



**TOWNSEND**<sup>®</sup>  
GROUP

an Aon company

Real Estate Portfolio

# Performance Measurement Report

FOURTH QUARTER 2022



**SCERS**

SACRAMENTO COUNTY  
EMPLOYEES'  
RETIREMENT SYSTEM

## SCERS Real Estate Portfolio Overview

- SCERS recently changed the target real estate allocation from 7% to 9% with the allowable range changing to 7.0%-11.0%. As of the end of the fourth quarter, 2022 (the “Quarter”), the Real Estate Portfolio was slightly below the new real estate target but within the allowable range at 8.9%. Core Real Estate currently makes up 74.1% of the portfolio, with Non-Core Real Estate making up the remaining 25.9%.

### SCERS' Real Estate Portfolio Construction:

	Minimum	Target	Maximum	Policy Index Benchmark
Total Real Estate Program	7%	<b>9%</b>	11%	Custom blend of benchmarks below:
Core Real Estate	50%	<b>60%</b>	80%	60% NFI-ODCE +
Non-Core Real Estate	30%	<b>40%</b>	50%	40% NFI-ODCE + 1%
U.S. Real Estate	60%	<b>65%</b>	80%	
Non-U.S. Real Estate	0%	<b>35%</b>	35%	

- Performance of the Core Portfolio is evaluated over rolling 10-year time periods relative to the NCREIF Fund Index of Open-End Diversified Core Equity funds (“NFI-ODCE”), net of fees. The NFI-ODCE represents the aggregation of twenty-six Diversified Core open-end commingled funds invested across the United States.
- In July of 2017, Staff and Townsend recommended revising the Real Estate IPS to reflect transition away from IMAs, including removal of the Core vehicle constraints of 0-60% (30% target) for funds and 40-100% (70% target) for IMAs, which was subsequently approved by the Board.
- In 2018, SCERS’ Core IMA Program transitioned to a commingled fund manager. Following an extensive bidding, selection and structuring process, Staff and Townsend selected Clarion’s Lion Properties Fund as the recipient for the Core IMA Portfolio. Given the size of the Core IMA Portfolio, SCERS reduced concentration risk by allocating funds to an additional manager, Brookfield’s Premier Property Partners, in order to achieve greater diversification within the Core Portfolio. SCERS’ investment in Brookfield Premier Property Fund was funded October 1, 2018.
- The loan-to-value ratio of the Private Real Estate Portfolio was 35.5% at the end of the fourth quarter of 2022. The loan-to-value ratio of the Core Portfolio was 29.1%, below the 40.0% leverage constraint for Core as approved by the Board. As a point of reference, the loan-to-value ratio of the NFI-ODCE was 22.7% as of the fourth quarter. The Non-Core Portfolio reported a loan-to-value ratio of 48.9%.

## Portfolio Funding Status

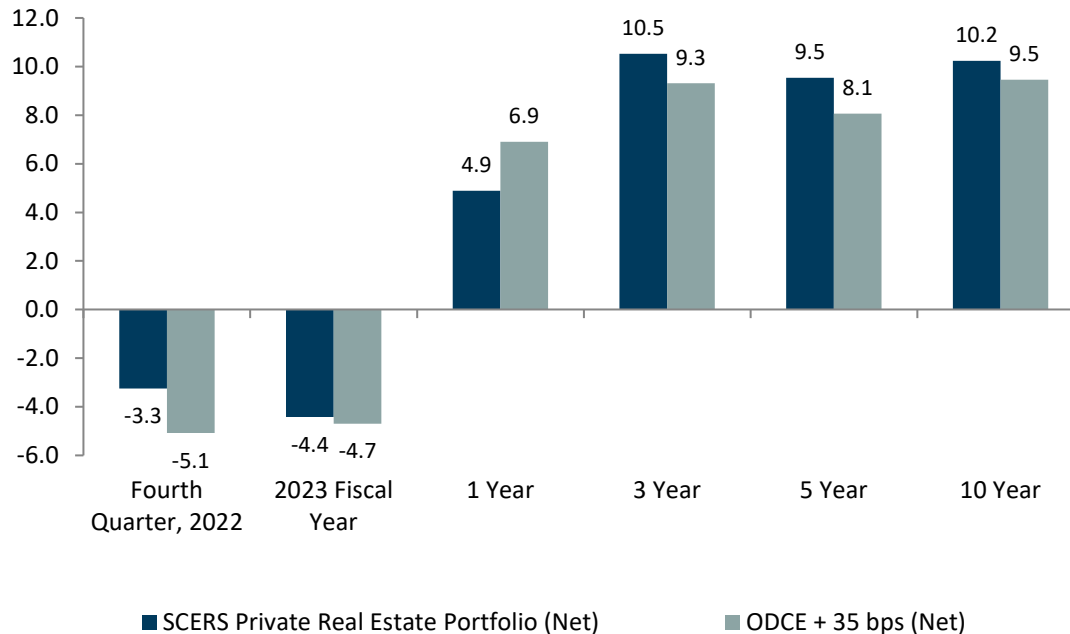
- The following slides provide a review of key information of the SCERS Real Estate Portfolio (the “Portfolio”) through December 31, 2022.
- A detailed performance report is also provided in **Exhibit A**.
- Figures exclude commitments / redemptions / dispositions approved subsequent to Quarter-end and future distributions.
- Unfunded commitments may never be fully drawn.

SCERS Portfolio Snapshot <i>As of December 31, 2022</i>	Market Value (in millions of dollars)*	% of SCERS Plan	% of Real Estate
<b>SCERS Total Plan Assets</b>	<b>11,909</b>	<b>100.0%</b>	
<b>Private Portfolio Target</b>	<b>1,072</b>	<b>9.0%**</b>	
<b>Private Portfolio Permissible Range</b>		<b>7.0-11.0%**</b>	
<b>Private Real Estate</b>			
Core Portfolio	786	6.6%	74.1%
Non-Core Portfolio	275	2.3%	25.9%
<b>Total SCERS Private Real Estate Market Value</b>	<b>1,061</b>	<b>8.9%</b>	
<b>Total SCERS Private Real Estate Unfunded Commitments</b>	<b>235</b>	<b>2.0%</b>	

• Figures may not add due to rounding

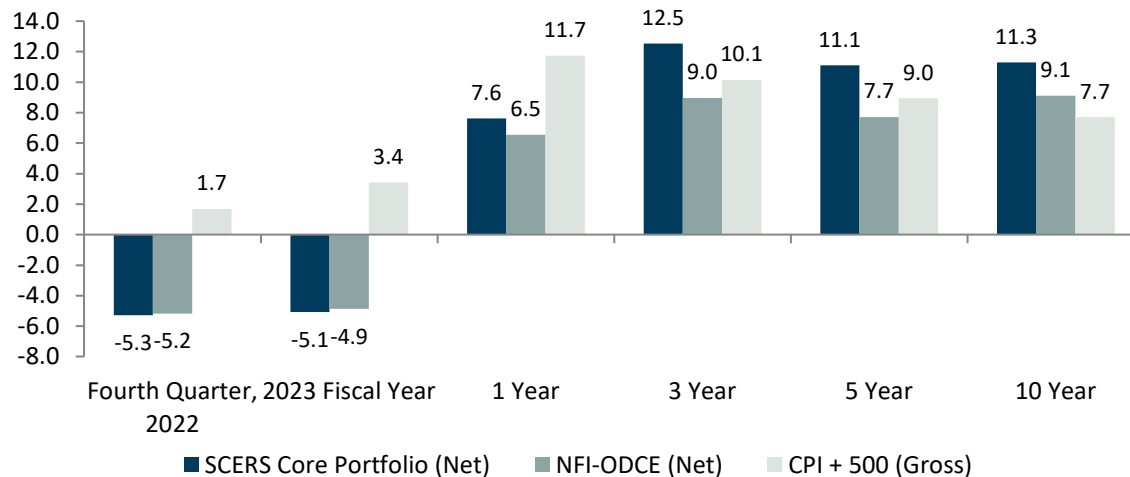
\*\* The 9% Private Portfolio (RE) target and permissible range were approved during the third quarter of 2021

## Private Real Estate Performance



- The SCERS Private Real Estate Portfolio includes: (1) Core Real Estate and (2) Non-Core Real Estate.
- The SCERS Private Real Estate Benchmark is comprised of the NFI-ODCE (Core Benchmark, net) (65%) and the NFI-ODCE + 100bps (Non-Core Benchmark, net) (35%), resulting in an NFI-ODCE + 35bps (net) portfolio benchmark.
- Although the SCERS Private Real Estate Portfolio generated negative returns in the fourth quarter of 2022, the SCERS Portfolio outperformed the benchmark by 182 basis points. Outperformance is driven by positive returns of the Non-Core Portfolio.
- Moreover, the SCERS Total Real Estate Portfolio outperformed the benchmark over all other time periods except for the trailing year driven by the robust performance of the Core funds as well as the Non-Core investments.

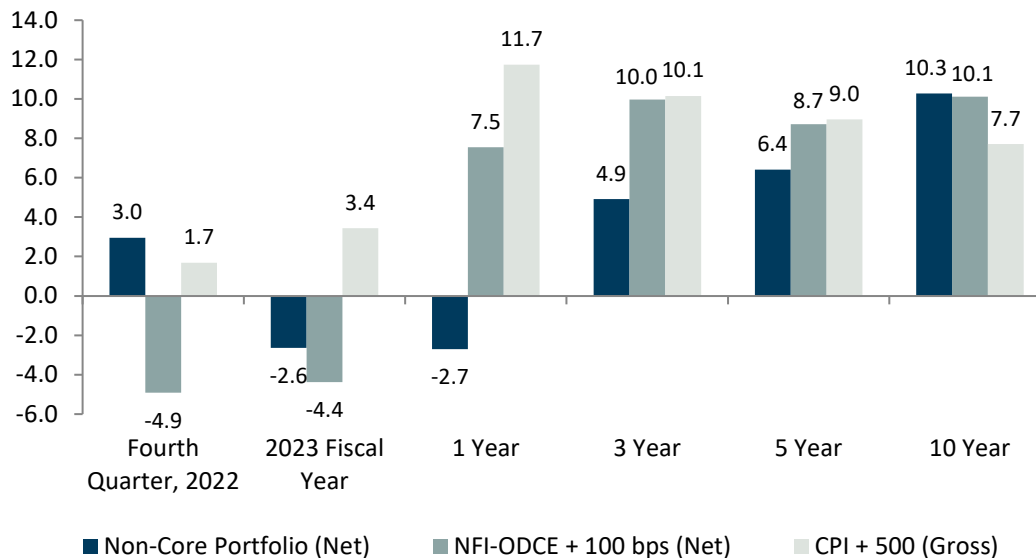
## Core Portfolio Performance



- The SCERS Core Portfolio consists of seven open-end Core Commingled funds. The Core Commingled Fund exposure includes, MetLife Core Property Fund, Principal U.S. Property Account, Prologis Targeted U.S. Logistics Fund, Prologis European Logistics Fund, Townsend Real Estate Fund, Brookfield Premier Real Estate Partners, and Clarion’s Lion Properties Fund.
- Performance of the Core Portfolio is evaluated relative to the NCREIF Fund Index of Open-End Diversified Core Equity funds (“NFI-ODCE”), net of fees. In aggregate, the Core Portfolio outperforms the NFI-ODCE, net of fees, over all displayed time periods except for the trailing quarter and fiscal year.
- During the Quarter, the Core portfolio slightly underperformed the benchmark by 11 basis points as a result of broad-based asset write-downs across the entire Core universe in response to the higher interest rate environment.

\*EX-US funds produced the following 4Q22 net returns in local currency: Prologis European Logistics Fund (Euro) (13.5%).

