



Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 19

MEETING DATE: September 18, 2019

SUBJECT: Quarterly Investment Performance Report
Real Estate

SUBMITTED FOR: ___ Consent ___ Deliberation and Action X Receive and File

RECOMMENDATION

Staff recommends the Board receive and file the Townsend Real Estate Portfolio Performance Measurement Report for the period ending June 30, 2019.

PURPOSE

This item complies with SCERS' investment policy statement reporting requirements and contributes to the effective management and oversight of investment activities.

DISCUSSION

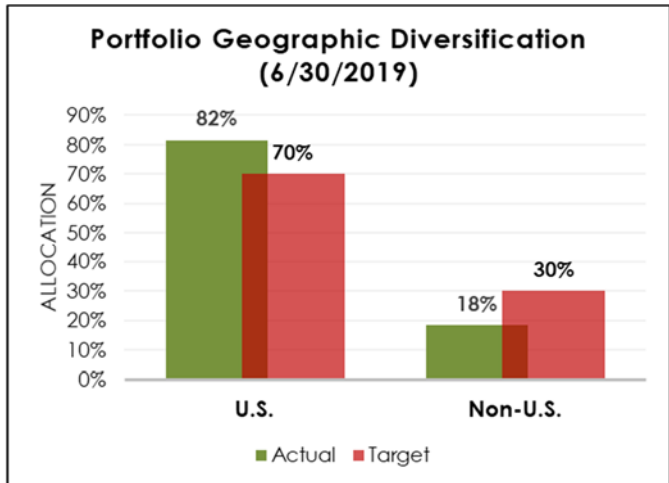
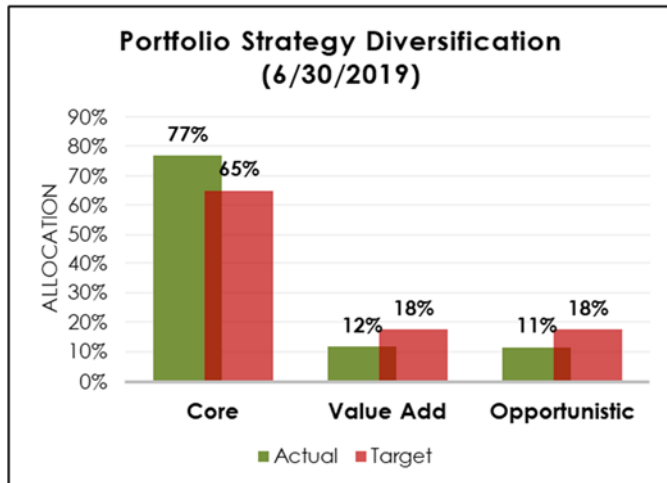
This memorandum provides a summarized table of SCERS' Real Estate period returns, which complements Townsend's Quarterly Performance Review, and it highlights notable manager performance, along with any recent alternative investments made by SCERS.

During the quarter, SCERS made redemption requests from two core open-end funds in order to bring down the overweight in the SCERS Real Estate portfolio. After the redemptions, SCERS' real estate allocation will reduce from 9.0% to 8.5%, still above the target allocation of 7.0% but within the permissible range of 5.0%-9.0%. To date, SCERS has been comfortable holding a higher than target weight while the real assets portfolio is being built out.

**SCERS REAL ESTATE PERFORMANCE SUMMARY
6/30/2019**

SUB-ASSET CLASS	Quarter 6/30/19	1-Year	3-Year	5-Year	Since Inception	Since Inception Date
SCERS Real Estate Portfolio	1.7%	5.6%	9.8%	10.4%	8.3%	Nov-86
(65%) NFI-ODCE + (35%) NFI-ODCE	0.9%	5.9%	7.0%	9.2%	6.7%	Nov-86
Core Portfolio	2.0%	5.2%	9.4%	10.1%	6.6%	Nov-86
Separate Account	-15.4%	1.3%	8.3%	8.6%	8.8%	Nov-86
Commingled Funds	2.1%	8.2%	10.4%	11.2%	7.1%	Sep-13
NFI-ODCE Index	0.8%	5.5%	6.6%	8.8%	6.3%	
Non-Core Portfolio	1.1%	6.9%	11.1%	12.7%	5.9%	Jun-06
Value Add Portfolio	0.8%	2.5%	9.4%	11.4%	4.5%	Jun-06
Opportunistic	1.2%	10.0%	12.5%	12.7%	5.9%	May-13
NFI-ODCE + 1% Index	1.0%	6.5%	7.6%	9.8%	7.3%	

SCERS PORTFOLIO DIVERSIFICATION



SCERS PORTFOLIO RESULTS

For the quarter ended June 30, 2019, SCERS' Real Estate portfolio meaningfully outperformed against the NFI-ODCE blended benchmark, +1.7% versus +0.9%, due to the positive out performance in the core commingled fund portfolio (+2.1%).

Below are notable top and bottom performing funds during the quarter ended June 30, 2019:

- Top performing funds:
 - Core:
 - Prologis Targeted U.S. Logistics: +4.1%
 - Prologis European Logistics Fund: +3.1% in U.S. dollars (+1.7% in Euros)
 - Non-Core:
 - NREP Nordic Strategies Fund II: +6.5% in U.S. dollars (+5.1% in Euros)
 - ECE European Prime Shopping Center Fund II: +4.7% in U.S. dollars (+3.3% in Euros)

Bottom performing funds:

- Core:
 - Clarion Lion Properties Fund: +1.2%
 - Principal U.S. Property Account: +1.3%
- Non-Core:
 - NREP Nordic Strategies Fund I: -15.4% in U.S. dollars (-16.5% in Euros)
 - Carlyle China Rome: -0.3%

NEW INVESTMENTS

During the quarter ended June 30, 2019, SCERS made the following new investments:

- None

New investments made after the quarter:

- None

ATTACHMENT

Townsend's Real Estate Portfolio Performance Measurement Report for the Quarter ended June 30, 2019.

Prepared by:
/S/

JR Pearce
Investment Officer

Reviewed by:
/S/

Steve Davis
Chief Investment Officer

/S/

Eric Stern
Chief Executive Officer



TOWNSEND[®]
GROUP

an Aon company

Real Estate Portfolio

Performance Measurement Report

SECOND QUARTER 2019



SCERS Real Estate Portfolio Overview

- In July 2017, Sacramento County Employees' Retirement System ("SCERS") Board adopted a series of changes to its Real Estate Investment Policy Statement. Real Estate, housed within the Real Return asset category, now includes Core, Non-Core and Non-U.S. Private Real Estate; though there is no current exposure to Real Estate Investment Trusts ("REITs"), REITs are included within the Equity allocation. This report will focus on the SCERS Private Real Estate portfolio.
- SCERS targets 7.0% to Real Estate with an allowable range of 5.0% to 9.0%. As of the end of the Second Quarter, 2019 (the "Quarter"), the Real Estate Portfolio was above the allowable range at 9.1%. Core Real Estate currently makes up 77.2% of the portfolio, with Non-Core Real Estate making up the remaining 22.8%. Townsend and Staff are evaluating portfolio rebalancing options to reduce Real Estate exposure.

SCERS' Real Estate Portfolio Construction:

	Minimum	Target	Maximum
Total Real Estate Program	5.0%	7.0%	9.0%
	Minimum	Target	Maximum
Core Real Estate	50%	65%	80%
Non-Core Real Estate	20%	35%	50%
Non-U.S. Real Estate	0%	0%	30%

- 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-four 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' 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 IMA Portfolio. Given the size of the 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 1st 2018.
- The loan-to-value ratio of the Private Real Estate Portfolio was 32.9% at the end of the Second Quarter of 2019. The loan-to-value ratio of the Core Portfolio was 29.9%, 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 21.5% as of the Second Quarter. The Non-Core Portfolio reported a loan-to-value ratio of 41.4%.

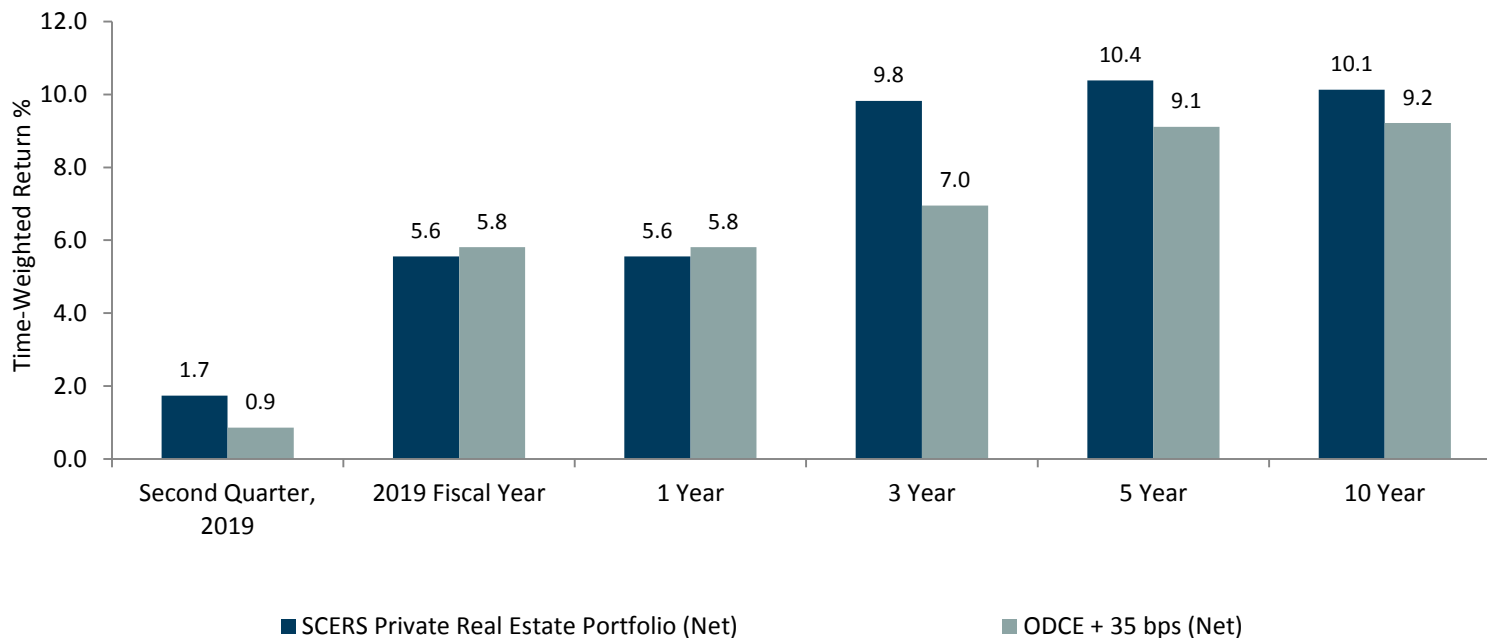
Portfolio Funding Status

- The following slides provide a review of key information of the SCERS Real Estate Portfolio (the “Portfolio”) through June 30, 2019.
- A detailed performance report is also provided in **Exhibit A**.
- Figures exclude commitments / redemptions / dispositions approved subsequent to Quarter-end.

