Property fundamentals look strong for 2016

Investors worry market volatility could spread to real estate

Returns expected to be flat for year ahead

Housing likely to lead economic growth

Property fundamentals look strong for 2016

Returns expected to be flat for year ahead

NANIVAGATING THROUGH CITY CURRENTS
Investors to steer cautiously through challenges in 2016
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FOREWORD

January 2016

Dear Readers,

This is the fifth year that Deloitte, the National Association of REALTORS® (NAR), and Situs RERC have collaborated to publish this annual forecast report. Although the previous four years have not been easy to forecast, the year 2016—given the recent slowdown in global economic growth, low oil prices, stock market volatility, and movement off a near-zero federal funds rate—may be the most challenging.

However, 2015 was a good year for commercial real estate, and this asset class as a whole is in a generally strong position compared to other investments. The fact that real estate is a hard asset is particularly useful when one wonders about the value of paper assets. Fundamentals are relatively strong, as demand for space advanced across all property types and drove vacancies lower and rents higher in 2015. In addition, with increased capital availability and funding sources in 2015, investors pursued deals across the full spectrum of markets seeking yields. This trend led to a higher profile for secondary and tertiary markets, as well as significant gains in prices which exceeded 2007 peaks.

As 2016 gets underway, there is a slowdown in the velocity of commercial property sales volume, according to Real Capital Analytics. Although this is better for the market in the long run, investors are facing a host of new questions, challenges, and conflicting priorities. Will real estate prices and values level off, or do they have a little more room to run in this cycle? Will the commercial real estate market drop like the stock market, and is this 2008 all over again? Will long-term interest rates start to increase and by how much? Given the difficult decisions ahead for investors as they steer through the many uncertainties in the economy and capital markets, we entitled this outlook report: Expectations & Market Realities in Real Estate 2016—Navigating Through The Crosscurrents.

We would also like to thank everyone who has contributed to this report, including our researchers and data providers, economists, analysts, survey respondents, reviewers, business associates and colleagues, and the many others who have shared their insights and observations. We also thank you—our clients, subscribers, and consultants—for your continued interest and support of our annual forecast reports.

Sincerely,

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NAVIGATING THROUGH THE CROSSCURRENTS
NAVIGATING THROUGH THE CROSSCURRENTS

When Situs RERC, Deloitte, and the National Association of REALTORS® (NAR) began making plans to publish this year’s issue of Expectations & Market Realities in Real Estate, the economy was moving along at a slow but steady pace. Employment growth was improving, gas prices were falling, and consumers seemed likely to increase spending. New highs had been reached in the major stock market indices, and commercial real estate prices were reaching new highs in some markets. The investment environment and capital markets appeared to be on solid footing, and according to most news accounts, many investors expected the Federal Reserve to begin raising the federal funds rate because the U.S. economy seemed to be gaining traction.

However, by fall 2015, the world’s investment environment was becoming increasingly shaky. Geopolitical concerns and terrorism cast a wider shadow, as thousands of Middle Eastern refugees fled into Europe, a nuclear agreement was signed with Iran, and Russia began to play both sides of the court. Various economic indicators seemed to be operating at crosscurrents as well, causing more uncertainty. Employment growth was improving, but the major stock market indices were declining. Retail sales remained flat, despite more money in consumers’ pockets. Given the volatility in the stock market, many investors were shifting strategies to bonds and other safe harbor investments. Meanwhile, as central banks in many countries were expanding quantitative easing policies in order to stimulate growth, the Federal Reserve announced “liftoff” of the federal funds rate in December 2015 after keeping it near zero for the past seven years.

The crosscurrents carried into the early part of 2016 as well, as the stock market sell-off continued, the dollar continued to rise, and the investment environment in general seemed tenuous. Low crude oil prices, along with slowing economic growth in China, further drove market uncertainty, and with it, the DJIA Index fell more than 1,000 points during the first week of trading in 2016, the worst start in a new year ever, per historical records. According to discussions at the World Economic Forum in Davos, Switzerland, in January 2016, there was concern that the U.S. is facing the possibility of entering a period of deflation in the year ahead.

LOOKING AHEAD TO 2016

A year ago, we forecasted that commercial real estate returns would perform relatively well for another 12 to 18 months. During the past year, price increases have surpassed 2007 peaks in some markets, per Real Capital Analytics. In addition, fundamentals have improved, and with income and appreciation components, commercial real estate total returns were 13.5 percent for 2015, according to the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index (NPI).

As the year gets underway, there has been a definite slowdown in the velocity of commercial real estate sales volume, per Real Capital Analytics. We expect commercial real estate to take on more of a defensive role in this environment, and as values and prices begin to level off, investors will likely benefit from it being a hard asset, as well as from its strong income flow, especially if long-term interest rates and 10-year Treasury rates remain low, as expected.

With respect to investment, it is always difficult to separate market realities from the “noise” in the market. However, it appears that we are entering a new phase of the cycle, and while we do not yet know what all the ripple
effects of the economic and capital market chaos will be, investors should pay strong attention to the possible risks. Our goal is to help you do just that in *Expectations & Market Realities in Real Estate 2016—Navigating Through The Crosscurrents.*

In Chapter 2 of this report, we have provided our outlook for the U.S. economy. Although economic growth remains slow and is forecast to grow at a rate of 2.5 percent to 2.8 percent in 2016, according to NAR, it is stronger than the economies in most other nations and should be able to generate about 2.5 million to 3 million new jobs over the next year.

Due to the shortage of existing homes and the underproduction of new homes for nearly a decade, we expect demand for housing to continue to increase and the housing market to help lead the residential investment component of GDP growth by up to 10 percent in 2016, per NAR. Housing starts are expected to increase to 1.3 million in 2016, and to 1.5 million in 2017, according to the U.S. Census Bureau. Housing prices have been increasing over the past few years, and are expected to increase 5.5 percent to 6.0 percent in 2015, according to NAR.

Other economic highlights in this chapter include discussion about the strengthening dollar, which has made imports much cheaper for U.S. residents and imports increase over exports in 2015, according to the Bureau of Economic Analysis (BEA). However, the collapse in oil prices has hurt employment in some states, with North Dakota, Louisiana, Oklahoma, and West Virginia losing jobs, according to the Bureau of Labor Statistics (BLS). Many consumers have benefitted from lower fuel costs and have had more money to purchase automobiles, eat out more frequently, and purchase homes.

Although there has been no inflation in 2015, we expect that deflationary pressures related to low gasoline and energy prices will subside by mid-2016, in part due to increasing apartment sector rent, and that inflation could increase in 2016. Despite the Federal Reserve’s movement away from a federal funds rate range of 0 percent to 0.25 percent, to 0.25 percent to 0.5 percent, at present there has been no increase in long-term interest rates or 10-year Treasury yield rates.

We examined the capital markets in Chapter 3, noting that the investment world saw much activity in 2015, including record-high readings in some of the stock market indices, commercial property prices that exceeded 2007 highs, and more than $100 billion in commercial mortgage-backed securities (CMBS), per *Commercial Mortgage Alert.*

Based on the annual survey conducted by the Association of Foreign Investors in Real Estate (AFIRE), the U.S. is regarded as the safest investment market for commercial real estate investment. Foreign capital directed to U.S. real estate totaled $62.7 billion in 2015, about 33 percent higher than foreign investment in 2014, per Real Capital Analytics.
According to Situs RERC, quality commercial real estate in the U.S. totaled roughly $5.18 trillion in 2015, including $3.54 trillion in debt-based investment properties and $2.64 trillion in equity-based institutional properties. According to the Federal Reserve, debt market origination expanded 7.6 percent in third quarter 2015 compared to 4.4-percent expansion in third quarter 2014, and was led primarily from U.S. depository institutions to 49 percent of the total real estate debt universe. Private equity investors held 43 percent of the institutional equity market in 2015, which was down slightly from last year’s total of 44 percent, per Situs RERC estimates. Real estate investment trusts (REITs) also owned less equity than the previous year, according to the National Association of Real Estate Investment Trusts (NAREIT).

The CMBS market totaled $101 billion in 2015, more than in 2014, per Commercial Mortgage Alert, but is down slightly thus far in 2016 from the same period in 2015. The CMBS delinquency rate further declined in 2015.

New loan originations improved in 2015, and on the surface, it appears that the loan-to-value (LTV) ratios improved as well. Today’s average LTV ratios are lower than the May 2007 average LTV ratios, but since today’s LTV averages do not take into account leverage held on unsecured debt, current LTV ratios may be artificially low, per Real Capital Analytics.

Risks to the capital markets include possible deterioration of lending standards, the impact of increasing federal funds rates on the 10-year Treasury yield rate, and new federal lending rules and regulations.

On a yearly basis, commercial real estate investment rose across all property types in 2015, according to Real Capital Analytics, and outlined in Chapter 4 of this report. Sales of major properties totaled $375.3 billion, as of third quarter 2015.

The chapter includes our highlights and expectations for the five major property sectors—the office, industrial, retail, apartment, and hotel markets. Our analysis examines volume, pricing, transaction-based capitalization rates, vacancy/occupancy rates, absorption and completions, and rental rates/revenues for the various property types.

The office sector retained its status as the most active investment target, followed by the apartment sector, per Real Capital Analytics. Vacancy/occupancy improved for each property type in 2015, and rental growth is expected to increase for all major property types in 2016, although it is likely to slow in the apartment sector in 2016 as more completions come online, according to Axiometrics.

Finally, in Chapter 5, we offer a summary of the highlights of the report and our collective outlook for 2016. Although commercial real estate transaction volume appears to be leveling off and we do not expect values to increase substantially in 2016, we do expect a strong income flow due to leases in place, especially if the economy and capital markets continue to function as we expect, as outlined in our alternative economic scenarios for 2016.
THE ECONOMY

SLOW AND STEADY
SLOW AND STEADY

The International Monetary Fund (IMF) and the World Bank, along with many private Wall Street forecasters, have steadily notched down their global economic forecasts for 2016. Brazil and Russia have dipped into a recession. Europe is only a hair above the zero growth line. China is wobbly and thereby hurting commodity-exporting countries like Australia and Canada, as well as the stock markets in Europe and the U.S. Despite this gloomy background, the U.S. economy is growing, and gross domestic product (GDP) is poised to expand by around 2.5 to 2.8 percent in 2016, according to many economists. This growth rate is expected to be good enough to generate 2.5 million to 3 million net new jobs and further force down the unemployment rate. The tightening labor market is expected to steadily boost worker wages.

One reason for not-great-but-not-bad U.S. economic growth is due to entrance into the virtuous cycle of more jobs leading to more income, which typically boosts overall consumer and investment spending, and which subsequently causes companies to hire more people. In addition, the housing market is further expected to gain, with the residential investment component of GDP anticipated to rise by 8 percent to 10 percent, according to NAR. Most economists, including NAR, expect that the U.S. economy will outperform most of the world, and that is likely leading to the U.S. dollar’s strengthening and the Federal Reserve’s intent to complete multiple rounds of rate increases to help assure that future inflation is well-behaved.

The improving job market naturally raises demand for occupancy of commercial real estate buildings. Vacancy rates are then expected to lead to higher rents, though not necessarily to higher property prices (prices have already experienced a huge run-up). But even as the fundamentals of vacancy rates and rents move to a better position, it is unlikely that the extremely low capitalization rates of recent years for Class A trophy properties in major metropolitan areas can trend down any further, especially in a rising interest rate environment. There may be vulnerability in a price decline, albeit even a modest decline, on those properties. However, Class B and lower grade properties, or even Class A properties in second-tier cities like Jacksonville or Indianapolis, could easily see further price strengthening from improved fundamentals.

HOUSING RECOVERY LEADS THE WAY

The inventory of existing and new homes for sale has been on the tight side throughout 2015. Instead of the equilibrium level of a 6- to 7-month supply, there has been a supply of only around 5 months, and sometimes even less, according to NAR, as shown in Exhibit 2-1. This housing shortage is largely a result of having gobbled up much of the distressed properties, and from a great underproduction of new homes spanning nearly a decade.

According to NAR, distressed property sales—those properties that underwent foreclosures or are in short-sale status as the home is underwater—comprised only 6 percent of total reported sales, the lowest share in the aftermath of the housing crisis, in October 2015 (they had been as high as 40 percent of total sales in some months in 2008 and 2009), as shown in Exhibit 2-2. Moreover, the number of future distressed property sales as estimated from the number of homeowners with serious mortgage delinquencies and from those in underwater status has been falling almost every month. That is not surprising, as many of the mortgages...
that had been underwritten since the crisis have been to individuals with very high credit scores and are one of the best-performing vintages with very low default rates. House prices have also been steadily rising, increasing by 11.5 percent in 2013, 5.7 percent in 2014, and a likely 5.5 percent to 6.0 percent in 2015, according to NAR. This trend indicates that more homeowners can rise above water and get into a positive equity position without needing a short-sale bank approval. It is therefore unlikely that the low inventory of homes will increase due to the addition of distressed properties to the mix.

Another key reason for the low inventory of housing is due to the lack of homebuilding. Given the normal population growth of 2.5 million to 3 million persons each year, per the U.S. Census Bureau, there should be about 1.5 million new housing starts each year. Although this number will fluctuate from year-to-year due to varying economic circumstances, this figure was the long-term 50-year average prior to the recent housing crash. But consider that since 2008, the annual average housing starts have been only around 810,000 units, per the U.S. Census Bureau (see Exhibit 2-3). This low figure is essentially at Depression levels, and for such low levels to have occurred for several consecutive years is representative of economic conditions associated with the Great Depression.
Even though the percentage change of real private residential fixed investment in 2015 has improved such that housing starts in 2015 were the best out of the past eight years, as shown in Exhibit 2-4, housing starts will have only reached an estimated 1.1 million starts in 2015, per the Bureau of Economic Analysis (BEA). This negative news from the past, however, may soon be the positive news of the future. Housing starts are expected to rise to 1.3 million in 2016 and then to 1.5 million in 2017, according to the U.S. Census Bureau. Even with these increases, there is no prospect of oversupply. The question is whether this estimated growth can adequately address the ever-growing housing shortage. Directionally, the rising housing starts will be a big boost to the economy. This change, along with some modest gains in home sales and a commensurate rise in broker commissions and increased remodeling spending, are expected to lead the residential investment component of GDP to grow by 10 percent.

