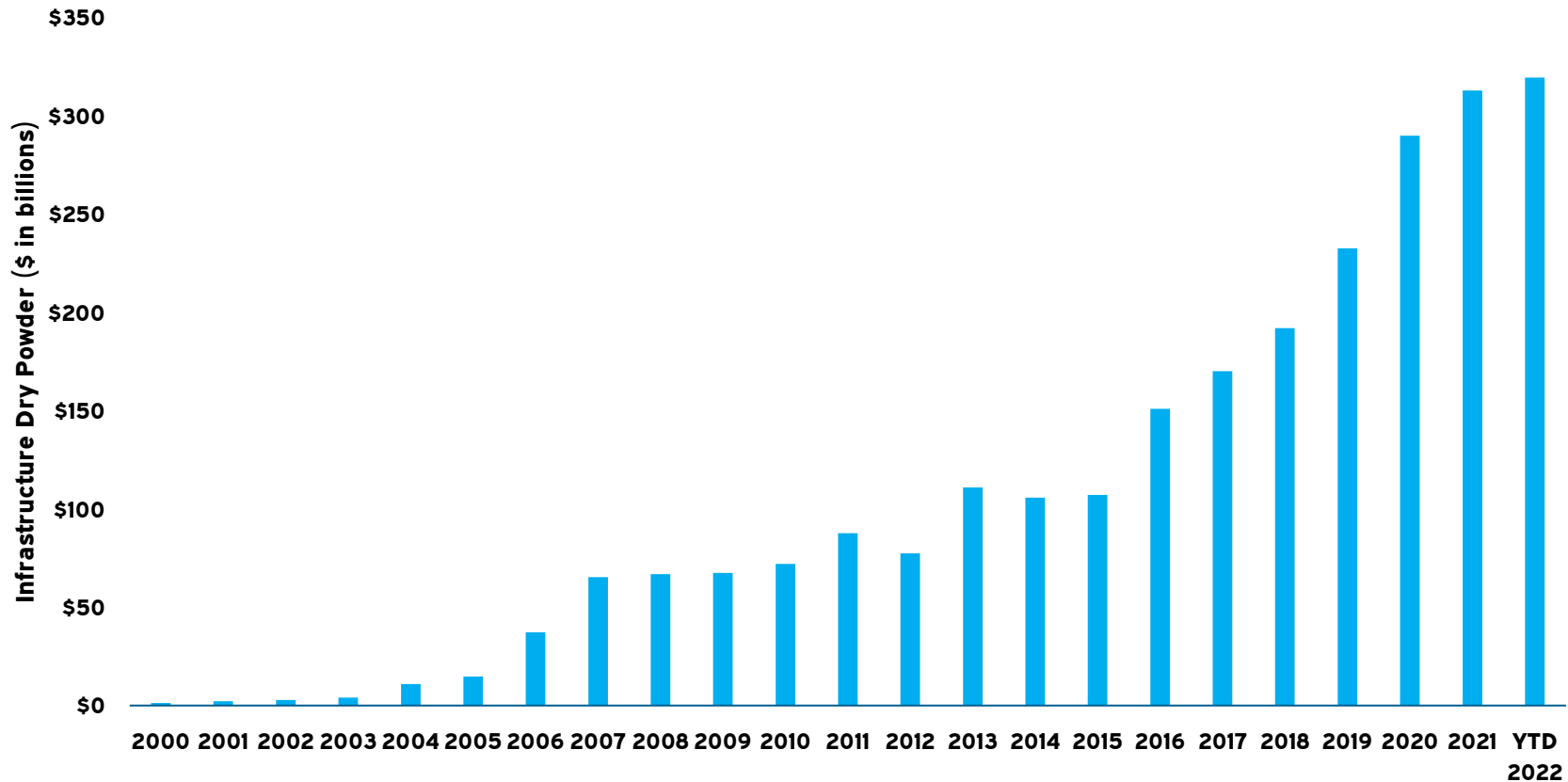
Global Quarterly Unlisted Infrastructure Fundraising¹



The first two quarters of 2022 nearly matched capital raised during the full year 2021 with over \$120 billion raised. This capital was raised by a significantly smaller number of funds totaling 39 partnerships averaging over \$3 billion per fund. This was an increase over the 2021 average of \$1.0 billion per fund.

¹ Source: Preqin 2Q 2022 Global Infrastructure Report.

