

Private Markets Review 2021

Douglas Kidd Investment Officer 16 March 2022

Executive Summary Private Markets

- The Role of Private Markets
- Recap of Board-approved activity
- Portfolio Holdings and Performance
 - 1 Infrastructure
 - 2 Real Estate
- 3 Private Equity
- 4 Private Credit
- Near term plans





The Role of Private Markets Assets

Infrastructure:

- Consistent and meaningful income
- Value creation from improvements and acquisitions

Real Estate:

- Consistent income/yield from rents
- Combine stable core properties plus value added
- Capture growth factor from lease up, development and value enhancements
- Add illiquidity premium from private structures



The Role of Private Markets Assets

Private Equity:

- Capture growth factor as portfolio companies expand
- Capture Small size factor inefficiencies
- Add illiquidity premium from private fund structures

Private Credit:

- Cash Income or Yield from loan interest payments
- Capture Credit factor for lower credit quality/risk
- Capture some rates factor for shorter term loans
- Add illiquidity premium for private structures

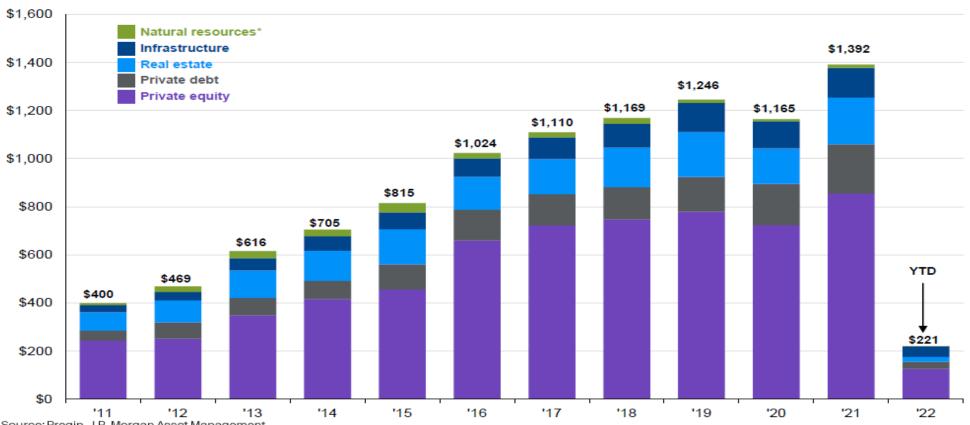


Alternatives fundraising

GTA U.S. 4

Global private capital fundraising

USD billions



Source: Pregin, J.P. Morgan Asset Management.

Fundraising categories are provided by Preqin, and represent their estimate of annual capital raised in closed-end funds. Data may not sum to total due to rounding. *Natural resources include natural resources fund of funds, agriculture, energy, metals & mining, timberland and water. 2022 fundraising data is year-to-date as of February 2022.

Data is based on availability as of February 28, 2022.



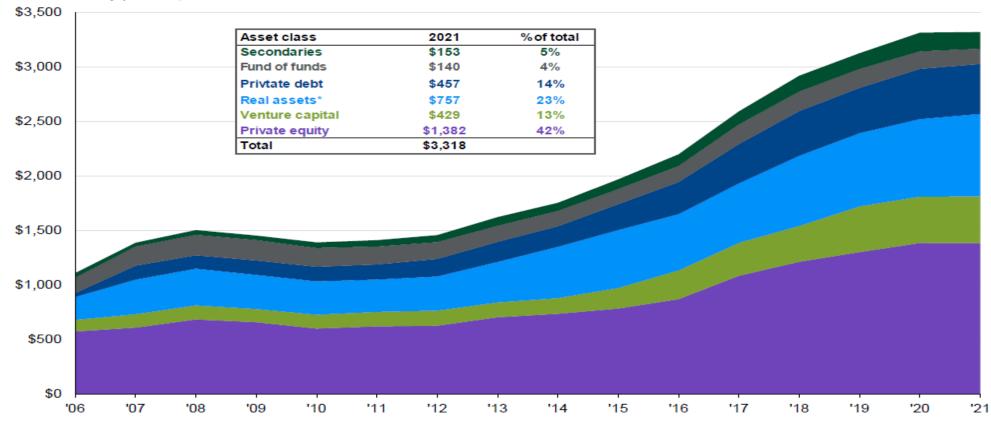


Alternatives dry powder (Funds raised but not yet called)

GTA U.S. 5

Dry powder by asset class

Cumulative dry powder, USD billions



Source: Pitchbook, J.P. Morgan Asset Management. Dry powder data is as of December 31, 2021. Percentages may not sum to 100 due to rounding. *Real assets dry powder includes real estate & infrastructure.