As related to home sales, some moderate growth can be expected because of job gains, despite the anticipated rise in mortgage rates. But with wages rising only by around 2 percent, according to the BLS, the affordability squeeze will likely continue. Home prices at the national level rose by 11.5 percent, 5.7 percent, and 5.9 percent, respectively, in the past three years, according to Standard & Poor's/Case-Shiller Home Price Index, shown in Exhibit 2-5. As a result, the number of first-time home buyers may again be near historic lows in 2016. The existing homeowners who are also facing higher prices when buying will likely be compensated by the

**Exhibit 2-4. Real Private Residential Fixed Investment (% Change)**

![Exhibit 2-4. Real Private Residential Fixed Investment (% Change)](image)

Source: Bureau of Economic Analysis, 12/9/15.

**Exhibit 2-5. Home Prices Have Been Increasing**

![Exhibit 2-5. Home Prices Have Been Increasing](image)

Source: Standard & Poor’s/Case-Shiller Home Price Index, 12/9/15.
fact that they will have increased their housing equity when they sell. This housing equity, which in the aggregate has risen by $6 trillion from the low point in 2008, according to the Federal Reserve Board, will facilitate down payments for their next home purchase. Affordability is expected to be an issue throughout 2016, but one big support for rising home prices will be the addition of new jobs.

**NET EXPORT DRAG**

The housing recovery is a major positive for the U.S. economy, and, as a strong component of consumer spending, is coming at the right moment to help offset the nation’s deteriorating net export position. As in the past, the U.S. has been running a trade deficit with more imports than exports. But according to the BEA and as suggested by a reduction in negative net exports from 2006 to 2014 (see Exhibit 2-6), the net export position improved.

From early 2015 on, imports grew faster than exports, according to the BEA. The strengthening dollar has made foreign-made products much cheaper for U.S. residents, while foreign nations are pressed to buy more American-made products that carry an even higher premium than normal after currency conversion. According to the Federal Reserve, the dollar is now at its strongest point since 2004, having risen by 26 percent from a cyclical low point in 2011, as depicted in Exhibit 2-7.

**STATE-LEVEL IMPACT**

The collapse in oil prices has quickly turned previously solid employment markets into questionable ones. According to the latest data from the BLS, North Dakota came in dead last in job changes with 9,600 fewer jobs in the last 12 months, translating into a 2.0-percent reduction in overall state employment. Louisiana and Oklahoma also lost jobs. With oil prices so low, demand for coal has also been reduced, and hence, West Virginia has also lost jobs.

At the same time, the low oil prices have been a boon for other states. Many consumers have extra cash on hand from not needing to pay so much at the gas pump. Though the savings have not resulted in extra spending at retail shops, consumers are snapping up automobiles, eating out more frequently, and buying homes. Auto sales set a new record of close to 18 million vehicles on an annualized basis in 2015, according to Autodata, marking the best run since the turn of the...
In addition, according to the BLS, 46 states are currently adding jobs, with the states in the Mountain and Pacific time zones doing particularly well, as shown on Pages A2 and A3 in the Appendix to this report.

**INFLATION WATCH**

One area investors should keep a watchful eye out for is inflation. There has been no inflation in 2015, due primarily to the fall in gasoline and other energy prices (see Exhibit 2-8). However, by the first half of 2016, it is likely that deflationary pressure will have subsided, as gasoline prices are expected to have stopped declining and will be steady, according to NAR. This means that other items are anticipated to drive inflation.

![Exhibit 2-8. CPI Percentage Change](source: Bureau of Labor Statistics, 12/9/15)
As noted in Chapter 4 of this report, apartment property rents have been increasing in 2015, and could increase more based on continuing falling apartment vacancy rates in the first half of 2016, per Axiometrics, Inc. It is this rent increase that is expected to put upward pressure on the overall Consumer Price Index (CPI). According to NAR’s analysis, CPI inflation could exceed 2 percent in 2016 and may even touch 3 percent. Consequently, it appears that the Federal Reserve will have little choice but to raise interest rates multiple times over the next three years to help assure that inflation does not get out of control. NAR anticipates that the Federal Reserve policy will in the end likely boost mortgage rates to around 4.5 percent in 2016, which is higher but certainly not alarming for the housing market.

**MONETARY POLICY**

It’s been over a month since the Federal Reserve’s first rate hike in nearly a decade, and the first move away from the zero-boundary since 2008. Yet, as shown in Exhibit 2-9, the longer-dated bond yields are not moving up in any measurable way. Some days the yields fall if there happens to be unexpected bad news. The surprisingly weak December 2015 Institute of Supply Management (ISM) reading, for example, led to a fall in long-term rates. History suggests that short-term interest rate changes that the Federal Reserve directly controls do not always lead to similar long-term interest rates.
rates changes. Still, given the already low levels, and possibly six to eight rounds of quarter-point increases by the Federal Reserve over the next two years, the only direction of change is likely to be up for long-term interest rates. The 10-year Treasury yield will likely touch 3 percent in 2016, and an even higher figure in 2017.

The 10-yr Treasury yields represent return on a “risk-free” asset (government debt), although commercial real estate cap rates represent return on a more risky asset. The spread between the two can be viewed as the risk premium. If risk-free returns go up and close in on the riskier commercial real estate returns, investors will expect higher returns from commercial real estate investments to account for the risk.

Such a change is expected to add upward pressure on cap rates, though not proportionally. Commercial property prices, which have experienced a rapid run-up in the past five years, as shown in Exhibit 2-10, may therefore decline modestly. Rents are not expected to fall, but rent growth is unlikely to be strong enough to boost cap rates without some buckling in price.

Exhibit 2-10. Commercial Real Estate Price Index

![Commercial Real Estate Price Index](image-url)

Source: Federal Reserve Board, 1/7/15.
THE CAPITAL MARKETS
AWASH IN CAPITAL
AWASH IN CAPITAL

The year 2015 saw more activity in the capital markets than many investors anticipated a year ago. By May, the DJIA Index reached a new high of 18,351 points and the S&P 500 Index peaked at 2,134 points, according to their historical records. By June, 10-year Treasury yields increased to 2.5 percent, per the U.S. Treasury. Commercial real estate prices were on a tear as well, reaching new highs in the major coastal markets like New York City, Boston, and San Francisco, where foreign investors in particular seemed willing to pay almost any price for high-quality properties, according to Real Capital Analytics. Issuance of commercial mortgage-backed securities (CMBS) grew to slightly over $100 billion, according to Commercial Mortgage Alert, the highest volume since 2007. Even when it became apparent that the economy was slowing in second half 2015, capital was still flush and investment activity continued, with business mergers and acquisitions totaling $4.7 trillion in 2015, more than any other year on record, per Dealogic.

However, as the year 2015 came to an end, geopolitical concerns were heating up. The world’s major stock markets began to falter due to fear that the Chinese government would not be able to revive China’s economy. Recession in Brazil, Venezuela, and Canada continued, and with less demand for energy throughout the world, oil prices dropped. In addition, the balance of power in the Middle East was changing, and refugees began streaming into safe-haven states throughout Western Europe. Before the end of the year, there were terrorist attacks in Paris, elsewhere in Europe, and in the U.S.

Meanwhile, as central banks in many countries were increasing quantitative easing policies in order to stimulate economic growth, the Federal Reserve announced “liftoff” of the federal funds rate after keeping it near zero for the past seven years. Even though, as noted in Chapter 2 of this report, long-term mortgage rates have not yet increased in a measurable way, they are likely to do so eventually, given the already low rate levels and additional federal funds rate hikes, as suggested by the Federal Reserve, over the next few years.

MARKET VOLATILITY INCREASES IN 2016

As 2016 got underway, the selloff in the world’s major stock markets continued. Low crude oil prices, along with slow economic growth in China, continued to drive market uncertainty, and with it, the DJIA Index fell more than 1,000 points during the first week of trading, the worst start to a new year ever.

While not immune to capital market volatility, commercial real estate’s tangible nature, relative stability, and rational returns in the form of income and capital appreciation, tend to make this asset class especially attractive in a volatile investment environment. As a result, transaction volume increased, and per Real Capital Analytics, during the first nine months of 2015, U.S. commercial real estate transaction volume was $375.3 billion (of property transactions priced at $2.5 million or above), and the recovery had extended into the secondary and tertiary markets.

Foreign investors have been attracted to the U.S. commercial real estate market as well, and based on the results of the annual survey conducted by the Association of Foreign Investors in Real Estate (AFIRE), executives of AFIRE stated, “In an environment that is regarded both as the safest and most secure in the world, with a strong currency and the best opportunity for capital appreciation, the U.S. is the safest harbor.”

1 24th annual survey conducted by the Association of Foreign Investors in Real Estate (AFIRE) in fourth quarter 2015 by the James A. Graaskamp Center for Real Estate, Wisconsin School of Business.
Further, foreign capital directed toward U.S. properties in 2015 totaled $62.7 billion, which was 33 percent higher than 2014 foreign-based acquisitions on a 12-month trailing basis, according to Real Capital Analytics. Top foreign countries investing in commercial real estate in the U.S. were Canada, Norway, Singapore, China, and Germany.

This trend for foreign investment in commercial real estate in the U.S. is expected to continue in 2016, and according to the AFIRE survey results, the U.S. was cited as the country providing the best opportunity for capital appreciation in 2016, followed by Brazil, Spain, Ireland, and the United Kingdom (UK). For the second year in a row, New York City was the top global city for foreign investment in real estate, followed by London, Los Angeles, Berlin, and San Francisco.

Compared to other investment types, Situs RERC’s institutional investment survey respondents rated commercial real estate as the most attractive investment option compared to stocks, bonds, and cash. According to our preliminary findings for fourth quarter 2015, respondents rated commercial real estate at 6.3 on a scale of 1 to 10, with 10 reflecting the strongest possible investment among the alternatives listed, although the 6.3 rating is slightly lower than the previous quarter’s rating. In comparison, stocks were rated lower than commercial real estate at 5.0, cash at 4.1, and bonds at 3.7, indicating that while many investors were in a risk-off frame of mind, they were still considering performance and were looking for higher investment returns than were available with cash or bonds.

**CAPITAL ORIGINATIONS**

According to analysis by Situs RERC, the investment market for quality commercial real estate in the U.S. totaled roughly $6.18 trillion in 2015, including $3.54 trillion in debt-based investment properties and $2.64 trillion in equity-based institutional investment properties. Key investors in the debt market included U.S. chartered depository institutions (banks and savings institutions); government-sponsored entities (GSEs); CMBS, collateralized debt obligations (CDOs), and other asset-backed securities (ABS); life insurance companies; other debt, including real estate investment trusts (REITs); and foreign banking offices. Equity investors included private investors, REITs, pension funds, foreign investors, life insurance companies, commercial banks, corporations, GSEs, and others.
According to the Federal Reserve, there was solid expansion of origination with a 7.6-percent annual increase in debt for third quarter 2015 compared to only 4.4 percent in third quarter 2014. This increase came primarily from U.S. depository institutions, which grew by 8.7 percent to a total of 49 percent of all commercial real estate debt, as shown in Exhibit 3-2. Interest from foreign investors and foreign banking offices grew by 33.8 percent in third quarter 2015, although as a group, they still comprised only 1 percent of the debt market, but are expected to become a growing area of financing in an increasingly global economy. A big change from last year was the 2.3-percent decrease in debt held by REITs compared to a year ago when debt held by REITs increased 16.6 percent.

With respect to the institutional equity market, Situs RERC’s estimate indicated that private investors continued to hold the bulk (43 percent) of equity-based commercial real estate in third quarter 2015, although this total was down slightly from last year’s total of 44 percent. REITs also owned less equity than when measured in third quarter 2014, and in 2015, decreased 230 basis points to comprise 32 percent of equity-owned commercial real estate, as shown in Exhibit 3-3. The typically less active life insurance companies, commercial banks, corporations, and foreign investors, which in total owned 11 percent of the equity in commercial real estate in 2015, compensated for the loss of REIT investment.

KEY CAPITAL CONCERNS IN 2016

CMBS Growth Expected

The CMBS market started off strong in 2015, and with commercial real estate transactions picking up speed throughout the year, some experts expected CMBS issuance to follow in tandem to the tune of about $110 billion for the year. However, according to Commercial Mortgage Alert, actual U.S. CMBS volume was just $101 billion in 2015 (see Exhibit 3-4), which was higher than 2014 issuance, but below market conjectures. According to conservative estimates, CMBS issuance could be hitting its upper bounds in this cycle, given the current commercial real estate and regulatory environment. Thus far, only $12.2 billion in CMBS issuance is scheduled for January and February 2016, per Commercial Mortgage Alert, which is $4.7 billion less than during the same period in 2015.

However, according to Trepp, a total of $205.2 billion of conduit loans will come due by 2018. Increases in interest
rates will naturally put some loans at risk, as discussed in “Wall of CMBS Loan Maturities Shrinks, Remains Daunting,” provided on Pages A4 and A5 in the Appendix to this document. The more aggressive estimate shown in Exhibit 3-4 demonstrates that CMBS issuance potentially could increase to about $150 billion in 2016 and to about $200 billion in 2017 due to the heavy load of 10-year loans originated in 2006 and 2007 that are expected to be refinanced.

