Introduction

Amidst headwinds such as economic weakness in China and emerging markets, financial and stock market volatility, falling oil prices and a stronger dollar, the U.S. economy weakened to end 2015. The advance estimate of 4Q15 GDP showed that the U.S. economy grew at a seasonally adjusted annualized rate of 0.7%, as consumers scaled back spending. The struggles of China’s economy, the second largest worldwide, has been a drag on many U.S. companies. In December, factory and manufacturing weakness continued to be weighed down by tepid global demand, triggered by the strong U.S. dollar, which has negatively impacted the sales and profits of U.S. companies with large foreign operations by cutting the dollar value of international revenues and has diminished demand for American exports by effectively raising their prices. The industrial sector pulled back production for the third straight month, dragged by cutbacks in utilities and mining output, which was driven by cheaper energy prices.

Despite these impediments to growth, several economic indicators were encouraging. During 4Q15, leading indices show that consumer confidence increased, the labor market strengthened, as 284,000 jobs were created during the quarter, the best pace all year, and the unemployment rate ended at a yearly low of 5.0%. Driven by steady household formations, a resilient housing market was evidenced by improving builder sentiment, increased sales activity and strong new home sales. However, many in the real estate industry believe that the other lower risk investments become more attractive; could diminish investor demand for commercial real estate, as normalize rates, have led to concerns that the higher rates might support higher rents and property values.

In December 2015, the Federal Reserve raised its Federal Funds Rate (25 BPS) for the first time in nine years and hinted at several more increases that could come in 2016. During 4Q15, the Federal Reserve raised its Federal Funds Rate (25 BPS) for the first time in nine years and hinted at several more increases that could come in 2016. During 4Q15, the Federal Reserve raised its Federal Funds Rate (25 BPS) for the first time in nine years and hinted at several more increases that could come in 2016. During 4Q15, the Federal Reserve raised its Federal Funds Rate (25 BPS) for the first time in nine years and hinted at several more increases that could come in 2016. During 4Q15, the Federal Reserve raised its Federal Funds Rate (25 BPS) for the first time in nine years and hinted at several more increases that could come in 2016. During 4Q15, the Federal Reserve raised its Federal Funds Rate (25 BPS) for the first time in nine years and hinted at several more increases that could come in 2016.
Data and analysis from numerous commercial information providers and real estate brokerage firms were mostly indicative of strengthening market fundamentals within the major sectors during 4Q15 despite headwinds and challenges unique to each asset class. Low interest rates, strong competition among buyers and access to debt and equity continued to drive cap rate compression (per the most recent PwC Real Estate Investor Survey) among the major commercial property types during 2015. As capital flows poured in from international investors, the pace of investor sales ramped up during 4Q15 to the highest quarterly level since the first half of 2007. Additionally, leading commercial real estate indices such as NCREIF, Moody’s/RCA and Green Street continued to indicate strong price appreciation for the majority of commercial real estate assets during the past 12 months.

Conditions within the real estate debt markets were generally positive to end 2015. The Mortgage Bankers Association reported commercial and multi-family loan originations increased 19.0% YoY and 4Q15 was the fourth highest quarter for borrowing and lending on record, as banks, life insurance companies and Fannie Mae/Freddie Mac recorded their highest level since 2007. Additionally, leading commercial real estate indices for the major commercial real estate indices continued to drive cap rate compression (per the most recent PwC Real Estate Investor Survey) among the major commercial real estate sectors during 4Q15 despite headwinds and challenges unique to each asset class. Low interest rates, strong competition among buyers and access to debt and equity continued to drive cap rate compression (per the most recent PwC Real Estate Investor Survey) among the major commercial property types during 2015. As capital flows poured in from international investors, the pace of investor sales ramped up during 4Q15 to the highest quarterly level since the first half of 2007. Additionally, leading commercial real estate indices such as NCREIF, Moody’s/RCA and Green Street continued to indicate strong price appreciation for the majority of commercial real estate assets during the past 12 months.

The following summarizes current, key economic indicators:

- **GDP Growth Decreases.** The advance estimate showed that 4Q15 U.S. GDP increased at a 0.7% seasonally adjusted annualized rate. Much of the weakness was attributed to the slowdown in consumer spending.

- **No Change in Unemployment Rate:** Unemployment remained at 5.0% in December and is down 60 basis points (BPS) from a year ago. Job openings reached the highest level since 2001, as there are about 1.4 unemployed workers for every available job. Prior to the recession this ratio stood at 1.7.

- **Employment Cost Index (ECI) Remains Steady.** The ECI indicated that employment costs, including wages and salaries, increased 0.6% during 4Q15. For 2015, the index is up only 2.0%, down slightly from the increase reported the prior year. Tightening labor market conditions are not reflected in wage growth.

- **Small Business Optimism Rises.** According to the National Federation of Independent Business (NFIB) Small Business Optimism Index, small business confidence rebounded in December from the prior month’s decline. The report indicated that businesses still have concerns about the state of the economy and face burdens resulting from taxes and regulation.

- **Consumer Confidence Increases.** According to the two leading indices, U.S. consumer confidence increased in December primarily resulting from a positive view of current economic conditions.

- **The Leading Economic Index (LEI) Declines** - The LEI decreased 0.2% in December, which continues to signal the U.S. economy’s slowing momentum. Contributing to the index’s fall were continued soft readings from the factory sector and the slowdown in building permit activity.

- **Retail Sales Fall.** U.S. retail sales declined 0.1% in December and increased just 2.1% in 2015, considerably lagging the 3.9% increase in sales of the prior year. This represented the weakest year for sales growth since the end of the recession. Despite a lackluster year, automobile sales remained strong, as the Automotive News Data Center reported the largest automobile sales volume since 2000. Economists had predicted a much stronger December sales figure due to strong job growth, low gas prices, increased consumer sentiment and above average winter temperatures, which historically tends to increase retail sales.

- **CPI Declines.** The headline CPI decreased 0.1% in December. Lower gasoline prices were the primary cause for the decline. Consumer food prices decreased for the second consecutive month.

- **Industrial Production Falls.** The industrial sector pulled back production for the third consecutive month, resulting in a 0.4% fall in December. Manufacturing output declined and mining production fell for the fourth consecutive month.

- **Durable Goods Orders Plummet.** U.S. durable goods orders decreased 5.1% in December, the fourth decline in the past five months. Declines were broad-based across categories such as motor vehicles and parts orders, commercial aircraft orders, capital goods, machinery and computers.

- **ISM Non-Manufacturing Index Falls.** Activity outside the manufacturing sector fell slightly during December, but still remains in expansion territory. Despite the decrease, business activity, new orders and employment all reported steady growth.

- **Dodge Momentum Index (DMI) Increases.** In December, the DMI, an early indicator of private non-residential construction spending, increased 4.1%, reversing the downward trend recorded during the prior two months. Growth was driven by commercial and institutional building planning.
Employment

In the face of headwinds, such as global turbulence and a struggling Chinese economy, the U.S. labor market strengthened during 4Q15. In December, employers added 292,000 jobs, following upward revisions of 50,000 jobs in October and November. 284,000 monthly jobs were created during 4Q15, the best quarterly pace in a year and approximately 2.65 million jobs were created in 2015, equaling a monthly average of 221,000 and representing the second highest total since 1999. Since the last monthly decline in employment in September 2010, the economy has added roughly 13.0 million jobs.

The December ADP National Employment Report showed a gain of 257,000 in non-farm private employment, which was primarily concentrated within service-providing sectors. Industries with the largest employment gains were within the business services (+66,000), trade, transportation and utilities (+38,000) and construction (+24,000) sectors.

Non-farm employment totaled roughly 143 million as of December 2015, an increase of 1.9% from 2014. Employment gains were broad-based during 4Q15, as the professional and business services (+188,000), education and health services (+182,000) and trade, transportation and utilities (+131,000) sectors added the largest numbers of jobs. Helped by warmer weather, the construction industry added 128,000 jobs, nearly half of the sector’s total job creation for the year. For 2015, the education & health services (+655,000) and professional and business services sectors (+602,000) were the largest job producers. In contrast, due to falling oil prices, the natural resources and mining sector lost 131,000 jobs.

The December unemployment rate remained unchanged at 5.0% for the third consecutive month, lingering at its lowest level since April 2008. The labor force participation rate edged up slightly to 62.6%, but remains at its lowest level since the late 1970’s. Despite encouraging employment growth, December wages were basically unchanged. Year-over-year (YoY) wage growth of 2.5% was the strongest it has been in five years, but the growth is still historically modest.

As shown below, December marked the sixteenth consecutive month that the unemployment rate registered below 6.0%. The current unemployment rate is 220 basis points below the 7.2% average recorded between December 2010 and 2015.