SCERS Portfolio Snapshot <i>As of June 30, 2019</i>	Market Value (in millions of dollars)*	% of SCERS Plan
SCERS Total Plan Assets	9,718	100.0%
Private Portfolio Target	680	7.0%
Private Portfolio Permissible Range		5.0-9.0%
Private Real Estate		
Core Portfolio	681	7.0%
Non-Core Portfolio	201	2.1%
Total SCERS Private Real Estate Market Value	882	9.1%
Total SCERS Private Real Estate Unfunded Commitments	193	2.0%

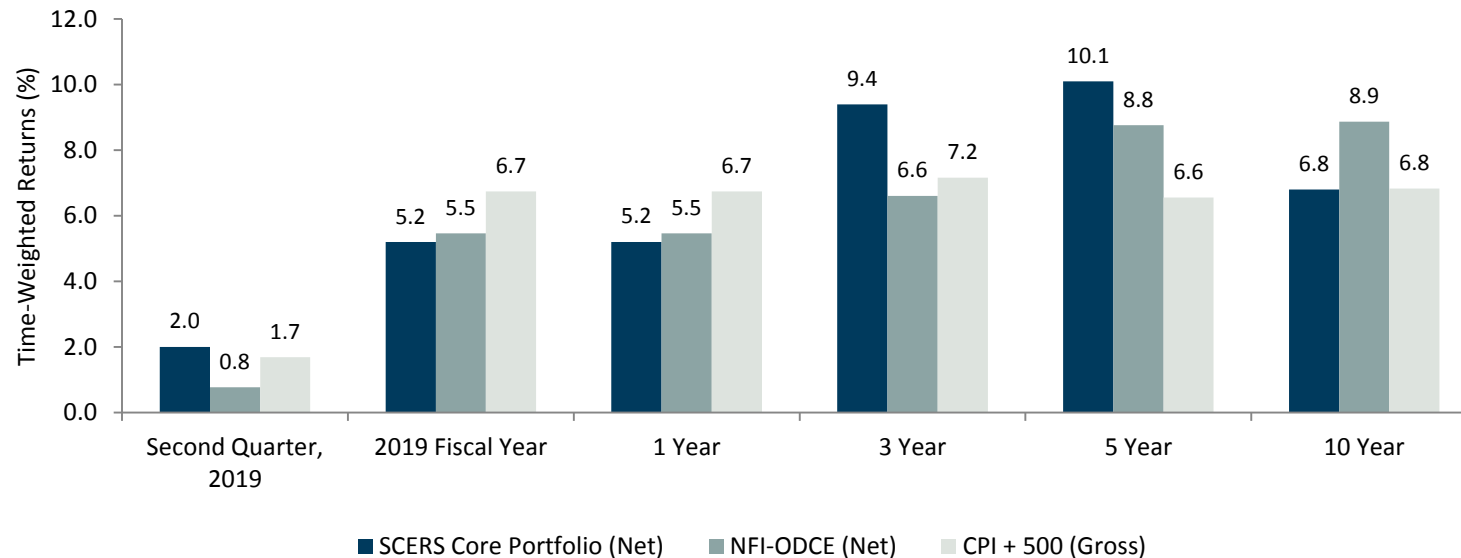
* Figures may not add due to rounding.

Private Real Estate Portfolio 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.
- On a net of fee basis, the SCERS Total Real Estate Portfolio outperformed the blended benchmark for all time periods, with the exception of the fiscal and one-year driven by write-downs in the liquidating Separate Account Portfolio.

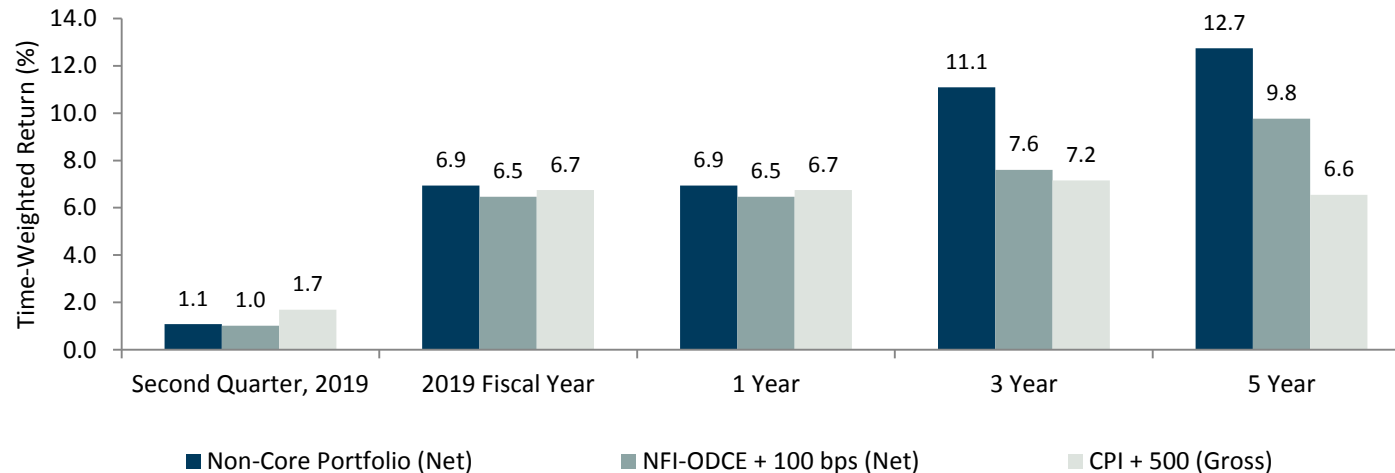
Core Portfolio Performance



- The SCERS Core Portfolio consists of nine open-end Core Commingled funds. The Core Commingled Fund exposure includes Morgan Stanley's Prime Property Fund, MetLife Core Property Fund, Jamestown Premier 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 with exception of the fiscal, one-year and ten-year periods.
- The Core Portfolio has experienced a drag on fiscal year and one-year performance as a result of the liquidation of IMA assets which were being held above fair market value.
- The Core Portfolio has recently benefited from the industrial exposure, with Prologis U.S. generating one-year net returns of 14.3% leading as the strongest contributor. Prologis Europe has generated strong local currency returns (12.9% over the one-year period), but currency fluctuation resulted in a one-year USD net return of 9.9%.
- The SCERS Core Portfolio performed in line with or above the CPI + 500 bps (the SCERS Real Asset benchmark), with the exception of the fiscal and one-year period.

*EX-US funds produced the following 2Q19 net returns in local currency: Prologis European Logistics Fund (Euro) 1.7%

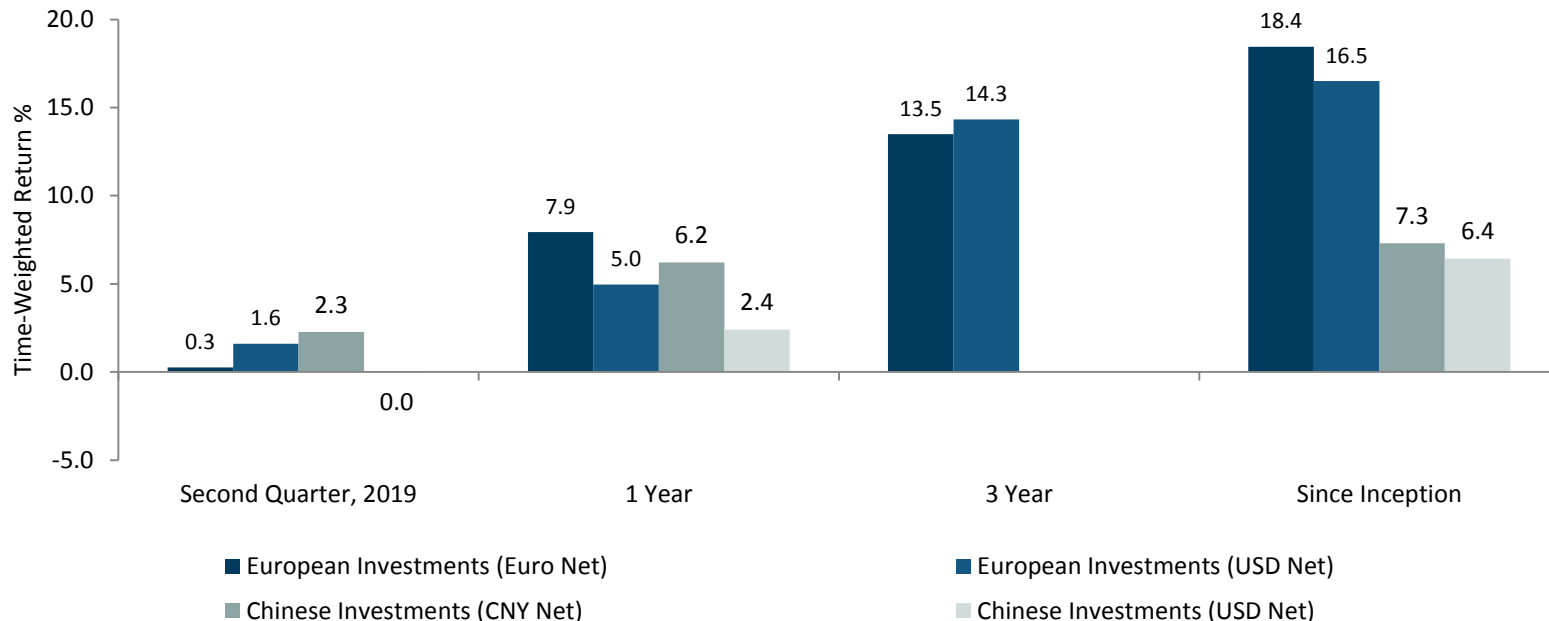
Non-Core Portfolio Performance



- The SCERS Non-Core Portfolio includes both Value Add and Opportunistic Real Estate strategies, which are defined in the Glossary of Terms. As displayed above, the SCERS Non-Core Portfolio outperformed the NFI-ODCE + 100 basis points over all time periods.
- Outperformance over the last year is attributable primarily to Opportunistic strategies.
 - The following Opportunistic investments were particularly accretive and have outperformed relative to the NFI-ODCE + 100 bps (Net) over the trailing year: KKR Real Estate Partners America generated a 8.3% net return, Och-Ziff Real Estate Fund III generated a 15.9% net return, and CIM Fund VIII resulted in a 7.1% net return.
 - The following Value Added investments also contributed positively to outperformance of the Non-Core portfolio: Hammes Partners II (15.5%), and NREP Nordic strategies Fund II (13.3%).
- Over the trailing quarter, NREP Nordic Strategies Fund I returns were distorted due to accrued incentive fees that had previously not been reported on.

* EX-US funds produced the following 2Q19 net returns in local currency: Carlyle China Realty Fund (Chinese Yuan) 3.4%, Carlyle's Project Rome (Chinese Yuan) 2.0%, DRC European Real Estate Debt Fund II (Pound Sterling) 4.0%, ECE European Prime Shopping Center Fund II (Euro) 3.3%, NREP Nordic Strategies Fund (Euro) -16.5%, NREP Nordic Strategies Fund II (Euro) 5.1% and NREP Nordic Strategies Fund III (Euro) 1.6%.