The CMBS delinquency rate continued to decline in 2015, dropping to 3.41 percent from a total outstanding balance of $795.2 billion in November 2015, which was below the rate last seen in 2009, according to Morningstar Credit Ratings. So far, the maturing loans, including CMBS, have been successfully refinanced with the support of low interest rates. However, according to Morgan Stanley Research, commercial real estate loans (with much of it coming from CMBS) maturing in 2016 and 2017, which total roughly $750 billion, may have difficulty refinancing without the loosening of underwriting stances and/or recapitalization by the borrowers. Morgan Stanley projects that in 2016, the refinancing rate will drop to 75 percent compared to the 80 percent we saw in 2015 from refinancing 2005 vintage loans, because 45 percent of those loans maturing in 2016 have a debt yield of less than 10 percent.

**Lending Conditions**

In 2015, new originations for office, retail, industrial, and hotel properties improved from 2006 and 2007. In June 2007, the average debt yield for office, retail, industrial, and hotel property originations was 9.6 percent compared to 10.7 percent in October 2015, per Real Capital Analytics. Although the debt yield for office, retail, industrial, and hotel properties got as low as 8.7 percent, debt yields for apartment properties were 9.3 percent in October 2015, or 60 basis points higher than they were in 2007. As these come close to or match debt yields of the previous cycle, it will be important to see how well the previous vintage does in refinancing over the next two years, and will give us some idea of how refinancing for 2015 and 2016 loans will do roughly 10 years down the road.

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**Exhibit 3-4. Actual and Forecast CMBS Issuance**

On the surface, it appeared that loan-to-value (LTV) ratios improved in 2015. Data from Real Capital Analytics showed that average LTV ratios for office, retail, industrial, and hotel properties, as well as for apartment properties, were lower in October 2015 than those in May 2007, which was at the peak of the previous cycle (see Exhibit 3-5). In May 2007, the LTV ratio for office, retail, industrial, and hotel properties was 70.9 percent; by October 2015, LTVs declined 4.83 percent to 66.1 percent. In May 2007, the LTV ratio for apartment properties was 69.7 percent, and having declined 3.69 percent, was 66.0 percent in October 2015. However, current LTVs do not take into account unsecured debt, so leverage and LTV ratios are considered artificially low.

Another sign of good health for the lending environment in the current cycle has been the upward trend in the debt service coverage ratio (DSCR). While there has yet to be any explicit sign of eroding like in the previous cycle, the DSCR may be somewhat misleading. According to Real Capital Analytics, the DSCR was as low as 1.3 by the end of 2007, but boasted a solid 1.7 on average in October 2015 for office, retail, industrial, and hotel properties. The DSCR for office, retail, industrial, hotel, and apartment properties has begun to show signs of capital pressure as the rates were higher at the midpoint of 2015, but the change has been only slight so far. Still, much of this change is due to a low coupon rate that many investors do not expect to last, and as the coupon rate rises, the DSCR tends to fall.

External Forces

Beyond the risk of a market correction, a slower and longer-term problem could develop from the deterioration in lending standards which would be reflected in the debt yield, LTV ratio, and DSCR metrics in 2016 due to capital pressures from investors seeking better returns than offered in the volatile stock market. Everything considered, this force may come strongest from global investors.

Much of this growth may come from China, where many investors are looking to diversify their funds more than ever, given the slowdown in the Chinese economy. Chinese investors with commercial real estate platforms set up in the U.S. are expected to expand their activity over the coming years. Investors in Canada, Singapore, Norway, United Arab Emirates, Switzerland, Qatar, and Germany are also expected to be very active in 2016.

All Things Fed

As the clock wound down on 2015, the capital markets got their most highly-anticipated decision of the year—a 25-basis point increase in the targeted federal funds rate range to 0.25 percent to 0.50 percent by unanimous approval of the Federal Open Market Committee (FOMC). Separately, the FOMC’s forecast for the effective federal funds rate is 1.375 percent by the end of 2016. At the press conference after the federal funds targeted rate hike was announced, FOMC Chairwoman Janet Yellen expressed the Committee’s optimism about the U.S. economy and indicated that monetary policy would remain accommodative. The expected rate of increase for the effective federal funds rate would certainly be accommodative from a historical perspective. Since 1990, the FOMC has gone through only three major periods of ramping up the rate. From December 1993 through March 1995, the effective federal funds rate increased by 309 basis points, increasing from 2.96 percent to 6.05 percent. The rate was also increased from June 1999 through June 2000 by 177 basis points. Most recently, it increased 420 basis points from June 2004 through July 2006. At the rate of gradual increases projected for 2016, the effective federal funds rate would rise at roughly half the speed as what has been done historically.

One of the looming questions regarding the federal funds rate increases is what impact they will have on the 10-year Treasury yield rate. While it may seem that yield should be quite reactive to the federal funds rate increases, this hasn’t been the case in the past 25 years. According to the
Federal Reserve, the reaction was most prominent in 1993 when the federal funds rate increased 309 basis points and the 10-year Treasury yield increased 129 basis points to 7.96 percent, or for every basis point the federal funds rate increased, the 10-year Treasury reacted by 42 percent. When the federal funds rate increased in June 1999 through June 2000, the 10-year Treasury reacted at a rate of 11 percent. When the federal funds rate increased from June 2004 through July 2007, the 10-year Treasury reacted a mere 9 percent (refer to Exhibit 2-9 in Chapter 2 of this report).

According to this historical analysis, if the effective federal funds rate increases by the FOMC’s forecasted amount of 100 basis points through 2016, there may be as little as a 9-basis point increase in the 10-year Treasury rate to only 2.34 percent. At the same time, if inflation in the U.S. and global economy manages to pick up speed, as the FOMC expects, the 10-year Treasury yield rate could jump to 3.0 percent.

However, as shown in Situs RERC’s base case forecast scenario for the 10-year Treasury rate (see Exhibit 3-6), this is not expected to happen. If you look at how low global yield rates are now (see Exhibit 3-7), compounded by the historical trend of a decreasing 10-year Treasury yield rate while government debt has increased, it is unlikely that the long-term trend is going to suddenly reverse itself for a sustained period of time.

Regulations On the Horizon

As the year 2015 wound down, the U.S. government’s omnibus spending bill passed. This bill included an extension of the EB-5 Regional Center Program as is until the end of September 2016. According to news reports about this program, usage has increased over the years. EB-5 allows foreign investors to invest in projects which create jobs, and in addition to getting a return on their investment, they also receive a green card. While the cost is a minimum of $1 million (or $500,000 in rural or high unemployment areas), some developers plan to raise massive amounts of capital. This type of funding offers much lower interest rates (typically between 3 percent and 5 percent) compared to traditional financing (7.44 percent on average in fourth quarter 2015) for construction loans, per RealtyRates.com. As long as commercial real estate developers in major metros want access to capital, it is likely that they will use the...
EB-5 program, in addition to normal debt sources.

Also in late 2015, the U.S. Securities and Exchange Commission’s (SEC's) expanded Regulation AB rules were enacted. One of the provisions that will likely hold back CMBS growth requires that the chief executive of the securitization's depositor must personally guarantee that they have done all the due diligence possible to confirm that the information regarding the loans in the collateral pool are correct. Additionally, if delinquencies rise above a certain threshold, a reviewer steps in to see if the lender of the mortgage provided adequate and accurate information. Upon confirmation that all information was disclosed, the lender can be forced to buy back the loan at par value.

In December 2016, part of the Dodd-Frank Wall Street Reform and Protection Act, commonly known as the Risk Retention Rule, will come into effect. This rule will force the issuer to hold onto 5 percent of the risk from the class of securities in the CMBS. An issuer can either hold that 5 percent equally through each class, or they may hold a total of 5 percent through the most subordinate class, and they must retain that risk for at least five years before it can be sold to a qualified b-piece buyer. Taken with the additional rules that will go into effect in late 2016, the risk retention rule is expected to make for a healthier source of long-term financing although growth will likely be restrained over the next year.

Non-traded REITs are also facing significant regulatory hurdles as the SEC approved a rule change proposed by the Financial Industry Regulatory Authority (FINRA) on Oct. 15, 2015. The approved changes to Rule 2340 will impact the statements that investors in non-traded REITs receive, and by April 2016, investors will see the “real value” of their shares, which are reflective of the various fees and commissions involved. These real value statements are only done 18 months preceding the stop of raising funds for the non-traded REIT, and will not be the death knell of non-traded REITs, but it will be important to see how they react in 2016, which is expected to be a year of regulatory headwinds and fraught with questions.

REINS ON CAPITAL SEEM TO BE TIGHTENING

Despite the regulatory hurdles ahead and possible slight increases in interest rates spurred on by increases in the federal funds rate, the amount of capital available is expected to be sufficient for most investor needs in 2016, especially in the equity markets where standards appear to be loosening. In addition, due to the global economic slowdown, foreign capital may become less robust and more selective, although the U.S. commercial real estate market is expected to remain stable in 2016, and as such, could become even more attractive to investors.

However, given the decline in CMBS issuance in fourth quarter 2015, activity appears to be slowing in the debt market, at least for the near term, although with the amount of refinancing possible in 2016 and 2017, the pace and volume of issuance could certainly increase (reference Exhibit 3-4). Interestingly, Situs RERC’s institutional investment survey respondent views regarding debt underwriting were mixed, with comments ranging from “Average loan sizes and LTVs are decreasing as underwriting standards become more conservative,” to “Underwriting standards are back to 2006 levels, and slipping.”

As noted throughout this chapter, we expect commercial real estate investment to continue to be positive, although the pace of price increases is slowing because of the crosscurrents affecting the economy and capital markets. However, commercial real estate is expected to remain a very attractive asset class, especially compared to the investment alternatives, due to its relative stability, tangible nature, and reasonable performance characteristics. Highlights for the 2015 debt, equity, and cross-border investment markets, as well as expectations for 2016, are included on Page A6 in the Appendix.
THE PROPERTY MARKETS

FUNDAMENTALS CONTINUE TO IMPROVE
FUNDAMENTALS CONTINUE TO IMPROVE

Commercial real estate benefited from a positive macroeconomic environment in 2015. Fundamentals continued on an upward trend, as demand for space advanced across all property types, driving vacancies lower and rents higher. With increased capital availability and funding sources, investors pursued deals across the full spectrum of markets seeking yields. The trend led to a higher profile for secondary and tertiary markets, as well as significant gains in prices, which exceeded prior 2007 peaks.

Sales of major properties (priced at over $2.5 million) totaled $258.2 billion in the first half of 2015, a 38-percent year-over-year advance, based on data from Real Capital Analytics. Sales volume came close to the $314.1 billion peak reached in the first 6 months of 2007. As shown in Exhibit 4-1, the third quarter 2015 saw an additional $115.3 billion in transactions, bringing the three-quarter total to $375.3 billion. On a yearly basis, investments rose across all property types.

The office sector retained its status as the most active investment target in the first nine months of 2015. With $108.5 billion in transactions, office buildings made up 29 percent of total investments, according to Real Capital Analytics. Investors gravitated toward markets with high yield prospects, driving deal-making for suburban properties. Apartment assets accounted for 26 percent of all deals, with $98.3 billion in sales. Retail and industrial transactions comprised 17 percent and 14 percent, respectively, of sales activity, with combined transaction volume of $115.9 billion.

In terms of volume growth during the first half of 2015, hotel and industrial assets stood out, with investment sales gaining 73 percent and 69 percent, respectively, compared with the first half of 2014, per Real Capital Analytics. The strong rise in investor activity was driven by both sectors offering higher relative yields, averaging 8.1 percent for hotel properties and 6.9 percent for industrial properties at the midpoint of the year. This trend continued through the third quarter 2015.

According to Real Capital Analytics, at the midpoint of 2015, all of the top 40 most active U.S. markets, except Philadelphia, experienced gains in sales volume. Manhattan continued as the top market, followed by Los Angeles, Chicago and Dallas. Atlanta rounded out the top five most active metros, swapping places with San Francisco, which dropped to sixth place. With many investors hunting for higher yields, secondary and tertiary markets continued to see significant inflows of capital. Orlando, Palm Beach and St. Louis posted triple-digit increases in year-over-year sales volume. They were accompanied by other markets, such as...
as Seattle, Raleigh/Durham, Portland, and San Antonio.

Commercial property prices rose 16 percent in the first half of 2015 compared with the prior year, according to the Moody’s/Real Capital Analytics Commercial Property Price Index. Reflecting the rise in transactions, hotel properties posted the strongest price gains by the midpoint of the year, with a 37-percent year-over-year increase. Prices for central business district (CBD) office properties recorded the second-largest gains, with a 24-percent year-over-year increase, moving past their 2007 peaks. Growth in prices for suburban office and apartment properties tied, with an increase of 15 percent each. Industrial prices rose 11 percent from the same period in 2014, while retail properties experienced an 11-percent yearly price appreciation. Prices moved up during the quarter as trends across all of the property sectors held steady in the third quarter of the year (see Exhibit 4-2).

Exhibit 4-2. Property Prices Maintained Upward Trend in 2015

Capitalization rate compression moderated during 2015, as many investors expected a rise in the Federal Reserve’s interest rate. Average transaction-based cap rates for all of the property types declined from 7.1 percent in the third quarter 2014 to 6.9 percent by the end of the third quarter 2015, per Real Capital Analytics.

With a 29-basis point slide, the industrial sector posted the most significant decline in average cap rates between the first nine months of 2014 and the same period in 2015, according to Real Capital Analytics. Industrial sector cap rates averaged 6.8 percent by the end of the third quarter 2015, as shown in Exhibit 4-3. Cap rates for office transactions declined 23 basis points year-over-year. Cap rates for retail transactions averaged 6.5 percent by the end of September 2015, 27 basis points lower than the prior year. Apartments posted the lowest cap rates at the end of third quarter 2015, reaching 5.9 percent. Hotel yields declined 5 basis points, to an average of 8.2 percent by September 2015. Interest rates are projected to rise into 2016 and beyond, squeezing spreads and driving cap rate pressure upward.
With capital availability rising and an inventory shortage marking the top-tier markets, some investors expressed concern about too much money chasing not-enough deals. Based on data from Real Capital Analytics, the office sector offered the most balanced capital source picture, with investor types fairly evenly distributed between private investors, publicly-listed companies, equity funds, institutional investors, and cross-border funds. The industrial sector counted on private funds and cross-border capital for 64 percent of transaction funding. Retail activity was driven primarily by private investors, who comprised 44 percent of acquisitions, with public companies and equity funds coming in a distant second and third place. Financing for the apartment sector was the most skewed, with private capital comprising 61 percent of acquisitions. Institutional investors made up 15 percent of all apartment buyers, with public, user, cross-border, and equity funds accounting for the rest. In the retail and hotel sectors, private sources were the major capital providers, followed by publicly-listed companies and equity funds.