## US Non-Farm Employment by Industry

**Historic and Current Figures (thousands)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining and Logging</td>
<td>762</td>
<td>785</td>
<td>840</td>
<td>895</td>
<td>-13.3%</td>
</tr>
<tr>
<td>Construction</td>
<td>6,539</td>
<td>6,725</td>
<td>7,012</td>
<td>7,308</td>
<td>-4.0%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>12,331</td>
<td>12,301</td>
<td>12,086</td>
<td>12,038</td>
<td>0.2%</td>
</tr>
<tr>
<td>Trade, Trans &amp; Utilities</td>
<td>27,114</td>
<td>26,969</td>
<td>26,159</td>
<td>25,365</td>
<td>3.0%</td>
</tr>
<tr>
<td>Information</td>
<td>2,817</td>
<td>2,787</td>
<td>2,724</td>
<td>2,690</td>
<td>1.2%</td>
</tr>
<tr>
<td>Financial Activities</td>
<td>8,166</td>
<td>8,009</td>
<td>7,914</td>
<td>7,792</td>
<td>1.5%</td>
</tr>
<tr>
<td>Prof &amp; Bus. Services</td>
<td>20,044</td>
<td>19,439</td>
<td>18,735</td>
<td>17,983</td>
<td>3.5%</td>
</tr>
<tr>
<td>Educ. &amp; Health Services</td>
<td>22,373</td>
<td>21,718</td>
<td>21,230</td>
<td>20,766</td>
<td>2.3%</td>
</tr>
<tr>
<td>Leisure &amp; Hospitality</td>
<td>15,367</td>
<td>14,948</td>
<td>14,466</td>
<td>14,091</td>
<td>2.8%</td>
</tr>
<tr>
<td>Other Services</td>
<td>5,079</td>
<td>5,011</td>
<td>4,926</td>
<td>4,835</td>
<td>1.8%</td>
</tr>
<tr>
<td>Government</td>
<td>22,001</td>
<td>21,902</td>
<td>21,828</td>
<td>21,730</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Total Nonfarm: 143,242 100.0% 140,592 100.0% 137,476 100.0% 1.9%

Source: Bureau of Labor Statistics

Consumer confidence indices produced by the Conference Board and Thomson Reuters/University of Michigan are considered key indicators of economic conditions.

**The Conference Board:** Consumer confidence rebounded in December following a moderate decrease in November. Lynn Franco, Director of Economic Indicators at The Conference Board, remarked, “As 2015 draws to a close, consumers' assessment of the current state of the economy remains positive, particularly their assessment of the job market. Looking ahead to 2016, consumers are expecting little change in both business conditions and the labor market.” Still, consumers remain concerned by sluggish income growth and had mixed feelings regarding business conditions.

The Thomson Reuters/University of Michigan Index: The Index of Consumer Sentiment increased to its highest level in five months in December, largely fueled by positive consumer perceptions regarding current economic conditions. It was reported that lower inflation has increased household incomes and plans for buying household durable goods.

Below is a graph depicting consumer confidence since December 2010.
Gross Domestic Product (GDP)

The advance estimate of 4Q15 GDP showed that the U.S. economy grew at a seasonally adjusted annualized rate of 0.7%, down from 2.0% during the prior quarter, but generally in-line with consensus estimates. Despite steady job gains and an improvement in the housing market, growth slowed during the second half of the year. For 2015, GDP expanded at a 2.4% rate, the same as last year and slightly above the 2.1% average since 2010.

Consumer spending, the main driver of economic growth, increased at a 2.2% rate, down from the 3.0% pace of growth recorded during 3Q15. Despite the latest pullback, consumer spending, boosted by cheaper gasoline prices and a gradual uptick in wages, grew at a 3.1% rate during 2015, which was the fastest pace in a decade.

Weak global demand and falling energy prices has negatively affected business investment, which decreased at a 1.8% annualized rate during 4Q15, its first drop since 3Q12. Spending on structures declined at a 5.3% rate during 4Q15, led by a 39% decrease in oil and gas well drilling rigs. Outlays for structures used to extract oil and gas fell 35.0% during 2015, the most since 1986.

Of significance, the weak GDP reading may influence the Federal Reserve to slow future interest rate hikes, which will tentatively be discussed in March 2016. Despite global weakness, the majority of economists expect growth to accelerate due to increased consumer spending.

4Q15 GDP Key Statistics

- A widening trade gap between exports and imports continues to subtract from economic growth due to the strong U.S. dollar, which makes U.S. exports comparatively more expensive. Exports declined by 2.5% and imports increased by 1.1%

- Overall government spending increased at a 0.7% rate, primarily due to a 3.6% rise in national defense spending. State and local government consumption and gross investment fell 0.6%.

- Reflective of a healthy housing market, spending on residential investment increased at an 8.1% rate, the seventh consecutive quarterly increase.

- Durable goods spending increased 4.3%, bettering the 1.5% rise in non-durable goods.

- As demand eased from foreign countries, U.S. firms continued to reduce inventories to pare unwanted inventories, which was the largest drag on economic growth during the quarter.

- The personal savings rate registered 5.4% during 4Q15, 20 BPS higher than the prior quarter.

The following chart summarizes U.S. GDP growth since 4Q11.

Gross Domestic Product

Quarter-to-Quarter Growth in Real GDP

Source: Bureau of Economic Analysis

Institute for Supply Management (ISM) Manufacturing Index

The ISM Index, a national survey of purchasing managers, is calculated based on a weighted average of the following five sub-indexes: new orders (30%), production (25%), employment (20%), deliveries (15%) and inventories (10%).

According to the December 2015 report, the manufacturing sector continued to slow and contracted for a second consecutive month. This marked the first consecutive monthly contraction within the sector since the summer of 2012. With a reading of 48.2%, the headline Purchaser’s Manufacturing Index (PMI) fell to its lowest level since June 2009. The stronger dollar and weaker global economy have led to cuts to U.S. exports of many major American-made goods. Additionally, there has been declining demand by energy producers for drilling equipment due to the fall in oil prices. Only six of the eighteen industries tracked by the ISM Index reported growth in December.

Bradley Holcomb, who oversees the ISM survey, noted that the overall softness in December was due to a contraction in new orders, production, employment and raw materials inventories. In December, the Prices Index reported a 2% monthly decrease, including the 14th consecutive monthly price decline for raw materials. As a direct result, energy providers posted among the manufacturing sector’s largest production decreases during the month. Additionally, weakness in the new orders index is indicative that factory orders and capital spending will likely remain sluggish in the immediate future.

Purchasing managers were generally mixed regarding manufacturing conditions. On the positive, respondents indicated that, “Business is going well. Low fuel prices keep full size SUV and truck sales at high volumes” and “Deflation in many commodities is helping with product savings. Sales are strong with a backlog”. Concerns from respondents were that, “Low oil prices are negatively impacting oil and gas exploration activities” and “Customers are tightening their inventories for year-end, impacting our sales and shipments.”
The graph below shows fluctuations within the PMI since December 2012.

**Purchasing Manager’s Index (PMI)**

Reading above 50% indicates expansion in the manufacturing sector

Source: Institute for Supply Management

The following summarizes key components of the ISM Index.

- **Purchasing Managers’ Index (PMI).** A reading above 50.0% indicates that the manufacturing economy is generally expanding; below 50.0% indicates that it is generally contracting. Manufacturing contracted for the second consecutive month after 29 consecutive months of expansion. The PMI has averaged 51.4% during the past 12 months. Seven industries reported growth in December.

- **New Orders Index.** A New Orders Index above 52.1%, over time, is generally consistent with an increase in the Census Bureau’s series on manufacturing orders. The New Orders Index increased 0.3 percentage point to 49.2% in December, indicating contraction for the second consecutive month. Six industries reported growth in December.

- **Production Index.** An index above 51.0%, over time, is generally consistent with an increase in the Federal Reserve Board’s industrial production figures. The index increased 0.6 percentage points in December to 49.8%. Seven industries reported growth in December.

- **Employment Index.** An Employment Index above 50.6%, over time, is generally consistent with an increase in manufacturing employment. A decrease of 3.2% percentage points was recorded in December, indicating contraction. Seven industries reported growth in December.

- **Inventories Index.** An Inventories Index greater than 42.9%, over time, is generally consistent with expansion in the Bureau of Economic Analysis’ (BEA) figures on overall manufacturing inventories. An increase of 5 percentage points to 43.5% was recorded in December, as raw material inventories contracted for the sixth consecutive month. Five industries reported growth in December.

**Construction Spending**

The Commerce Department reported that U.S. construction spending increased 0.1% in December, below consensus estimates, after falling the two prior months. The latest gain was driven by increases in residential construction and government projects, offsetting a 2.1% fall in non-residential structures, which represented the largest decline since January 2013.

For 2015, construction increased 10.5% to $1.1 trillion, the highest annual total since 2007. Home construction grew at an annual rate of 8.1% in the October–December period, reflecting improved builder confidence.

**Private Construction**

- Comprising 74.0% of total construction expenditures, private construction spending decreased 0.6% in December, as non-residential construction declined 2.1%, offsetting a 0.9% gain for residential spending.

- Despite the latest decline, non-residential spending is up nearly 12.0% from a year ago.

- Total construction expenditures increased 9.9% YoY. Within the residential sector, spending on new multi-family projects increased 12.0% YoY as compared to a nearly 9.0% increase for new single-family homes.