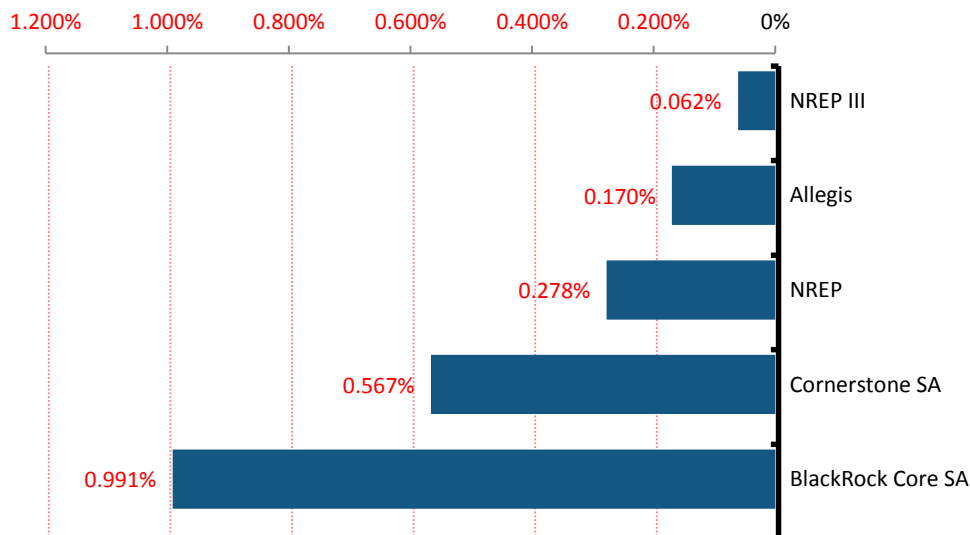
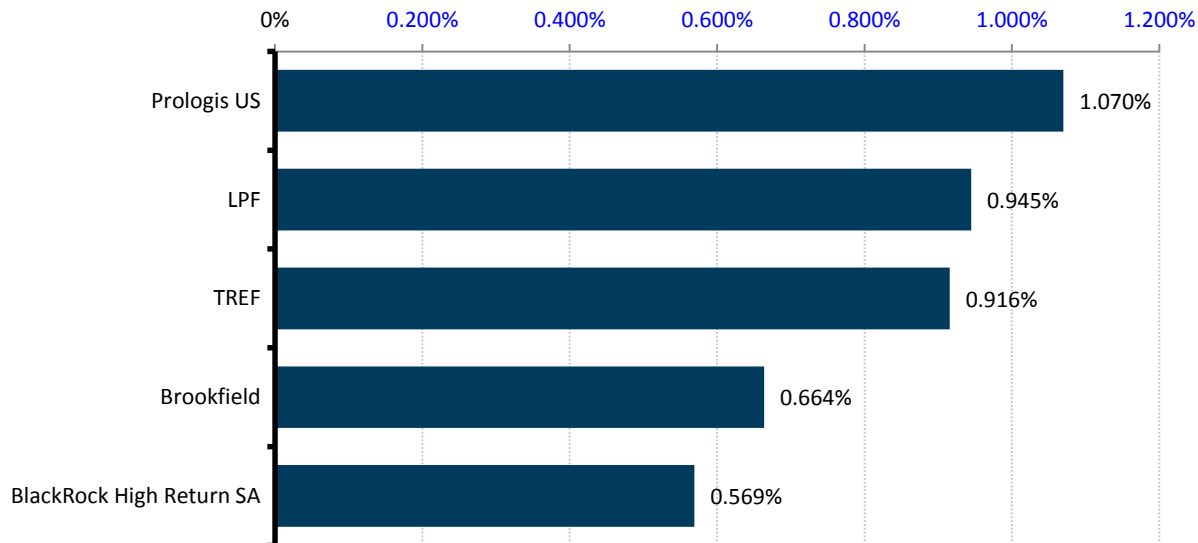
Ex-US Portfolio Performance



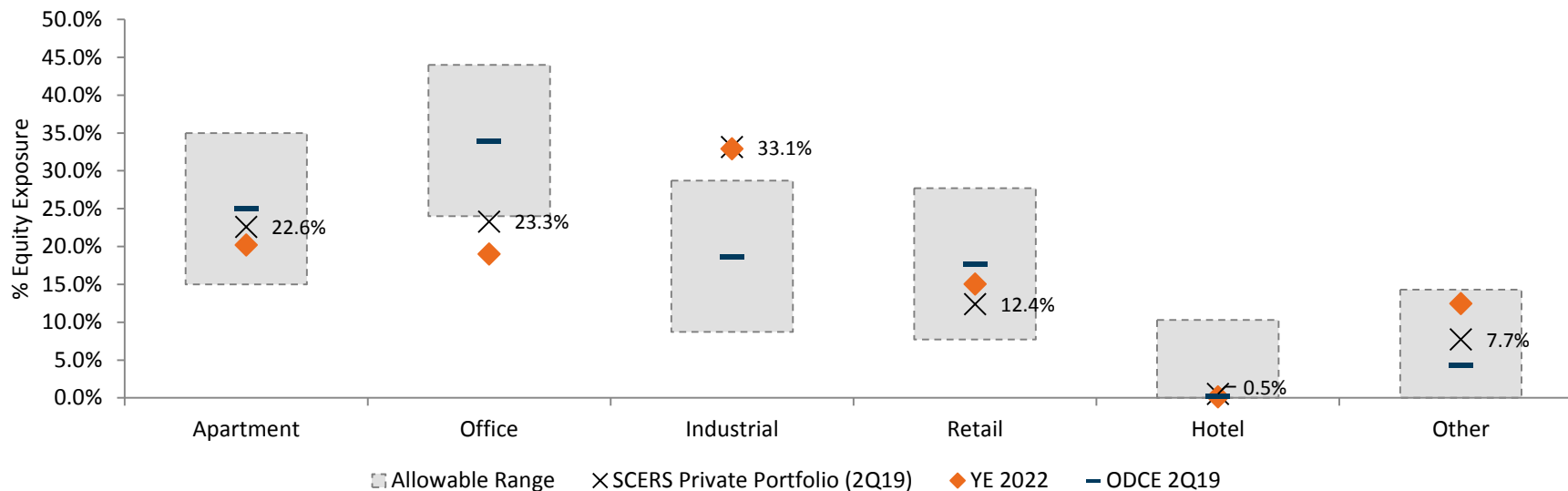
- Approximately 18.4% of the SCERS Portfolio is comprised of Ex-US investment. SCERS does not currently hedge its foreign currency exposures and pays liabilities in US Dollars. As such, FX movement will impact performance for Ex-US investments. The chart above isolates European and Asian investments and displays performance both before and after currency conversion.
- Currency movement has negatively impacted foreign investments over recent time periods, with the exception of movement in the Euro over the trailing quarter. Chinese investments in dominant local currencies has been positive and accretive to SCERS' primary benchmark. Currency impacts on performance tend to be cyclical in nature.
- The SCERS Euro Denominated Composite includes: ECE European Prime Shopping Center Fund II (Euro) 3.3%, NREP Nordic Strategies Fund (Euro) -16.5%, NREP Nordic Strategies Fund II (Euro) 5.1%, NREP Nordic Strategies Fund III (Euro) 1.6%, and Prologis European Logistics Fund (PELF) 1.7%.
 - Since Inception period begins 1Q15.
 - For the purposes of this composite, DRC has been excluded since its a pound denominated fund.
- The SCERS Chinese Yuan Composite includes: Carlyle China Realty Fund (Chinese Yuan) 3.4% and Carlyle's Project Rome (Chinese Yuan) 2.0%.
 - 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 Fiscal Year, performance was driven primarily by Core OECFs, with Prologis Targeted U.S. Logistics Fund contributing the greatest proportion of overall returns.
 - The Lion Properties Fund and the Townsend Real Estate Fund also contributed significantly to overall portfolio performance.
- During the Fiscal Year, the BlackRock Core Separate Account was written down, resulting in negative performance over the period.
 - The Core Separate Account detracted approximately 1% from SCERS total portfolio over the Fiscal Year.
 - Despite recent negative performance, the Core Separate Account contributed positively to longer-term performance.

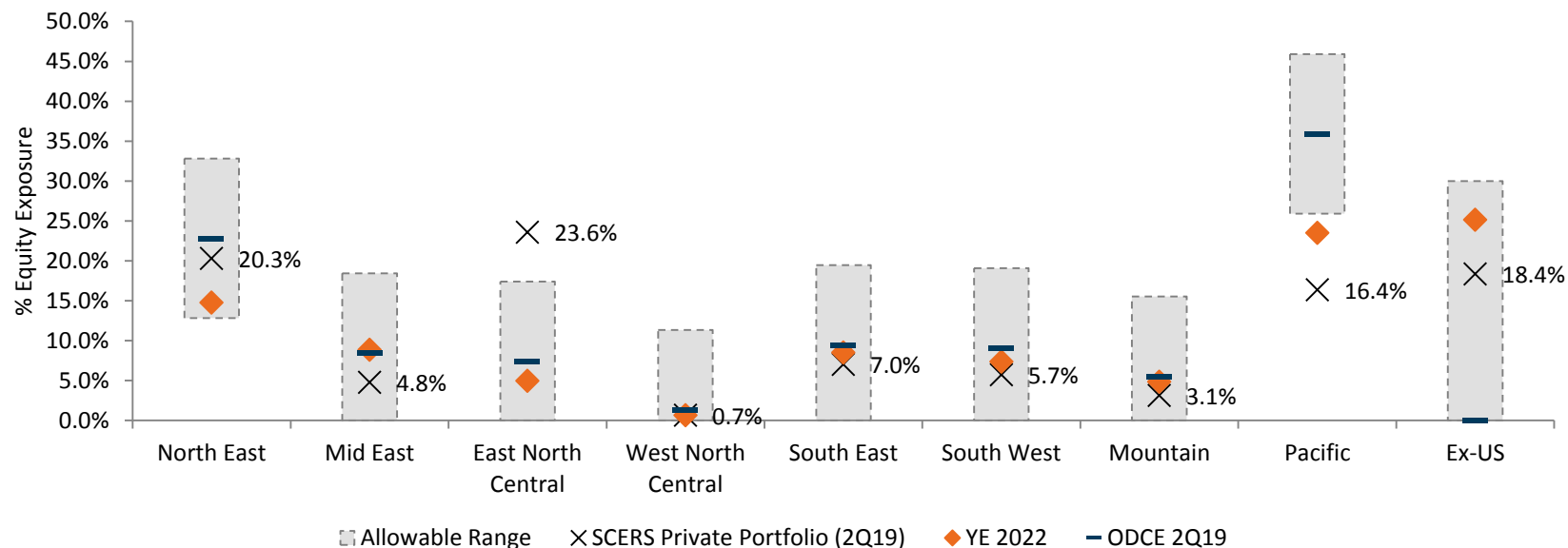


Real Estate Private Portfolio Diversification – Property Type



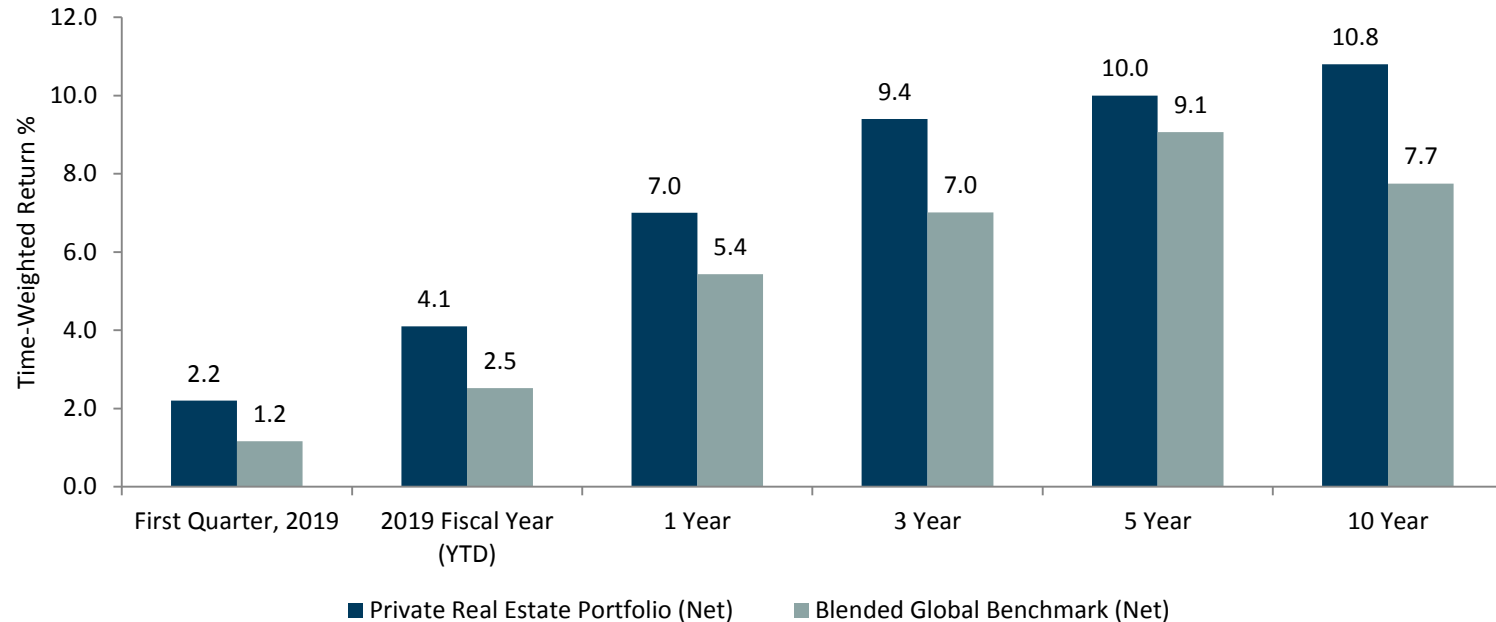
- The diversification of the Private Portfolio is compared to the diversification of the NFI-ODCE, with a permissible deviation of $\pm 10.0\%$ for each property type. The Real Estate Policy also allows for temporary deviations in order to provide SCERS with the flexibility required to overweight or underweight property types during certain parts of the market cycle.
- As of the Second Quarter, the Private Portfolio was in compliance across all property types, with the exception of office and industrial. Given a majority of industrial exposure is within open-ended vehicles, Townsend and Staff will continue to monitor the property type fundamentals for opportunities to tactically reduce exposure if secular growth trends moderate.
- Favorable views on the industrial property type fundamentals support increasing exposure in today's environment. SCERS made a \$70 million commitment in 2014 to the industrial space (in both the US and Europe). SCERS made an additional contribution of \$15 million to Prologis USLF in the 2nd Quarter of 2018, which further increased exposure. Going forward, exposure to logistics assets will increase as capital is called by Carlyle for the Project Rome co-invest and an additional \$15 million commitment to Prologis' European vehicle.
- The "Other" property type exposure represents Och-Ziff Real Estate Fund III (parking, senior housing and cell towers), KKR Real Estate Partners Americas (senior housing), CIM Fund VIII (condominiums), Hammes Partners II and III (medical office), Jamestown Premier Property Fund (signage – One Times Square), 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 Prime Property Fund (self storage).

