Deutsche Asset Management



# Property Performance Monitor

## First Quarter 2017

Marketing Material

### Quarterly highlights

— Unlevered total returns to core commercial real estate measured by the NCREIF Property Index (NPI) slipped to 7.3% (trailing four quarters) in the first quarter of 2017 from 8% in 2016 and 13.3% in 2015.

— Retail returns nearly halved since 2015, although they continued to modestly outperform the index. In contrast, Industrial returns dropped only modestly and outperformed the index by a large margin.

— The West, led by Los Angeles, produced strong returns, while the other regions lagged behind the national index. Areas of weakness included Washington D.C. and New York in the East and Houston in the South.

### Private real estate property returns

— Commercial real estate returns moderated over the past year as cap rates stabilized, in part due to rising interest rates and tightening lending standards.

— Real estate delivered returns between those of bonds and stocks, consistent with historical norms.

— Net operating income (NOI) growth of 5% year-over-year reflected strong underlying fundamentals. Occupancies were near their highest level since 2001.

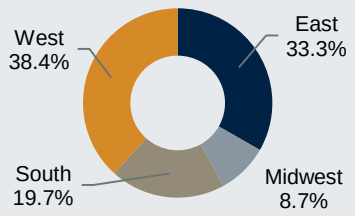
— Industrial opened a wide gap over other sectors, outperforming the NPI by nearly 500 basis points. Retail, a star performer from 2012 to 2015, converged to the index.

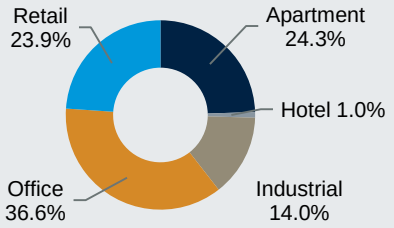
— The west coast dominated the list of top-performing markets, including Portland, Seattle, Oakland, San Jose, Santa Ana, and Los Angeles. Returns were weak in New York, Washington D.C., and Houston.

### NPI market capitalization

Index market value: $533.8 billion

Property count: 7139




### Recent performance trends

| | Quarter | 12 months trailing | |
|---|---|---|---|
| | 1Q 2017 | 1Q 2017 | 4Q 2016 |
| Private Real Estate (NPI) | 1.6% | 7.3% | 8.0% |
| Broad Equities (large cap) | 6.1% | 17.2% | 12.0% |
| Bonds | 1.0% | 0.5% | 3.0% |
| Listed Real Estate | 2.6% | 5.2% | 8.6% |
| 10-Year Treasury[1] | 2.4% | 2.0% | 1.8% |
| 12-Month LIBOR[1] | 1.8% | 1.5% | 1.4% |
| CPI (NSA) | 0.8% | 2.6% | 1.8% |

Sources: NCREIF, Standard and Poor's, Barclay's and Federal Reserve. As of Mar 31, 2017. Past performance is no guarantee of future results. For definitions of indices, see the last page of this report.

[1] These figures represent annual yields.

## NCREIF Property Index (NPI) performance by sector and region

— While returns moderated overall, the industrial sector (12.2%) proved resilient, outperforming by a large margin. Retail (7.6%), Apartment (6.7%), and Office (5.7%) clustered more closely around the NPI (7.3%).

— Warehouses were the strongest subsector in the NPI. R&D and Flex were the second- and third-best performing subsectors, respectively.

— Regional malls led the deceleration of retail returns while Super Regional and Neighborhood centers held up better. Power centers trailed the NPI despite elevated income returns.

— CBD offices appreciated more than suburban ones, but fell slightly short on a total return basis due to their lower income returns.

— High-rise apartments were the weakest subsector in the NPI, likely due to an influx of new supply. Conversely, garden apartments were among the better performing subsectors.

— The West continued to outperform, despite a pullback in San Francisco apartments. While the East was generally soft, Boston Office and New York Industrial were notable bright spots.

### Detailed property type NPI performance

| | No. of props. | Market value (Mil) | Trailing four quarters | | |
|---|---|---|---|---|---|
| | | | Total return | Income | Apprec. |
| **Apartment** | | | | | |
| Garden | 658 | $41,161 | 8.8% | 5.2% | 3.4% |
| High Rise | 773 | $78,600 | 5.6% | 4.2% | 1.3% |
| Low Rise | 155 | $11,053 | 7.2% | 4.5% | 2.6% |
| **Industrial** | | | | | |
| R&D | 38 | $1,176 | 10.9% | 5.4% | 5.3% |
| Flex | 207 | $3,186 | 8.9% | 5.9% | 2.9% |
| Warehouse | 2,609 | $68,839 | 12.4% | 5.2% | 6.9% |
| **Office** | | | | | |
| CBD | 415 | $114,606 | 5.7% | 4.1% | 1.6% |
| Suburban | 972 | $80,842 | 5.8% | 5.1% | 0.7% |
| **Retail** | | | | | |
| Community | 228 | $13,658 | 7.1% | 5.4% | 1.6% |
| Neighborhood | 440 | $17,004 | 8.9% | 5.2% | 3.5% |
| Power | 172 | $14,575 | 6.8% | 5.7% | 1.1% |
| Regional | 61 | $18,116 | 6.3% | 4.8% | 1.5% |
| Super Regional | 60 | $47,047 | 8.4% | 4.5% | 3.8% |

Source: NCREIF Property Index as of Mar 31, 2017.
Past performance is no guarantee of future results.