- During the past 12 months, spending increases occurred, most notably, within the following non-residential sectors: lodging (+30.6%), office (+20.4%) and manufacturing (+19.4%).

**Public Construction**

- Comprising 26.0% of total construction expenditures, public construction outlays increased 1.9% in December.

- Spending on state and local building projects increased 6.1% in 2015, bettering the 0.7% gain in federal project spending.

- During the past 12 months, public construction expenditures increased by 3.9%. Highway and street (+12.0%) and education (+9.4%) increased YoY.

The following chart highlights annualized residential and non-residential construction (seasonally adjusted) since December 2010. Although the economic downturn initially affected the residential construction industry more significantly, spending rebounded within the sector at a faster pace than for non-residential properties. As a result, the variance in spending between the sectors fell to $199 billion in early 2014. The pace of non-residential construction then increased at a faster pace, increasing the variance to $309 billion during the spring of 2015. During 4Q15, spending within the residential sector has increased in contrast to declines within the non-residential sector, decreasing the variance to $246 billion.
The Architecture Billings Index (ABI) is a diffusion index derived from the monthly Work-on-the-Boards survey, conducted by the American Institute of Architects (AIA) Economics & Market Research Group. The ABI is a leading economic indicator of non-residential construction activity, reflecting an approximate nine to twelve month lag time between architecture billings and construction spending. Any measure below 50 indicates contraction in the demand for architects’ services.

- After a decline in November, the ABI increased in December to 50.9. Overall, eight of the twelve months in 2015 were indicative of increased demand for architects’ services.
- Firms reported that their backlog of projects averaged about 5.6 months during 4Q15, which represents the highest level since 2011.
- Two regions reported positive billings, including the West (53.7) and South (53.3). Weakness was present in the Northeast (46.7) and Midwest (46.1).
- Billings growth was the strongest within the multi-family residential (52.9) and institutional (52.2), commercial/industrial (47.3) and mixed practice (46.5) sectors.
- AIA Chief Economist Kermit Baker stated, “As has been the case for the past several years, there continues to be a mix of business conditions that architecture firms are experiencing. Overall, ABI scores for 2015 averaged just below the strong showing in 2014, which points to another healthy year for construction.”
- Top concerns among architecture firms included increasing firm profitability, availability of labor with proper technical skills and the negotiation of fees.

The following graph shows fluctuations within the ABI since December 2012.

State of the Housing Market

Despite economic volatility, the housing market recovery continues to positively impact the U.S. economy, characterized by steady sales, price appreciation and positive builder sentiment. In December, the National Association of Realtors reported that annualized existing home sales (5.46 million) rebounded from a 19-month low during the prior month and increased 14.7%, the largest monthly increase ever recorded. YoY sales increased 7.7%. In November, it was reported that the rollout of new mortgage disclosure rules, called “The Know Before You Owe Initiative,” caused closing delays. In 2015, existing home sales totaled 5,26 million, the highest figure since 2006. Median existing home prices, which are up 7.6% YoY, continue to rise. December marked the 46th consecutive month of YoY price gains.

Below are additional key points pertaining to the housing market.

- New home sales increased 10.8% during December to a seasonally adjusted annualized rate of 544,000 units. This represented the highest level in ten months. During 2015, new home sales jumped 14.5% to 501,000 units, the highest level since 2007.
- According to Freddie Mac, the average commitment rate for a 30-year, conventional, fixed-rate mortgage increased slightly in December to 3.96%. The average commitment rate for all of 2015 was 3.85%.
- According to RealtyTrac, foreclosure filings declined 3.0% from 2014 and registered their lowest annual total since 2006. Since peaking in 2010, filings are down 62.0%. States with the highest foreclosure rates were New Jersey, Florida and Illinois.
- The S&P/Case-Shiller U.S. National Home Price Index reported a 5.3% annual gain in November. Generally, west coast cities recorded the largest annual price
appreciation, including strong gains within San Francisco, Denver and Portland. The widely quoted 20-city home price index increased 5.8% YoY in November.

- The CoreLogic Home Price Index showed that U.S. home prices increased 6.3% YoY in November. Home price growth is expected to increase 5.4% YoY from November 2015 to November 2016. The latest report indicated that 8 states reached new highs.

- Distressed transactions (foreclosures and short sales sold at deep discounts) declined to 8.0% in December, down 11% YoY.

- Lawrence Yun, NAR Chief Economist, stated, “While the carryover of November’s delayed transactions into December contributed greatly to the sharp increase, the overall pace taken together indicates sales these last two months maintained the healthy level of activity seen in most of 2015. Additionally, the prospect of higher mortgage rates in coming months and warm November and December weather allowed more homes to close before the end of the year.”

Below is a breakdown of single- vs. multi-family housing starts since December 2005.

### Housing Starts

- Despite mild weather, housing starts declined 2.5% in December (from the prior month) to an adjusted annual pace of 1.15 million units. In 2015, housing starts exceeded 2014 activity by nearly 11.0%. The Northeast and South regions posted increases during 2015 in contrast to declines within the Midwest and West regions.

- In December, building permits, an indicator of future construction activity, fell 3.9% from the prior month to an adjusted annual rate of 1.23 million from the prior month. In 2015, building permitting activity was up 12.0% from 2014 totals.

The following is a historical chart comparing the NAHB/Wells Fargo Housing Market Index and single-family starts.

### NAHB/Wells Fargo Housing Market Index

In December, builder confidence in the market for newly-built, single-family homes remained generally flat, declining by one percentage point. All three index components (sales expectations, buyer traffic and current sales conditions) posted modest losses during the month. Looking at the three-month moving averages for regional HMI scores, the West increased three points to 76, the South declined one point to 64, the Midwest fell two points to 58 and the Northeast increased one point to 50.

NAHB Chairman, Tom Woods, remarked, “For the past seven months, builder confidence levels have averaged in the low 60s, which is in line with a gradual, consistent recovery. With job creation, economic growth and growing household formations, we anticipate the housing market to continue to pick up traction as we head into 2016.”

### Housing Sales and Inventory

Below are key housing market statistics.

- Regionally, YoY sales activity increased 23.2% in the West, 14.6% in the South, 10.9% in the Midwest and 8.7% in the Northeast.

- The median price of an existing home was highest in the West ($321,100), followed by the Northeast ($255,700), South ($196,100) and the Midwest ($171,000).

- The median time on the market for an existing home was 58 days in December, down from the 66 days recorded 12 months ago.

- Foreclosures sold in 68 days and non-distressed homes stayed on the market 57 days. It was estimated that 32.0% of the homes sold in December were on the market for less than one month.

- First-time buyers accounted for 32.0% of December’s purchases and averaged 30% of 2015 purchases, up slightly from the prior year.
The total inventory of existing homes available for sale decreased 12.3% to 1.79 million units at the end of December, representing a 3.9-month supply, which is the lowest level since January 2005.

Below is a breakdown of existing annualized housing sales vs. supply during the past year.

### Existing Annualized Home Sales

<table>
<thead>
<tr>
<th>Months Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.3%</td>
</tr>
<tr>
<td>1.79 million</td>
</tr>
</tbody>
</table>

### CRITICAL THINKING AT THE CRITICAL TIME™

**PwC Real Estate Investor Survey**

- Institutional and private investors surveyed for the 4Q15 PwC Real Estate Investor Survey reported that overall cap rates (OARs) declined in twenty-six, held steady in six and increased in two of the survey’s 34 tracked markets. OAR’s decreased by an average of 9 BPS across the major property types since 3Q15. Overall cap rates declined 33 BPS from 4Q14 to 4Q15.

- Terminal cap rates decreased to 6.61% during 4Q15, marking the 15th consecutive monthly decline. The average decline was 6 BPS across nearly all major property types since 3Q15. Terminal cap rates declined 30 BPS from 4Q14 to 4Q15.

- Discount rates (IRR) decreased to 7.58% during 4Q15, marking the 7th consecutive monthly decline. The average decline was 2 BPS across nearly all major property types since 3Q15. Discount rates declined 29 BPS from 4Q14 to 4Q15.

### 4Q15 Survey Highlights

- OARs declined for the five major commercial property types during 4Q15 from the prior quarter, with the strip center (43 BPS) sector recording the largest declines. Other sector declines ranged from 4 to 8 BPS. The regional mall and power center sectors recorded no change and the CBD-office recorded a slight increase.

- As of 4Q15, flex/R&D properties had the highest average OARs at 7.15%, followed by the strip center (6.38%) and suburban office (6.36%) sectors. The lowest average OARs were recorded within the apartment (5.35%), warehouse (5.48%) and CBD-office (5.68%) sectors. The simple average OAR across all sectors was 6.09%.

- Terminal capitalization rates decreased in five of the major commercial property sectors during 4Q15 from the prior quarter. The largest decrease was recorded within the strip center (27 BPS) sector. Other sector declines ranged from 4 to 10 BPS. The warehouse sector recorded a 9 BPS increase and the CBD-office and power center sectors recorded no change.

