

# San Jose Federated City Employees' Retirement System

First Quarter 2022

Private Markets Program  
PUBLIC

# San Jose Federated City Employees' Retirement System Private Markets Program

Program Snapshot | As of March 31, 2022

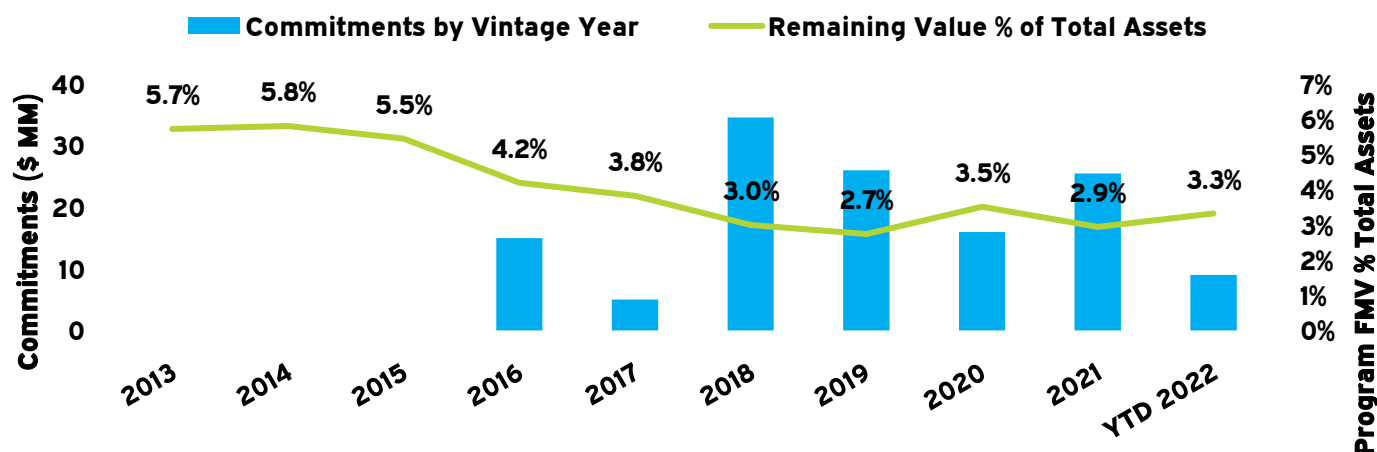
## Snapshot

### 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	214.1	41.6	1.59	8.3	7.2
NB Fund of One	2017	324.9	141.3	183.6	38.5	315.4	1.93	33.7	13.5
Private Debt	2010	281.1	58.0	275.1	234.8	98.8	1.21	6.1	6.1
Real Estate	2007	228.8	41.1	217.5	186.2	105.2	1.34	7.4	8.9
Real Assets	2016	66.3	26.4	43.3	9.5	51.7	1.41	13.9	13.4
Venture Capital	2021	59.8	42.0	10.7	0.0	10.9	1.01	NM	NM
<b>Total</b>		<b>1,135.2</b>	<b>308.8</b>	<b>891.1</b>	<b>683.1</b>	<b>623.5</b>	<b>1.47</b>	<b>9.7</b>	<b>NA</b>

### Introduction

As of March 31, 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 \$98.8 million at March 31, 2022, which equates to 3.3% of the overall Retirement System, slightly above the 3.0% policy target.



### Program Status

No. of Investments	16
Committed (\$ MM)	281.1
Contributed (\$ MM)	275.1
Distributed (\$ MM)	234.8
Remaining Value (\$ MM)	98.8

### Performance Since Inception

Program	
DPI	0.85x
TVPI	1.21x
IRR	6.1%

#### Commitments

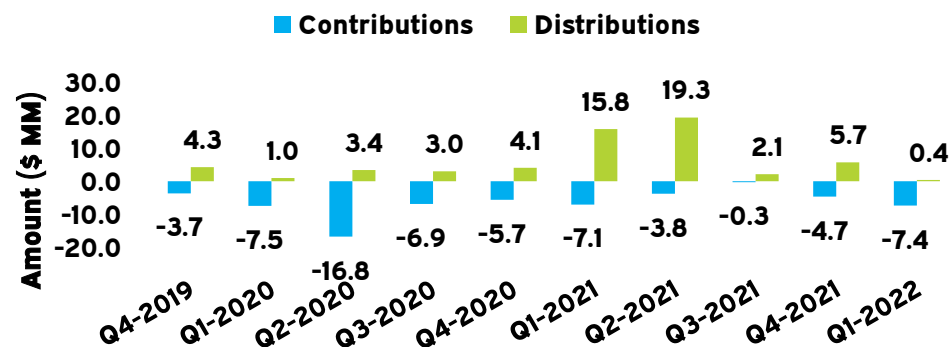
##### Commitments This Quarter

Fund	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)
Cross Ocean ESS III	2019	Western Europe	1.81
Octagon Fund IV	2022	North America	1.35
Crestline Fund II	2020	North America	1.17

##### Largest Distributions This Quarter

Fund	Vintage	Region	Amount (\$MM)
Cross Ocean ESS II	2016	Western Europe	0.31
Eagle Point Income	2020	North America	0.07
AG Credit Fund II	2021	North America	0.00

### By Vintage

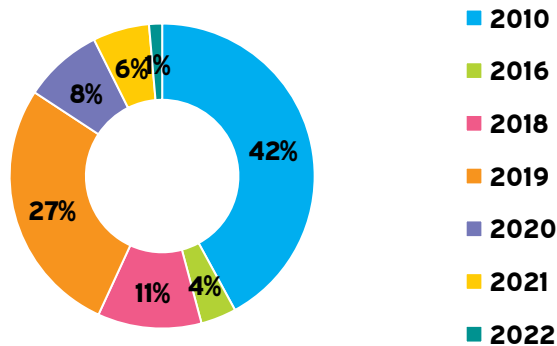
Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)	Peer IRR (%)
2010	3	150.0	181.8	0.0	179.3	41.1	41.1	0.99	1.21	5.0	10.9
2016	1	15.0	12.0	12.2	10.7	3.7	15.9	0.89	1.19	5.8	10.9
2017	1	5.0	5.0	0.0	6.1	0.0	0.0	1.22	1.22	12.9	11.2
2018	3	34.6	38.2	3.8	34.4	11.9	15.6	0.90	1.21	17.4	10.8
2019	2	26.0	21.0	6.0	1.5	26.8	32.8	0.07	1.34	20.3	12.8
2020	2	16.0	10.1	8.4	2.8	8.2	16.6	0.28	1.09	NM	NM
2021	3	25.5	5.6	19.9	0.0	5.9	25.7	0.00	1.04	NM	NM
2022	1	9.0	1.4	7.7	0.0	1.4	9.0	0.00	1.00	NM	NM
<b>Total</b>	<b>16</b>	<b>281.1</b>	<b>275.1</b>	<b>58.0</b>	<b>234.8</b>	<b>98.8</b>	<b>156.8</b>	<b>0.85</b>	<b>1.21</b>	<b>6.1</b>	<b>NA</b>

### Fund Performance: Sorted By Vintage And Strategy

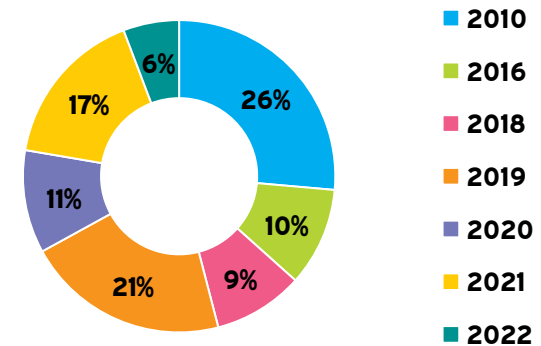
By Investment	Vintage	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
GSO Direct Lending	2010	50.0	43.4	0.0	45.0	3.8	1.13	1.48	4.1	10.9
Medley II	2010	50.0	50.0	0.0	52.0	4.9	1.14	1.48	2.4	10.9
White Oak DL	2010	50.0	88.3	0.0	82.3	32.5	1.30	1.48	7.6	10.9
Cross Ocean ESS II	2016	15.0	12.0	12.2	10.7	3.7	1.19	1.35	5.8	10.9
ArrowMark Sep Acct	2017	5.0	5.0	0.0	6.1	0.0	1.22	1.29	12.9	11.2
Arbour Lane II	2018	8.0	15.4	0.0	7.6	10.8	1.20	1.21	21.6	10.8
Crestline Co-Inv. I	2018	1.6	1.6	0.0	0.9	1.1	1.24	1.21	9.4	10.8
Octagon CLO III	2018	25.0	21.3	3.8	25.9	0.0	1.22	1.21	16.8	10.8
Cross Ocean ESS III	2019	18.0	16.3	2.3	1.2	21.4	1.38	1.15	19.7	12.8
HPS Special Sits.	2019	8.0	4.7	3.7	0.4	5.4	1.21	1.15	NM	NM
Crestline Fund II	2020	8.0	5.2	5.4	2.7	2.7	1.04	1.15	NM	NM
Eagle Point Income	2020	8.0	5.0	3.0	0.2	5.5	1.14	1.15	NM	NM
Arbour Lane III	2021	9.0	2.3	6.7	0.0	2.3	0.99	1.03	NM	NM
Strategic Value V	2021	7.5	2.4	5.1	0.0	2.7	1.10	1.03	NM	NM
AG Credit Fund II	2021	9.0	0.9	8.1	0.0	0.9	1.02	1.03	NM	NM
Octagon Fund IV	2022	9.0	1.4	7.7	0.0	1.4	1.00	1.01	NM	NM
<b>Total</b>		<b>281.1</b>	<b>275.1</b>	<b>58.0</b>	<b>234.8</b>	<b>98.8</b>	<b>1.21</b>	<b>NA</b>	<b>6.1</b>	<b>NA</b>

#### By Vintage

Percent of FMV

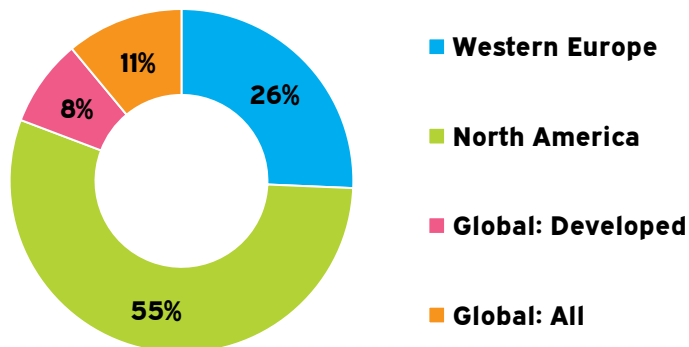


Percent of Exposure

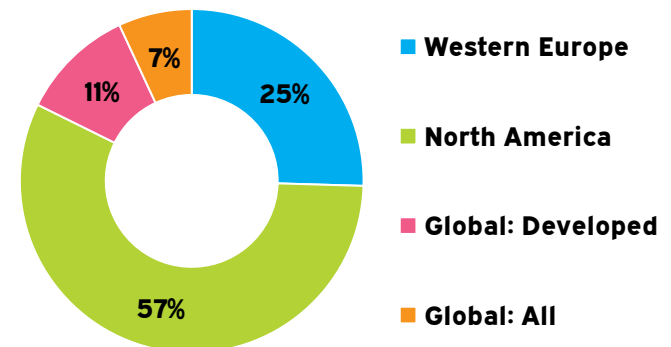


#### By Geographic Focus

Percent of FMV

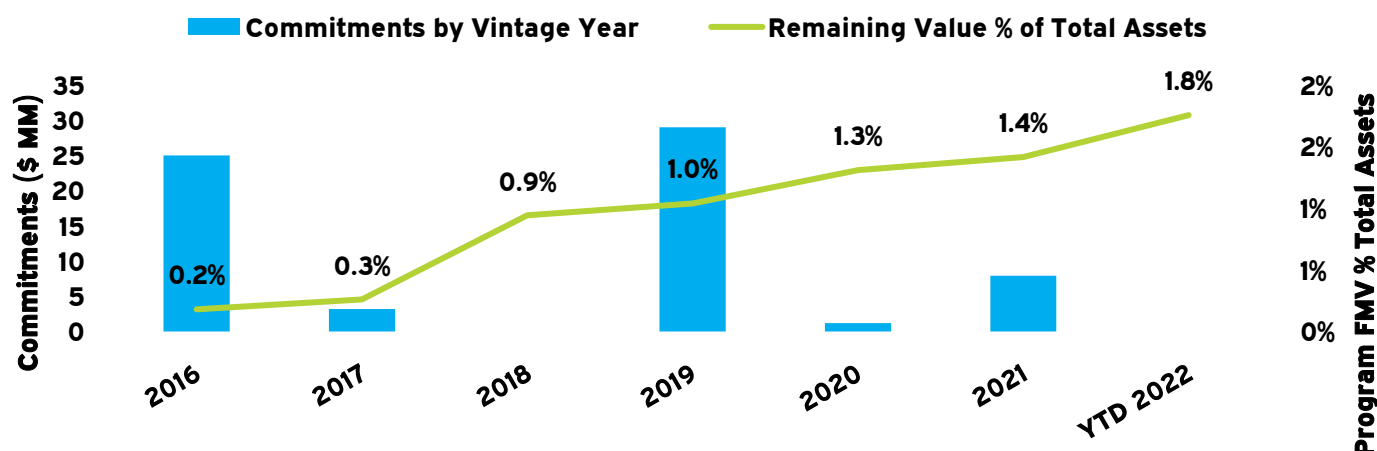


Percent of Exposure



### Introduction

As of March 31, 2022, the Retirement System had committed \$66.3 million to nine real assets funds and two co-investments. The total reported fair value of real assets investments was \$51.7 million at March 31, 2022, which equates to 1.8% of the overall Retirement System, versus a 3.0% policy target.



### Program Status

No. of Investments	11
Committed (\$ MM)	66.3
Contributed (\$ MM)	43.3
Distributed (\$ MM)	9.5
Remaining Value (\$ MM)	51.7

### Performance Since Inception

	Program
DPI	0.22x
TVPI	1.41x
IRR	13.9%



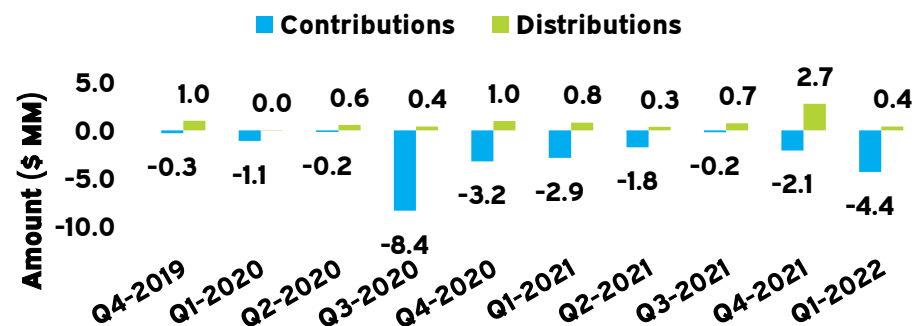
### Commitments

#### Commitments This Quarter

Fund	Region	Amount (MM)
Hull Street II	North America	6.00

### Cash Flows

#### Recent Quarterly Cash Flows



#### Largest Contributions This Quarter

Fund	Vintage	Region	Amount (\$MM)
GIP III	2016	Global: Developed	1.61
Mountain Capital II	2019	North America	1.20
GIP IV	2019	Global: Developed	1.12

#### Largest Distributions This Quarter

Fund	Vintage	Region	Amount (\$MM)
GIP III	2016	Global: Developed	0.24
Lime Rock VIII	2017	North America	0.13
Tembo Capital III	2019	Global: Emerging	<0.01

### By Vintage

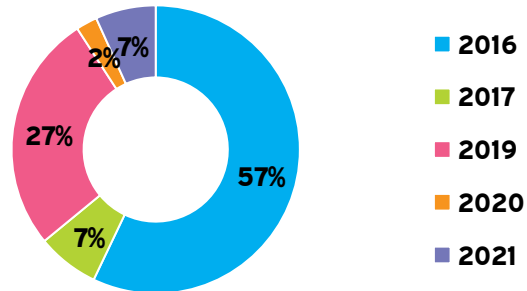
Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)	Peer IRR (%)
2016	1	25.0	24.7	3.0	6.4	28.7	31.7	0.26	1.42	11.0	10.7
2017	1	3.2	2.8	0.9	0.4	3.5	4.4	0.15	1.42	13.1	16.1
2019	6	29.0	12.8	16.5	2.8	14.9	31.4	0.22	1.38	28.4	14.1
2020	1	1.2	1.2	0.0	0.0	1.2	1.2	0.00	1.00	NM	NM
2021	2	7.9	1.9	6.0	0.0	3.4	9.4	0.00	1.79	NM	NM
<b>Total</b>	<b>11</b>	<b>66.3</b>	<b>43.3</b>	<b>26.4</b>	<b>9.5</b>	<b>51.7</b>	<b>78.0</b>	<b>0.22</b>	<b>1.41</b>	<b>13.9</b>	<b>NA</b>

