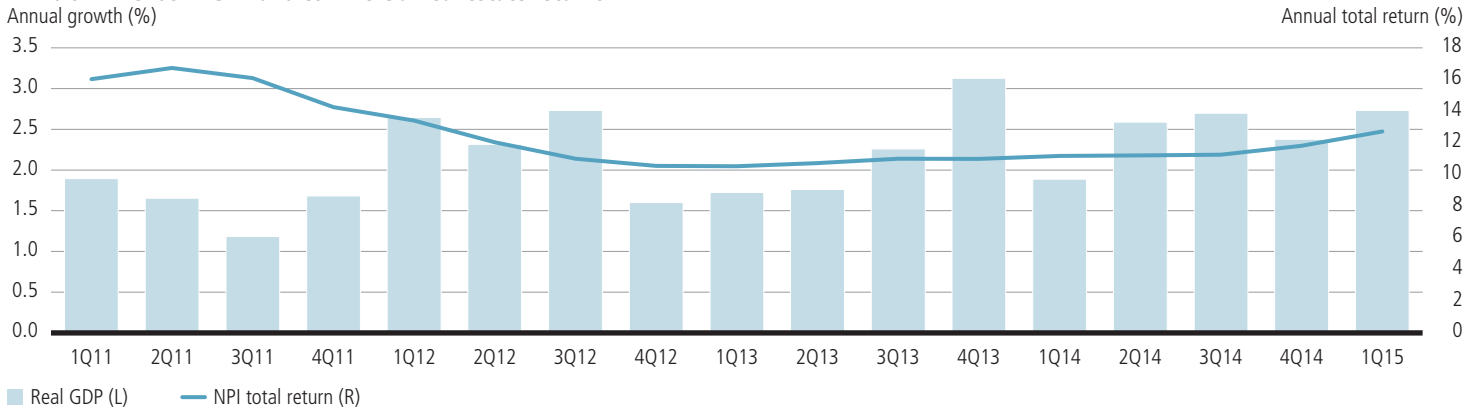


# US Real Estate Market

## Quarterly Outlook, **May 2015**

- After an initial pop of recovery, commercial real estate performance has been supported by the positive, albeit slow, expansion in US economic growth, *exhibit 1*.
- Cap rates compressed further during early 2015 but did not mirror the volatility of long-term interest rates.
- Three headline-grabbing economic variables began to accelerate late in the first quarter: rising long-term interest rates, increasing oil prices and improving job growth.
- During the first quarter of 2015 the NCREIF Property Index (NPI) had its highest single-quarter total return since early 2011, driven by lofty appreciation in the retail and downtown office sectors.
- We expect that Gross Domestic Product (GDP) growth will return to its slow, positive growth track over the balance of the year, helping to maintain leasing demand.

**Exhibit 1 - Trends in GDP and commercial real estate returns**



Source: Moody's Analytics as of May 29, 2015

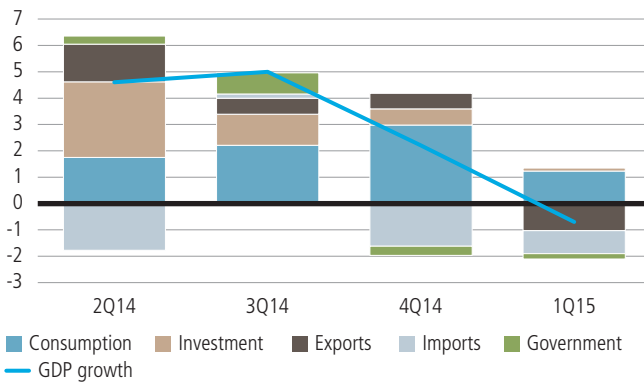


# Economic Viewpoint

- Commercial real estate performance improved markedly despite disappointing GDP growth during the first quarter, as returns tend to follow economic trends and growth expectations, which remain positive.
- Was the turndown in GDP weather-related? Was it impacted negatively by the dock worker strikes on the West Coast? Did the appreciating dollar weaken marginal growth? Was the drop-off in energy exploration detrimental? To some degree the answer to all of these is likely, "yes".
- *Exhibit 2* delves deeper into the components of GDP growth. Consumption and investment remained positive, though they weakened during the first quarter; however, the effects of the dock strike and an expensive US dollar negated the prior two quarters of export growth.