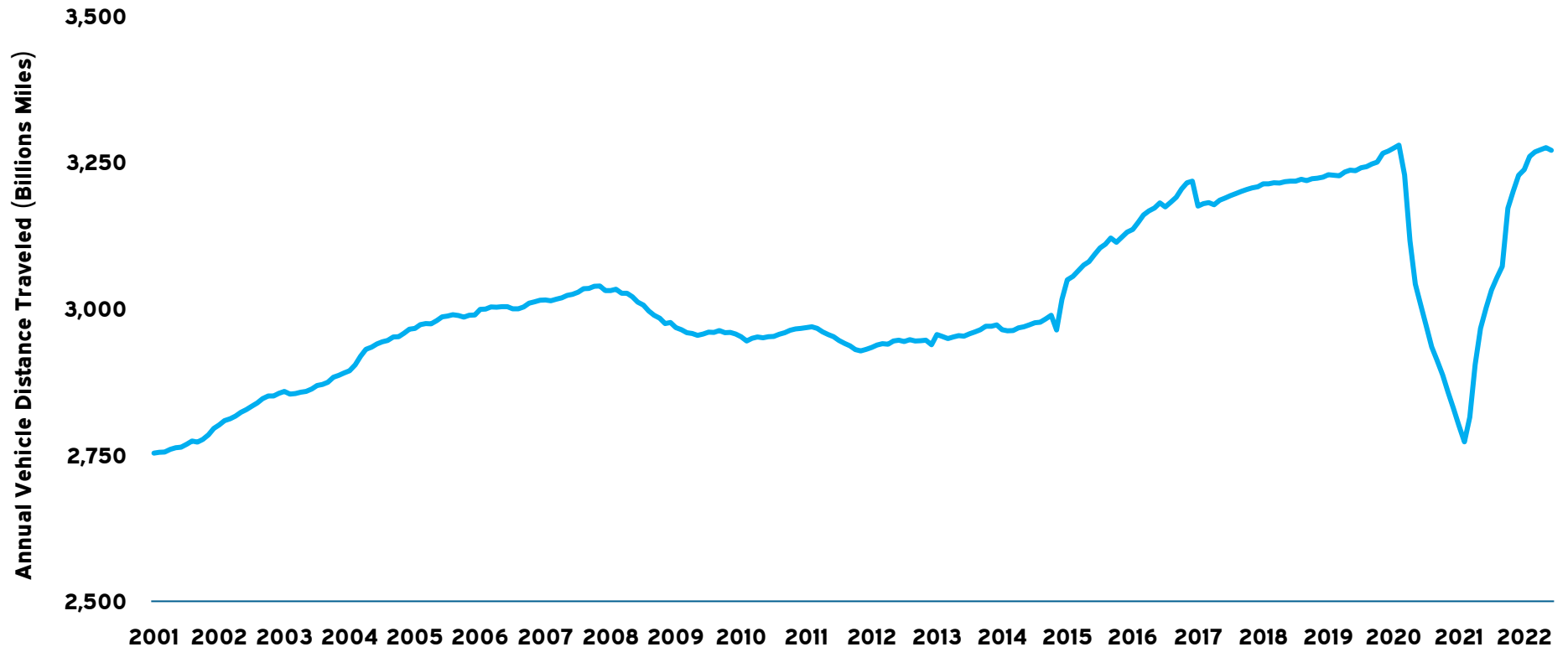
Global Infrastructure Dry Powder¹



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 2006, 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 \$300 billion today.

¹ Source: Preqin Dry Powder downloaded July 2022.

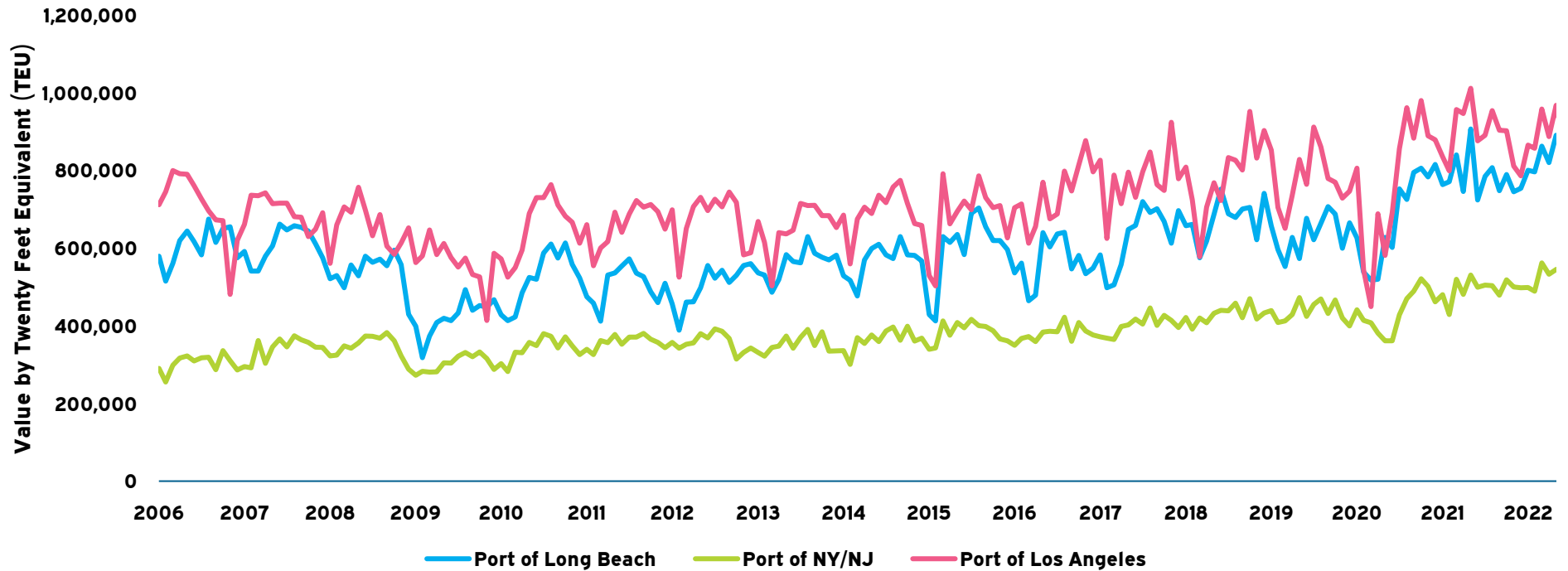
Trailing 12-month Annual Vehicle Miles on All US Roads¹



The second quarter continued post-pandemic travel recovery with a total of approximately 833 billion miles. This represented an increase of 0.3% 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 second quarter continued to show an increase in the US price of a gallon of gas, which steadily increased to an average price of \$5.03 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