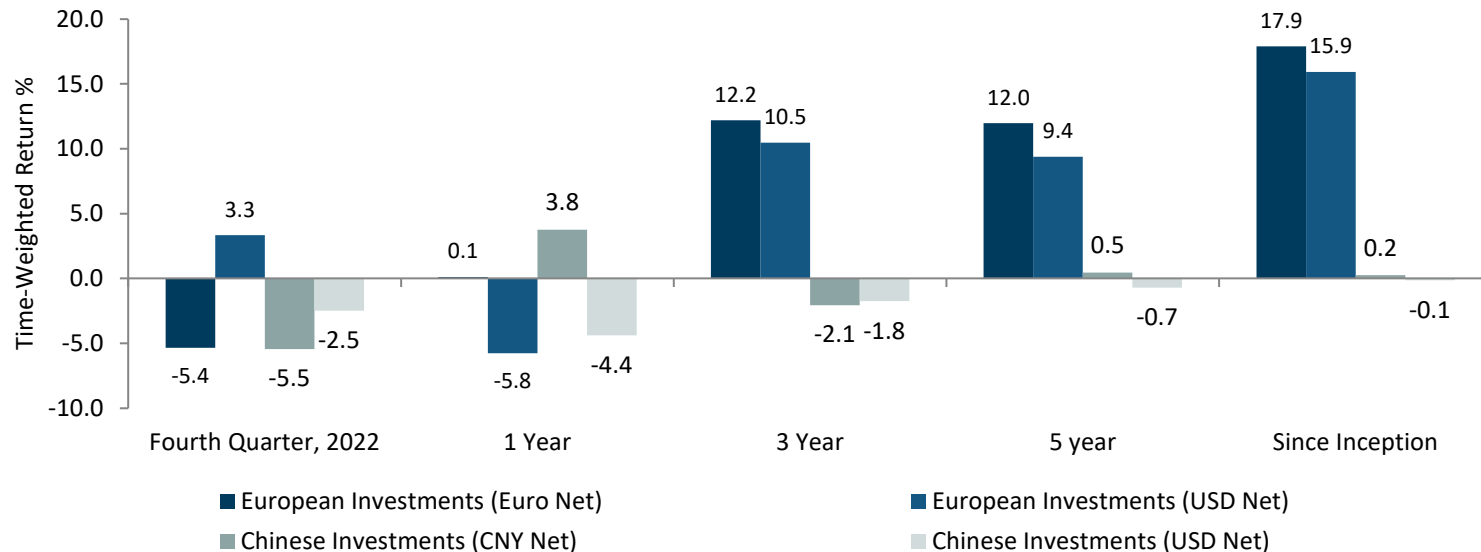
## Non-Core Portfolio Performance



- The SCERS Non-Core Portfolio includes both Value Added and Opportunistic Real Estate strategies, which are defined in the Glossary of Terms.
- During the quarter, the Non-Core Portfolio outperformed the benchmark by 787 basis points recording 3.0% in net returns. The outperformance is attributed to the strong performance of the Value-add investments generating 8.3% in net returns, largely driven by appreciation of the Euro and Pound sterling against the Dollar over the quarter. DRC European Real Estate Debt Fund II was the strongest absolute performer generating 48.2% in net returns while ECE European Prime Shopping Center Fund II was the largest contributor recording 10.6% in net returns.

*\*EX-US funds produced the following 4Q22 net returns in local currency: DRC European Real Estate Debt Fund II (Pound Sterling) 37.0%, ECE European Prime Shopping Centre Fund II (Euro) 1.3%, NREP Nordic Strategies Fund (Euro) 7.0%, NREP Nordic Strategies Fund II (Euro) 3.7%, NREP Nordic Strategies Fund III (Euro) (2.5%), NREP Nordic Strategies Fund IV (Euro) (1.9%), Carlyle China Realty Fund (Chinese Yuan) (5.6%) and Carlyle's Project Rome (Chinese Yuan) (5.4%).*

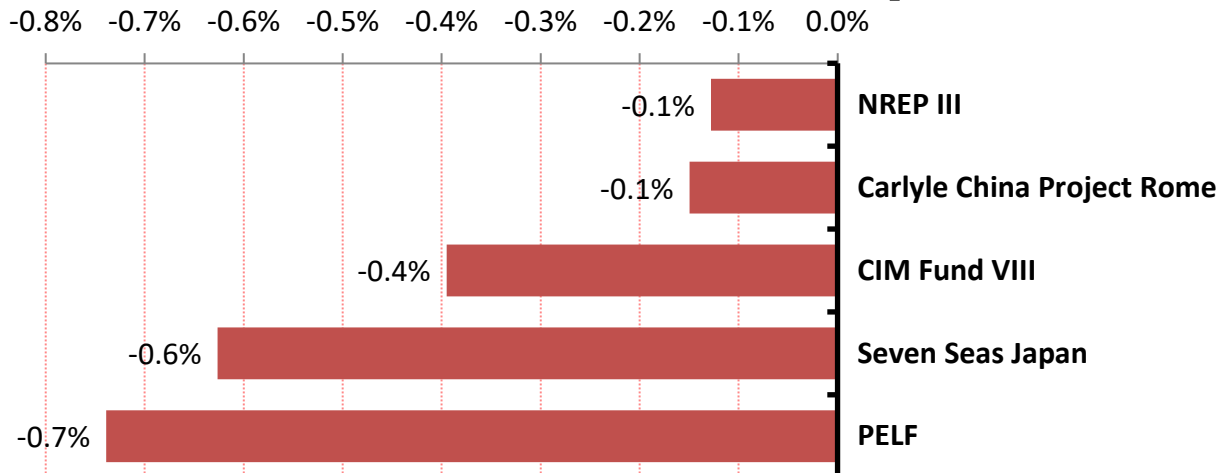
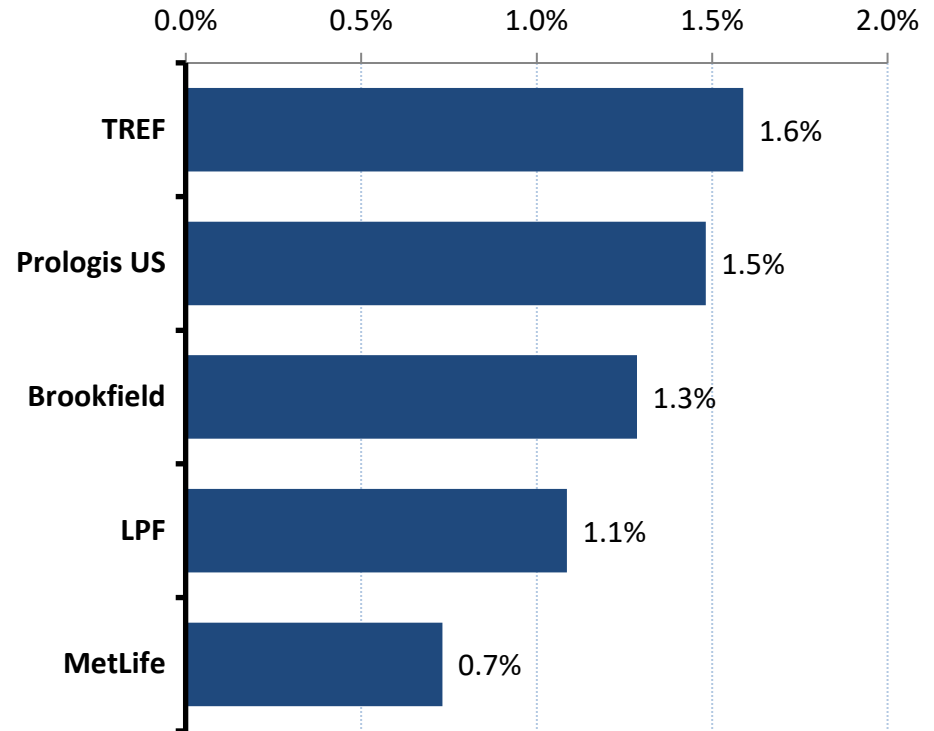
## Ex-US Portfolio Performance



- Approximately 20.6% of the SCERS Portfolio is comprised of Ex-US investments. SCERS does not currently hedge its foreign currency exposures and pays liabilities in US Dollars. As such, FX movement will impact performance for Ex-US investments. The chart above isolates European and Asian investments and displays performance both before and after currency conversion.
- During the quarter, the impact of currency movement was positive on foreign investments with both investments in Euros and Chinese Yuan positively affected. However, currency impacts on performance tend to be cyclical in nature.
- The SCERS Euro Denominated Composite includes: ECE European Prime Shopping Center Fund II (Euro) 1.3%, NREP Nordic Strategies Fund (Euro) 7.7%, NREP Nordic Strategies Fund II (Euro) 3.7%, NREP Nordic Strategies Fund III (Euro) (2.5%), NREP Nordic Strategies Fund IV (Euro) (1.9%) and Prologis European Logistics Fund (PELF) (13.5%).
  - Since Inception period begins 1Q15.
  - For the purposes of this composite, DRC has been excluded since it is a Pound denominated fund.
- The SCERS Chinese Yuan Composite includes: Carlyle China Realty Fund (Chinese Yuan) (5.4%) and Carlyle's Project Rome (Chinese Yuan) (5.6%).
  - Since Inception period begins 3Q17.
  - SCERS' Carlyle investments are USD denominated at the fund level, but property values are exposed to currency translation.

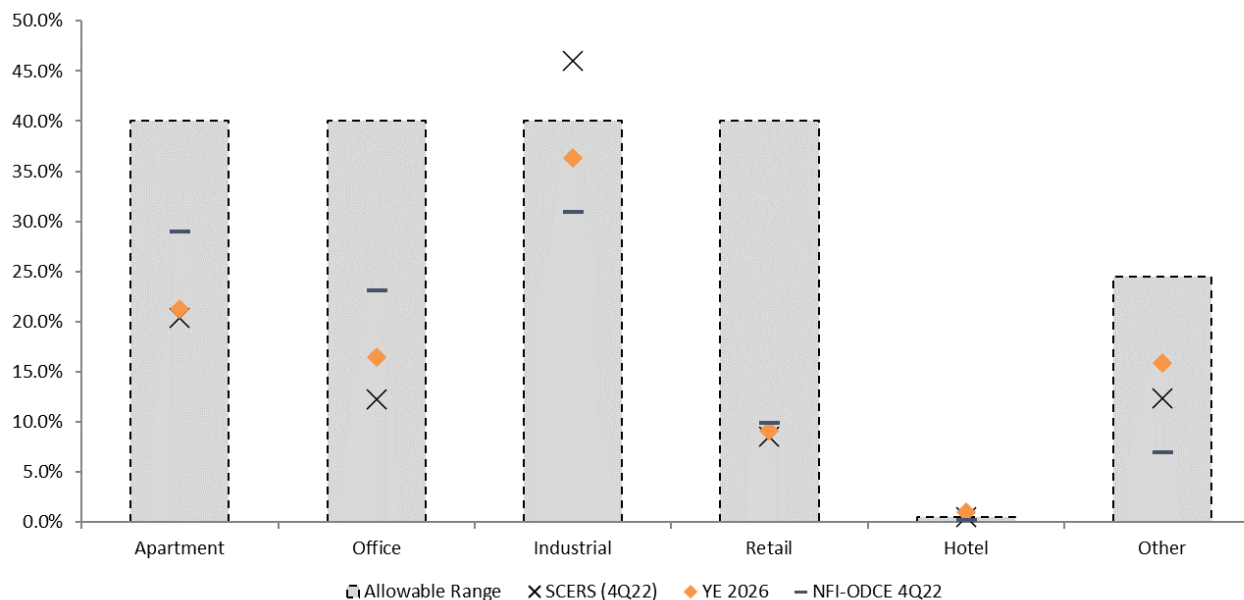
# Performance Attribution

- Over the trailing twelve months period, the top five performers were OECFs within the SCERS portfolio. The funds include Townsend Real Estate Fund, Prologis Targeted U.S. Logistics Fund, Lion Properties Fund, Brookfield Premier Real Estate Partners and Metlife Core Property Fund.
- Prologis European Logistics Fund (PELF) was the largest detractor. PELF recorded negative returns for the second half of 2022 as a result of write-downs in the fund's assets due to the current slowdown in the market environment.
- Seven Seas Japan was the second detractor. Seven Seas recorded negative net returns because the fund is new and undergoing the J-curve effect.
- CIM Fund VIII continued to lag in performance over the trailing year as the fund's office portfolio continued to suffer from the market slowdown following challenges during the pandemic.