**Exhibit 2 - Real GDP growth**

Contribution to real GDP, quarterly annualized (%)

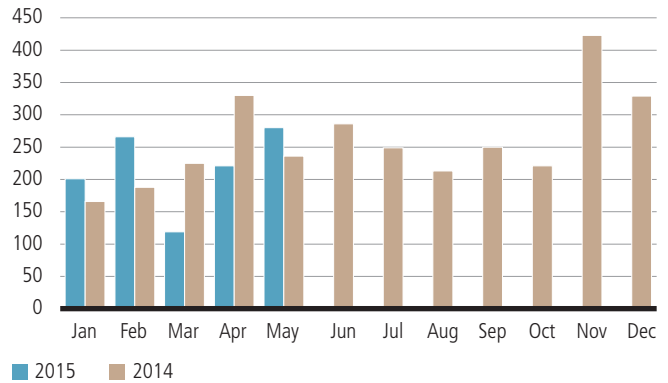


Source: Moody's Analytics as of May 29, 2015

- Despite the confluence of layoffs in the domestic energy sector, declining exports and paralyzing winter weather, the US added a respectable 119,000 new jobs in March 2015, *exhibit 3*. Once those transitory hits were absorbed by the labor market, job growth bounced back to well-over 200,000 new jobs during each of the following months, returning to the levels achieved during mid-2014.
- One year ago, inflation (as measured by the Consumer Price Index) was running at around 2% year-over-year. With the downturn in energy prices late in 2014, headline inflation is nearly zero. It is likely that inflation will begin to move upward again as oil prices rise heading into the summer.
- US consumers and businesses have benefited from lower interest rates and cheaper fuel costs. However, over the past six months, more of that benefit was put into savings than spent on goods and services.

**Exhibit 3 - Monthly job growth**

Thousands jobs

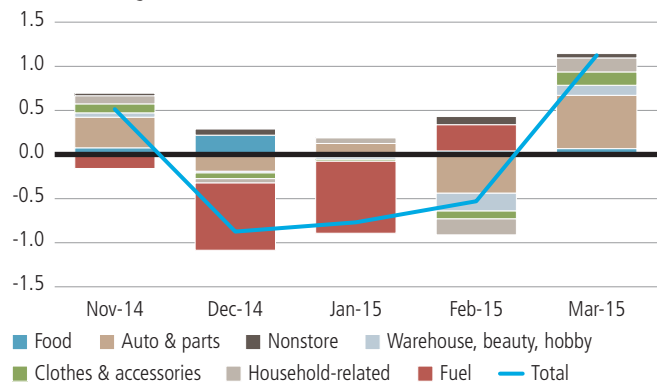


Source: Moody's Analytics as of June 5, 2015

- Retail sales declined in December, January and February, *exhibit 4*, led by reduced revenue at gas stations and exasperated by weakness in the furniture, appliance, and wholesale club sectors. Re-acceleration in consumer spending at the end of the first quarter encourages a more optimistic economic outlook as consumption represents two-thirds of US GDP.
- The slow pace of retail sales growth has hampered improvement in the property sector's fundamental metrics.
- The US is adding new jobs, but wage growth has yet to accelerate. We expect retail sales should improve if wages begin to respond to a tightening labor market during 2015.

**Exhibit 4 - Retail sales**

Contribution to growth (%)

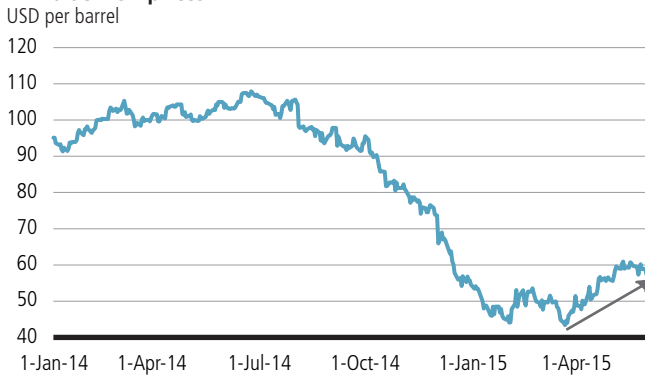


Source: Moody's Analytics as of April 2015

Retail sales, job growth, and oil prices are on the rise

- Oil prices appear to have reached a floor and increased nearly 40% since reaching a recent low on March 17, 2015, exhibit 5.