- As of 4Q15, flex/R&D properties had the highest terminal capitalization rate at 7.40%, followed by the suburban-office (7.20%) sector. The lowest terminal capitalization rates were recorded within the apartment (5.84%) and CBD-office (6.11%) sectors. The simple average terminal capitalization rate across all sectors was 6.61%.

- IRRs decreased from the prior quarter in six of the major commercial property sectors during 4Q15. The largest decrease was recorded within the regional mall (13 BPS) sector. Other sector declines ranged from 1 to 5 BPS. The power center sector recorded no change and the warehouse sector recorded a 6 BPS increase.

- As of 4Q15, flex/R&D properties had the highest IRR at 8.33%, followed by the power center (7.79%) sector. The lowest IRR was recorded within the warehouse (6.99%) and CBD-office (7.20%) sectors and the simple average across all sectors was 7.58%.

### Additional 4Q15 Report Insights/Findings

- Investors are increasingly becoming more critical of property cash flow assumptions.
  - Generally, more investors need to be aggressive in order to win bids for trophy warehouse assets in contrast to bidding for power center or regional mall assets.
  - Many respondents believe that quality offerings and opportunities for creating value have fallen within the apartment sector.
  - In the office sector, investors continue to monitor falling space-per-employee ratios, lease-up times and tenant retention rates.

- Despite the increase in interest rates, many surveyed participants believe that the commercial real estate industry will not be negatively affected.
Manhattan (5.15%), Washington D.C. (5.40%), San Francisco (5.68%), Los Angeles (5.71%), Pacific Northwest (6.08%), Seattle (6.10%), Boston (6.19%), Denver (6.49%) and Phoenix (6.88%) had the lowest overall office capitalization rates.

Philadelphia (7.55%), Atlanta (7.35%), Chicago (7.30%), Suburban Maryland (7.23%), Charlotte (7.21%), SE Florida (7.18%) and Houston (7.01%) had the highest overall office capitalization rates.

Simple averages of overall capitalization, terminal capitalization and discount rates are presented in the following table. The averages reflect the following property types: industrial (flex/R&D, warehouse), office (central business district (CBD) office, suburban office), apartment and retail (strip center, regional malls and power centers).

**PwC Real Estate Investor Survey Historical Results**

<table>
<thead>
<tr>
<th></th>
<th>Office</th>
<th>Retail</th>
<th>Industrial</th>
<th>Multi-Family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expansion</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recovery</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recession</td>
<td>16%</td>
<td>14%</td>
<td>4%</td>
<td>18%</td>
</tr>
<tr>
<td>Contraction</td>
<td>6%</td>
<td>1%</td>
<td>56%</td>
<td>78%</td>
</tr>
</tbody>
</table>

**PwC Real Estate Barometer**

- The PwC Real Estate Barometer was introduced as a system for analyzing historical/forecasted commercial real estate data within the four major property sectors.
- The barometer indicates where a major property type is positioned within the real estate cycle. The real estate cycle consists of the following four phases:
  - **Contraction**: Softening market conditions following the market peak.
  - **Recession**: Following contraction, a period of very low demand, high vacancies and negative rental growth.
  - **Recovery**: Tightening market conditions following the market bottom.
  - **Expansion**: Following recovery, a period of strong demand, low vacancies and robust rental growth.
- Approximately 79.0% of the tracked U.S. office markets are in the expansion and recovery phases, down from 88.0% last quarter. Still, underlying fundamentals, driven by employment growth, remain strong.
- About 86.0% of the tracked U.S. retail markets are in the recovery phase. Looking ahead to 2016 through 2018, no markets are forecasted to be in the recession phase. Grocery-anchored centers and regional malls in prime locations continue to be favored by investors.
- Approximately 87% of the tracked U.S. industrial markets are in the recovery or expansion phase; however, the addition of significant new supply is predicted to place downward pressure on rental rates, which is a future concern.
- Although 78% of the tracked U.S. multi-family markets are in the expansion phase, it is expected that an increasing number of metro areas will move into the contraction phase due the wave of new supply causing rising vacancy rates and slowing rental rate growth.

Below is a snapshot of each major property type as of 4Q15.

**Moody’s/RCA Commercial Property Price Index (CPPI)**

The Moody’s/RCA Commercial Property Price Index (CPPI) is a periodic same-property investment price change index of the U.S. commercial investment market based on Real Capital Analytics (RCA) data. RCA collects price information for every commercial property transaction in the U.S. that is over $2,500,000. The index tracks same-property realized round-trip price changes based purely on the documented prices in completed, contemporary property transactions. The methodology is an extension of market-accepted regression-based, repeat-sales indices and uses no appraisal valuations.

- During 4Q15, the National All-Property Composite Index (“the Index”) increased 1.9%. The Index is now 17.3% above the pre-crisis peak set in late 2007.
- The apartment sector witnessed the strongest price gain (+2.7%) during 4Q15 followed by the retail (+2.5%) and suburban office (+2.3%) sectors. Appreciation cooled...
within the CBD-office sector (+0.8%) and gains for industrial sector (0.7%) lagged the Index gain.

- In 2015, CBD-office properties were the best performing asset type, returning 19.8%. Returns within the apartment (+12.9%) and retail sectors (+12.6%) were near the Index average of 12.7%. Annual price gains within the industrial (+6.9%) and suburban office (+9.6%) sectors were the weakest.
- Hotel assets, although not part of the index, recorded a 15.9% price gain during 2015, exceeding the prior years’ gain by approximately 500 BPS.
- Pricing increased faster within major markets (+15.8%) versus the non-major markets (+9.9%) during 2015.
- During the past three-year period, the largest price appreciation was recorded within the CBD-office sector (+72.7%), followed by gains within the apartment (+52.3%), suburban office (+46.6%), retail (+45.5%) and industrial (42.2%) sectors.

Below is a graph detailing changes within the CPPI since December 2005.

### Moody’s/RCA Commercial Property Price Index

<table>
<thead>
<tr>
<th>Sector/Type</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
<td>9.7%</td>
<td>15.4%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Office</td>
<td>17.9%</td>
<td>13.9%</td>
<td>14.9%</td>
</tr>
<tr>
<td>CBD</td>
<td>19.7%</td>
<td>13.2%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Suburban</td>
<td>15.9%</td>
<td>14.7%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Retail</td>
<td>22.2%</td>
<td>6.5%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Apartment</td>
<td>13.5%</td>
<td>14.8%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Major Markets</td>
<td>16.6%</td>
<td>13.8%</td>
<td>15.8%</td>
</tr>
<tr>
<td>Non-Major Markets</td>
<td>16.0%</td>
<td>12.2%</td>
<td>9.9%</td>
</tr>
<tr>
<td>National All-Property</td>
<td>16.3%</td>
<td>13.0%</td>
<td>12.7%</td>
</tr>
</tbody>
</table>

The following chart illustrates annual price returns for the primary sectors within the CPPI since 2013.

### Green Street Commercial Property Price Index

Green Street’s Commercial Property Price Index is a time series of unleveraged U.S. commercial property values that captures the prices at which commercial real estate transactions are currently being negotiated and contracted. Features that differentiate this index are its timeliness, emphasis on institutional quality properties, and ability to capture changes in the aggregate value of the commercial property sector.

The Green Street Commercial Property Price Index was unchanged in December from the prior month. During 2015, property values increased 10.0% and prices are up 30% during the past three years. Peter Rothemund, senior analyst with Green Street Advisors, remarked, “Property values posted robust gains in 2015, like they did in each of the prior five years. That said, investors would be wise to discount a continuation of that streak in 2016. Whether compared to yields available on long-dated investment grade bonds or riskier junk bonds, cap rates on commercial property look too low at today’s levels. Higher cap rates, which mean lower property values, seem like a very real possibility in 2016.”

Below is a graph detailing changes since December 2005.

### Commercial Property Sales Analysis

During 4Q15, sales of commercial properties grew to their highest quarterly level since the first half of 2007. Real Capital Analytics reported that sale volume registered $150.3 billion (excluding commercial land) during 4Q15, representing increases of 20.0% from the prior quarter and 37.0% YoY. Driving much of this robust activity to end the year was strong capital flows from international investors, who are increasingly seeking a safe haven for their investments amidst the global and political turmoil occurring in much of the world. Findings from the 2016 Association of Foreign Investors in Real Estate
(AFIRE) Survey indicate that the U.S. provides the best opportunity for capital appreciation.

Sales activity during 2015 registered roughly $509 billion, eclipsing 2014 totals by 24.0%. It still continues to be reported that strong competition exists for primary assets in top markets, which has forced buyers to be very competitive in submitting bids and continues to drive prices up and returns down.

Below we take a look at sales activity by product type.

- **Apartment**: Activity reached record levels in 2015, as volume totaled $150 billion, an increase of $32 billion from the prior year. Volume was boosted by the $5.3 billion sale of Peter Cooper Village and Stuyvesant Town in New York City to the Blackstone Group and Ivanhoe Cambridge. Garden apartment transactions increased 38.0% YoY and have accounted for 64.0% of total volume. Mid/high-rise apartment sales grew 23.0% YoY.

