

Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

| Agenda Item 1 | Α | ae | n | da | Ite | m | 1 | ; |
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MEETING DATE: December 18, 2019

SUBJECT: Quarterly Investment Performance Report

Real Estate

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

RECOMMENDATION

Staff recommends the Board receive and file the Townsend Real Estate Portfolio Performance Measurement Report for the period ending September 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 real estate investments made by SCERS.

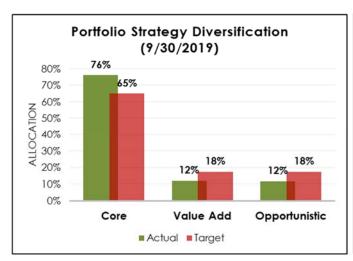
SCERS made redemption requests from two core open-end funds in order to bring down the overweight in the SCERS Real Estate portfolio. After the redemptions, SCERS' real estate allocation will reduce from 9.0% to 8.5%, still above the target allocation of 7.0% but within the permissible range of 5.0%-9.0%.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

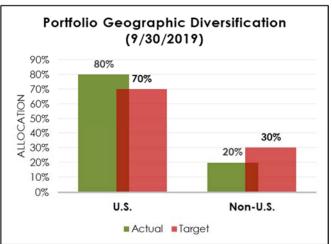
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SCERS REAL ESTATE PERFORMANCE SUMMARY Quarter Reporting Period Ending September 30, 2019

| SUB-ASSET CLASS | Quarter 9/30/19 | 1-Year | 3-Year | 5-Year | Since Inception | Since Inception Date |
|--------------------------------------|--------------------|--------|--------|--------|--------------------|----------------------------|
| SCERS Real Estate Portfolio | 1.4% | 7.6% | 9.8% | 10.0% | 8.3% | Nov-86 |
| (65%) NFI-ODCE + (35%) NFI-ODCE + 1% | 1.2% | 5.0% | 6.7% | 8.8% | 6.7% | Nov-86 |
| Core Portfolio | 1.7% | 7.5% | 9.3% | 9.4% | 6.6% | Nov-86 |
| Separate Account | 1.0% | 33.3% | 15.6% | 12.5% | 9.7% | Nov-86 |
| Commingled Funds | 1.7% | 7.6% | 10.1% | 10.8% | 7.1% | Sep-13 |
| NFI-ODCE Index | 1.1% | 4.6% | 6.3% | 8.4% | 6.3% | |
| Non-Core Portfolio | 0.4% | 8.4% | 11.3% | 12.4% | 5.9% | Jun-06 |
| Value Add Portfolio | 1.5% | 6.0% | 10.8% | 11.9% | 4.7% | Jun-06 |
| Opportunistic | -0.9% | 9.1% | 11.4% | 12.7% | 7.1% | May-13 |
| NFI-ODCE + 1% Index | 1.3% | 5.6% | 7.3% | 9.4% | 7.3% | |

SCERS PORTFOLIO DIVERSIFICATION





SCERS PORTFOLIO RESULTS

For the quarter ended September 30, 2019, SCERS' Real Estate portfolio outperformed against the NFI-ODCE blended benchmark, +1.4% versus +1.2%, due to the outperformance in the core commingled fund portfolio (+1.7%).

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

- Top performing funds:
 - Core:
 - Prologis Targeted U.S. Logistics: +4.6%
 - Brookfield Premier Real Estate Partners: +2.0%
 - Non-Core:
 - Hammes Partners II: +22.6%
 - Sculptor Real Estate Fund II (formerly Och-Ziff Real Estate Fund II): +3.7%

Bottom performing funds:

- > Core:
 - Prologis European Logistics: -1.3% in U.S. Dollars (+2.8% in Euros)
 - Jamestown Premier Property Fund: +0.6%
- ➤ Non-Core:
 - NREP Nordic Strategies Fund III: -8.2% in U.S. dollars (-4.2% in Euros)
 - Asana Partners Fund II: -3.1%

NEW INVESTMENTS

During the quarter ended September 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 September 30, 2019.

| Prepared by: | |
|--------------------------------------|------------------------------------|
| /S/ | |
| JR Pearce Investment Officer | |
| Reviewed by: | |
| /S/ | /S/ |
| Steve Davis Chief Investment Officer | Eric Stern Chief Executive Officer |



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 Third Quarter, 2019 (the "Quarter"), the Real Estate Portfolio was below the allowable range at 8.8%. Core Real Estate currently makes up 76.4% of the portfolio, with Non-Core Real Estate making up the remaining 23.6%. 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 35.0% at the end of the Third Quarter of 2019. The loan-to-value ratio of the Core Portfolio was 30.9%, 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 21.7% as of the Third Quarter. The Non-Core Portfolio reported a loan-to-value ratio of 45.5%.

Portfolio Funding Status



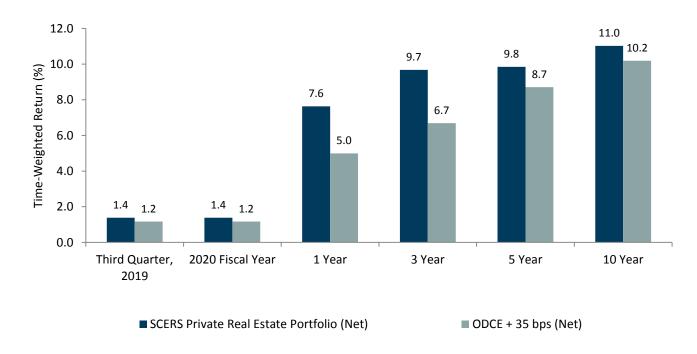
- The following slides provide a review of key information of the SCERS Real Estate Portfolio (the "Portfolio") through September 30, 2019.
- A detailed performance report is also provided in **Exhibit A**.
- Figures exclude commitments / redemptions / dispositions approved subsequent to Quarter-end.

| SCERS Portfolio Snapshot As of September 30, 2019 | Market Value (in millions of dollars)* | % of SCERS Plan |
|--|---|-----------------|
| SCERS Total Plan Assets | 9,976 | 100.0% |
| Private Portfolio Target | 698 | 7.0% |
| Private Portfolio Permissible Range | | 5.0-9.0% |
| Private Real Estate | | |
| Core Portfolio | 672 | 6.7% |
| Non-Core Portfolio | 207 | 2.1% |
| Total SCERS Private Real Estate Market Value | 879 | 8.8% |
| Total SCERS Private Real Estate Unfunded Commitments | 171 | 1.7% |

^{*} Figures may not add due to rounding.

Private Real Estate Portfolio Performance

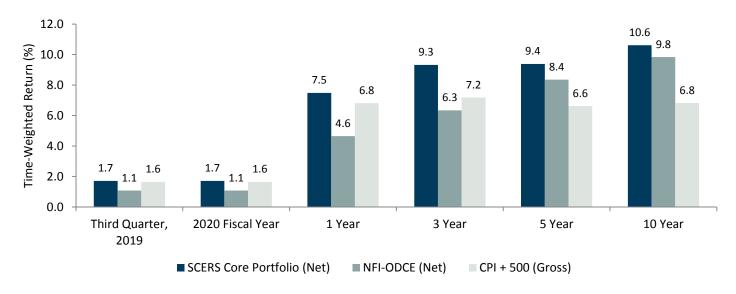




- The SCERS Private Real Estate Portfolio includes: (1) Core Real Estate and (2) Non-Core Real Estate.
- The SCERS Private Real Estate Benchmark is comprised of the NFI-ODCE (Core Benchmark, net) (65%) and the NFI-ODCE + 100bps (Non-Core Benchmark, net) (35%), resulting in an NFI-ODCE + 35bps (net) portfolio benchmark.
- On a net of fee basis, the SCERS Total Real Estate Portfolio outperformed the blended benchmark for all time periods.

Core Portfolio Performance

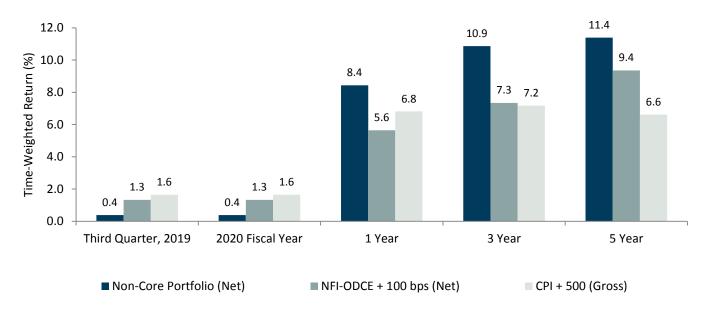




- The SCERS Core Portfolio consists of nine open-end Core Commingled funds. The Core Commingled Fund exposure includes Morgan Stanley's Prime Property Fund, MetLife Core Property Fund, Jamestown Premier Property Fund, Principal U.S. Property Account, Prologis Targeted U.S. Logistics Fund, Prologis European 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.
- During the Quarter, Prologis Targeted U.S. Logistics Fund was the strongest absolute performer followed by the Townsend Real Estate Fund and Brookfield Premier Real Estate Partners. On the other hand, Lion Properties Fund was the largest contributor on a dollar-basis.
- The Core Portfolio has recently benefited from an overweight to industrial exposure, with Prologis U.S. Logistics Fund generating one-year net returns of 15.8%, greatly outperforming the benchmark. Prologis European Logistics Fund has generated strong local currency returns (12.5% over the one-year period), but currency fluctuation resulted in a one-year USD net return of 5.9%.
- The SCERS Core Portfolio performed above the CPI + 500 bps (the SCERS Real Asset benchmark) over all time periods.

Non-Core Portfolio Performance

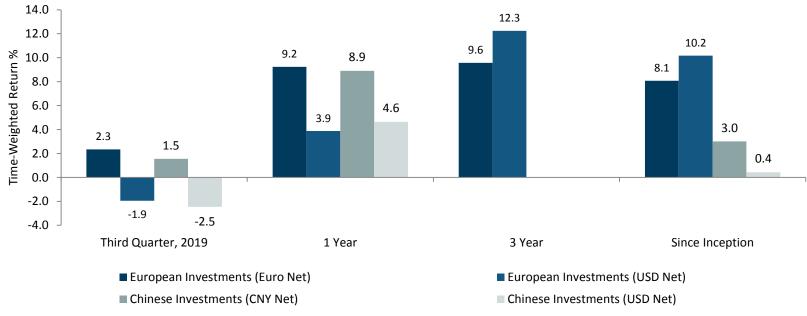




- The SCERS Non-Core Portfolio includes both Value Add and Opportunistic Real Estate strategies, which are defined in the Glossary of Terms. As displayed above, the SCERS Non-Core Portfolio outperformed the NFI-ODCE + 100 basis points over all time periods, except for the trailing Quarter and fiscal year.
- Underperformance of the Non-Core Portfolio over the third Quarter is driven by the poor performance of the Opportunistic investments. This was due to the currency exchange effect led by Carlyle China Project Rome Co-Investment and Carlyle China Realty.
- On the other hand, Value Added Investments outperformed the benchmark by 16 bps, driven by the positive performance of Hammes Partners II, which generated a 22.6% net return.
- Over the trailing quarter, NREP Nordic Strategies Fund III returns were affected by the J-curve effect and currency fluctuations.

Ex-US Portfolio Performance



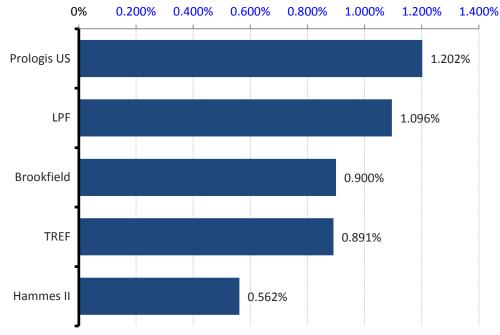


- Approximately 20.8% of the SCERS Portfolio is comprised of Ex-US investment. SCERS does not currently hedge its foreign currency exposures and pays liabilities in US Dollars. As such, FX movement will impact performance for Ex-US investments. The chart above isolates European and Asian investments and displays performance both before and after currency conversion.
- Currency movement has negatively impacted foreign investments over recent time periods. In local currency, both European and Chinese investments have been positive and accretive to SCERS' portfolio. Currency impacts on performance tend to be cyclical in nature.
- The SCERS Euro Denominated Composite includes: ECE European Prime Shopping Center Fund II (Euro) 4.2%, NREP Nordic Strategies Fund (Euro) 1.5%, NREP Nordic Strategies Fund II (Euro) 1.7%, NREP Nordic Strategies Fund III (Euro) -4.2%, and Prologis European Logistics Fund (PELF) 2.8%.
 - 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) 1.3% and Carlyle's Project Rome (Chinese Yuan) 1.6%.
 - 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

TOWNSEND°
GROUP
an Aon company

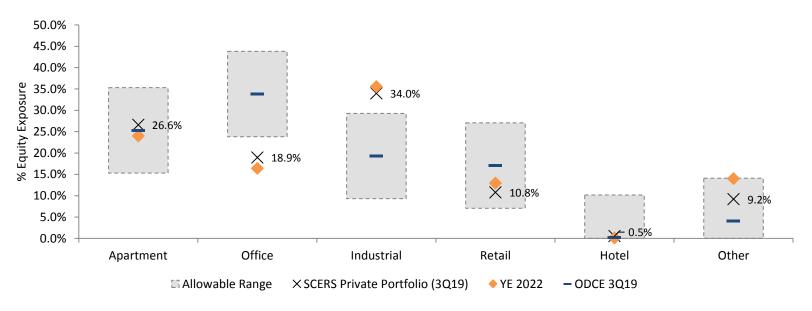
- Over the trailing year, performance was driven primarily by Core OECFs, with Prologis Targeted U.S. Logistics Fund contributing the greatest proportion of overall returns
 - Lion Properties Fund, Brookfield Premier Real Estate Partners and the Townsend Real Estate Fund also contributed significantly to overall portfolio performance.
- NREP Nordic Strategies Fund I negative performance was affected by the accrued incentive fees that had previously not been reported on.
- During the trailing year, BlackRock Core Separate Account was written down, resulting in negative performance over the period.