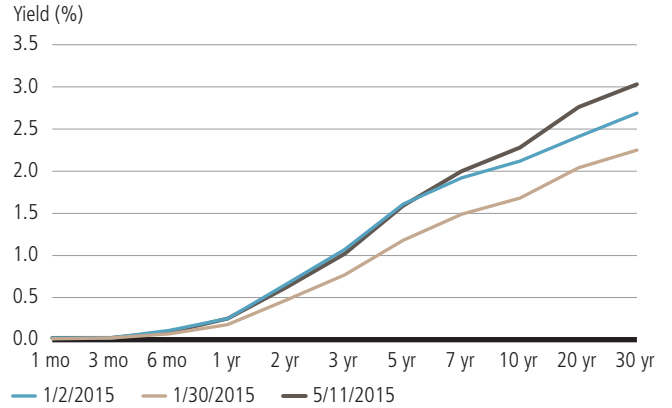
**Exhibit 5 - Oil prices**



Source: Moody's Analytics as of May 29, 2015



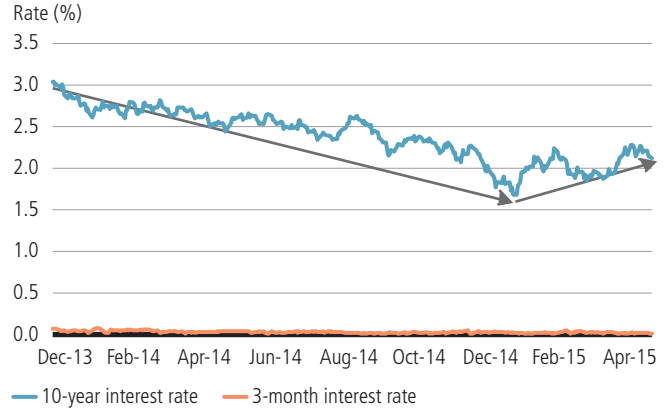
**Exhibit 6 - Yield curves**



Source: US Department of the Treasury as of May 2015

- Overall, interest rates remain low, with the 30-year Treasury rates just above 3%, but the long-end of the yield curve has shifted upward since January, exhibit 6. Short-term rates remain near zero.
- The rate on the 10-year Treasury increased from a low of 1.68%, reached in late January, exhibit 7.
- Going into 2015, global uncertainty helped push long-term interest rates down in the US. However, rates, as evidenced by the 10-year shown in exhibit 7, began an increasing trend in the middle of the first quarter.
- Although commercial real estate cap rates compressed somewhat during the first quarter, cap rates did not move downward at the same pace as interest rates.

**Exhibit 7 - Interest rates**

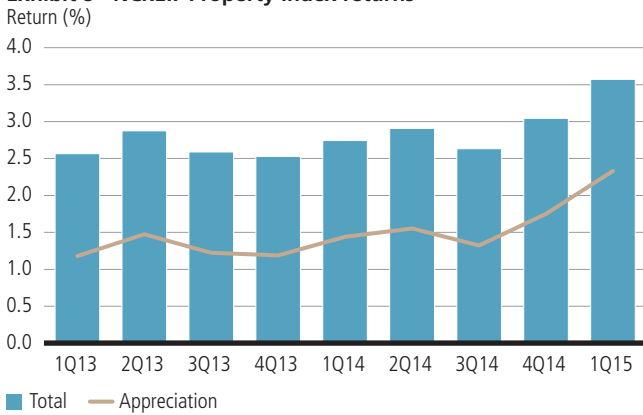


Source: Moody's Analytics as of May 2015, last data point is May 29, 2015

# Commercial Real Estate

- By nearly any measure, commercial and multifamily real estate markets are off to a strong start in 2015.
- *Exhibit 8* illustrates recent acceleration of returns. Net operating income beat our expectations. Fundamentals held steady in the apartment sector and improved further across all other property types.

**Exhibit 8 - NCREIF Property Index returns**



Source: NCREIF as of March 2015

- If it continues, the acceleration in returns likely means that the *Base Case* scenario in our *US Real Estate Market Outlook 2015* publication will prove pessimistic.
- With 2.3% appreciation return during the first quarter, *exhibit 8*, private commercial real estate has already achieved 85% of the appreciation we expected for 2015 in our *Base Case*, making our *Upside* scenario increasingly likely, *exhibit 9*.