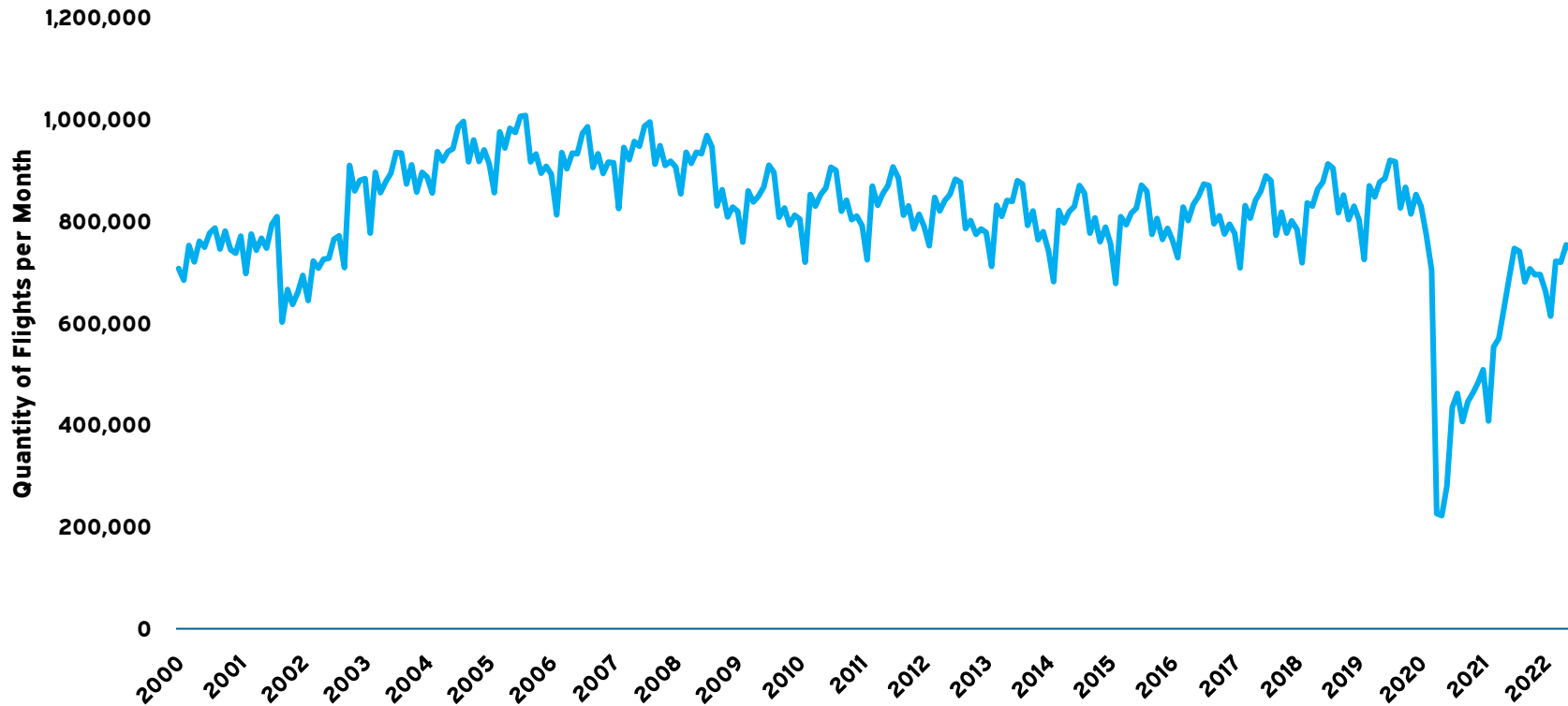


The chart presents the top three US ports by container volume, as measured by twenty-foot equivalent units (TEU). Activity at the three ports provides a high-level representation of the volume at US ports more broadly.

During the second quarter, volumes at the three ports increased by 0.2 million units relative to the same period in 2021. On a year-over-year basis, the combined port volumes increased by 0.4 million TEUs, or 1.3%, over the prior 12-month period. The Port of Long Beach recorded an increase of 2.0% (0.2 million TEUs), the Port of NY/NJ reported an increase of 6.4% (0.4 million TEU), and the Port of Los Angeles recorded a decrease of 1.4% (0.2 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