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 30% of the Total Private Portfolio.
- As of the Second Quarter, the Private Portfolio was in compliance across all region except for the Pacific and East North Central region. Townsend and Staff continue to evaluate future opportunities that align with SCERS Portfolio goals in the Pacific region.
- Tactical overweight/underweight positions may exist over time.
- The Private Portfolio's international exposure is 18.4%, well within its 30% constraint, but will increase as KKR Real Estate Partners Americas, Och-Ziff Real Estate Fund III, NREP Nordic Strategies Fund II & III, ECE European Prime Shopping Centre Fund II, and Prologis European Logistics Fund continue to call capital and purchase assets in Europe.
- In 2017, SCERS committed to Carlyle China Realty (\$10m) and Project Rome co-invest (\$20m initial; \$20m re-up April 2017) which will increase Ex-US exposure and diversify international exposure as both investments are 100% China. As of 2Q19, these investments provide \$41 million in equity exposure to China.
- Ex-US exposure consists of 3.4% in China, 2.0% in Denmark, 2.0% in Finland, 1.9% in Germany, 1.7% in France, 1.5% in Sweden, 1.3% in the UK and 4.7% in other countries.

Private Real Estate Performance – Global Ancillary Benchmark (1Q19)



- The Global Ancillary Benchmark is made-up of a 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 18.4%, well within its 30% 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 over all time periods.

Exhibit A: Performance Flash Report



Portfolio Composition (\$)								
Total Plan Assets	Allocation		Market Value		Unfunded Commitments		Remaining Allocation	
9,717,909,284	Core	7.0%	680,596,931	7.0%	14,784,488	0.2%	-15,127,769	-0.2%
	Non-Core	0.00% - 5.00%	201,232,284	2.1%	178,647,046	1.8%	-161,226,371	-1.7%
	Total	7.0%	881,829,215	9.1%	193,431,534	2.0%	-176,354,140	-1.8%

Performance Summary	Quarter (%)		1 Year (%)		3 Year (%)		5 Year (%)	
	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET
Core Portfolio (Commingled Funds & Separate Accounts)	2.2	2.0	6.1	5.2	10.7	9.4	11.5	10.1
Non-Core Portfolio (Value Added & Opportunistic, 1Q2007 Forward)	3.1	1.1	11.1	6.9	14.4	11.1	16.4	12.7
Private Real Estate Portfolio	2.4	1.7	7.3	5.6	11.6	9.8	12.3	10.4
NFI-ODCE (Core)	1.0	0.8	6.4	5.5	7.6	6.6	9.8	8.8
NFI-ODCE + 100 bps (Non-Core)	1.2	1.0	7.4	6.5	8.6	7.6	10.8	9.8
NFI-ODCE + 35 bps (Private Portfolio)	1.1	0.9	6.8	5.8	7.9	7.0	10.1	9.1

Funding Status (\$)	Investment Vintage Year	Commitment Amount	Funded Amount	Unfunded Commitments	Capital Returned	Market Value	Market Value (%)	Market Value + Unfunded Commitments (%)
Core Commingled Funds								
Brookfield Premier Real Estate Partners	2018	100,000,000	100,000,000	0	3,103,828	102,740,334	11.7	9.6
Jamestown Premier Property Fund	2014	15,000,000	21,253,253	0	13,046,318	18,397,265	2.1	1.7
Lion Properties Fund	2018	152,400,000	153,209,767	0	6,002,496	155,505,371	17.6	14.5
MetLife Core Property Fund	2013	35,000,000	45,739,772	0	11,400,414	61,816,896	7.0	5.7
Prime Property Fund	2013	35,000,000	45,920,329	0	10,920,329	62,145,779	7.0	5.8
Principal U.S. Property Account	2015	35,000,000	35,000,000	0	0	47,176,963	5.3	4.4
Prologis European Logistics Fund ⁴	2017	47,950,142	34,479,993	14,784,488	2,551,111	39,966,140	4.5	5.1
Prologis Targeted U.S. Logistics Fund	2015	50,000,000	50,000,000	0	6,144,378	73,497,105	8.3	6.8
Townsend Real Estate Fund, L.P.	2016	90,000,000	101,071,941	0	11,071,941	115,831,282	13.1	10.8
Core Commingled Funds	1986	560,350,142	586,675,055	14,784,488	64,240,815	677,077,135	76.8	64.3
Core Separate Accounts								
BlackRock Core Separate Account	1995	0	852,777,064	0	1,217,078,847	3,158,019	0.4	0.3
Cornerstone Separate Account	2004	0	255,678,854	0	349,062,365	361,776	0.0	0.0
Core Separate Accounts	1996	0	1,108,455,918	0	1,566,141,212	3,519,795	0.4	0.3
<i>Total BlackRock Separate Account</i>	<i>1996</i>	<i>0</i>	<i>871,578,110</i>	<i>0</i>	<i>1,246,578,847</i>	<i>3,023,641</i>	<i>0.3</i>	<i>0.3</i>
Total Core Portfolio	1986	560,350,142	1,695,130,973	14,784,488	1,630,382,026	680,596,931	77.2	64.7
Value Added Portfolio								
Allegis Value Trust ⁵	2006	25,000,000	25,550,296	0	30,459,296	922,378	0.1	0.1
Asana Partners Fund II	2019	35,000,000	262,500	34,737,500	0	-121,791	0.0	3.2
DRC European Real Estate Debt Fund II	2013	50,007,963	48,584,007	14,162,942	44,059,804	8,610,202	1.0	2.1
ECE European Prime Shopping Centre Fund II C	2015	33,611,623	16,982,867	13,852,820	2,211,389	19,642,877	2.2	3.1
Hammes Partners II	2015	25,000,000	25,462,992	2,430,568	16,015,927	16,344,662	1.9	1.7
Hammes Partners III	2018	25,000,000	2,241,978	28,883,022	173,883	1,545,552	0.2	2.8
NREP Nordic Strategies Fund	2014	17,322,210	22,485,011	0	23,563,428	13,312,494	1.5	1.2
NREP Nordic Strategies Fund II	2016	35,176,432	27,678,997	8,376,955	4,204,159	31,722,440	3.6	3.7
NREP Nordic Strategies Fund III	2018	39,019,632	7,659,049	28,740,730	0	7,512,919	0.9	3.4
Value Added Portfolio	1986	285,137,860	176,907,697	131,184,537	120,687,886	99,491,733	11.3	21.5

Funding Status (\$)	Investment Vintage Year	Commitment Amount	Funded Amount	Unfunded Commitments	Capital Returned	Market Value	Market Value (%)	Market Value + Unfunded Commitments (%)
Opportunistic Portfolio								
BlackRock High Return Separate Account	2016	0	18,801,046	0	29,500,000	-134,378	0.0	0.0
Carlyle China Project Rome Co-Investment	2017	40,000,000	31,989,923	9,222,207	0	32,272,930	3.7	3.9
Carlyle China Realty	2017	10,000,000	9,145,091	2,334,314	1,593,478	7,423,511	0.8	0.9
CIM Fund VIII	2015	35,000,000	35,171,384	3,968,029	5,428,705	38,002,112	4.3	3.9
KKR Real Estate Partners Americas		35,000,000	0	16,606,662	0	10,165,759	1.2	2.5
Och-Ziff Real Estate Fund III ¹	2014	35,000,000	24,120,547	15,331,297	21,103,541	14,010,617	1.6	2.7
Opportunistic Portfolio	1991	155,000,000	119,227,991	47,462,509	57,625,724	101,740,551	11.5	13.9
Total Non-Core Portfolio 1Q 2007 Forward	2007	440,137,860	296,135,688	178,647,046	178,313,610	201,232,284	22.8	35.3
Total Private Portfolio								
SCERS	1986	1,000,488,002	1,991,266,661	193,431,534	1,808,695,636	881,829,215	100.0	100.0

¹ Fees for this Fund are charged on total commitments. As a result of Och-Ziff only calling a portion of SCERS' committed capital, the gross to net spread is significant and expected to normalize over time.

² Represent composite performance of Prologis Targeted Europe Logistics Fund and Prologis European Logistics Fund

³ Net IRR and Equity Multiple may be missing due to investment managers being unable to provide historical cash flows back to inception.