### Fund Performance: Sorted By Vintage And Strategy

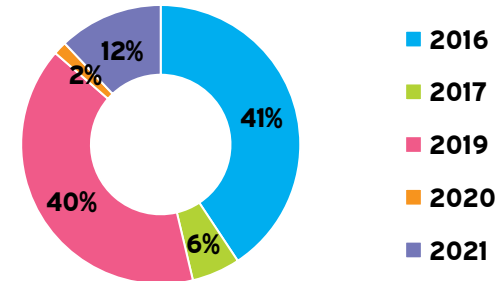
By Investment	Vintage	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
GIP III	2016	25.0	24.7	3.0	6.3	28.7	1.42	1.30	11.0	10.7
Lime Rock VIII	2017	3.2	2.8	0.9	0.4	3.5	1.42	1.25	13.1	16.1
Kimmeridge Energy V	2019	3.8	3.4	0.4	0.8	6.0	2.00	1.13	53.4	14.1
Mountain Capital II	2019	6.0	1.2	4.8	0.0	1.4	1.16	1.13	NM	NM
Orion Mine III	2019	5.0	2.7	2.3	0.0	3.1	1.18	1.13	NM	NM
GIP IV	2019	3.2	1.8	1.5	0.0	1.8	0.99	1.13	-1.3	14.1
Tembo Capital III	2019	6.0	1.3	4.7	0.0	1.4	1.06	1.13	NM	NM
Lime Rock New Energy	2019	5.0	2.3	2.9	1.9	1.1	1.32	1.13	NM	NM
Energy Co-Invest	2020	1.2	1.2	0.0	0.0	1.2	1.00	1.05	NM	NM
Crestline Co-Inv. II	2021	1.9	1.9	0.0	0.0	3.4	1.79	1.00	NM	NM
Hull Street II	2021	6.0	0.0	6.0	0.0	0.0	NM	NM	NM	NM
<b>Total</b>		<b>66.3</b>	<b>43.3</b>	<b>26.4</b>	<b>9.5</b>	<b>51.7</b>	<b>1.41</b>	<b>NA</b>	<b>13.9</b>	<b>NA</b>

#### By Vintage

Percent of FMV

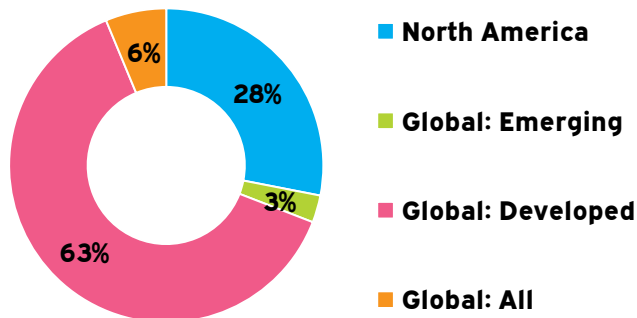


Percent of Exposure

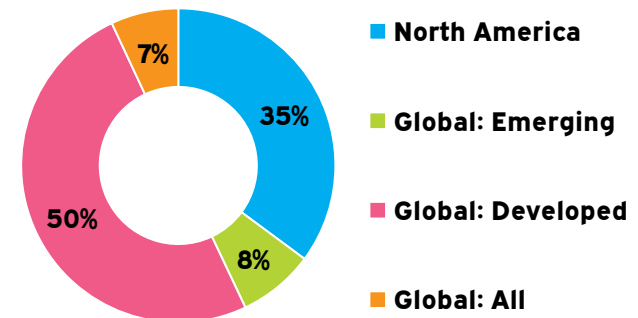


#### By Geographic Focus

Percent of FMV

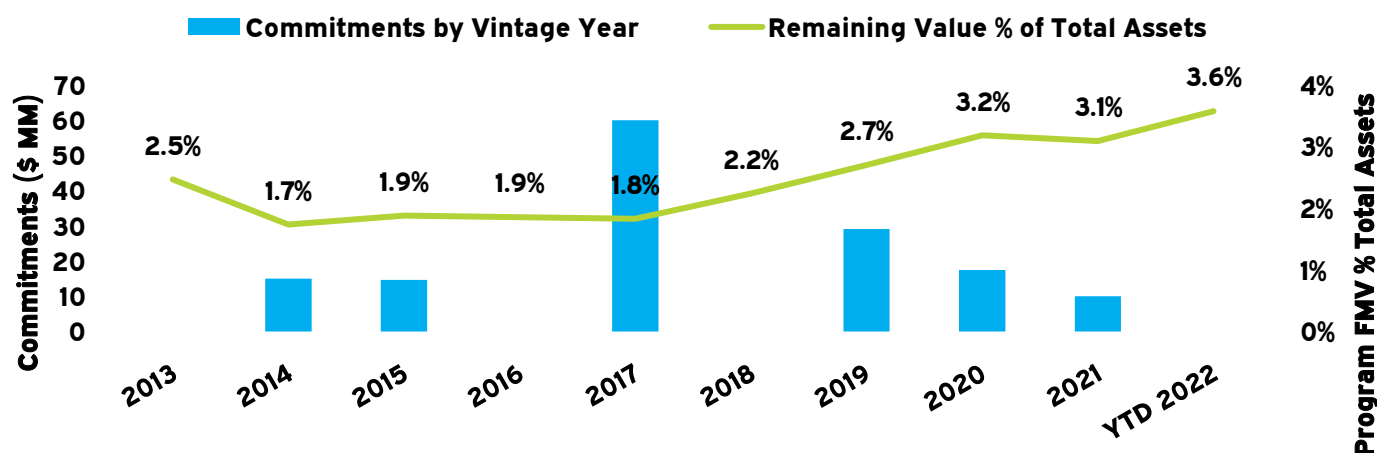


Percent of Exposure



### Introduction

As of March 31, 2022, the Retirement System had committed a total of \$228.8 million to 17 closed-end real estate funds. The Real Estate Program's reported fair value of real estate investments was \$105.2 million at March 31, 2022, which equates to 3.6% of the overall Retirement System, versus a 3.0% policy target.



### Program Status

No. of Investments	17
Committed (\$ MM)	228.8
Contributed (\$ MM)	217.5
Distributed (\$ MM)	186.2
Remaining Value (\$ MM)	105.2

### Performance Since Inception

	Program
DPI	0.86x
TVPI	1.34x
IRR	7.4%

### Commitments

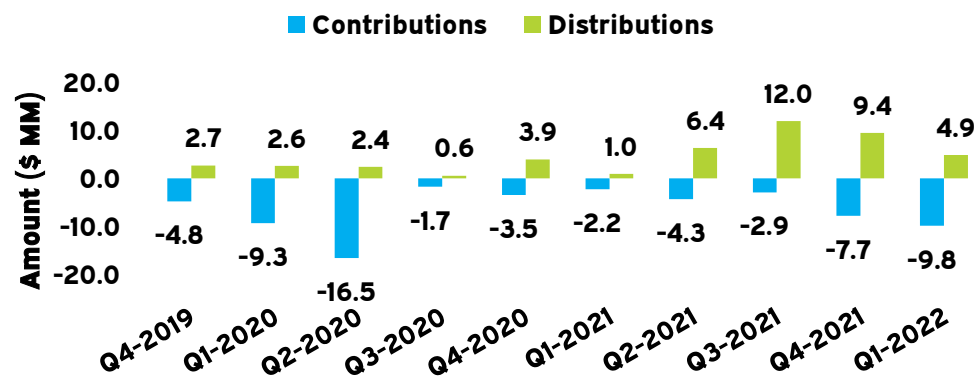
#### Commitments This Quarter

Fund	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)
Torchlight VI	2017	North America	6.08
HIG Realty IV	2020	North America	1.69
EPISO 5	2019	Western Europe	0.83

#### Largest Distributions This Quarter

Fund	Vintage	Region	Amount (\$MM)
DRA IX	2017	North America	1.25
GEM VI	2017	North America	1.08
DRA VIII	2014	North America	0.78

### By Vintage

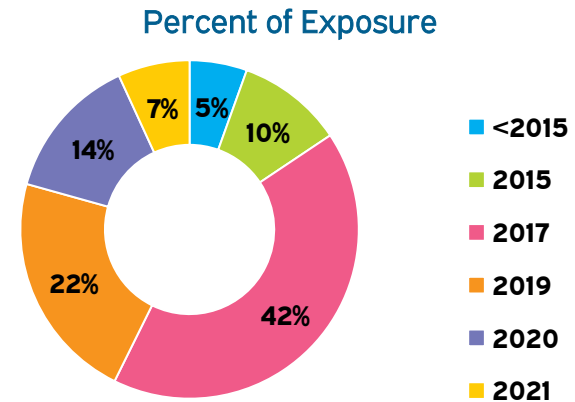
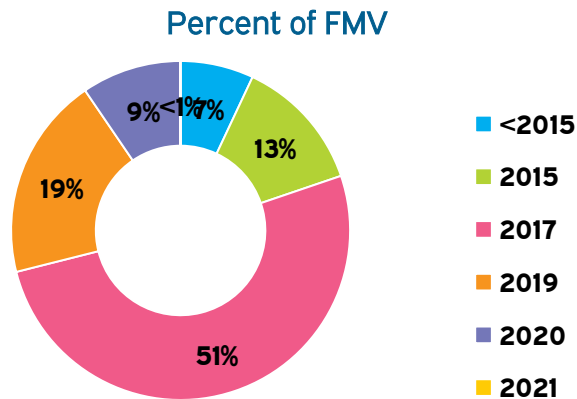
Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)	Peer IRR (%)
2005	1	20.0	30.5	0.0	40.3	0.0	0.0	1.32	1.32	5.2	3.4
2006	1	20.0	18.2	0.0	8.8	0.0	0.0	0.48	0.48	-10.9	3.7
2007	2	27.6	28.4	0.0	41.2	0.0	0.0	1.45	1.45	8.8	5.2
2011	1	15.0	16.0	0.0	35.4	1.2	1.2	2.21	2.31	21.5	18.1
2014	1	15.0	17.7	0.7	18.2	6.1	6.8	1.03	1.37	9.6	15.6
2015	1	14.6	13.3	1.3	5.3	13.5	14.8	0.40	1.41	10.2	13.5
2017	3	60.0	67.3	7.0	34.3	54.0	61.0	0.51	1.31	14.4	15.5
2019	3	29.1	18.4	11.8	1.8	20.4	32.2	0.10	1.21	22.5	17.1
2020	3	17.5	7.6	10.2	1.0	10.0	20.2	0.13	1.44	NM	NM
2021	1	10.0	0.0	10.0	0.0	0.0	10.0	0.00	NM	NM	NM
<b>Total</b>	<b>17</b>	<b>228.8</b>	<b>217.5</b>	<b>41.1</b>	<b>186.2</b>	<b>105.2</b>	<b>146.3</b>	<b>0.86</b>	<b>1.34</b>	<b>7.4</b>	<b>NA</b>

### Fund Performance: Sorted By Vintage And Strategy

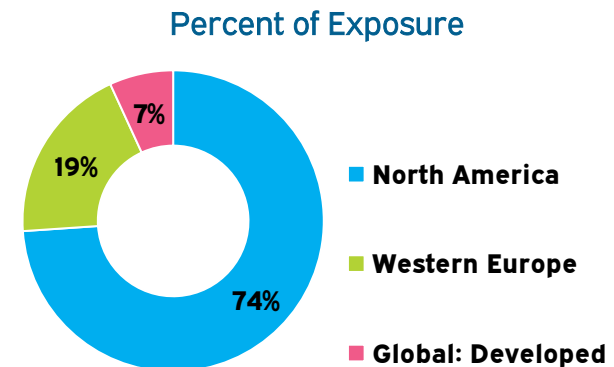
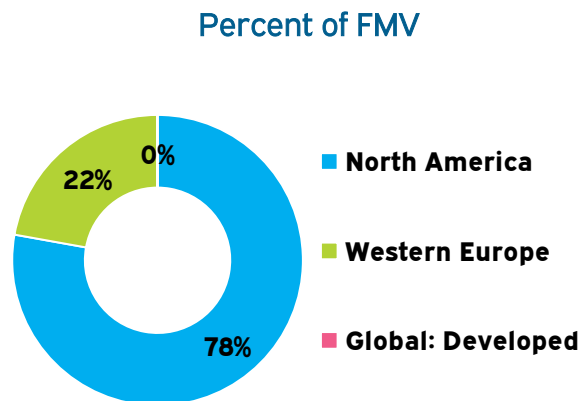
By Investment	Vintage	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	Peer TVPI (X)	IRR (%)	Peer IRR (%)
DRA V	2005	20.0	30.5	0.0	40.3	0.0	1.32	1.09	5.2	3.4
GEAM Value Add	2006	20.0	18.2	0.0	8.8	0.0	0.48	1.19	-10.9	3.7
DRA VI	2007	9.7	10.6	0.0	17.5	0.0	1.65	1.22	10.6	5.2
Fidelity RE III	2007	17.9	17.9	0.0	23.7	0.0	1.33	1.22	7.3	5.2
DRA VII	2011	15.0	16.0	0.0	35.4	1.2	2.31	1.59	21.5	18.1
DRA VIII	2014	15.0	17.7	0.7	18.2	6.1	1.37	1.51	9.6	15.6
EPISO 4	2015	14.6	13.3	1.3	5.3	13.5	1.41	1.46	10.2	13.5
Torchlight VI	2017	30.0	39.3	2.2	13.2	32.1	1.15	1.44	8.7	15.5
GEM VI	2017	10.0	6.8	3.3	3.5	5.7	1.37	1.44	20.4	15.5
DRA IX	2017	20.0	21.3	1.6	17.6	16.2	1.58	1.44	18.9	15.5
Rockpoint VI	2019	6.5	4.2	2.3	0.1	5.2	1.28	1.24	NM	NM
DRA X	2019	10.0	5.1	6.0	1.7	5.3	1.37	1.24	41.6	17.1
EPISO 5	2019	12.6	9.1	3.5	0.0	9.8	1.08	1.24	8.2	17.1
Torchlight Debt VII	2020	6.0	2.1	4.2	0.3	1.8	1.02	1.16	NM	NM
HIG Realty IV	2020	6.0	1.7	4.4	0.7	1.8	1.46	1.16	NM	NM
Exeter V	2020	5.5	3.9	1.7	0.0	6.4	1.66	1.16	NM	NM
Centerbridge RE II	2021	10.0	0.0	10.0	0.0	0.0	NM	NM	NM	NM
<b>Total</b>		<b>228.8</b>	<b>217.5</b>	<b>41.1</b>	<b>186.2</b>	<b>105.2</b>	<b>1.34</b>	<b>NA</b>	<b>7.4</b>	<b>NA</b>



#### By Vintage

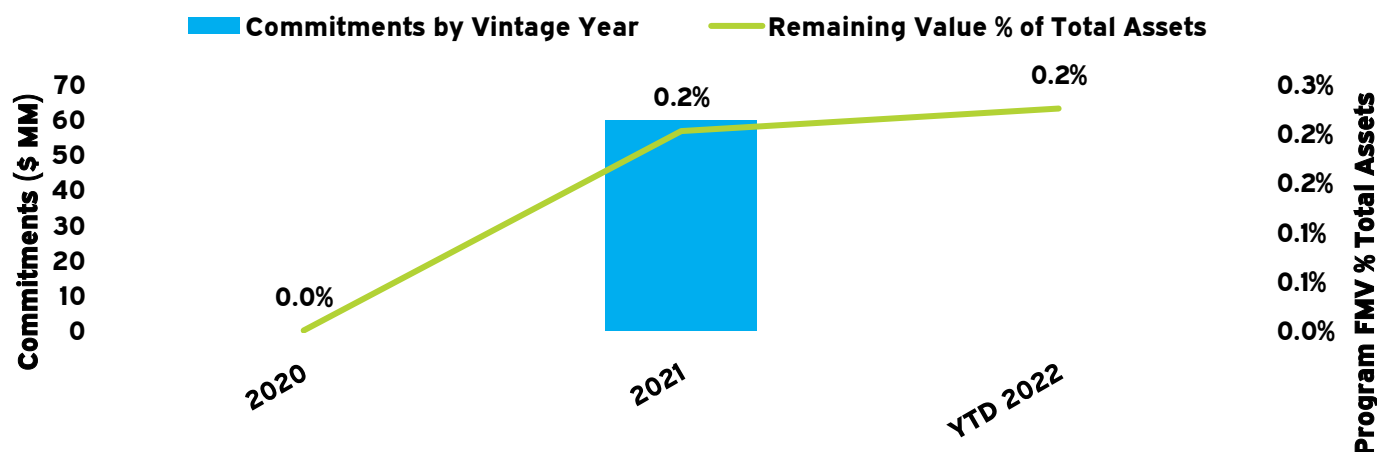


#### By Geographic Focus



### Introduction

As of March 31, 2022, the Plan had committed \$59.8 million to four venture capital funds. The total reported fair value of the Venture Capital Program's investments was \$10.9 million at March 31, 2022, which equates to 0.1% of the overall Retirement System, versus a 4.0% policy target.