- **Retail**: Sales of retail assets totaled nearly $87 billion during 2015, a 1.1% YoY increase. This represented the weakest gain in volume among the property types. Among the retail subtypes, the sale of malls and other retail properties increased 4% during the year in contrast to a 2.0% decline for strip centers. On the positive, the sale of individual assets grew 9.0%.

- **Office**: Nearly $146 billion of office sales occurred during 2015, which represents a 16.0% YoY increase and the second highest volume among the property types. Helping to drive the increase in volume was suburban office sales, which increased 26.0% YoY to $79 billion. In contrast, CBD office sales increased by only 6.0% YoY to $67 billion. The sale of portfolios and entity-level deals grew 36%, outpacing the 10.0% gain for the sale of individual assets.

- **Industrial**: Posting growth of 54.0% YoY, the highest among the property types, sales volume registered nearly $77.0 billion in 2015. This record total eclipsed the previous high of $60 billion recorded in 2007. Portfolio and entity-level deals were responsible for the majority of growth, which increased nearly 170% from the prior year to $38 billion. Additionally, foreign interest in the sector increased, as international firms invested approximately $27.5 billion in industrial assets, a record high.

- **Hotel**: Investment volume increased 42% to $49 billion during 2015, the highest annual volume since 2007. The sale of individual assets increased 32% in 2015 and represented nearly 60.0% of volume. Investor interest in full-service hotels drove volume as this subtype accounted for 71.0% of volume during 2015, increasing 56.0% YoY. Limited-service hotel sales volume recorded just a 15.0% increase during the same period, as investors favored high-end assets.

2013 to 2015 sales activity by property type is summarized below.

### Investment Sales Activity

**Dollar Value of Sales Transactions by Property Type**

Source: Real Capital Analytics

In addition to the preceding data, we have also analyzed RCA historical sales activity by buyer type.

- International capital continued to find U.S. commercial real estate assets attractive. In 2015, investment from foreign investors totaled a record $88 billion, representing a 116% increase from 2014 and well above the prior five year average of $28 billion. In 2015, countries making the largest investments in U.S. commercial real estate include (in order): 1) Canada, 2) Singapore, 3) China, 4) Norway and 5) United Arab Emirates.

- Private buyers continued as the most active buyers of real estate, as their share of total real estate investment activity accounted for 42.0% of the transaction volume during 2015. During the year, private buyers acquired roughly $221 billion of commercial real estate assets.

- Acquisition volume totaled $43 billion from institutional/equity buyers during 4Q15, an increase of 45% from the prior quarter. During 2015, this investor group has accounted for 25.0% of total sales activity.

- After recording $28.0 billion in acquisitions during 1Q15, volume slowed to around $10.5 billion per quarter for listed funds/REITs. As a result, market share of total transactions declined from 15% to 11% YoY.

### Investment Sales Activity

**Summary of Transactions by Buyer**

Source: Real Capital Analytics
Significant 4Q15 Sales Transactions

The following tables summarize noteworthy sales executed during 4Q15 in the major commercial real estate sectors.

### Office Sale Transactions

<table>
<thead>
<tr>
<th>Address/Name</th>
<th>City, State</th>
<th>Size (SF)</th>
<th>Sale Price ($ mil)</th>
<th>Buyer(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 Boylston Street and 222 Berkeley Street</td>
<td>Boston, MA</td>
<td>1,294,156</td>
<td>$1,250.0</td>
<td>Oxford Properties Group &amp; J.P. Morgan Investment</td>
</tr>
<tr>
<td>200 E Randolph Street - 400 South Dearborn</td>
<td>Chicago, IL</td>
<td>2,272,922</td>
<td>$1,210.0</td>
<td>The RSM Companies (private real estate co)</td>
</tr>
<tr>
<td>Towne at Williams Square (4)</td>
<td>Irving, TX</td>
<td>1,800,080</td>
<td>$1,200.0</td>
<td>Axiom Management Holdings &amp; Vanbochtel Partners</td>
</tr>
<tr>
<td>390 Waker Drive</td>
<td>Chicago, IL</td>
<td>867,821</td>
<td>$1,200.0</td>
<td>PHC Realty Investments &amp; AEP (Co) (private real estate co)</td>
</tr>
<tr>
<td>131 Darmouth Street</td>
<td>Boston, MA</td>
<td>371,058</td>
<td>$1,190.0</td>
<td>TA Realty</td>
</tr>
<tr>
<td>515 Northside Avenue</td>
<td>Seattle, WA</td>
<td>304,578</td>
<td>$1,180.0</td>
<td>Union Investment Real Estate GmbH</td>
</tr>
<tr>
<td>350 Lexington Avenue</td>
<td>New York, NY</td>
<td>295,058</td>
<td>$1,170.0</td>
<td>Union Holdings Company, Limited Partnership</td>
</tr>
</tbody>
</table>

### Industrial/Flex Sale Transactions

<table>
<thead>
<tr>
<th>Address/Name</th>
<th>City, State</th>
<th>Size (SF)</th>
<th>Sale Price ($ mil)</th>
<th>Buyer(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2800 Polar Way</td>
<td>Richfield, MN</td>
<td>295,058</td>
<td>$1,150.0</td>
<td>Linn-Ott Real Estate Investors</td>
</tr>
<tr>
<td>4500 &amp; 500 Old Pearl Road</td>
<td>Natchez, MS</td>
<td>925,768</td>
<td>$1,150.0</td>
<td>First Industrial Realty Trust, Inc.</td>
</tr>
<tr>
<td>Legacy Grove Business Center (3)</td>
<td>Pampa, TX</td>
<td>241,457</td>
<td>$1,150.0</td>
<td>Sunstone West Properties, Inc.</td>
</tr>
<tr>
<td>4000 Palomar Beach Avenue</td>
<td>Carlsbad, CA</td>
<td>303,744</td>
<td>$1,150.0</td>
<td>WRM Capital Management</td>
</tr>
<tr>
<td>Rider Park Technology Center (3)</td>
<td>San Jose, CA</td>
<td>243,145</td>
<td>$1,150.0</td>
<td>Greyrock Capital</td>
</tr>
<tr>
<td>108 Gateway Logistics Center</td>
<td>Aurora, IL</td>
<td>614,955</td>
<td>$1,140.0</td>
<td>American Realty Advisors</td>
</tr>
</tbody>
</table>

### Retail Sale Transactions

<table>
<thead>
<tr>
<th>Address/Name</th>
<th>City, State</th>
<th>Size (SF)</th>
<th>Sale Price ($ mil)</th>
<th>Buyer(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlantic Station (9)</td>
<td>Atlanta, GA</td>
<td>846,298</td>
<td>$1,090.0</td>
<td>Morgan Stanley</td>
</tr>
<tr>
<td>Standbridge at Potomac Town Center (12)</td>
<td>Woodbridge, VA</td>
<td>485,111</td>
<td>$1,088.0</td>
<td>JBG Rosenfeld Retail Properties</td>
</tr>
<tr>
<td>Westfield Carlsbad/Pacific Gateway (4)</td>
<td>Carlsbad, CA</td>
<td>917,033</td>
<td>$1,070.0</td>
<td>Rose Properties, Inc.</td>
</tr>
<tr>
<td>Park Place Outlets</td>
<td>West Palm Beach, FL</td>
<td>330,000</td>
<td>$1,070.0</td>
<td>Clarion Partners</td>
</tr>
<tr>
<td>Christian Spectrum Mall (13)</td>
<td>Phoenix, AZ</td>
<td>850,000</td>
<td>$1,050.0</td>
<td>Kimco Realty Corporation</td>
</tr>
<tr>
<td>Westfield Mall (3)</td>
<td>Kansas City, MO</td>
<td>218,000</td>
<td>$1,050.0</td>
<td>JLL Income Property Trust, Inc.</td>
</tr>
<tr>
<td>Marketplace at El Paseo</td>
<td>Thousand Oaks, CA</td>
<td>224,568</td>
<td>$1,050.0</td>
<td>JLL Income Property Trust, Inc.</td>
</tr>
</tbody>
</table>

### Multi-Family Sale Transactions

<table>
<thead>
<tr>
<th>Name</th>
<th>City, State</th>
<th>Units</th>
<th>Sale Price ($ mil)</th>
<th>Buyer(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 NMM Tower</td>
<td>New York, NY</td>
<td>151</td>
<td>$250.0</td>
<td>SGR America</td>
</tr>
<tr>
<td>Waterfront San Jose</td>
<td>San Jose, CA</td>
<td>450</td>
<td>$250.0</td>
<td>GreatWest REIT Limited</td>
</tr>
<tr>
<td>West Square</td>
<td>Boston, MA</td>
<td>255</td>
<td>$250.0</td>
<td>Avison Young</td>
</tr>
<tr>
<td>Akamai Chiyoda</td>
<td>Tokyo, Japan</td>
<td>544</td>
<td>$250.0</td>
<td>GreatWest REIT Limited</td>
</tr>
<tr>
<td>The Commons at Washingtonian</td>
<td>Gaithersburg, MD</td>
<td>546</td>
<td>$250.0</td>
<td>GreatWest REIT Limited</td>
</tr>
<tr>
<td>Jefferson Marketplace</td>
<td>Washington, DC</td>
<td>261</td>
<td>$250.0</td>
<td>Invesco Advisers, Inc.</td>
</tr>
<tr>
<td>The Bayfront</td>
<td>New York, NY</td>
<td>171</td>
<td>$250.0</td>
<td>GreatWest REIT Limited</td>
</tr>
</tbody>
</table>