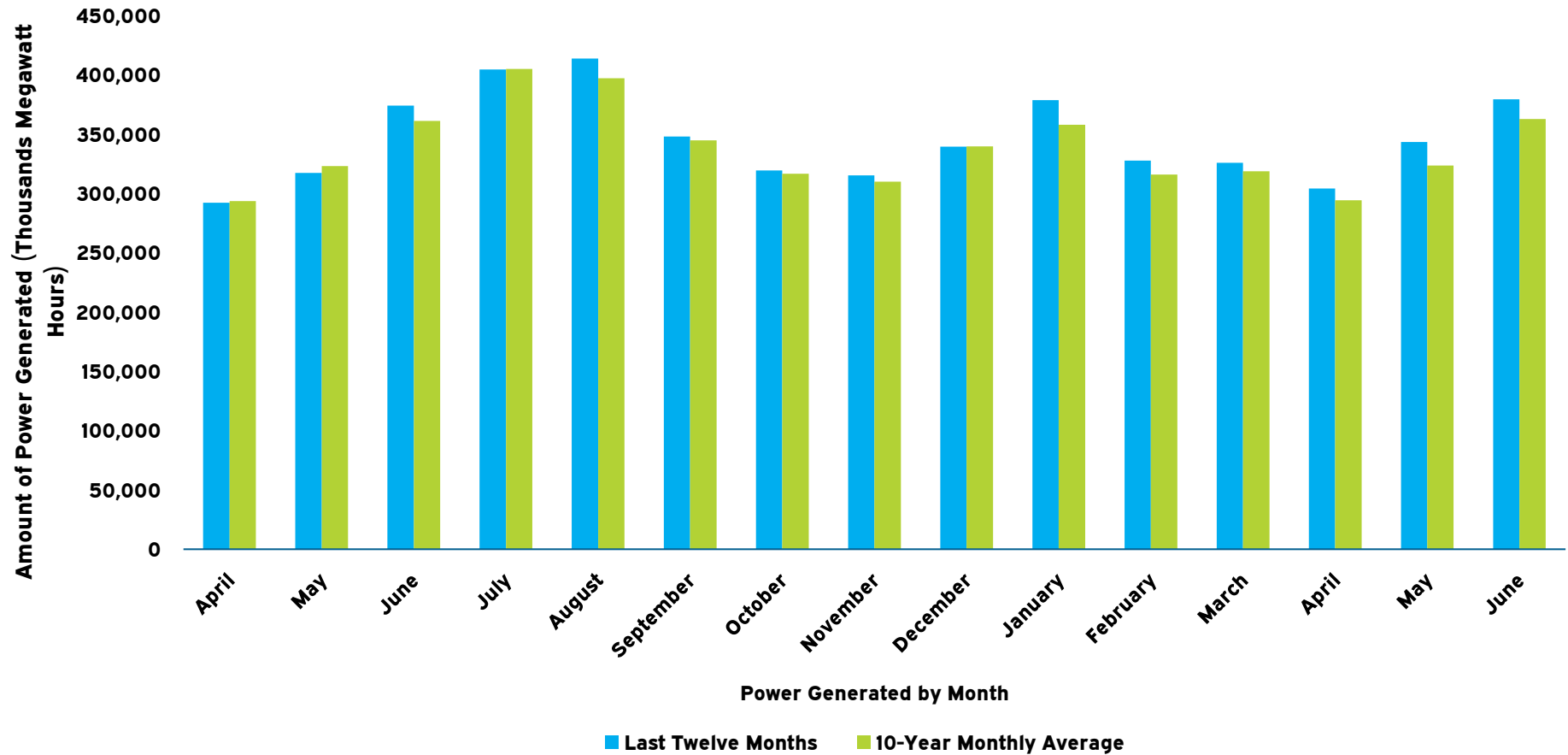


The chart above presents all US domestic and international flights, excluding foreign point-to-point flights by month. Historically, air traffic is cyclical with peaks in the summer months and troughs in the winter months.

There were 0.3 million more flights during the second quarter of 2022 over same period in 2021, representing a 18% increase. In addition to the number of flights, the total number of passengers travelling on US and international airlines increased by 88% for the 12 months ended June 2022 over the prior 12 months.

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

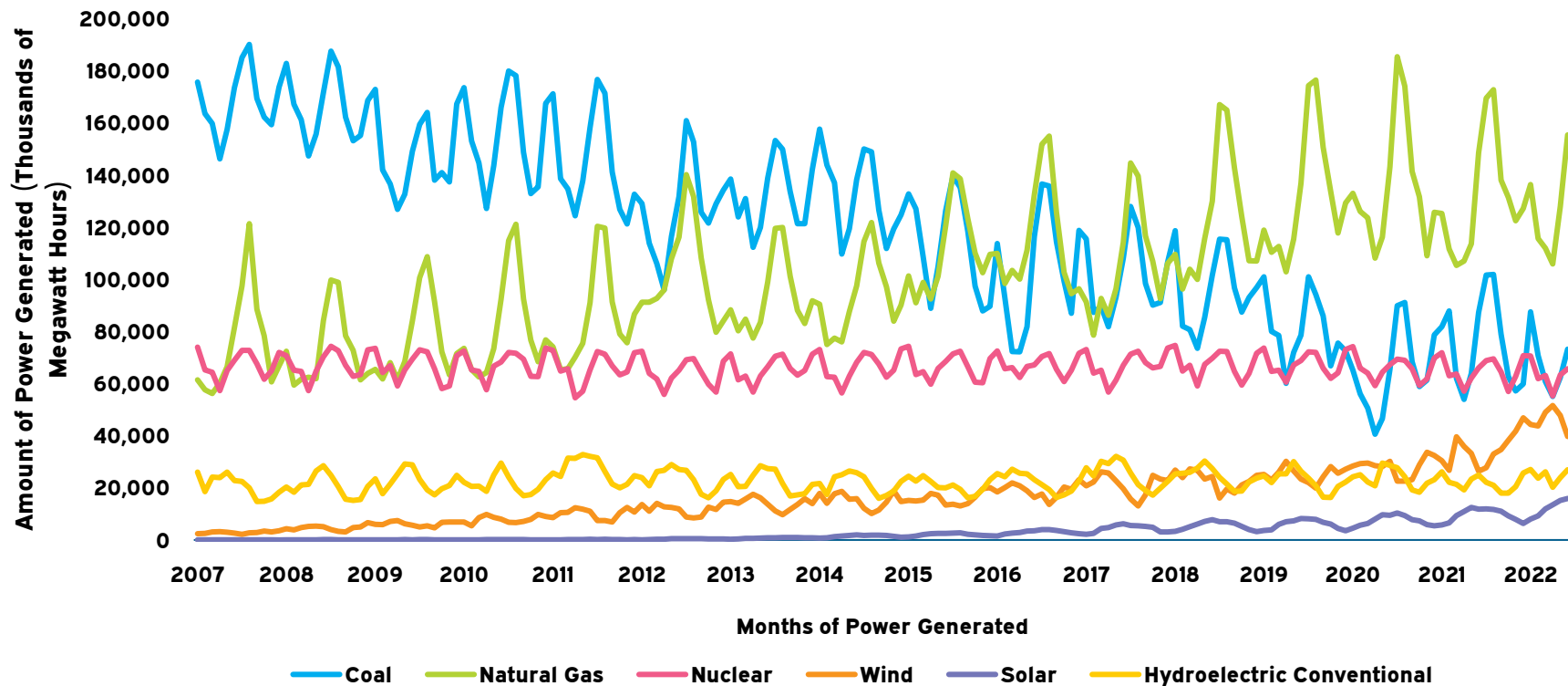
Total US Power Generation¹



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 4.4% during the second quarter, compared to the same period in 2021.