### Program Status

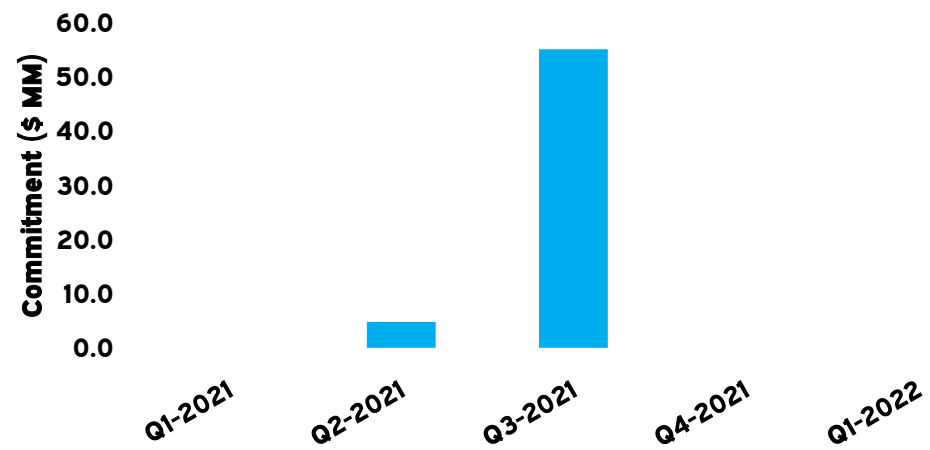
No. of Investments	3
Committed (\$ MM)	59.8
Contributed (\$ MM)	10.7
Distributed (\$ MM)	0.0
Remaining Value (\$ MM)	10.9

### Performance Since Inception

	Program
DPI	0.0x
TVPI	1.01x
IRR	NM

Commitments

Recent Quarterly Commitments

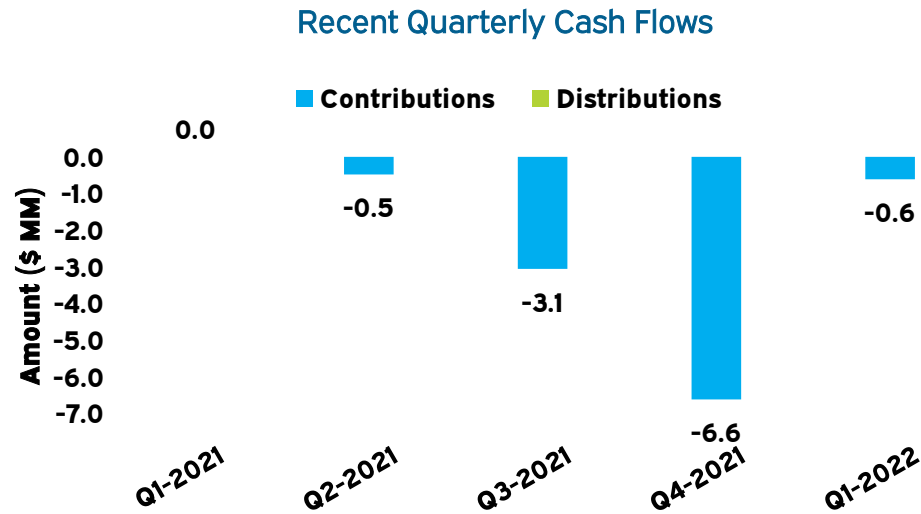


Commitments This Quarter

Fund	Region	Amount (MM)
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None to report.

### Cash Flows



### Largest Contributions This Quarter

Fund	Vintage	Region	Amount (\$MM)
Innovation Endeavors IV	2021	North America	0.36
Soma Capital III	2021	North America	0.25
TI Platform SJFED	2021	North America	0.00

### Largest Distributions This Quarter

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

### By Vintage

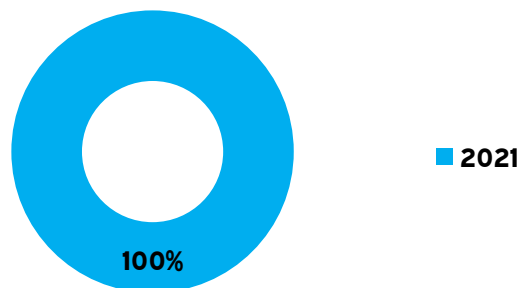
Group	Number	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	Exposure (\$ MM)	DPI (X)	TVPI (X)	IRR (%)
2021	3	59.8	10.7	49.1	0.0	10.9	59.9	0.00	1.01	NM
<b>Total</b>	<b>3</b>	<b>59.8</b>	<b>10.7</b>	<b>49.1</b>	<b>0.0</b>	<b>10.9</b>	<b>59.9</b>	<b>0.00</b>	<b>1.01</b>	<b>NM</b>

### Fund Performance: Sorted By Vintage And Strategy

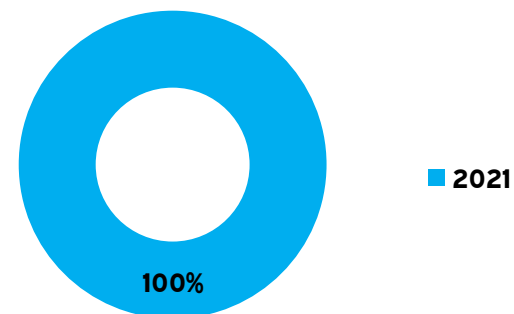
By Investment	Vintage	Committed (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	IRR (%)
Innovation Endeavors IV	2021	4.8	1.2	3.6	0.0	1.2	0.99	NM
Soma Capital III	2021	5.0	1.5	3.5	0.0	1.6	1.04	NM
TI Platform SJFED	2021	50.0	8.1	42.0	0.0	8.1	1.01	NM
<b>Total</b>		<b>59.8</b>	<b>10.7</b>	<b>49.1</b>	<b>0.0</b>	<b>10.9</b>	<b>1.01</b>	<b>NM</b>

#### By Vintage

Percent of FMV

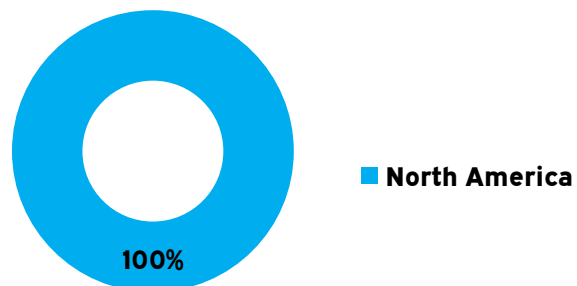


Percent of Exposure

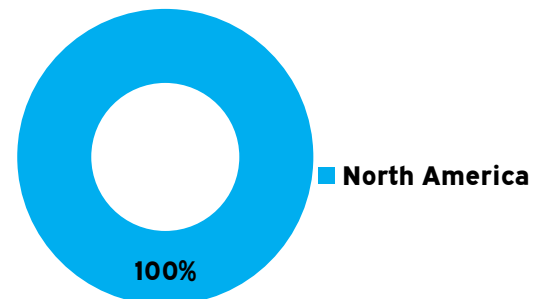


#### By Geographic Focus

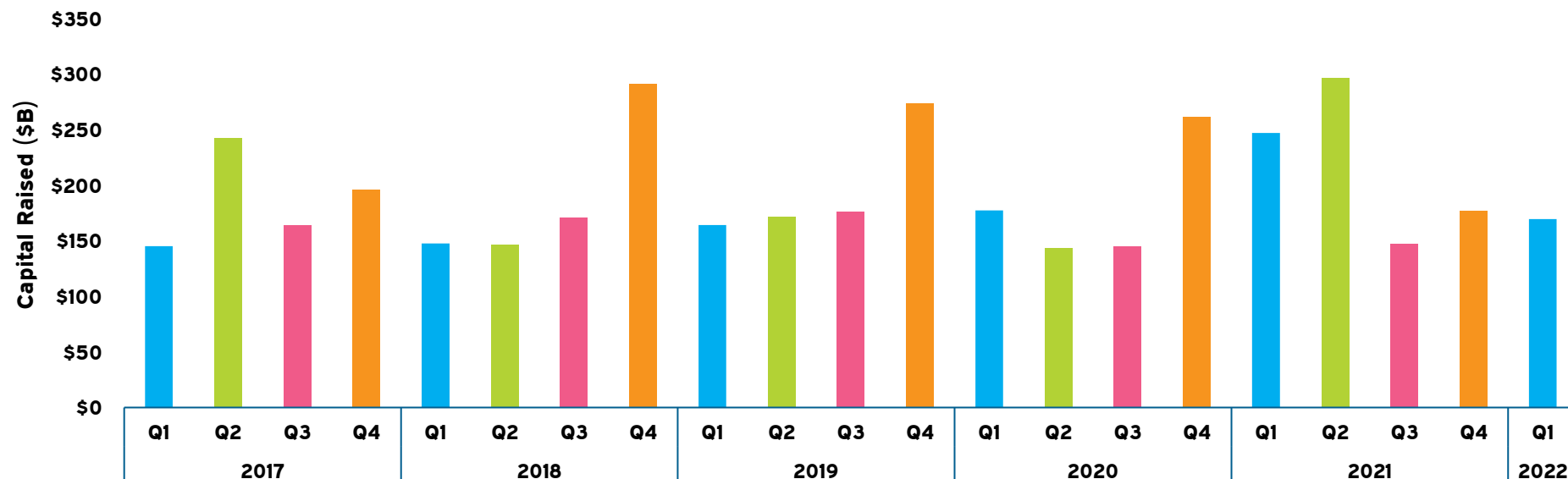
Percent of FMV



Percent of Exposure



### Private Equity Global Fundraising<sup>1</sup>



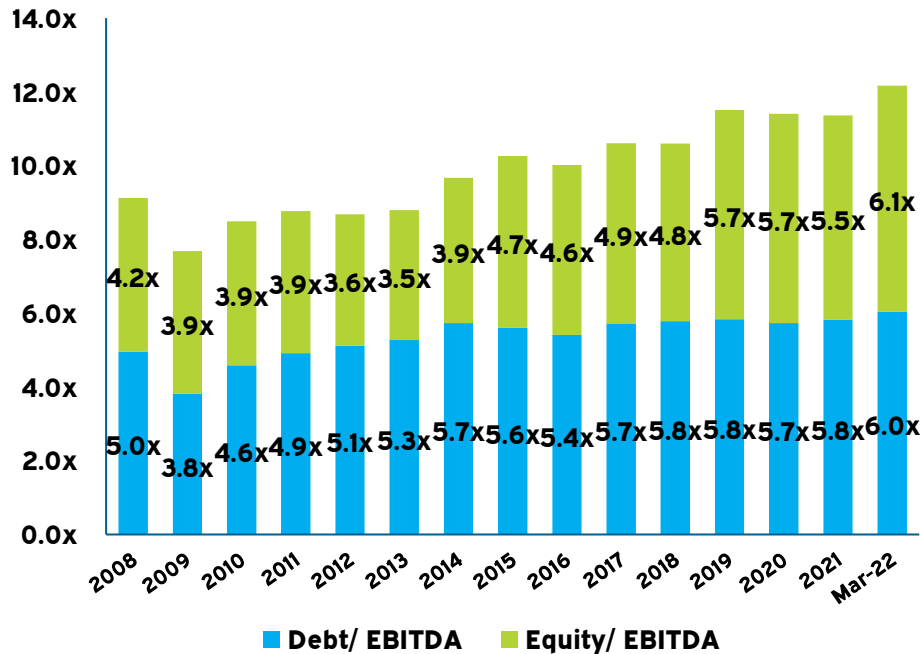
Fundraising activity for private equity funds in the first quarter of 2022 decreased by 4% compared to the previous quarter, with \$169.7 billion raised. It also marked the lowest fundraising total for a first quarter since 2019 and a decrease of 31% from the same period in 2021. The number of fund closings also decreased 44%, to 339 funds, relative to the previous quarter and 54% compared to Q1 2021. The first 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 Q1 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 Russia's invasion of Ukraine, inflationary pressures, and rising energy prices. That said, there is a record number of private equity funds in market, as of the start of April 2022. There are currently 2,650 funds<sup>2</sup> looking to raise \$966 billion in capital, which is equivalent to 1.62x the level of trailing twelve month (TTM) global private equity fundraising. Of the funds in market, 1,113 are yet to reach their first close, which equates to 42% of the total and 61.5% of the total capital targeted.

<sup>1</sup> Preqin

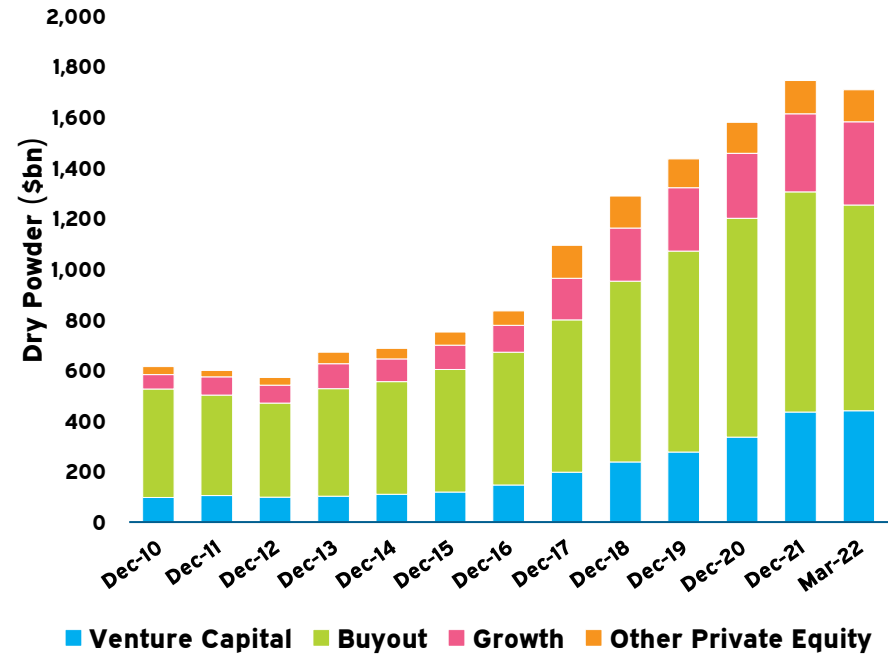
<sup>2</sup> Includes Buyout, Growth, Fund of Funds, Secondaries, and Other Private Equity (Balanced, Co-Investment, Direct Secondaries, Hybrid, PIPE, and Turnaround). It excludes Venture Capital.



#### Purchase Price Breakdown, All LBOs<sup>1</sup>



#### Dry Powder by Fund Type<sup>2</sup>

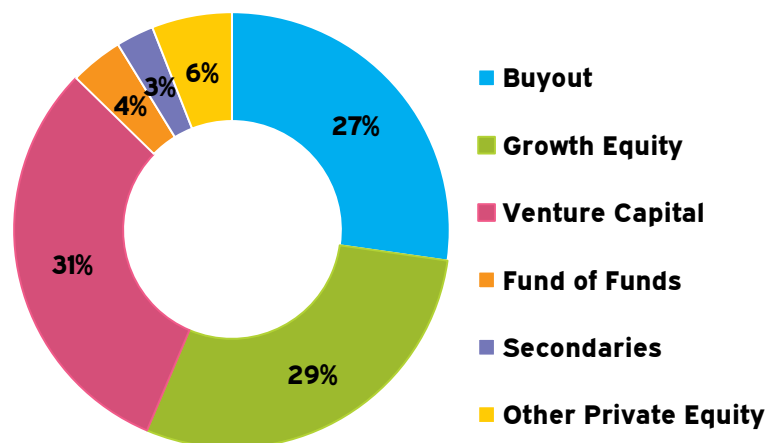


Relative to 2021, the average private equity purchase price multiple increased from 11.4x EBITDA to 12.2x EBITDA in the first quarter of 2022. Equity contribution (relative to total purchase price) has slightly increased to approximately 50% from 49% in 2021, indicating that total purchase prices now comprise equal amounts of equity and debt. Dry powder levels dipped by approximately 2% from Q4 2021 but still 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.