Returns (%)	Market Value (\$)	Quarter				Fiscal Year 2019				1 Year				3 Year			
		INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET
Core Commingled Funds																	
Brookfield Premier Real Estate Partners	102,740,334	1.1	1.3	2.4	1.9												
Jamestown Premier Property Fund	18,397,265	0.8	1.6	2.4	2.3	3.0	2.0	5.0	4.6	3.0	2.0	5.0	4.6	4.0	6.8	11.0	8.7
Lion Properties Fund	155,505,371	0.9	0.5	1.4	1.2												
MetLife Core Property Fund	61,816,896	1.2	1.2	2.4	2.3	5.1	2.7	7.9	7.4	5.1	2.7	7.9	7.4	5.0	3.9	9.1	8.6
Prime Property Fund	62,145,779	1.0	1.1	2.1	1.8	3.9	4.4	8.4	7.2	3.9	4.4	8.4	7.2	4.1	5.1	9.4	8.2
Principal U.S. Property Account	47,176,963	1.1	0.5	1.5	1.3	4.4	3.4	7.9	6.9	4.4	3.4	7.9	6.9	4.6	4.2	9.0	8.0
Prologis European Logistics Fund ^c	39,966,140	1.4	2.0	3.4	3.1	5.6	6.5	12.4	9.9	5.6	6.5	12.4	9.9				
Prologis Targeted U.S. Logistics Fund	73,497,105	1.1	3.6	4.7	4.1	4.7	11.2	16.4	14.3	4.7	11.2	16.4	14.3	5.2	14.6	20.4	17.5
Townsend Real Estate Fund, L.P.	115,831,282	1.1	1.0	2.2	2.1	4.2	3.3	7.7	7.5	4.2	3.3	7.7	7.5	4.4	5.1	9.7	9.4
Core Commingled Funds	677,077,135	1.1	1.3	2.4	2.1	4.1	5.0	9.3	8.2	4.1	5.0	9.3	8.2	4.6	6.8	11.6	10.4
Core Separate Accounts																	
BlackRock Core Separate Account	3,158,019	2.9	-0.7	2.2	2.2	9.9	2.6	12.6	13.4	9.9	2.6	12.6	13.4	6.7	4.8	11.7	10.6
Cornerstone Separate Account	361,776																
Core Separate Accounts	3,519,795	-14.9	-0.5	-15.4	-15.4	-8.7	11.2	0.8	1.3	-8.7	11.2	0.8	1.3	0.1	9.3	9.1	8.3
<i>Total BlackRock Separate Account</i>	<i>3,023,642</i>	<i>0.1</i>	<i>3.2</i>	<i>3.2</i>	<i>2.8</i>	<i>-0.4</i>	<i>16.8</i>	<i>16.5</i>	<i>13.2</i>	<i>-0.4</i>	<i>16.8</i>	<i>16.5</i>	<i>13.2</i>	<i>2.8</i>	<i>10.0</i>	<i>13.1</i>	<i>10.7</i>
Total Core Portfolio	680,596,930	1.0	1.3	2.2	2.0	4.0	2.0	6.1	5.2	4.0	2.0	6.1	5.2	4.7	5.8	10.7	9.4
Value Added Portfolio																	
Allegis Value Trust ³	922,378																
Asana Partners Fund II	-121,791																
DRC European Real Estate Debt Fund II	8,610,202	4.2	-2.8	1.3	1.1	10.0	-3.8	5.9	4.8	10.0	-3.8	5.9	4.8	10.7	-3.2	7.2	6.0
ECE European Prime Shopping Centre Fund II C	19,642,877	2.8	2.4	5.2	4.7	1.5	5.0	6.2	4.0	1.5	5.0	6.2	4.0	0.4	15.1	15.6	13.0
Hammes Partners II	16,344,662	1.9	1.2	3.1	1.9	9.2	11.0	21.0	15.5	9.2	11.0	21.0	15.5	8.7	8.4	17.7	12.8
Hammes Partners III	1,545,552	0.4	2.3	2.7	-11.4												
NREP Nordic Strategies Fund	13,312,494	0.8	2.8	3.6	-15.4	4.0	-0.3	3.8	-15.6	4.0	-0.3	3.8	-15.6	6.6	9.8	16.8	8.5
NREP Nordic Strategies Fund II	31,722,440	-0.1	7.4	7.3	6.5	4.4	12.2	17.1	13.3	4.4	12.2	17.1	13.3	3.0	21.5	25.0	15.1
NREP Nordic Strategies Fund III	7,512,919	-0.4	6.1	5.8	2.5												
Value Added Portfolio	99,491,733	1.3	3.4	4.8	0.8	4.7	4.9	9.7	2.5	4.7	4.9	9.7	2.5	5.8	7.7	13.8	9.4
Opportunistic Portfolio																	
BlackRock High Return Separate Account	-134,378																
Carlyle China Project Rome Co-Investment	32,272,930	-0.3	0.3	0.0	-0.3	-0.7	4.7	3.9	2.5	-0.7	4.7	3.9	2.5				
Carlyle China Realty	7,423,511	0.4	1.1	1.6	1.1	-2.3	6.8	4.5	2.1	-2.3	6.8	4.5	2.1				
CIM Fund VIII	38,002,112	0.0	1.0	1.0	0.7	0.1	8.2	8.3	7.1	0.1	8.2	8.3	7.1	0.0	8.5	8.5	7.0
KKR Real Estate Partners Americas	10,165,759	0.5	1.6	2.1	1.4	16.5	-8.0	8.0	8.3	16.5	-8.0	8.0	8.3	33.0	-14.4	17.8	16.5
Och-Ziff Real Estate Fund III ¹	14,010,617	2.4	2.0	4.4	4.0	9.7	9.0	19.3	15.9	9.7	9.0	19.3	15.9	10.5	19.3	31.2	26.7
Opportunistic Portfolio	101,740,551	0.2	1.3	1.5	1.2	1.9	9.8	11.9	10.0	1.9	9.8	11.9	10.0	4.7	9.9	15.0	12.5
Total Non-Core Portfolio 1Q 2007 Forward	201,232,284	0.7	2.3	3.1	1.1	3.4	7.6	11.1	6.9	3.4	7.6	11.1	6.9	5.2	8.9	14.4	11.1
Total Private Portfolio																	
SCERS	881,829,214	0.9	1.5	2.4	1.7	3.8	3.4	7.3	5.6	3.8	3.4	7.3	5.6	4.7	6.6	11.6	9.8

Returns (%)	Market Value (\$)	Quarter				Fiscal Year 2019				1 Year				3 Year			
		INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET	INC	APP	TGRS	TNET
Ex-US Dollar Denominated Investments (In Local Currency)																	
Prologis Targeted Europe Logistics Fund (Euro)	€ 35,142,277	1.4	0.6	2.0	1.7	5.6	9.4	15.4	12.9	5.6	9.4	15.4	12.9	5.9	8.6	14.8	12.7
DRC European Real Estate Debt Fund II (Pound Sterling)	£6,780,534	4.3	0.0	4.3	4.0	10.0	0.0	10.0	8.9	10.0	0.0	10.0	8.9	10.7	-1.5	9.1	7.8
ECE European Prime Shopping Centre Fund II (Euro)	€ 17,271,982	2.8	1.0	3.8	3.3	1.5	7.8	9.3	7.0	1.5	7.8	9.3	7.0	0.3	14.1	14.7	12.2
NREP Nordic Strategies Fund (Euro)	€ 11,705,676	0.8	1.4	2.2	-16.5	4.1	2.6	6.7	-13.1	4.1	2.6	6.7	-13.1	6.6	9.1	16.0	7.8
NREP Nordic Strategies Fund II (Euro)	€ 27,893,542	-0.1	5.9	5.8	5.1	4.4	15.4	20.3	16.4	4.4	15.4	20.3	16.4	3.0	20.3	23.8	14.0
NREP Nordic Strategies Fund III (Euro)	€ 6,606,109	-0.4	5.2	4.9	1.6												
Indices																	
NFI ODCE+ 35bps				1.1	0.9			6.8	5.8			6.8	5.8			7.9	7.0
NFI-ODCE		1.0	0.0	1.0	0.8	4.1	2.2	6.4	5.5	4.1	2.2	6.4	5.5	4.3	3.2	7.6	6.6
NFI-ODCE + 100bps				1.2	1.0			7.4	6.5			7.4	6.5			8.6	7.6
CPI + 500 bps				1.7				6.7				6.7				7.2	

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			
Core Commingled Funds																
Brookfield Premier Real Estate Partners	102,740,334									1.7	5.6	7.4	5.9	4Q18	8.0	1.1
Jamestown Premier Property Fund	18,397,265	4.2	8.3	12.8	10.2					4.3	8.6	13.2	10.5	1Q14	10.9	1.5
Lion Properties Fund	155,505,371									3.0	2.5	5.6	4.9	4Q18	6.7	1.1
MetLife Core Property Fund	61,816,896	5.1	5.8	11.0	10.5					5.1	6.4	11.7	11.2	1Q14	11.2	1.6
Prime Property Fund	62,145,779	4.2	7.2	11.6	10.4					4.3	7.4	11.9	10.7	4Q13	10.6	1.6
Principal U.S. Property Account	47,176,963									4.7	4.4	9.3	8.3	4Q15	8.3	1.3
Prologis European Logistics Fund ⁴	39,966,140									6.0	9.0	15.4	13.0	4Q17	13.1	1.2
Prologis Targeted U.S. Logistics Fund	73,497,105									5.4	13.2	19.1	16.5	3Q15	17.1	1.6
Townsend Real Estate Fund, L.P.	115,831,282									4.4	5.4	10.0	9.7	2Q16	9.4	1.3
Core Commingled Funds	677,077,135	4.6	7.6	12.5	11.2	4.9	4.9	9.9	8.9	4.5	3.4	8.0	7.1	4Q86	6.9	1.3
Core Separate Accounts																
BlackRock Core Separate Account	3,158,019	6.0	7.0	13.3	11.5	6.0	5.8	12.0	10.6	7.1	3.3	10.6	9.1	1Q96	9.9	1.4
Cornerstone Separate Account	361,776													3Q04	5.6	1.4
Core Separate Accounts	3,519,795	2.1	7.8	9.9	8.6	3.9	6.4	10.4	9.3	6.4	3.5	10.0	8.8	1Q96	8.8	1.4
<i>Total BlackRock Separate Account</i>	<i>3,023,642</i>	<i>3.6</i>	<i>9.1</i>	<i>13.1</i>	<i>10.7</i>	<i>4.7</i>	<i>6.7</i>	<i>11.7</i>	<i>10.0</i>	<i>6.7</i>	<i>3.9</i>	<i>10.8</i>	<i>9.3</i>	<i>1Q96</i>	<i>9.7</i>	<i>1.4</i>
Total Core Portfolio	680,596,930	4.9	6.4	11.5	10.1	5.2	2.5	7.8	6.8	5.5	2.0	7.6	6.6	4Q86	8.4	1.4
Value Added Portfolio																
Allegis Value Trust ³	922,378													1Q07	2.5	1.2
Asana Partners Fund II	-121,791													2Q19		
DRC European Real Estate Debt Fund II	8,610,202	11.6	-6.5	4.5	2.8					10.6	-5.4	4.8	3.0	1Q14	3.4	1.1
ECE European Prime Shopping Centre Fund II C	19,642,877									0.9	17.0	18.1	15.5	4Q15	13.4	1.3
Hammes Partners II	16,344,662									10.2	9.5	20.6	14.3	3Q15	13.3	1.3
Hammes Partners III	1,545,552									1.2	4.7	6.0	-25.5	1Q19	-59.8	0.8
NREP Nordic Strategies Fund	13,312,494									9.5	15.0	25.5	18.5	1Q15	24.2	1.6
NREP Nordic Strategies Fund II	31,722,440									3.0	21.5	25.0	15.1	3Q16	15.7	1.3
NREP Nordic Strategies Fund III	7,512,919									-6.7	9.5	2.5	-23.7	4Q18	-5.2	1.0
Value Added Portfolio	99,491,733	7.3	7.3	14.9	11.4	7.0	3.3	10.4	7.7	2.0	3.8	5.9	4.5	4Q86	4.6	1.2
Opportunistic Portfolio																
BlackRock High Return Separate Account	-134,378													3Q16	19.2	1.6
Carlyle China Project Rome Co-Investment	32,272,930									-1.8	6.5	4.6	1.2	3Q17	0.7	1.0
Carlyle China Realty	7,423,511									-0.3	6.4	6.2	2.9	3Q17	-1.2	1.0
CIM Fund VIII	38,002,112									0.1	10.8	10.9	8.7	2Q15	8.1	1.2
KKR Real Estate Partners Americas	10,165,759	29.8	0.9	33.1	25.7					44.4	-29.1	32.0	25.6	2Q14	0.0	
Och-Ziff Real Estate Fund III ¹	14,010,617									15.1	15.8	32.7	12.4	4Q14	24.5	1.5
Opportunistic Portfolio	101,740,551	8.6	15.6	25.2	16.0	12.3	-1.0	25.7	18.9	4.2	0.8	9.6	7.2	1Q91	28.1	1.4
Total Non-Core Portfolio 1Q 2007 Forward	201,232,284	6.9	9.0	16.4	12.7	6.5	10.8	17.9	14.1	4.9	5.1	10.1	5.9	1Q07	7.5	1.3
Total Private Portfolio																
SCERS	881,829,214	5.1	6.9	12.3	10.4	5.4	6.1	11.7	10.1	4.4	4.7	9.3	8.3	4Q86	8.3	1.4