Real Estate Private Portfolio Diversification – Property Type

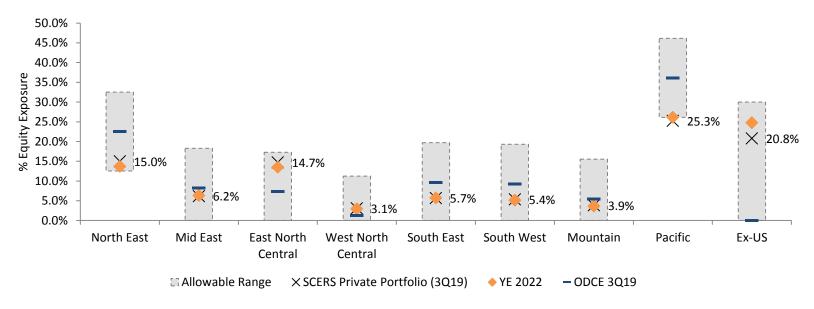




- The diversification of the Private Portfolio is compared to the diversification of the NFI-ODCE, with a permissible deviation of ± 10.0% for each property type. The Real Estate Policy also allows for temporary deviations in order to provide SCERS with the flexibility required to overweight or underweight property types during certain parts of the market cycle.
- As of the Third 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, NREP II and NREP III.
- The "Other" property type exposure represents Sculptor 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

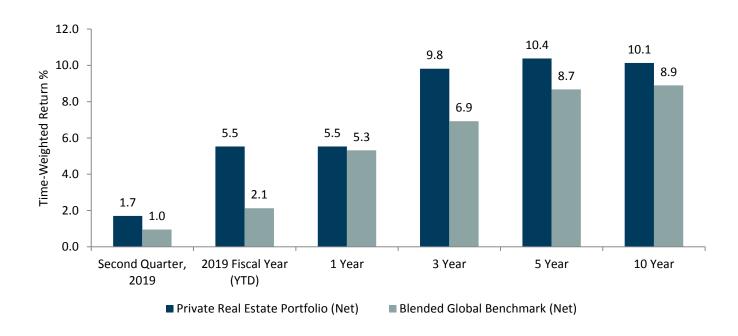




- The diversification of the Private Portfolio is compared to the diversification of the NFI-ODCE, with a permissible deviation of ± 10.0% for each region. Ex-US exposure is limited to 30% of the Total Private Portfolio.
- As of the Third Quarter, the Private Portfolio was in compliance across all region except for the Pacific 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 20.8%, well within its 30% constraint, but will increase as KKR Real Estate Partners Americas, Sculptor 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 3Q19, these investments provide \$38.7 million in equity exposure to China.
- Ex-US exposure consists of 3.57% in China, 1.59% in Denmark, 1.54% in Finland, 2.48% in Germany, 1.96% in France, 1.63% in Sweden, 1.1% in Netherlands, 1.48% in the UK and 5.45% in other countries.

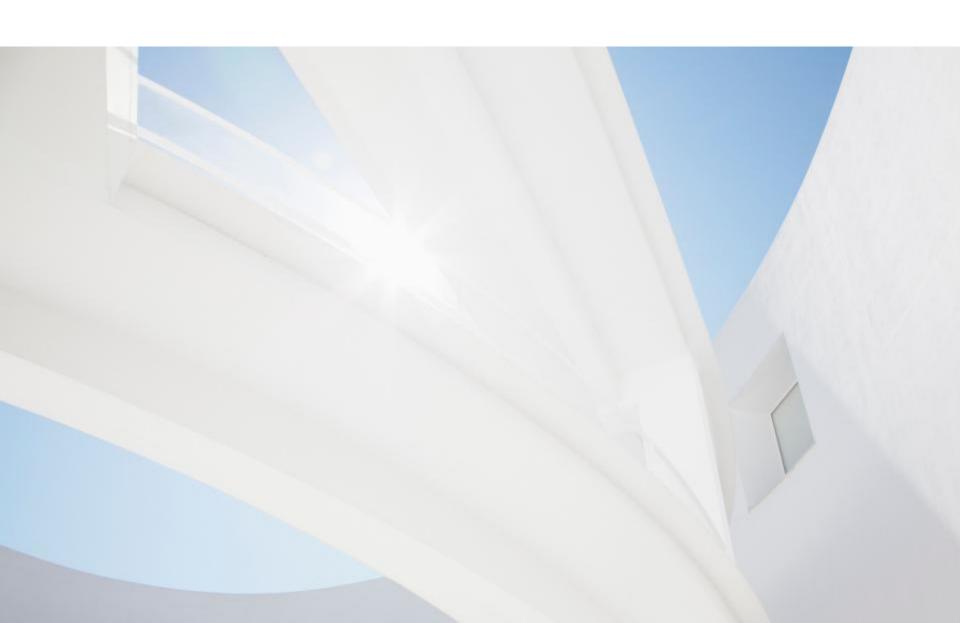
TOWNSEND* GROUP an Aon company

Private Real Estate Performance – Global Ancillary Benchmark (2Q19)



- 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 quaterly lag to SCERS.
- The Private Portfolio's international exposure is 20.8%, 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 | Alloc | ation | Market ' | Value | Unfunded Cor | nmitments | Remaining A | Illocation |
| 9,975,967,256 | Core | 7.0% | 671,701,355 | 6.7% | 0 | 0.0% | 26,616,353 | 0.3% |
| | Non-Core | 0.00% - 5.00% | 206,981,049 | 2.1% | 171,117,091 | 1.7% | -153,638,877 | -1.5% |
| | Total | 7.0% | 878,682,404 | 8.8% | 171,117,091 | 1.7% | -127,022,524 | -1.3% |

| Performance Summary | Quart | er (%) | 1 Ye | ar (%) | 3 Yea | ar (%) | 5 Year (%) | | |
|--|-------|--------|------|--------|-------|--------|------------|------|--|
| | TGRS | TNET | TGRS | TNET | TGRS | TNET | TGRS | TNET | |
| Core Portfolio (Commingled Funds & Separate Accounts) | 2.0 | 1.7 | 8.6 | 7.5 | 10.5 | 9.3 | 10.7 | 9.4 | |
| Non-Core Portfolio (Value Added & Opportunistic, 1Q2007 Forward) | 0.9 | 0.4 | 12.4 | 8.4 | 14.0 | 10.9 | 14.7 | 11.4 | |
| Private Real Estate Portfolio | 1.8 | 1.4 | 9.6 | 7.6 | 11.4 | 9.7 | 11.6 | 9.8 | |
| | | | | | | | | | |
| NFI-ODCE (Core) | 1.3 | 1.1 | 5.6 | 4.6 | 7.3 | 6.3 | 9.3 | 8.4 | |
| NFI-ODCE + 100 bps (Non-Core) | 1.6 | 1.3 | 6.6 | 5.6 | 8.3 | 7.3 | 10.3 | 9.4 | |
| NFI-ODCE + 35 bps (Private Portfolio) | 1.4 | 1.2 | 5.9 | 5.0 | 7.7 | 6.7 | 9.7 | 8.7 | |

| 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 | 4,162,390 | 103,783,508 | 11.8 | 9.9 |
| Jamestown Premier Property Fund | 2014 | 15,000,000 | 21,363,588 | 0 | 13,156,653 | 18,501,800 | 2.1 | 1.8 |
| Lion Properties Fund | 2018 | 152,400,000 | 153,527,721 | 0 | 38,554,456 | 125,533,524 | 14.3 | 11.9 |
| MetLife Core Property Fund | 2013 | 35,000,000 | 46,400,414 | 0 | 12,074,553 | 62,507,574 | 7.1 | 5.9 |
| Prime Property Fund | 2013 | 35,000,000 | 46,533,196 | 0 | 11,533,196 | 63,023,182 | 7.2 | 6.0 |
| Principal U.S. Property Account | 2015 | 35,000,000 | 35,000,000 | 0 | 0 | 47,944,634 | 5.5 | 4.6 |
| Prologis European Logistics Fund ² | 2017 | 47,950,142 | 49,151,023 | 0 | 3,996,452 | 52,489,714 | 6.0 | 5.0 |
| Prologis Targeted U.S. Logistics Fund | 2015 | 50,000,000 | 50,000,000 | 0 | 6,643,178 | 76,413,441 | 8.7 | 7.3 |
| Townsend Real Estate Fund, L.P. | 2016 | 90,000,000 | 102,251,860 | 0 | 12,251,860 | 117,947,530 | 13.4 | 11.2 |
| Core Commingled Funds | 1986 | 560,350,142 | 604,227,802 | 0 | 102,372,738 | 668,144,907 | 76.0 | 63.6 |
| Core Separate Accounts | | | | | | | | |
| BlackRock Core Separate Account | 1995 | 0 | 852,777,064 | 0 | 1,217,078,847 | 3,236,784 | 0.4 | 0.3 |
| Cornerstone Separate Account | 2004 | 0 | 255,784,314 | 0 | 349,671,865 | 319,664 | 0.0 | 0.0 |
| Core Separate Accounts | 1996 | 0 | 1,108,561,378 | 0 | 1,566,750,712 | 3,556,448 | 0.4 | 0.3 |
| Total BlackRock Separate Account | 1996 | 0 | 872,562,491 | 0 | 1,246,578,847 | 4,094,017 | 0.5 | 0.4 |
| Total Core Portfolio | 1986 | 560,350,142 | 1,712,789,181 | 0 | 1,669,123,450 | 671,701,355 | 76.4 | 64.0 |
| Value Added Portfolio | | | | | | | | |
| Allegis Value Trust ³ | 2006 | 25,000,000 | 25,550,296 | 0 | 31,209,296 | 182,420 | 0.0 | 0.0 |
| Asana Partners Fund II | 2019 | 35,000,000 | 918,750 | 34,081,250 | 0 | 376,890 | 0.0 | 3.3 |
| DRC European Real Estate Debt Fund II | 2013 | 50,007,963 | 48,584,007 | 13,710,285 | 44,059,804 | 8,339,049 | 0.9 | 2.1 |
| ECE European Prime Shopping Centre Fund II C | 2015 | 33,611,623 | 21,416,251 | 13,274,613 | 2,379,656 | 27,959,754 | 3.2 | 3.9 |
| Hammes Partners II | 2015 | 25,000,000 | 26,289,116 | 1,604,444 | 16,381,048 | 20,582,279 | 2.3 | 2.1 |
| Hammes Partners III | 2018 | 25,000,000 | 2,241,978 | 28,883,022 | 265,673 | 1,444,872 | 0.2 | 2.9 |
| NREP Nordic Strategies Fund | 2014 | 25,130,756 | 22,485,011 | 0 | 26,857,409 | 9,697,014 | 1.1 | 0.9 |
| NREP Nordic Strategies Fund II | 2016 | 35,176,432 | 27,678,997 | 8,027,306 | 4,204,159 | 30,922,465 | 3.5 | 3.7 |
| NREP Nordic Strategies Fund III | 2018 | 39,019,632 | 7,659,049 | 27,541,111 | 0 | 6,895,657 | 0.8 | 3.3 |
| Value Added Portfolio | 1986 | 292,946,406 | 182,823,455 | 127,122,031 | 125,357,045 | 106,400,400 | 12.1 | 22.2 |

Funding Status 13





| 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 | 19,785,427 | 0 | 29,500,000 | 857,233 | 0.1 | 0.1 |
| Carlyle China Project Rome Co-Investment | 2017 | 40,000,000 | 31,989,923 | 9,222,207 | 0 | 31,502,548 | 3.6 | 3.9 |
| Carlyle China Realty | 2017 | 10,000,000 | 9,145,091 | 2,334,314 | 1,593,478 | 7,220,445 | 0.8 | 0.9 |
| CIM Fund VIII | 2015 | 35,000,000 | 37,721,438 | 520,647 | 5,553,879 | 39,922,195 | 4.5 | 3.9 |
| KKR Real Estate Partners Americas | | 35,000,000 | 29,761,633 | 16,550,767 | 32,951,350 | 6,993,486 | 0.8 | 2.2 |
| Sculptor Real Estate Fund III ^{1,4} | 2014 | 35,000,000 | 24,120,547 | 15,367,125 | 21,530,614 | 14,084,742 | 1.6 | 2.8 |
| Opportunistic Portfolio | 1991 | 155,000,000 | 152,524,059 | 43,995,060 | 91,129,321 | 100,580,649 | 11.4 | 13.8 |
| Total Non-Core Portfolio 1Q 2007 Forward | 2007 | 447,946,406 | 335,347,514 | 171,117,091 | 216,486,366 | 206,981,049 | 23.6 | 36.0 |
| Total Private Portfolio | | | | | | | | |
| SCERS | 1986 | 1,008,296,548 | 2,048,136,695 | 171,117,091 | 1,885,609,816 | 878,682,404 | 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.