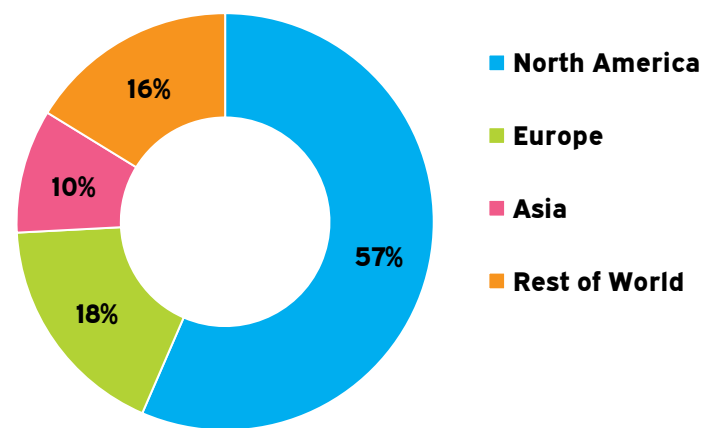
<sup>1</sup> S&P

<sup>2</sup> Preqin

Capital Raised by Strategy<sup>1</sup>



Capital Raised by Geography<sup>2</sup>



Venture Capital (31% of all private equity capital raised) and Growth Equity (29%) funds outpaced Buyout funds as the most popular private equity sub-strategies during the first quarter of 2022. Buyout funds dipped from 38% of capital raised in Q4 2021 to 27% in the first quarter of 2022. Venture Capital strategies, as a percentage of total capital raised, increased by 5% from Q4 2021, and Growth Equity funds jumped 2% from 27% of private equity capital raised in Q4 2021. Fund of Funds, Secondaries, and Other Private Equity, which includes co-investment and hybrid vehicles, also increased from 9% to 13%, collectively, through the first quarter compared to the previous quarter, driven in part by growing appetite from LPs in co-investment opportunities.

North America-focused vehicles continued to represent the majority of funds raised during the first quarter, representing 57% of total capital. However, this is a notable decrease from the 69% in the prior quarter. Alternatively, commitments to Europe and Rest of World increased by 4% and 10%, respectively, during the first quarter. Overall, private equity investors continued to favor commitments to North America-focused funds, but investor appetite for Europe and Rest of World remained strong, specifically for non-Venture Capital funds. The majority (78%) of capital raised for Venture Capital funds went to North America-focused funds in Q1 2022.

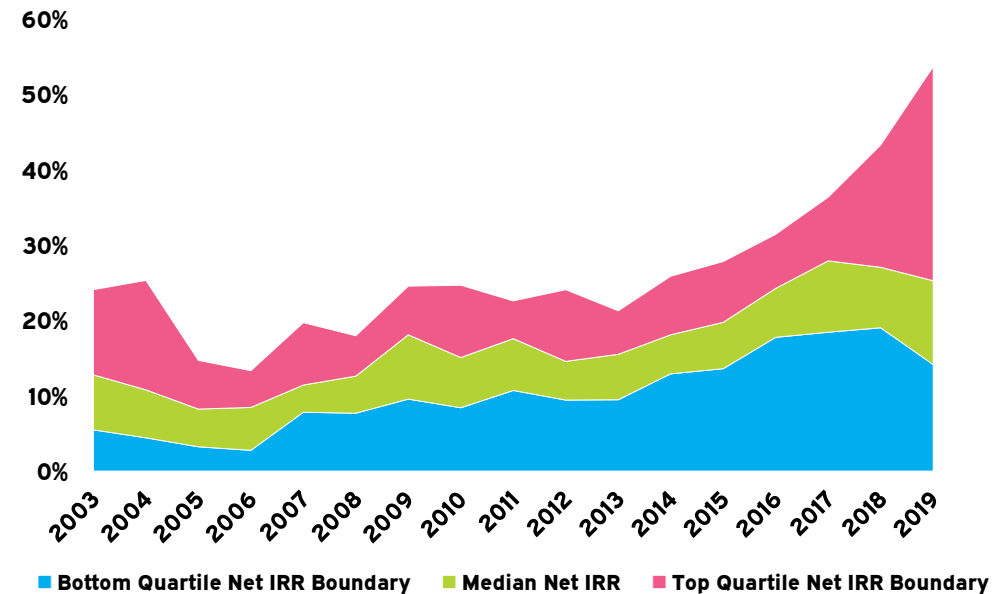
<sup>1</sup> Preqin

<sup>2</sup> Preqin

#### Private Equity Performance by Horizon<sup>1</sup>

Horizon	Private Equity	Buyout	Venture Capital	Growth Equity
1 Year to 12/2021	34.8%	34.9%	46.8%	34.6%
3 Years to 12/2021	25.5	26.6	30.8	25.8
5 Years to 12/2021	21.6	22.5	23.0	23.1
10 Years to 12/2021	17.8	18.9	17.1	18.7

#### Private Equity Performance by Vintage Year<sup>2</sup>

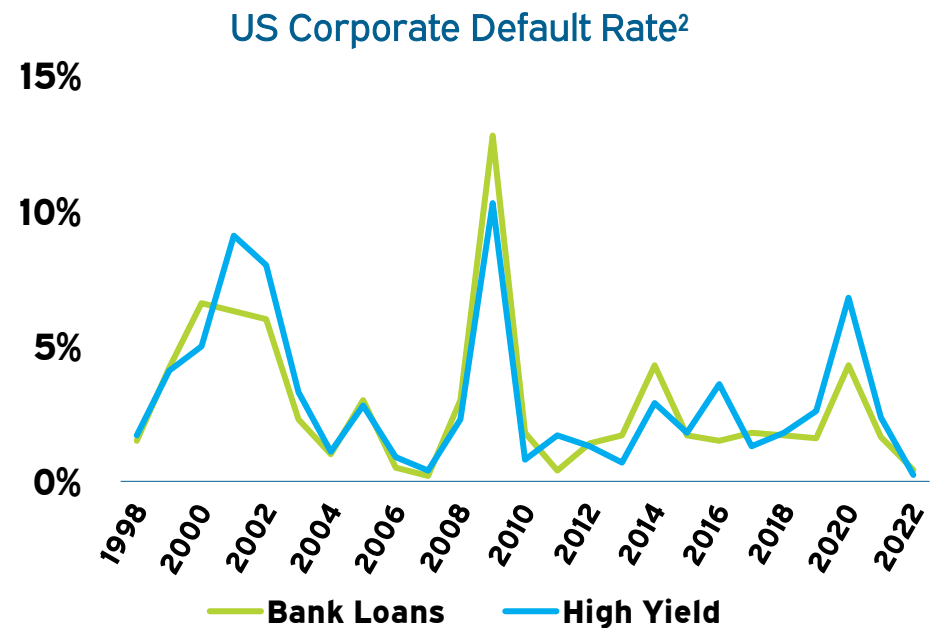
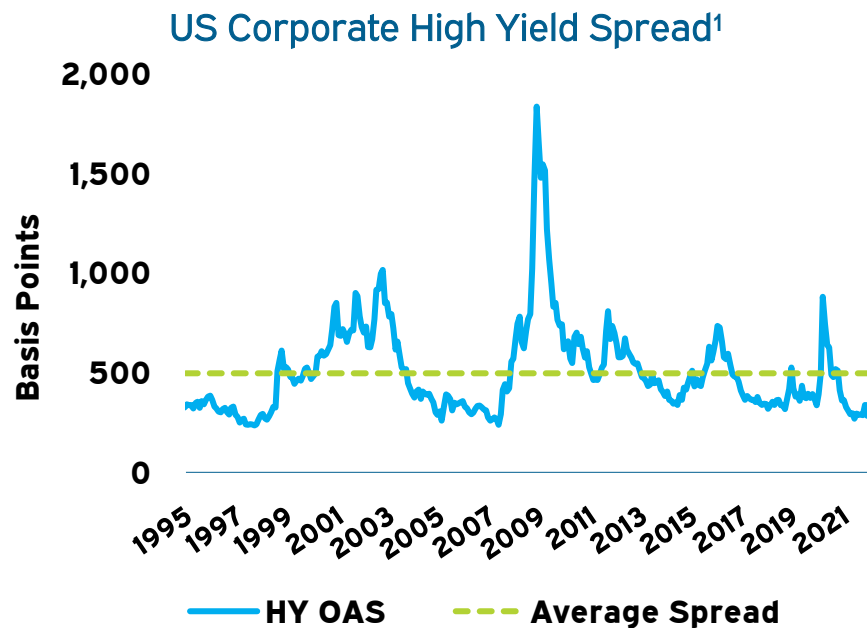


Recent private equity returns have been very strong, with Private Equity generating a 34.8% IRR over the past year, following the outbreak of the COVID-19 pandemic in Q1 2020 and write-downs across most portfolios at that time related to the associated uncertainty. In general, performance has been strong 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 Venture funds outperforming Buyout and Growth funds over the past year. The spread between first and third quartile performance in private equity has grown consistently since the Global Financial Crisis; 2007 vintage funds reported a 11.9% spread while 2019 vintage funds reported a 39.6% spread.

<sup>1</sup> Preqin Horizon IRRs as of 12/31/2021. Data as of 3/31/2022 not yet available.

<sup>2</sup> Preqin Global Quartile Returns as of 3/31/2022.

#### Private Debt



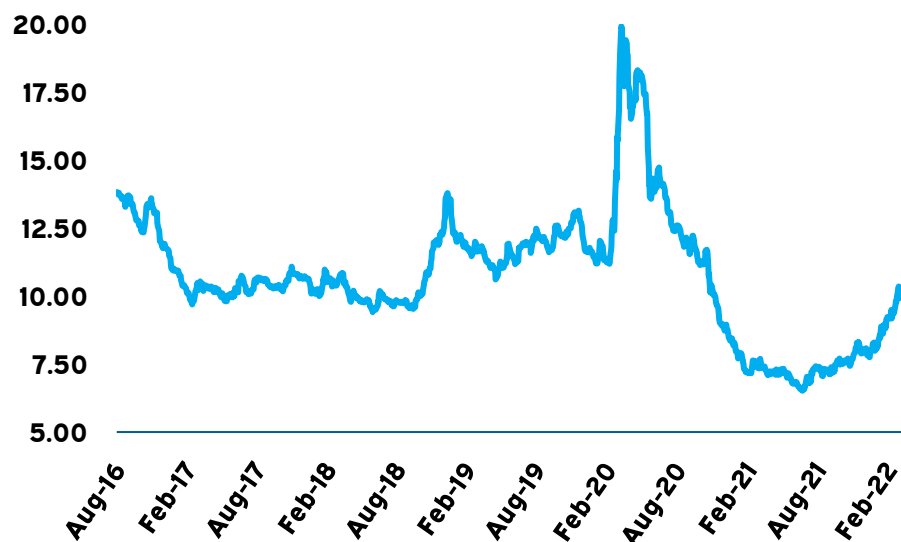
High spreads remained largely unchanged and default rates also remained muted through the end of Q1 2022. These metrics, however, belie the year-to-date tumult experienced in the broader fixed income markets following multiple interest rate hikes which were initiated by the Federal Reserve in March. Market expectations now are that corporate default rates will likely increase though year-end, although expectations are that default levels are unlikely to reach levels following the Global Financial Crisis.

<sup>1</sup> Source: Barclays Capital

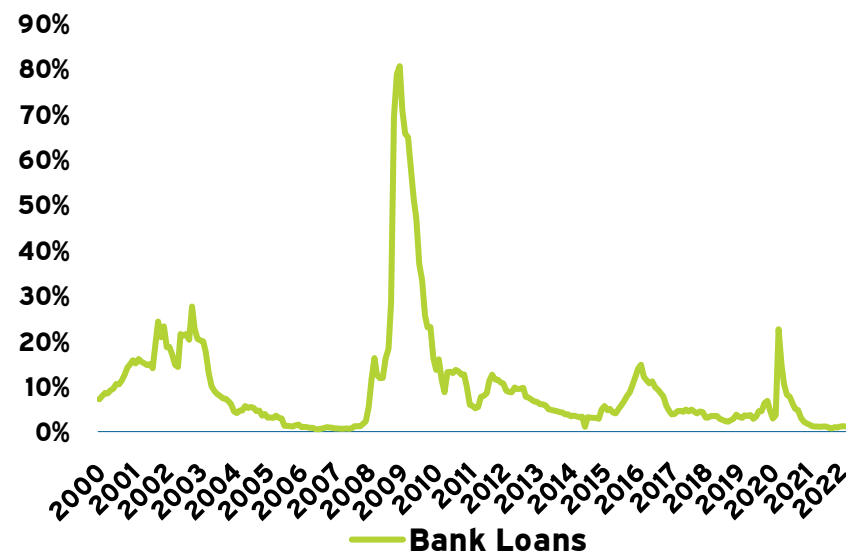
<sup>2</sup> Source: JP Morgan

#### Distressed & Opportunistic Debt

##### Lower Rated Debt Yield<sup>1</sup>



##### Distressed Ratio<sup>2</sup>

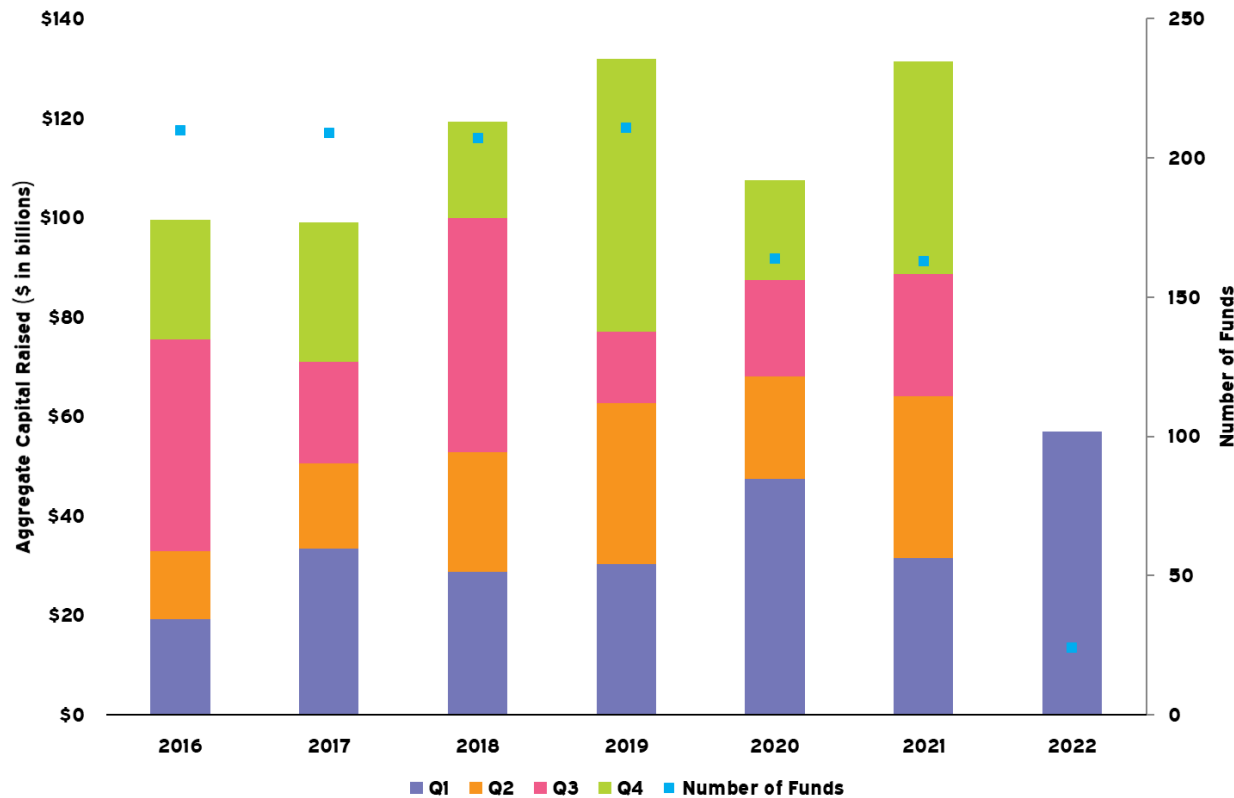


The yields on lower rated debt continued to trend upward in Q1 2022, ending the quarter above 9%. Following quarter end yields continued to raise meaningfully and were over 2X as high as levels one year ago as of July 2022.