### Returns by property type and region

| | Annual returns | | | | | | | | Standard deviation | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 Year | | | 3 years | 5 years | 10 years | 20 years | Since inception[2] | 20 years | Since inception[2] |
| **Property Type** | Total | Income | Apprec. | | | | | | | |
| Apartment | 6.7% | 4.6% | 2.1% | 9.5% | 9.9% | 6.4% | 9.6% | 10.5% | 8.4% | 7.7% |
| Industrial | 12.2% | 5.2% | 6.7% | 13.6% | 12.8% | 7.3% | 10.1% | 9.7% | 8.4% | 7.6% |
| Office | 5.7% | 4.5% | 1.2% | 9.7% | 9.7% | 6.0% | 9.4% | 8.5% | 9.5% | 9.7% |
| Retail | 7.6% | 4.8% | 2.6% | 11.5% | 12.1% | 8.2% | 10.7% | 9.8% | 7.5% | 6.6% |
| **Total Index** | **7.3%** | **4.7%** | **2.5%** | **10.6%** | **10.7%** | **6.7%** | **9.7%** | **9.3%** | **8.3%** | **7.7%** |
| **Region** | Total | Income | Apprec. | | | | | | | |
| East | 5.6% | 4.5% | 1.2% | 8.6% | 8.8% | 5.7% | 9.8% | 10.2% | 8.8% | 9.2% |
| Midwest | 6.2% | 5.1% | 1.1% | 9.7% | 9.9% | 6.3% | 8.2% | 8.1% | 6.6% | 5.9% |
| South | 7.0% | 5.2% | 1.7% | 10.9% | 11.4% | 7.2% | 9.2% | 8.4% | 7.4% | 6.9% |
| West | 9.1% | 4.6% | 4.4% | 12.5% | 12.3% | 7.5% | 10.7% | 9.8% | 9.2% | 8.6% |
| **Total Index** | **7.3%** | **4.7%** | **2.5%** | **10.6%** | **10.7%** | **6.7%** | **9.7%** | **9.3%** | **8.3%** | **7.7%** |

Source: NCREIF Property Index. As of Mar 31, 2017. Past performance is not indicative of future returns.

[2] Index returns start in 1978, equivalent to a 39 year calculation.

## Market Analysis – Benchmark insights and portfolio implications

The NCREIF Property Index is a value-weighted index of property returns and as such, a large portion of the index is located in just 20 markets. Local economic growth will affect properties located in the same market similarly, so we can estimate the effect of property geographical location on the overall index. Large metros, by value, will likely have the largest impact on the index, although small metros with particularly strong or weak performance may boost or weigh on returns from time to time. The following tables lists out which markets had the strongest positive and negative effect on returns during the past four quarters.