Funding Status 14

²Represent 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.

⁴ Previously Och-Ziff Real Estate Fund III



| | Market Value | | Qua | arter | | | Fiscal Ye | ear 2020 | | | 1 Y | 'ear | | | 3 Y | ear | |
|---|--------------|------|-------|-------|------|------|-----------|----------|------|------|-------|------|-------|------|------|------|------|
| Returns (%) | (\$) | INC | APP | TGRS | TNET | INC | APP | TGRS | TNET | INC | APP | TGRS | TNET | INC | APP | TGRS | TNET |
| Core Commingled Funds | | | | | | | | | | | | | | | | | |
| Brookfield Premier Real Estate Partners | 103,783,508 | 0.7 | 1.8 | 2.5 | 2.0 | 0.7 | 1.8 | 2.5 | 2.0 | 2.5 | 7.5 | 10.1 | 8.1 | | | | |
| Jamestown Premier Property Fund | 18,501,800 | 0.5 | 0.2 | 0.7 | 0.6 | 0.5 | 0.2 | 0.7 | 0.6 | 2.7 | 1.4 | 4.1 | 3.7 | 3.7 | 6.1 | 10.0 | 7.9 |
| Lion Properties Fund | 125,533,524 | 1.0 | 0.7 | 1.7 | 1.5 | 1.0 | 0.7 | 1.7 | 1.5 | 4.0 | 3.2 | 7.3 | 6.4 | | | | |
| MetLife Core Property Fund | 62,507,574 | 1.4 | -0.1 | 1.3 | 1.1 | 1.4 | -0.1 | 1.3 | 1.1 | 5.1 | 2.3 | 7.5 | 7.0 | 5.0 | 3.4 | 8.6 | 8.1 |
| Prime Property Fund | 63,023,182 | 1.0 | 0.8 | 1.7 | 1.4 | 1.0 | 0.8 | 1.7 | 1.4 | 3.9 | 3.9 | 7.9 | 6.6 | 4.0 | 4.9 | 9.1 | 7.9 |
| Principal U.S. Property Account | 47,944,634 | 1.0 | 0.9 | 1.9 | 1.6 | 1.0 | 0.9 | 1.9 | 1.6 | 4.3 | 2.6 | 7.0 | 6.0 | 4.6 | 4.1 | 8.8 | 7.8 |
| Prologis European Logistics Fund ² | 52,489,714 | 1.3 | -2.1 | -0.8 | -1.3 | 1.3 | -2.1 | -0.8 | -1.3 | 5.3 | 2.6 | 8.0 | 5.9 | 6.0 | 8.0 | 14.4 | 12.2 |
| Prologis Targeted U.S. Logistics Fund | 76,413,441 | 1.2 | 4.2 | 5.4 | 4.6 | 1.2 | 4.2 | 5.4 | 4.6 | 4.7 | 13.0 | 18.2 | 15.8 | 5.1 | 15.6 | 21.3 | 18.2 |
| Townsend Real Estate Fund, L.P. | 117,947,530 | 1.0 | 1.1 | 2.1 | 2.0 | 1.0 | 1.1 | 2.1 | 2.0 | 4.2 | 3.1 | 7.4 | 7.1 | 4.4 | 5.0 | 9.5 | 9.3 |
| Core Commingled Funds | 668,144,907 | 1.0 | 1.0 | 2.0 | 1.7 | 1.0 | 1.0 | 2.0 | 1.7 | 4.0 | 4.6 | 8.8 | 7.6 | 4.5 | 6.6 | 11.4 | 10.1 |
| Core Separate Accounts | | | | | | | | | | | | | | | | | |
| BlackRock Core Separate Account | 3,236,784 | 2.5 | 0.0 | 2.5 | 2.5 | 2.5 | 0.0 | 2.5 | 2.5 | 11.4 | 10.6 | 22.9 | 22.9 | 7.1 | 4.2 | 11.6 | 10.6 |
| Cornerstone Separate Account ⁵ | 319,664 | | | | | | | | | | | | | | | | |
| Core Separate Accounts ⁵ | 3,556,448 | 1.0 | 0.0 | 1.0 | 1.0 | 1.0 | 0.0 | 1.0 | 1.0 | 10.3 | 21.7 | 33.3 | 33.3 | 6.6 | 9.5 | 16.4 | 15.6 |
| Total BlackRock Separate Account ⁵ | 4,094,017 | 1.2 | 1.2 | 2.5 | 2.5 | 1.2 | 1.2 | 2.5 | 2.5 | -0.1 | 25.9 | 25.9 | 21.7 | 2.8 | 9.9 | 13.1 | 10.8 |
| Total Core Portfolio | 671,701,355 | 1.0 | 1.0 | 2.0 | 1.7 | 1.0 | 1.0 | 2.0 | 1.7 | 4.0 | 4.5 | 8.6 | 7.5 | 4.5 | 5.8 | 10.5 | 9.3 |
| Value Added Portfolio | | | | | | | | | | | | | | | | | |
| Allegis Value Trust ³ | 182,420 | | | | | | | | | | | | | | | | |
| Asana Partners Fund II | 376,890 | | | | | | | | | | | | | | | | |
| DRC European Real Estate Debt Fund II | 8,339,049 | 0.3 | -3.2 | -2.9 | -3.1 | 0.3 | -3.2 | -2.9 | -3.1 | 7.9 | -5.9 | 1.5 | 0.5 | 9.7 | -1.8 | 7.7 | 6.5 |
| ECE European Prime Shopping Centre Fund II C | 27,959,754 | 2.6 | -2.2 | 0.4 | -0.1 | 2.6 | -2.2 | 0.4 | -0.1 | 21.2 | 0.4 | 20.9 | 18.6 | 7.7 | 10.5 | 18.9 | 16.3 |
| Hammes Partners II | 20,582,279 | 1.9 | 21.1 | 23.0 | 22.6 | 1.9 | 21.1 | 23.0 | 22.6 | 9.3 | 23.2 | 34.2 | 30.6 | 8.6 | 15.1 | 24.7 | 19.9 |
| Hammes Partners III | 1,444,872 | 2.3 | 4.7 | 7.0 | -0.6 | 2.3 | 4.7 | 7.0 | -0.6 | | | | | | | | |
| NREP Nordic Strategies Fund | 9,697,014 | 0.6 | -1.9 | -1.3 | -2.9 | 0.6 | -1.9 | -1.3 | -2.9 | 3.3 | -1.8 | 1.4 | -18.8 | 5.9 | 7.7 | 13.9 | 5.3 |
| NREP Nordic Strategies Fund II | 30,922,465 | 0.1 | -2.0 | -1.9 | -2.5 | 0.1 | -2.0 | -1.9 | -2.5 | 1.5 | 8.7 | 10.3 | 7.2 | 3.2 | 20.6 | 24.3 | 17.2 |
| NREP Nordic Strategies Fund III | 6,895,657 | -0.6 | -4.2 | -4.8 | -8.2 | -0.6 | -4.2 | -4.8 | -8.2 | -7.3 | 4.9 | -2.4 | -29.9 | | | | |
| Value Added Portfolio | 106,400,400 | 1.0 | 1.5 | 2.5 | 1.5 | 1.0 | 1.5 | 2.5 | 1.5 | 7.7 | 5.4 | 13.2 | 6.0 | 6.8 | 8.1 | 15.3 | 10.8 |
| Opportunistic Portfolio | | | | | | | | | | | | | | | | | |
| BlackRock High Return Separate Account | 857,233 | | | | | | | | | | | | | | | | |
| Carlyle China Project Rome Co-Investment | 31,502,548 | 0.1 | -2.2 | -2.1 | -2.4 | 0.1 | -2.2 | -2.1 | -2.4 | -0.2 | 6.3 | 6.1 | 4.7 | | | | |
| Carlyle China Realty | 7,220,445 | 0.0 | -2.2 | -2.2 | -2.7 | 0.0 | -2.2 | -2.2 | -2.7 | -1.6 | 8.4 | 6.8 | 4.5 | | | | |
| CIM Fund VIII | 39,922,195 | 0.0 | -1.0 | -1.0 | -1.3 | 0.0 | -1.0 | -1.0 | -1.3 | 0.1 | 6.6 | 6.7 | 5.5 | 0.1 | 7.6 | 7.6 | 6.1 |
| KKR Real Estate Partners Americas | 6,993,486 | 10.0 | -11.3 | -1.3 | 0.3 | 10.0 | -11.3 | -1.3 | 0.3 | 15.1 | -13.1 | 1.2 | 3.3 | 17.3 | -8.4 | 8.4 | 8.7 |
| Sculptor Real Estate Fund III ^{1,4} | 14,084,742 | 1.8 | 2.2 | 4.0 | 3.7 | 1.8 | 2.2 | 4.0 | 3.7 | 9.4 | 8.8 | 18.8 | 15.9 | 10.6 | 19.0 | 31.0 | 26.9 |
| Opportunistic Portfolio | 100,580,649 | 0.8 | -1.6 | -0.8 | -1.0 | 0.8 | -1.6 | -0.8 | -1.0 | 1.7 | 9.1 | 10.9 | 9.1 | 3.3 | 9.1 | 12.6 | 10.5 |
| Total Non-Core Portfolio 1Q 2007 Forward | 206,981,049 | 1.0 | -0.1 | 0.9 | 0.4 | 1.0 | -0.1 | 0.9 | 0.4 | 4.7 | 7.5 | 12.4 | 8.4 | 5.1 | 8.6 | 14.0 | 10.9 |
| Total Private Portfolio | | | | | | | | | | | | | | | | | |
| SCERS | 878,682,404 | 1.0 | 0.8 | 1.8 | 1.4 | 1.0 | 0.8 | 1.8 | 1.4 | 4.2 | 5.3 | 9.6 | 7.6 | 4.7 | 6.5 | 11.4 | 9.7 |



| Determs (NA) | Returns (%) Market Value | | Quarter | | | Fiscal Year 2020 | | | | 1 Year | | | | 3 Year | | | |
|--|--------------------------|------|---------|------|------|------------------|-----|------|------|--------|------|------|-------|--------|------|------|------|
| keturns (%) | (\$) | 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 | 1.3 | 2.0 | 3.3 | 2.8 | 1.3 | 2.0 | 3.3 | 2.8 | 5.4 | 9.0 | 14.8 | 12.5 | 6.1 | 9.0 | 15.5 | 13.3 |
| DRC European Real Estate Debt Fund II (Pound Sterling) | £6,780,534 | 0.3 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 0.3 | 0.0 | 7.9 | 0.0 | 7.9 | 6.8 | 9.7 | 0.0 | 9.7 | 8.5 |
| ECE European Prime Shopping Centre Fund II (Euro) | € 25,655,870 | 2.7 | 2.0 | 4.8 | 4.2 | 2.7 | 2.0 | 4.8 | 4.2 | 21.4 | 6.5 | 29.0 | 26.5 | 7.6 | 11.4 | 20.2 | 17.6 |
| NREP Nordic Strategies Fund (Euro) | € 8,897,980 | 0.6 | 2.7 | 3.3 | 1.5 | 0.6 | 2.7 | 3.3 | 1.5 | 3.3 | 4.9 | 8.4 | -13.1 | 5.9 | 9.0 | 15.2 | 6.5 |
| NREP Nordic Strategies Fund II (Euro) | € 28,374,454 | 0.1 | 2.2 | 2.3 | 1.7 | 0.1 | 2.2 | 2.3 | 1.7 | 1.5 | 15.7 | 17.4 | 14.1 | 3.2 | 21.7 | 25.4 | 18.3 |
| NREP Nordic Strategies Fund III (Euro) | € 6,327,455 | -0.6 | 0.0 | -0.6 | -4.2 | -0.6 | 0.0 | -0.6 | -4.2 | -7.5 | 12.4 | 4.5 | -25.0 | | | | |
| Indices | | | | | | | | | | | | | | | | | |
| NFI ODCE+ 35bps | | | | 1.4 | 1.2 | | | 1.4 | 1.2 | | | 5.9 | 5.0 | | | 7.7 | 6.7 |
| NFI-ODCE | | 1.0 | 0.3 | 1.3 | 1.1 | 1.0 | 0.3 | 1.3 | 1.1 | 4.2 | 1.4 | 5.6 | 4.6 | 4.3 | 2.9 | 7.3 | 6.3 |
| NFI-ODCE + 100bps | | | | 1.6 | 1.3 | | | 1.6 | 1.3 | | | 6.6 | 5.6 | | | 8.3 | 7.3 |
| CPI + 500 bps | | | | 1.6 | | | | 1.6 | | | | 6.8 | | | | 7.2 | |

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.