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

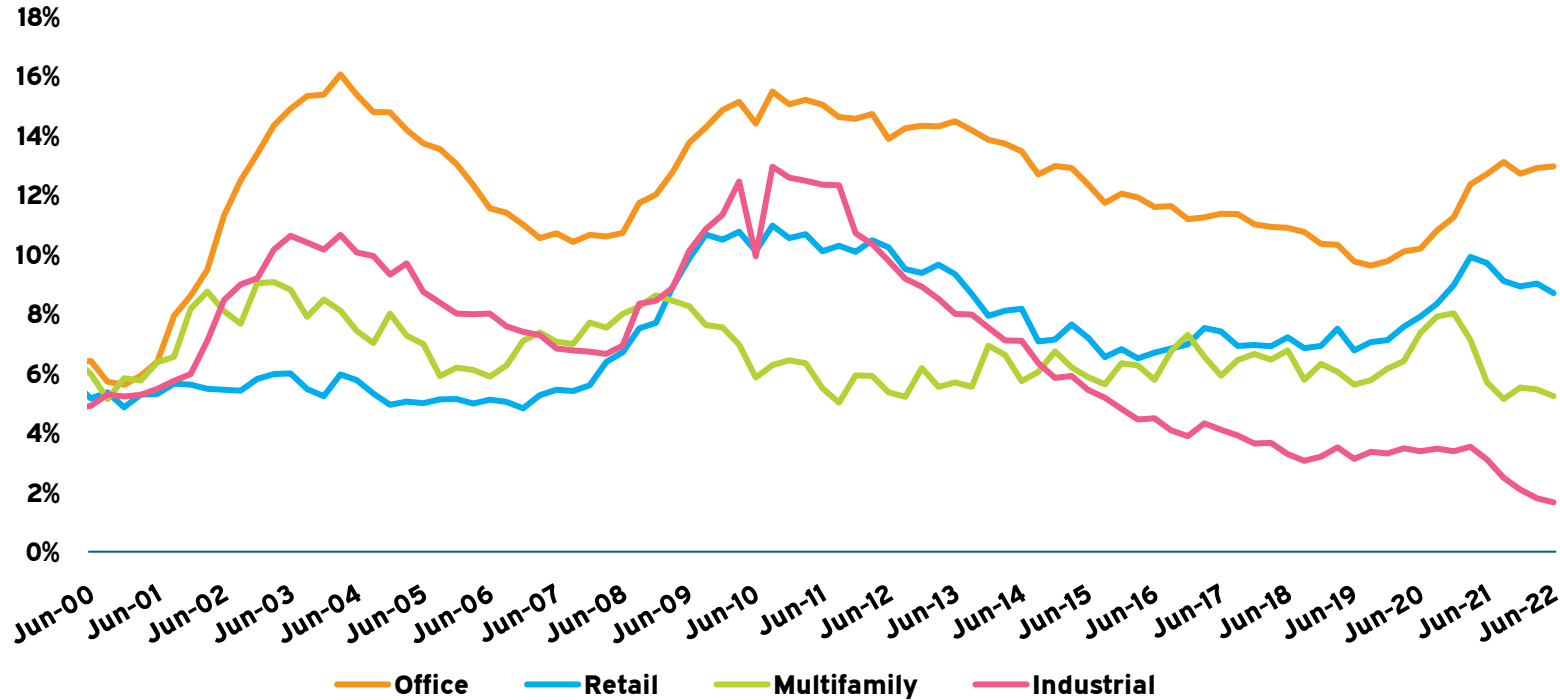
US Power Generation by Source¹



In the second quarter 2022, total US power generated increased by 4% over the same time 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 3% of energy generation, respectively. Natural gas, coal, and nuclear accounted for 38%, 21%, 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.