## Real Estate Private Portfolio Diversification – Property Type

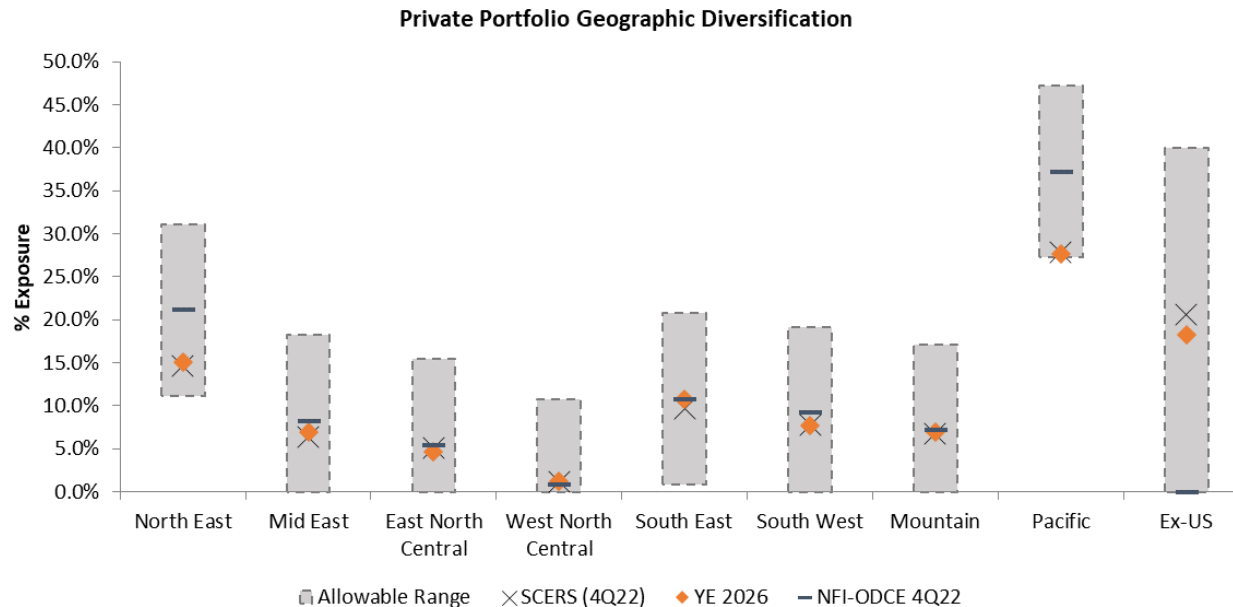


- The diversification of the Private Portfolio is compared to the diversification of the NFI-ODCE, and has a maximum limit of 40% for each property type, except for the “other” property type which has a maximum limit of 25%\*\*. The Real Estate Policy also allows for temporary deviations in order to provide SCERS with the flexibility required to overweight or underweight property types during certain parts of the market cycle.
- As of the fourth quarter, the industrial property type was the only sector outside the current set limit of 40%. However, Townsend’s current views support an overweight to the industrial sector. Townsend and Staff will continue to monitor the industrial property type fundamentals for opportunities to tactically reduce exposure if secular growth trends moderate. Additionally, Townsend will work with Staff to develop a plan to reduce the overweight through deploying capital to specialty funds in other sectors.
- The “Other” property type exposure represents Sculptor Real Estate Fund III\* (parking, senior housing and cell towers), Sculptor Real Estate Fund IV (parking), CIM Fund VIII (condominiums), Hammes Partners II and III (medical office), Townsend Real Estate Fund (senior and student housing), NREP Nordic Strategies Fund II (student housing), NREP Nordic Strategies Fund III (senior living and land) and NREP Nordic strategies Fund IV (Senior Living and Student Housing).

\*Sculptor Real Estate Fund III was previously called Och-Ziff Real Estate Fund III.

\*\* The 25% limit is for “Other” property type exposure including hotels. However, our chart currently separates the “Hotel” property sector from “Other” due to be aligned with the ODCE classifications.

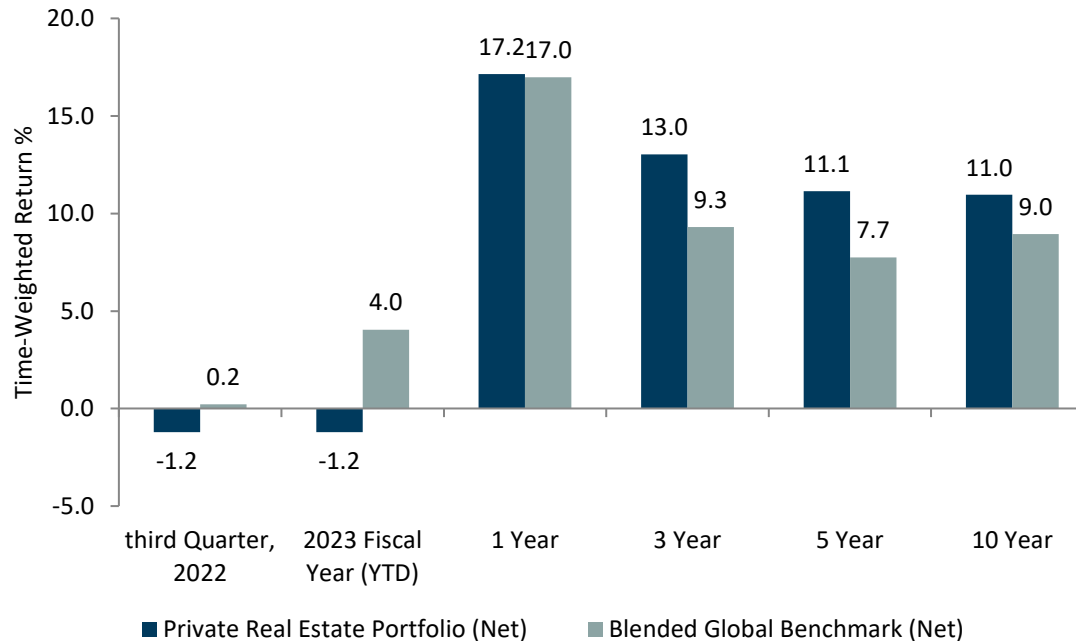
# Real Estate Private Portfolio Diversification – Geographic Region



- The diversification of the Private Portfolio is compared to the diversification of the NFI-ODCE, with a permissible deviation of  $\pm 10.0\%$  for each region. Ex-US exposure is limited to 40.0% of the Total Private Portfolio.
- As of the fourth quarter, the Private Portfolio was in compliance across all regions.
- The Private Portfolio's international exposure is 20.6%, well within its 40% constraint, and will remain similar as Sculptor Real Estate Fund III\* and IV, NREP Nordic Strategies Fund III and IV as well as LaSalle China Logistics and Seven Seas Japan continue to call capital and purchase assets in Europe, China and Japan while older vintage funds liquidate.
- Ex-US exposure consists of 4.15% in China, 3.70% in Denmark, 1.52% in Finland, 2.21% in Germany, 1.25% in France, 1.70% in Sweden, 1.08% in Poland, 1.11 in Netherlands, 1.48% in the UK and 1.30% in other countries.

\*Sculptor Real Estate Fund III was previously called Och-Ziff Real Estate Fund III.

# Private Real Estate Performance – Global Ancillary Benchmark (3Q22)



- The Global Ancillary Benchmark is made-up of the NFI-ODCE (Core), NFI-ODCE + 100bps (Non-Core), GREFI Europe Core, GREFI Europe Non-Core, and GREFI Non-Core Asia Pacific to create a global blended benchmark based on weighted average invested capital for each strategy.
  - GREFI reports on a 12 week lag. As a result, the ancillary benchmark will be reported on a quarterly lag to SCERS.
- The Private Portfolio's international exposure is 20.6%, well within its 40% new constraint. International exposure is mainly Non-Core in nature, with the exception of Prologis Targeted Europe Logistics Fund.
- The SCERS Private Real Estate program has outperformed its secondary benchmark significantly over all time periods, except for the trailing quarter and fiscal year.

## Exhibit A: Performance Flash Report



Portfolio Composition (\$)								
Total Plan Assets	Allocation		Market Value		Unfunded Commitments		Remaining Allocation	
11,909,155,119	Core	7.0%	786,349,316	6.6%	0	0.0%	47,291,542	0.4%
	Non-Core	0.00% - 5.00%	274,749,703	2.3%	235,042,142	2.0%	-241,835,855	-2.0%
	<b>Total</b>	<b>9.0%</b>	<b>1,061,099,019</b>	<b>8.9%</b>	<b>235,042,142</b>	<b>2.0%</b>	<b>-194,544,312</b>	<b>-1.6%</b>

Performance Summary	Quarter (%)		1 Year (%)		3 Year (%)		5 Year (%)	
	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET
Core Portfolio (Commingled Funds & Separate Accounts)	-5.5	-5.3	8.8	7.6	14.1	12.5	12.5	11.1
Non-Core Portfolio (Value Added & Opportunistic, 1Q2007 Forward)	4.0	3.0	1.1	-2.7	10.5	4.9	11.6	6.4
Private Real Estate Portfolio	-3.2	-3.3	6.8	4.9	13.2	10.5	11.9	9.5
NFI-ODCE (Core)	-5.0	-5.2	7.5	6.5	9.9	9.0	8.7	7.7
NFI-ODCE + 100 bps (Non-Core)	-4.7	-4.9	8.5	7.5	10.9	10.0	9.7	8.7
NFI-ODCE + 35 bps (Private Portfolio)	-4.9	-5.1	7.8	6.9	10.3	9.3	9.0	8.1

Funding Status (\$)	Investment Vintage Year	Commitment Amount	Funded Amount	Unfunded Commitments	Capital Returned	Market Value	Market Value (%)	Market Value + Unfunded Commitments (%)
<b>Core Commingled Funds</b>								
Brookfield Premier Real Estate Partners	2018	100,000,000	100,000,000	0	18,630,198	130,007,617	12.3	10.7
Lion Properties Fund	2018	152,400,000	156,902,901	0	73,223,329	133,369,288	12.6	10.9
MetLife Core Property Fund	2013	35,000,000	54,378,860	0	20,777,268	88,290,597	8.3	7.2
Principal U.S. Property Account	2015	35,000,000	35,000,000	0	0	62,330,731	5.9	5.1
Prologis European Logistics Fund <sup>1,3</sup>	2017	47,950,142	49,151,023	0	8,879,579	64,566,525	6.1	5.3
Prologis Targeted U.S. Logistics Fund	2015	50,000,000	50,000,000	0	14,702,927	134,366,704	12.7	11.0
Townsend Real Estate Fund, L.P. <sup>3</sup>	2016	90,000,000	120,981,246	0	30,981,246	173,417,854	16.3	14.2
<b>Core Commingled Funds</b>	<b>1986</b>	<b>510,350,142</b>	<b>566,414,030</b>	<b>0</b>	<b>167,194,547</b>	<b>786,349,316</b>	<b>74.1</b>	<b>60.7</b>
<b>Value Added Portfolio</b>								
Asana Partners Fund II <sup>3</sup>	2019	35,000,000	21,962,500	13,037,500	0	27,463,022	2.6	3.3
Asana Partners Fund III <sup>3</sup>	2022	45,000,000	3,066,667	36,933,333	0	2,568,750	0.2	3.2
DRC European Real Estate Debt Fund II <sup>3</sup>	2013	50,007,963	47,627,074	3,901,921	42,853,672	6,342,991	0.6	0.8
ECE European Prime Shopping Centre Fund II C <sup>3</sup>	2015	33,611,623	34,613,419	0	5,106,426	34,557,729	3.3	2.8
Hammes Partners II	2015	25,000,000	27,590,401	1,043,060	43,557,278	3,131,264	0.3	0.3
Hammes Partners III	2018	25,000,000	26,827,553	4,297,446	10,396,587	21,425,217	2.0	2.1
Hammes Partners IV	2022	40,000,000	0	40,000,000	0	0	0.0	3.1
NREP Nordic Strategies Fund <sup>3</sup>	2014	25,130,756	22,485,011	0	36,359,214	2,730,004	0.3	0.2
NREP Nordic Strategies Fund II <sup>3</sup>	2016	35,176,432	35,664,816	470,577	55,351,664	16,964,525	1.6	1.4
NREP Nordic Strategies Fund III <sup>3</sup>	2018	39,019,632	31,089,242	4,763,386	8,455,396	33,702,067	3.2	3.2

Funding Status (\$)	Investment Vintage Year	Commitment Amount	Funded Amount	Unfunded Commitments	Capital Returned	Market Value	Market Value (%)	Market Value + Unfunded Commitments (%)
NREP Nordic Strategies Fund IV <sup>2</sup>	2019	35,449,208	17,201,216	18,463,276	0	18,429,756	1.7	3.0
NREP Nordic Strategies Fund V	2022	37,042,400	0	37,042,400	0	0	0.0	2.8
<b>Value Added Portfolio</b>	<b>1986</b>	<b>425,438,014</b>	<b>268,127,899</b>	<b>159,952,899</b>	<b>202,080,237</b>	<b>167,315,325</b>	<b>15.8</b>	<b>25.2</b>
<b>Opportunistic Portfolio</b>								
Carlyle China Project Rome Co-Investment	2017	40,000,000	38,492,870	4,405,916	0	36,701,518	3.5	3.4
Carlyle China Realty	2017	10,000,000	10,707,665	771,740	2,342,232	8,270,733	0.8	0.7
CIM Fund VIII	2015	35,000,000	39,613,994	0	7,840,469	25,874,102	2.4	2.1
KKR Real Estate Partners Americas	2014	22,720,638	30,436,297	3,883,537	37,610,739	1,530,684	0.1	0.4
LaSalle China Logistics Venture	2021	30,000,000	5,840,173	24,159,827	0	5,777,762	0.5	2.5
Sculptor Real Estate Fund III <sup>2,3</sup>	2014	35,000,000	26,848,956	12,642,212	39,355,329	7,815,487	0.7	1.7
Sculptor Real Estate Fund IV <sup>2,3</sup>	2020	30,000,000	15,877,187	18,229,202	5,947,722	11,152,351	1.1	2.4
Seven Seas Japan Opportunity Fund	2022	177,336	12,314,535	10,996,809	-4,991,153	10,311,741	1.0	1.7
<b>Opportunistic Portfolio</b>	<b>1991</b>	<b>202,897,974</b>	<b>180,131,677</b>	<b>75,089,243</b>	<b>88,105,338</b>	<b>107,434,378</b>	<b>10.1</b>	<b>14.1</b>
<b>Total Non-Core Portfolio 1Q 2007 Forward</b>	<b>2007</b>	<b>628,335,988</b>	<b>448,259,576</b>	<b>235,042,142</b>	<b>290,185,575</b>	<b>274,749,703</b>	<b>25.9</b>	<b>39.3</b>
<b>Total Private Portfolio</b>								
<b>SCERS</b>	<b>1986</b>	<b>1,138,686,130</b>	<b>1,867,450,670</b>	<b>235,042,142</b>	<b>1,677,711,173</b>	<b>1,061,099,019</b>	<b>100.0</b>	<b>100.0</b>

<sup>1</sup> Represent composite performance of Prologis Targeted Europe Logistics Fund and Prologis European Logistics Fund.