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

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

Previously Och-Ziff Real Estate Fund III.

⁵ Core Seperate Account returns are no longer meaningful as all assets have been sold.





| Returns (%) Fore Commingled Funds Brookfield Premier Real Estate Partners Brookfield Premier Property Fund Brookfield Premier Property Fund Brookfield Premier Property Fund | 103,783,508 18,501,800 125,533,524 62,507,574 | 4.1 | APP | TGRS | TNET | INC | APP | TGRS | TNET | 1010 | | | | Calculation | IRR | Multiple |
|--|--|------|------|------|------|-----|------|------|-------|------|------|------|-------|-------------|-------|----------|
| Brookfield Premier Real Estate Partners amestown Premier Property Fund ion Properties Fund | 18,501,800 125,533,524 62,507,574 | 4.1 | | | | | Ar i | IGNO | IIVEI | INC | APP | TGRS | TNET | Inception | INN | Multiple |
| amestown Premier Property Fund ion Properties Fund | 18,501,800 125,533,524 62,507,574 | 4.1 | | | | | | | | | | | | | | |
| ion Properties Fund | 125,533,524 62,507,574 | 4.1 | | | | | | | | 2.5 | 7.5 | 10.1 | 8.1 | 4Q18 | 8.1 | 1.1 |
| · | 62,507,574 | | 8.2 | 12.6 | 10.0 | | | | | 4.2 | 8.3 | 12.7 | 10.1 | 1Q14 | 10.6 | 1.5 |
| and the second s | | | | | | | | | | 4.0 | 3.2 | 7.3 | 6.4 | 4Q18 | 6.5 | 1.1 |
| MetLife Core Property Fund | | 5.1 | 5.0 | 10.3 | 9.8 | | | | | 5.1 | 6.1 | 11.4 | 10.9 | 1Q14 | 10.9 | 1.6 |
| rime Property Fund | 63,023,182 | 4.2 | 6.7 | 11.1 | 9.9 | | | | | 4.2 | 7.2 | 11.7 | 10.5 | 4Q13 | 10.4 | 1.6 |
| rincipal U.S. Property Account | 47,944,634 | | | | | | | | | 4.7 | 4.4 | 9.2 | 8.2 | 4Q15 | 8.2 | 1.4 |
| rologis European Logistics Fund ² | 52,489,714 | | | | | | | | | 4.8 | 8.2 | 13.3 | 11.6 | 1Q16 | 10.0 | 1.2 |
| rologis Targeted U.S. Logistics Fund | 76,413,441 | | | | | | | | | 5.4 | 13.5 | 19.4 | 16.7 | 3Q15 | 17.3 | 1.7 |
| ownsend Real Estate Fund, L.P. | 117,947,530 | | | | | | | | | 4.4 | 4.6 | 9.2 | 8.9 | 2Q16 | 8.6 | 1.3 |
| Core Commingled Funds | 668,144,907 | 4.6 | 7.3 | 12.1 | 10.8 | 4.9 | 6.4 | 11.5 | 10.5 | 4.5 | 3.4 | 8.0 | 7.1 | 4Q86 | 6.9 | 1.3 |
| ore Separate Accounts | | | | | | | | | | | | | | | | |
| BlackRock Core Separate Account | 3,236,784 | 6.3 | 6.2 | 12.8 | 11.4 | 6.1 | 6.7 | 13.1 | 11.7 | 7.2 | 3.3 | 10.6 | 9.1 | 1Q96 | 9.9 | 1.4 |
| Cornerstone Separate Account | 319,664 | | | | | | | | | | | | | 3Q04 | 5.6 | 1.4 |
| Core Separate Accounts | 3,556,448 | 6.0 | 7.4 | 13.6 | 12.5 | 5.9 | 7.4 | 13.6 | 12.5 | 7.2 | 3.5 | 10.9 | 9.7 | 1Q96 | 8.8 | 1.4 |
| Total BlackRock Separate Account | 4,094,017 | 3.7 | 8.6 | 12.6 | 10.5 | 4.7 | 7.6 | 12.6 | 10.9 | 6.7 | 3.9 | 10.8 | 9.3 | 1Q96 | 9.7 | 1.4 |
| Total Core Portfolio | 671,701,355 | 4.7 | 5.8 | 10.7 | 9.4 | 5.2 | 6.4 | 11.8 | 10.6 | 5.5 | 2.0 | 7.6 | 6.6 | 4Q86 | 8.3 | 1.4 |
| /alue Added Portfolio | | | | | | | | | | | | | | | | |
| llegis Value Trust ³ | 182,420 | | | | | | | | | | | | | 1Q07 | 2.5 | 1.2 |
| sana Partners Fund II | 376,890 | | | | | | | | | | | | | 4Q19 | | |
| PRC European Real Estate Debt Fund II | 8,339,049 | 10.9 | -6.2 | 4.2 | 2.7 | | | | | 10.1 | -5.7 | 4.0 | 2.3 | 1Q14 | 3.1 | 1.1 |
| CE European Prime Shopping Centre Fund II C | 27,959,754 | | | | | | | | | 6.2 | 15.3 | 22.4 | 19.8 | 4Q15 | 19.7 | 1.4 |
| lammes Partners II | 20,582,279 | | | | | | | | | 10.1 | 14.0 | 25.3 | 19.0 | 3Q15 | 18.0 | 1.4 |
| lammes Partners III | 1,444,872 | | | | | | | | | 3.5 | 9.6 | 13.4 | -25.9 | 1Q19 | -39.5 | 8.0 |
| IREP Nordic Strategies Fund | 9,697,014 | | | | | | | | | 9.1 | 13.7 | 23.6 | 16.7 | 1Q15 | 23.2 | 1.6 |
| IREP Nordic Strategies Fund II | 30,922,465 | | | | | | | | | 2.8 | 18.9 | 22.2 | 12.9 | 3Q16 | 12.7 | 1.3 |
| IREP Nordic Strategies Fund III | 6,895,657 | | | | | | | | | -7.3 | 4.9 | -2.4 | -29.9 | 4Q18 | -15.8 | 0.9 |
| /alue Added Portfolio | 106,400,400 | 7.9 | 7.3 | 15.5 | 11.9 | 7.3 | 4.7 | 12.2 | 9.4 | 2.2 | 3.8 | 6.0 | 4.7 | 4Q86 | 5.0 | 1.2 |
| Opportunistic Portfolio | | | | | | | | | | | | | | | | |
| llackRock High Return Separate Account | 857,233 | | | | | | | | | | | | | 3Q16 | 19.2 | 1.5 |
| Carlyle China Project Rome Co-Investment | 31,502,548 | | | | | | | | | -1.6 | 4.8 | 3.1 | 0.0 | 3Q17 | -1.0 | 1.0 |
| Carlyle China Realty | 7,220,445 | | | | | | | | | -0.3 | 4.7 | 4.5 | 1.3 | 3Q17 | -2.6 | 1.0 |
| IM Fund VIII | 39,922,195 | | | | | | | | | 0.1 | 9.9 | 10.0 | 7.9 | 2Q15 | 7.0 | 1.2 |
| KR Real Estate Partners Americas | 6,993,486 | 14.5 | -5.2 | 9.4 | 8.3 | | | | | 17.9 | -8.4 | 9.7 | 8.5 | 2Q14 | 14.3 | 1.3 |
| culptor Real Estate Fund III ^{1,4} | 14,084,742 | 14.7 | 15.5 | 31.9 | 12.6 | | | | | 14.7 | 15.5 | 31.9 | 12.6 | 4Q14 | 24.1 | 1.5 |
| Opportunistic Portfolio | 100,580,649 | 4.3 | 9.1 | 13.8 | 9.8 | 5.8 | 12.4 | 19.5 | 14.8 | 2.0 | 6.3 | 8.6 | 6.8 | 1Q91 | 17.6 | 1.3 |
| Total Non-Core Portfolio 1Q 2007 Forward | 206,981,049 | 6.4 | 7.9 | 14.7 | 11.4 | 6.3 | 9.7 | 16.5 | 13.1 | 4.7 | 5.1 | 9.9 | 5.7 | 1Q07 | 7.3 | 1.3 |
| otal Private Portfolio | | | | | | | | | | | | | | | | |
| CERS | 878,682,404 | 5.1 | 6.3 | 11.6 | 9.8 | 5.4 | 7.0 | 12.6 | 11.0 | 4.4 | 4.7 | 9.3 | 8.3 | 4Q86 | 8.2 | 1.3 |



| | Market Value | | 5 Y | 'ear | | | 10 \ | Year | | | Ince | ption | | TWR | Net | Equity |
|--|--------------|------|------|------|------|-----|------|------|------|------|------|-------|-------|--------------------------|------|----------|
| Returns (%) | (\$) | INC | APP | TGRS | TNET | INC | APP | TGRS | TNET | INC | APP | TGRS | TNET | Calculation Inception | IRR | Multiple |
| Ex-US Dollar Denominated Investments (In Local Currency) | | | | | | | | | | | | | | | | |
| Prologis Targeted Europe Logistics Fund (Euro) | € 35,142,277 | | | | | | | | | 5.0 | 8.2 | 13.6 | 11.6 | 1Q16 | 14.9 | 1.2 |
| DRC European Real Estate Debt Fund II (Pound Sterling) | £6,780,534 | 10.9 | -0.8 | 10.1 | 8.6 | | | | | 10.2 | -0.7 | 9.5 | 6.9 | 1Q14 | 7.8 | 1.2 |
| ECE European Prime Shopping Centre Fund II (Euro) | € 25,655,870 | | | | | | | | | 6.1 | 16.0 | 23.4 | 20.7 | 4Q15 | 21.7 | 1.5 |
| NREP Nordic Strategies Fund (Euro) | € 8,897,980 | | | | | | | | | 9.2 | 16.3 | 26.4 | 19.3 | 1Q15 | 25.2 | 1.7 |
| NREP Nordic Strategies Fund II (Euro) | € 28,374,454 | | | | | | | | | 2.8 | 19.4 | 22.7 | 13.4 | 3Q16 | 15.0 | 1.3 |
| NREP Nordic Strategies Fund III (Euro) | € 6,327,455 | | | | | | | | | -7.5 | 12.4 | 4.5 | -25.0 | 4Q18 | -9.6 | 0.9 |
| Indices | | | | | | | | | | | | | | | | |
| NFI ODCE+ 35bps | | | | 9.7 | 8.7 | | | 11.2 | 10.2 | | | 7.7 | 6.6 | 4Q86 | | |
| NFI-ODCE | | 4.4 | 4.7 | 9.3 | 8.4 | 5.0 | 5.6 | 10.9 | 9.8 | 6.7 | 0.5 | 7.3 | 6.3 | 4Q86 | | |
| NFI-ODCE + 100bps | | | | 10.3 | 9.4 | | | 11.9 | 10.8 | | | 8.3 | 7.3 | 4Q86 | | |
| CPI + 500 bps | | | | 6.6 | | | | 6.8 | | | | 7.7 | | 4Q86 | | |

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.

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

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

⁴ Previously Och-Ziff Real Estate Fund III.