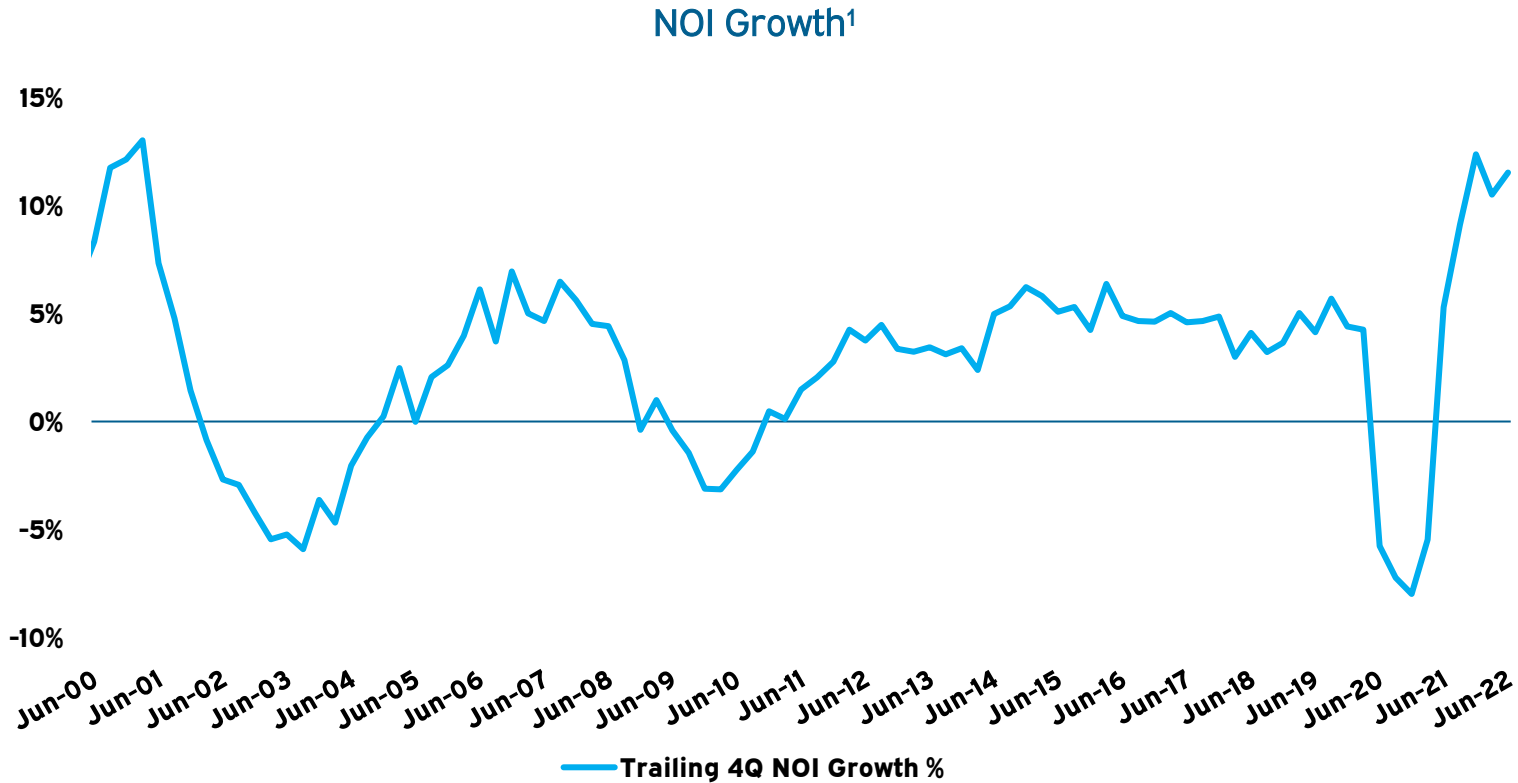
¹ Source: US Energy Information Administration: Electric Power Monthly, June 2022.

Real Estate Fundamentals Vacancy by Property Type¹



In the second quarter of 2022, vacancy rates increased for office, while vacancy rates for multifamily, industrial and retail decreased. Retail saw the largest decrease in vacancy rates, moving down 32 basis points. Multifamily vacancies decreased 22 basis points in Q2 2022, and industrial vacancies fell another 14 basis points to set a new all-time low at 1.7%. Office vacancies increased slightly by 6 basis points in Q2 2022 to 13.0%. Compared to one year ago, vacancy rates in industrial decreased 144 basis points, retail decreased 101 basis points, multifamily decreased 46 basis points, and office increased 26 basis points. Overall, the vacancy rate across all property types decreased 110 basis point from Q2 2021.