<sup>1</sup> Source: St. Louis FRED data

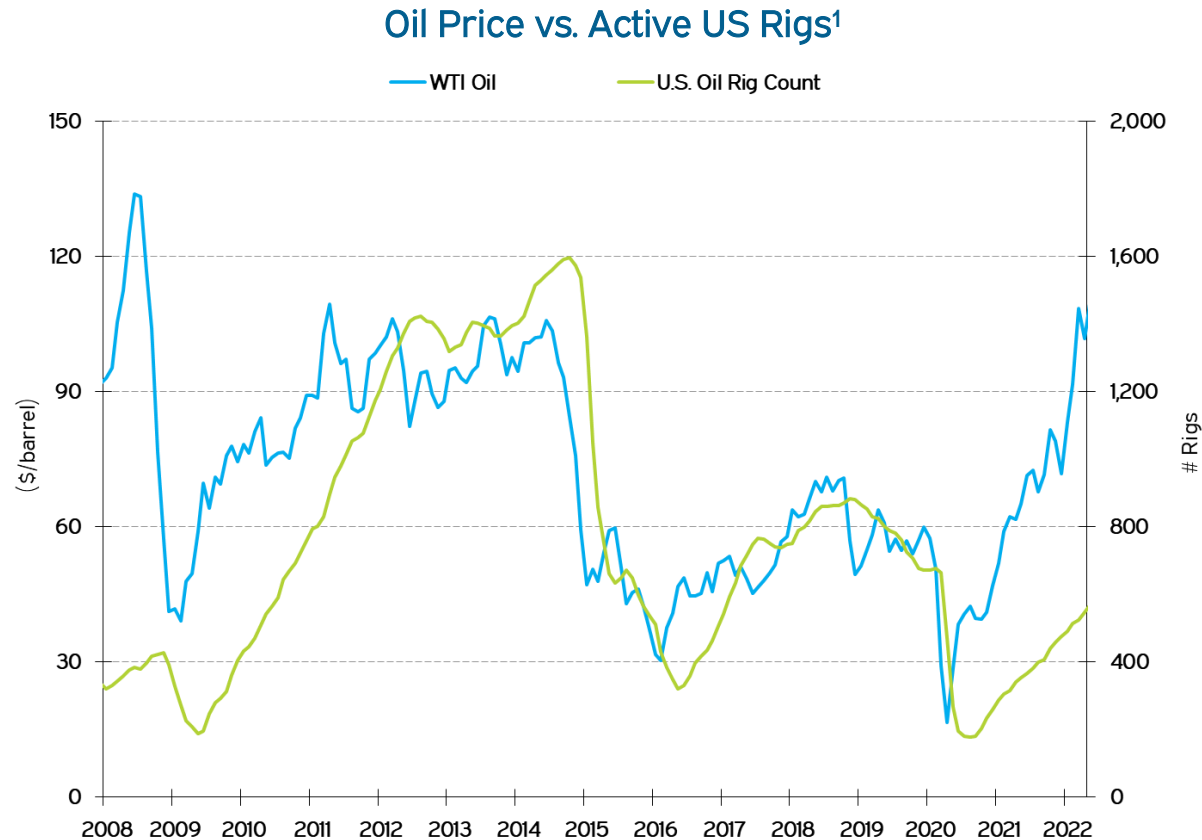
<sup>2</sup> Source: Bank Loans trading below \$80, Credit Suisse

#### Global Quarterly Unlisted Natural Resources Fundraising<sup>1</sup>



During the first quarter, \$57 billion was raised across 24 funds with the average fund size raised averaging approximately \$2.4 billion of commitments. This represented the largest fundraising quarter since the start of the global COVID-19 pandemic. The majority of natural resources managers raising capital during the first quarter were focused on North America, accounting for over half of cumulative targeted capitalization in the market. Energy managers raised the most capital, accounting for 84% of total fundraising.

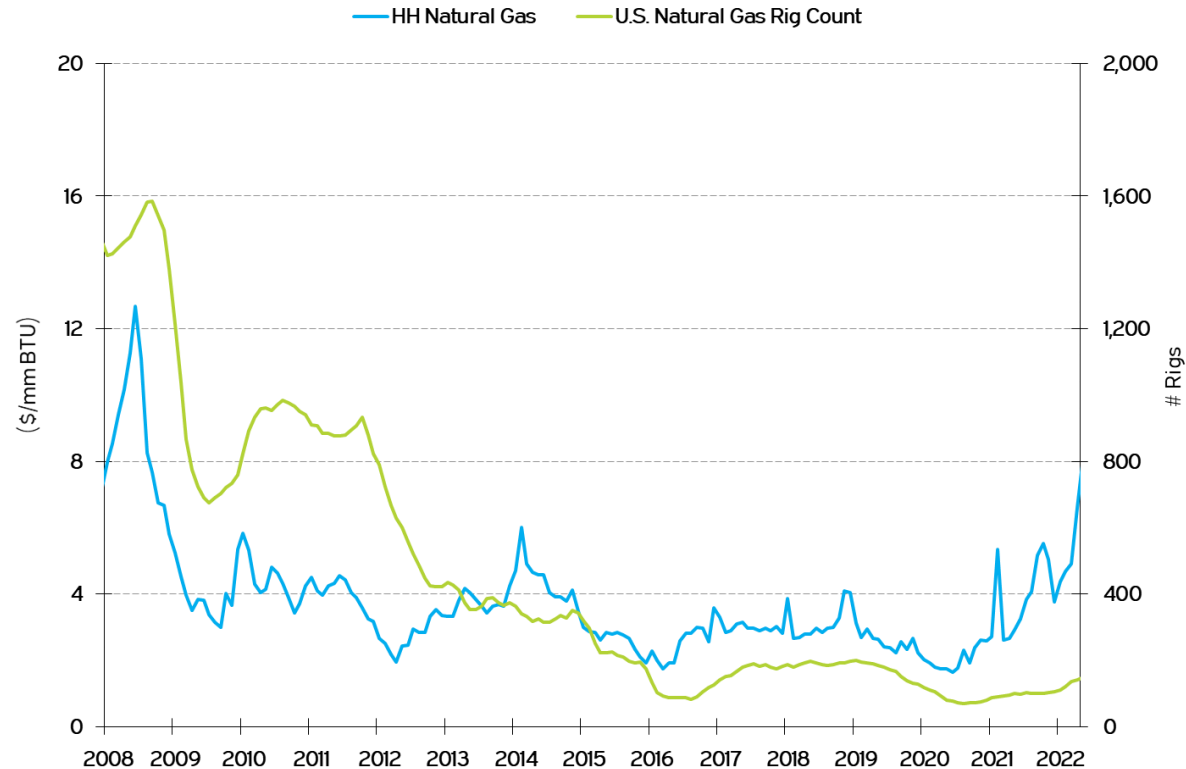
<sup>1</sup> Source: Preqin Private Capital Fundraising Update, 1Q 2022.



Russia invaded Ukraine during first quarter of 2022 resulting in a disruption in oil and natural gas produced and transported from the region. Additionally, higher global inflation corresponded with a surge in oil prices. West Texas Intermediate (WTI) and Brent oil prices each increased by 51% to \$108 and \$117 per barrel, respectively. Relative to one year prior, WTI prices were 74% higher. The number of rigs increased by 265 from one year prior to a total of 525. The U.S. achieved peak oil production of 13.0 million barrels of oil equivalent per day (boepd) in November 2019 and produced approximately 11.7 million boepd in March 2022. Gasoline prices for regular blend in the U.S. reached an average of \$4.54 per gallon representing a 26% quarterly increase and a 90% increase from one year prior.

<sup>1</sup> Source: EIA and Baker Hughes.

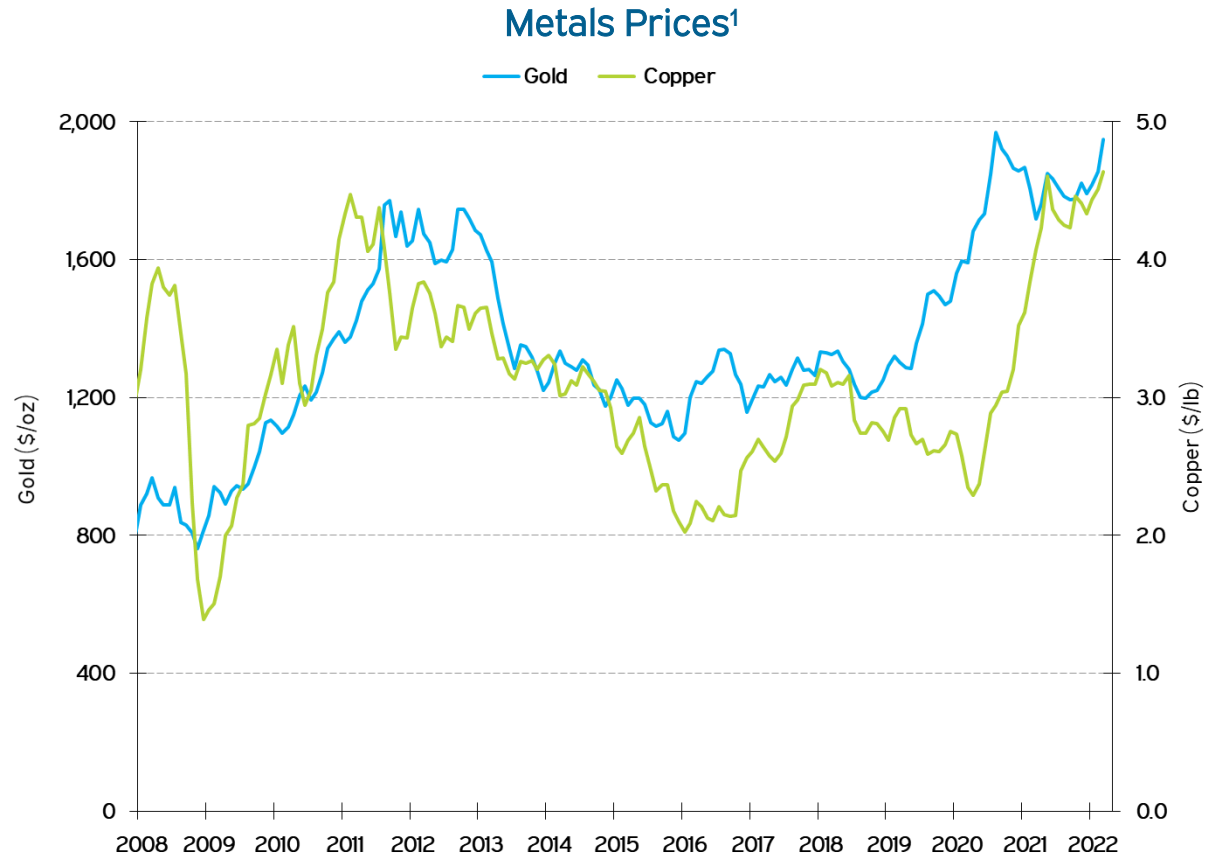
### Natural Gas Price vs. Active US Rigs<sup>1</sup>



As the world seeks to replace Russian energy, U.S. natural gas is in high demand. Henry Hub gas prices averaged \$4.66/mm BTU during the quarter and ended at \$4.90/mm BTU, an 87% increase from one year prior. The U.S. natural gas rig count increased by 30 to 135 during the quarter. The U.S. produced 107 billion cubic feet per day in March 2022, just shy of record production in December 2021 of 109 million bcf/day. Europe is highly dependent on Russian natural gas imports and is now seeking solutions to reduce this reliance. The U.S. is well positioned to export liquified natural gas into the international markets.

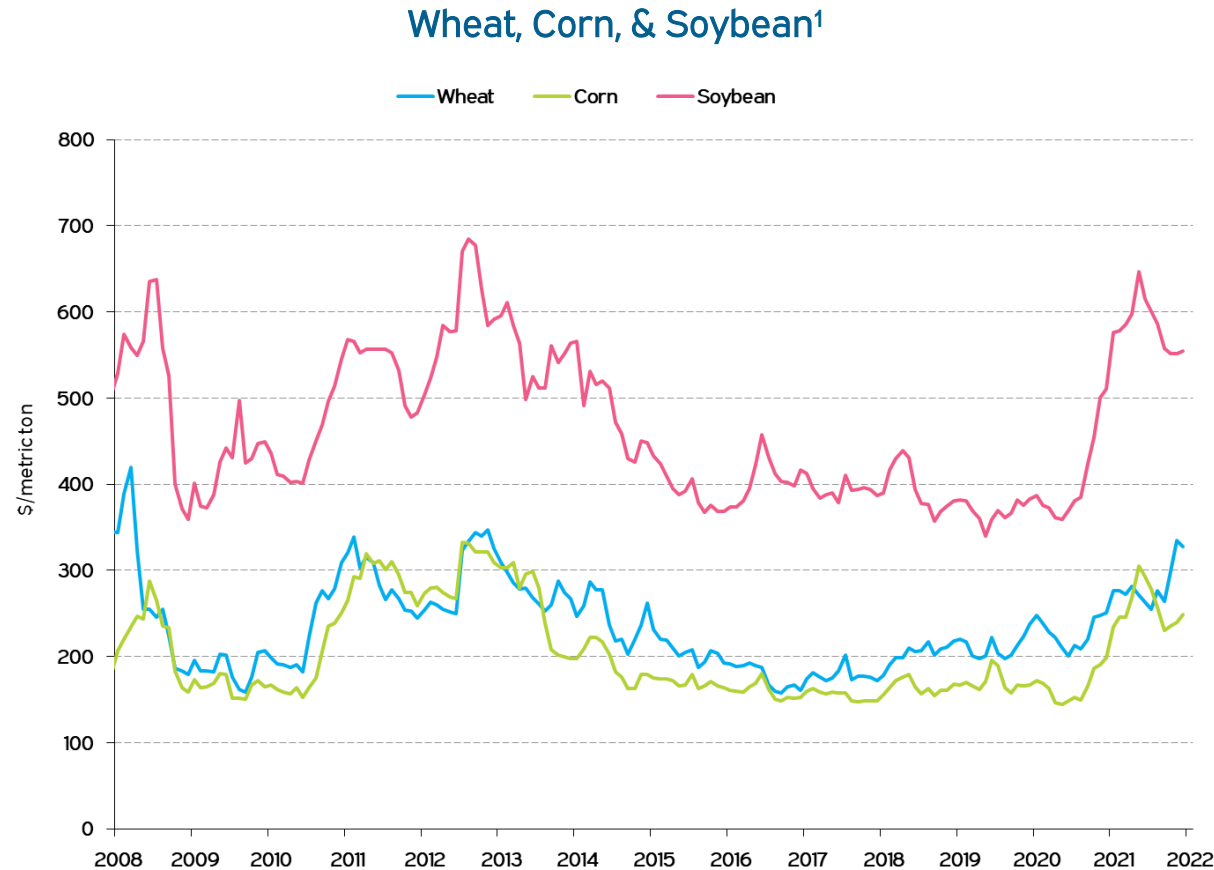
<sup>1</sup> Source: EIA and Baker Hughes.





As inflation increased during the quarter, so too did the price of many metals and minerals. Strong global demand, and supply concerns, have contributed to increases over the past several years. During the quarter, the price of gold and copper increased by 9% and 7%, respectively, while other metals, such as tin, aluminum, and nickel, were up 11%, 30%, and 69%.

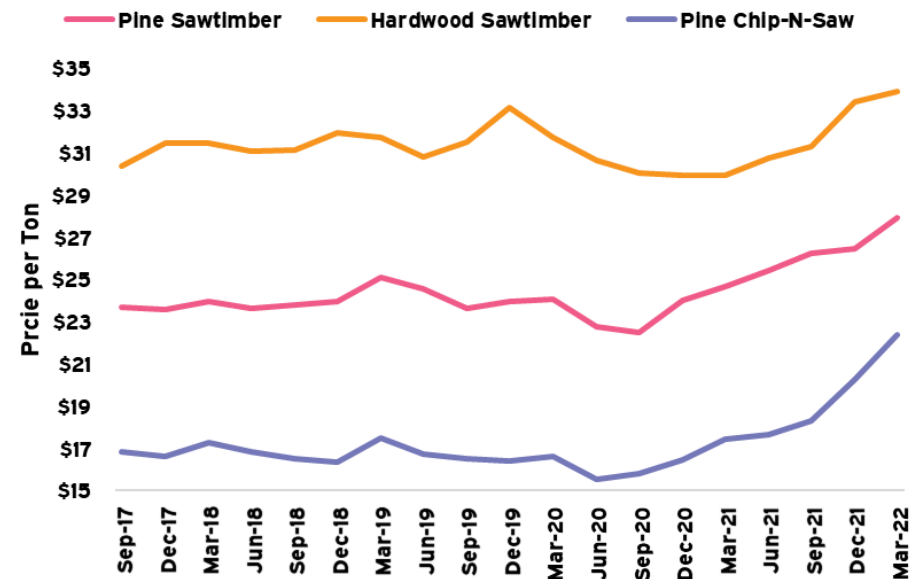
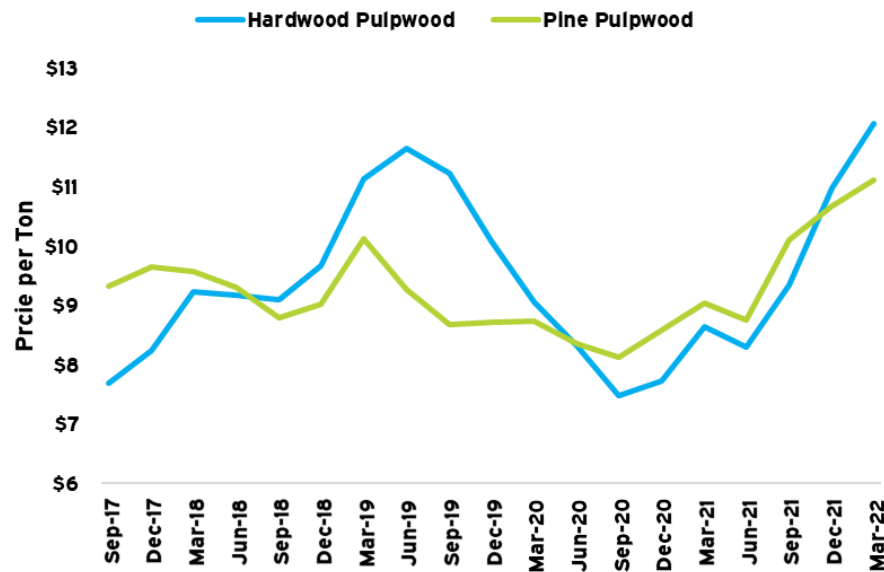
<sup>1</sup> Source: World Bank



Grain prices surged during the quarter as the conflict between Ukraine and Russia threatened exports from the region. During the first quarter, wheat, corn, and soybean prices experienced increases of 36%, 18%, and 30%, respectively. Relative to one year prior, the grains were up by 64%, 19%, and 23%, respectively. The NCREIF Farmland index increased by 2.6% during the quarter driven by income returns of 0.7% and appreciation of 2.0%.