Data is based on availability as of February 28, 2022.

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FCERA Asset Class Targets

- ☐ 4% Infrastructure: currently 3.7%
- 8% Real Estate: currently 6.5%
- 8% Private Equity: currently 7.4%
- 8% Private Credit: currently 7.8%



Infrastructure

3.7% of assets, target 4.0% or \$240mil

Per Verus

- -10 year expected return: 6.6%
- -Volatility 17.6% (above or below expected return)

Performance (as of 12/31):

-1 year: 17.6%

-3 years: 11.5 %

-5 years: 14.7%

Commitment

-\$39mil likely to be called in Q1, previously approved

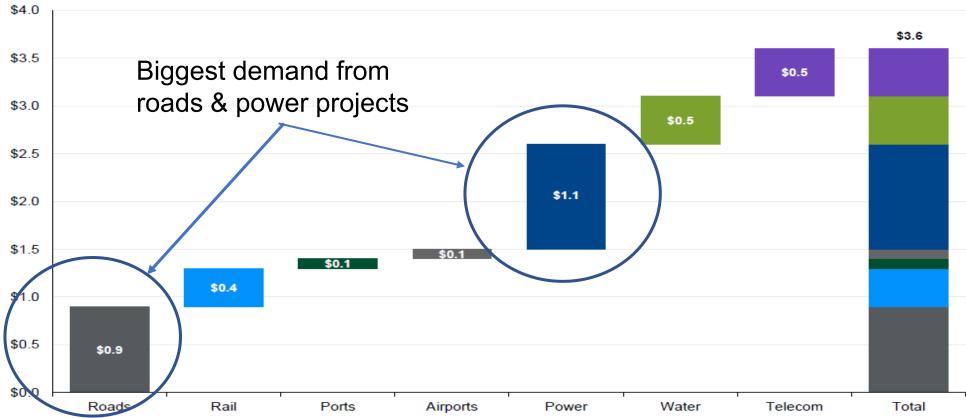


Global infrastructure investment

GTA U.S. 21

Average annual infrastructure need

USD trillions, constant 2017 dollars



Source: McKinsey Global Institute, J.P. Morgan Asset Management. Data is based on availability as of February 28, 2022.





Current Infrastructure Exposure

IFM Global Infrastructure Fund

Diversified portfolio of investments





19 portfolio companies across 20+ countries(1)



As at 31 December 2021. Portfolio holdings shown are as of the date noted, may not represent all of the portfolio's current holdings, and are not representative of future investments. Note: Year indicates initial acquisition year. Certain assets have subsequent transactions (follow-on investments or partial divestments).

(1) Country exposures outlined here reflect material asset exposures (based on contribution to total EBITDA) across our portfolio companies. GIF has assets located in 45 countries, of which 21 countries account for 98%+ of the portfolio

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Overall FCERA Real Estate

6.5% of assets, target 8%

Performance (as of 12/31)

• 1 year: 19.3%

3 year: 7.8%

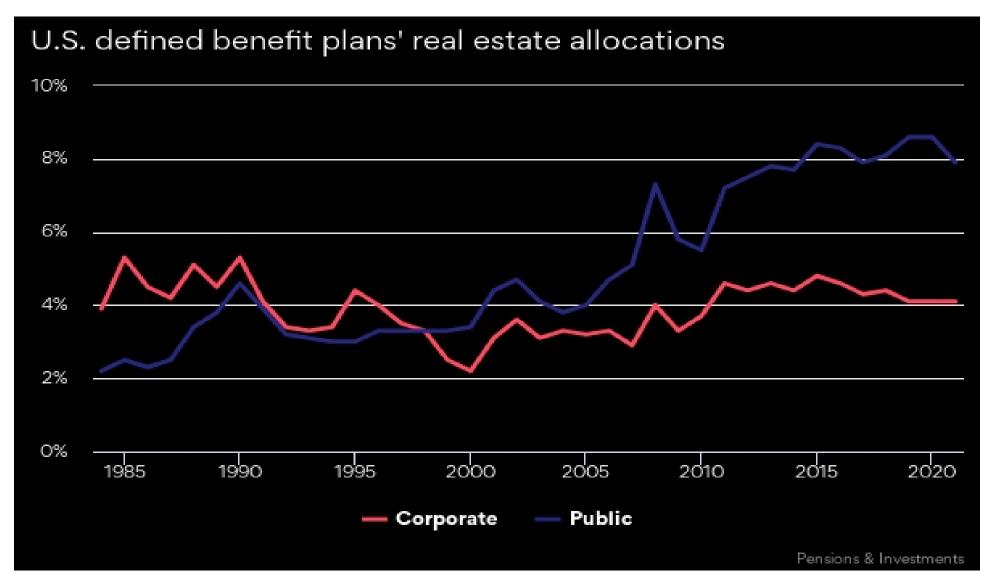
5 year: 7.8%

Commitments:

- Ares \$75mil in 2020, 3-4 years, \$26mil called to date
- Oaktree \$75mil in 2020, 3-4 years, \$12mil called to date
- Harrison Street Core in 2021 \$115mil total, \$70mil called in Jan
- PCCP Fund IX in 2021, \$50mil committed, \$5mil called to date
- Invesco Value Add Fund VI \$50mil, 3-4 years, 0 called
- New Value Add Fund \$40mil in discussions, 3-4 years



FCERA Real Estate Target is Typical







Real Estate Market Overview

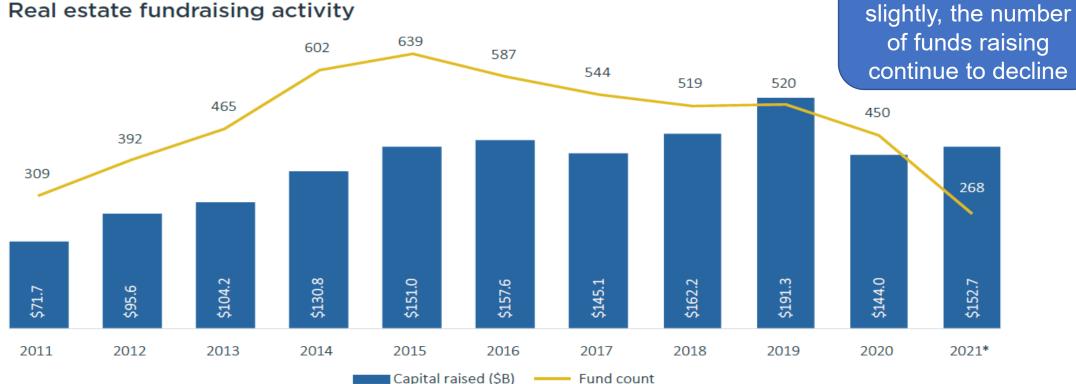
- Rising inflation is thought to benefit real estate, so recent inflation is a tailwind
- Real Estate allocations are up, but Core real estate share of funds raised continues to decline
- Self-storage, about 5% of the market, returns calculated at +66%
- Industrial, about 10% weight, showed returns of 41%
- Cap Rate Spreads or Yields: (net operating income/asset value, less Treasury rates) have fallen back to about 3.2%, with the low being 2.9% in 2019
- Although vacancies in all asset types have fallen from peaks, they are still 14% in Office
- Retail is bifurcated, with malls & many vendors struggling. Experiential retail thriving with lifting of pandemic restrictions





Fundraising overview

Real estate fundraising activity



The median step-up in fund size was 60%

Source: PitchBook | Geography: Global *As of December 31, 2021

Although total \$

raised was up





Fundraising overview

Real estate dry powder (\$B)



Source: PitchBook | Geography: Gobal *As of June 30, 2021



FCERA Closed End Real Estate

Expected return 8.5-9.5%, Volatility 9.9-11.2%

Real Estate Closed End Funds (Net of Fees)

Period Ending: December 31, 2021

Fund	Inception Date	% of Portfolio	Total Commitment	Contributions	Distributions	Estimated Market Value	One Quarter Return	One Year Return	Three Years Return	Five Year Retuin	(IRR) Since Inception
Kennedy Wilson Real Estate Fund VI	2019	0.4%	\$30,000,000	\$29,634,259	\$11,119,578	\$25,828,103	15.3%	28.5%	N/A	N/A	16.9%
Invesco Value-Add Fund V	2017	0.4%	\$30,000,000	\$21,941,585	\$2,894,940	\$26,994,475	8.8%	31.2%	N/A	N/A	19.8%
Kennedy Wilson Real Estate Fund V	2016	0.1%	\$30,000,000	\$28,113,444	\$34,436,776	\$3,930,621	1.8%	-3.9%	4.4%	8.2%	12.2%
Gerding Edlen Green Cities III	2016	0.3%	\$20,000,000	\$19,412,739	\$4,675,596	\$19,361,251	1.0%	1.6%	2.8%	3.29	5.0%
Ares US Real Estate Opportunity Fund III	2021	0.4%	\$75,000,000	\$26,291,809	-\$3,368,137	\$26,853,136	7.2%	N/A	N/A	N/A	N/A
Oaktree Real Estate Opportunities Fund VIII, L.P.	2021	0.1%	\$75,000,000	\$11,502,295	\$7,500,000	\$7,505,951	8.1%	N/A	N/A	N/A	N/A