Score Seperate Account returns are no longer meaningful as all assets have been sold.



| (\$) | 20 | 19 | Fiscal Ye | ear 2020 | 20 | 18 | 2017 | | 20 | 16 | 2015 | | 2014 | | 2013 | | 2012 | |
|-----------------------|---|--|---|--|--|--|--|---|--|--|---|---|--|--|--|--|---|--|
| | TGRS | TNET | TGRS | TNET | TGRS | TNET | TGRS | TNET | TGRS | TNET | TGRS | TNET | TGRS | TNET | TGRS | TNET | TGRS | TNE |
| | | | | | | | | | | | | | | | | | | |
| 103,783,508 | 7.6 | 6.1 | 2.5 | 2.0 | 2.3 | 1.9 | | | | | | | | | | | | |
| 18,501,800 | 2.8 | 2.5 | 0.7 | 0.6 | 9.7 | 7.7 | 18.0 | 14.2 | 6.6 | 5.3 | 22.4 | 17.3 | 14.7 | 11.9 | | | | |
| 125,533,524 | 5.2 | 4.5 | 1.7 | 1.5 | 2.0 | 1.8 | | | | | | | | | | | | |
| 62,507,574 | 6.3 | 6.0 | 1.3 | 1.1 | 7.8 | 7.3 | 8.4 | 7.9 | 9.3 | 8.8 | 16.9 | 16.3 | 17.4 | 16.9 | | | | |
| 63,023,182 | 5.5 | 4.6 | 1.7 | 1.4 | 9.1 | 8.0 | 9.9 | 8.7 | 10.4 | 9.2 | 15.9 | 14.6 | 15.5 | 14.1 | 3.8 | 3.6 | | |
| 47,944,634 | 5.4 | 4.7 | 1.9 | 1.6 | 9.1 | 8.1 | 9.1 | 8.1 | 10.0 | 9.0 | 3.0 | 2.8 | | | | | | |
| 52,489,714 | 5.0 | 3.5 | -0.8 | -1.3 | 13.6 | 10.8 | 30.4 | 28.5 | 2.8 | 2.4 | | | | | | | | |
| 76,413,441 | 13.8 | 12.0 | 5.4 | 4.6 | 18.5 | 16.1 | 24.2 | 20.3 | 16.1 | 14.2 | 9.1 | 7.9 | | | | | | |
| 117,947,530 | 5.7 | 5.5 | 2.1 | 2.0 | 9.0 | 8.8 | 11.0 | 10.8 | 8.4 | 8.2 | | | | | | | | |
| 668,144,907 | 6.6 | 5.7 | 2.0 | 1.7 | 10.9 | 9.7 | 14.2 | 12.8 | 9.8 | 8.9 | 15.7 | 14.1 | 13.5 | 12.4 | 10.2 | 9.3 | 11.1 | 10. |
| | | | | | | | | | | | | | | | | | | |
| 3,236,784 | | | | | 15.8 | 14.9 | 9.1 | 7.5 | 11.3 | 9.3 | 15.3 | 13.9 | 16.3 | 12.5 | 11.8 | 9.6 | 13.5 | 13 |
| 319,664 | | | | | -8.4 | -8.8 | 21.5 | 20.8 | 14.0 | 13.3 | 2.4 | 1.6 | 14.0 | 13.2 | 11.3 | 10.5 | 16.2 | 15 |
| 3,556,448 | 5.4 | 5.4 | 1.0 | 1.0 | 28.5 | 27.7 | 12.8 | 11.6 | 10.0 | 8.6 | 7.7 | 6.6 | 16.0 | 13.5 | 11.0 | 9.5 | 14.1 | 13 |
| 4,094,017 | 16.5 | 15.3 | 2.5 | 2.5 | 10.6 | 7.2 | 10.6 | 9.0 | 8.6 | 7.0 | 10.7 | 9.4 | 17.0 | 13.6 | 10.9 | 9.0 | 13.1 | 12. |
| 671,701,355 | 6.5 | 5.7 | 2.0 | 1.7 | 8.6 | 7.4 | 13.6 | 12.3 | 9.8 | 8.5 | 10.4 | 9.2 | 15.3 | 13.2 | 10.8 | 9.5 | 13.3 | 12. |
| | | | | | | | | | | | | | | | | | | |
| 182,420 | | | | | -22.6 | -22.8 | 8.2 | 7.8 | 9.9 | 9.4 | 8.6 | 8.0 | 10.8 | 10.2 | 4.7 | 4.0 | 21.8 | 20. |
| 376,890 | | | | | | | | | | | | | | | | | | |
| 8,339,049 | 3.9 | 3.1 | -2.9 | -3.1 | -0.6 | -1.7 | 23.8 | 22.3 | -7.8 | -8.9 | 5.0 | 3.0 | 1.4 | -2.1 | | | | |
| 27,959,754 | 14.4 | 13.0 | 0.4 | -0.1 | 15.1 | 12.8 | 24.7 | 21.5 | 22.1 | 19.7 | 12.1 | 11.0 | | | | | | |
| 20,582,279 | 30.1 | 27.7 | 23.0 | 22.6 | 27.9 | 19.6 | 12.7 | 10.0 | 16.2 | 10.4 | 19.4 | 12.9 | | | | | | |
| 1,444,872 | 13.4 | -25.9 | | | | | | | | | | | | | | | | |
| 9,697,014 | 0.9 | -19.0 | -1.3 | -2.9 | 0.8 | 0.1 | 41.2 | 40.1 | 23.1 | 21.7 | 55.1 | 50.8 | | | | | | |
| 30,922,465 | 4.2 | 2.3 | -1.9 | -2.5 | 17.0 | 12.3 | 44.9 | 34.4 | 8.6 | -3.8 | | | | | | | | |
| 6,895,657 | 0.4 | -18.1 | -4.8 | -8.2 | -2.8 | -14.4 | | | | | | | | | | | | |
| 106,400,400 | 10.1 | 4.2 | 2.5 | 1.5 | 10.5 | 6.3 | 24.9 | 22.3 | 9.5 | 7.0 | 19.1 | 17.0 | 15.7 | 13.7 | 13.3 | 10.8 | 19.6 | 18 |
| | | | | | | | | | | | | | | | | | | |
| | | | | | 17.0 | 14.4 | 24.0 | 21.7 | 6.3 | 6.3 | | | | | | | | |
| 857,233 | | | | | | | | | | | | | | | | | | |
| 857,233 31,502,548 | 4.9 | 3.9 | -2.1 | -2.4 | -2.5 | -7.1 | 4.7 | 3.6 | | | | | | | | | | |
| , | 4.9 5.8 | 3.9 4.2 | -2.1 -2.2 | -2.4 -2.7 | -2.5 1.6 | -7.1 -1.4 | 4.7 2.7 | 3.6 0.2 | | | | | | | | | | |
| 31,502,548 | | | | | | | | | 6.4 | 4.0 | 16.9 | 13.8 | | | | | | |
| | 4,094,017 671,701,355 182,420 376,890 8,339,049 27,959,754 20,582,279 1,444,872 9,697,014 30,922,465 6,895,657 106,400,400 | 4,094,017 16.5 671,701,355 6.5 182,420 376,890 8,339,049 3.9 27,959,754 14.4 20,582,279 30.1 1,444,872 13.4 9,697,014 0.9 30,922,465 4.2 6,895,657 0.4 106,400,400 10.1 | 4,094,017 16.5 15.3 671,701,355 6.5 5.7 182,420 376,890 8,339,049 3.9 3.1 27,959,754 14.4 13.0 20,582,279 30.1 27.7 1,444,872 13.4 -25.9 9,697,014 0.9 -19.0 30,922,465 4.2 2.3 6,895,657 0.4 -18.1 106,400,400 10.1 4.2 | 4,094,017 16.5 15.3 2.5 671,701,355 6.5 5.7 2.0 182,420 376,890 8,339,049 3.9 3.1 -2.9 27,959,754 14.4 13.0 0.4 20,582,279 30.1 27.7 23.0 1,444,872 13.4 -25.9 9,697,014 0.9 -19.0 -1.3 30,922,465 4.2 2.3 -1.9 6,895,657 0.4 -18.1 -4.8 106,400,400 10.1 4.2 2.5 | 4,094,017 16.5 15.3 2.5 2.5 671,701,355 6.5 5.7 2.0 1.7 182,420 376,890 8,339,049 3.9 3.1 -2.9 -3.1 27,959,754 14.4 13.0 0.4 -0.1 20,582,279 30.1 27.7 23.0 22.6 1,444,872 13.4 -25.9 9,697,014 0.9 -19.0 -1.3 -2.9 30,922,465 4.2 2.3 -1.9 -2.5 6,895,657 0.4 -18.1 -4.8 -8.2 106,400,400 10.1 4.2 2.5 1.5 | 4,094,017 16.5 15.3 2.5 2.5 10.6 671,701,355 6.5 5.7 2.0 1.7 8.6 182,420 376,890 8,339,049 3.9 3.1 -2.9 -3.1 -0.6 27,959,754 14.4 13.0 0.4 -0.1 15.1 20,582,279 30.1 27.7 23.0 22.6 27.9 1,444,872 13.4 -25.9 9,697,014 0.9 -19.0 -1.3 -2.9 0.8 30,922,465 4.2 2.3 -1.9 -2.5 17.0 6,895,657 0.4 -18.1 -4.8 -8.2 -2.8 106,400,400 10.1 4.2 2.5 1.5 10.5 | 4,094,017 16.5 15.3 2.5 2.5 10.6 7.2 671,701,355 6.5 5.7 2.0 1.7 8.6 7.4 182,420 376,890 8,339,049 3.9 3.1 -2.9 -3.1 -0.6 -1.7 27,959,754 14.4 13.0 0.4 -0.1 15.1 12.8 20,582,279 30.1 27.7 23.0 22.6 27.9 19.6 1,444,872 13.4 -25.9 9,697,014 0.9 -19.0 -1.3 -2.9 0.8 0.1 30,922,465 4.2 2.3 -1.9 -2.5 17.0 12.3 6,895,657 0.4 -18.1 -4.8 -8.2 -2.8 -14.4 106,400,400 10.1 4.2 2.5 1.5 10.5 6.3 | 4,094,017 16.5 15.3 2.5 2.5 10.6 7.2 10.6 671,701,355 6.5 5.7 2.0 1.7 8.6 7.4 13.6 182,420 376,890 -22.6 -22.8 8.2 8,339,049 3.9 3.1 -2.9 -3.1 -0.6 -1.7 23.8 27,959,754 14.4 13.0 0.4 -0.1 15.1 12.8 24.7 20,582,279 30.1 27.7 23.0 22.6 27.9 19.6 12.7 1,444,872 13.4 -25.9 9,697,014 0.9 -19.0 -1.3 -2.9 0.8 0.1 41.2 30,922,465 4.2 2.3 -1.9 -2.5 17.0 12.3 44.9 6,895,657 0.4 -18.1 -4.8 -8.2 -2.8 -14.4 106,400,400 10.1 4.2 2.5 1.5 10.5 6.3 24.9 | 4,094,017 16.5 15.3 2.5 2.5 10.6 7.2 10.6 9.0 671,701,355 6.5 5.7 2.0 1.7 8.6 7.4 13.6 12.3 182,420 376,890 8,339,049 3.9 3.1 -2.9 -3.1 -0.6 -1.7 23.8 22.3 27,959,754 14.4 13.0 0.4 -0.1 15.1 12.8 24.7 21.5 20,582,279 30.1 27.7 23.0 22.6 27.9 19.6 12.7 10.0 1,444,872 13.4 -25.9 9,697,014 0.9 -19.0 -1.3 -2.9 0.8 0.1 41.2 40.1 30,922,465 4.2 2.3 -1.9 -2.5 17.0 12.3 44.9 34.4 6,895,657 0.4 -18.1 -4.8 -8.2 -2.8 -14.4 106,400,400 10.1 4.2 2.5 1.5 10.5 6.3 24.9 22.3 | 4,094,017 16.5 15.3 2.5 2.5 10.6 7.2 10.6 9.0 8.6 671,701,355 6.5 5.7 2.0 1.7 8.6 7.4 13.6 12.3 9.8 182,420 376,890 3.9 3.1 -2.9 -3.1 -0.6 -1.7 23.8 22.3 -7.8 27,959,754 14.4 13.0 0.4 -0.1 15.1 12.8 24.7 21.5 22.1 20,582,279 30.1 27.7 23.0 22.6 27.9 19.6 12.7 10.0 16.2 1,444,872 13.4 -25.9 9 0.8 0.1 41.2 40.1 23.1 30,922,465 4.2 2.3 -1.9 -2.5 17.0 12.3 44.9 34.4 8.6 6,895,657 0.4 -18.1 -4.8 -8.2 -2.8 -14.4 106,400,400 10.1 4.2 2.5 1.5 10.5 6.3 24.9 22.3 9.5 | 4,094,017 16.5 15.3 2.5 2.5 10.6 7.2 10.6 9.0 8.6 7.0 671,701,355 6.5 5.7 2.0 1.7 8.6 7.4 13.6 12.3 9.8 8.5 182,420 376,890 8,339,049 3.9 3.1 -2.9 -3.1 -0.6 -1.7 23.8 22.3 -7.8 -8.9 27,959,754 14.4 13.0 0.4 -0.1 15.1 12.8 24.7 21.5 22.1 19.7 20,582,279 30.1 27.7 23.0 22.6 27.9 19.6 12.7 10.0 16.2 10.4 1,444,872 13.4 -25.9 9,697,014 0.9 -19.0 -1.3 -2.9 0.8 0.1 41.2 40.1 23.1 21.7 30,922,465 4.2 2.3 -1.9 -2.5 17.0 12.3 44.9 34.4 8.6 -3.8 6,895,657 0.4 -18.1 -4.8 -8.2 -2.8 -14.4 106,400,400 10.1 4.2 2.5 1.5 10.5 6.3 24.9 22.3 9.5 7.0 | 4,094,017 16.5 15.3 2.5 2.5 10.6 7.2 10.6 9.0 8.6 7.0 10.7 671,701,355 6.5 5.7 2.0 1.7 8.6 7.4 13.6 12.3 9.8 8.5 10.4 182,420 376,890 8,339,049 3.9 3.1 -2.9 -3.1 -0.6 -1.7 23.8 22.3 -7.8 -8.9 5.0 27,959,754 14.4 13.0 0.4 -0.1 15.1 12.8 24.7 21.5 22.1 19.7 12.1 20,582,279 9,697,014 1,444,872 13.4 -25.9 13.0 22.6 27.9 19.6 12.7 10.0 16.2 10.4 19.4 30,922,465 6,895,657 0.4 -18.1 -4.8 -8.2 -2.8 -14.4 106,400,400 10.1 4.2 2.5 1.5 10.5 6.3 24.9 22.3 9.5 7.0 19.1 | 4,094,017 16.5 15.3 2.5 2.5 10.6 7.2 10.6 9.0 8.6 7.0 10.7 9.4 671,701,355 6.5 5.7 2.0 1.7 8.6 7.4 13.6 12.3 9.8 8.5 10.4 9.2 182,420 376,890 8,339,049 3.9 3.1 -2.9 -3.1 -0.6 -1.7 23.8 22.3 -7.8 -8.9 5.0 3.0 27,959,754 1,444,872 13.4 -25.9 23.0 22.6 27.9 19.6 12.7 10.0 16.2 10.4 19.4 12.9 1,444,872 13.4 -25.9 -9 0.8 0.1 41.2 40.1 23.1 21.7 55.1 50.8 30,922,465 6,895,657 0.4 -18.1 -4.8 -8.2 -2.8 -14.4 12.3 44.9 34.4 8.6 -3.8 106,400,400 10.1 4.2 2.5 1.5 10.5 6.3 24.9 22.3 9.5 7.0 19.1 17.0 | 4,094,017 16.5 15.3 2.5 2.5 10.6 7.2 10.6 9.0 8.6 7.0 10.7 9.4 17.0 671,701,355 6.5 5.7 2.0 1.7 8.6 7.4 13.6 12.3 9.8 8.5 10.4 9.2 15.3 182,420 | 4,094,017 16.5 15.3 2.5 2.5 10.6 7.2 10.6 9.0 8.6 7.0 10.7 9.4 17.0 13.6 671,701,355 6.5 5.7 2.0 1.7 8.6 7.4 13.6 12.3 9.8 8.5 10.4 9.2 15.3 13.2 182,420 376,890 3.9 3.1 -2.9 -3.1 -0.6 -1.7 23.8 22.3 -7.8 -8.9 5.0 3.0 1.4 -2.1 27,959,754 14.4 13.0 0.4 -0.1 15.1 12.8 24.7 21.5 22.1 19.7 12.1 11.0 20,582,279 30.1 27.7 23.0 22.6 27.9 19.6 12.7 10.0 16.2 10.4 19.4 12.9 1,444,872 13.4 -25.9 9 0.8 0.1 41.2 40.1 23.1 21.7 55.1 50.8 30,922,465 4.2 2.3 -1.9 -2.5 17.0 12.3 44.9 34.4 8.6 -3.8 -3.8 | 4,094,017 16.5 15.3 2.5 2.5 10.6 7.2 10.6 9.0 8.6 7.0 10.7 9.4 17.0 13.6 10.9 671,701,355 6.5 5.7 2.0 1.7 8.6 7.4 13.6 12.3 9.8 8.5 10.4 9.2 15.3 13.2 10.8 182,420 | 4,094,017 16.5 15.3 2.5 2.5 10.6 7.2 10.6 9.0 8.6 7.0 10.7 9.4 17.0 13.6 10.9 9.0 671,701,355 6.5 5.7 2.0 1.7 8.6 7.4 13.6 12.3 9.8 8.5 10.4 9.2 15.3 13.2 10.8 9.5 182,420 376,890 8,339,049 3.9 3.1 -2.9 -3.1 -0.6 -1.7 23.8 22.3 -7.8 -8.9 5.0 3.0 1.4 -2.1 27,959,754 14.4 13.0 0.4 -0.1 15.1 12.8 24.7 21.5 22.1 19.7 12.1 11.0 20,582,279 30.1 27.7 23.0 22.6 27.9 19.6 12.7 10.0 16.2 10.4 19.4 12.9 1,444,872 13.4 -25.9 9,697,014 0.9 -19.0 -1.3 -2.9 0.8 0.1 41.2 40.1 23.1 21.7 55.1 50.8 30,922,465 4.2 2.3 -1.9 -2.5 17.0 12.3 44.9 34.4 8.6 -3.8 6,895,657 0.4 -18.1 -4.8 -8.2 -2.8 -14.4 10.6 10.5 6.3 24.9 22.3 9.5 7.0 19.1 17.0 15.7 13.7 13.3 10.8 | 4,094,017 16.5 15.3 2.5 2.5 10.6 7.2 10.6 9.0 8.6 7.0 10.7 9.4 17.0 13.6 10.9 9.0 13.1 671,701,355 6.5 5.7 2.0 1.7 8.6 7.4 13.6 12.3 9.8 8.5 10.4 9.2 15.3 13.2 10.8 9.5 13.3 182,420 376,890 8.339,049 3.9 3.1 -2.9 -3.1 -0.6 -1.7 23.8 22.3 -7.8 -8.9 5.0 3.0 1.4 -2.1 27,959,754 14.4 13.0 0.4 -0.1 15.1 12.8 24.7 21.5 22.1 19.7 12.1 11.0 20,582,279 30.1 27.7 23.0 22.6 27.9 19.6 12.7 10.0 16.2 10.4 19.4 12.9 1.444,872 13.4 -25.9 9,697,014 0.9 -19.0 -1.3 -2.9 0.8 0.1 41.2 40.1 23.1 21.7 55.1 50.8 6,895,657 0.4 -18.1 -4.8 -8.2 -2.8 -14.4 106,400,400 10.1 4.2 2.5 1.5 10.5 6.3 24.9 22.3 9.5 7.0 19.1 17.0 15.7 13.7 13.3 10.8 19.6 |