Commercial real estate properties provided a solid investment option during 2015. With volatility in the global economies and many investors looking for safety and returns, commercial assets remained attractive to many investors. With fundamentals approaching full recovery, commercial properties appear well-positioned for continued growth in 2016.
THE OFFICE MARKET

Gains in office-using employment sectors drove positive changes in fundamentals, leading to solid performance for office markets in 2015. Investment sales of office properties totaled $72.5 billion in the first half of 2015, a 38-per cent year-over-year increase, according to Real Capital Analytics. As shown in Exhibit 4-A1, the third quarter added an additional $35.9 billion in transactions, bringing the nine-month total to $108.5 billion. While office properties in central business districts (CBDs) remained dominant in terms of volume, suburban office sales increased at a faster pace. During the first half of 2015, sales of CBD office buildings advanced 20 percent compared to the same period a year ago, while sales of suburban properties jumped 50 percent on a yearly basis.

With rising capital sources, many investors have focused more intensely on portfolio and entity-level transactions in major metropolitan markets. Portfolio sales volume accounted for 30 percent of all office sales in the first half of 2015, according to Real Capital Analytics. In a sign of the rising profile of suburban offices, portfolio sales comprised 38 percent of all suburban office volume. In addition, as investors focused on higher yields, properties in secondary markets remained high on the list of acquisitions.

Positive changes in fundamentals and rising expectations of growing cash flow drove office deals. Average prices for office properties rose 13 percent on a yearly basis in the first half of 2015, based on data from Real Capital Analytics. In the third quarter, price appreciation slowed, with a 1-percent year-over-year advance to $243 per square foot (see Exhibit 4-A1). CBD properties posted a 4.6-percent yearly appreciation rate, averaging $386 per square foot at the end of the third quarter. Prices for suburban office buildings rose 8.5 percent to an average of $177 per square foot.

Cap rate compression continued for CBD office properties, declining 70 basis points from January 2015 to September 2015, to an average of 5.3 percent. Suburban office transaction-based cap rates increased by 20 basis points during the same period, averaging 7.1 percent at the end of September 2015. Per Real Capital Analytics, the average capitalization rate for the office sector overall declined to 6.7 percent in third quarter 2015, as shown in Exhibit 4-A2.

Exhibit 4-A1. Office Property Volume and Pricing

Source: Real Capital Analytics, 3q 2015.
Investor Composition

Changes in investor composition for office sector transactions were driven by cross-border investors in 2015. According to Real Capital Analytics, private investors accounted for 27 percent of all buyers, the largest group. In a noticeable change from prior years, cross-border investors comprised the second largest share, with 20 percent of acquisition volume. (In comparison, cross-border investors made up only 4 percent of office acquisitions in 2014.) Equity funds were the third largest buyer group, accounting for 18 percent of acquisitions. Institutional investors and publicly-listed companies each accounted for 15 percent of office purchases. Users made up 5 percent of investors.

According to Real Capital Analytics, Manhattan retained its top spot for office transaction volume with growth posting a 44-percent rise during third quarter 2015 on a yearly basis. Chicago and San Jose rounded out the top three metros, posting impressive year-over-year volume gains of 158 percent and 165 percent, respectively. Boston ranked fourth in sales volume, with a modest 13-percent yearly gain. San Francisco dropped from the number two spot in 2014 to number five in 2015, as sales volume declined 15 percent on a year-over-year basis. Signaling that many investors remained interested in the higher yields of stronger secondary markets, the highest yearly growth centers were markets such as Inland Empire (up 713 percent), Raleigh/Durham (up 438 percent), St. Louis (up 407 percent), and Indianapolis (up 368 percent).

Market Fundamentals

Office fundamentals were on a positive trajectory during 2015, driven by rising demand. Vacancies continued declining over the first three quarters of the year, indicating broader improvements in the sector. Based on data from Jones
Lang LaSalle (JLL), national vacancies declined from 16.6 percent in the first quarter of 2014 to 15.5 percent in the first quarter of 2015. Office vacancies continued declining in the ensuing two quarters, registering 15.3 percent in the second quarter and 15.1 percent in the third quarter. Salt Lake City, Portland, San Francisco, and New York City posted single-digit vacancies, maintaining their advantage compared with other locations such as Houston, Westchester County in New York, and Baltimore. JLL also reported that office net absorption totaled 35.5 million square feet over the first nine months of the year. New completions added 48.2 million square feet of space to the market (mostly during the second quarter of 2015), with a large portion of the new space coming on the market pre-leased.

With tightening fundamentals, many landlords were in a better position to increase rental rates. The national average rent for the office sector rose 4.2 percent by mid-year 2015, and third quarter rents increased an additional 1.6 percent, according to JLL. Office properties located in CBDs outperformed suburban properties, as employers generally preferred high-density, walkable environments.

**Outlook**

The office sector outlook continues on a positive trend, as shown in Exhibit 4-A3. With employment in professional and business services leading the growth in 2015, net absorption is projected to advance. Based on NAR’s forecast of JLL data, net absorption is expected to total 54.0 million square feet by the end of 2015, accompanied by 80.8 million square feet in 2016. The supply of new office space is expected to record 63.5 million square feet in 2015, and 74.8 million square feet in 2016. With demand exceeding supply, office vacancies are expected to be at 15.2 percent by the end of 2015 and to decline to 14.6 percent in 2016. Asking rents are projected to increase 2.8 percent in 2015 and to increase 2.2 percent in 2016.

On the investment front, with slowing growth in global economies, U.S. office properties will likely remain attractive for many investors. Notably, the spreads between average cap rates and 10-year Treasurys remain high by historical standards.

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**Exhibit 4-A3. Office Fundamentals (Current and Forecast)**

<table>
<thead>
<tr>
<th></th>
<th>Vacancy (%)</th>
<th>Net Absorption (sf)</th>
<th>New Completions (sf)</th>
<th>Rents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3Q 2015</td>
<td>15.1</td>
<td>35.5 M</td>
<td>48.2 M</td>
<td>1.6</td>
</tr>
<tr>
<td>2015F</td>
<td>15.2</td>
<td>54.0 M</td>
<td>63.5 M</td>
<td>2.8</td>
</tr>
<tr>
<td>2016F</td>
<td>14.6</td>
<td>80.8 M</td>
<td>74.8 M</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Sources: JLL, NAR, 3q 2015.
THE INDUSTRIAL MARKET

As consumer spending patterns have been increasing the profile of e-commerce, demand for industrial properties posted strong gains in 2015. Industrial sales volume rose 69 percent on a yearly basis from January to June of 2015, reaching $36.8 billion, according to Real Capital Analytics. The third quarter added $13.4 billion in transactions to sales volume, as shown in Exhibit 4-B1. Both warehouse and flex properties found favorable conditions, with sales advancing 81 percent and 35 percent year-over-year, respectively. Portfolio and entity-level transactions were a strong feature of the industrial landscape, marked by multi-billion dollar deals—the KTR Capital buyout by ProLogis, the IndCor buyout by the Government of Singapore Investment Corporation (GIC) and Global Logistic Properties (GLP), as well as the CCIT/Select Income REIT merger. These large deals comprised 56 percent of all industrial sales volume in the first half of 2015.

Riding the wave of rising trades, pricing for industrial properties increased 8 percent on a yearly basis over the first nine months of 2015, based on Real Capital Analytics data. The national average reached $81 per square foot (see Exhibit 4-B1), a figure not seen since the market peak of 2007. Prices for warehouses reflected stronger demand, rising 12 percent year-over-year, to $73 per square foot by the end of September 2015. Flex buildings traded at an average of $108 per square foot at the end of September, a 6-percent yearly decline.

Cap rates for industrial properties followed positive trends, with rates declining 32 basis points in the first three quarters of 2015, per Real Capital Analytics (see Exhibit 4-B2). Over the same period, average cap rate compression was steeper for warehouse properties than it was for flex space, with national rates reaching 6.9 percent and 6.7 percent, respectively, by the end of September. Industrial average cap rates have declined 180 basis points since the peak of 8.6 percent in 2009.

EXHIBIT 4-B1. Industrial Property Volume and Pricing

EXHIBIT 4-B2. Average Industrial Property Cap Rate

Source: Real Capital Analytics, 3q 2015.

Investor Composition

With portfolio sales accounting for such a large share of deals, private and cross-border investors comprised the bulk of acquisitions in 2015, with 32 percent of industrial acquisitions for each group, according to Real Capital Analytics. Publicly-listed companies and users tied for a distant second, with 10 percent
of industrial purchases each. Institutional funds made up 8 percent of industrial buyers, while equity funds accounted for 7 percent.

Los Angeles retained the leading position in the ranking of top metros in terms of investment activity, with $3.0 billion in transactions during the first half of 2015, according to Real Capital Analytics. Chicago, Dallas, Northern New Jersey and the Inland Empire rounded out the top five. Investors seeking higher yields poured money into secondary and tertiary markets, leading to noticeable spikes in sales volume. Reno witnessed a yearly sales volume jump of 1,072 percent in the first half of 2015. In addition, per Real Capital Analytics, 17 of the top 40 industrial markets which posted triple-digit sales growth were secondary and tertiary markets, including Seattle, Portland, Memphis, Harrisburg/Central Pennsylvania, St. Louis, Louisville, and Nashville.

**Market Fundamentals**

Industrial fundamentals made significant strides, as economic and investment trends provided a favorable environment. Based on data from CBRE Econometric Advisors, demand for industrial space rose in the first six months of 2015, with net absorption totaling 120 million square feet. As shown in Exhibit 4-B3, new industrial completions totaled 29 million square feet in the first quarter of 2015, and 41 million square feet in the second quarter. Industrial net absorption reached 58.9 million square feet in the third quarter.

The solid demand, coupled with relatively slower construction, led to tight availability rates. Exhibit 4-B3 shows that the industrial availability rates dropped over 100 basis points on a yearly basis to 9.6 percent by the end of third quarter 2015. According to CBRE Econometric Advisors, the availability rates matched the prior cycle low recorded in 2007. Markets with the lowest rates included Los Angeles (4.5 percent), Orange County (5.2 percent), San Francisco and Portland (5.7 percent each), Seattle (6.0 percent), Denver (6.1 percent), and Las Vegas (6.6 percent), per CBRE Econometric Advisors.

Nationally, the industrial average rents rose 1.7 percent in the first quarter of 2015 and 1.3 percent in second quarter. Adding the third quarter’s gains, average rents advanced 6.8 percent from January to the end of September. According to CBRE Econometric Advisors, two-thirds of U.S. industrial markets recorded rent gains in 2015. By the third quarter, the highest rent growth (over 11.0 percent) was recorded in San Francisco, San Jose, Washington, DC, Austin, San Diego, and Orange County.

**Outlook**

The near-term outlook for the industrial sector is bright, with conditions closing-in on a full recovery. Net absorption is projected to reach 213.7 million square feet in 2015 and 168.3 million square feet in 2016, based on CBRE Econometric Advisors’ data. Supply is expected to continue rising, with industrial completions adding 157.9 million square feet of new space by the end of 2015 and an additional 163.1 million square feet in 2016. Given the strong and rising demand, industrial availability rates are projected to decline to 9.7 percent in 2015 and 9.5 percent in 2016. Average rents are estimated to increase 6.2 percent by the end of 2015 and an additional 6.2 percent in 2016.

Investments in industrial properties are expected to continue on an upward trajectory, driven by increasing demand for distribution and intermodal centers. As cap rate compression brought industrial yields more in line with the other property types, a rising interest rate environment is likely to add downward pressure on spreads.
THE RETAIL MARKET

The assault on the traditional shopping experience continues with exponential growth in online retailing. According to the U.S. Census Bureau of the Department of Commerce, e-commerce sales for the third quarter of 2015, adjusted for seasonal variation, were $87.5 billion, an increase of 15.1 percent over third quarter 2014. E-commerce sales accounted for 7.4 percent of total retail sales for third quarter 2015 compared to 6.5 percent for third quarter 2014.

Traditional brick and mortar shopping centers continue to fight to stay relevant, and now is the time to rethink “traditional.” We are seeing those centers that can provide a service or customer experience as one type that has longevity for at least the near term. Others will likely need to implement significant technologies and adapt new strategies, such as cartless shopping using radio-frequency identification (RFID) scanners, in store pick-up, or personalized sale advertisements triggered by global positioning system (GPS) location. Retailers may need to either make in-person shopping as streamlined as online shopping, or provide the customer with something a virtual store cannot offer. In addition, many of the national chains are promoting their own online presence to combat the online mega stores.

According to RetailNext, there was a 5.6-percent decrease in year-over-year same-store sales for November 2015, which was attributed to a 7.6 percent decline in traffic. RetailNext reported that while sales were down, the average transaction value was up by 3.2 percent. In its fourth consecutive month of increasing average transaction value, the RetailNext Retail Performance Pulse report suggested that buyers may be more knowledgeable about their prospective purchase before they come into stores and are ready to pull the trigger on bigger ticket items.

RetailNext cites several reasons why sales are down, but one of the largest factors is the increase in U.S. auto sales. According to Autodata, the U.S. market for light vehicle deliveries is up 5.4 percent calendar year to date (January through November 2015) over the same period in 2014. While auto sales help boost retail sales, this shift to a different type of retail purchase may further reduce traffic in malls and shopping centers.