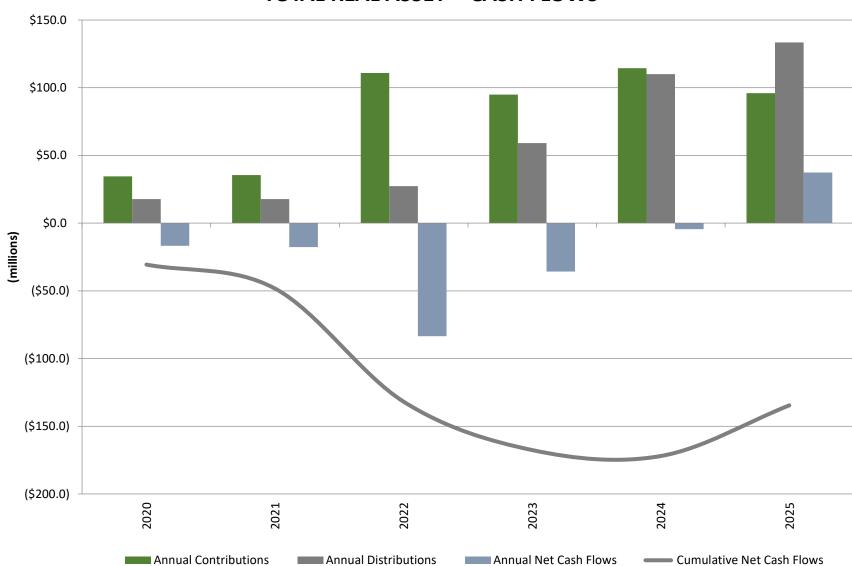
Verus

cash

flow

forecast

TOTAL REAL ASSET - CASH FLOWS





Real Estate Pacing @ \$80mil per year

		2021		2022	2	2023		2024		2025
Invesco Core Fund	\$	205,610,066	\$	211,778,368	\$	218,131,719	\$	224,675,671	\$	231,415,941
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Harrison Street Core Fund NEW	\$	-	\$	115,000,000	\$	118,450,000	\$	122,003,500	\$	125,663,605
Existing Value-Add/Opportunistic Commitments	\$	73,114,450	\$	72,680,191	\$	44,188,319	\$	19,588,319	\$	6,388,319
Future Value-Add/Opportunistic Commitments			\$	18,400,000	\$	56,800,000	\$	119,200,000	\$	200,600,000
Ares AREOF III (est)	\$	26,853,136	\$	56,978,136	\$	70,228,136	\$	51,210,219	\$	16,335,219
Oaktree ROF VIII (est)	\$	7,505,951	\$	24,755,951	\$	47,255,951	\$	58,505,951	\$	49,005,951
PCCP Equity XI (est)	\$	4,785,589	\$	21,277,319	\$	31,870,788	\$	42,042,882	\$	35,000,000
Lorenza Malara A. L.I.VII. (c. et)	Φ.	0.500.000	Φ.	47 500 000	Φ.	04 000 000	Φ.	04 500 000	Φ.	00 500 000
Invesco Value-Add VI (est)	\$	2,500,000	\$	17,500,000	\$	24,000,000	\$	31,500,000	\$	28,500,000
TOTAL	\$	320,371,213	\$	538,371,987	\$	610,926,936	\$	668,728,566	\$	692,911,060



Private Equity

7.5% of assets, target 8% Expected return 9.5%, volatility 26%

Performance (as of 12/31)