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10.2

9.8

10.9

Sculptor Real Estate Fund III^{1,4}

Total Non-Core Portfolio 1Q 2007 Forward

Opportunistic Portfolio

Total Private Portfolio

NFI-ODCE + 35 bps

NFI-ODCE + 100 bps

SCERS

NFI-ODCE

CPI + 500 bps

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.

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

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

⁴ Previously Och-Ziff Real Estate Fund III.

⁵ Core Seperate Account returns are no longer meaningful as all assets have been sold.



| | Market Value | 20 | 11 | 20 | 10 | 2009 | | 20 | 08 | 20 | 07 | 20 | 06 |
|---|--------------|-------|--------|-------|------|--------------|--------|-------------|-------|------|------|-------|------|
| Returns (%) | (\$) | TGRS | TNET | TGRS | TNET | TGRS | TNET | TGRS | TNET | TGRS | TNET | TGRS | TNET |
| Core Commingled Funds | (+/ | 10113 | ****** | 101.5 | | 1010 | ****** | 10113 | | 1010 | | 101.5 | |
| Brookfield Premier Real Estate Partners | 103,783,508 | | | | | | | | | | | | |
| Jamestown Premier Property Fund | 18,501,800 | | | | | | | | | | | | |
| Lion Properties Fund | 125,533,524 | | | | | | | | | | | | |
| MetLife Core Property Fund | 62,507,574 | | | | | | | | | | | | |
| Prime Property Fund | 63,023,182 | | | | | | | | | | | | |
| Principal U.S. Property Account | 47,944,634 | | | | | | | | | | | | |
| Prologis European Logistics Fund ² | 52,489,714 | | | | | | | | | | | | |
| Prologis Targeted U.S. Logistics Fund | 76,413,441 | | | | | | | | | | | | |
| Townsend Real Estate Fund, L.P. | 117,947,530 | | | | | | | | | | | | |
| Core Commingled Funds | 668,144,907 | 16.4 | 15.5 | 14.1 | 13.3 | -33.0 | -33.6 | -13.8 | -14.6 | 15.5 | 14.5 | 16.9 | 15.8 |
| Sort Comming.cu rumus | 000,211,507 | 2011 | | | | 55.0 | | 20.0 | | 20.0 | | 20.5 | |
| Core Separate Accounts | | | | | | | | | | | | | |
| BlackRock Core Separate Account | 3,236,784 | 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 | 319,664 | 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 | 3,556,448 | 18.7 | 18.2 | 18.6 | 17.6 | -28.5 | -28.7 | -10.5 | -11.1 | 16.3 | 13.6 | 15.2 | 12.1 |
| Total BlackRock Separate Account | 4,094,017 | 16.1 | 15.7 | 17.3 | 16.4 | -26.8 | -26.7 | -11.1 | -11.6 | 18.5 | 15.0 | 16.8 | 13.1 |
| Total Core Portfolio | 671,701,355 | 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 | 182,420 | 15.7 | 14.7 | 21.6 | 20.4 | -62.2 | -62.8 | -21.2 | -23.9 | 38.6 | 28.4 | | |
| Asana Partners Fund II | 376,890 | 15.7 | 14.7 | 21.0 | 20.4 | -02.2 | -02.8 | -21.2 | -23.9 | 36.0 | 20.4 | | |
| | 8,339,049 | | | | | | | | | | | | |
| DRC European Real Estate Debt Fund II | | | | | | | | | | | | | |
| ECE European Prime Shopping Centre Fund II | 27,959,754 | | | | | | | | | | | | |
| Hammes Partners II Hammes Partners III | 20,582,279 | | | | | | | | | | | | |
| | 1,444,872 | | | | | | | | | | | | |
| NREP Nordic Strategies Fund | 9,697,014 | | | | | | | | | | | | |
| NREP Nordic Strategies Fund II | 30,922,465 | | | | | | | | | | | | |
| NREP Nordic Strategies Fund III | 6,895,657 | | | | | | | | | | | | |
| Value Added Portfolio | 106,400,400 | 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 | 857,233 | | | | | | | | | | | | |
| Carlyle China Project Rome Co-Investment | 31,502,548 | | | | | | | | | | | | |
| Carlyle China Realty | 7,220,445 | | | | | | | | | | | | |
| CIM Fund VIII | 39,922,195 | | | | | | | | | | | | |
| KKR Real Estate Partners Americas | 6,993,486 | | | | | | | | | | | | |
| Sculptor Real Estate Fund III ^{1,4} | 14,084,742 | | | | | | | | | | | | |
| Opportunistic Portfolio | 100,580,649 | -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 | 206,981,049 | -0.3 | 0.4 | 37.0 | 30.4 | -13.5 | -17.8 | -33.7 | -35.7 | 18.2 | 5.6 | | |
| Total Private Portfolio | | | | | | | | | | | | | |
| SCERS | 878,682,404 | 14.9 | 14.5 | 20.6 | 18.8 | -28.1 | -28.8 | -12.8 | -13.5 | 15.8 | 13.4 | 15.5 | 12.7 |
| Indices | | | | | | | | | | | | | |
| NFI-ODCE + 35 bps | | 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 | | 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 | | 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 | | 8.2 | 10.1 | 6.5 | 10.4 | -29.1 8.0 | -29.7 | -9.1 5.0 | -9.6 | 9.3 | 10.0 | 7.7 | 10.4 |
| о 555 бро | | 8.2 | | 0.5 | | 8.0 | | 5.0 | | 9.3 | | 1./ | |

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.

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

⁴ Previously Och-Ziff Real Estate Fund III.