**Exhibit 9 - Performance scenarios from 2015 Outlook**

	Upside	Base Case	Downside
NOI growth (%)	3.9	3.7	1.5
Cap rate change (bps)	(15)	5	30
Income return (%)	5.4	5.4	5.6
Appreciation (%)	6.9	2.7	(4.0)
Total return (%)	12.3	8.1	1.6

Source: UBS Global Asset Management, Global Real Estate Research & Strategy based on data obtained from NCREIF, Moody's Analytics and Real Capital Analytics as of December 16, 2014

- As detailed in *exhibit 10*, acceleration in appreciation was led by an unexpected turnaround in momentum in the retail sector, backed by continued strength in the mall subsector and an improvement in power center performance.

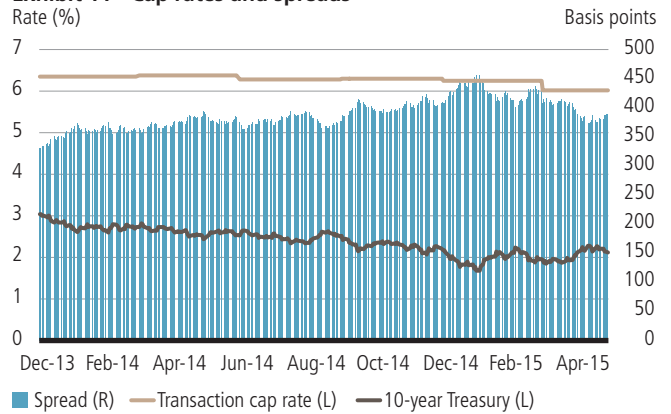
**Exhibit 10 - NPI appreciation by sector**

	Apartments	Hotels	Industrial	Office CBD	Office suburban	Retail	Total
1Q14	1.0	(0.6)	1.3	0.8	1.2	2.9	1.4
2Q14	1.2	0.4	1.8	1.4	1.8	1.8	1.6
3Q14	1.3	0.8	1.5	1.6	1.4	1.0	1.3
4Q14	1.6	2.2	2.5	2.0	1.7	1.3	1.8
1Q15	1.7	1.0	2.1	2.5	1.5	3.6	2.3

Source: NCREIF as of March 2015. Gray shading indicates sector appreciation exceeded NPI total appreciation for the quarter.

- The spread available on commercial real estate increased during the first quarter despite cap rate compression, as cap rates did not move down as quickly as long-term interest rates, *exhibit 11*.
- Given that commercial real estate fundamentals and pricing continued to rise, increased spread likely reflected reluctance on the part of investors to chase interest rates down rather than expectations for diminished income growth. As interest rates began to rise from the January low, the spread was wide enough to absorb the change.

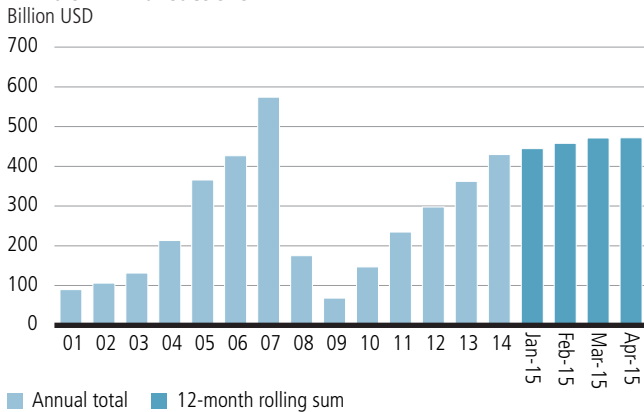
**Exhibit 11 - Cap rates and spreads**



Source: NCREIF as of March 2015 and Moody's Analytics as of May 2015. Last data point is May 29, 2015