<sup>2</sup> Previously Och-Ziff Real Estate Fund III.

<sup>3</sup> Preliminary data.

Returns (%)	Market Value (\$)	Quarter				Fiscal Year 2023				1 Year				3 Year			
		INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET
Brookfield Premier Real Estate Partners	130,007,617	0.4	-7.1	-6.8	-6.3	1.2	-4.8	-3.7	-3.8	2.8	10.1	13.1	10.8	3.1	10.6	14.0	11.6
Lion Properties Fund	133,369,288	0.7	-5.8	-5.1	-5.3	1.4	-6.0	-4.6	-5.0	3.2	6.3	9.6	8.7	3.5	7.7	11.4	10.5
MetLife Core Property Fund	88,290,597	1.0	-6.4	-5.4	-5.5	2.1	-5.1	-3.0	-3.2	4.4	5.1	9.7	9.1	4.5	7.6	12.3	11.7
Principal U.S. Property Account	62,330,731	0.9	-6.9	-6.0	-6.2	1.8	-7.1	-5.4	-5.8	3.8	1.2	5.1	4.1	4.0	5.5	9.7	8.7
Prologis European Logistics Fund <sup>1,2</sup>	64,566,525	0.9	-6.3	-5.3	-5.6	1.8	-16.9	-15.3	-14.9	3.9	-13.7	-10.2	-11.6	4.7	5.0	9.8	7.4
Prologis Targeted U.S. Logistics Fund	134,366,704	0.7	-7.3	-6.6	-5.3	1.5	-8.1	-6.6	-5.2	3.2	10.4	13.9	12.2	3.8	21.9	26.3	22.4
Townsend Real Estate Fund, L.P. <sup>3</sup>	173,417,854	0.7	-4.6	-3.8	-3.9	1.5	-4.0	-2.5	-2.6	3.0	7.3	10.5	10.3	3.4	9.6	13.3	13.1
<b>Core Commingled Funds</b>	<b>786,349,316</b>	<b>0.7</b>	<b>-6.2</b>	<b>-5.5</b>	<b>-5.3</b>	<b>1.6</b>	<b>-6.7</b>	<b>-5.2</b>	<b>-5.1</b>	<b>3.3</b>	<b>5.3</b>	<b>8.8</b>	<b>7.6</b>	<b>3.7</b>	<b>10.1</b>	<b>14.1</b>	<b>12.5</b>
<b>Value Added Portfolio</b>																	
Asana Partners Fund II <sup>1</sup>	27,463,022	-0.1	6.6	6.5	4.8	-0.2	5.2	4.9	3.6	0.0	1.9	1.8	0.7	-1.7	4.6	2.0	-6.4
Asana Partners Fund III <sup>1</sup>	2,568,750	-5.9	24.0	18.1	10.5	-5.8	19.5	13.9	-5.4								
DRC European Real Estate Debt Fund II <sup>2</sup>	6,342,991	40.4	7.6	48.0	48.2	41.3	-1.3	36.7	37.2	74.0	-11.7	52.5	52.3	-8.2	-3.9	-10.5	-11.3
ECE European Prime Shopping Centre Fund II C <sup>3</sup>	34,557,729	-4.2	15.9	11.8	10.6	-7.5	14.1	6.1	4.2	-6.6	10.2	3.5	0.9	0.4	0.7	1.3	-1.3
Hammes Partners II	3,131,264	1.0	2.1	3.0	2.8	2.4	1.0	3.4	2.8	4.7	6.0	10.9	8.2	6.4	24.9	32.1	24.5
Hammes Partners III	21,425,217	1.4	0.0	1.4	0.8	3.2	0.3	3.6	2.2	7.3	5.7	13.2	9.0	10.0	16.9	28.0	17.1
NREP Nordic Strategies Fund <sup>2</sup>	2,730,004	0.0	19.5	19.5	17.6	0.0	11.7	11.7	9.8	0.0	6.6	6.6	5.4	1.3	8.2	9.6	4.3
NREP Nordic Strategies Fund II <sup>3</sup>	16,964,525	-2.2	19.0	16.8	13.3	-2.2	11.6	9.6	6.0	-1.5	8.9	7.8	-1.9	-2.9	40.9	38.3	25.1
NREP Nordic Strategies Fund III <sup>3</sup>	33,702,067	2.2	4.3	6.5	6.4	1.2	-3.8	-2.8	-3.1	0.0	0.3	0.3	-3.3	-0.9	25.3	24.7	15.0
NREP Nordic Strategies Fund IV <sup>3</sup>	18,429,756	-2.0	9.4	7.4	7.1	2.1	-4.0	-1.3	-1.9	-5.2	5.7	0.6	-6.4	-20.7	43.5	17.1	N/A
<b>Value Added Portfolio</b>	<b>167,315,325</b>	<b>0.5</b>	<b>8.9</b>	<b>9.3</b>	<b>8.3</b>	<b>0.2</b>	<b>3.7</b>	<b>3.8</b>	<b>2.4</b>	<b>0.5</b>	<b>4.7</b>	<b>5.1</b>	<b>0.7</b>	<b>-1.0</b>	<b>20.9</b>	<b>19.9</b>	<b>11.8</b>
<b>Opportunistic Portfolio</b>																	
Carlyle China Project Rome Co-Investment	36,701,518	0.0	-2.2	-2.2	-2.4	0.0	-3.8	-3.8	-4.3	-0.1	-3.2	-3.3	-4.3	-0.1	-0.5	-0.6	-1.7
Carlyle China Realty	8,270,733	-0.1	-2.2	-2.2	-2.6	-0.1	-3.8	-3.9	-4.6	-0.2	-3.2	-3.4	-4.8	-0.2	-0.3	-0.5	-2.0
CIM Fund VIII	25,874,102	-0.1	-10.1	-10.2	-10.5	-0.1	-11.6	-11.7	-12.4	-0.2	-12.9	-13.1	-14.3	-0.1	-11.2	-11.3	-12.5
KKR Real Estate Partners Americas	1,530,684	-0.4	-14.4	-14.8	-11.8	-28.5	11.2	-13.3	-10.9	-65.8	51.3	-25.1	-21.8	-40.1	6.6	-19.3	-16.5
LaSalle China Logistics Venture	5,777,762	0.0	6.4	6.4	4.2	-3.9	0.6	-3.5	-9.6	-5.1	9.8	4.2	-9.6				
Sculptor Real Estate Fund III <sup>2,3</sup>	7,815,487	1.9	5.4	7.3	7.0	4.3	10.6	15.2	14.6	9.9	68.1	82.4	80.0	11.9	24.1	38.1	35.3
Sculptor Real Estate Fund IV <sup>2,3</sup>	11,152,351	0.3	2.6	2.9	1.9	0.2	4.2	4.4	2.4	-0.9	7.9	6.9	0.8				
Seven Seas Japan Opportunity Fund	10,311,741	18.1	-34.5	-16.3	-23.1	17.5	-60.1	-49.5	-55.0								
<b>Opportunistic Portfolio</b>	<b>107,434,378</b>	<b>1.6</b>	<b>-5.6</b>	<b>-4.0</b>	<b>-5.0</b>	<b>1.1</b>	<b>-9.7</b>	<b>-8.7</b>	<b>-10.1</b>	<b>1.1</b>	<b>-6.0</b>	<b>-4.9</b>	<b>-7.9</b>	<b>0.8</b>	<b>-2.9</b>	<b>-2.1</b>	<b>-4.5</b>
<b>Total Non-Core Portfolio 1Q 2007 Forward</b>	<b>274,749,703</b>	<b>0.9</b>	<b>3.1</b>	<b>4.0</b>	<b>3.0</b>	<b>0.5</b>	<b>-1.7</b>	<b>-1.2</b>	<b>-2.6</b>	<b>0.8</b>	<b>0.4</b>	<b>1.1</b>	<b>-2.7</b>	<b>-0.2</b>	<b>10.7</b>	<b>10.5</b>	<b>4.9</b>
<b>Total Private Portfolio</b>																	
<b>SCERS</b>	<b>1,061,099,019</b>	<b>0.8</b>	<b>-3.9</b>	<b>-3.2</b>	<b>-3.3</b>	<b>1.3</b>	<b>-5.4</b>	<b>-4.1</b>	<b>-4.4</b>	<b>2.7</b>	<b>4.0</b>	<b>6.8</b>	<b>4.9</b>	<b>2.7</b>	<b>10.3</b>	<b>13.2</b>	<b>10.5</b>

Returns (%)	Market Value (\$)	Quarter				Fiscal Year 2023				1 Year				3 Year			
		INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET
<b>Ex-US Dollar Denominated Investments (In Local Currency)</b>																	
Prologis Targeted Europe Logistics Fund (Euro) <sup>1,2</sup>	€ 60,311,591	0.9	-14.2	-13.3	-13.5	1.8	-18.7	-17.0	-16.6	4.0	-8.3	-4.6	-6.1	4.7	6.6	11.5	9.0
DRC European Real Estate Debt Fund II (Pound Sterling)	£5,249,459	36.8	0.0	36.8	37.0	37.8	0.0	37.8	38.2	70.7	0.0	70.7	70.5	-7.6	0.0	-7.6	-8.4
ECE European Prime Shopping Centre Fund II (Euro) <sup>3</sup>	€ 32,280,374	-3.9	6.2	2.3	1.3	-7.4	11.7	3.8	2.0	-6.5	17.1	9.9	7.2	0.3	2.2	2.7	0.1
NREP Nordic Strategies Fund (Euro) <sup>3</sup>	€ 2,550,097	0.0	9.4	9.4	7.7	0.0	9.4	9.4	7.6	0.0	13.3	13.3	11.9	1.2	10.1	11.4	6.1
NREP Nordic Strategies Fund II (Euro)	€ 15,846,562	-2.1	8.9	6.9	3.7	-2.0	9.2	7.2	3.6	-1.3	15.5	14.3	3.9	-2.8	43.0	40.5	27.1
NREP Nordic Strategies Fund III (Euro)	€ 31,481,100	2.0	-4.4	-2.3	-2.5	1.0	-5.7	-4.7	-4.9	-0.3	6.5	6.7	2.9	-0.9	27.0	26.4	16.6
NREP Nordic Strategies Fund IV (Euro)	€ 17,215,235	-1.9	0.3	-1.6	-1.9	2.4	-5.7	-3.2	-3.8	-5.2	12.4	7.0	-0.4	-20.9	48.8	21.5	N/A
Seven Seas Japan Opportunity Fund	¥1,352,075,482	17.0	-42.1	-25.1	-31.3	16.4	-61.9	-51.1	-56.4								
<b>Indices</b>																	
NFI ODCE+ 35bps				-4.9	-5.1			-4.3	-4.7			7.8	6.9			10.3	9.3
NFI-ODCE		0.8	-5.8	-5.0	-5.2	1.6	-6.0	-4.5	-4.9	3.4	3.9	7.5	6.5	3.8	6.0	9.9	9.0
NFI-ODCE + 100bps				-4.7	-4.9			-4.0	-4.4			8.5	7.5			10.9	10.0
CPI + 500 bps				1.7				3.4				11.7				10.1	

<sup>1</sup> Represent composite performance of Prologis Targeted Europe Logistics Fund and Prologis European Logistics Fund.

<sup>2</sup> Previously Och-Ziff Real Estate Fund III.

<sup>3</sup> Preliminary data.