1 year: 57.2%

3 year: 22.0

5 year: 19.8

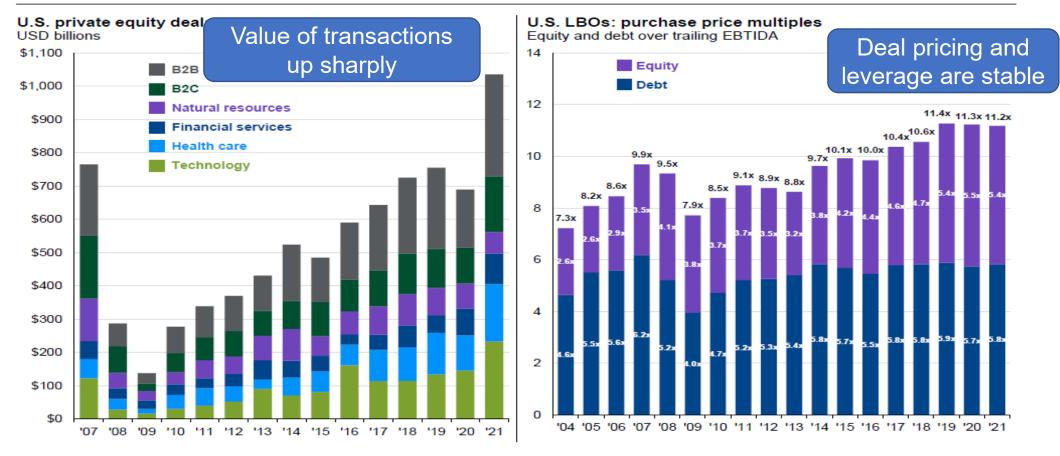
2021 Commitments:

Insight Partners XII, \$20mil Keensight Nova VI, \$20mil SK Capital Partners VI, \$15mil STG Allegro Fund, \$15mil The Resolute Fund V, \$15mil



Private equity deals and multiples

GTA U.S. 40



Source: Pitchbook, S&PLCD, J.P. Morgan Asset Management.
B2B is business to business. B2C is business to consumer. Natural resources = Materials and resources and energy. Private equity and multiple data are as of December 31, 2021.
Data is based on availability as of February 28, 2022.

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Private Equity Portfolio is Maturing