### Hospitality Sale Transactions

<table>
<thead>
<tr>
<th>Name</th>
<th>City, State</th>
<th>Rooms</th>
<th>Sale Price ($ mil)</th>
<th>Buyer(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Fairmont San Francisco</td>
<td>San Francisco, CA</td>
<td>550</td>
<td>$450.0</td>
<td>McCall Global Investments (USA) LLC</td>
</tr>
<tr>
<td>The Galt Hotel Boston</td>
<td>Boston, MA</td>
<td>200</td>
<td>$170.0</td>
<td>J.P. Morgan Investment Co.</td>
</tr>
<tr>
<td>Embassy Suites Downtown Convention Center</td>
<td>Denver, CO</td>
<td>210</td>
<td>$170.0</td>
<td>Embassy Suites Hotels</td>
</tr>
<tr>
<td>Hotel Del</td>
<td>San Diego, CA</td>
<td>250</td>
<td>$170.0</td>
<td>CBRE Global Investors Ltd</td>
</tr>
<tr>
<td>Hyatt Regency Orange County</td>
<td>Garden Grove, CA</td>
<td>500</td>
<td>$170.0</td>
<td>CBRE Global Investors Ltd</td>
</tr>
<tr>
<td>Mission</td>
<td>Sunnyvale, CA</td>
<td>174</td>
<td>$170.0</td>
<td>Starwood Capital Group</td>
</tr>
</tbody>
</table>

### NCREIF Property Index

The NCREIF (National Council of Real Estate Investment Fiduciaries) Property Index (NPI) is a quarterly time series composite total rate of return measure of investment performance of individual commercial real estate properties acquired in the private market for investment purposes only. Properties in the NPI are accounted for using market value accounting standards. NCREIF requires that properties included in the NPI be valued at least quarterly using standard commercial real estate appraisal methodology. Each property must be independently appraised a minimum of once every three years. The capital value component of return is predominately the product of property appraisals. When entering the NPI, properties must be 60% occupied; investment returns are reported on a non-leveraged basis and properties must be owned/controlled by a qualified tax-exempt institutional investor or its designated agent.

#### NCREIF Composition

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office</td>
<td>37.1%</td>
</tr>
<tr>
<td>Apartment</td>
<td>24.0%</td>
</tr>
<tr>
<td>Retail</td>
<td>23.3%</td>
</tr>
<tr>
<td>Industrial</td>
<td>14.4%</td>
</tr>
<tr>
<td>Hotel</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

### NPI General Recap

- NCREIF reported a 24th consecutive quarter of positive growth during 4Q15. The NPI total return was 2.9%, comprised of a 1.2% income return and a 1.7% capital appreciation return.
- Total one-year returns registered 13.3%, about 110 BPS higher than the average annualized return recorded during the past five years.
- It was also reported that occupancy rates increased to 92.9% for the five major sectors, the highest level in 14 years. Additionally, NOI growth registered 4.7% for 2015, led by gains of 9.6% and 7.3%, respectively, within the apartment and industrial sectors.

### NPI Annualized Returns by United States Region

- Spreads between the best and worst performing regions increased during 4Q15, registering 132 BPS (3.60% vs. 2.28%). The spread was 95 BPS (3.59% vs. 2.64%) last quarter.
- 4Q15 returns decreased within the East, Midwest and South regions and increased slightly in the West.
- Price appreciation in the East again trailed the other regions, returning 2.28% during 4Q15. The current return was comprised of 1.15% income and 1.13% appreciation. One-year returns registered 11.3%.
- Property returns were strongest in the West, registering 3.60% during 4Q15. One year returns registered 15.2%, the highest among the regions. The current return was comprised of 1.15% income and 2.45% appreciation.
- The South realized gains of 2.96% during 4Q15, down 9 BPS from the prior quarter. The current return was comprised of 1.31% income and 1.65% appreciation. One year returns registered 14.0%.
- Property returns in the Midwest decreased 49 BPS points from last quarter to 2.41%, representing the largest quarterly decline. One year returns registered 12.1%.
Below is a graph illustrating total returns by region since 2010.

**NCREIF: Regional Total Returns**

- Spreads between the best and worst performing asset types decreased during 4Q15, registering 88 BPS (3.46% vs. 2.58%). The spread was 75 BPS (3.67% vs. 2.92%) last quarter.
- Retail was the only sector where returns (+3.46%) increased from the prior quarter. The one-year return of 15.3% was the highest among the property types and exceeded the total index average by 200 BPS.
- Price appreciation within the apartment sector lagged the total index average for the second consecutive quarter. Although the annual return of 12.0% was the smallest among the property types, it still exceeded the 2014 return by 170 BPS.
- The industrial sector recorded the largest price appreciation during the second half of 2015, increasing 6.9%. Its one year return of 14.9% was second among the property types.
- Price appreciation continues to be the lowest within the apartment sector. Returns fell 6 BPS from the prior quarter to 2.92%. Total one-year returns of 12.0% lag the total index average by 150 BPS.
- The office sector posted a 2.6% return during 4Q15, nearly a 40 BPS decline from the prior quarter and the lowest return during the quarter. Its one-year return is 80 BPS below the total index return of 13.5%.
- The hotel sector recorded nearly a 50 BPS decline in price appreciation during 4Q15, registering growth of 3.0%. On the positive, the 13.2% annual return in 2015 exceeded the prior year return by 210 BPS.

Below is a graph illustrating total returns by property type since 2010.

**NCREIF: Property Type Total Returns**

**Equity REIT Analysis**

**FTSE National Association of REITS U.S. Real Estate Index**

Comprised of 170 REITs, the Financial Times of London and London Stock Exchange (FTSE) NAREIT All Equity REITs Index (“The Index”) rebounded during 4Q15. After posting a negative return of 4.5% during the first nine months of the year, the index returned 7.7% during the final quarter. For the year, the index posted a 2.8% gain, well below the 28.0% return recorded during the prior year. Experts believe that the looming interest rate hike negatively weighed on the sector throughout the year.

Many leading analysts, including Alexander Goldfarb, managing director at Sandler O’Neill & Partners, and Matt Werner, portfolio manager at Chilton Capital Management, are still bullish on REIT performance in 2016. Slated for August 31, 2016, real estate will be elevated to an 11th headline sector of the Global Industry Classification Standard. Briefly, this means that real estate will be a distinct new sector within the S&P 500, as opposed to being grouped with a broad group of financial firms. This move is expected to generate more interest among investors and is reflective of the greater role of the real estate industry is assuming within the stock market. Currently, there are 25 companies in the S&P 500 that would comprise this new sector. Other positive factors for REITs include steady demand from both individual and institutional tenants, a steadily growing economy and solid balance sheets.

Below is a brief overview of selected commercial real estate sector performance.

- Apartment REITs returned nearly 16.5% during 2015, the highest among the major sectors. After gaining 6.7% during 3Q15, an 8.3% return was achieved during 4Q15. Analysts are generally positive regarding the sector, which is a reflection of pent-up demand for rentals, falling home ownership rates and favorable demographics.
Office REITs slowly gained momentum during the year. The sector gained 7.2% during 4Q15 after recording declines of 5.3% during the first half of 2015 and 1.2% during 3Q15. Still, the 2015 return of 0.3% underperformed the broader REIT market and was considerably lower than the 26.0% return achieved in 2014. Analyst expectations are still positive due to underlying growth within the labor market.

After falling nearly 23.0% during the first three quarters of 2015, losses lessened for lodging/resorts REITs during 4Q15. A loss of 2.3% during the latest quarter has resulted in negative YTD returns of 24.4%. During 2014, lodging/resorts was the second best performing sector. On the positive, more business and leisure travel is expected to keep occupancy and RevPAR at healthy levels and provide optimism for a turnaround in 2016.

Steadily increasing returns were a sign of optimism for industrial REIT investors during 2015. After posting an 11.3% loss during the first half of 2015, gains of 5.0% and 10.0%, respectively, were achieved during the second half of the year. The 2.6% return during 2015 was similar to the broader index. Analysts remain bullish on the sector due to sustained demand for big box distribution warehouse space.

Following the negative 3.3% return posted during the first three quarters of 2015, the retail REIT sector returned 8.1% during 4Q15. For 2015, a 4.6% return was achieved. The free standing subsector posted returns of 5.9% while shopping center and regional malls posted returns averaging approximately 4.5%.

Below is a graph illustrating total returns by property sector since 2012.