Returns (%)	Market Value (\$)	5 Year				10 Year				Inception				TWR Calculation Inception	Net IRR	Equity Multiple
		INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET <sup>4</sup>			
Brookfield Premier Real Estate Partners	130,007,617									2.9	9.8	12.9	10.6	4Q18	10.5	1.5
Lion Properties Fund	133,369,288									3.7	6.4	10.2	9.4	4Q18	8.7	1.3
MetLife Core Property Fund	88,290,597	4.7	5.7	10.6	10.1					4.9	6.5	11.6	11.1	1Q14	11.1	2.0
Principal U.S. Property Account	62,330,731	4.2	4.7	9.0	8.0					4.4	4.8	9.3	8.3	4Q15	8.3	1.8
Prologis European Logistics Fund <sup>4,5</sup>	64,566,525	5.1	6.0	11.3	8.8					5.2	6.7	12.1	9.7	4Q17	9.6	1.5
Prologis Targeted U.S. Logistics Fund	134,366,704	4.2	18.5	23.3	20.0					4.7	16.8	22.2	19.0	3Q15	19.4	3.0
Townsend Real Estate Fund, L.P. <sup>3</sup>	173,417,854	3.7	7.3	11.3	11.0					3.9	7.1	11.2	11.0	2Q16	11.0	1.7
<b>Core Commingled Funds</b>	<b>786,349,316</b>	<b>3.9</b>	<b>8.4</b>	<b>12.5</b>	<b>11.1</b>	<b>4.3</b>	<b>8.0</b>	<b>12.6</b>	<b>11.3</b>	<b>4.4</b>	<b>4.0</b>	<b>8.5</b>	<b>7.6</b>	<b>4Q86</b>	<b>8.2</b>	<b>1.6</b>
<b>Value Added Portfolio</b>																
Asana Partners Fund II <sup>2</sup>	27,463,022									-3.6	9.5	5.2	-5.5	4Q19	12.7	1.3
Asana Partners Fund III <sup>3</sup>	2,568,750									-5.8	19.5	13.9	-5.4	3Q22	-26.2	0.8
DRC European Real Estate Debt Fund II <sup>2</sup>	6,342,991	-2.6	-2.7	-4.4	-5.3					3.4	-4.2	-0.3	-1.7	1Q14	1.1	1.0
ECE European Prime Shopping Centre Fund II C <sup>5</sup>	34,557,729	1.5	2.6	4.1	1.6					1.1	9.4	10.7	8.0	4Q15	3.7	1.1
Hammes Partners II	3,131,264	8.2	26.8	36.2	29.2					9.2	20.0	30.5	23.7	3Q15	23.4	1.7
Hammes Partners III	21,425,217									8.8	17.2	27.0	5.0	1Q19	13.6	1.2
NREP Nordic Strategies Fund <sup>2</sup>	2,730,004	2.4	7.8	10.3	1.7					5.9	13.9	20.3	13.7	1Q15	23.1	1.7
NREP Nordic Strategies Fund II <sup>2</sup>	16,964,525	-1.7	31.5	30.2	19.3					-0.2	30.9	31.3	19.1	3Q16	21.6	2.0
NREP Nordic Strategies Fund III <sup>3</sup>	33,702,067									-3.5	24.6	20.9	5.0	4Q18	13.2	1.4
NREP Nordic Strategies Fund IV <sup>2</sup>	18,429,756									-20.7	43.5	17.1	N/A	1Q20	5.5	1.1
<b>Value Added Portfolio</b>	<b>167,315,325</b>	<b>0.9</b>	<b>17.3</b>	<b>18.4</b>	<b>10.7</b>	<b>4.4</b>	<b>12.5</b>	<b>17.4</b>	<b>12.3</b>	<b>1.8</b>	<b>5.5</b>	<b>7.4</b>	<b>5.4</b>	<b>4Q86</b>	<b>6.9</b>	<b>1.3</b>
<b>Opportunistic Portfolio</b>																
Carlyle China Project Rome Co-Investment	36,701,518	-0.7	1.3	0.5	-1.4					-0.7	2.1	1.3	-0.6	3Q17	-1.1	1.0
Carlyle China Realty	8,270,733	1.7	1.6	3.4	1.4					1.5	2.0	3.6	1.3	3Q17	-0.2	1.0
CIM Fund VIII	25,874,102	-0.1	-4.8	-4.9	-6.1					0.0	0.6	0.6	-1.1	2Q15	-3.2	0.9
KKR Real Estate Partners Americas	1,530,684	-21.9	0.6	-9.4	-7.6					-7.3	-2.2	-0.9	-0.6	2Q14	12.0	1.3
LaSalle China Logistics Venture	5,777,762									N/A	227.7	108.4	-10.4	3Q21	-1.6	1.0
Sculptor Real Estate Fund III <sup>2,3</sup>	7,815,487	11.4	18.7	31.7	28.7					13.6	18.0	33.4	20.3	4Q14	24.2	1.8
Sculptor Real Estate Fund IV <sup>2,3</sup>	11,152,351									12.7	12.4	26.3	11.7	3Q20	11.0	1.1
Seven Seas Japan Opportunity Fund	10,311,741									15.4	-64.1	-55.4	-60.3	2Q22	-57.7	1.2
<b>Opportunistic Portfolio</b>	<b>107,434,378</b>	<b>1.6</b>	<b>0.8</b>	<b>2.5</b>	<b>0.3</b>	<b>5.0</b>	<b>8.3</b>	<b>14.4</b>	<b>10.2</b>	<b>1.9</b>	<b>6.6</b>	<b>8.8</b>	<b>6.7</b>	<b>1Q91</b>	<b>6.9</b>	<b>1.2</b>
<b>Total Non-Core Portfolio 1Q 2007 Forward</b>	<b>274,749,703</b>	<b>1.2</b>	<b>10.3</b>	<b>11.6</b>	<b>6.4</b>	<b>4.5</b>	<b>9.7</b>	<b>14.5</b>	<b>10.3</b>	<b>3.7</b>	<b>6.6</b>	<b>10.3</b>	<b>5.8</b>	<b>1Q07</b>	<b>6.9</b>	<b>1.3</b>
<b>Total Private Portfolio</b>																
SCERS	1,061,099,019	3.2	8.5	11.9	9.5	4.1	7.8	12.2	10.2	4.1	5.5	9.8	8.7	4Q86	8.6	1.5

Returns (%)	Market Value (\$)	5 Year				10 Year				Inception				TWR Calculation Inception	Net IRR	Equity Multiple					
		INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET <sup>4</sup>								
<b>Ex-US Dollar Denominated Investments (In Local Currency)</b>																					
Prologis Targeted Europe Logistics Fund (Euro) <sup>1,2</sup>	€ 60,311,591	5.1	8.5	13.8	11.3									4.8	7.7	12.8	10.6	1Q16	10.7	1.4	
DRC European Real Estate Debt Fund II (Pound Sterling)	£5,249,459	-2.2	0.0	-2.2	-3.1									3.6	-0.4	3.2	1.8	1Q14	5.2	1.2	
ECE European Prime Shopping Centre Fund II (Euro) <sup>3</sup>	€ 32,280,374	1.4	4.9	6.5	3.9									1.0	10.1	11.4	8.7	4Q15	5.2	1.2	
NREP Nordic Strategies Fund (Euro) <sup>3</sup>	€ 2,550,097	2.4	10.5	13.1	4.3									5.9	15.8	22.3	15.6	1Q15	24.5	1.8	
NREP Nordic Strategies Fund II (Euro)	€ 15,846,562	-1.7	34.7	33.3	22.2									-0.1	31.6	32.0	19.8	3Q16	22.7	2.1	
NREP Nordic Strategies Fund III (Euro)	€ 31,481,100													-3.6	27.2	23.4	7.2	4Q18	15.7	1.4	
NREP Nordic Strategies Fund IV (Euro)	€ 17,215,235													-20.9	48.8	21.5	N/A	1Q20	9.6	1.1	
Seven Seas Japan Opportunity Fund	¥1,352,075,482													14.2	-61.7	-51.8	-57.2	2Q22	-56.6	1.3	
<b>Indices</b>																					
NFI ODCE+ 35bps				9.0	8.1				10.4	9.5							7.9	6.8	4Q86		
NFI-ODCE		3.9	4.6	8.7	7.7		4.4	5.5	10.1	9.1				6.5	1.0	7.5	6.5	4Q86			
NFI-ODCE + 100bps				9.7	8.7				11.1	10.1							8.5	7.5	4Q86		
CPI + 500 bps				9.0					7.7								7.9		4Q86		

<sup>1</sup> Represent composite performance of Prologis Targeted Europe Logistics Fund and Prologis European Logistics Fund.

<sup>2</sup> Previously Och-Ziff Real Estate Fund III.

<sup>3</sup> Preliminary data.