Private Equity Non Marketable Securities Overview

Period Ending: December 31, 2021

Fund	Vintage Year	Commitment	Unfunded Commitment	Paid-In Capital	Capital Distributed	NAV*	TVPI
Legacy Portfolio	rear	Communent	Communent	Palu-III Capital	Distributed	PA-V	TOPI
Blackstone Capital Partners IV, L.P.	2003	320,000,000	\$597,726	\$22,648,846	\$53,149,007	\$305,568	2.4x
Hamilton Lane Private Equity Fund IX L.P.	2016	5100.000.000	\$9,951,676	590,048,324	561,485,822	\$101,805,946	1.8x
Hamilton Lane Private Equity Fund VI, LP	2007	\$70,000,000	\$7,104,295	\$62,895,705	\$91,622,923	\$12,662,961	1.7x
Horsley Bridge XI Growth Buyout L.P.	2007	\$30,000,000	\$5,167,347	\$24,832,653	\$15,453,243	\$34,245,205	1.7X 2.0X
Landmark Equity Partners XIV, L.P.	2009	\$30,000,000	\$810,190	\$29,191,971	\$36,118,004	\$3,430,562	1.4x
New Mountain Partners III, L.P.	2007	515,000,000	\$1,839,884	\$15,429,351	\$37,809,673	-526,988	2.4x
NMP III Continuation Fund, L.P.	2021	\$3,402,119	\$633,527	\$2,768,592	\$0	\$3,652,316	1.3x
Warburg Pincus Equity Partners, L.P.	1998	\$34,000,000	\$0	\$20,000,000	\$33,046,892	\$78,485	1.73
Warburg Pincus Private Equity VIII, L.P.	2001	\$20,000,000	\$0	\$26,100,000	\$58,384,663	\$0	2.2
Warburg Pincus Private Equity X, L.P.	2007	\$25,000,000	50	\$25,046,896	544,312,076	5623,361	1.8
Warburg Pincus Private Equity XII, L.P.	2015	\$25,000,000	\$459,000	\$33,558,364	\$17,958,382	\$47,429,585	1.9
Total Legacy Portfolio		\$372,402,119	\$26,563,645	\$352,520,702	\$449,340,685	\$204,207,001	1.9 k
Hamilton Lane Portfolio							
Altaris Health Partners V, L.P.	2020	510,000,000	\$7,577,437	\$2,422,563	50	\$2,421,050	1
Aurora Equity Partners VI, L.P.	2019	\$10,000,000	\$7,239,699	\$2,761,502	\$1,720	\$2,488,991	0.9x
Avista Capital Partners IV, L.P.	2018	\$10,000,000	\$1,607,793	\$12,012,382	\$16,434,271	\$5,831,071	1. bx
Avista Capital Partners V, L.P.	2019	\$10,000,000	\$4,563,493	\$6,033,912	\$597,405	\$6,776,294	1. 2x
Bridgepoint Development Capital IV, L.P.	2020	310 ,767,450	\$10,809,642	50	50	-5141,889	N A
Cinven Seventh Fund	2019	\$8,841,182	\$5,261,351	\$3,432,044	\$0	\$3,877,632	1.1x
CVC Capital Partners VIII, L.P.	2020	\$10,581,275	\$8,342,495	\$2,002,671	\$0	\$2,051,552	1.0 Ox
Gridiron Capital Fund IV, L.P.	2019	\$10,000,000	\$3,298,790	\$7,198,966	\$518,442	\$10,053,023	1.5x
H.I.G. Growth Buyouts & Equity Fund III, L.P.	2019	\$10,000,000	\$7,928,278	\$2,071,722	30	\$2,387,429	1, 2x
Hamilton Lane Secondary Fund IV, L.P.	2017	\$75,000,000	\$31,254,573	\$64,407,538	\$46,494,094	\$61,075,919	1.7x
HGGC Fund IV, L.P.	2019	\$10,000,000	\$5,163,264	\$7,080,128	\$2,274,601	\$5,747,847	1. 1x
Insight Partners XI, L.P.	2019	\$10,000,000	\$503,185	\$9,500,000	\$17,768	\$15,980,481	1.7x
JFL Equity Investors V, L.P.	2019	\$10,000,000	\$4,505,673	\$5,494,327	50	\$5,127,906	0.9x
K4 Private Investors, L.P.	2018	\$5,000,000	\$1,280,282	\$3,720,221	\$507	\$5,674,548	1.5x
K5 Private Investors, L.P.	2020	\$10,000,000	\$7,522,497	\$2,477,503	\$0	\$2,243,141	0. 8x
Kelso Investment Associates X, L.P.	2018	\$7,500,000	\$1,942,140	\$5,607,497	\$52,086	\$8,384,191	1. ix
NewQuest Asia Fund IV, L.P.	2019	\$10,000,000	\$4,337,787	\$5,662,213	\$180	\$5,975,856	1. x
Oak Hill Capital Partners V, L.P.	2020	\$10,000,000	\$2,965,680	\$7,034,320	\$3,504	\$7,619,756	1.10x
Platinum Equity Capital Partners V, L.P.	2019	\$10,000,000	\$876,973	\$9,149,033	\$26,006	\$10,816,825	1.2 x
Platinum Equity Small Cap Fund, L.P.	2018	\$7,500,000	\$3,403,986	\$4,655,619	51,273,747	\$3,842,247	1.1x
SK Capital Partners Fund V. L.P.	2018	\$10,000,000	\$1,300,985	\$9,949,823	\$1,330,877	\$10,344,445	1.2 k
Sterling Group Partners V, L.P.	2020	\$10,000,000	\$9,062,347	\$937,653	\$0	\$1,447,142	1.5
STG VI, L.P.	2020	\$10,000,000	\$6,759,910	\$3,240,090	\$0	\$2,981,813	0.9
TCV XI, L.P.	2020	510.000,000	\$6,075,864	\$3,924,136	50	\$3,799,091	1.0:
Thomas H. Lee Equity Fund VIII, L.P.	2019	\$7,500,000	\$1,899,418	\$6,371,560	\$2,525,304	\$9,796,534	1.9x
TPG Partners VIII, L.P.	2019	\$10,000,000	\$5,625,647	\$5,674,107	\$1,429,336	\$5,675,586	1.3x
Verdane Capital X AB	2019	\$7,577,799	\$1,942,808	\$5,616,937	\$114,313	\$9,321,387	1.7x
ZMC III. L.P.	2019	56.764,374	\$4,921,458	\$1,842,916	52,118	\$1,630,523	0.9x
Insight Partners XII, L.P.	2021	\$20,000,000	\$13,000.000	\$7,000.000	\$4,682	\$6,885,688	1.0x
Keensight Nova VI SLP	2021	\$19,283,231	\$19,283,231	\$0	\$0	\$0	N/A
SK Capital Partners VI, LP	2021	\$15,000,000	\$15,000,000	50	50	50	N/A
STG Allegro Fund, L.P.	2021	515,000,000	\$15,000,000	50	50	50	N/A
-	2021	\$15,000,000	\$10,470,591	\$4,529,409	\$5,324	\$8,775,939	1.9x
The Resolute Fund V, L.P.							