FTSE NAREIT REIT Performance by Sector

Capital Raising
REITs continued to take advantage of investor demand for high returns and attractive dividends at a time of low interest rates. Although the pace of capital raising decreased from the first half of 2015, approximately $10.2 billion was raised during 4Q15. In 2015, the $62 billion raised is approximately 9.0% off the 2014 output when REITs raised approximately $69 billion. The majority of capital raised included $36.0 million in senior debt, $23.5 billion in common equity and $2.0 billion in preferred equity. By property sector, specialty, health care and retail REIT’s raised the most capital.

Below is a graph showing the total capital raised by REITs since 2005.

Total Capital Raised by REITs (in billions)

Source: NAREIT / SNL Financial

Equity REIT Returns Versus Leading Indices
For much of 2015, global markets were negatively impacted by global uncertainty and the timing of the anticipated Federal Reserve interest rate hike. Despite returning between 6.5% and 8.4% during 4Q15, annual returns within the three leading stock indices were the weakest since 2011. The FTSE NAREIT All Equity REITs Index outperformed the Dow Jones Industrial Average and the S&P 500 indices, but lagged the 5.7% generated by the NASDAQ during 2015.

Below is a chart highlighting the annual returns of Equity REITs in comparison to several of the leading stock indices.

<table>
<thead>
<tr>
<th>Index</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2010-2014 Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity REIT</td>
<td>28.0%</td>
<td>8.3%</td>
<td>19.7%</td>
<td>2.9%</td>
<td>28.0%</td>
<td>2.8%</td>
<td>17.4%</td>
</tr>
<tr>
<td>NASDAQ</td>
<td>26.9%</td>
<td>-4.2%</td>
<td>14.6%</td>
<td>12.1%</td>
<td>13.4%</td>
<td>5.7%</td>
<td>12.6%</td>
</tr>
<tr>
<td>S&amp;P 500</td>
<td>16.9%</td>
<td>-1.8%</td>
<td>15.9%</td>
<td>38.3%</td>
<td>11.4%</td>
<td>-0.7%</td>
<td>16.1%</td>
</tr>
<tr>
<td>DJIA</td>
<td>15.1%</td>
<td>2.1%</td>
<td>13.4%</td>
<td>29.6%</td>
<td>7.5%</td>
<td>-2.2%</td>
<td>13.5%</td>
</tr>
</tbody>
</table>

Source: Yahoo Finance: *Data as of December 31, 2015

Commercial Lending
The Mortgage Bankers Association’s (MBA) Quarterly Survey of Commercial/Multi-Family Mortgage Bankers Originations reported that 4Q15 commercial and multi-family mortgage loan originations increased 35.0% from the prior quarter and 19.0% compared to the same period last year. Loans for industrial and hotel assets recorded the largest increases during 4Q15. Loans for health care properties witnessed a sizeable decrease YoY.

Jamie Woodwell, MBA’s Vice President of Commercial Real Estate Research, stated, “We saw strong volumes of borrowing and lending for commercial real estate in 2015 and in particular in the fourth quarter. In fact, the fourth quarter was the fourth highest quarter for borrowing and lending on record. Banks, life insurance companies, and Fannie Mae and Freddie Mac saw their highest originations volumes on record. Of the major investor groups, only the CMBS market didn’t break a record for originations. In terms of overall borrowing and
According to data from Commercial Mortgage Alert (CMA), CMBS issuances registered $23.4 billion during 4Q15, down from the average of $25.9 billion registered during the first three quarters of 2015. CMBS issuance registered $101 billion during the year, the first time the $100 billion level has been exceeded since 2007. Although volume exceeded 2014 output by 7.0%, a panel of experts surveyed by CMA projected volume of upwards of $124 billion for 2015.

According to CMA, there are numerous headwinds and tailwinds within the CMBS industry. Among the largest source of optimism is the large number of maturing loans, originated in 2006 and 2007, that must be refinanced. Other positives include historically low interest rates, robust levels of property sales and rising property valuations. Concerns include the late 2015 spike in bond spreads that hurt profits on warehoused loans, which led to higher spreads on new mortgages and made CMBS shops less competitive with portfolio lenders. Additionally, there is uncertainty regarding the potential impact of new regulations, specifically a Dodd-Frank Act rule directed at making lenders write higher-quality loans by requiring them to retain exposure to future potential losses.

Similar to the past several years, Deutsche Bank served as the top book runner, underwriting approximately $19.0 billion of transactions in 2015. Other firms underwriting more than $10 billion included Wells Fargo, J.P. Morgan and Morgan Stanley.

Looking ahead, commercial MBS lenders are generally optimistic, although the potential impact of impending regulations and market volatility are of concern. Numerous professionals surveyed by Commercial Mortgage Alert project that 2016 U.S. CMBS issuance will increase 9.0% to $110 billion.
CMBS Delinquency

According to Morningstar, CMBS delinquency rates and unpaid balances continue to fall, both of which are positive signs for the commercial real estate debt markets. Despite a slight uptick in December, the U.S. CMBS delinquency rate registered 3.43%, which is 49 BPS lower than at this time last year.

- The delinquent unpaid balance for CMBS fell to $27.17 billion in December. At this time last year, the unpaid balance for CMBS stood at $30.3 billion.
- By type, retail properties have the highest delinquency rates (5.4%), followed by office (5.3%), industrial (4.6%), hotel (2.6%) and multi-family (1.8%).
- Retail loan delinquencies, at 32.8%, have been the greatest contributor to CMBS delinquencies during the past 12 months and have fallen just $17 million from a year ago.
- Office loans represent 29.8% of CMBS delinquencies, but are down $928 million from a year ago.
- Multi-family loans represent 19.6% of CMBS delinquencies, but have declined by $744 million from last year.
- Hotel loan delinquencies, accounting for 7.9% of total CMBS delinquencies, declined by nearly $1.1 billion or 33.0% from a year ago, the largest percentage decline among the property types.
- Larger loan vintages between 2005 and 2007 continue to default and cause delinquencies resulting from aggressive pro-forma underwriting and market conditions. Approximately 89.0% of CMBS delinquencies through December 2015 resulted from such loans.
- States with the largest delinquency exposure, California, New York and Florida, account for about 29.0% of total delinquencies.

Property Sector Overviews

Office

- According to Reis Inc., market fundamentals strengthened as the national office vacancy rate declined 20 BPS to 16.3% during 4Q15. This marked the first time since early 2011 that the quarterly vacancy rate declined by more than 10 BPS. The YoY decline of 40 BPS was the largest yearly decline since 2007.
- Reis, Inc. reported that net absorption totaled 15.5 million square feet (msf) during 4Q15, the highest total since 3Q07. For 2015, net absorption totaled 42.4 msf, an increase of 35% from the prior year and the highest annual total since 2007.
- Asking and effective rental rates increased 0.8%, respectively, during 4Q15, marking the 21st consecutive quarter of rent growth.

Office Market: Rents vs. Vacancy Rates

- Sustained office employment growth is a critical factor to sector recovery. Roughly 802,000 jobs were created within the information services, financial activities and professional and business services sectors, down about 8.0% from the prior year.
- Developers continued to gain confidence. According to Reis, Inc., new quarterly construction completions...
registered more than 9.0 msf for the third consecutive period, the longest such streak since the middle of 2009.

- Among the 20 largest office metro markets, Costar reported that vacancy rates are the lowest (in order) in 1) San Francisco, 2) New York City, 3) Long Island, 4) Seattle/Puget Sound, 5) Minneapolis and 6) Boston.
- Among the 20 largest office metro markets, Costar reported that vacancy rates are the highest (in order) in 1) Phoenix, 2) Detroit, 3) Washington D.C., 4) Dallas/Fort Worth, 4) Northern New Jersey and 6) Boston.

Industrial
- Despite continued weakness within the manufacturing sector and a pullback in industrial production for the third consecutive month, market fundamentals continued to improve, characterized by falling vacancy rates and increasing rental rates.
- An increase in build-to-suit development has occurred, driven by heightened demand for modern buildings to handle automated individual and bulk-order processing.
- As companies aim to shorten the supply chain and deliver goods to consumers faster, the construction of intermodal facilities and inland ports designed to handle containerized shipment transfers is boosting demand for modern warehouse and distribution facilities.
- According to CoStar, the national vacancy rate declined for the sixth consecutive year and is at a historically low level. In response to increased demand, developers delivered 44 million sf of new product and the market absorbed nearly 73 million square feet during 4Q15.

Retail
- Retailers have struggled to attract shoppers, who are still cautious despite growth in the job market and a slow uptick in wages. U.S. retail sales declined 0.1% in December and increased 2.1% in 2015, lagging the 3.9% increase in sales of the prior year. This represented the weakest year for sales growth since the end of the recession.
- There was little change in market fundamentals throughout the year. Neighborhood and community center vacancy rates declined slightly to 10.0% during 4Q15 and asking and effective rental rates grew by 0.5%. Vacancy rates within the regional mall sector fell 10 BPS to 7.8%.
- Reis, Inc. reports continued low levels of new construction (21 msf of completions during 4Q15) within the neighborhood and community center sector.