<sup>1</sup> Source: World Bank

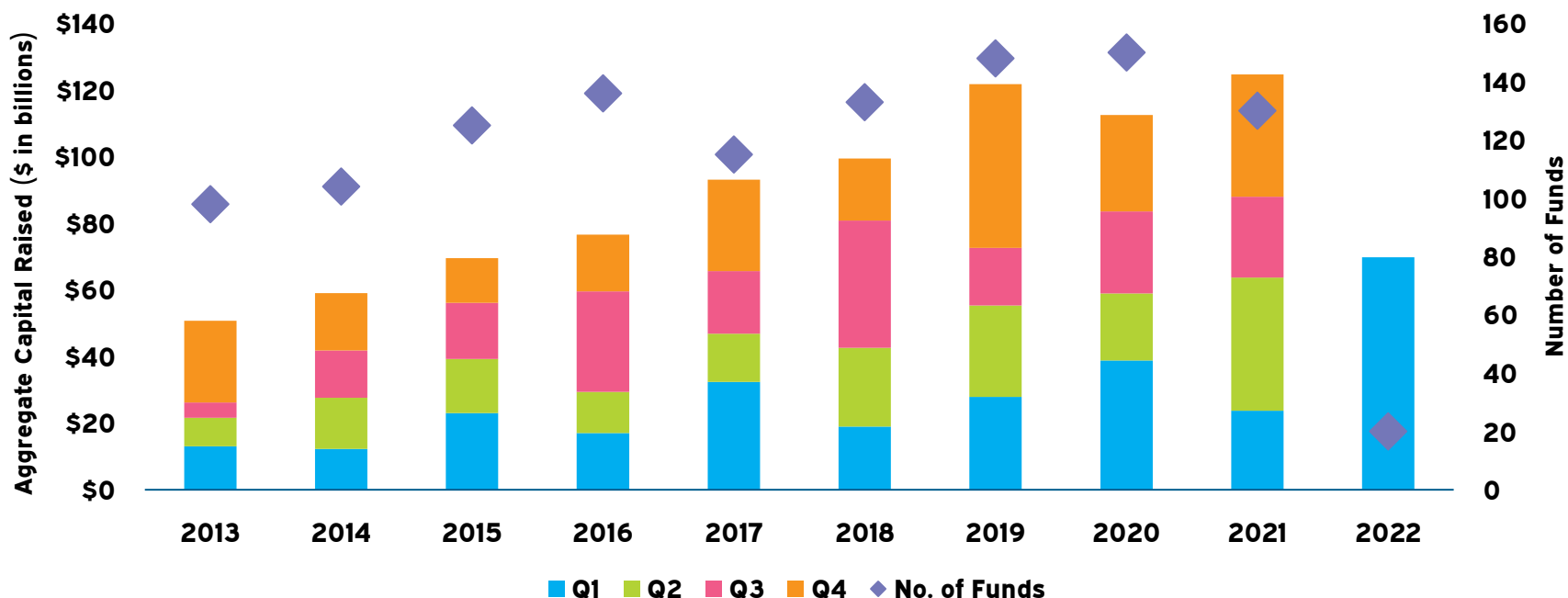
#### U.S. South Timber Prices<sup>1</sup>



U.S. South average timber prices for sawtimber and chip-n-saw continued its upward trend over the past two years and into the first quarter 2022. Pulpwood has experienced more volatility than sawtimber since 2017 with significant increases over the past two years. Hardwood pulpwood experienced a quarterly increase of 10% and was up 40% for the trailing one-year period. Pine pulpwood increased 4% during the quarter and was up 23% over the past year. The NCREIF Timberland index increased by 3.2% during the quarter driven by income returns of 0.8% and appreciation of 2.4%.

<sup>1</sup> Source: Bloomberg and TimberMart South

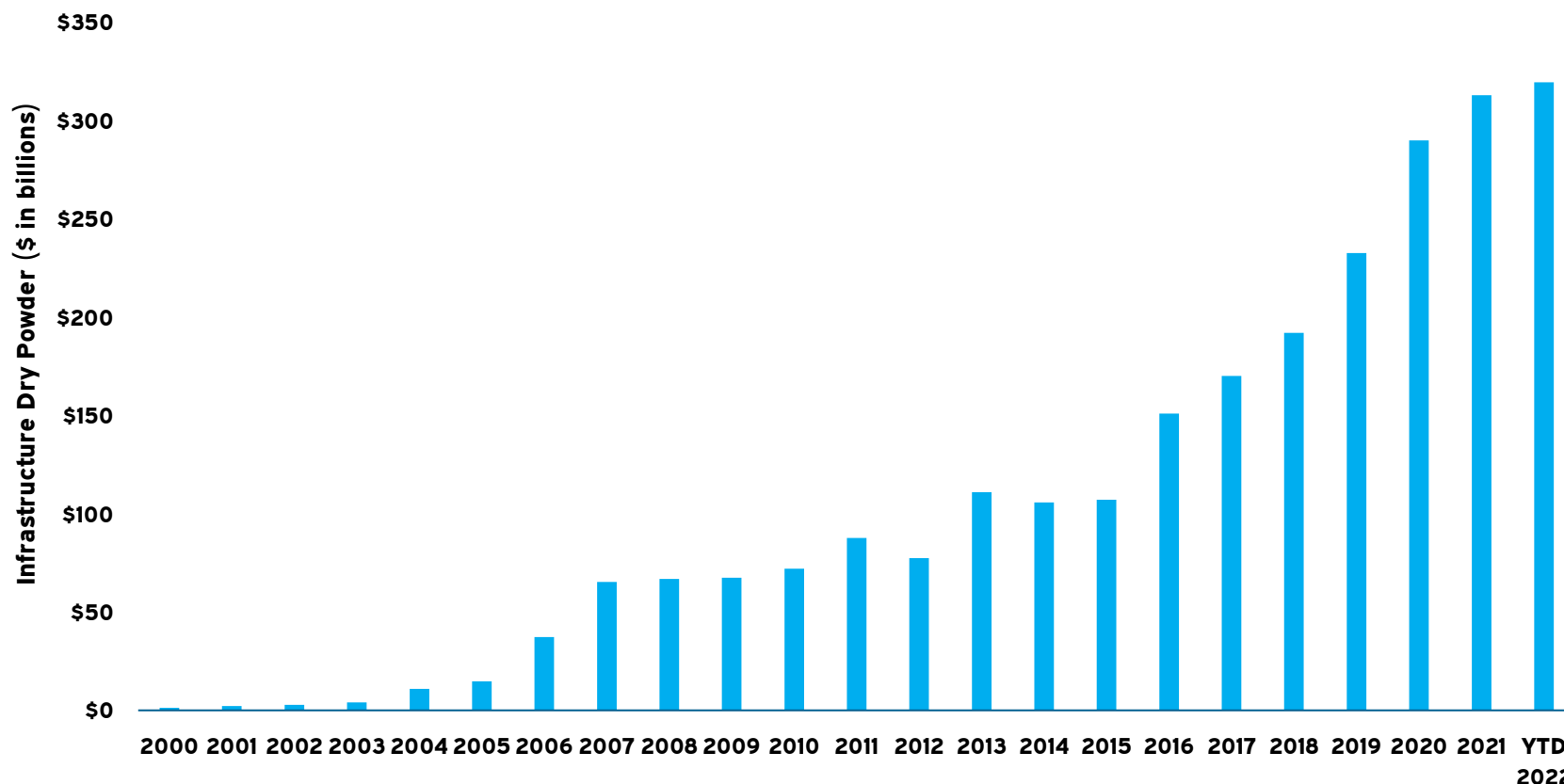
#### Global Quarterly Unlisted Infrastructure Fundraising<sup>1</sup>



Capital raised in the first quarter of 2022 exceeded the amount raised in the first half of 2021. The aggregate capital came from just 20 funds with an average fund size of \$3.5 billion. This was an increase over the 2021 average of \$1.0 billion.

<sup>1</sup> Source: Preqin 1Q 2022 Global Infrastructure Report.

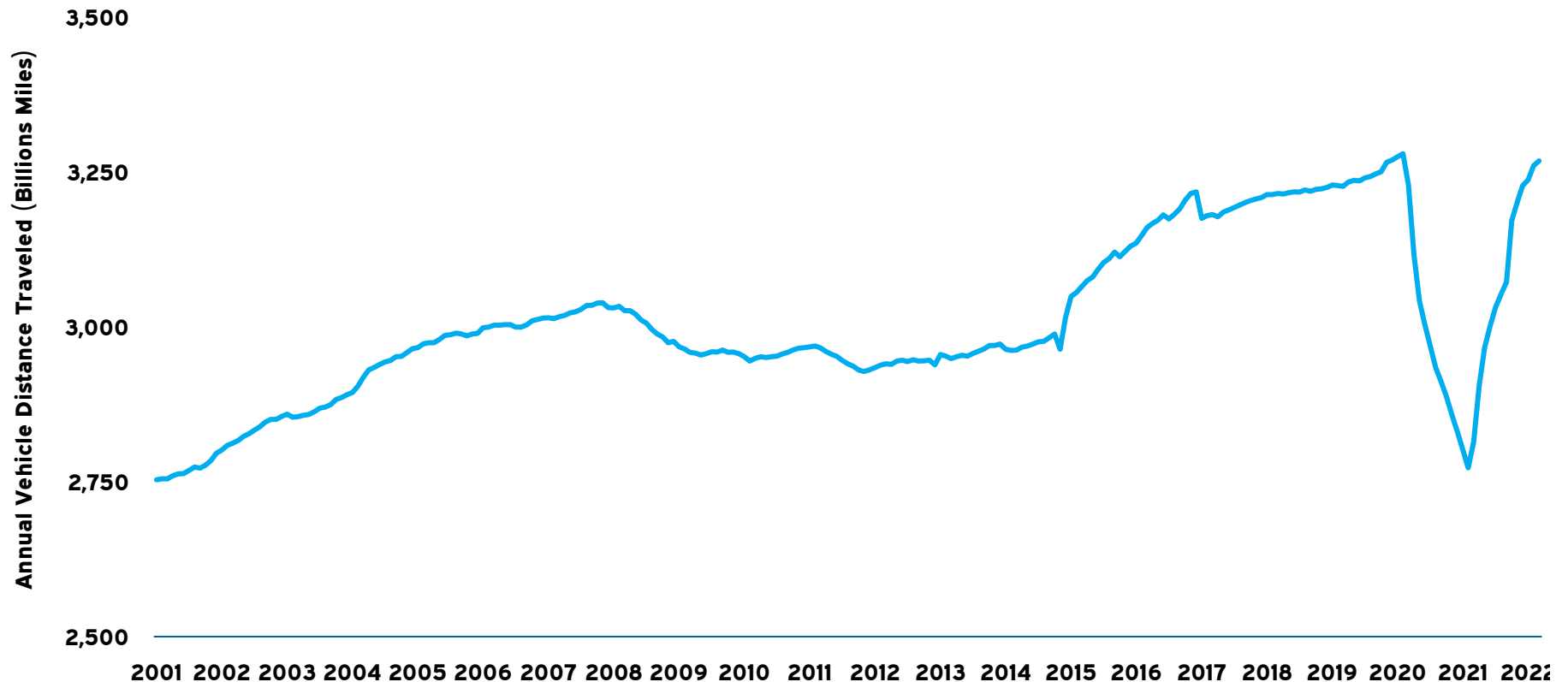
#### Global Infrastructure Dry Powder<sup>1</sup>



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.

<sup>1</sup> Source: Preqin 1Q 2022 Global Infrastructure Report.

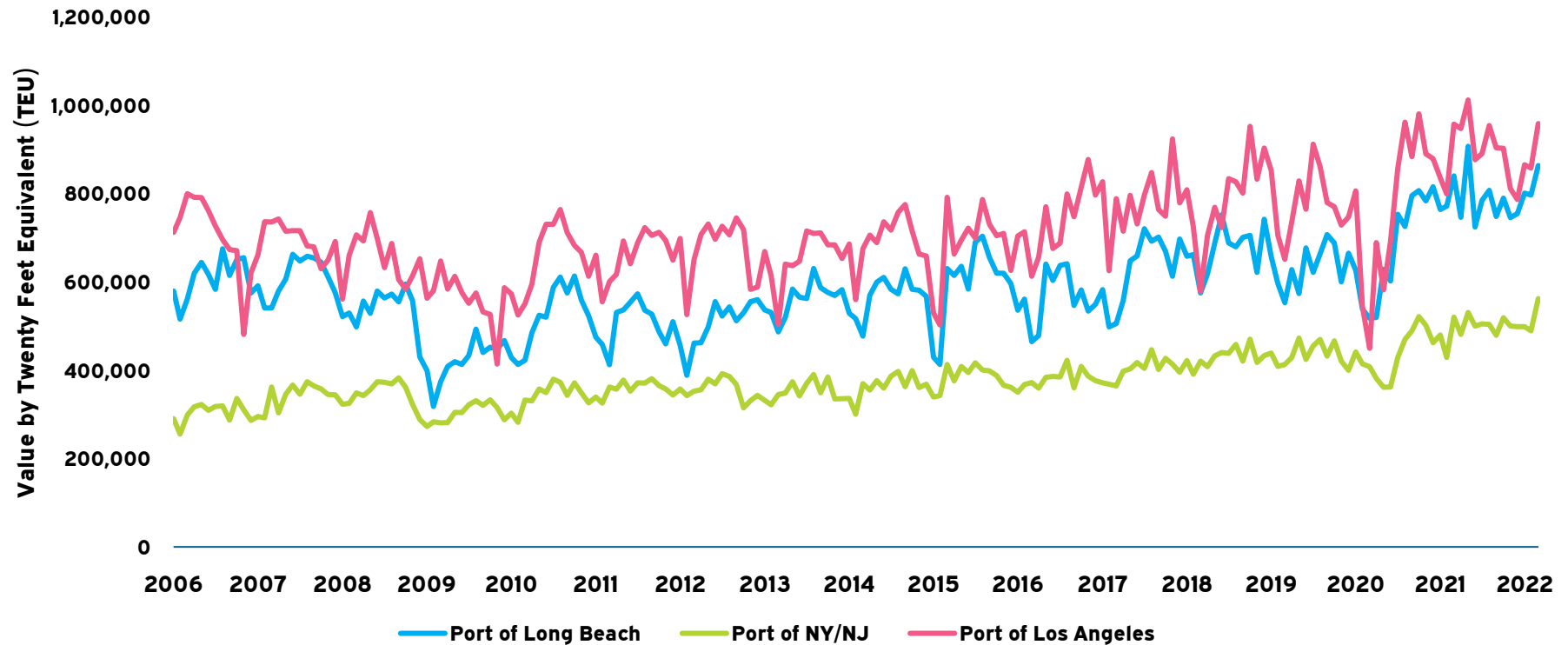
#### Trailing 12-month Annual Vehicle Miles on All US Roads<sup>1</sup>



The first quarter continued post-pandemic travel recovery with a total of approximately 753 billion miles. This represented an increase of 6% 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 first quarter continued to show an increase in the US price of a gallon of gas, which steadily increased to an average price of \$4.32 per gallon. This compares to \$3.09 per gallon average in 2021.

<sup>1</sup> Source: US Department of Transportation, Federal Highway Administration: Office of Highway Policy Information.