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				
Ex-US Dollar Denominated Investments (In Local Currency)																	
Prologis Targeted Europe Logistics Fund (Euro)	€ 35,142,277																
DRC European Real Estate Debt Fund II (Pound Sterling)	£6,780,534	11.7	-0.8	10.8	9.1												
ECE European Prime Shopping Centre Fund II (Euro)	€ 17,271,982																
NREP Nordic Strategies Fund (Euro)	€ 11,705,676																
NREP Nordic Strategies Fund II (Euro)	€ 27,893,542																
NREP Nordic Strategies Fund III (Euro)	€ 6,606,109																
Indices																	
NFI ODCE+ 35bps				10.1	9.1			10.2	9.2			7.7	6.6	4Q86			
NFI-ODCE		4.5	5.1	9.8	8.8	5.1	4.6	9.9	8.9	6.7	0.5	7.3	6.3	4Q86			
NFI-ODCE + 100bps				10.8	9.8			10.9	9.9			8.3	7.3	4Q86			
CPI + 500 bps				6.6				6.8				7.7		4Q86			

Returns (%)	Market Value (\$)	2019		Fiscal Year 2019		2018		2017		2016		2015		2014	
		TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET
Core Commingled Funds															
Brookfield Premier Real Estate Partners	102,740,334	4.9	3.9	0.0	0.0	2.3	1.9								
Jamestown Premier Property Fund	18,397,265	2.1	1.9	5.0	4.6	9.7	7.7	18.0	14.2	6.6	5.3	22.4	17.3	14.7	11.9
Lion Properties Fund	155,505,371	3.5	3.0	0.0	0.0	2.0	1.8								
MetLife Core Property Fund	61,816,896	5.0	4.8	7.9	7.4	7.8	7.3	8.4	7.9	9.3	8.8	16.9	16.3	17.4	16.9
Prime Property Fund	62,145,779	3.7	3.1	8.4	7.2	9.1	8.0	9.9	8.7	10.4	9.2	15.9	14.6	15.5	14.1
Principal U.S. Property Account	47,176,963	3.5	3.0	7.9	6.9	9.1	8.1	9.1	8.1	10.0	9.0	3.0	2.8		
Prologis European Logistics Fund ²	39,966,140	5.9	4.9	12.4	9.9	13.6	10.8	6.8	6.5						
Prologis Targeted U.S. Logistics Fund	73,497,105	8.0	7.1	16.4	14.3	18.5	16.1	24.2	20.3	16.1	14.2	9.1	7.9		
Townsend Real Estate Fund, L.P.	115,831,282	3.7	3.6	7.7	7.5	9.0	8.8	11.0	10.8	8.4	8.2				
Core Commingled Funds	677,077,135	4.5	3.9	9.3	8.2	10.9	9.7	14.2	12.8	9.8	8.9	15.7	14.1	13.5	12.4
Core Separate Accounts															
BlackRock Core Separate Account	3,158,019					15.8	14.9	9.1	7.5	11.3	9.3	15.3	13.9	16.3	12.5
Cornerstone Separate Account	361,776					2.3	1.9	21.5	20.8	14.0	13.3	2.4	1.6	14.0	13.2
Core Separate Accounts	3,519,795	-13.9	-13.9	0.8	1.3	26.8	26.0	12.8	11.6	10.0	8.6	7.7	6.6	16.0	13.5
<i>Total BlackRock Separate Account</i>	<i>3,023,642</i>	<i>13.6</i>	<i>12.5</i>	<i>16.5</i>	<i>13.2</i>	<i>10.6</i>	<i>7.2</i>	<i>10.6</i>	<i>9.0</i>	<i>8.6</i>	<i>7.0</i>	<i>10.7</i>	<i>9.4</i>	<i>17.0</i>	<i>13.6</i>
Total Core Portfolio	680,596,930	4.4	3.8	6.1	5.2	8.6	7.5	13.6	12.3	9.8	8.5	10.4	9.2	15.3	13.2
Value Added Portfolio															
Allegis Value Trust ³	922,378					-22.6	-22.8	8.2	7.8	9.9	9.4	8.6	8.0	10.8	10.2
Asana Partners Fund II	-121,791														
DRC European Real Estate Debt Fund II	8,610,202	7.0	6.4	5.9	4.8	-0.6	-1.7	23.8	22.3	-7.8	-8.9	5.0	3.0	1.4	-2.1
ECE European Prime Shopping Centre Fund II	19,642,877	-5.0	-5.8	6.2	4.0	15.1	12.8	24.7	21.5	22.1	19.7	12.1	11.0		
Hammes Partners II	16,344,662	5.7	4.1	21.0	15.5	27.9	19.6	12.7	10.0	16.2	10.4	19.4	12.9		
Hammes Partners III	1,545,552	6.0	-25.5												
NREP Nordic Strategies Fund	13,312,494	2.2	-16.6	3.8	-15.6	0.8	0.1	41.2	40.1	23.1	21.7	55.1	50.8		
NREP Nordic Strategies Fund II	31,722,440	6.2	4.9	17.1	13.3	17.0	12.3	44.9	34.4	8.6	-3.8				
NREP Nordic Strategies Fund III	7,512,919	5.4	-10.8	0.0	0.0	-2.8	-14.4								
Value Added Portfolio	99,491,733	3.4	-1.2	9.7	2.5	10.5	6.3	24.9	22.3	9.5	7.0	19.1	17.0	15.7	13.7
Opportunistic Portfolio															
BlackRock High Return Separate Account	-134,378					17.0	14.4	24.0	21.7	6.3	6.3				
Carlyle China Project Rome Co-Investment	32,272,930	7.1	6.4	3.9	2.5	-2.5	-7.1	4.7	3.6						
Carlyle China Realty	7,423,511	8.2	7.1	4.5	2.1	1.6	-1.4	2.7	0.2						
CIM Fund VIII	38,002,112	5.2	4.6	8.3	7.1	9.4	8.0	8.4	6.7	6.4	4.0	16.9	13.8		
KKR Real Estate Partners Americas	10,165,759	4.2	3.6	8.0	8.3	11.6	11.2	29.1	24.7	22.3	18.3	79.9	55.9	30.1	24.7
Och-Ziff Real Estate Fund III ¹	14,010,617	8.6	7.1	19.3	15.9	29.7	25.7	43.3	38.2	30.0	22.2	33.7	6.9	9.4	-28.3
Opportunistic Portfolio	101,740,551	7.9	7.0	11.9	10.0	11.6	9.1	19.3	16.0	14.1	10.3	44.6	23.3	33.3	19.9
Total Non-Core Portfolio 1Q 2007 Forward	201,232,284	5.9	3.4	11.1	6.9	11.0	7.8	22.3	19.5	10.9	8.1	23.0	17.9	17.0	14.2
Total Private Portfolio															
SCERS	881,829,214	4.7	3.7	7.3	5.6	9.2	7.5	15.7	14.0	10.0	8.4	12.6	10.7	15.5	13.3

Returns (%)	Market Value (\$)	2019		Fiscal Year 2019		2018		2017		2016		2015		2014	
		TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET
Indices															
NFI-ODCE + 35 bps		2.6	2.2	6.8	5.8	8.7	7.8	8.0	7.1	9.2	8.2	15.4	14.4	12.9	11.9
NFI-ODCE		2.4	2.0	6.4	5.5	8.3	7.4	7.6	6.7	8.8	7.8	15.0	14.0	12.5	11.5
NFI-ODCE + 100 bps		2.9	2.5	7.4	6.5	9.4	8.4	8.7	7.7	9.9	8.9	16.2	15.1	13.6	12.6
CPI + 500 bps		3.5		6.7		7.0		7.2		7.2		5.7		5.7	

¹ Fees for this Fund are charged on total commitments. As a result of Och-Ziff only calling a portion of SCERS' committed capital, the gross to net spread is significant and expected to normalize over time.

² Represent composite performance of Prologis Targeted Europe Logistics Fund and Prologis European Logistics Fund

³ Net IRR and Equity Multiple may be missing due to investment managers being unable to provide historical cash flows back to inception.

Returns (%)	Market Value (\$)	2013		2012		2011		2010		2009		2008		2007		2006	
		TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET
Core Commingled Funds																	
Brookfield Premier Real Estate Partners	102,740,334																
Jamestown Premier Property Fund	18,397,265																
Lion Properties Fund	155,505,371																
MetLife Core Property Fund	61,816,896																
Prime Property Fund	62,145,779	3.8	3.6														
Principal U.S. Property Account	47,176,963																
Prologis European Logistics Fund ²	39,966,140																
Prologis Targeted U.S. Logistics Fund	73,497,105																
Townsend Real Estate Fund, L.P.	115,831,282																
Core Commingled Funds	677,077,135	10.2	9.3	11.1	10.1	16.4	15.5	14.1	13.3	-33.0	-33.6	-13.8	-14.6	15.5	14.5	16.9	15.8
Core Separate Accounts																	
BlackRock Core Separate Account	3,158,019	11.8	9.6	13.5	13.0	17.8	17.4	20.7	19.6	-29.5	-29.1	-13.9	-14.3	21.2	16.8	17.7	13.3
Cornerstone Separate Account	361,776	11.3	10.5	16.2	15.4	24.9	23.9	21.2	20.2	-31.7	-32.4	-9.4	-10.1	11.9	11.1	11.1	10.2
Core Separate Accounts	3,519,795	11.0	9.5	14.1	13.5	18.7	18.2	18.6	17.6	-28.5	-28.7	-10.5	-11.1	16.3	13.6	15.2	12.1
<i>Total BlackRock Separate Account</i>	<i>3,023,642</i>	<i>10.9</i>	<i>9.0</i>	<i>13.1</i>	<i>12.5</i>	<i>16.1</i>	<i>15.7</i>	<i>17.3</i>	<i>16.4</i>	<i>-26.8</i>	<i>-26.7</i>	<i>-11.1</i>	<i>-11.6</i>	<i>18.5</i>	<i>15.0</i>	<i>16.8</i>	<i>13.1</i>
Total Core Portfolio	680,596,930	10.8	9.5	13.3	12.6	18.2	17.6	17.6	16.7	-29.5	-29.8	-11.3	-12.0	16.1	13.8	15.5	12.7
Value Added Portfolio																	
Allegis Value Trust ³	922,378	4.7	4.0	21.8	20.9	15.7	14.7	21.6	20.4	-62.2	-62.8	-21.2	-23.9	38.6	28.4		
Asana Partners Fund II	-121,791																
DRC European Real Estate Debt Fund II	8,610,202																
ECE European Prime Shopping Centre Fund II	19,642,877																
Hammes Partners II	16,344,662																
Hammes Partners III	1,545,552																
NREP Nordic Strategies Fund	13,312,494																
NREP Nordic Strategies Fund II	31,722,440																
NREP Nordic Strategies Fund III	7,512,919																
Value Added Portfolio	99,491,733	13.3	10.8	19.6	18.1	16.7	14.7	23.2	20.3	-56.4	-57.6	-31.2	-33.5	18.2	5.6	0.8	0.5
Opportunistic Portfolio																	
BlackRock High Return Separate Account	-134,378																
Carlyle China Project Rome Co-Investment	32,272,930																
Carlyle China Realty	7,423,511																
CIM Fund VIII	38,002,112																
KKR Real Estate Partners Americas	10,165,759																
Och-Ziff Real Estate Fund III ¹	14,010,617																
Opportunistic Portfolio	101,740,551	11.7	9.4	54.2	38.5	-10.1	-8.0	42.4	34.2	54.0	43.5	-44.5	-45.4	3.4	2.6	0.0	0.0
Total Non-Core Portfolio 1Q 2007 Forward	201,232,284	16.7	13.5	34.6	26.9	-0.3	0.4	37.0	30.4	-13.5	-17.8	-33.7	-35.7	18.2	5.6		
Total Private Portfolio																	
SCERS	881,829,214	11.4	9.9	16.4	14.7	14.9	14.5	20.6	18.8	-28.1	-28.8	-12.8	-13.5	15.8	13.4	15.5	12.7

Returns (%)	Market Value (\$)	2013		2012		2011		2010		2009		2008		2007		2006	
		TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET	TGRS	TNET
Indices																	
NFI-ODCE + 35 bps		14.3	13.3	11.3	10.2	16.4	15.4	16.8	15.7	-29.5	-30.1	-9.7	-10.4	16.4	15.2	16.7	15.7
NFI-ODCE		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		15.1	14.0	12.0	10.9	17.1	16.1	17.5	16.4	-29.1	-29.7	-9.1	-9.8	17.1	16.0	17.5	16.4
CPI + 500 bps		6.6		6.8		8.2		6.5		8.0		5.0		9.3		7.7	

¹ Fees for this Fund are charged on total commitments. As a result of Och-Ziff only calling a portion of SCERS' committed capital, the gross to net spread is significant and expected to normalize over time.