Returns (%)	Market Value (\$)	Fiscal Year 2023		2022		2021		2020		2019		2018		2017		2016	
		TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET
<b>11,909,155,119</b>																	
Brookfield Premier Real Estate Partners	130,007,617	-3.7	-3.8	13.1	10.8	28.5	23.0	1.8	1.9	10.6	8.5	2.3	1.9				
Lion Properties Fund	133,369,288	-4.6	-5.0	9.6	8.7	23.4	22.4	2.2	1.4	7.3	6.4	2.0	1.8				
MetLife Core Property Fund	88,290,597	-3.0	-3.2	9.7	9.1	27.8	27.2	1.0	0.5	8.6	8.1	7.8	7.3	8.4	7.9	9.3	8.8
Principal U.S. Property Account	62,330,731	-5.4	-5.8	5.1	4.1	23.7	22.6	1.6	0.6	7.0	6.0	9.1	8.1	9.1	8.1	10.0	9.0
Prologis European Logistics Fund <sup>1,3</sup>	64,566,525	-15.3	-14.9	-10.2	-11.6	22.7	18.0	20.2	18.7	13.5	11.1	13.6	10.8	6.8	6.5		
Prologis Targeted U.S. Logistics Fund	134,366,704	-6.6	-5.2	13.9	12.2	59.3	48.7	11.1	9.8	19.4	16.8	18.5	16.1	24.2	20.3	16.1	14.2
Townsend Real Estate Fund, L.P. <sup>3</sup>	173,417,854	-2.5	-2.6	10.5	10.3	29.3	29.1	2.6	2.3	7.6	7.3	9.0	8.8	11.0	10.8	8.4	8.2
<b>Core Commingled Funds</b>	<b>786,349,316</b>	<b>-5.2</b>	<b>-5.1</b>	<b>8.8</b>	<b>7.6</b>	<b>30.8</b>	<b>27.6</b>	<b>4.6</b>	<b>4.0</b>	<b>9.5</b>	<b>8.3</b>	<b>10.9</b>	<b>9.7</b>	<b>14.2</b>	<b>12.8</b>	<b>9.8</b>	<b>8.9</b>
<b>Value Added Portfolio</b>																	
Asana Partners Fund II <sup>3</sup>	27,463,022	4.9	3.6	1.8	0.7	63.7	49.9	-36.4	-45.7	11.1	1.5						
Asana Partners Fund III <sup>4</sup>	2,568,750	13.9	-5.4	13.9	-5.4												
DRC European Real Estate Debt Fund II <sup>3</sup>	6,342,991	36.7	37.2	52.5	52.3	-11.0	-12.4	-47.1	-47.7	12.0	11.1	-0.6	-1.7	23.8	22.3	-7.8	-8.9
ECE European Prime Shopping Centre Fund II C <sup>3</sup>	34,557,729	6.1	4.2	3.5	0.9	-0.2	-3.0	0.7	-1.8	2.2	0.0	15.1	12.8	24.7	21.5	22.1	19.7
Hammes Partners II	3,131,264	3.4	2.8	10.9	8.2	28.6	21.3	61.5	46.9	59.2	55.9	27.9	19.6	12.7	10.0	16.2	10.4
Hammes Partners III	21,425,217	3.6	2.2	13.2	9.0	29.1	18.3	43.5	24.5	23.9	-24.4						
NREP Nordic Strategies Fund <sup>3</sup>	2,730,004	11.7	9.8	6.6	5.4	-3.0	-11.6	27.2	21.8	23.0	-4.2	0.8	0.1	41.2	40.1	23.1	21.7
NREP Nordic Strategies Fund II <sup>3</sup>	16,964,525	9.6	6.0	7.8	-1.9	71.5	52.7	35.1	26.6	20.9	9.8	17.0	12.3	44.9	34.4	8.6	-3.8
NREP Nordic Strategies Fund III <sup>4</sup>	33,702,067	-2.8	-3.1	0.3	-3.3	35.9	22.8	42.3	28.1	19.0	-5.5	-2.8	-14.4				
NREP Nordic Strategies Fund IV <sup>3</sup>	18,429,756	-1.3	-1.9	0.6	-6.4	42.2	20.5	22.1	-121.4								
<b>Value Added Portfolio</b>	<b>167,315,325</b>	<b>3.8</b>	<b>2.4</b>	<b>5.1</b>	<b>0.7</b>	<b>36.4</b>	<b>25.1</b>	<b>19.0</b>	<b>10.6</b>	<b>22.1</b>	<b>11.5</b>	<b>10.5</b>	<b>6.3</b>	<b>24.9</b>	<b>22.3</b>	<b>9.5</b>	<b>7.0</b>
<b>Opportunistic Portfolio</b>																	
Carlyle China Project Rome Co-Investment	36,701,518	-3.8	-4.3	-3.3	-4.3	2.4	1.3	-0.9	-2.0	7.2	5.8	-2.5	-7.1	4.7	3.6		
Carlyle China Realty	8,270,733	-3.9	-4.6	-3.4	-4.8	2.2	0.8	-0.3	-2.1	18.1	15.7	1.6	-1.4	2.7	0.2		
CIM Fund VIII	25,874,102	-11.7	-12.4	-13.1	-14.3	-3.7	-4.9	-16.7	-17.9	2.0	0.9	9.4	8.0	8.4	6.7	6.4	4.0
KKR Real Estate Partners Americas	1,530,684	-13.3	-10.9	-25.1	-21.8	27.9	19.1	-30.9	-24.7	7.8	7.3	11.0	10.7	27.5	23.3	20.8	17.2
LaSalle China Logistics Venture	5,777,762	-3.5	-9.6	4.2	-9.6	188.6	-6.2	-30.9	-24.7	7.8	7.3	11.0	10.7	27.5	23.3	20.8	17.2
Sculptor Real Estate Fund III <sup>2,3</sup>	7,815,487	15.2	14.6	82.4	80.0	28.5	24.1	12.4	10.8	15.9	13.6	29.7	25.7	43.3	38.2	30.0	22.2
Sculptor Real Estate Fund IV <sup>2,3</sup>	11,152,351	4.4	2.4	6.9	0.8	40.3	25.9	19.6	3.9								
Seven Seas Japan Opportunity Fund	10,311,741	-49.5	-55.0	-55.4	-60.3												
<b>Opportunistic Portfolio</b>	<b>107,434,378</b>	<b>-8.7</b>	<b>-10.1</b>	<b>-4.9</b>	<b>-7.9</b>	<b>6.2</b>	<b>2.8</b>	<b>-6.9</b>	<b>-8.1</b>	<b>8.6</b>	<b>7.1</b>	<b>11.5</b>	<b>9.1</b>	<b>19.1</b>	<b>16.0</b>	<b>13.9</b>	<b>10.2</b>
<b>Total Non-Core Portfolio 1Q 2007 Forward<sup>5</sup></b>	<b>274,749,703</b>	<b>-1.2</b>	<b>-2.6</b>	<b>1.1</b>	<b>-2.7</b>	<b>24.4</b>	<b>16.4</b>	<b>6.5</b>	<b>1.6</b>	<b>15.8</b>	<b>9.9</b>	<b>10.9</b>	<b>7.6</b>	<b>22.3</b>	<b>19.4</b>	<b>10.8</b>	<b>8.1</b>
<b>Total Private Portfolio</b>																	
<b>SCERS</b>	<b>1,061,099,019</b>	<b>-4.1</b>	<b>-4.4</b>	<b>6.8</b>	<b>4.9</b>	<b>29.1</b>	<b>24.5</b>	<b>5.2</b>	<b>3.5</b>	<b>11.0</b>	<b>8.7</b>	<b>9.2</b>	<b>7.5</b>	<b>15.2</b>	<b>13.6</b>	<b>9.1</b>	<b>7.8</b>
<b>Indices</b>																	
NFI-ODCE + 35 bps		-4.3	-4.7	7.6	6.7	22.4	21.3	1.5	0.7	5.7	4.7	8.7	7.7	8.0	7.0	9.1	8.1
NFI-ODCE		-4.5	-4.9	7.5	6.5	22.2	21.0	1.2	0.3	5.3	4.4	8.3	7.4	7.6	6.7	8.8	7.8
NFI-ODCE + 100 bps		-4.0	-4.4	8.0	7.0	22.9	21.8	2.2	1.3	6.3	5.4	9.3	8.4	8.6	7.7	9.8	8.8
CPI + 500 bps		3.1		9.9		11.4		6.4		7.4		7.0		7.2		7.2	

<sup>1</sup> Represent composite performance of Prologis Targeted Europe Logistics Fund and Prologis European Logistics Fund.

<sup>2</sup> Previously Och-Ziff Real Estate Fund III.

<sup>3</sup> Preliminary data.

Returns (%)	Market Value (\$)	2015		2014		2013		2012		2011		2010		2009		2008		2007		2006	
		TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET
<b>11,909,155,119</b>																					
Brookfield Premier Real Estate Partners	130,007,617																				
Lion Properties Fund	133,369,288																				
MetLife Core Property Fund	88,290,597	16.9	16.3	17.4	16.9																
Principal U.S. Property Account	62,330,731	3.0	2.8																		
Prologis European Logistics Fund <sup>1,3</sup>	64,566,525																				
Prologis Targeted U.S. Logistics Fund	134,366,704	9.1	7.9																		
Townsend Real Estate Fund, L.P. <sup>3</sup>	173,417,854																				
<b>Core Commingled Funds</b>	<b>786,349,316</b>	<b>15.7</b>	<b>14.1</b>	<b>13.5</b>	<b>12.4</b>	<b>10.2</b>	<b>9.3</b>	<b>11.1</b>	<b>10.1</b>	<b>16.4</b>	<b>15.5</b>	<b>14.1</b>	<b>13.3</b>	<b>-33.0</b>	<b>-33.6</b>	<b>-13.8</b>	<b>-14.6</b>	<b>15.5</b>	<b>14.5</b>	<b>16.9</b>	<b>15.8</b>
<b>Value Added Portfolio</b>																					
Asana Partners Fund II <sup>3</sup>	27,463,022																				
Asana Partners Fund III <sup>4</sup>	2,568,750																				
DRC European Real Estate Debt Fund II <sup>3</sup>	6,342,991	5.0	3.0	1.4	-2.1																
ECE European Prime Shopping Centre Fund II C <sup>3</sup>	34,557,729	12.1	11.0																		
Hammes Partners II	3,131,264	19.4	12.9																		
Hammes Partners III	21,425,217																				
NREP Nordic Strategies Fund <sup>3</sup>	2,730,004	55.1	50.8																		
NREP Nordic Strategies Fund II <sup>4</sup>	16,964,525																				
NREP Nordic Strategies Fund III <sup>4</sup>	33,702,067																				
NREP Nordic Strategies Fund IV <sup>3</sup>	18,429,756																				
<b>Value Added Portfolio</b>	<b>167,315,325</b>	<b>19.1</b>	<b>17.0</b>	<b>15.7</b>	<b>13.7</b>	<b>13.3</b>	<b>10.8</b>	<b>19.6</b>	<b>18.1</b>	<b>16.7</b>	<b>14.7</b>	<b>23.2</b>	<b>20.3</b>	<b>-56.4</b>	<b>-57.6</b>	<b>-31.2</b>	<b>-33.5</b>	<b>18.2</b>	<b>5.6</b>	<b>0.8</b>	<b>0.5</b>
<b>Opportunistic Portfolio</b>																					
Carlyle China Project Rome Co-Investment	36,701,518																				
Carlyle China Realty	8,270,733																				
CIM Fund VIII	25,874,102	16.9	13.8																		
KKR Real Estate Partners Americas	1,530,684	79.0	55.3	30.1	24.7																
LaSalle China Logistics Venture	5,777,762	79.0	55.3	30.1	24.7																
Sculptor Real Estate Fund III <sup>2,3</sup>	7,815,487	33.7	6.9	9.4	-28.3																
Sculptor Real Estate Fund IV <sup>2,3</sup>	11,152,351																				
Seven Seas Japan Opportunity Fund	10,311,741																				
<b>Opportunistic Portfolio</b>	<b>107,434,378</b>	<b>44.5</b>	<b>23.2</b>	<b>33.3</b>	<b>19.9</b>	<b>11.7</b>	<b>9.4</b>	<b>54.2</b>	<b>38.5</b>	<b>-10.1</b>	<b>-8.0</b>	<b>42.4</b>	<b>34.2</b>	<b>54.0</b>	<b>43.5</b>	<b>-44.5</b>	<b>-45.4</b>	<b>3.4</b>	<b>2.6</b>	<b>0.0</b>	<b>0.0</b>
<b>Total Non-Core Portfolio 1Q 2007 Forward<sup>5</sup></b>	<b>274,749,703</b>	<b>23.0</b>	<b>17.9</b>	<b>17.0</b>	<b>14.2</b>	<b>16.7</b>	<b>13.5</b>	<b>34.6</b>	<b>26.9</b>	<b>-0.3</b>	<b>0.4</b>	<b>37.0</b>	<b>30.4</b>	<b>-13.5</b>	<b>-17.8</b>	<b>-33.7</b>	<b>-35.7</b>	<b>18.2</b>	<b>5.6</b>		
<b>Total Private Portfolio</b>																					
<b>SCERS</b>	<b>1,061,099,019</b>	<b>9.9</b>	<b>8.5</b>	<b>16.0</b>	<b>14.2</b>	<b>12.0</b>	<b>10.7</b>	<b>19.2</b>	<b>17.8</b>	<b>9.8</b>	<b>9.4</b>	<b>20.6</b>	<b>19.2</b>	<b>-16.0</b>	<b>-16.7</b>	<b>-14.1</b>	<b>-14.7</b>	<b>10.7</b>	<b>8.7</b>	<b>16.9</b>	<b>14.2</b>
<b>Indices</b>																					
NFI-ODCE + 35 bps		15.4	14.3	12.8	11.8	14.3	13.3	11.3	10.1	16.3	15.3	16.7	15.6	-29.4	-30.0	-9.7	-10.3	16.3	15.2	16.7	15.6
NFI-ODCE		15.0	14.0	12.5	11.5	13.9	12.9	10.9	9.8	16.0	15.0	16.4	15.3	-29.8	-30.4	-10.0	-10.7	16.0	14.8	16.3	15.3
NFI-ODCE + 100 bps		16.0	15.0	13.5	12.5	14.9	13.9	11.9	10.8	17.0	16.0	17.4	16.3	-28.8	-29.4	-9.0	-9.7	17.0	15.8	17.3	16.3
CPI + 500 bps		5.7		5.7		6.6		6.8		8.2		6.5		8.0		5.0		9.3		7.7	

<sup>1</sup> Represent composite performance of Prologis Targeted Europe Logistics Fund and Prologis European Logistics Fund.

<sup>2</sup> Previously Och-Ziff Real Estate Fund III.

<sup>3</sup> Preliminary data.