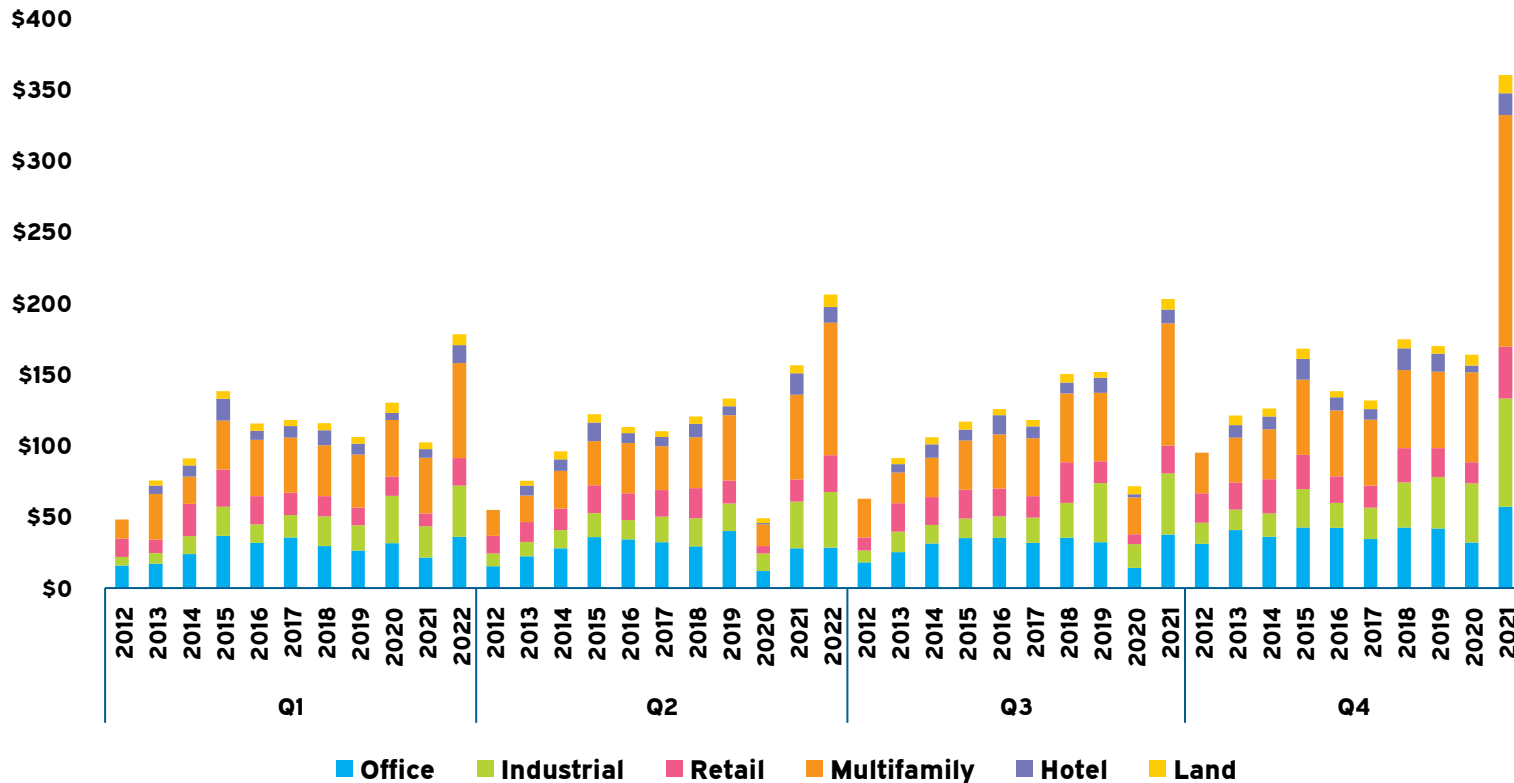
¹ Source: NCREIF



The trailing twelve-month rate of NOI growth increased slightly in Q2 2022 to 11.5%. Resilient demand and near immediate take-up of new supply in both the industrial and multifamily sectors underpinned the continued NOI growth. Industrial NOI growth is trending at 12.6% for the trailing year ending Q2 2022. Office NOI growth has moved out of negative territory to a positive 2.7% year-over-year, and Apartment NOI (a sector with “gross” rents, compared to “net” rents in other property types) experienced positive NOI growth at 22.3% year-over-year as occupancy levels and rental rate growth improved. Retail NOI growth continues to improve from pandemic lows, now at 13.6% year-over-year.

¹ Source: NCREIF

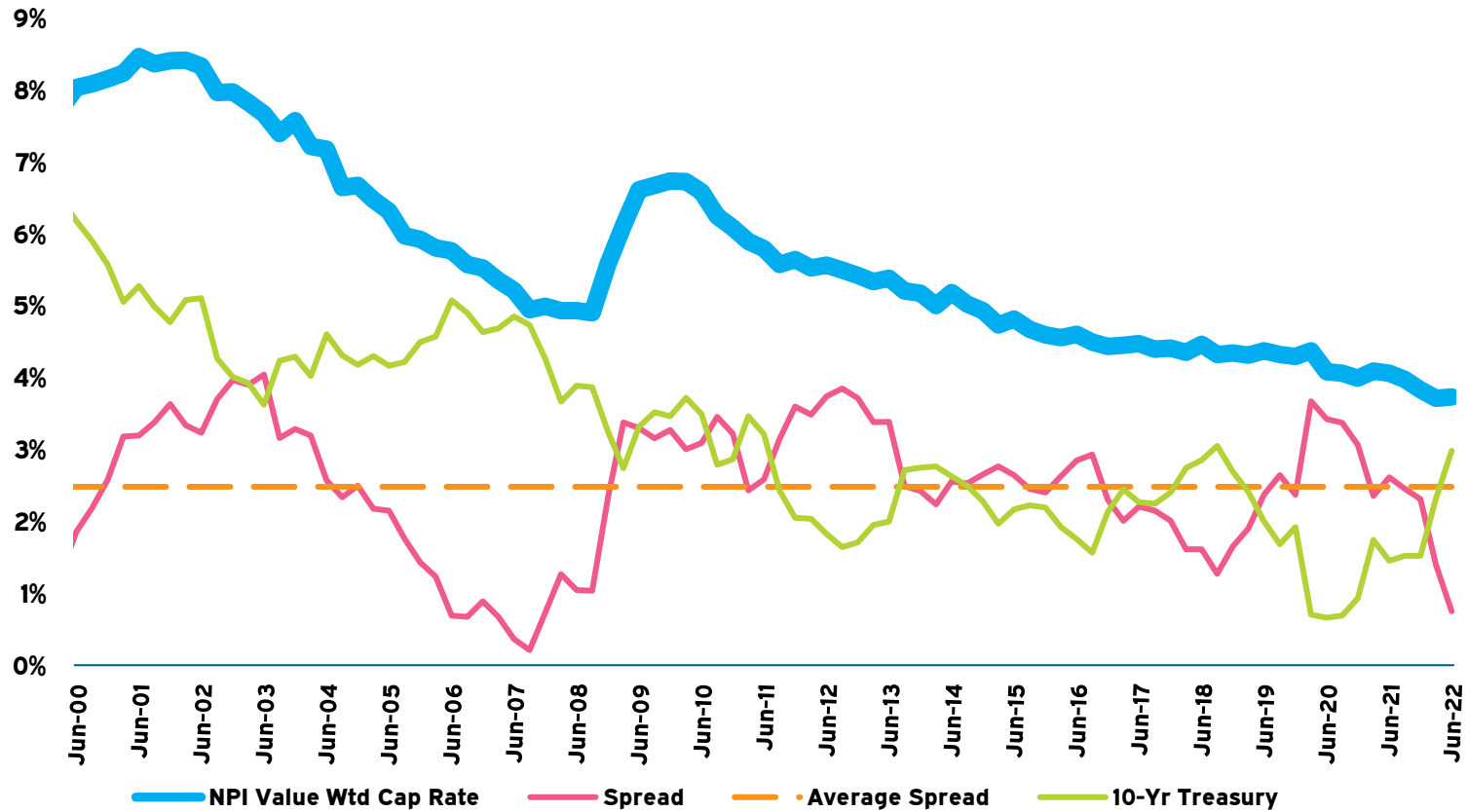
Transaction Volume (\$bn)¹



Private real estate transaction volume for properties valued over \$2.5 million for Q2 2022 was up significantly from Q2 2021 to \$206 billion. Compared to a year ago, most property types saw increases in transaction volume: retail (+68%), multifamily (+56%), land (+49%), and industrial (+19%). Office transaction volume was effectively flat, and hotel transaction volume was down 28%. Multifamily and industrial properties made up the largest percentages of total transaction volume during the quarter, at 45% and 19%, respectively.