⁵ Core Seperate Account returns are no longer meaningful as all assets have been sold.



| 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 | 102,740,334 | 0 | 1,058,562 | 0 | 745,884 | 498,501 | 1,854,353 | 103,783,508 | 45.6 |
| Jamestown Premier Property Fund | 18,397,265 | 110,335 | 110,335 | 0 | 88,968 | 29,021 | 44,588 | 18,501,800 | 41.8 |
| Lion Properties Fund | 155,505,371 | 317,953 | 1,551,960 | 31,000,000 | 1,519,297 | 317,953 | 1,060,817 | 125,533,524 | 22.5 |
| MetLife Core Property Fund | 61,816,896 | 660,642 | 674,139 | 0 | 840,356 | 74,326 | -61,855 | 62,507,574 | 23.1 |
| Prime Property Fund | 62,145,779 | 612,867 | 612,867 | 0 | 594,770 | 190,379 | 473,011 | 63,023,182 | 16.5 |
| Principal U.S. Property Account | 47,176,963 | 0 | 0 | 0 | 463,820 | 114,010 | 417,861 | 47,944,634 | 18.0 |
| Prologis European Logistics Fund | 39,966,140 | 14,671,030 | 1,445,341 | 0 | 687,579 | 261,761 | -1,127,932 | 52,489,714 | 19.8 |
| Prologis Targeted U.S. Logistics Fund | 73,497,105 | 0 | 498,800 | 0 | 867,321 | 532,533 | 3,080,347 | 76,413,441 | 17.3 |
| Townsend Real Estate Fund, L.P. | 115,592,247 | 1,179,919 | 1,179,919 | 0 | 1,188,850 | 65,256 | 1,231,689 | 117,947,530 | 44.0 |
| Core Commingled Funds | 676,838,100 | 17,552,746 | 7,131,923 | 31,000,000 | 6,996,845 | 2,083,740 | 6,972,879 | 668,144,907 | 31.0 |
| Core Separate Accounts | | | | | | | | | |
| BlackRock Core Separate Account | 3,158,019 | 0 | 0 | 0 | 78,765 | 0 | 0 | 3,236,784 | 0.0 |
| Cornerstone Separate Account | 361,775 | 0 | 0 | 0 | -42,111 | 0 | 0 | 319,664 | 0.0 |
| Core Separate Accounts | 3,519,794 | 0 | 0 | 0 | 36,654 | 0 | 0 | 3,556,448 | 0.0 |
| Total BlackRock Separate Account | 3,023,642 | 984,381 | 0 | 0 | 42,998 | 0 | 42,997 | 4,094,017 | 0.0 |
| Total Core Portfolio | 680,357,894 | 17,552,746 | 7,131,923 | 31,000,000 | 7,033,499 | 2,083,740 | 6,972,879 | 671,701,355 | 30.9 |
| Value Added Portfolio | | | | | | | | | |
| Allegis Value Trust | 922,378 | 0 | 0 | 750,000 | 10,483 | 786 | 345 | 182,420 | 0.0 |
| Asana Partners Fund II | -121,791 | 656,250 | 0 | 0 | -99,618 | 109,375 | 51,424 | 376,890 | 0.0 |
| DRC European Real Estate Debt Fund II | 8,610,202 | 0 | 0 | 0 | 24,422 | 20,649 | -274,927 | 8,339,049 | 43.7 |
| ECE European Prime Shopping Centre Fund II | 28,167,702 | 0 | 90,294 | 77,973 | 739,193 | 148,261 | -630,613 | 27,959,754 | 55.4 |
| Hammes Partners II | 16,344,662 | 826,124 | 359,069 | 6,052 | 318,819 | 57,865 | 3,515,659 | 20,582,279 | 62.0 |
| Hammes Partners III | 1,545,552 | 0 | 67,267 | 24,523 | 36,069 | 116,719 | 71,759 | 1,444,872 | 92.1 |
| NREP Nordic Strategies Fund | 13,312,494 | 0 | 3,293,981 | 0 | 63,733 | 178,749 | -206,484 | 9,697,014 | 38.5 |
| NREP Nordic Strategies Fund II | 31,722,440 | 0 | 0 | 0 | 32,970 | 186,842 | -646,103 | 30,922,465 | 48.0 |
| NREP Nordic Strategies Fund III | 7,512,919 | 0 | 0 | 0 | -43,875 | 259,748 | -313,638 | 6,895,657 | 38.0 |
| Value Added Portfolio | 108,016,558 | 1,482,374 | 3,810,611 | 858,548 | 1,082,196 | 1,078,994 | 1,567,422 | 106,400,400 | 55.1 |
| Opportunistic Portfolio | | | | | | | | | |
| BlackRock High Return Separate Account | -134,378 | 984,381 | 0 | 0 | -35,767 | 0 | 42,997 | 857,233 | 0.0 |
| Carlyle China Project Rome Co-Investment | 32,272,930 | 0 | 0 | 0 | 33,021 | 100,822 | -702,581 | 31,502,548 | 0.0 |
| Carlyle China Realty | 7,423,511 | 0 | 0 | 0 | -3,250 | 37,808 | -162,008 | 7,220,445 | 0.0 |
| CIM Fund VIII | 38,002,112 | 2,550,054 | 42,021 | 83,153 | -6,616 | 108,561 | -389,620 | 39,922,195 | 33.3 |
| KKR Real Estate Partners Americas | 8,877,761 | 91,932 | 564,076 | 1,429,575 | 570,954 | -93,409 | -646,919 | 6,993,486 | 64.0 |
| Sculptor Real Estate Fund III | 14,010,617 | 0 | 427,073 | 0 | 249,383 | 47,571 | 299,386 | 14,084,742 | 41.6 |
| Opportunistic Portfolio | 100,452,553 | 3,626,367 | 1,033,170 | 1,512,728 | 807,725 | 201,353 | -1,558,745 | 100,580,649 | 29.7 |
| Total Non-Core Portfolio 1Q 2007 Forward | 208,469,111 | 5,108,741 | 4,843,781 | 2,371,276 | 1,889,921 | 1,280,347 | 8,677 | 206,981,049 | 45.5 |
| Total Private Portfolio | | | | | | | | | |
| SCERS | 888,827,005 | 22,661,487 | 11,975,704 | 33,371,276 | 8,923,420 | 3,364,087 | 6,981,556 | 878,682,404 | 35.0 |



| Property Type Diversification (%) | Apartment | Office | Industrial | Retail | Hotel | Other |
|--|-----------|--------|------------|--------|-------|-------|
| Core Commingled Funds | | | | | | |
| Brookfield Premier Real Estate Partners | 29.7 | 32.4 | 37.8 | - | - | - |
| Jamestown Premier Property Fund | - | 66.8 | - | 25.4 | - | 7.8 |
| Lion Properties Fund | 23.9 | 36.9 | 20.1 | 14.2 | - | 4.9 |
| MetLife Core Property Fund | 100.0 | - | - | - | - | - |
| Prime Property Fund | 25.2 | 31.9 | 20.8 | 12.4 | - | 9.8 |
| Principal U.S. Property Account | 17.9 | 38.9 | 22.5 | 15.0 | - | 5.6 |
| Prologis European Logistics Fund | - | - | 100.0 | - | - | - |
| Prologis Targeted U.S. Logistics Fund | - | - | 100.0 | - | - | - |
| Townsend Real Estate Fund, L.P. | 38.8 | 15.5 | 19.7 | 11.2 | - | 14.8 |
| Core Commingled Funds | 29.0 | 22.4 | 36.0 | 7.6 | - | 5.1 |
| Core Separate Accounts | | | | | | |
| BlackRock Core Separate Account | - | - | - | - | - | - |
| Cornerstone Separate Account | - | - | - | - | - | - |
| Core Separate Accounts | - | - | - | - | - | - |
| Total BlackRock Separate Account | - | - | - | - | - | - |
| Total Core Portfolio | 28.5 | 21.7 | 37.6 | 7.3 | - | 4.9 |
| Value Added Portfolio | | | | | | |
| Allegis Value Trust | - | - | - | - | - | - |
| Asana Partners Fund II | - | - | - | 100.0 | - | - |
| 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 | 84.4 | - | - | 15.6 | - | - |
| NREP Nordic Strategies Fund II | 20.2 | 6.2 | 47.9 | 6.3 | - | 19.5 |
| NREP Nordic Strategies Fund III | 14.8 | 7.1 | 30.4 | 11.3 | - | 36.5 |
| Value Added Portfolio | 14.5 | 5.5 | 15.9 | 35.2 | - | 28.7 |
| Opportunistic Portfolio | | | | | | |
| BlackRock High Return Separate Account | - | - | - | - | - | - |
| Carlyle China Project Rome Co-Investment | - | - | 100.0 | - | - | - |
| Carlyle China Realty | - | - | 100.0 | - | - | - |
| CIM Fund VIII | 50.5 | 22.7 | 1.2 | 12.3 | 4.6 | 8.7 |
| KKR Real Estate Partners Americas | 31.7 | 11.4 | - | 8.4 | 30.9 | 17.6 |
| Sculptor Real Estate Fund III | 7.2 | 3.3 | 2.8 | 3.9 | 4.6 | 78.2 |
| Opportunistic Portfolio | 23.4 | 10.4 | 39.7 | 6.1 | 4.7 | 15.8 |
| Total Non-Core Portfolio | 18.8 | 7.9 | 27.4 | 21.1 | 2.3 | 22.5 |
| Total Private Portfolio | | | | | | |
| SCERS | 26.6 | 18.9 | 34.0 | 10.8 | 0.5 | 9.2 |
| Indices | | | | | | |
| NFI-ODCE | 25.3 | 33.8 | 19.3 | 17.1 | 0.2 | 4.1 |



| mpany | | | | | | | | | |
|--|------------|----------|-----------------------|-----------------------|------------|------------|----------|---------|-------|
| 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 | 22.8 | 11.1 | 7.0 | 8.3 | 3.1 | - | 5.2 | 42.5 | - |
| Jamestown Premier Property Fund | 30.4 | 30.6 | - | - | 4.6 | - | - | 34.4 | - |
| Lion Properties Fund | 22.7 | 9.1 | 4.8 | 0.2 | 8.7 | 10.8 | 4.4 | 39.3 | - |
| MetLife Core Property Fund | - | - | 100.0 | - | - | - | - | - | - |
| Prime Property Fund | 23.0 | 7.3 | 8.6 | 1.6 | 12.8 | 8.2 | 5.1 | 33.5 | - |
| Principal U.S. Property Account | 17.4 | 8.8 | 2.6 | 1.2 | 8.8 | 14.1 | 11.4 | 35.6 | - |
| Prologis European Logistics Fund | _ | _ | - | - | - | _ | _ | _ | 100.0 |
| Prologis Targeted U.S. Logistics Fund | 12.2 | 4.1 | 11.4 | - | 10.3 | 12.1 | 4.5 | 45.3 | - |
| Townsend Real Estate Fund, L.P. | 15.0 | 9.5 | 21.6 | 11.4 | 10.5 | 5.0 | 4.6 | 22.3 | - |
| Core Commingled Funds | 16.1 | 7.7 | 17.5 | 3.6 | 7.1 | 6.1 | 4.3 | 29.8 | 7.9 |
| | | | | | | | | | |
| Core Separate Accounts BlackRock Core Separate Account | | | | _ | _ | _ | - | _ | _ |
| Cornerstone Separate Account | - | - | - | - | - | - | - | - | - |
| | - | - | - | - | | - | = | - | - |
| Core Separate Accounts | - | - | - | - | - | - | - | - | - |
| Total BlackRock Separate Account | - | - | - | - | - | - | - | - | - |
| Total Core Portfolio | 15.9 | 7.5 | 16.7 | 2.1 | 7.6 | 7.3 | 4.2 | 29.6 | 9.0 |
| Value Added Portfolio | | | | | | | | | |
| Allegis Value Trust | - | - | - | - | - | - | - | - | - |
| Asana Partners Fund II | 32.5 | 27.9 | - | - | - | - | 2.4 | 37.3 | - |
| DRC European Real Estate Debt Fund II | - | - | - | - | - | - | - | - | 100.0 |
| ECE European Prime Shopping Centre Fund II | _ | _ | - | - | - | _ | _ | _ | 100.0 |
| Hammes Partners II | 30.3 | 5.9 | 25.7 | 2.1 | 3.2 | 21.8 | 6.8 | 4.1 | - |
| Hammes Partners III | 25.3 | 10.4 | 15.3 | - | 20.9 | 16.6 | 11.5 | - | _ |
| NREP Nordic Strategies Fund | - | - | - | _ | - | - | - | _ | 100.0 |
| NREP Nordic Strategies Fund II | - | - | - | - | - | - | - | - | 100.0 |
| NREP Nordic Strategies Fund III | _ | _ | - | - | - | - | - | - | 100.0 |
| Value Added Portfolio | 6.3 | 1.4 | 5.2 | 0.4 | 0.9 | 4.5 | 1.5 | 0.9 | 78.9 |
| | | | | | | | | | |
| Opportunistic Portfolio | | | | | | | | | |
| BlackRock High Return Separate Account | - | - | - | - | - | - | - | - | - |
| Carlyle China Project Rome Co-Investment | - | - | - | - | - | - | - | - | 100.0 |
| Carlyle China Realty | - | - | - | - | - | - | - | - | 100.0 |
| CIM Fund VIII | 35.5 | 8.0 | 12.8 | - | 0.8 | 1.4 | 7.5 | 37.8 | 3.4 |
| KKR Real Estate Partners Americas | 9.0 | - | 15.2 | 41.3 | 0.6 | 0.3 | - | 16.4 | 17.2 |
| Sculptor Real Estate Fund III | 13.6 | 2.9 | 2.4 | 0.5 | 6.2 | 5.7 | 5.2 | 33.4 | 30.1 |
| Opportunistic Portfolio | 16.8 | 0.7 | 6.5 | 3.0 | 1.2 | 1.4 | 3.7 | 21.0 | 45.7 |
| Total Non-Core Portfolio | 11.4 | 1.1 | 5.8 | 1.6 | 1.1 | 3.0 | 2.6 | 10.7 | 62.8 |
| Total Private Portfolio | | | | | | | | | |
| SCERS | 15.0 | 6.2 | 14.7 | 3.1 | 5.7 | 5.4 | 3.9 | 25.3 | 20.8 |
| Indices | | | | | | | | | |
| NFI-ODCE | 22.5 | 8.3 | 7.3 | 1.2 | 9.7 | 9.3 | 5.5 | 36.1 | - |

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.