Performance varies greatly by fund, but is generally good

Many funds are new, hence "J- curve"

Verus⁷⁷⁷

Fresno County Employees' Retirement Association

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Private Equity Pacing Plan

Most recent amendment anticipates \$125mil per year

FCERA - Private Equity Annual Pacing

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
FCERA - \$125M Commitments		·	·		·					
Commitments	\$85.0	\$125.0	\$125.0	\$125.0	\$125.0	\$125.0	\$125.0	\$125.0	\$125.0	\$125.0
Contributions	\$110.0	\$100.9	\$106.2	\$112.3	\$116.4	\$120.0	\$122.3	\$123.3	\$123.7	\$124.1
Distributions	\$113.9	\$92.9	\$108.2	\$122.9	\$145.2	\$152.5	\$162.2	\$174.3	\$188.3	\$196.1
Annual Net Cash Flow	\$3.9	-\$8.0	\$2.1	\$10.7	\$28.8	\$32.5	\$39.9	\$51.0	\$64.6	\$72.0
PE Market Value	\$420.8	\$475.2	\$521.4	\$565.9	\$599.9	\$637.3	\$673.6	\$704.0	\$725.1	\$742.3
Plan Value	\$6,272.6	\$6,586.3	\$6,915.6	\$7,261.4	\$7,624.4	\$8,005.7	\$8,405.9	\$8,826.2	\$9,267.6	\$9,730.9
% of Plan Value	6.7%	7.2%	7.5%	7.8%	7.9%	8.0%	8.0%	8.0%	7.8%	7.6%
FCERA Pacing Targets	6.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%



Private Credit

7.8% of assets, target 8% Expected return 6.8%, volatility 14.6%

Performance

1 year: 14.1%

3 year: 7.3

5 year: 7.5

Note: the latest private credit vintage is 2017

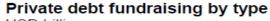
Commitments:

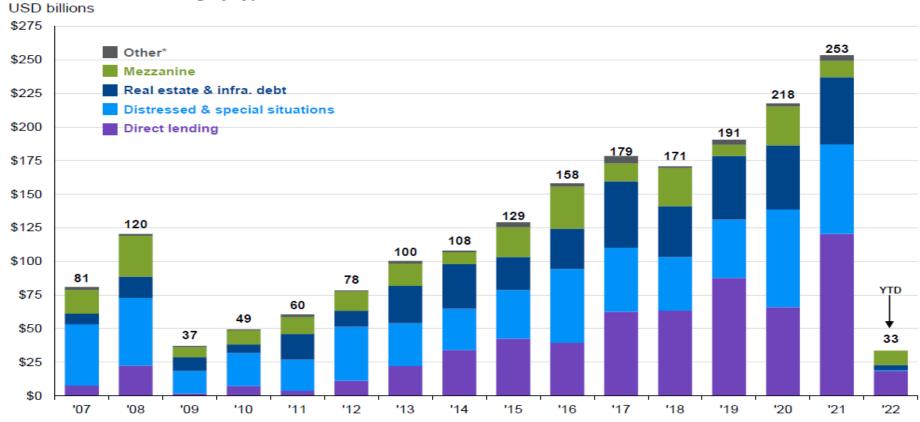
Aksia will commit \$230mil/year for 3 years (Carlyle BDC tender creates an option)
All existing funds/managers now in harvest mode



Private debt fundraising

GTA U.S. 48





Sources: Preqin, J.P. Morgan Asset Management. *Other includes venture debt and fund of funds. 2022 fundraising figures are year-to-date and based on availability as of February 2022.

Data is based on availability as of February 28, 2022.

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Private Credit Market

- Market size: one example is that leverage loan maturities are \$50B in 2022, \$175B in 2023, and \$225B in 2024 (refinancing)
- Private credit has outperformed public credit 21/21 previous years
- Private credit should do well in a rising rate environment due to its floating rate structure, but watch as rising rates pinches credit