Quarterly Cash Flow Activity (\$)	Beginning Market Value	Contributions	Distributions	Withdrawals	Gross Income	Manager Fees	Appreciation	Ending Market Value	LTV (%)
<b>Core Commingled Funds</b>									
Brookfield Premier Real Estate Partners	140,258,155	0	1,489,897	0	519,346	-640,672	-9,920,660	130,007,617	43.2
Lion Properties Fund	141,766,363	299,192	1,126,343	0	1,006,144	299,192	-8,276,876	133,369,288	20.9
MetLife Core Property Fund	93,416,724	707,960	721,033	0	964,968	105,509	-5,972,513	88,290,597	29.6
Principal U.S. Property Account	66,477,963	0	0	0	592,582	155,520	-4,584,294	62,330,731	24.2
Prologis European Logistics Fund	68,862,375	0	462,370	0	650,289	153,269	-4,330,500	64,566,525	23.2
Prologis Targeted U.S. Logistics Fund	142,389,147	0	502,162	0	1,050,393	-1,836,155	-10,406,829	134,366,704	12.9
Townsend Real Estate Fund, L.P.	180,422,856	1,743,036	1,743,036	0	1,333,713	96,510	-8,242,205	173,417,854	34.6
<b>Core Commingled Funds</b>	<b>833,593,583</b>	<b>2,750,188</b>	<b>6,044,841</b>	<b>0</b>	<b>6,117,435</b>	<b>-1,666,827</b>	<b>-51,733,877</b>	<b>786,349,316</b>	<b>29.1</b>
<b>Value Added Portfolio</b>									
Asana Partners Fund II	23,835,102	2,406,250	0	0	-17,514	438,531	1,677,716	27,463,022	49.4
Asana Partners Fund III	1,461,485	933,333	0	0	-98,060	125,000	396,992	2,568,750	85.2
DRC European Real Estate Debt Fund II	4,280,739	0	0	0	1,727,628	-7,620	327,005	6,342,991	0.0
ECE European Prime Shopping Centre Fund II	31,496,740	0	0	285,188	-1,308,101	353,672	5,007,951	34,557,729	55.7
Hammes Partners II	3,228,124	12,214	40,976	156,301	30,723	8,973	66,452	3,131,264	61.0
Hammes Partners III	21,622,304	0	327,737	44,412	296,551	118,349	-3,140	21,425,217	70.5
NREP Nordic Strategies Fund	2,321,769	0	0	0	65	44,239	452,410	2,730,004	0.0
NREP Nordic Strategies Fund II	18,266,814	0	3,576,066	0	-382,719	590,443	3,246,938	16,964,525	64.0
NREP Nordic Strategies Fund III	39,013,159	662,580	8,455,396	0	847,034	59,813	1,694,502	33,702,067	53.0
NREP Nordic Strategies Fund IV	15,436,658	1,822,691	0	0	-336,353	48,064	1,554,824	18,429,756	46.0
<b>Value Added Portfolio</b>	<b>160,962,894</b>	<b>5,837,068</b>	<b>12,400,175</b>	<b>485,901</b>	<b>759,254</b>	<b>1,779,464</b>	<b>14,421,650</b>	<b>167,315,325</b>	<b>57.4</b>
<b>Opportunistic Portfolio</b>									
Carlisle China Project Rome Co-Investment	37,417,390	200,055	0	0	7,864	100,822	-822,970	36,701,518	25.0
Carlisle China Realty	8,423,870	66,190	0	0	-4,282	29,830	-185,214	8,270,733	25.0
CIM Fund VIII	28,942,972	97,469	0	124,504	-22,340	97,712	-2,921,783	25,874,102	38.6
KKR Real Estate Partners Americas	1,688,686	45,875	0	0	-6,150	-50,969	-248,696	1,530,684	60.0
LaSalle China Logistics Venture	2,471,327	3,095,174	0	0	1,367	111,154	321,048	5,777,762	41.8
Sculptor Real Estate Fund III	8,119,791	4,266	873,660	0	150,838	22,339	436,591	7,815,487	0.0
Sculptor Real Estate Fund IV	9,962,025	1,085,629	99,348	0	30,672	103,973	277,346	11,152,351	0.0
Seven Seas Japan Opportunity Fund	7,654,537	2,005,609	-822,327	-1,814,374	1,554,598	584,234	-2,955,471	10,311,741	0.0
<b>Opportunistic Portfolio</b>	<b>104,680,598</b>	<b>6,600,267</b>	<b>150,681</b>	<b>-1,689,870</b>	<b>1,712,567</b>	<b>999,095</b>	<b>-6,099,149</b>	<b>107,434,378</b>	<b>26.0</b>
<b>Total Non-Core Portfolio 1Q 2007 Forward</b>	<b>265,643,492</b>	<b>12,437,335</b>	<b>12,550,856</b>	<b>-1,203,969</b>	<b>2,471,821</b>	<b>2,778,559</b>	<b>8,322,501</b>	<b>274,749,703</b>	<b>48.9</b>
<b>Total Private Portfolio</b>									
<b>SCERS</b>	<b>1,099,237,075</b>	<b>15,187,523</b>	<b>18,595,697</b>	<b>-1,203,969</b>	<b>8,589,256</b>	<b>1,111,732</b>	<b>-43,411,376</b>	<b>1,061,099,019</b>	<b>35.5</b>

Property Type Diversification (%)	Apartment	Office	Industrial	Retail	Hotel	Other
<b>Core Commingled Funds</b>						
Brookfield Premier Real Estate Partners	29.9	18.9	46.7	-	-	4.5
Lion Properties Fund	27.3	19.8	34.5	5.2	-	13.2
MetLife Core Property Fund	31.2	27.7	27.8	9.9	1.2	2.2
Principal U.S. Property Account	26.4	19.8	36.7	10.2	-	6.9
Prologis European Logistics Fund	-	-	100.0	-	-	-
Prologis Targeted U.S. Logistics Fund	-	-	100.0	-	-	-
Townsend Real Estate Fund, L.P. <sup>†</sup>	35.8	8.9	36.9	1.8	0.2	16.5
<b>Core Commingled Funds</b>	<b>23.1</b>	<b>13.1</b>	<b>53.0</b>	<b>3.2</b>	<b>0.2</b>	<b>7.4</b>
<b>Value Added Portfolio</b>						
Asana Partners Fund II	1.0	47.4	-	51.7	-	-
Asana Partners Fund III	0.0	56.2	-	43.7	-	-
DRC European Real Estate Debt Fund II	-	50.0	-	50.0	-	-
ECE European Prime Shopping Centre Fund II	-	-	-	100.0	-	-
Hammes Partners II	-	-	-	-	-	100.0
Hammes Partners III	-	-	-	-	-	100.0
NREP Nordic Strategies Fund	-	-	-	-	-	-
NREP Nordic Strategies Fund II	3.9	-	-	25.0	-	71.1
NREP Nordic Strategies Fund III	32.9	5.0	27.9	6.1	-	28.2
NREP Nordic Strategies Fund IV	36.4	5.3	27.2	3.5	6.3	21.3
<b>Value Added Portfolio</b>	<b>11.4</b>	<b>12.3</b>	<b>8.8</b>	<b>36.4</b>	<b>0.7</b>	<b>30.4</b>

Property Type Diversification (%)	Apartment	Office	Industrial	Retail	Hotel	Other
<b>Opportunistic Portfolio</b>						
Carlyle China Project Rome Co-Investment	-	-	100.0	-	-	-
Carlyle China Realty	-	-	100.0	-	-	-
CIM Fund VIII	48.3	19.3	-	15.0	5.7	11.7
KKR Real Estate Partners Americas	-	-	-	14.2	75.9	9.9
LaSalle China Logistics Venture	-	-	100	-	-	-
Sculptor Real Estate Fund III	-	0.1	-	0.4	-	99.5
Sculptor Real Estate Fund IV	4.1	-	-	-	4.1	91.7
Seven Seas Japan Opportunity Fund	-	32.2	-	41.7	26.1	-
<b>Opportunistic Portfolio</b>	<b>13.4</b>	<b>5.2</b>	<b>52.3</b>	<b>4.3</b>	<b>3.2</b>	<b>21.8</b>
<b>Total Non-Core Portfolio 1Q 2007 Forward</b>	<b>12.1</b>	<b>9.7</b>	<b>24.9</b>	<b>24.5</b>	<b>1.6</b>	<b>27.2</b>
<b>Total Private Portfolio</b>						
<b>SCERS</b>	<b>20.3</b>	<b>12.2</b>	<b>46.0</b>	<b>8.5</b>	<b>0.5</b>	<b>12.3</b>
<b>Indices</b>						
<b>NFI-ODCE</b>	<b>29.2</b>	<b>21.6</b>	<b>31.2</b>	<b>10.0</b>	<b>0.2</b>	<b>7.7</b>

<sup>4</sup>Property diversification numbers used are from 3Q22.

Geographic Diversification (%)	North East	Mid East	East North Central	West North Central	South East	South West	Mountain	Pacific	Ex-US
<b>Core Commingled Funds</b>									
Brookfield Premier Real Estate Partners	20.3	8.7	3.0	-	10.5	8.7	4.0	44.8	-
Lion Properties Fund	20.8	8.2	2.2	0.0	9.8	7.8	8.1	43.0	-
MetLife Core Property Fund	13.5	11.5	8.2	2.3	11.3	9.6	10.8	32.8	-
Principal U.S. Property Account	11.6	8.7	2.1	1.5	10.7	14.6	14.2	36.6	-
Prologis European Logistics Fund	-	-	-	-	-	-	-	-	100.0
Prologis Targeted U.S. Logistics Fund	14.6	5.1	11.0	-	12.4	8.6	5.6	42.8	-
Townsend Real Estate Fund, L.P. <sup>1</sup>	15.6	7.4	8.7	2.8	18.3	11.3	9.1	26.9	-
<b>Core Commingled Funds</b>	<b>15.2</b>	<b>7.3</b>	<b>5.8</b>	<b>1.0</b>	<b>11.7</b>	<b>8.9</b>	<b>7.3</b>	<b>34.5</b>	<b>8.2</b>
<b>Value Added Portfolio</b>									
Asana Partners Fund II	19.2	20.7	-	8.2	17.1	6.9	21.7	6.3	-
Asana Partners Fund III	-	17.6	2.4	3.2	50.8	8.8	17.2	-	-
DRC European Real Estate Debt Fund II	-	-	-	-	-	-	-	-	100.0
ECE European Prime Shopping Centre Fund II	-	-	-	-	-	-	-	-	100.0
Hammes Partners II	-	46.2	6.6	-	-	17.5	29.7	-	-
Hammes Partners III	42.5	2.2	15.7	6.3	5.5	19.7	7.0	1.1	-
NREP Nordic Strategies Fund	-	-	-	-	-	-	-	-	-
NREP Nordic Strategies Fund II	-	-	-	-	-	-	-	-	100.0
NREP Nordic Strategies Fund III	-	-	-	-	-	-	-	-	100.0
NREP Nordic Strategies Fund IV	-	-	-	-	-	-	-	-	100.0
<b>Value Added Portfolio</b>	<b>9.8</b>	<b>5.5</b>	<b>2.5</b>	<b>2.5</b>	<b>4.9</b>	<b>4.7</b>	<b>6.0</b>	<b>1.3</b>	<b>62.7</b>



Geographic Diversification (%)	North East	Mid East	East North Central	West North Central	South East	South West	Mountain	Pacific	Ex-US
<b>Opportunistic Portfolio</b>									
Carlyle China Project Rome Co-Investment	-	-	-	-	-	-	-	-	100.0
Carlyle China Realty	-	-	-	-	-	-	-	-	100.0
CIM Fund VIII	45.4	-	10.7	-	-	-	8.6	31.4	4.0
KKR Real Estate Partners Americas	-	-	1.0	-	-	9.9	-	75.9	13.2
LaSalle China Logistics	-	-	-	-	-	-	-	-	100.0
Sculptor Real Estate Fund III	35.4	0.8	7.3	1.6	1.6	25.2	2.0	7.0	19.2
Sculptor Real Estate Fund IV	15.0	0.6	1.4	0.0	11.5	0.7	3.5	25.5	16.3
Seven Seas Japan Opportunity Fund	-	-	-	-	-	-	-	-	100.0
<b>Opportunistic Portfolio</b>	<b>16.9</b>	<b>0.1</b>	<b>3.9</b>	<b>0.1</b>	<b>0.1</b>	<b>2.5</b>	<b>2.8</b>	<b>11.4</b>	<b>62.2</b>
<b>Total Non-Core Portfolio 1Q 2007 Forward</b>	<b>12.4</b>	<b>3.5</b>	<b>3.0</b>	<b>1.6</b>	<b>3.1</b>	<b>3.9</b>	<b>4.8</b>	<b>5.1</b>	<b>62.5</b>
<b>Total Private Portfolio</b>									
<b>SCERS</b>	<b>14.6</b>	<b>6.4</b>	<b>5.1</b>	<b>1.1</b>	<b>9.7</b>	<b>7.8</b>	<b>6.8</b>	<b>27.8</b>	<b>20.6</b>
<b>Indices</b>									
<b>NFI-ODCE</b>	<b>21.1</b>	<b>8.2</b>	<b>5.5</b>	<b>0.8</b>	<b>11.2</b>	<b>8.9</b>	<b>7.2</b>	<b>37.2</b>	<b>-</b>

<sup>1</sup>Geographic diversification numbers used are from 3Q22.

## Advisory Disclosures and Definitions

### Disclosure

Trade Secret and Confidential.

Past performance is not indicative of future results.

Investing involves risk, including the possible loss of principal.

Returns are presented on a time weighted basis and shown both gross and net of underlying third party fees and expenses and may include income, appreciation and/or other earnings. In addition, investment level Net IRR's and equity multiples are reported.

The Townsend Group, on behalf of its client base, collects quarterly limited partner/client level performance data based upon inputs from the underlying investment managers. Data collection is for purposes of calculating investment level performance as well as aggregating and reporting client level total portfolio performance. Quarterly limited partner/client level performance data is collected directly from the investment managers via a secure data collection site.

<sup>1</sup>In select instances where underlying investment managers have ceased reporting limited partner/client level performance data directly to The Townsend Group via a secure data collection site, The Townsend Group may choose to input performance data on behalf of its client based upon the investment managers quarterly capital account statements which are supplied to The Townsend Group and the client alike.

### Benchmarks

The potential universe of available real asset benchmarks are infinite. Any one benchmark, or combination thereof, may be utilized on a gross or net of fees basis with or without basis point premiums attached. These benchmarks may also utilize a blended composition with varying weighting methodologies, including market weighted and static weighted approaches.