² Represent composite performance of Prologis Targeted Europe Logistics Fund and Prologis European Logistics Fund

³ Net IRR and Equity Multiple may be missing due to investment managers being unable to provide historical cash flows back to inception.

Quarterly Cash Flow Activity (\$)	Beginning Market Value	Contributions	Distributions	Withdrawals	Gross Income	Manager Fees	Appreciation	Ending Market Value	LTV (%)
Core Commingled Funds									
Brookfield Premier Real Estate Partners	101,827,515	0	1,048,682	0	1,069,548	477,067	1,369,020	102,740,334	47.2
Jamestown Premier Property Fund	17,985,381	111,788	111,788	0	141,107	12,593	283,371	18,397,265	39.7
Lion Properties Fund	154,823,529	325,097	1,538,383	0	1,457,600	325,097	762,625	155,505,371	20.9
MetLife Core Property Fund	60,486,698	609,659	660,642	0	723,321	73,497	731,357	61,816,896	20.7
Prime Property Fund	61,035,011	600,489	600,489	0	592,996	178,865	696,638	62,145,779	17.2
Principal U.S. Property Account	46,570,732	0	0	0	507,198	110,908	209,941	47,176,963	17.6
Prologis European Logistics Fund	39,126,649	0	383,797	0	538,830	108,841	793,300	39,966,140	18.2
Prologis Targeted U.S. Logistics Fund	71,109,008	0	514,760	0	775,916	429,608	2,556,550	73,497,105	18.2
Townsend Real Estate Fund, L.P.	113,442,958	1,120,386	1,120,386	0	1,273,772	64,198	1,178,750	115,831,282	41.3
Core Commingled Funds	666,407,481	2,767,419	5,978,927	0	7,080,288	1,780,674	8,581,552	677,077,135	30.1
Core Separate Accounts									
BlackRock Core Separate Account	3,090,038	0	0	0	89,749	0	-21,768	3,158,019	0.0
Cornerstone Separate Account	2,834,450	0	1,750,000	0	-722,674	0	0	361,776	0.0
Core Separate Accounts	5,924,488	0	1,750,000	0	-632,925	0	-21,768	3,519,795	0.0
<i>Total BlackRock Separate Account</i>	<i>31,990,509</i>	<i>57,751</i>	<i>0</i>	<i>29,500,000</i>	<i>11,529</i>	<i>67,191</i>	<i>531,043</i>	<i>3,023,642</i>	<i>0.0</i>
Total Core Portfolio	672,331,969	2,767,419	7,728,927	0	6,447,363	1,780,674	8,559,784	680,596,930	29.9
Value Added Portfolio									
Allegis Value Trust	2,634,659	0	0	1,750,000	5,521	414	32,611	922,378	0.0
Asana Partners Fund II	-256,619	262,500	0	0	-18,811	109,375	515	-121,791	0.0
DRC European Real Estate Debt Fund II	14,702,448	0	329,333	5,879,525	445,633	27,044	-301,977	8,610,202	0.0
ECE European Prime Shopping Centre Fund II	18,967,210	0	182,802	20,409	519,979	100,576	459,474	19,642,877	55.3
Hammes Partners II	17,648,685	62,824	330,002	1,348,275	318,142	209,235	202,524	16,344,662	67.8
Hammes Partners III	481,068	1,223,642	39,373	25,323	3,003	116,719	19,254	1,545,552	83.2
NREP Nordic Strategies Fund	16,300,364	0	553,128	0	101,505	3,008,893	472,645	13,312,494	41.0
NREP Nordic Strategies Fund II	29,780,282	0	0	0	-29,441	230,203	2,201,801	31,722,440	47.0
NREP Nordic Strategies Fund III	1,348,674	6,003,933	0	0	-23,406	210,798	394,516	7,512,919	28.0
Value Added Portfolio	101,606,771	7,552,899	1,434,638	9,023,532	1,322,125	4,013,257	3,481,363	99,491,733	51.7
Opportunistic Portfolio									
BlackRock High Return Separate Account	28,900,471	57,751	0	29,500,000	-78,220	67,191	552,811	-134,378	0.0
Carlyle China Project Rome Co-Investment	32,343,939	16,991	0	0	-88,000	99,178	99,178	32,272,930	0.0
Carlyle China Realty	7,246,572	100,621	0	0	31,192	37,192	82,318	7,423,511	0.0
CIM Fund VIII	36,694,058	1,884,516	0	828,007	-7,706	102,672	361,923	38,002,112	33.0
KKR Real Estate Partners Americas	10,029,049	0	0	0	52,930	72,283	156,063	10,165,759	62.0
Och-Ziff Real Estate Fund III	13,303,271	966,168	781,466	0	308,960	45,183	258,867	14,010,617	0.0
Opportunistic Portfolio	128,517,360	3,026,047	781,466	30,328,007	219,156	423,699	1,511,160	101,740,551	25.8
Total Non-Core Portfolio 1Q 2007 Forward	230,124,131	10,578,946	2,216,104	39,351,539	1,541,281	4,436,956	4,992,523	201,232,284	41.4
Total Private Portfolio									
SCERS	902,456,100	13,346,365	9,945,031	39,351,539	7,988,644	6,217,630	13,552,307	881,829,214	32.9

Property Type Diversification (%)	Apartment	Office	Industrial	Retail	Hotel	Other
Core Commingled Funds						
Brookfield Premier Real Estate Partners	28.2	38.3	33.5	-	-	-
Jamestown Premier Property Fund	-	65.1	-	26.1	-	8.8
Lion Properties Fund	25.6	35.6	21.0	17.9	-	-
MetLife Core Property Fund	29.9	35.5	18.4	16.2	-	-
Prime Property Fund	24.8	32.1	20.4	12.8	-	10.0
Principal U.S. Property Account	15.7	39.6	22.1	15.1	-	7.5
Prologis European Logistics Fund	-	-	100.0	-	-	-
Prologis Targeted U.S. Logistics Fund	-	-	100.0	-	-	-
Townsend Real Estate Fund, L.P.	46.1	17.0	14.4	11.4	-	11.2
Core Commingled Funds	23.5	27.0	35.8	10.3	0.0	3.4
Core Separate Accounts						
BlackRock Core Separate Account	-	-	-	-	-	-
Cornerstone Separate Account	-	-	-	-	-	-
Core Separate Accounts						
<i>Total BlackRock Separate Account</i>	-	-	-	-	-	-
Total Core Portfolio	13.2	27.3	25.8	6.0	-	27.7
Value Added Portfolio						
Allegis Value Trust	-	-	100.0	-	-	-
Asana Partners Fund II	-	-	-	60.7	-	39.3
DRC European Real Estate Debt Fund II	-	41.6	-	58.4	-	-
ECE European Prime Shopping Centre Fund II	-	-	-	100.0	-	-
Hammes Partners II	-	-	-	-	-	100.0
Hammes Partners III	-	-	-	-	-	100.0
NREP Nordic Strategies Fund	88.5	-	-	11.5	-	-
NREP Nordic Strategies Fund II	20.6	5.7	48.2	5.7	-	19.8
NREP Nordic Strategies Fund III	13.7	8.1	21.8	23.8	-	32.7
Value Added Portfolio	15.9	8.2	14.7	31.6	0.0	29.5
Opportunistic Portfolio						
BlackRock High Return Separate Account	-	-	-	-	-	-
Carlyle China Project Rome Co-Investment	-	-	100.0	-	-	-
Carlyle China Realty	-	-	100.0	-	-	-
CIM Fund VIII	50.7	22.1	1.2	13.0	4.8	8.3
KKR Real Estate Partners Americas	21.6	26.7	-	7.6	26.1	18.1
Och-Ziff Real Estate Fund III	6.7	3.1	1.9	4.2	4.6	79.4
Opportunistic Portfolio	23.8	12.1	34.9	6.7	5.3	17.2
Total Non-Core Portfolio	19.5	10.0	24.1	20.1	2.5	23.8
Total Private Portfolio						
SCERS	22.6	23.3	33.1	12.4	0.5	7.7
Indices						
NFI-ODCE	25.0	34.0	18.7	17.7	0.3	4.3

Geographic Diversification (%)	North East	Mid East	East North Central	West North Central	South East	South West	Mountain	Pacific	Ex-US
Core Commingled Funds									
Brookfield Premier Real Estate Partners	30.0	9.6	3.7	-	4.2	6.9	6.0	39.6	-
Jamestown Premier Property Fund	34.9	34.8	-	-	2.6	-	-	27.8	-
Lion Properties Fund	24.4	10.0	5.0	0.1	8.2	10.1	5.0	37.2	-
MetLife Core Property Fund	10.2	11.1	8.5	-	16.2	9.9	7.7	36.4	-
Prime Property Fund	23.1	7.5	8.8	1.7	12.2	8.4	5.1	33.3	-
Principal U.S. Property Account	17.3	8.8	2.9	1.9	8.7	13.9	11.9	34.7	-
Prologis European Logistics Fund	-	-	-	-	-	-	-	-	100.0
Prologis Targeted U.S. Logistics Fund	10.2	6.5	10.6	-	10.6	12.4	4.5	45.2	-
Townsend Real Estate Fund, L.P.	14.3	11.3	8.4	3.1	25.1	13.3	4.6	20.0	-
Core Commingled Funds	18.7	9.4	6.1	0.8	11.0	9.6	5.2	32.4	6.8
Core Separate Accounts									
BlackRock Core Separate Account	-	-	-	-	-	-	-	-	-
Cornerstone Separate Account	-	-	-	-	-	-	-	-	-
Core Separate Accounts	-	-	-	-	-	-	-	-	-
<i>Total BlackRock Separate Account</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
Total Core Portfolio	22.9	5.6	28.6	0.8	8.4	6.1	3.2	17.7	6.8
Value Added Portfolio									
Allegis Value Trust	-	100.0	-	-	-	-	-	-	-
Asana Partners Fund II	29.8	63.9	-	-	-	-	6.2	-	-
DRC European Real Estate Debt Fund II	-	-	-	-	-	-	-	-	100.0
ECE European Prime Shopping Centre Fund II	-	-	-	-	-	-	-	-	100.0
Hammes Partners II	30.3	6.1	25.4	2.2	3.2	21.3	7.2	4.5	-
Hammes Partners III	13.2	14.3	4.0	-	23.0	10.7	34.8	-	-
NREP Nordic Strategies Fund	-	-	-	-	-	-	-	-	100.0
NREP Nordic Strategies Fund II	-	-	-	-	-	-	-	-	100.0
NREP Nordic Strategies Fund III	-	-	-	-	-	-	-	-	100.0
Value Added Portfolio	6.0	2.6	4.5	0.4	1.2	4.0	2.4	0.8	78.2
Opportunistic Portfolio									
BlackRock High Return Separate Account	-	-	-	-	-	-	-	-	-
Carlyle China Project Rome Co-Investment	-	-	-	-	-	-	-	-	100.0
Carlyle China Realty	-	-	-	-	-	-	-	-	100.0
CIM Fund VIII	33.6	0.8	12.7	-	0.8	1.7	7.6	39.1	3.7
KKR Real Estate Partners Americas	8.6	-	0.5	0.2	16.2	31.2	-	29.6	13.7
Och-Ziff Real Estate Fund III	13.4	2.6	2.7	0.6	6.3	5.9	5.1	34.0	29.4
Opportunistic Portfolio	16.5	0.7	5.6	0.1	3.0	4.8	3.8	24.0	41.5
Total Non-Core Portfolio	10.8	1.8	5.0	0.3	2.0	4.4	3.0	11.5	61.2
Total Private Portfolio									
SCERS	20.3	4.8	23.6	0.7	7.0	5.7	3.1	16.4	18.4
Indices									
NFI-ODCE	22.8	8.4	7.4	1.3	9.4	9.1	5.5	35.9	-

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.