#### US Port Activity – Container Trade in TEUs<sup>1</sup>

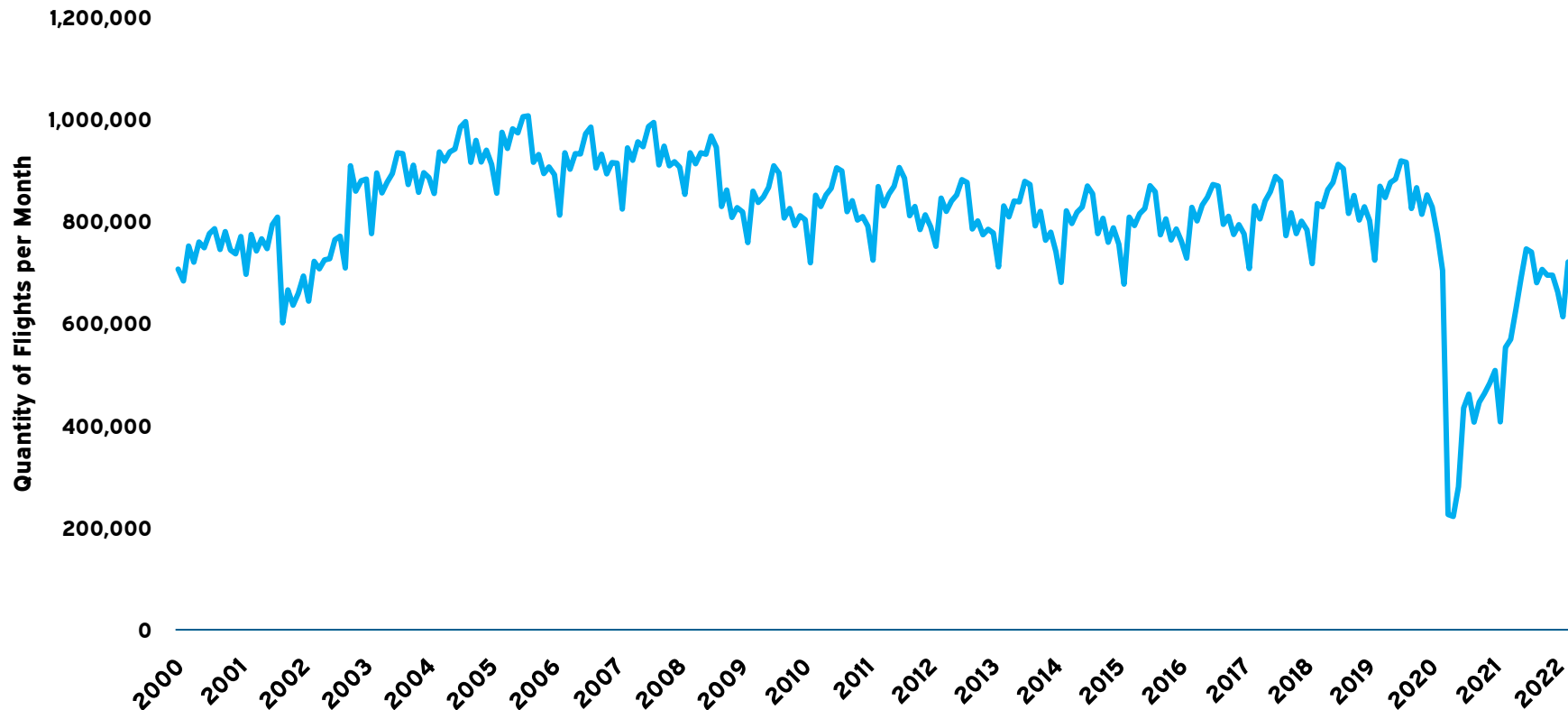


The chart presents the top three US ports by container volume, as measured by twenty-foot equivalent units (TEU). Activity at the three ports provides a high-level representation of the volume at US ports more broadly.

During the first quarter, volumes at the three ports increased by 0.3 million units relative to the same period in 2021. On a year-over-year basis, the combined port volumes increased by 2.1 million TEUs, or 8.6%, over the prior 12-month period. The Port of Long Beach recorded an increase of 8% (0.7 million TEUs), the Port of NY/NJ reported an increase of 12% (0.7 million TEU), and the Port of Los Angeles recorded an increase of 8% (0.8 million TEUs) over the prior 12 months.

<sup>1</sup> Source: [www.polb.com](http://www.polb.com), [www.panynj.gov](http://www.panynj.gov), and [www.portoflosangeles.org](http://www.portoflosangeles.org).

### Total US Domestic and International Flights<sup>1</sup>



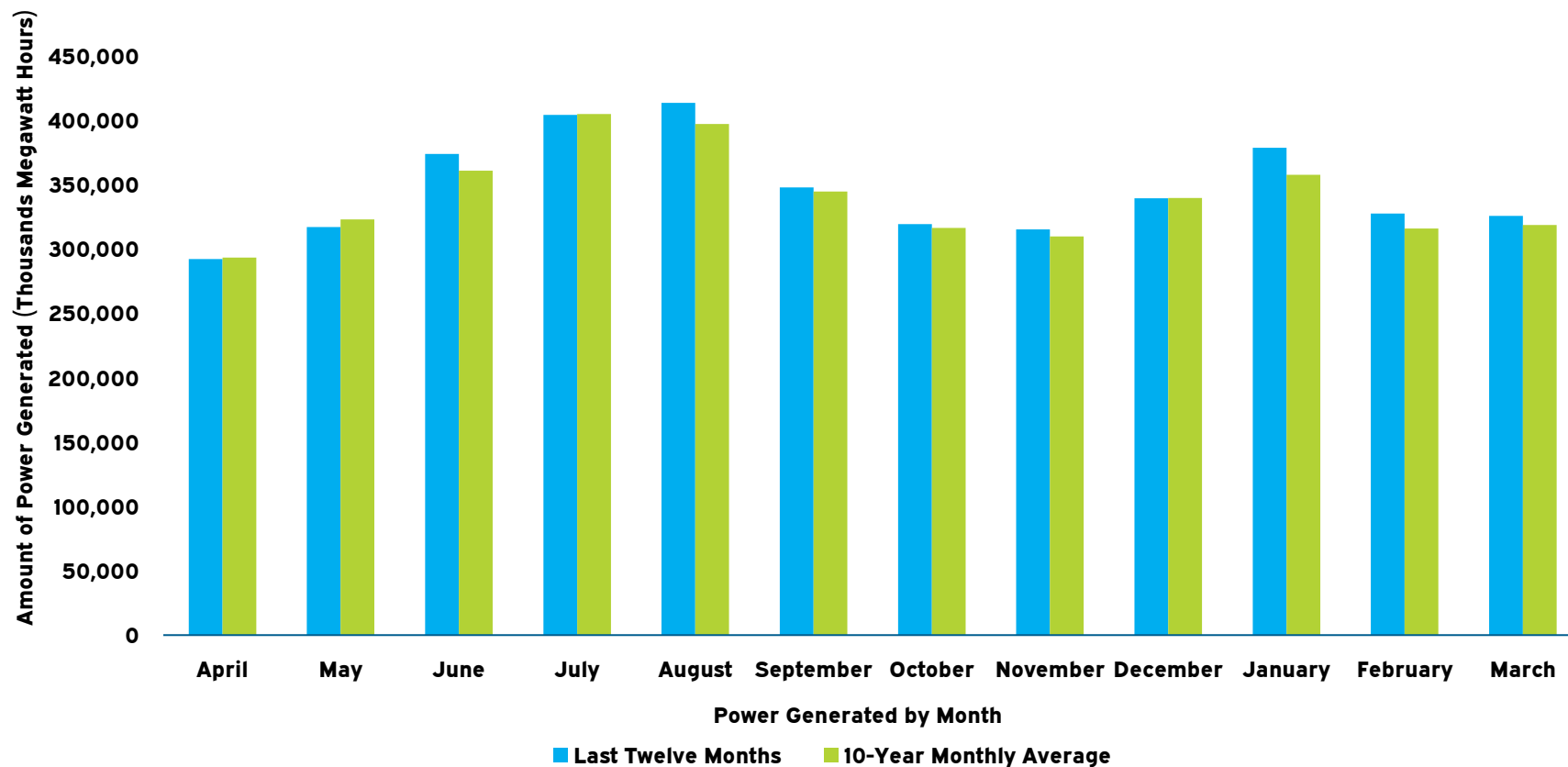
The chart above presents all US domestic and international flights, excluding foreign point-to-point flights by month. Historically, air traffic is cyclical with peaks in the summer months and troughs in the winter months.

There were 0.5 million more flights during the first quarter of 2022 over same period in 2021, representing a 36% increase. In addition to the number of flights, the total number of passengers travelling on US and international airlines increased by 158% for the 12 months ended March 2021 over the prior 12 months.

<sup>1</sup> Source: Bureau of Transportation Statistics: Flights, All US, and Foreign Carriers



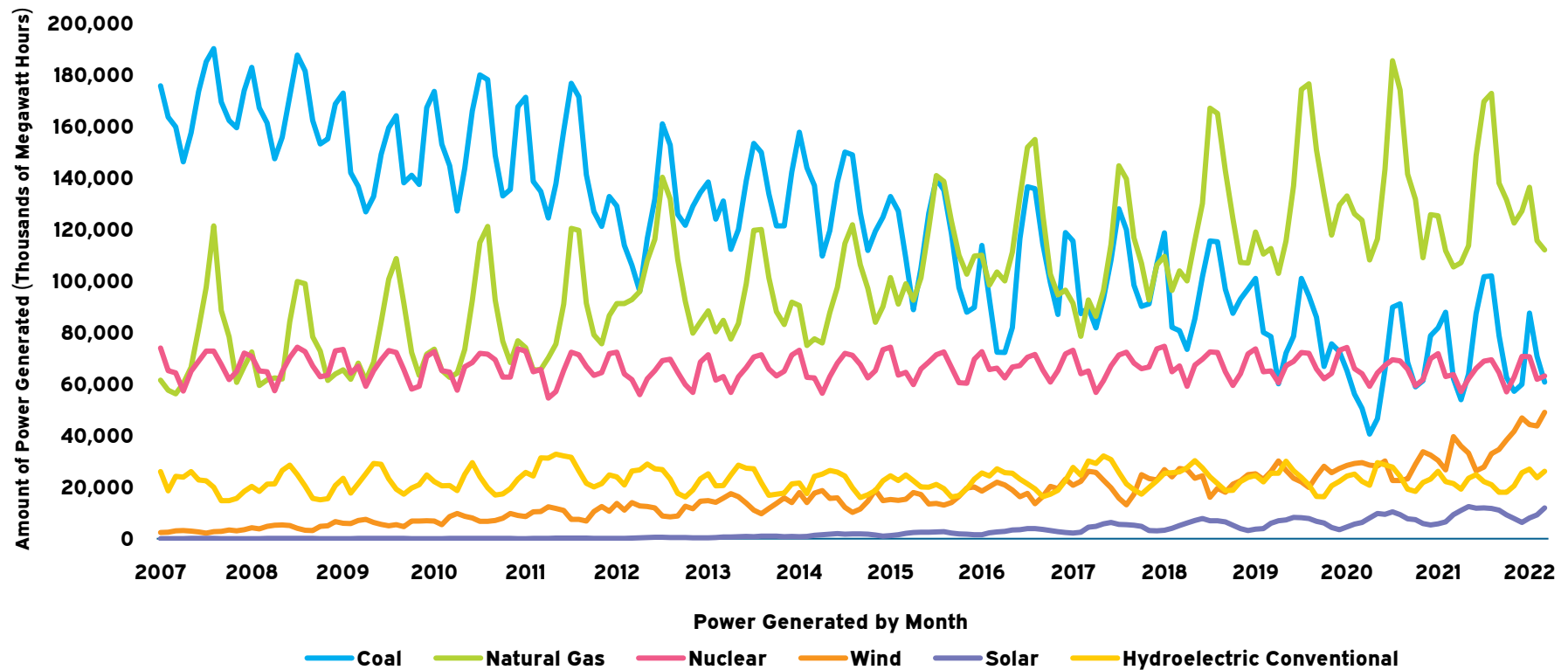
### Total US Power Generation<sup>1</sup>



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 remained flat with an increase by 1.4% during the first quarter, compared to the same period in 2021.

<sup>1</sup> Source: US Energy Information Administration: Electric Power Monthly, March 2022.

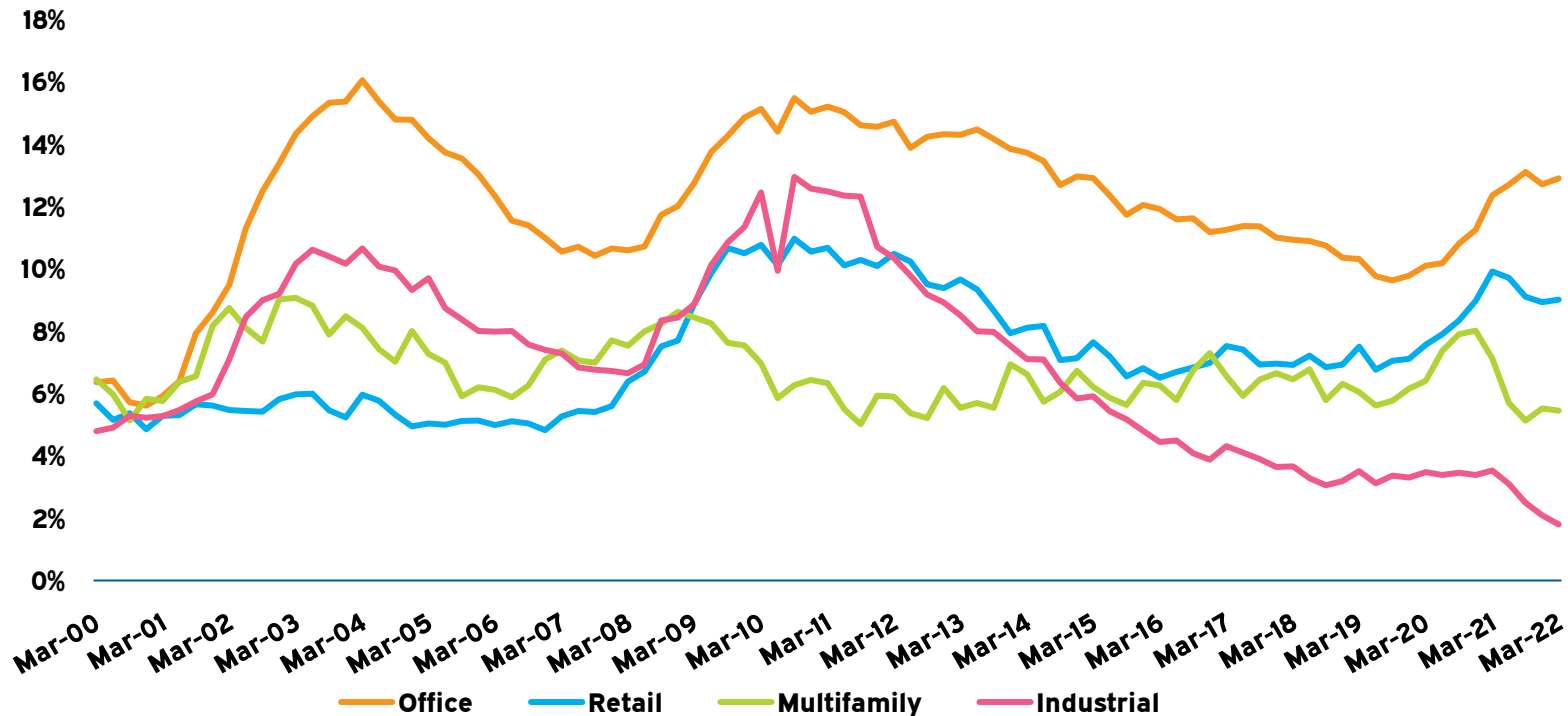
#### US Power Generation by Source<sup>1</sup>



In the first quarter 2022, total US power generated increased by 5% 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 11% and 3% of energy generation, respectively. Natural gas, coal, and nuclear accounted for 38%, 21%, and 19%, 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.

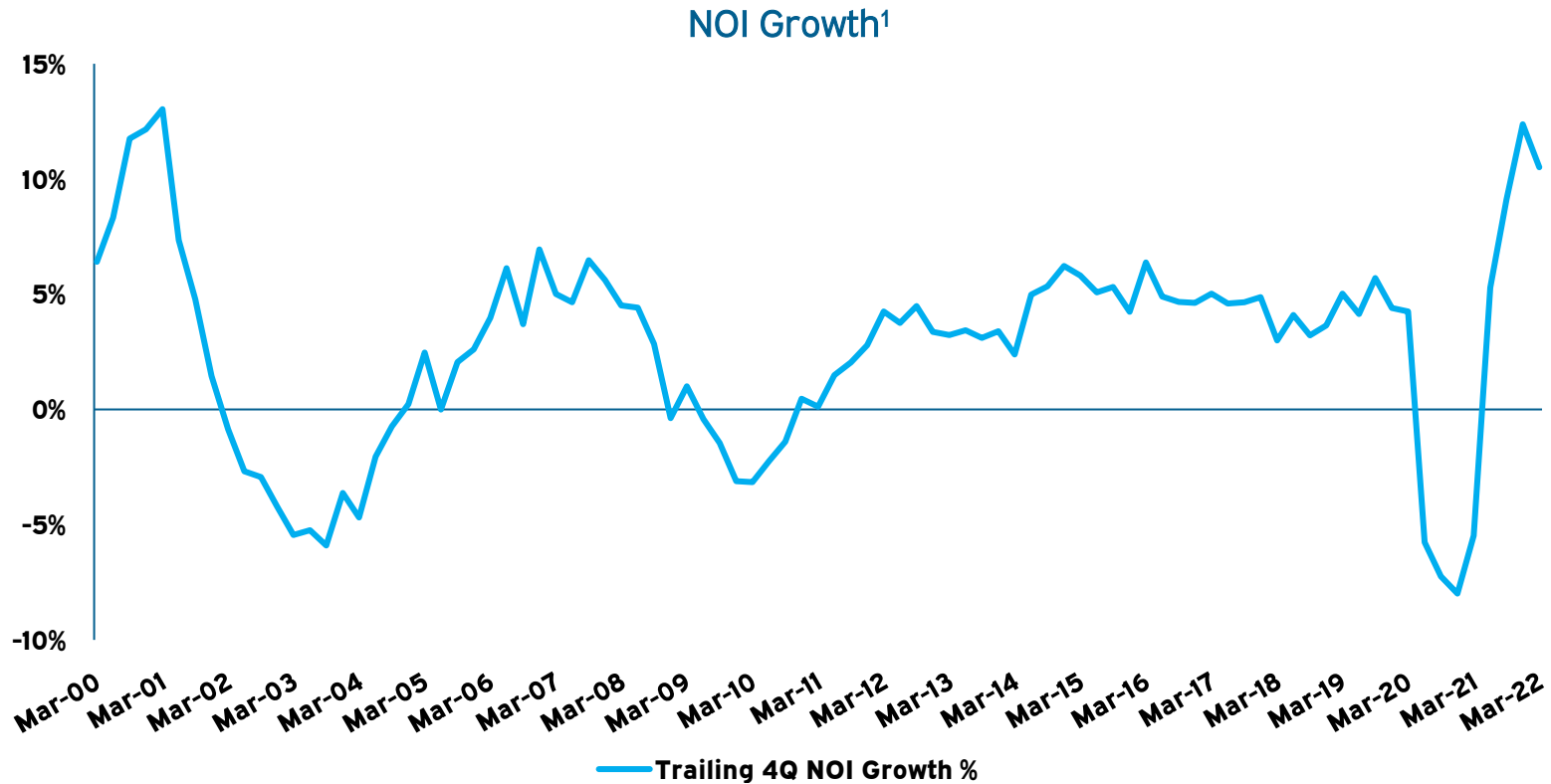
<sup>1</sup> Source: US Energy Information Administration: Electric Power Monthly, March 2022.