## Exhibit B: Real Estate Market Update 4Q22



# United States Real Estate Market Update (4Q22)

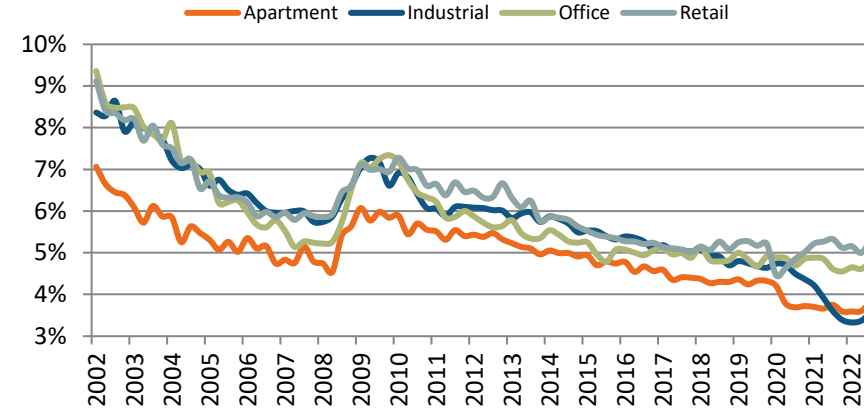
## General

- An array of headwinds have emerged including the potential for “higher for longer” interest rates, persistent inflation, various geopolitical events, and widespread global supply chain struggles. The S&P 500 was offered a reprieve, returning 7.6% during the fourth quarter despite locking in its worst annual performance since 2008, producing a total return of -18.1%. The MSCI US REIT index broke its losing streak of three consecutive down quarters, posting a gross fourth quarter return of 5.2%.
- During the fourth quarter, GDP increased at an annualized rate of 2.7%. This positive growth was propped up by government spending, a resilient labor market and consumer spending. As a result of the atrocities of the Russia-Ukraine war, Saudi-Iranian oil concerns, and a rise in protectionist measures, commodity pricing has skyrocketed in lockstep with persistent inflation, which is anticipated to carry over well into 2023. Federal reserve officials remain committed to taming inflation and reducing the central bank’s balance sheet for the foreseeable future, approving seven interest rate hikes throughout 2022, with more anticipated during 2023.

## Commercial Real Estate

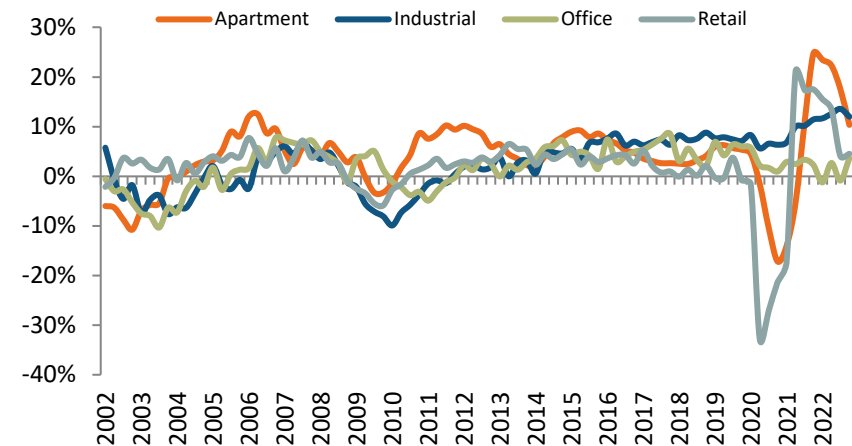
- To wrap up 2022, total CRE transaction activity for the quarter decreased by -62% YoY, with annual transaction activity down -15% YoY. The office sector transaction volumes in the U.S. have notably not recovered to pre-pandemic levels. While office sector fundamentals signaled mild improvement, the sector faces significant headwinds in the capital markets, driven by a dramatic increase in the cost of debt and the evolving nature of white-collar employers’ stance on return-to-office.
- Transaction cap rates (4.9%) remained relatively flat, expanding only 2 bps during the quarter. This increase comes after historic low cap rates in experienced in 4Q21 and 2Q22. Current valuation cap rates expanded for all major property sectors, led by retail (+30 bps), and followed by apartment (+23 bps), industrial (+19 bps) and office (+19 bps).
- NOI growth has substantially diverged between property sectors. Apartment sector fundamentals are as strong as ever. With the affordability of home ownership seemingly eroded, Apartment NOI expanded (+10%) YoY. Industrial NOI expanded (+12%) YoY on the back of companies’ investments in direct-to-customer distribution.
- 10-year treasury bond yields remained elevated, ending the quarter at 3.9%. As economists expected rates moved significantly higher throughout 2022, with the potential to climb further in 2023.

Current Value Cap Rates by Property Type



Source: NCREIF

4 Qtr Rolling NOI Growth



Source: NCREIF

# United States Property Matrix (4Q22)

## INDUSTRIAL

- In 4Q22, industrial properties returned -3.56% and underperformed the NPI by 6 bps.
- Transaction volumes decreased to \$33 billion in the fourth quarter of the year, resulting in an 58% decrease year-over-year. Individual asset sales decreased 46% year-over-year, while portfolio purchases turned in a year-over-year volume decrease of 88%. At \$33 billion, the industrial sector decreased by \$4 billion quarter-over-quarter.
- The industrial sector turned in NOI growth of 12.0% over the past year. NOI continues to reach all time highs for the sector.
- Vacancy decreased by 61 bps year-over-year to 1.5%. Vacancy in the sector decreased 4 bps from last quarter, reaching all-time historic lows. E-commerce continues to drive demand across the sector.
- Industrial cap rates slightly compressed approximately 4 bps from a year ago, to 3.6%. Industrial overall fundamentals still top all property sectors.

## MULTIFAMILY

- The apartment sector delivered a -3.21% return during the quarter, outperforming the NPI by 29 bps.
- Transaction volume in the fourth quarter of 2022 decreased to \$50 billion, resulting in a decrease of 69% year-over-year. Transaction volume for the sector decreased from the third quarter but it still high relative to historical levels. This volume continues to make multifamily the most actively traded sector for the nineteenth straight quarter.
- Cap rates remained steady at 3.8% quarter-over-quarter, increasing 7 bps year-over-year. Multifamily cap rates remain at low levels relative to prior years, driven by continued increases in valuation.
- The multifamily sector saw increasing vacancy rates throughout the entirety of 2020 due to the global pandemic. Through 2021, the sector appeared to have shaken that trend although vacancy rates remained steady during the last 3 quarters. Vacancy rates increased by 43 bps quarter-over-quarter. The aging millennials have begun shifting their desires to suburban living, but continued home price appreciation has deterred the full effect of this migratory trend.

## OFFICE

- The office sector returned -4.80% in 4Q22, 130 bps below the NPI return over the period.
- Transaction volumes decreased by 65% year-over-year in the fourth quarter. Transaction volume equated to \$20 billion for the quarter, a decrease of \$10 billion quarter-over-quarter. Office transaction levels have regressed from 3Q22 but not quite to levels seen during the COVID-19 pandemic.
- Office sector vacancy rates have expanded since the beginning of the pandemic due to work from home orders and uncertainty revolving around the future of office space. Office continues to be the highest vacancy property type at 12.79%, slightly decreasing by 18 bps from last quarter.
- NOI growth in the office sector increased quarter-over-quarter by 477 bps to 1.15% and appears to be in the midst of its recovery to pre-pandemic levels.
- Office cap rates expanded from a year ago, sitting at approximately 4.8%. Office-using job growth was stunted significantly through out 2020 due to work from home orders. Though we are observing a slow but steady flow back to in-office work, there is still uncertainty in the sector as many companies remain hesitant.

## RETAIL

- As of 4Q22, the retail sector delivered a quarterly return of -1.61%, outperforming 190 bps compared to the NPI.
- Transaction volumes totaled \$16 billion in the fourth quarter, decreasing 57% year-over-year. Single asset transactions accounted for just over 82% of all sales volume for the quarter.
- Cap rates have remained fairly steady within the sector over the last year at 5.3%. Current valuation cap rates expanded quarter-over-quarter by 30 bps due to valuation adjustments made across the sector in general.
- NOI growth increased from the prior quarter to 4.89% as of the fourth quarter. Retail has begun its slow recovery as a large portion of stores nationally have opened and operate safely.
- Retail vacancy rates decreased over the quarter by 20 bps, and down 113 bps over the past year to 7.8%. Many big box stores have closed as the need for retail space shrinks, translating to a negative outlook for rent growth. Paired with the global economic crisis, which has had a significant negative impact on this sector.

# Global Real Estate Market Update (4Q22)

- Prolonged high inflation, discouraging interest rates, escalating debt costs and pessimistic views on economic growth have all contributed to property acquisitions plunging in the final quarter. Year over year, deal volumes have contracted by 47%. Capital is expected to remain on the sidelines, as sellers are apprehensive towards taking a significant haircut on asking prices. Inversely, buyers are standing pat awaiting a further decrease in valuations that are accretive.

- Tangible effects of these challenges can be witnessed in the EMEA region, with deal volume falling 70% YOY. Transaction activity in the U.K. was down 64%, in Germany by 85% and in France by 45%. Germany was the most affected of the top 10 global markets, particularly hampered with sanctions on Russian energy exports and spikes in financing costs resulting in yield compression. These headwinds have seen the number of completed deals at its lowest in a decade.

- The U.S. experienced a 63% decline in transaction activity with multifamily and industrial remaining the top remaining sectors with sturdy fundamentals. Despite this, investment volume in these property types have decreased by 70% and 58% YOY.

- The Asia Pacific market is expected to have regional inflationary pressures decline in 2023, with limited interest hikes foreseen in the future. Mainland China, despite several lockdown periods, has led the recovery with escalated office and retail leasing demand. Hospitality is foreseen to have modest growth with the return of Chinese tourism in 2023, before returning pre-pandemic levels. Logistics leasing demand in the region is expected to subside with the moderation of e-commerce sales growth. Additionally, cost saving initiatives from occupiers can see outsourcing operations to third-parties.

- Global retail sales are expected to soften in the first half of 2023 as pressure mounts on disposable incomes particularly in Europe and North America. Many retailers have prioritized profitability and operational costs, but the rebasing of rents over recent years in mature markets, geographic diversification by well-capitalized operators, and experimentation with new formats should provide support for the best locations.

- In the fourth quarter, demand for logistics and industrial in the US remained widespread with strong fundamentals. Nevertheless, rent growth is expected to moderate relative to the 2022 record highs. This healthy demand is correlated to larger acquisitions to capitalize on the strength of the market. Roughly 20% of projects under construction into next year are larger than 500,000sf, compared to roughly 5% of existing inventory. This new delivery of supply will alleviate pressure to markets experiencing vacancy rates less than 1%.

- Investment into U.S. multifamily declined and cap rates have expanded by around 100-150 bps since their peak in Q1 2022. Across Europe, house price growth eased or began to fall as mortgage rates increased and sentiment declined, while transaction volumes also softened in the region during the fourth quarter. Bucking the trend, Asia Pacific multifamily investment volumes bounced back, with China particularly active post-lockdown.

## Global Total Commercial Real Estate Volume - 2021 - 2022

\$ US Billions	Q4 2022	Q4 2021	% Change		% Change	
			Q4 22 - Q4 21	2022	2021	Full Year
Americas	126	341	-63%	674	784	-14%
EMEA	55	178	-69%	305	442	-31%
Asia Pacific	253	302	-16%	831	903	-8%
<b>Total</b>	<b>435</b>	<b>820</b>	<b>-47%</b>	<b>1810</b>	<b>2130</b>	<b>-15%</b>

Source: Real Capital Analytics, Inc., Q4' 22

## Global Outlook - GDP (Real) Growth % pa, 2022-2024

	2022	2023	2024
<b>Global</b>	<b>5.9</b>	<b>4.3</b>	<b>3.6</b>
<b>Asia Pacific</b>	<b>4.4</b>	<b>4.6</b>	<b>4.4</b>
Australia	4.1	2.8	2.5
China	4.5	5.2	5.1
India	8.7	7.3	6.5
Japan	1.8	1.8	1.1
<b>North America</b>	<b>2.7</b>	<b>2.0</b>	<b>1.9</b>
US	2.6	2.0	1.9
<b>Middle East</b>	<b>4.1</b>	<b>4.4</b>	<b>4.5</b>
<b>European Union</b>	<b>3.0</b>	<b>2.1</b>	<b>2.0</b>
France	2.7	1.8	1.7
Germany	1.8	2.3	2.0
UK	3.7	1.2	1.7

Source: Bloomberg