Private Credit Non Marketable Securities Overview

Period Ending: December 31, 2021

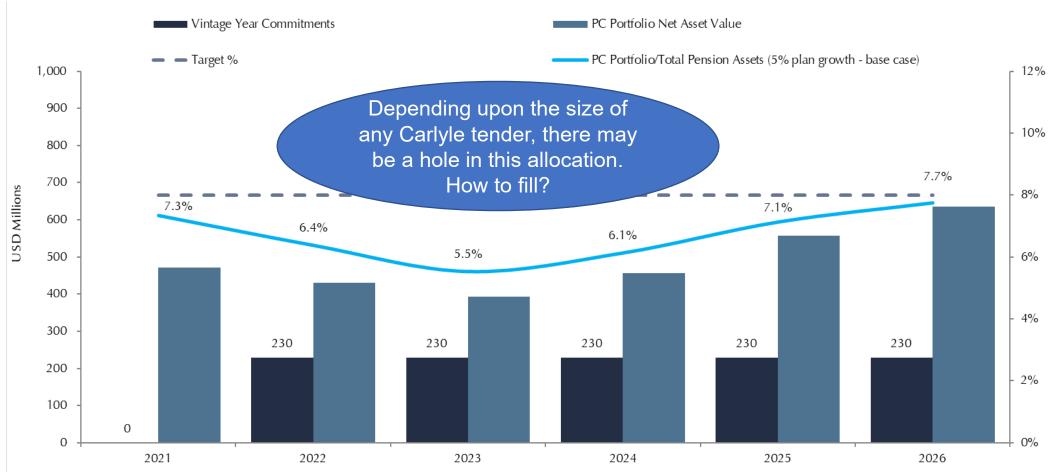
Private Credit								
	Vintage				Capital			Since
Fund	Year	Commitment	Unfunded	Paid-In Capital	Distributed	NAV	TVPI	Inception IRR
Legacy Portfolio								/ \
EQT European Special Situations Debt	2017	\$40,000,000	\$16,952,219	\$34,755,655	\$6,923,228	\$30,928,281	1.09	6.3%
OHA Strategic Credit Fund II	2016	\$40,000,000	\$14,000,000	\$26,000,000	\$4,547,582	\$30,981,536	1.37	17.6%
TSSP Adjacent Opportunities Partners	2016	\$30,000,000	\$10,911,621	\$49,699,064	\$31,662,913	\$26,296,511	1.17	11.1%
GSO European Senior Debt	2015	\$30,000,000	\$7,867,163	\$30,964,231	\$32,162,894	\$14,501,036	1.51	6.1%
CVI Credit Value Fund III	2015	\$30,000,000	\$1,500,000	\$28,500,000	\$28,315,922	\$8,632,860	1.30	8.0%
Colony Distressed Credit III	2014	\$20,000,000	\$2,734,614	\$21,939,049	\$24,673,663	\$4,171,324	1.31	6.0%
Oaktree Opportunities IX	2012	\$15,000,000	\$0	\$15,000,000	\$9,476,419	\$11,093,174	1.37	5.4%
KKR Mezzanine Partners	2010	\$30,000,000	\$944,937	\$38,353,339	\$38,067,300	\$7,809,073	1.20	6.9%
Angelo Gordon VII	2010	\$30,000,000	\$0	\$30,000,000	\$36,737,533	\$40,255	1.23	4.9%
Colony Distressed Credit I	2009	\$40,000,000	\$0	\$42,267,927	\$64,307,755	\$0	1.52	13.0%
Lone Star Fund IV	2002	\$20,000,000	\$954,801	\$19,045,199	\$44,404,793	\$65,640	2.33	30.7%
Total Legacy Portfolio		\$325,000,000	\$55,865,355	\$336,524,463	\$321,280,002	\$134,519,690	1.40	- 1
Carlyle Portfolio							- 1	- 1
TCG BDC II	2017	\$150,000,000	\$7,911,971	\$142,088,029	\$31,584,164	\$139,286,143	1.20	9.9%
CPCV	2017	\$150,000,000	\$20,748,975	\$192,740,235	\$63,489,210	\$156,125,640	1.14	8.8%
AlpInvest FC Credit Fund	2017	\$100,000,000	\$50,116,747	\$50,405,095	\$22,575,418	\$35,269,049	1.15	9.5%
Total Carlyle Portfolio		\$400,000,000	\$78,777,692	\$385,233,359	\$117,648,792	\$330,680,832	1.16	
Total Private Credit		\$725,000,000	\$134,643,047	\$721,757,822	\$438,928,793	\$465,200,522		Funds
							pe	rforming
								expected
								expected
Data provided by Carlyle.								

Verus⁷⁷

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Private Credit Pacing Assuming Carlyle BDC tender \$100mil 2022, \$50mil 2023





Summary of Expected Private Markets & Activities

- All Private Markets attempt to capture an illiquidity premium
- Private Markets sectors each have their own drivers
- Each private markets sector weathered the pandemic very well
- FCERA portfolio retains \$80mil in "tactical cash" for upcoming calls
- FCERA Board has committed for 2022:
 - \$39mil for Infrastructure, to be called in this quarter
 - \$45mil more for Core real estate, in addition to \$70mil just called
 - \$40mil in Value Add real estate YTD, with \$40mil to follow
 - \$230mil for Private Credit, to be adjusted for Carlyle tender(s)
 - \$125mil for Private Equity, 5-7 commitments of \$15-25mil