The December 2015 University of Michigan Survey of Consumers reported a 1.9 percent year-over-year decrease in the consumer sentiment index to 91.8. However, the average index reading for 2015 overall was 92.9, which was the highest since before the recession when confidence was 95.2 in 2004. While it should be noted the December 2015 data was still preliminary at the time of this writing, respondents to the survey indicated continued strength in personal finances and a positive outlook on purchasing trends. The 2016 forecast calls for consumer expenditure growth of 2.8 percent.

One last point regarding consumers is that while disposable income has grown over the year due to modest increases in wages and salaries, we are not seeing this translate into increased retail sales because many consumers have been increasing personal savings instead. According to the BEA, personal savings as a percentage of disposable income was 5.2 percent as of the third quarter 2015 compared to 4.7 percent in the third quarter 2014.

While the retail consumer directly effects retail property economics, the year-to-date 2015 sales of significant retail properties totaled $65.2 billion through September 2015, which is a 6.8 percent increase compared with the same nine-month period in 2014, according to Real Capital Analytics. Third quarter 2015 data shows that the volume is comprised of 58 percent mall sales and 42 percent strip center sales in 2015, compared to 44 percent mall sales and 56 percent strip center sales in the prior year. As shown in
Exhibit 4-C1, mall transactions are up 10 percent over the prior year by $3.4 billion during the first three quarters of 2015. Retail property transactions for both mall and strip center sales showed that the year-to-date average price per square foot was $213 in 2015, compared to $198 in the prior year. Malls ended the quarter at $324 per square foot and strip centers at $153 per square foot (see Exhibit 4-C1).

Average capitalization rates reported by Real Capital Analytics have continued to compress over the year. September 2015 ended with a reported average cap rate of 6.5 percent for all retail properties compared with a 6.8-percent cap rate in September 2014. As shown in Exhibit 4-C2, the September 2015 average cap rates were 5.9 percent for malls and 7.1 percent for strip centers (compared with 6.2 percent for malls and 7.3 percent for strip centers in September 2014).

**Investor Composition**

The 2015 retail property market continued to be dominated by private investors, who comprised 44 percent of the buyer pool year-to-date through August 2015, per Real Capital Analytics. The public investor market share was 25 percent of the 2015 retail property buyer pool. There was not much change in other investor segments, such as cross-border, institutional, user/other, and equity funds. However, equity funds did increase their activity slightly, representing 11 percent of retail property investments, which was up from 7 percent a year ago. Real Capital Analytics indicated that private investors were heavily active in strip centers in 2015, making up 57 percent of the active buyers in that subtype. Real Capital Analytics also noted that there were nearly 5,281 transactions in the first three quarters of 2015, which was down from 6,091 transactions during the same period in 2014.

**Retail Property Fundamentals**

According to CBRE Econometric Advisors, the vacancy rate for the total retail market decreased to 11.3 percent in third quarter 2015 (see Exhibit 4-C3), which is a year-to-date decrease of 20 basis points.

Positive absorption was 6 million square feet as of the third quarter 2015 compared to 13.6 million square feet year-to-date-2015 for all retail
centers, according to CBRE Econometric Advisors. While currently at lower levels compared to one year ago, 2015 is expected to finish strong. With an anticipated 12 million square feet of net absorption added in fourth quarter 2015, the overall retail market is expected to finish the year at over 25 million total square feet of net absorption, per CBRE Econometric Advisors.

Also, according to CBRE Econometric Advisors, net asking rental rates for total retail centers increased to $15.68 per square foot in third quarter 2015. While rents continue to climb, CBRE Econometric Advisors notes that rents have yet to return to the peak levels seen in 2007. The expectation is that rental growth will be about 5 percent for 2016 and continuing at that rate through 2019.

**Outlook**

Although there may be disruptive trends in the way consumers shop, retail real estate is still a thriving property asset class. In addition, the outlook for retail construction is low, which should benefit owners and further improve operational metrics. With improving operational metrics, there is little doubt there will continue to be buyers, but the question will be at what price. Cap rates may continue to decline slightly; however, cap rate compression will likely slow, as deal economics get stretched to the limit. Further, it will be interesting to see if 2016 brings about a mega-merger or major acquisition in the retail sector like we saw in other real estate asset classes in 2015.
THE APARTMENT MARKET

On a broad market basis, the apartment sector has been among the hottest commercial real estate property types since the start of the new market cycle following the Great Recession. This can be credited in no small part to major changes occurring within the U.S. economy, particularly related to employment and homeownership. As a result of these changes, the key attributes of the apartment sector, namely providing people with lower upfront housing costs, access to work, and flexibility, have led to continued high demand for this sector.

Nearly eight years removed from the highs of the last commercial real estate cycle, the apartment market continues to thrive. A total of $98.3 billion of significant apartment properties were sold in the first three quarters of 2015, representing a year-over-year increase of 26 percent, according to Real Capital Analytics (see Exhibit 4-D1). This is well above the 10-percent increase in volume from 2013 to 2014, and given the mix of individual asset and portfolio sales, suggests a healthy and balanced demand from investors. Among apartment subtypes, garden-style properties observed the highest growth, accounting for nearly two-thirds of the total sales volume in the first three quarters of 2015, according to Real Capital Analytics.

Apartment properties had the second-highest transaction volume of all major property types (trailing only office sector volume slightly) in the first three quarters of the year, according to Real Capital Analytics, and many investors continue to favor this category of commercial real estate.

Based on the Moody’s/RCA Commercial Property Price Index (CPPPI), pricing for apartment properties nationally has increased approximately 13 percent year-over-year through September 2015, and is now 34 percent above previous peak levels from late 2007. The average price per unit (PPU) has increased significantly, averaging $131,233 over the last four quarters compared to $116,545 in the prior four quarters, per Real Capital Analytics. The PPU is now more than 40 percent above that of the prior market peak at the end of 2007.

As presented in Exhibit 4-D2, average capitalization rates for the apartment sector have compressed during the past year, decreasing to an average of 5.9 percent during the first three quarters of 2015, according to Real Capital Analytics. This represents a 19-basis...
point decrease from the average cap rate in 2014.

Capitalization rates for mid/high-rise properties have been relatively steady at approximately 5.1 percent through the first three quarters of 2015, while rates for garden-style properties have dropped from 6.2 percent to 5.9 percent over the same time period, according to Real Capital Analytics. However, cap rates for both apartment subtypes have continued to trend downward over the past several years, reflecting the availability of capital and low mortgage rates.

Based on Real Capital Analytics data, the average cap rate for the apartment sector is now nearly 50 basis points below the level exhibited prior to the start of the economic downturn in 2008. Several factors that have contributed to lower cap rates include sustained and historically low interest rates, increased availability of capital, strong sector fundamentals, and the perceived safety of apartment assets relative to other property types. Additionally, government-sponsored enterprises (GSEs) such as Fannie Mae and Freddie Mac often provide apartment properties with a financing advantage relative to other property types.

Further cap rate compression in the apartment sector, particularly in the primary markets, is unlikely to continue, though improving fundamentals may continue to drive pricing upwards. It is conceivable that average cap rates may inch upward slightly in 2016, with the potential for rising interest rates and a greater proportion of transactions occurring in secondary and certain tertiary markets from investors seeking opportunities for potentially higher yields.

**Investor Composition**

Competition for apartment product by private investors, REITs, equity funds, and institutions has continued. According to Real Capital Analytics, similar to 2014, private investors have comprised 61 percent of purchases through August 2015. This is significant relative to the prior four years in which private investors represented approximately 50 percent of the total buyer pool. Notably, cross-border investment has nearly doubled through August 2015 to 9 percent, up from just 5 percent in 2014.

Clarion Partners, which acquired Gables Residential in the first quarter of 2015 for $3.2 billion, was the most active buyer (in terms of investment volume) by a large margin, according to Real Capital Analytics. Other notable buyers were Blackstone, Strata Equity Group, and TruAmerica Multifamily. Gables Residential, Praedium Group, Blackstone, and Principal Financial were the top sellers during the period. Another notable transaction in the apartment sector not captured within the buyer/seller data above was the sale of Associated Estates to Brookfield Asset Management for approximately $2.5 billion (including the assumption of debt).

Additionally, it was announced in late October 2015 that Sam Zell’s Equity Residential sold 23,000 units to Starwood Capital for $5.37 billion.

Through the first half of 2015, the geographic areas leading the pack in terms of transaction sales volume for apartment properties included major markets such as New York City, Los Angeles, Dallas, and Atlanta, according to Real Capital Analytics. However, markets exhibiting the biggest year-over-year increases (more than 150 percent) included Orlando, Broward, Inland Empire, and Minneapolis. Continuing the trend over the past several years, many investors have broadened their focus to secondary and tertiary markets in search of greater returns.

A diminishing supply of apartment properties, strong sector fundamentals, and intense competition has led to a significant pipeline of new apartment projects, as developers look to capitalize on the tight market conditions. According to Axiometrics, 341,713 apartment units were expected to be delivered in 2015,
followed by 380,032 units in 2016 and 301,676 more units in 2017. These figures are significant compared to the average annual new supply of just 132,632 units built in 2010 through 2012. As noted by the data above, new supply is projected to peak in 2016. The total apartment stock as of third quarter 2015 was approximately 23.1 million units, per Axiometrics.

**Apartment Property Fundamentals**

Annual effective rent growth rose to 4.9 percent in third quarter 2015, which was above its prior peak level of 4.8 percent in third quarter 2011, according to Axiometrics, Inc. Further, the average annual effective rent growth through three quarters of 2015 was 130 basis points higher than the average in 2014, representing a nearly 40-percent increase. Axiometrics, Inc. forecasts a peak rent growth in first quarter 2016 of 5.0 percent, with a gradual decline in the latter half of the year and into 2017.

Since the apartment recovery began in second quarter 2010, the vacancy rate has declined for 22 consecutive quarters, falling from 7.7 percent to 5.0 percent in third quarter 2015 (see Exhibit 4-D3). Per Axiometrics, Inc., the vacancy rate is expected to continue to decline to a low of 4.9 percent in early 2016, subsequently increasing to approximately 5.4 percent by the end of 2016, presumably due to an anticipated increase in supply brought about by new construction.

A number of markets may continue to outperform the U.S. average in terms of cumulative potential rental revenue growth from 2016 to 2018. (Potential rental revenue growth is the combined change in effective rental rates and occupancy.) According to forecast information from Axiometrics, several of the top 20 markets are expected to outperform the U.S. average over the specified period, with San Francisco, Boston, Denver, Austin, and San Diego leading in performance. The lower performing markets are expected to be New York City, Houston, and Chicago.

**Outlook**

The outlook for the apartment market appears to be positive (particularly in the short term), with continued investor appetite in this sector and strong fundamentals fueled by increasing demand from tenants. The number of households that either choose to rent versus own or that may not have the financial wherewithal to buy a home continues to increase. In fact, according to the U.S. Census Bureau, the homeownership rate is below 64 percent, which is its lowest level since 1967 and well below its peak of 69 percent in 2004. It is noted that the decline in
Homeownership has been most heavily impacted by households under age 35, where the rate has fallen to under 36 percent (this is down from 43.6 percent just 10 years ago). However, this downward trend in homeownership may begin to reverse, with housing affordability still at historic lows in many markets and apartment rents on the rise. It is yet to be determined whether there has been a more permanent shift in views towards homeownership for the Millennial demographic.

While it is largely expected that continued job growth (as presented in Exhibit 4-D4) and pent-up demand from the younger demographic, many of whom have been living with their parents or have been doubling up, will continue to maintain positive demand in the short-term, there are some key risks to be considered for this property sector in the coming years. These risks include the significant recent and projected increases in supply of new apartment developments.

The apartment sector appears to be well-positioned to possibly experience another year of solid growth in 2016. However, given some of the potential headwinds noted above, it is expected that the long “up” cycle that this property sector has undergone over the past eight years will soon begin to achieve equilibrium.

### Exhibit 4-D4. Key Assumptions for U.S. Forecast

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<td>Employment (000)</td>
<td>131,658.3</td>
<td>133,630.3</td>
<td>135,860.7</td>
<td>138,322.0</td>
<td>141,321</td>
<td>142,189</td>
<td>144,262.1</td>
<td>147,060.5</td>
<td>149,231.0</td>
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<td>Job Growth (000)</td>
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<td>2,461.3</td>
<td>2,998.7</td>
<td>2,858.7</td>
<td>2,941.4</td>
<td>2,798.4</td>
<td>2,170.5</td>
<td>2,486.2</td>
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<td>Job Growth %</td>
<td>0.54%</td>
<td>1.50%</td>
<td>1.67%</td>
<td>1.81%</td>
<td>2.17%</td>
<td>2.05%</td>
<td>2.08%</td>
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<td>Total Residential Permitting</td>
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<td>633,526</td>
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<td>978,332</td>
<td>1,036,784</td>
<td>1,146,864</td>
<td>1,176,395</td>
<td>1,481,202</td>
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<td>Demand/Supply Ratio</td>
<td>1.2</td>
<td>3.2</td>
<td>3.5</td>
<td>2.9</td>
<td>3.1</td>
<td>2.8</td>
<td>2.6</td>
<td>2.4</td>
<td>1.5</td>
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<td>Housing Affordability Index</td>
<td>209.2</td>
<td>214.4</td>
<td>219.6</td>
<td>161.4</td>
<td>157.1</td>
<td>149.9</td>
<td>145.3</td>
<td>155.2</td>
<td>157.3</td>
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<td>New Supply</td>
<td>109,370</td>
<td>122,281</td>
<td>166,246</td>
<td>257,412</td>
<td>292,480</td>
<td>339,727</td>
<td>341,713</td>
<td>380,032</td>
<td>301,676</td>
<td>282,897</td>
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</table>

THE HOTEL MARKET

Through the years, hotel properties have progressed from a niche investment into a major part of the commercial real estate industry. With a wide array of institutional participants, hotels could be uniquely positioned to absorb some of the increasing pressure from global economic concerns. However, investors are also keeping in mind the typical cyclical trends that may disrupt possible hotel performance.