Retail Market: Rents vs. Vacancy Rates

- Big-box retailers continue to gravitate toward urban locations, creating increased competition for traditional department stores.
- E-commerce continues to force brick and mortar retailers to reposition stores by reducing their physical presence and closing and/or scaling back operations. During 2015, several major national retailers, including Barnes & Noble, Chico’s, Office Depot/Office Max, Pier One, Sears and Staples, announced plans or continued to close significant numbers of stores.

Apartment
- Market fundamentals within the multi-family sector still remain desirable. Although vacancy rates increased 10 BPS for the second consecutive quarter in 4Q15, due to the arrival of new supply, according to Reis, Inc., vacancies remain near cyclical low levels at 4.4%.
- Despite growing at a slower pace relative to the prior two quarters, both asking and effective rental rates grew 0.8%, respectively, during 4Q15. According to Reis, Inc., asking and effective rental rates increased 4.5% and 4.6%, respectively, during the year, representing the strongest annual increase since 2007. This marked the sixth consecutive year of rental rate increases.

Industrial Market: Rents vs. Vacancy Rates

- Among the 20 largest industrial metro markets, Costar reported that vacancy rates are the lowest (in order) in 1) Los Angeles, 2) Orange County (CA), 3) Long Island, 4) West Michigan, 5) Seattle/Puget Sound and 6) Houston.
- Among the 20 largest industrial metro markets, Costar reported that vacancy rates are the highest (in order) in 1) Phoenix, 2) Indianapolis, 3) Boston, 4) Charlotte, 5) Philadelphia and 6) Atlanta,
Apartment Market: Rents vs. Vacancy Rates

Source: Reis, Inc.

- Apartment deliveries totaled about 49,400 units during 4Q15, similar to the prior quarter. In total, roughly 188,300 units were completed during 2015, the highest total since 1999. Deliveries for 2016 are expected to exceed 2015 figures due to the ample number of new projects in the construction pipeline.

- Net absorption declined for the second consecutive quarter during 4Q15. About 34,150 units were absorbed, an 8.0% decrease from the prior quarter. In 2015, nearly 165,000 units were absorbed, representing a decline of 2.3% from last year. Absorption is predicted to remain steady, as previously stalled projects are expected to break ground and be absorbed by renters.

- According to Reis, Inc., there continues to be increasing demand for older apartments in suburban locations, which have attracted people priced out of newer construction near city centers. To capitalize on this trend, several large investors have begun buying and renovating such assets. During 2015, Blackstone Group, LP, and Starwood Capital Group have made considerable investments in suburban apartment assets.

Hotel

- Hotel demand, which is driven by increased corporate travel and steady leisure travel, has enabled the U.S. hotel sector to continue its recovery.

- Compared with 2014, Smith Travel Research (STR) reported that the U.S. hotel industry’s occupancy grew 1.7% to 65.6%, its average daily rate (ADR) increased 4.4% to $120, and its revenue per available room jumped 6.3% to nearly $79. Most importantly, the absolute values in these three key performance metrics were each the highest STR has ever benchmarked.

- During 2015, southern U.S. areas had the best performance relative to the prior year. Metropolitan areas reporting the largest increases in RevPAR included Tampa/St. Petersburg, Phoenix, Nashville and Dallas. Additionally, Nashville and Phoenix also posted the largest rises in ADR and Tampa/St. Petersburg recorded the largest increase in occupancy during the year.

Lodging Market: RevPAR, ADR & Occupancy

Source: Smith Travel Research

- STR reported that a record 1.2 billion rooms were sold during 2015, as room supply increased to a record 1.8 billion room nights.

- According to STR, there are nearly 3,900 projects totaling approximately 469,100 rooms under contract in the U.S. as of December 2015, representing nearly a 14.0% increase from this time last year. Under Contract data includes projects in the planning, final planning and in construction stages. Among the Chain Scale segments, the Economy segment reported the largest year-over-year increase in rooms under contract, followed by the upper midscale and upper upscale segments.

Forecasts

Property

- There is cautious optimism that commercial real estate momentum will continue throughout 2016, marked by steady demand, occupancy gains, healthy absorption and modest rental rate growth. Numerous economic and political headwinds, domestically and abroad, may act to curtail growth.

- Anticipated additional interest rate hikes are not expected to negatively impact real estate values in the short term.

- The pursuit of higher yields relative to other investments will continue to drive activity and interest in secondary markets and for second-tier properties in primary markets.

- Capitalization rates are primarily expected to be stable, but compression is expected to occur for trophy assets in prime locations as heightened investor demand for risk and yield competes for limited product offerings.

- Strong investment demand, especially from the foreign community, will continue to drive volume, intensify competition for trophy assets and keep pricing elevated, as investors seek stability/value.
Increased international capital is forecasted to continue to pour into U.S. commercial real estate assets and to support pricing, as the U.S. is widely regarded as the most attractive global real estate market.

- Expected to positively impact continued foreign investment into the U.S., a legislative change to the Foreign Investment in Real Property Tax Act of 1980 (FIRPTA) was signed in December 2015. This act reduces withholding tax levels for many of the world’s largest investors when investing in U.S. real estate.

CMBS issuances are forecasted to increase in 2016, as a surge of maturing loans is expected to peak in 2016 and 2017. Concerns include the potential impact of impending regulations and market volatility.

- Spreads between real estate capitalization rates and interest rates are expected to fall with the anticipated increase in interest rates. Experts believe the squeeze on cap rate spreads has the potential to be a concern in some top tier markets.

- Readings from leading construction indices point to increased construction activity in the upcoming quarters.

Below is a 20-year historical average and property forecast for the major property types through 2017.

### Economic

- After the first rate interest rate increase in nine years in December, the Federal Reserve could raise short-term interest rates again in 2016. A strengthening U.S. economy is cited for the projected increases, but market performance will dictate the timing of future increases.

- The U.S. dollar is likely to remain strong in 2016 due to expectations of rising interest rates and the uncertainty regarding global growth. This will continue to negatively impact commodity prices, such as oil.

- The U.S. trade deficit is projected to widen, as exports soften due to the dollar’s strength against key currencies and as imports become cheaper.

- Economic weakness in many emerging economies and China, the world’s second largest economy, will continue to negatively impact global growth, but economists do not believe it will lead to a U.S. recession.

- Core PCE inflation, the key inflation indicator monitored by the FOMC, is likely to trend below the Federal Reserve’s target of 2.0 percent.

- Despite a modest increase, oil prices are projected to remain low and still weigh on energy-related investment.

- Steady job creation is projected to persist, further reducing the unemployment rate. A tighter labor market will cause wage pressures to pick up, albeit slowly.

- Housing market growth will likely be challenged by the threat of rising interest rates and less favorable financing options, modest income gains and tight inventory levels.
Real Estate and Infrastructure Solutions

Every real estate client or stakeholder has unique objectives, constraints, operational circumstances and economic realities. The FTI Consulting Real Estate and Infrastructure Solutions Group has the deep bench of expertise and experience to help real estate owners, users, investors and lenders better navigate the market’s complexities and manage the inherent risks in this climate. For more than three decades clients have relied on our creative and sound business solutions to turn these complexities into opportunities.

As unbiased and independent advisors, we represent leading public and private real estate entities and stakeholders including REITs, financial institutions, investment banks, opportunity funds, insurance companies, hedge funds, pension advisors and owners/developers to align strategy with business goals.

Our innovative and results-driven strategy and superior execution are supported by authoritative, state-of-the-art financial and tax analyses developed by some of the industry’s foremost experts.

We offer a comprehensive integrated suite of services:

- **STRATEGIC ADVISORY, TRANSACTION DUE DILIGENCE & MANAGEMENT**
  - Valuations
  - Transaction Strategy, Due Diligence and Management
  - Debt/REO Acquisitions and Dispositions
  - Operations Optimization
  - Portfolio Optimization
  - Development Advisory
  - Lease Consulting
  - Corporate Real Estate Strategy
  - Lender Relationship Management
  - Site Selection and Incentive Negotiation
  - Construction Project Management
  - Outsourced Accounting and Financial Reporting

- **CAPITAL MARKETS ADVISORY**
  - IPO and M&A Advisory
  - Capital Structure Advisory-Debt, Equity, Portfolio Acquisition and Disposition
  - Executive Compensation and Corporate Governance

- **RESTRUCTURING SERVICES**
  - Company-Owner Advisory
  - Secured Lender and Special Servicer Advisory
  - Unsecured Creditors/Committees Advisory
  - Trustee-Receiver Services
  - Interim Management Services
  - §363 Asset Sales
  - Bankruptcy Administration & Reporting
  - Strategic Communications

- **LITIGATION SUPPORT**
  - Expert Testimony
  - Investigations and Forensic Accounting
  - Dispute Advisory Services

- **TAX ADVISORY**
  - Tax Structuring and Compliance
  - Tax Strategy and Planning Related to Bankruptcy and Financial Restructuring
  - State and Local Tax Services
  - Cost Segregation
  - Private Client Advisory

- **SPECIAL FOCUS AREAS**
  - Residential and Commercial Mortgage Backed Securities
  - Hospitality, Gaming and Leisure

The views expressed herein are those of the authors and are not necessarily the views of FTI Consulting, Inc., its management, its subsidiaries, affiliates or other professionals.