*Upside scenario more likely for commercial real estate in 2015*

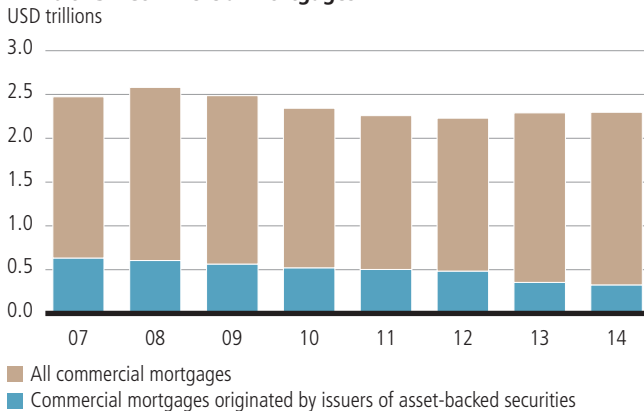
### Exhibit 12 - Transactions



Source: Real Capital Analytics as of April 2015

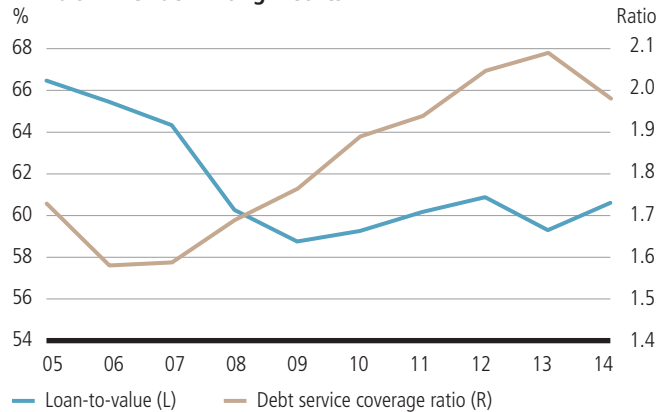
- Commercial real estate volume is approaching the pre-recession peak achieved in 2007, *exhibit 12*. However, the underlying risk profile supporting the transaction volume appears to be better-positioned today than it was eight years ago.
- Debt capital markets are functioning but have not even begun to approach pre-recession levels of commercial real estate debt outstanding, *exhibit 13*.

### Exhibit 13 - Commercial mortgages



Source: Moody's Analytics as of March 2015

### Exhibit 14 - Underwriting metrics



Source: American Council of Life Insurers as of March 2015

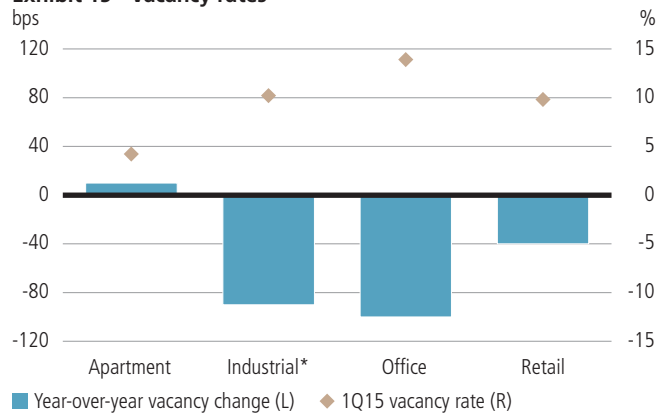
- Lower loan-to-value and higher debt service coverage ratios imply more stringent underwriting standards are in place today, *exhibit 14*, as lenders require more equity compared to transactions underwritten in 2007.

### Property sector focus

- Expansion continues in the apartment, hotel, industrial and downtown office sectors. Recoveries are progressing in the suburban office and retail segments.

- *Exhibit 15* shows current vacancy rates and the change in vacancy over the past year for the four broad property types.

### Exhibit 15 - Vacancy rates



Source: CBRE-Econometric Advisors and Reis as of March 2015

\* Industrial data are the availability rate

### Apartments

- National apartment vacancy has been 4.2% since the third quarter 2014, indicating supply and demand are balanced despite increased development.
- During the first quarter of 2015, 29,000 new units were added with an additional 210,000 units expected prior to year end for an increase of 2.3% in institutional-quality rental inventory.
- Vacancy is expected to rise by year end, although current expectation is that it will remain at or below the 20-year average of 5.2% through at least 2016.
- Apartment rents continue to grow. Effective rents grew by 3.6% during the year ended March 2015, *exhibit 16*.

### Hotels

- Hotel supply is increasing in response to high occupancy and RevPAR (Revenue per Available Room) growth. The supply of Upper-Tier hotels has already grown in response to strong demand. Construction of Lower-Tier hotels will pick-up noticeably by the end of next year.
- Nationally, RevPAR is expected to be flat to slightly positive over the next two years as new supply comes online, which should hold occupancy rates steady and inhibit management's ability to raise room rates.

### Industrial

- With strong demand for space, industrial availability has declined to 10.1% and is below its 20-year average rate of 10.3% for the first time in seven years.
- Net rents remain 6% below their pre-recession peak levels, indicating further rent recovery is likely.
- Warehouses compose 65% of the US industrial inventory and had availability of 10.2% in the first quarter.