Transaction Trends

The current market cycle for hotel investment has been progressing both in breadth and depth. However, the hotel sector is still only one of two major property types (the other being office) which has yet to surpass the previous market cycle’s peak in transaction volume. As of third quarter 2015, the transaction volume for the previous 12 months for all hotels was $45.4 billion, according to Real Capital Analytics (see Exhibit 4-E1). In comparison, the peak transaction volume for the previous 12 months leading up to fourth quarter 2007 was $80.9 billion dollars, or 43.9 percent higher than where the market is now. However, it is important to note that in the previous cycle, the market accelerated abruptly in fourth quarter 2007 due to Hilton’s mega entity-level sale of 67,254 units in 182 properties to Blackstone for approximately $26 billion. Minus this huge sale, the difference between the current transaction volume for hotels and the higher volume in the previous cycle peak is only 16.1 percent. Despite the sporadic nature of such entity-level transactions, it does seem that entity transactions have been greatly subdued in this cycle, with the highest recent entity transaction at roughly $3 billion. This is a little more than half of where entity transactions were in first quarter 2006, when overall transaction volume was less than where it is now.

While hotel transaction volume has grown recently, the focal point in the current cycle has continued to be in major metropolitan areas as well as major coastal tourist cities, many of which were full of high-quality, low-risk assets with proven cash flows. So while transaction volume continues to lag previous highs, the intense attention from investors on a smaller subset of areas compared to the previous cycle has helped push up the price per unit (PPU) beyond its peak for full-service hotels. According to third quarter 2015 data from Real Capital Analytics, the 12-month trailing average PPU for full-service hotel properties rose to $243,817, which was a 66.7-percent
increase from the previous cycle’s peak in fourth quarter 2007.

At the same time, PPU for limited-service hotels was relatively flat and down slightly from the previous peak recorded in the second quarter 2011. It is likely that the limited-service subsector is pricing in potential supply additions that may disrupt future projected returns. While it is too early to say if the limited-service hotel subsector will continue its sluggish performance, many investors continue to proceed with caution.

These facts are well-reflected in Real Capital Analytics’ transaction-based cap rate trends, as shown in Exhibit 4-E2. Though the cap rates for both limited-service and full-service hotels were 82 basis points lower in third quarter 2015 from their previous cycle lows, only full-service hotels seem to be maintaining momentum with further cap rate compression, as the rate has declined 20 basis points over the past year. At the same time, the cap rate for limited-service hotels has completely stagnated at 8.5 percent for the past year. For both subtypes, the cause may be directly related to their expected average daily rate (ADR) increases.

One of the growing narratives surrounding commercial real estate, including hotel properties, involves the impact of foreign capital investment. With approximately $8.5 billion in acquisitions on a 12-month trailing basis, third quarter 2015 data from Real Capital Analytics shows that cross-border investors made 18 percent of total acquisitions. (Cross-border investors had already surpassed their acquisitions from the previous cycle in third quarter 2014, and now acquisitions are 24.1 percent higher.) Many of these purchases, however, are targeted at high-quality hotel properties with numerous rooms. For example, Anbang Insurance Group based in Beijing, China, purchased the 1,425-unit Waldorf Astoria in New York City for...
$1.95 billion, or $1,368 per unit, from Hilton Worldwide.

The change in acquisition composition has been dominated by institutional and equity fund investors. In fourth quarter 2007, institutional and equity fund investors purchased $53.5 billion in hotel properties, or 66 percent of total hotel acquisitions, per Real Capital Analytics. Although institutional and equity fund investors have not been acquiring many properties in the current environment, prices have improved enough for many of those who had purchased properties during previous cycles to cleanly exit the market. As of third quarter 2015, institutional and equity fund investors sold $19.14 billion, or 43 percent of total hotel dispositions, during the past 12 months, as shown in Exhibit 4-E3.

**Fundamentals**

Despite the persistently sluggish economy, fundamentals for the hotel sector have slowly climbed to new heights, as many families and individuals become more comfortable spending money on leisure, including travel and hotels. This has led to record-breaking occupancy levels, ADR, and an ever expanding market. However, according to PKF-Hospitality Research, occupancy is expected to increase 120 basis points to 65.6 percent by end of 2015, which is 100 basis points less than the growth rate from 2013 to 2014. Additionally, occupancy is expected to slow even further, and increase by just 40 basis points to 66.0 percent at the end of 2016, as demonstrated in Exhibit 4-E4.

PKF-Hospitality Research expects hotel supply to increase by 1.1 percent in 2015 compared to the prior year, while demand is expected to increase by a respectable 3.0 percent. However, annual supply and demand growth has slowed and is expected to slow further, so that demand is likely to be only 60 basis points higher than supply in 2016, as shown in Exhibit 4-E5.

Revenue growth may continue its magnanimous reign for hotels. PKF-Hospitality Research expects ADR to increase by 4.7 percent in 2015 over the previous year. This substantial profit growth for hotel owners should continue for longer than what may seem possible, because ADR typically lags occupancy in positive growth. So as occupancy stagnates at record levels, it is expected that ADR will expand further to $126.93 by the end of 2016. That is a 5.5-percent annual increase in ADR.

**Outlook**

Overall, the hotel sector is expected to perform fairly well through 2016
on a fundamentals basis, although there will likely be some distinct performance differences in the subtypes. While luxury hotels had a quicker recovery, the performance may be nearing peak. Growth of the subtype is expected to be slowed by occupancy, which is projected to increase only 0.1 percent in 2016 to 75.5 percent, according to PKF-Hospitality Research. On the other hand, ADR for luxury hotels is expected to grow 5.4 percent in 2016.

Supplanting luxury as the darling of hotels will likely be upper midscale hotels. While ADR growth for midscale hotels was 4.7 percent in 2015, ADR is expected to grow an additional 6.2 percent in 2016, according to PKF-Hospitality Research. Also, upper midscale hotels are likely to have the best occupancy growth in 2015 and 2016, with 150 basis points and 90 basis points respectively, so that by the end of 2016, occupancy is forecast to be 68.9 percent. It should come as little surprise that the upper midscale subtype is expected to see revenue per available room (RevPAR) growth of 7.6 percent in 2016, according to PKF-Hospitality Research.

Cap rate compression for the hotel property type overall is likely to slow, however rates for high-quality, full-service properties in the gateway metros may compress further. Further cross sector compression is possible in an environment where interest rates are rising slightly, although rising interest rates could certainly slow the tightening of the equity spread. Even in those circumstances, expect more major deals, as commercial real estate continues to be an attractive investment compared to many other alternatives.
CROSSCURRENTS INCREASE IN 2016

As the year 2016 gets underway, the number of crosscurrents through which investors must navigate in this increasingly interconnected world is rising. Many economists expect that the year 2016 is likely to be another year of steady but unspectacular economic growth in the U.S., and while it may be slower than we hope, the U.S. economy is more stable and is growing more than the economies of most other developed nations. Despite the relative strength of the U.S. economy, however, the recent volatility in the stock and bond markets has been staggering and additional geopolitical and economic concerns, including weak manufacturing data, are a concern. In addition, there are fears about escalating tensions in the Middle East, increasing terrorism at home and abroad, and we have a national debt that exceeds $19 trillion, per the U.S. Treasury.

On the other hand, early economic data also show that the auto industry experienced strong new car sales in 2015, per Autodata, and labor market conditions have been improving, as reported by the BLS. Interest rates are still very low, although the Federal Reserve has started to increase the federal funds rate. While inflation is not expected to meet the Federal Reserve’s target range of 2 percent until the end of 2018 (according to the FOMC’s meeting minutes from Dec. 15 and 16, 2015), low fuel and commodity prices may provide a boost to consumers’ pocketbooks, prompting them to spend, save, and pay down debt, all of which contribute to the overall health of the economy. However, as noted at the Davos World Economic Forum, there are concerns about the lack of pricing pressure worldwide and deflationary pressures in the U.S. At the time of this writing, the Russell 2000, Nikkei, FTSE 100, and other major stock market indices had entered bear market territory mostly based on the slowing Chinese economy and the freefall in oil prices. Other concerns identified at Davos include the possibility that central banks will need to inject additional quantitative easing measures into their economies, and that there are a number of black swan events possible.

STABILITY IN A NERVOUS WORLD

Such crosscurrents increase the uncertainty for investors, but commercial real estate—especially given the property fundamentals as discussed in Chapter 4 of this report—continues to be very attractive. It is not surprising that the perceived high value of this asset class has increased pricing in some markets to record levels in 2015, as well as having encouraged a variety of new investors to enter the real estate market. A few of the more interesting property transactions in 2015 include:

- The Waldorf Astoria Hotel in New York City was sold to Anbang Insurance Group in China for $1.95 billion, the steepest price tag ever for a U.S. hotel, per Reuters.

- Tower Two at Rincon Hill in San Francisco was sold for $410 million, or $1.37 million per apartment unit, in a joint venture between Maximus Real Estate Partners and Rockpoint Group. The highest price paid for an apartment building in the Bay Area since at least 2007, the building is said to be converted to condominiums, according to the San Francisco Business Times.

- The Pacific Northwest’s tallest skyscraper, the 76-story Columbia Center in Seattle, was sold to Hong-Kong-based Gaw Capital Partners for $711 million, according to Real Capital Analytics. This is the first time a large Asian investment firm has acquired a trophy tower in Seattle.

- Stuyvesant Town and Peter Cooper Village, an 11,200-unit apartment complex, was purchased by
Blackstone Group and another large investor for about $5.3 billion, according to The Wall Street Journal. This was about the same price paid by Tishman Speyer in 2006, and was the highest single property sale price at that time.

These are the kinds of prices that have had experienced investors shaking their heads in amazement throughout most of 2015. And now, given recent challenges in the capital markets, new questions dominate the conversation. Is it possible for commercial real estate prices to increase further in this cycle, or have they topped out? If they have topped out, will they stabilize, or like stock market values, will they plummet into correction territory?

The answers to these questions, based on available research trends and analysis, are included in our collective outlook for the year ahead, as presented by Situs RERC, Deloitte, and NAR in Expectations & Market Realities in Real Estate 2016: Navigating Through The Crosscurrents, and are summarized in this chapter.

ECONOMIC HIGHLIGHTS

- The IMF, World Bank, and many other forecasters have steadily downgraded their global economic growth forecasts. However, according to NAR, the U.S. economy is in reasonable shape, with GDP expected to grow about 2.5 percent to 2.8 percent in 2016, and growth expected to generate approximately 2.5 million to 3 million net new jobs and to steadily boost worker wages.

- The housing market continues to recover. The inventory of existing and new homes for sale has been rather tight, with a supply of only about 5 months in most of 2015, as stated by NAR. Home prices have been steadily rising, increasing by 11.5 percent in 2013, 5.7 percent in 2014, and a likely 5.5 percent to 6.0 percent in 2015, per NAR.

- According to the Federal Reserve, the dollar is now at its strongest point since 2004, having risen by 26 percent from a cyclical low in 2011. However, the strength of the dollar compared to other currencies is causing a drag on net exports.

- The collapse in oil prices has been a mixed bag. Lower fuel costs have given many consumers more cash on hand to spend on automobiles, restaurants, and homes. However, it has also caused thousands of good-paying jobs to be eliminated. There has been a net job loss in North Dakota, Louisiana, Oklahoma, and West Virginia, according to the BLS.

- Although there has been no inflation in 2015 per the BLS, some economists expect the decline in gasoline and other energy prices to subside in early 2016. Other prices, including rising apartment property rents, are putting pressure on the CPI.

CAPITAL MARKETS HIGHLIGHTS

- After keeping the federal funds rate at near-zero percent for the past seven years, the Federal Reserve raised the targeted federal funds rate range by 25 basis points to 0.25 percent to 0.50 percent in December 2015. Although there has been little change thus far in long-term interest rates, they may eventually increase, especially if inflation begins to increase and the FOMC continues to raise short-term rates gradually over the next few years as forecasted. Meanwhile, central banks in many other countries have been increasing their quantitative easing efforts in order to stimulate growth.

- After record highs in the major stock market indices in mid-2015, there was a drastic sell-off in the global markets in late 2015 and early 2016, with several of the major indices dropping into bear market territory. According to analysis in The Wall Street Journal and elsewhere, the sell-off was due primarily to the decline in the price of oil and the slowdown in the Chinese economy.
economy, but other geopolitical issues were also raising havoc.

■ As volatility increased, commercial real estate continued to remain attractive to many investors due to still-low interest rates in 2015, the tangible nature of the asset class, its relative stability, and rational returns.

■ According to Situs RERC’s analysis, the investment market for commercial real estate in the U.S. totaled roughly $6.18 trillion in 2015, including $3.54 trillion in debt-based investment properties and $2.64 trillion in equity-based institutional properties.

■ CMBS volume totaled $101 billion in 2015, according to Commercial Mortgage Alert. Given the current regulatory environment, CMBS issuance may be reaching its upper boundary in this cycle, although since many 10-year loans originated in 2006 and 2007 have yet to be refinanced, CMBS issuance could increase significantly in 2016 and 2017.

■ New loan originations improved in 2015, and on the surface, it appears that the loan-to-value (LTV) ratios improved as well. Real Capital Analytics reports that today's average LTV ratio for office, retail, industrial, and hotel properties is 4.83 percent lower than the May 2007 average, and the current LTV ratio for the apartment sector is 3.69 percent lower than the May 2007 LTV ratio. However, since LTV averages do not take into account unsecured debt, the LTVs on leverage may be artificially low, per Real Capital Analytics.