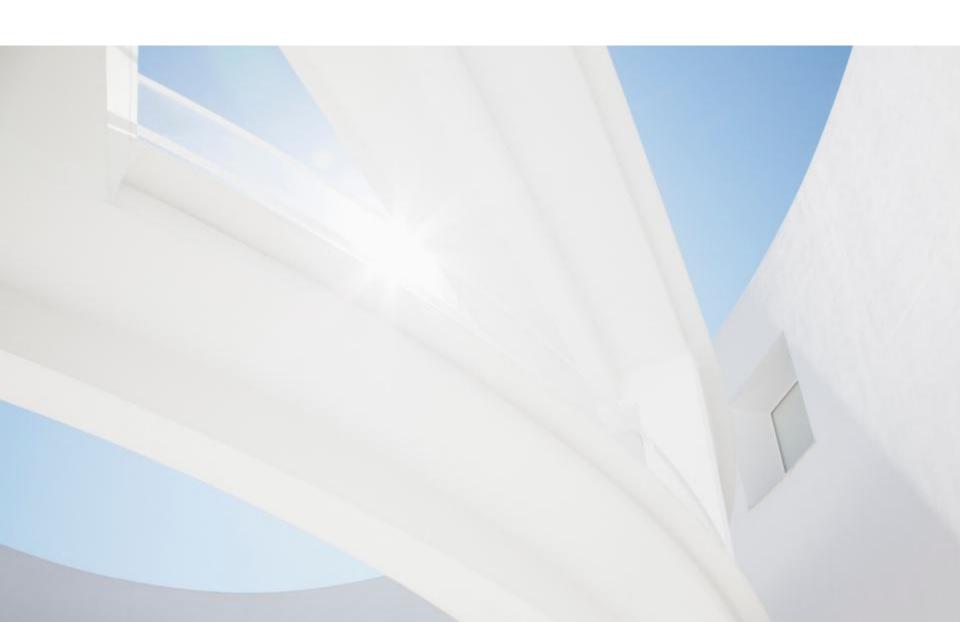
In select instances where underlying investment managers have ceased reporting limited partner/client level performance data directly to The Townsend Group via a secure data collection site, The Townsend Group may choose to input performance data on behalf of its client based upon the investment managers 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.

Disclosure 24

Exhibit B: Real Estate Market Update 3Q19



United States Real Estate Market Update (3Q19)



General

- The S&P 500 produced a gross total return of 1.7% during the quarter. The MSCI US REIT index produced a return of 7.7%. Consumer Sentiment declined to 93.2, but rebounded subsequent to quarter-end.
- Macro indicators for U.S. real estate continue to be positive; GDP grew at an annualized rate of 2.1% in the third quarter and headline CPI rose by 1.7% YoY, below the Fed's 2% target. As of guarter-end, the economy has now experienced 108 consecutive months of job growth. The Federal Reserve has cut rates three times this year, including one cut following quarter end, and the current effective rate is 1.55%.

Commercial Real Estate

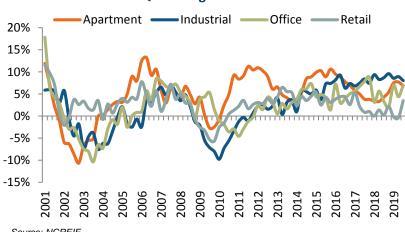
- Private real estate market carrying values remained flat over the quarter. Transaction cap rates (5.4%) expanded 4 bps during the quarter, while current valuation cap rates compressed across property sectors, apartments (-12 bps), industrial (-6 bps), office (-16 bps) . Retail cap rates were flat during the quarter.
- NOI growth picked up across property sectors during the quarter, with the industrial 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). Retail NOI growth rebounded to a positive 3.5% year over year.
- In the third quarter of 2019, \$46 bn of aggregate capital was raised by real estate funds. Through the third quarter of 2019, private equity real estate funds raised \$131 bn which is an increase of 16% YoY. However, transaction volume declined during the 3rd guarter by -4% year over year to \$154 bn.
- 10-year treasury bond yields dropped 34 bps to 1.7% during the quarter, and, subsequent to quarter-end, have rebounded to 1.8%. The U.S. yield curve is no longer inverted.

Current Value Cap Rates by Property Type



Source: NCRFIF

4 Qtr Rolling NOI Growth



Source: NCREIF

United States Property Matrix (3Q19)



| • | In 3Q19, industrial properties were the highest returning sector at 3.2% and outperformed | • | The apartment sector delivered a 1.2% return during the quarter, underperforming the NPI by |
|---|---|---|---|
| | the NPI by 175 bps. | | 23 bps. |

Transaction volumes reached \$41.3 billion in the third guarter of the year, a 66.0% year-overyear increase. Individual asset sales were up 20.6% year-over-year, while portfolio purchases turned in a year-over-year volume increase of 597.2%. Portfolio transaction volume was driven by multiple megadeals occurring in the sector, as well as a significant year-over-year decrease in entity-level transactions. This large portfolio transaction volume increase is expected to be an outlier and should regress to the mean positive growth rate.

INDUSTRIAL

- The industrial sector continued to experience steady NOI growth of 8.0% over the past year, decreasing from the prior periods TTM growth of 8.9% in 2Q19. Market rent growth is
- Vacancy increased by 24 bps to 3.4%, still remaining close to all-time historic lows. Ecommerce continues to drive demand.

expected to decelerate compared to the recent phenomenal pace, but still remains strong.

Industrial cap rates compressed approximately 19 bps from a year ago, to 4,74%, Industrial fundamentals still top all property sectors.

MULTIFAMILY

- Transaction volume in the third guarter of 2019 reached \$46.8 billion, an decrease of 5.6% year-over-year. This volume continues to make multifamily the most actively traded sector for the ninth straight quarter.
- Cap rates decreased to 4.2%, compressing 3 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 94.2%, changes in vacancy remain flat from a year ago. 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 RETAIL

- The office sector returned 1.5% in 3Q19, 4 bps above the NPI return over the period.
- Transaction volumes decreased by 7.5% year-over-year in Q3. Annual sales volumes equaled \$32.3 billion for the guarter. Single asset transactions accounted for 83% of volume.
- Occupancy growth within the office sector has improved, increasing 1.1% year-over-year. Office continues to be the highest vacancy property type at close to 9.6%.
- NOI growth of 7.0% 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 remained relatively flat from a year ago at approximately 4.8% in the third quarter. Office-using job growth is positive, though decelerating as expected.

- As of 3Q19, the retail sector delivered a quarterly return of 0.2%, performing 119 bps below the NPI.
- Transaction volumes totaled \$15.0 billion in the third quarter, down 52.6% year-over-year.
- Cap rates have expanded approximately 20 bps within the sector over the last year. Strong fundamental headwinds continue to effect the retail landscape.
- NOI growth has turned a positive for the first time this year. NOI has increased 349 bps over the past year. Retail is expected to continue to suffer from the shift towards e-commerce.
- Retail vacancy rates increased 21 bps over the past year to 7.1%. 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 (3Q19)



- Global investment activity during the third quarter of 2019 was depressed relative to the same period in 2018. Year to date, the New York, San Francisco and Los Angeles metro markets have witnessed the greatest transaction volume.
- Broad geopolitical risk factors, such as Brexit and the Trade War, have negatively influenced sentiment. Fears of recession in the U.S. and an impending global slowdown also served to depress sentiment, in turn weighing on transaction volumes. Further monetary expansion has partially offset this trend, cushioning real estate yield spreads relative to sovereigns and supporting positive capital flows into the sector. Within the Eurozone, quantitative easing will provide stimulus to a flagging economy.

Global Total Commercial Real Estate Volume - 2018 - 2019

| | % Change YTD | | | | | |
|----------------|--------------|---------|---------------|----------|---------|-------------|
| \$ US Billions | Q3 2019 | Q3 2018 | Q3 19 – Q3 18 | YTD 2018 | H1 2018 | 19 - YTD 18 |
| Americas | 136 | 146 | -7% | 355 | 366 | -3% |
| EMEA | 71 | 77 | -9% | 207 | 235 | -12% |
| Asia Pacific | 166 | 209 | -21% | 609 | 635 | -4% |
| Total | 372 | 433 | -14% | 1172 | 1236 | -5% |

Source: Real Capital Analytics, Inc., Q3' 19

- Investment volumes in the Americas decreased during the third quarter year-over-year, including the U.S., Canada, and Mexico all showing declines, with Brazil increasing volume.
- Asia Pacific countries broadly declined, with Hong Kong volume decreasing significantly as a
 product of continued protests and political uncertainty within the metro. Australia was the
 sole country to post YoY transaction volume growth, although by a lackluster 1%.
- In EMEA, Brexit continued to press UK investment volumes lower, a 32% decline from third quarter 2018. Other EMEA markets saw similar declines – with France as a notable outlier – as trade tensions weigh on export reliant countries such as Germany.
- In the office sector, global leasing activity was healthy, leasing volumes decreased 3% YoY.
 The U.S office market was relatively strong, although leasing reached the lowest level since first quarter 2017. Europe experienced an uptick in demand, and office up-take increased 7% over the previous year. Central and Eastern Europe drove the trend, and experienced a 30% increase in activity.
- The retail sector continued to face headwinds globally as e-commerce disrupts traditional
 consumer spending habits. Within the U.S., net absorption dropped sharply, down 60% YoY.
 Surprisingly, mall vacancy held firm and rents rose moderately. Across Europe, rents moved
 downward, while APAC markets retail markets have remained largely neutral.
- The multifamily market in the U.S. has continued to see strong growth, with vacancy rates
 decreasing to a cycle low. Development continues, possibly presenting future supply
 headwinds. Rent control and other regulations hampered European markets, but
 investment volume remains positive. APAC markets were mixed, a result of macroeconomic
 uncertainty.
- Industrial properties continued their ascent, with robust uptake globally driven by logistics
 and omnichannel distribution demand. New supply has been increasing rapidly, and there
 are signs of slowing demand in Asia and Europe.

| | 2019 | 2020 | 2021 |
|----------------|------|------|------|
| Global | 3.1 | 3.1 | 3.2 |
| Asia Pacific | 4.4 | 4.3 | 4.4 |
| Australia | 1.8 | 2.4 | 2.5 |
| China | 6.1 | 5.9 | 5.7 |
| India | 6.0 | 5.6 | 6.4 |
| Japan | 0.9 | 0.3 | 0.8 |
| North America | 2.1 | 1.7 | 1.9 |
| US | 2.3 | 1.8 | 1.9 |
| EMEA | 2.1 | 2.4 | 2.6 |
| European Union | 1.4 | 1.3 | 1.5 |
| France | 1.3 | 1.2 | 1.3 |
| Germany | 0.5 | 0.7 | 1.2 |
| UK | 1.2 | 1.1 | 1.5 |

Source: Bloomberg (December 2, 2019)

Note: 2021 projections are not yet available for certain regions