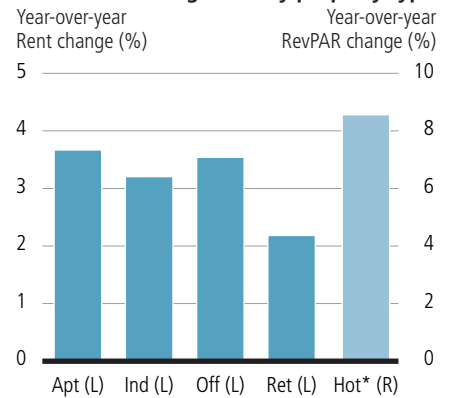
### Office

- Downtown offices are much further along in recovery than suburban offices with vacancy at 11.2% or 420 basis points (bps) below that of suburban offices.
- Rent growth was 4.3% for downtown offices and 3.3% in the suburbs over the past year.
- New office construction remains modest but is beginning to increase.

### Retail

- Vacancy rates in community and neighborhood shopping centers continue to tighten at a glacial pace with a 10 bps decline to 10.1% during the first quarter. Effective rents were 2.0% higher than one year ago.
- Mall vacancy also decreased by 10 bps to 7.9% during the quarter reflecting different experience according to the quality of the asset. High-end malls are near full occupancy. Mid-level malls are beginning to experience rent growth; however, growth has been anemic at low-end malls.

**Exhibit 16 - Rent growth by property type**



Source: CBRE-Econometric Advisors and Reis as of March 2015



# Real Estate & Capital Markets Activity

**Exhibit 17 - Historical performance data (%)**

Total returns	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	4Q14	1Q15	3 YR	5 YR	10 YR
Bar Cap	9.76	9.48	(2.16)	11.85	8.50	11.04	4.67	4.19	2.37	3.78	7.24	5.70	4.51	6.59	8.74	4.80	(2.34)	6.01	1.82	1.84	3.35	4.75	4.96
S&P 500	33.36	28.58	21.05	(9.11)	(11.90)	(22.11)	28.69	10.87	4.91	15.80	5.50	(36.99)	26.47	15.06	2.11	16.00	32.38	13.69	4.93	0.95	16.11	14.46	8.01
Russell 2000	22.36	(2.55)	21.26	(3.02)	2.49	(20.48)	47.25	18.32	4.55	18.37	(1.56)	(33.79)	27.18	26.85	(4.19)	16.35	38.81	4.90	9.73	4.32	16.27	14.56	8.82
EAFE	2.05	20.34	27.29	(13.96)	(21.21)	(15.67)	39.17	20.69	14.01	26.86	11.63	(43.06)	32.46	8.20	(11.73)	17.89	23.29	(4.48)	(3.53)	5.00	9.52	6.64	5.43
NAREIT	20.27	(17.51)	(4.62)	26.36	13.93	3.81	37.14	31.59	12.16	35.07	(15.69)	(37.73)	27.99	27.94	8.28	19.70	2.86	28.04	12.94	3.98	14.06	15.60	9.54
CPI	1.70	1.61	2.68	3.44	1.60	2.48	2.04	3.34	3.34	2.52	4.11	(0.02)	2.81	1.42	3.02	1.76	1.51	0.66	(0.62)	(0.17)	1.01	1.64	2.02
NCREIF Property Index returns																							
Total	13.91	16.25	11.36	12.25	7.28	6.75	9.00	14.49	20.06	16.60	15.85	(6.46)	(16.85)	13.11	14.26	10.54	10.98	11.82	3.04	3.57	11.47	12.75	8.39
Income	9.08	8.78	8.38	8.58	8.67	8.42	7.97	7.46	6.75	6.22	5.56	5.13	6.17	6.76	6.11	5.84	5.61	5.36	1.29	1.24	5.54	5.85	5.90
Appreciation	4.52	7.02	2.81	3.46	(1.31)	(1.58)	0.97	6.66	12.68	9.92	9.88	(11.15)	(21.98)	6.05	7.80	4.51	5.16	6.21	1.75	2.33	5.70	6.62	2.38
NCREIF total returns by property type																							
Apartment	12.90	14.12	11.73	12.99	9.37	8.76	8.90	13.04	21.15	14.63	11.36	(7.29)	(17.51)	18.21	15.45	11.23	10.42	10.29	2.77	2.85	10.67	13.62	8.05
Industrial	15.94	15.86	11.65	14.02	9.30	6.70	8.23	12.07	20.31	16.96	14.95	(5.76)	(17.85)	9.37	14.59	10.71	12.32	13.42	3.87	3.47	12.43	12.69	8.34
Office	17.87	19.62	12.22	14.11	6.20	2.78	5.67	12.02	19.46	19.16	20.51	(7.29)	(19.10)	11.74	13.76	9.49	9.86	11.50	3.09	3.30	10.62	11.79	8.18
Retail	8.53	12.91	9.55	7.76	6.74	13.74	17.15	22.95	19.98	13.35	13.51	(4.11)	(10.95)	12.62	13.77	11.61	12.87	13.12	2.69	4.93	13.30	13.63	9.23
Core Farmland Index returns (market weighted) *																							
Total	9.45	7.73	7.01	8.51	3.29	6.47	8.78	19.54	21.94	17.08	16.97	13.40	7.30	7.68	14.93	17.33	15.82	7.92	1.58	1.33	12.19	12.55	13.82
Income	6.27	5.71	5.71	5.63	5.06	5.44	5.16	5.64	5.52	5.53	5.74	4.33	4.81	4.96	5.14	5.61	4.67	4.52	1.24	0.97	4.67	4.96	5.05
Appreciation	3.05	1.93	1.25	2.76	(1.70)	0.99	3.48	13.38	15.79	11.09	10.77	8.79	2.40	2.63	9.44	11.27	10.78	3.29	0.33	0.36	7.27	7.32	8.46