■ One of the looming questions regarding the federal funds rate increases is what impact they will have on the 10-year Treasury yield rate. Situs RERC’s forecast indicates that without an increase in inflation and increased growth in the global economy, the 10-year Treasury is likely to remain low. (At the close of business on Jan. 20, 2016, the 10-year Treasury yield rate slipped to 1.98 percent.)

■ New regulations, including expanded Regulation AB rules, the Risk Retention Rule, and FINRA Rule 2340, may affect lending in 2016 and 2017. EB-5 was extended through September 2016, and is expected to continue to encourage commercial real estate development among foreign investors.

PROPERTY MARKETS HIGHLIGHTS

■ Commercial real estate benefitted from a positive macroeconomic environment in 2015. As discussed in Chapter 4 of this report, fundamentals continued their upward trend, as demand for space advanced across all property types, driving vacancies lower and rents higher.

■ With ample capital and funding sources available, many investors pursued deals and sought yields across the full spectrum of markets, including the secondary and tertiary markets.

■ Transaction volume was $375.3 billion in the first nine months of 2015, based on data from Real Capital Analytics. Office sector volume made up 29 percent of the total, followed by apartment assets at 26 percent, retail assets at 17 percent of the total, and industrial assets at 14 percent.

■ Commercial property prices rose 16 percent in the first half of 2015, according to the Moody’s/Real Capital Analytics Commercial Property Price Index.

■ Cap rate compression moderated during 2015, with average transaction-based cap rates for all property types declining from 7.1 percent in third quarter 2014 to 6.9 percent in third quarter 2015, per Real Capital Analytics.

Office Sector

■ Positive changes in fundamentals and rising expectations of growing cash flow drove office property deals. Year-to-date office transaction volume reached $108.5 billion in third quarter 2015, while average
prices rose to $243 per square foot, per Real Capital Analytics. CBD property prices averaged $386 per square foot and suburban property prices averaged $177 per square foot. Cap rates declined to 6.7 percent in third quarter 2015.

Office fundamentals improved in 2015 due to rising demand. The vacancy rate dropped to 15.1 percent in third quarter 2015, and is expected to decline to 14.6 percent in 2016, according to JLL. Asking rents are expected to increase 2.8 percent in 2015 and to increase 2.2 percent in 2016.

Industrial Sector

Changing consumer spending patterns and an increase in e-commerce activity has strengthened demand in the industrial property sector. Year-to-date transaction volume was approximately $50.2 billion in third quarter 2015, and the average price increased 8 percent in the first nine months of the year to $81 per square foot, according to Real Capital Analytics. Average cap rates dropped to 6.8 percent in third quarter, 180 basis points lower than at the peak of 8.6 percent in 2009.

Availability rates tightened in 2015, with a 100-basis point drop on a yearly basis to 9.6 percent at the end of third quarter 2015, per CBRE Econometric Advisors, matching the prior cycle low recorded in 2007. Average rents advanced 6.8 percent through the first nine months of 2015, and are expected to increase 6.2 percent in 2016.

Retail Sector

According to Real Capital Analytics, year-to-date sales of significant retail properties totaled $65.2 billion in third quarter 2015, a 6.8-percent increase compared with the same period in 2014. Year-to-date average price per square foot was $213 in third quarter 2015, compared to $198 the prior year. The average cap rate for all retail properties was 6.5 percent in third quarter.

The vacancy rate for the total retail market decreased to 11.3 percent in third quarter 2015, per CBRE Econometric Advisors, while net asking rental rates increased to 15.68 per square foot. Rental rates are expected to increase by about 5 percent in 2016, but have yet to return to the peak levels seen in 2007.

Apartment Sector

Apartment properties had a total of $98.3 billion in transaction volume in the first three quarters of 2015, stated Real Capital Analytics. The average PPU was $131,233 in third quarter 2015, which was significantly higher than the 2014 average. The average cap rate for the apartment sector was 5.9 percent in third quarter 2015.

The vacancy rate declined to 5.0 percent in third quarter 2015, and is expected to decline to a low of 4.9 percent in early 2016 before inching upward by the end of 2016 due to expected new supply, according to Axiometrics. Annual effective rental growth rose to 4.9 percent in third quarter 2015, and is expected to peak at 5.0 percent in first quarter 2016.

Hotel Sector

As of third quarter 2015, the transaction volume for hotel properties was $45.4 billion, per Real Capital Analytics. The PPU for full-service hotel properties rose to $243,817 in third quarter, a 66.7-percent increase over the prior year, while the PPU for limited-service hotels was mostly flat. The cap rate for the all hotels average was 8.1 percent in third quarter 2015.

Although final numbers were not yet available at the time of this writing, hotel sector occupancy was expected to increase to 65.6 percent by the end of 2015 and to increase to 66.0 percent at the end of 2016, per PKF-Hospitality Research. ADR was expected to increase by 4.7 percent in 2015 and to increase by 5.5 percent in 2016.

VALUE VS. PRICE CHALLENGED

Although the pace of commercial real estate price increases slowed in late 2015 and we do not expect to see average prices for commercial real estate to increase much more, if any, in 2016, investors continued to believe that property value generally outweighed price in fourth quarter 2015, according
to Situs RERC’s institutional investment survey analysis. As shown in Exhibit 5-1, investors rated commercial real estate value compared to price at 5.2 on a scale of 1 to 10, with 5 indicating that value and price are equal and with anything higher than 5.0 indicating value is higher than the price. Investor views have been up and down during the recovery, with values pulling up prices in some instances and with the huge amount of capital pushing up values in other instances.

However, there is no doubt that high prices are putting investors at risk. The higher that prices go and the longer that trend continues, the bigger the correction and the harder the fall when prices do eventually come down. According to many investors, we are already seeing some pushback on prices.

**COMMERCIAL REAL ESTATE VALUE EXPECTATIONS FOR 2016 AND BEYOND**

When examining commercial property value, it is important to examine gross value as well as net value. Commercial real estate gross value (appreciation plus CapEx) reached a new peak in second quarter 2008, and as analyzed by Situs RERC and shown in Exhibit 5-2, value has increased 77.2 percent since first quarter 2000. Gross value declined 29.3 percent in the 2009 trough, but prices have increased 62.6 percent from 2009 to today. From first quarter 2000 to present, the gross value of commercial real estate has increased 103.6 percent and continues to increase over the previous peak.

However, when considering commercial real estate on a net value basis (or considering appreciation only), the value is much less. By the time prices reached a new peak in first quarter 2009, value had increased 48.1 percent since 2000. As analyzed by Situs RERC, the net value of commercial real estate dropped 31.7 percent in the 2009 trough, and prices have increased 46.2 percent from 2009 to today. Even though the increases during the recoveries over the past 15 years appear significant on the graph in Exhibit 5-3, the net value of commercial real estate increased 47.9 percent from first quarter 2000 to present. It is interesting to note that despite the increase in prices, as of third quarter 2015, net values had not yet reached their previous peak.

**AS WE LOOK AHEAD TO 2016**

Given the crosscurrents we are aware of and can anticipate, 2016 will be an interesting period for investors. We
seem to be entering a new phase of the cycle, where commercial real estate is fully-priced and where the asset class is considered mature. Values and prices are beginning to flatten, and Situs RERC expects them to level off in 2016. We can still expect reasonable return performance, although returns will be based primarily on income (vs. capital appreciation) in 2016. If commercial real estate adjusts to this new phase well, it is likely that the asset class will have a soft landing.

Last year in our annual Expectations & Market Realities in Real Estate 2015—Scaling New Heights, we stated: “…broad market prices and values have room to increase for 12 to 18 months, after which we will enter a period where values most likely will begin to level off.”

It is now 12 months later, and as we move into 2016, we are seeing values and prices begin to flatten, like we expected a year ago. As shown in Exhibits 5-2 and 5-3, we expect this period of leveling-off to continue for another 12 months or so, during which time commercial property performance should continue to remain relatively strong, primarily due to the income component.

According to the National Council of Real Estate Investment Fiduciaries (NCREIF) Property Index (NPI), returns for fourth quarter 2015 were 2.91 percent, which was comprised of 1.72 percent appreciation and 1.2 percent income. However, it is important to note that while NPI income was stable at 1.2 percent throughout 2015, this was down slightly from 1.3 percent in 2014. In addition, appreciation declined throughout the year (from 2.51 percent in first quarter 2015 to 1.72 percent in fourth quarter 2015). Total annual NCREIF returns were 13.5 percent for 2015.

We cannot see into the future, but given the return performance in 2015 and Situs RERC’s expectation that values and prices in most markets will level off in 2016, we expect returns to be flat in 2016. As discussed in this report, the economy is expected to continue much as it has during 2015, the capital markets are expected to be accommodative, and fundamentals are strong with rental growth expected to increase slightly in 2016 for most property sectors. Further, due to leases in place, we do not expect incomes to decline, although capital appreciation will likely slow. It is also important to add that fundamentals are not expected to deteriorate in 2016, as commercial real estate has not been overbuilt in most markets. Vacancies are expected to continue to decline slightly in 2016 for all property types, except in the apartment sector, where vacancy may increase as more completions are projected to come online in mid-2016.

As demonstrated in our collective summary of economic expectations as they pertain to real estate (see Exhibit 5-4), we have provided a scenario forecast of what investors might expect to occur in 2016 if events continue as expected (baseline forecast), if economic growth decelerates, and if economic growth increases more than expected.

However, it is important to point out that if GDP growth either accelerates or decelerates more than expected, commercial real estate may still be a favored investment alternative on a risk-adjusted basis. In an investment environment with many crosscurrents, a defensive posture may be called for, and commercial real estate is generally well-suited to this role.

Commercial real estate is one of the safest investments because prices and values generally do not change at the drop of a hat. Commercial real estate is also a tangible asset, and as such, it is easier to see and understand what is going on with individual properties or with the asset class overall. And then there is the strong income flow with commercial real estate, which is not available with many other investment alternatives, and which we expect to continue for 2016.
### Exhibit 5-4. Alternative Economic Scenarios for 2016

<table>
<thead>
<tr>
<th></th>
<th>Lower Case Scenario: Decelerating Growth</th>
<th>Baseline Case Scenario: Continued Slow Growth</th>
<th>Higher Case Scenario: Better Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>U.S. GDP Real Growth</strong></td>
<td>Less than 2.0 percent</td>
<td>2.0 percent to 2.5 percent</td>
<td>2.5 percent or greater</td>
</tr>
<tr>
<td><strong>Probability</strong></td>
<td>Somewhat Likely</td>
<td>Most Likely</td>
<td>Possible</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td>New layoffs in major industries occur.</td>
<td>Unemployment declines slightly below 5 percent at full employment and averages 250,000 new jobs per month. The labor participation rate remains around 62 percent. Improving labor market steadily causes wage growth to increase.</td>
<td>With average job growth of 300,000 or more workers per month, unemployment drops below 5 percent. Overqualified workers matriculate to respective fields, and discouraged workers re-enter the workforce. Wage growth increases about 5 percent.</td>
</tr>
<tr>
<td><strong>Housing Market</strong></td>
<td>Prospective buyers are unwilling or unable to finance a home. The housing recovery stagnates, and home prices decline. Higher home foreclosure risk due to weak demand and higher financing costs.</td>
<td>Existing home sales stabilize around 5.5 million units annually, which boosts new home sales to generally stay above 500,000 annualized. Top markets establish new price highs, while bottom markets make more significant traction towards pre-recession era high. The housing market will lead the residential investment component of GDP to grow by 8 percent to 10 percent. Pricing starts to be a concern as first-time home buyers are priced out of the market.</td>
<td>With a stronger job market and increasing wage growth, home buyers with their new accumulated wealth and Millennials with more secure jobs outside major metropolitan areas begin to purchase homes. Improvement in the housing market accelerates. Although new construction increases, supply is unable to meet demand, pushing up prices and giving a sizeable boost to new home starts.</td>
</tr>
<tr>
<td><strong>Consumer Spending</strong></td>
<td>Consumers retrench as personal and real disposable incomes fall due to stagnating wage growth and increasing interest rates. Purchasing power falls as prices start to increase. Large durable goods are hurt the most, but all non-essential product sales suffer. Increase in the demand for inferior goods.</td>
<td>Consumer confidence continues to improve and stabilizes to levels of 100 or slightly higher. Personal consumption expenditures are estimated to grow at a rate of 2.7 percent. Consumer spending increases due to continuously low energy and fuel costs. This creates a further positive feedback loop for inflation and GDP.</td>
<td>Consumers feel secure with their jobs, and with wage growth, begin to spend freely. Personal saving falls as consumer confidence stays above 110. Major purchases and upgrades to durable goods will occur.</td>
</tr>
<tr>
<td><strong>Business Spending</strong></td>
<td>Businesses struggle to keep up with increasing interest rates, and expenses/costs are cut. New hiring ceases, wage growth stays flat, and layoffs commence. Efficiency is paramount for survival.</td>
<td>Business profits expand and spending increases, as businesses gain more confidence in positive economic growth and low but stable fuel costs. Business investment grows at a rate of 3 percent.</td>
<td>Businesses spending increases, especially on infrastructure. Ensuring competition for the growing market drives more investment in R&amp;D. The search for new investments accelerates start-ups and venture capital growth.</td>
</tr>
<tr>
<td><strong>Government Spending</strong></td>
<td>Possible increase in government spending via fiscal policy/presidential election. In deflationary environment, Federal Reserve quickly drops short-term rates back to near-zero percent.</td>
<td>Depending on the presidential election results, the federal deficit may be reduced due to some budgetary adjustments but not to the point of stagnating growth. Revenue increases from a stable economy.</td>
<td>Federal debt starts to decrease due to increased revenues. However, the government still operates at a deficit due to the cost of the public sector growth. Discussions about reducing the cost of government programs intensify and the President and Congress work together on budget.</td>
</tr>
<tr>
<td><strong>Trade Balance</strong></td>
<td>European deflation, along with a more widespread global economic slowdown, especially in China, may raise the trade deficit close to $500 billion.</td>
<td>The trade deficit remains steady as the domestic economy strengthens and trading partners continue to recover and import increases resume. Global GDP growth remains above 3 percent.</td>
<td>The trade deficit narrows as the economies in Europe and our major trading partners strengthen.</td>
</tr>
<tr>
<td><strong>Inflation</strong></td>
<td>Deflation takes hold, with prices, including oil/ennergy continuing to fall.</td>
<td>As energy prices stabilize, inflation will be driven by other sectors, but remains generally weak and below the Federal Reserve's target range of 2 percent.</td>
<td>Inflation approaches 3.0 percent, and we see the first price increases in durable goods in more than 3 years.</td>
</tr>
<tr>
<td><strong>Interest Rates</strong></td>
<td>Continued concern about the lack of global growth complicates monetary policy. The 10- year Treasury yield rate falls, closer to 1 percent.</td>
<td>The federal funds rate increases about 75 bps in 2016, if the FOMC continues raising rates as planned. 10-year Treasury yield rates remain around 2 percent.</td>
<td>The U.S. economy accelerates, and the increase in the Federal Reserve's short-term interest rates further complement growth. Ten-year Treasury yields rise to 3 percent.</td>
</tr>
<tr>
<td><strong>Commercial Real Estate</strong></td>
<td>Ten-year Treasury rates decline. Debt and equity markets quickly respond to the changes. Sales volume and property prices drop, and cap rates start to increase. At the same time, the 3-year wave of debt maturities hits, with a significant portion requiring special servicing, and delinquencies increasing to between 5.0 percent and 6.0 percent. Vacancy rates level off or may start to increase in some areas (particularly oil producing areas), depending on number of layoffs.</td>
<td>Commercial real estate prices level off and enjoy another year of high volume and high prices in 2016. Fundamentals remain positive, and may continue to improve, which will help maintain demand. Foreign investment increases. Cap rates are not likely to compress much in 2016, but spreads will remain healthy. According to Situs RERC’s value outlook, total returns are expected to be approximately 8.0 percent to 10.0 percent for institutional properties on an unleveraged basis.</td>
<td>Fundamentals increase for all property types. Investors move in on infrastructure and niche assets such as parking garages, etc. to find yield. Old and outdated properties (suburban office and small- to medium-sized malls) are updated to more desirable buildings. Volume sets another record. Pricing surpasses historic highs, increasing robustly for all property types and markets. Prices in secondary and tertiary markets reach pre-recession era high. Debt maturities are almost all refinanced via increased property performance and capital appreciation. CMBS issuance reaches $150 billion or more with minimal impact on loan quality. Risk of forming another CRE bubble increases.</td>
</tr>
</tbody>
</table>