#### Real Estate Fundamentals Vacancy by Property Type<sup>1</sup>



In the first quarter of 2022, vacancy rates increased for office and retail, while vacancy rates for multifamily and industrial decreased. Multifamily vacancies decreased slightly by 7 basis points in Q1 2022. Industrial vacancies set a new all-time low at 1.8%. Retail vacancies increased slightly by 9 basis points in Q1 2022. Office vacancies increased in Q1 2022 to 12.9%. Compared to one year ago, vacancy rates in multifamily decreased 167 basis points, industrial decreased 173 basis points, retail decreased 90 basis points, and office increased 54 basis points. Overall, the vacancy rate across all property types decreased 153 basis point from Q1 2021.

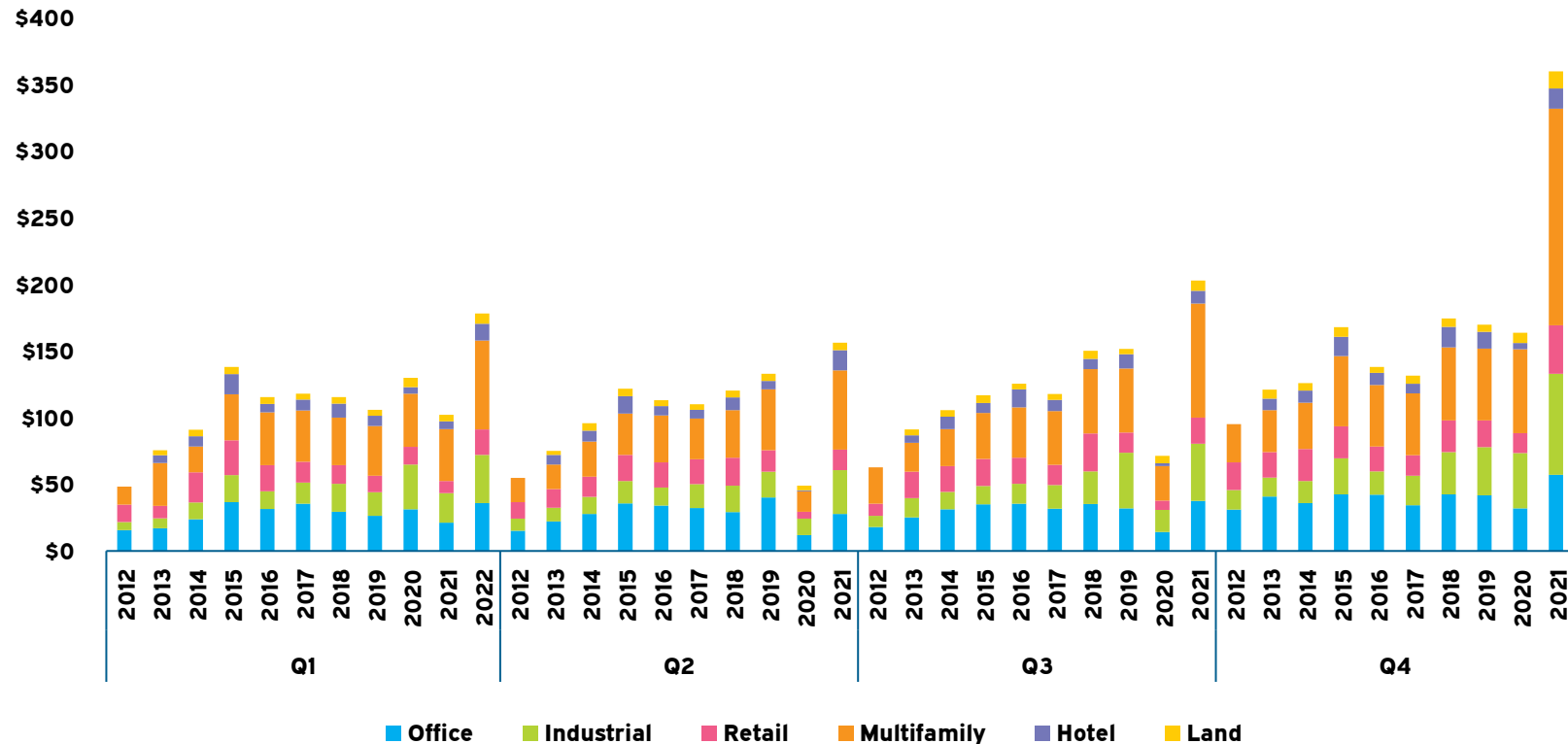
<sup>1</sup> Source: NCREIF



The trailing twelve-month rate of NOI growth decreased slightly in Q1 2022 to 10.5%. This growth rate continues to be supported by improved rent collections and the expiry of pandemic-related delinquencies/deferrals. Industrial NOI growth is trending above 11.0% for the trailing year ending Q1 2022. Office NOI growth has gone negative to -1.2% year-over-year, and Apartment NOI (a sector with “gross” rents, compared to “net” rents in other property types) experienced positive NOI growth at 23.5% year-over-year as occupancy levels and rental rate growth improved. Retail NOI growth has improved significantly from the previous four quarters, now at 15.6% year-over-year.

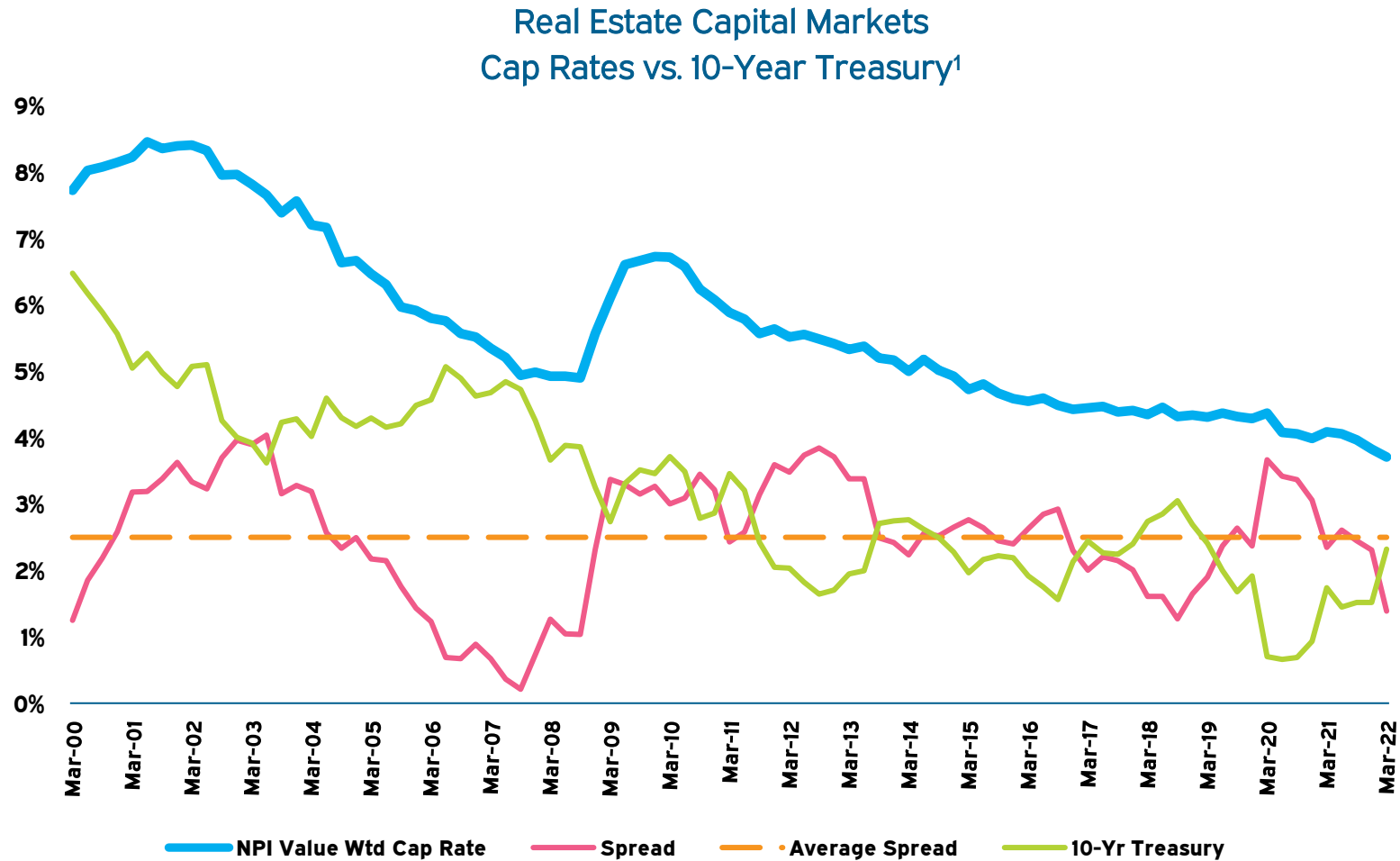
<sup>1</sup> Source: NCREIF

#### Transaction Volume (\$bn)<sup>1</sup>



Private real estate transaction volume for properties valued over \$2.5 million for Q1 2022 was up significantly from Q1 2021 to \$178 billion, representing the highest transaction volume in the first quarter of a year since the Global Financial Crisis. Compared to a year ago, all property types saw major increases in transaction volume: office (+69%), industrial (+64%), retail (+111%), multifamily (+71%), hotel (+110%) and land (+57%). Multifamily and industrial properties made up the largest percentages of total transaction volume during the quarter, at 38% and 20%, respectively.

<sup>1</sup> Source: PREA



The NPI Value Weighted Cap Rate decreased 12 basis points in Q1 2022 to 3.7%. The 10-year Treasury yield increased by 80 basis points in Q1 2022 to 2.3%. The spread between cap rates and treasury yields (139 basis points) is now well below the long-term average spread of 251 basis points.

<sup>1</sup> Source: NCREIF and US Department of the Treasury

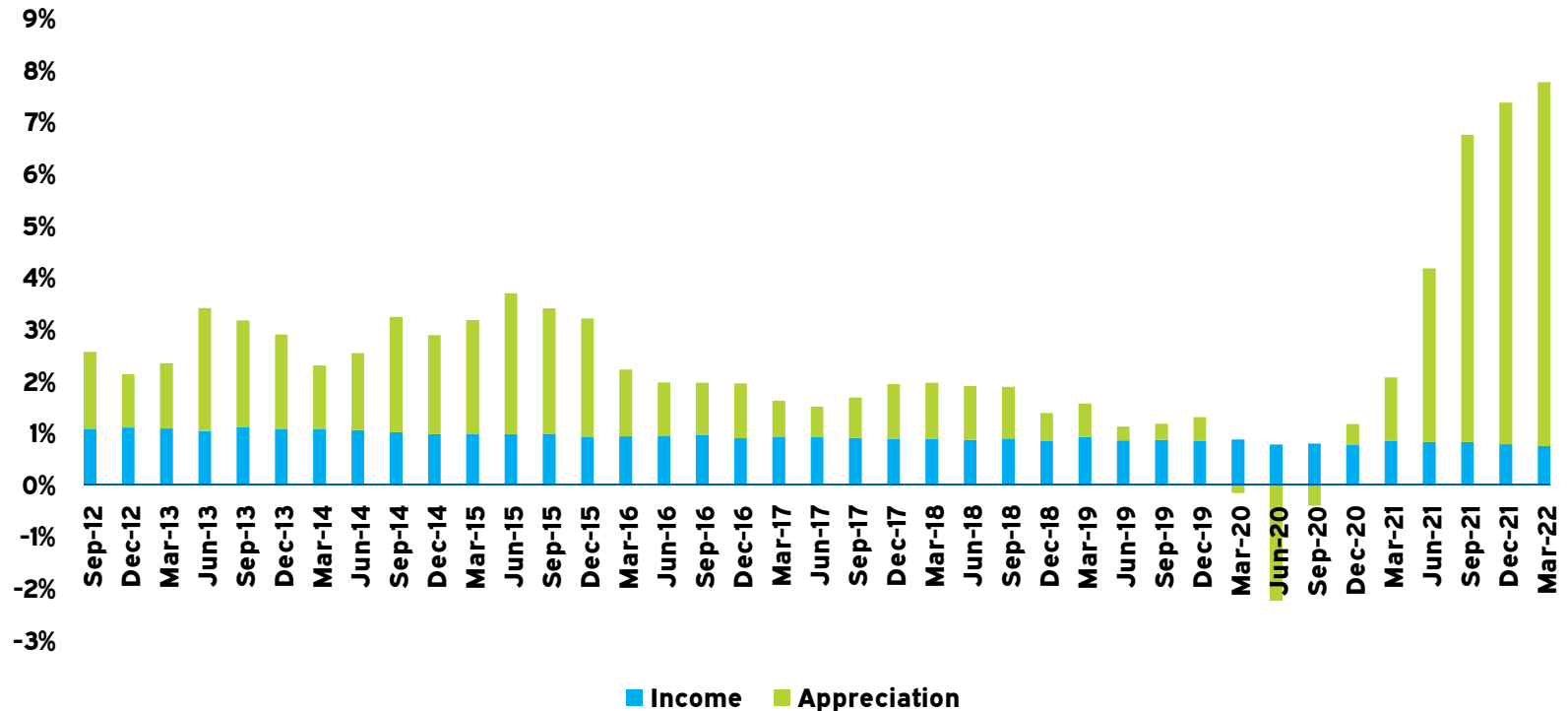
### Trailing Period Returns<sup>1</sup>

<i>As of March 31, 2022</i>	1 Year	3 Years	5 Years	10 Years
NFI-ODCE (EW, net)	28.7%	11.1%	9.5%	10.2%
NFI-ODCE (VW, net)	27.3	10.3	8.9	9.9
NCREIF Property Index	21.9	9.6	8.5	9.6
NAREIT Equity REIT Index	23.6	11.7	10.6	10.5

Private real estate indices were positive in Q1 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 Q1 2022 and private core real estate outperformed the public index over the trailing one-year period. Public real estate performance in 2020 and into 2021 has been volatile, returning -5.3% in Q1 2022, after posting a 16.2% return in the prior quarter.

<sup>1</sup> Source: NCREIF

#### ODCE Return Components <sup>1</sup> (Equal Weight, Net)



The NFI-ODCE Equal Weight return for Q1 2022 was strong at 7.8%, beating the prior quarter's return and posting the highest quarterly return in the history of the index. The income component of the quarterly return has been fairly consistent around 0.7%, while the appreciation for the quarter was very high at 7.0%.

<sup>1</sup> Source: NCREIF



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

<b>Committed</b>	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.
<b>Contributed</b>	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.
<b>Distributed</b>	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.
<b>DPI</b>	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.
<b>Exposure</b>	Represents the sum of the investor's Unfunded and Remaining Value.
<b>IRR</b>	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.
<b>NCV</b>	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.
<b>NM</b>	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.

### Peer Universe

The performance for a set of comparable private market funds. The peer returns used in this report are based on data from Preqin 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. Data sets that include less than five funds display performance as "NM". Meketa utilizes the following Preqin strategies for peer universes:

Infrastructure: Infrastructure

Natural Resources: Natural Resources Private Debt: Private Debt

Private Equity (including Private Debt): Private Equity, Private Debt Private Equity (excluding Private Debt): Private Equity

Real Assets (excluding Real Estate): Infrastructure, Natural Resources

Real Assets (including Real Estate): Infrastructure, Natural Resources, Real Estate Real Estate: Real Estate

### 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.