Source: NCREIF, NAREIT, Bureau of Labor Statistics, Morningstar and Moody's Analytics as of March 2015

\*The Core Farmland Index (CFI) is composed of all annual and permanent cropland investments in the NCREIF Farmland Index that are leased. For a more market-neutral benchmark, CFI excludes investments that are owner/operated and re-weighted NCREIF Farmland Index returns to 80% annual cropland and 20% permanent cropland.



Real Estate Research & Strategy - US

William Hughes, Kurt Edwards,  
Tiffany Gherlone, Amy Holmes, Kim House,  
Brian O'Connell, Joshua Rome, Shane Russo,  
Kimberly Stankus & Laurie Tillinghast

For more information please contact:

UBS Realty Investors LLC  
10 State House Square  
Hartford, CT 06103  
Tel. +1-860-616 9000

 @UBSAmericas

[www.ubs.com/realstate](http://www.ubs.com/realstate)

**This publication is not to be construed as a solicitation of an offer to buy or sell any securities or other financial instruments relating to UBS AG or its affiliates in Switzerland, the United States or any other jurisdiction.** UBS specifically prohibits the redistribution or reproduction of this material in whole or in part without the prior written permission of UBS and UBS accepts no liability whatsoever for the actions of third parties in this respect. The information and opinions contained in this document have been compiled or arrived at based upon information obtained from sources believed to be reliable and in good faith but no responsibility is accepted for any errors or omissions. All such information and opinions are subject to change without notice. Please note that past performance is not a guide to the future. With investment in real estate (via direct investment, closed- or open-end funds) the underlying assets are illiquid, and valuation is a matter of judgment by a valuer. The value of investments and the income from them may go down as well as up and investors may not get back the original amount invested. Any market or investment views expressed are not intended to be investment research. **The document has not been prepared in line with the requirements of any jurisdiction designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research.** The information contained in this document does not constitute a distribution, nor should it be considered a recommendation to purchase or sell any particular security or fund. A number of the comments in this document are considered forward-looking statements. Actual future results, however, may vary materially. The opinions expressed are a reflection of UBS Global Asset Management's best judgment at the time this document is compiled and any obligation to update or alter forward-looking statements as a result of new information, future events, or otherwise is disclaimed. Furthermore, these views are not intended to predict or guarantee the future performance of any individual security, asset class, markets generally, nor are they intended to predict the future performance of any UBS Global Asset Management account, portfolio or fund. Source for all data/charts, if not stated otherwise: UBS Global Asset Management, Global Real Estate – US. The views expressed are as of June 24, 2015 and are a general guide to the views of UBS Global Asset Management, Global Real Estate – US. All information as at March 31, 2015 unless stated otherwise. Published June 24, 2015.  
**Approved for global use.**

© UBS 2015.

The key symbol and UBS are among the registered and unregistered trademarks of UBS. Other marks may be trademarks of their respective owners. All rights reserved.