¹In 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 2Q19



United States Real Estate Market Update (2Q19)

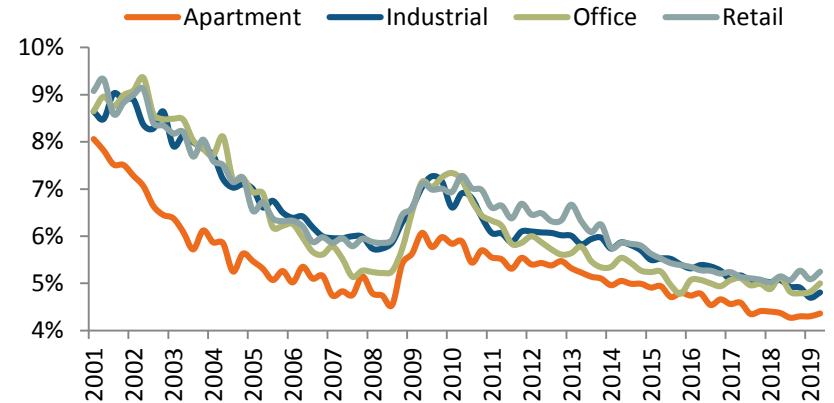
General

- The S&P 500 produced a gross total return of 4.3% during the quarter. The MSCI US REIT index produced a return of 1.3%. Consumer Sentiment remained flat at 98.2, but rose subsequent to quarter-end.
- Macro indicators for U.S. real estate continue to be positive; GDP grew at an annualized rate of 2.3% in the second quarter and headline CPI rose by 1.8% YoY, below the Fed's 2% target. As of quarter-end, the economy has now experienced 105 consecutive months of job growth. The Federal Reserve has paused its tightening of monetary policy, and cut the effective federal funds rate, which was 2.13% at quarter-end. Based on interest rate futures, the market has begun pricing in the expectation of another cut by the Fed in September.

Commercial Real Estate

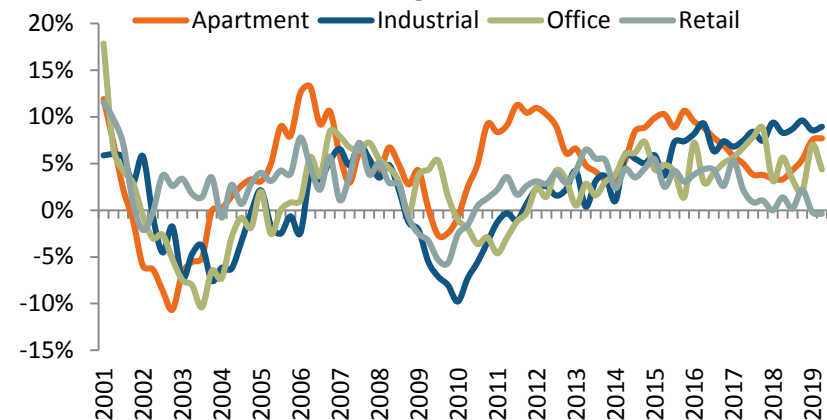
- Private real estate market carrying values remained flat over the quarter. Transaction cap rates (5.3%) compressed 5 bps during the quarter, while current valuation cap rates expanded across property sectors, apartments (+6 bps), industrial (+11 bps), office (+18 bps), and retail (+16 bps).
- NOI growth by sector continued to deviate during the quarter, with the industrial and apartments sector continuing to outpace the other traditional property types. While the industrial sector has faced increasing supply, it continues to benefit from outsized demand tailwinds (e-commerce and economic growth). On the other hand, retail experienced negative 40 bps of NOI growth during the quarter.
- In the second quarter of 2019, \$23 bn of aggregate capital was raised by real estate funds. In 2018, private equity real estate funds raised \$236 bn which is an increase of 9% YoY. However, transaction volume declined during the 1st quarter by 18% year over year to \$28 bn.
- 10-year treasury bond yields dropped 40 bps to 2.0% during the quarter, and, subsequent to quarter-end, have dropped further to 1.7%. A combination of expansionary fiscal policy and tightening monetary policy have led to increasing short-term interest rates and an inversion of the yield curve.

Current Value Cap Rates by Property Type



Source: NCREIF

4 Qtr Rolling NOI Growth



Source: NCREIF

United States Property Matrix (2Q19)



INDUSTRIAL

MULTIFAMILY

- In 2Q19, industrial properties were the highest returning sector at 3.4% and outperformed the NPI by 191 bps.
- Transaction volumes reached \$19.1 billion in the second quarter of the year, a 4.0% year-over-year decrease. Individual asset sales were up 13.6% year-over-year, while portfolio sales drove the decline in year-over-year volume (-31.5%).
- The industrial sector continued to experience steady NOI growth of 8.9% over the past year, increasing from the prior periods TTM growth of 8.6% in 1Q19. Market rent growth is expected to decelerate compared to the recent phenomenal pace, but still remains strong.
- Vacancy declined 40 bps to 3.1%, close to all-time historic lows. E-commerce continues to drive demand.
- Industrial cap rates compressed approximately 12 bps from a year ago, to 4.8%. Industrial fundamentals still top all property sectors.

- The apartment sector delivered a 1.4% return during the quarter, underperforming the NPI by 9 bps.
- Transaction volume in the second quarter of 2019 reached \$45.6 billion, an increase of 25.3% year-over-year. This volume continues to make multifamily the most actively traded sector for the eighth straight quarter.
- Cap rates increased to 4.4%, expanding 9 bps year-over-year. Robust job growth and improving wages have supported healthy operating fundamentals.
- Steady demand for the sector continues to keep occupancy above 94.3%, over a 1.0% increase from a year ago. Delayed deliveries from construction labor bottlenecks have created a gap between permitting activity and starts volume.

OFFICE

RETAIL

- The office sector returned 1.7% in 2Q19, 15 bps above the NPI return over the period.
- Transaction volumes increased by 36.4% year-over-year in Q2. Annual sales volumes equaled \$39.5 billion for the quarter. Single asset transactions accounted for 77% of volume.
- Occupancy growth within the office sector has improved, increasing 1.0% year-over-year. Office continues to be the highest vacancy property type at close to 9.8%.
- NOI growth of 4.4% in the last year is a positive as the sector continues to benefit from positive job growth. Sun Belt and tech-oriented West Coast office fundamentals are healthiest.
- Office cap rates compressed slightly from a year ago to approximately 4.8% in the second quarter. Office-using job growth is positive, though decelerating as expected.

- As of 2Q19, the retail sector delivered a quarterly return of -0.1%, performing 162 bps below the NPI.
- Transaction volumes totaled \$16.9 billion in the second quarter, down 22.7% year-over-year.
- Cap rates have expanded approximately 25 bps within the sector over the last year. Strong fundamental headwinds continue to effect the retail landscape.
- Growth NOI growth has been negative for five consecutive quarters. NOI has declined 40 bps over the past year. Retail is expected to continue to suffer from the shift towards e-commerce.
- Retail vacancy rates declined 74 bps over the past year to 6.8%. Many big box stores have closed as the need for retail space shrinks, translating to a negative outlook for rent growth.

Global Real Estate Market Update (2Q19)

- Global investment activity during the second quarter of 2019 continues to slow, and YoY transaction activity has decreased.
- Geopolitical uncertainty and its potential impacts on the global real estate markets has remained a principal concern for investors. However, global commercial real estate is still positioned to steadily perform in 2019. Despite compressing yields, broad decreases in risk-free rates has increased the value of real estate yields. Capital values and rents are expected to increase during the year. However, full-year global investment volumes are expected to decline by 5-10%, especially in the office and retail sectors.
- In the second quarter, investment volumes in the Americas to decline YoY, led by the U.S., Brazil, and Mexico.
- Asia-Pacific cross-border investment activity slightly decreased in the second quarter. Despite this, Asia-Pacific has shown the best first-half of the year performance on record. This growth was driven by robust activity in China and Singapore.
- In EMEA, the decline in investment volume is largely attributable to uncertainty over Brexit in the UK and ongoing structural changes in the retail sector.
- In the office sector, leasing activity continued to increase through the second quarter of 2019. The U.S office market continued to perform well, driven by demand from the technology and co-working industries. Europe's net absorption outperformed the 10 year average, led by performance in Madrid. In Asia Pacific's office market gross leasing volumes witnessed a 30% year-over year decline due to limited availability of space, economic uncertainty and trade tensions. Globally, aggregate rental growth for prime office locations is expected to stay positive in 2019 and office vacancy is expected to continue to fall.
- In the retail sector, the U.S. net absorption declined by 45% YoY in the second quarter. Strengthening labor markets and wage growth in Europe has positively impacted consumer spending, and retailers continue to focus on rightsizing their store portfolios. Asia Pacific retailers are focusing their efforts on providing unique products and targeting niche consumer segments. Australia is experiencing challenging retailer market pressures and rising incentives leading to modest rental growth.
- The multifamily market in the U.S. has continued to see growth in demand and declines in vacancy rates. There has been an increase in construction activity which is likely to lead to some near-term supply headwinds. Investment activity in European multifamily markets was lower due to rent control regulation leading to investor caution.
- The global industrial market continued to perform well during the quarter, with vacancy rates in the U.S. and Asia Pacific at all-time lows, as demand continues to be robust. U.S. rental rates are expected to increase, driven by robust leasing momentum. Demand has been strong in the European logistics market as well, however, a slight deceleration in the rate of growth suggests the sector may be entering a stage of stabilization.

Global Total Commercial Real Estate Volume - 2018 - 2019

\$ US Billions	Q1 2019	Q1 2018	% Change	Full Year	Full Year	% Change
			Q1 19 - Q1 18	Ending 1Q19	Ending 1Q18	Full Year
Americas	92	106	-13%	505	447	13%
EMEA	50	78	-36%	327	371	-12%
Asia Pacific	168	216	-22%	815	895	-9%
Total	310	400	-22%	1646	1713	-4%

Source: Real Capital Analytics, Inc., Q1' 19

Global Outlook - GDP (Real) Growth % pa, 2019-2021

	2019	2020	2021
Global	3.3	3.3	3.1
Asia Pacific	4.6	4.6	4.7
Australia	2.2	2.6	2.6
China	6.3	6.0	5.9
India	7.0	7.2	7.3
Japan	0.6	0.5	0.9
North America	2.5	1.9	1.9
US	2.6	1.9	1.9
MENA*	2.9	3.0	-
European Union	1.5	1.6	1.5
France	1.3	1.4	1.5
Germany	0.9	1.4	1.4
UK	1.3	1.4	1.6

*Middle East North Africa

Source: Bloomberg

Note: 2021 projections are not yet available for certain regions