Impact of top 20 markets on sector performance

| Apartment | | | Industrial | | | Office | | | Retail | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Metro | Metro returns[3] | Impact on sector returns | Metro | Metro returns[3] | Impact on sector returns | Metro | Metro returns[3] | Impact on sector returns | Metro | Metro returns[3] | Impact on sector returns |
| Denver | 9.7% | 16 | Seattle | 16.5% | 32 | Los Angeles | 8.9% | 28 | Los Angeles | 10.0% | 16 |
| Los Angeles | 8.6% | 13 | Los Angeles | 14.7% | 25 | San Francisco | 8.0% | 24 | Houston | 10.1% | 15 |
| Seattle | 9.2% | 13 | Oakland | 18.5% | 22 | Boston | 7.6% | 21 | Dallas | 8.9% | 7 |
| Portland | 11.0% | 8 | San Jose | 20.9% | 14 | Dallas | 10.6% | 8 | San Jose | 9.5% | 4 |
| Oakland | 11.1% | 7 | New York | 13.9% | 9 | San Jose | 8.1% | 8 | Miami | 8.5% | 3 |
| Fort Lauderdale | 9.9% | 6 | San Diego | 15.5% | 7 | Portland | 12.4% | 6 | Riverside | 8.9% | 3 |
| Santa Ana | 10.3% | 6 | San Francisco | 16.3% | 5 | Oakland | 9.1% | 5 | Seattle | 8.7% | 3 |
| San Diego | 8.8% | 5 | Portland | 13.3% | 2 | Austin | 8.1% | 3 | San Francisco | 8.3% | 2 |
| Atlanta | 8.1% | 5 | Santa Ana | 12.5% | 1 | Santa Ana | 7.3% | 3 | Atlanta | 8.1% | 1 |
| Phoenix | 9.2% | 4 | Fort Lauderdale | 11.6% | -1 | Seattle | 6.0% | 1 | Denver | 7.7% | 0 |
| Dallas | 7.3% | 3 | Harrisburg | 11.3% | -1 | Phoenix | 6.6% | 1 | San Diego | 7.5% | 0 |
| Minneapolis | 6.9% | 0 | Atlanta | 10.7% | -4 | Atlanta | 5.2% | -1 | Santa Ana | 7.3% | -1 |
| Boston | 6.6% | -1 | Phoenix | 8.3% | -5 | Minneapolis | 3.3% | -2 | Baltimore | 6.8% | -2 |
| Philadelphia | 5.6% | -3 | Dallas | 11.6% | -5 | Chicago | 5.1% | -3 | Chicago | 7.2% | -3 |
| Austin | 5.4% | -4 | Washington, DC | 8.6% | -6 | Denver | 4.2% | -3 | Phoenix | 6.9% | -3 |
| San Francisco | 2.6% | -9 | Baltimore | 7.5% | -11 | San Diego | 4.0% | -3 | Orlando | 6.4% | -3 |
| Chicago | 4.9% | -15 | Miami | 7.9% | -13 | Miami | 2.5% | -5 | Oakland | 5.8% | -4 |
| Washington, DC | 4.8% | -16 | Houston | 7.1% | -15 | New York | 4.3% | -26 | Washington, DC | 6.9% | -5 |
| New York | 4.6% | -25 | Riverside | 10.9% | -17 | Washington, DC | 3.5% | -30 | New York | 5.7% | -12 |
| Houston | -3.1% | -47 | Chicago | 10.3% | -17 | Houston | -2.2% | -31 | Boston | 3.5% | -16 |

Source: NCREIF Property Index as of Mar 31, 2017. Past performance is no guarantee of future results. Forecasts are based on assumptions, estimates, opinions and hypothetical models or analysis which may prove to be incorrect.

Apartments – With the exception of San Francisco, where new supply has put downward pressure on rents and values, west coast markets such as Portland, Oakland, and Santa Ana continued to lead the index. Several sun belt markets also produced solid returns, including Fort Lauderdale, Phoenix, and Atlanta. However, capital values fell sharply in Houston and stagnated in Chicago, Washington D.C. and New York. Together, these four metros subtracted about 100 basis points from the national apartment sector's returns.

Industrial – The west coast, from Portland to San Diego, dominated the list of top performing industrial markets; in San Jose, returns topped 20%. Major distribution markets (e.g., Atlanta, Riverside, Chicago, and Dallas) generally underperformed, but their absolute returns were still impressive. Industrial was a bright spot for New York, where other sectors struggled. Similarly, Houston's industrial sector held up much better than its apartment and office sectors.

Office – While office markets were generally weak, there were exceptions. Among the large coastal markets, Los Angeles, San Francisco, and Boston performed well. Other strong markets included Portland, Oakland, and Austin (dynamic tech centers) and Dallas (corporate relocations and expansions). However, New York, Washington D.C., and Houston struggled amid lackluster economic conditions and substantial new supply. Denver's office sector also flagged under supply pressures, despite a healthy local economy.

Retail – While performance was hardly uniform, the spread between the best and worst markets was narrower than in other sectors. Los Angeles was near the top of the list and New York and Washington D.C. were near the bottom. However, unlike its apartment and office sectors, Houston's retail property delivered strong returns in the face of energy-related economic challenges. Phoenix, recently a top performer, dropped back in the rankings.

[3] Four-quarter cumulative returns ending first quarter 2017.

# Research & Strategy – Alternatives

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Broad Equities (S&P 500 Index): The S&P 500 Index tracks the performance of 500 leading U.S. stocks and is widely considered representative of the U.S. equity market.

Private Real Estate (NCREIF Property Index, NPI): The NPI represents data collected from the Data Contributing Members of the National Council of Real Estate Investment Fiduciaries (NCREIF). NCREIF's Universe of Properties include all properties that have been acquired on behalf of tax-exempt institutions and held in a fiduciary environment.

Listed Real Estate (FTSE NAREIT All Equity REITs Index): The FTSE NAREIT US Real Estate Index is a free float adjusted market capitalization weighted index that includes all tax-qualified REITs listed on the NYSE, AMEX and NASDAQ National Market.
LIBOR: LIBOR, or the London Interbank Offered Rate, is a widely used benchmark for short-term taxable interest rates.

(Bonds) Barclays U.S. Government//Credit Index: The Barclays Capital U.S. Government/Credit Index tracks the performance of U.S. Treasuries and credit level corporate debt.

Sources: BBA, NAREIT, NCREIF, Russell, S&P, Bloomberg and Wikipedia.

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