¹ Source: PREA

Real Estate Capital Markets
Cap Rates vs. 10-Year Treasury¹



The NPI Value Weighted Cap Rate was unchanged in Q2 2022 at 3.7%. The 10-year Treasury yield increased by 66 basis points in Q2 2022 to 3.0%. The spread between cap rates and treasury yields (75 basis points) is now well below the long-term average spread of 251 basis points.

¹ Source: NCREIF and US Department of the Treasury

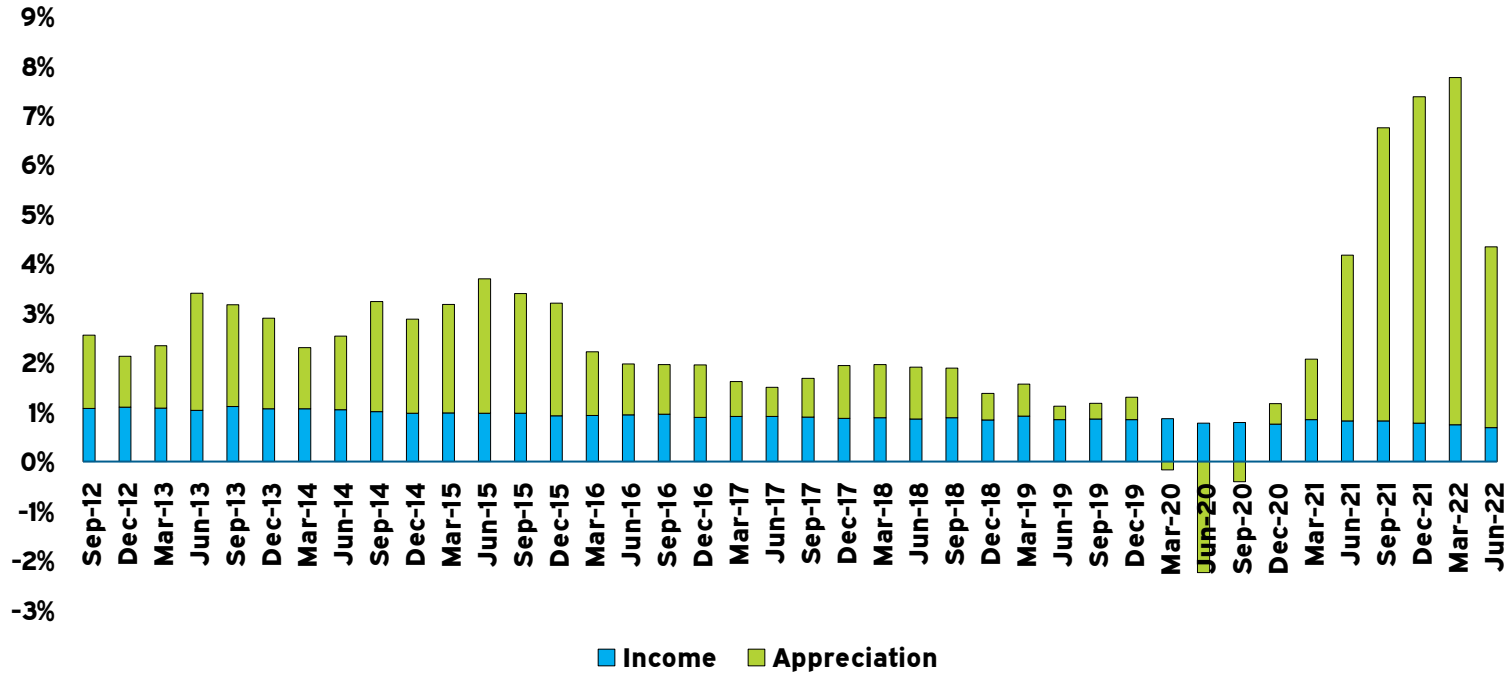
Trailing Period Returns¹

<i>As of June 30, 2022</i>	1 Year	3 Years	5 Years	10 Years
NFI-ODCE (EW, net)	28.9%	12.3%	10.1%	10.5%
NFI-ODCE (VW, net)	28.3	11.7	9.6	10.2
NCREIF Property Index	21.5	10.2	8.9	9.7
NAREIT Equity REIT Index	-5.9	5.3	6.7	8.3

Private real estate indices were positive in Q2 2022 and continue to be positive over the 1-year, 3-year, 5-year, and 10-year time horizons. The NFI-ODCE Equal Weight Index posted another strong quarter in Q2 2022 and private core real estate vastly outperformed 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 -14.7% in Q2 2022, after posting a 12.0% return in the same quarter one year ago.

¹ Source: NCREIF

ODCE Return Components ¹ (Equal Weight, Net)



The NFI-ODCE Equal Weight return in Q2 2022, while quite strong at 4.4%, represented a significant decrease from the prior quarter's record setting return of 7.8%. Small upward adjustments to the discount rate, used in valuations to reflect increasing interest rates and the cost of debt financing, chipped away at the appreciation component of returns (+3.7% in Q2 versus 7.0% in Q1). The income component of the quarterly return has been fairly consistent around 0.7%.

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.
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.
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	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.

Public Market Equivalent ("PME")

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:

Infrastructure: Dow Jones Brookfield Global Infrastructure Index

Natural Resources: S&P Global Natural Resources Index

Private Debt: Barclays Capital U.S. Corporate High Yield Bond Index

Private Equity: MSCI ACWI Investable Market Index

Real Assets (excluding Real Estate): Equal blend of Dow Jones Brookfield Global Infrastructure Index and S&P Global Natural Resources Index

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

Real Estate: Dow Jones U.S. Select Real Estate Securities Index

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.

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.