**NOTE:** These are not the only scenarios that are possible. There will usually be differences between the forecasted and actual results because events and circumstances frequently do not occur as expected, and those differences may be material.

VALUE VS. PRICE INDEX RATINGS FOR PROPERTY TYPES BY METRO

According to Situs RERC’s Value vs. Price Index—a new analytics-based tool designed to sort through various investment characteristics and to help identify the best markets for investing in commercial real estate—as the recovery expands, many of the top 20 best investment markets are in secondary and tertiary markets, especially in the South region of the U.S. Although other strong markets are not included in the list, the ones listed here have the best value vs. price perspective, based on Situs RERC’s analysis, of the top 48 markets in the U.S.

A closer look at the markets shows that besides being the number one location for the office and apartment sectors, Orlando also has strong appeal for retail and industrial property investors. And given the strong economic diversity and growth in Texas, it is not surprising that three markets (Austin, San Antonio, and Dallas) are among the top investment markets on a value vs. price level for each property type. If one is planning to invest in the Midwest region, Omaha offers the best value vs. price relationship for the apartment and office sectors, though it also presents good value for retail and is the only Midwest city among the top 20 listed with good industrial investment opportunity.

Interestingly, no cities in the Northeast U.S. are listed as strong value investments among the top 20 markets for any of the property sectors, although there are several cities in Ohio where there should be good value vs. price opportunity.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Office Market</th>
<th>Industrial Market</th>
<th>Apartment Market</th>
<th>Retail Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Orlando</td>
<td>Austin</td>
<td>Orlando</td>
<td>San Antonio</td>
</tr>
<tr>
<td>2</td>
<td>Raleigh/Durham</td>
<td>San Antonio</td>
<td>San Antonio</td>
<td>Austin</td>
</tr>
<tr>
<td>3</td>
<td>Austin</td>
<td>Dallas</td>
<td>Omaha</td>
<td>Tampa</td>
</tr>
<tr>
<td>4</td>
<td>Atlanta</td>
<td>Seattle</td>
<td>Raleigh/Durham</td>
<td>Dallas</td>
</tr>
<tr>
<td>5</td>
<td>Omaha</td>
<td>Richmond/Norfolk</td>
<td>Dallas</td>
<td>Orlando</td>
</tr>
<tr>
<td>6</td>
<td>Phoenix</td>
<td>Orlando</td>
<td>Austin</td>
<td>Columbus</td>
</tr>
<tr>
<td>7</td>
<td>Dallas</td>
<td>Nashville</td>
<td>Atlanta</td>
<td>Omaha</td>
</tr>
<tr>
<td>8</td>
<td>San Antonio</td>
<td>Charlotte</td>
<td>Phoenix</td>
<td>Atlanta</td>
</tr>
<tr>
<td>9</td>
<td>Nashville</td>
<td>Raleigh/Durham</td>
<td>Nashville</td>
<td>Nashville</td>
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<tr>
<td>10</td>
<td>Miami</td>
<td>Salt Lake City</td>
<td>Columbus</td>
<td>Miami</td>
</tr>
<tr>
<td>11</td>
<td>Richmond/Norfolk</td>
<td>Denver</td>
<td>Tampa</td>
<td>Las Vegas</td>
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<td>Phoenix</td>
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<td>Seattle</td>
<td>Portland</td>
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<td>Denver</td>
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<td>Las Vegas</td>
<td>Kansas City</td>
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<td>16</td>
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<td>Raleigh/Durham</td>
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<tr>
<td>20</td>
<td>Tampa</td>
<td>Miami</td>
<td>San Diego</td>
<td>Denver</td>
</tr>
</tbody>
</table>

Source: Situs RERC, 3q 2015.
APPENDIX

SECTION 1

State Employment Growth........................................................................................................................................... A2, A3

SECTION 2

“Wall of CMBS Loan Maturities Shrinks, Remains Daunting,” ........................................................................................................ A4, A5

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SECTION 3

Investor Highlights for the Debt, Equity, and Cross-Border Investments................................................................................. A6
## State Employment Growth (1-25)

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Net New Jobs (over 12 months)</th>
<th>Job Growth Rate (12-month % change)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Idaho</td>
<td>25,300</td>
<td>3.8</td>
</tr>
<tr>
<td>2</td>
<td>Utah</td>
<td>47,700</td>
<td>3.5</td>
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<tr>
<td>3</td>
<td>Nevada</td>
<td>42,400</td>
<td>3.4</td>
</tr>
<tr>
<td>4</td>
<td>Florida</td>
<td>239,900</td>
<td>3.0</td>
</tr>
<tr>
<td>5</td>
<td>Washington</td>
<td>9,300</td>
<td>3.0</td>
</tr>
<tr>
<td>6</td>
<td>California</td>
<td>463,800</td>
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<td>7</td>
<td>South Carolina</td>
<td>57,400</td>
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<td>8</td>
<td>Oregon</td>
<td>46,600</td>
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<td>9</td>
<td>Arizona</td>
<td>60,300</td>
<td>2.3</td>
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<td>Georgia</td>
<td>96,900</td>
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<td>Massachusetts</td>
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<td>12</td>
<td>North Carolina</td>
<td>91,600</td>
<td>2.2</td>
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<td>13</td>
<td>Colorado</td>
<td>51,700</td>
<td>2.1</td>
</tr>
<tr>
<td>14</td>
<td>Indiana</td>
<td>60,300</td>
<td>2.0</td>
</tr>
<tr>
<td>15</td>
<td>Maryland</td>
<td>51,900</td>
<td>2.0</td>
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<tr>
<td>16</td>
<td>Hawaii</td>
<td>12,000</td>
<td>1.9</td>
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<tr>
<td>17</td>
<td>South Dakota</td>
<td>8,000</td>
<td>1.9</td>
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<tr>
<td>18</td>
<td>Michigan</td>
<td>79,600</td>
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<td>New York</td>
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<td>Kentucky</td>
<td>31,700</td>
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<td>24</td>
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<tr>
<td>25</td>
<td>Connecticut</td>
<td>24,300</td>
<td>1.4</td>
</tr>
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</table>

Source: BLS, December 2015.
## State Employment Growth (26-50)

<table>
<thead>
<tr>
<th>Rank</th>
<th>State</th>
<th>Net New Jobs (over 12 months)</th>
<th>Job Growth Rate (12-month % change)</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Iowa</td>
<td>22,100</td>
<td>1.4</td>
</tr>
<tr>
<td>27</td>
<td>New Jersey</td>
<td>54,200</td>
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</tr>
<tr>
<td>28</td>
<td>Ohio</td>
<td>77,300</td>
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</tr>
<tr>
<td>29</td>
<td>Virginia</td>
<td>47,900</td>
<td>1.3</td>
</tr>
<tr>
<td>30</td>
<td>Nebraska</td>
<td>12,000</td>
<td>1.2</td>
</tr>
<tr>
<td>31</td>
<td>Rhode Island</td>
<td>5,800</td>
<td>1.2</td>
</tr>
<tr>
<td>32</td>
<td>Alabama</td>
<td>21,100</td>
<td>1.1</td>
</tr>
<tr>
<td>33</td>
<td>Missouri</td>
<td>27,400</td>
<td>1.0</td>
</tr>
<tr>
<td>34</td>
<td>New Hampshire</td>
<td>6,500</td>
<td>1.0</td>
</tr>
<tr>
<td>35</td>
<td>Delaware</td>
<td>4,300</td>
<td>1.0</td>
</tr>
<tr>
<td>36</td>
<td>Maine</td>
<td>5,800</td>
<td>0.9</td>
</tr>
<tr>
<td>37</td>
<td>Montana</td>
<td>4,100</td>
<td>0.9</td>
</tr>
<tr>
<td>38</td>
<td>Kansas</td>
<td>10,900</td>
<td>0.8</td>
</tr>
<tr>
<td>39</td>
<td>Pennsylvania</td>
<td>48,700</td>
<td>0.8</td>
</tr>
<tr>
<td>40</td>
<td>Vermont</td>
<td>2,600</td>
<td>0.8</td>
</tr>
<tr>
<td>41</td>
<td>Minnesota</td>
<td>24,300</td>
<td>0.8</td>
</tr>
<tr>
<td>42</td>
<td>Alaska</td>
<td>2,300</td>
<td>0.7</td>
</tr>
<tr>
<td>43</td>
<td>Illinois</td>
<td>41,100</td>
<td>0.7</td>
</tr>
<tr>
<td>44</td>
<td>Mississippi</td>
<td>8,300</td>
<td>0.7</td>
</tr>
<tr>
<td>45</td>
<td>New Mexico</td>
<td>2,800</td>
<td>0.3</td>
</tr>
<tr>
<td>46</td>
<td>Wyoming</td>
<td>500</td>
<td>0.2</td>
</tr>
<tr>
<td>47</td>
<td>Oklahoma</td>
<td>1,300</td>
<td>0.1</td>
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<tr>
<td>48</td>
<td>Louisiana</td>
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<td>49</td>
<td>West Virginia</td>
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</tr>
<tr>
<td>50</td>
<td>North Dakota</td>
<td>-9,600</td>
<td>-2.0</td>
</tr>
</tbody>
</table>

Source: BLS, December 2015.
Wall of CMBS Loan Maturities Shrinks, Remains Daunting

By Susan Persin

The volume of CMBS conduit loans that were scheduled to mature last year totaled $54.5 billion, excluding those that previously had been defeased. That volume will increase further during the next two years, with the overwhelming majority comprised of loans originated in 2006 and 2007. Between now and 2018, $205.2 billion of conduit loans come due, with $87.1 billion maturing this year and $105.8 billion in 2017. Maturities scheduled for 2018 drop off to $12.8 billion.

Strong underlying market conditions mean that fewer loans have problems. Trepp’s U.S. CMBS delinquency rate fell to 5.13 percent in November from 5.8 percent a year earlier. The "seriously delinquent" rate, which tracks loans that are more than 60-days late, was 5.02 percent in November.

Healthy real estate market fundamentals have enabled many owners to increase rents and income, which has contributed to an increase in property values and made refinancing easier than it otherwise would be. Borrowers have taken advantage of the strong market fundamentals, the availability of debt capital and relatively low interest rates to defease CMBS loans and refinance properties before their underlying loans mature.

More than 1,300 loans totaling nearly $20 billion were defeased, or replaced by government securities, last year through November. That’s up from the full-year activity in 2014 and well above the $11.8 billion in 2013.

As a result of early refinancings and defeasance activity, the volume of maturities slated for 2016 and 2017 is down 17 percent from the $232 billion that last year would have been due during those years. A snapshot of Trepp data from late 2014 and well above the $11.8 billion in 2013.

Nonetheless, the volume of loans coming due in the next two years remains daunting. Consider that new CMBS issuance in 2015 totaled only $95.6 billion, less than what had been expected.

Meeting DSCR Requirements

Effect of Rate Changes on Loan DSCR

<table>
<thead>
<tr>
<th>Maturing CMBS Loans</th>
<th>Proportion of Loans with DSCR &lt;1.2 for Each Interest Rate Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance $bln</td>
<td>Coupon %</td>
</tr>
<tr>
<td>Office</td>
<td>$64.6</td>
</tr>
<tr>
<td>Retail</td>
<td>$63.2</td>
</tr>
<tr>
<td>Multifamily</td>
<td>$24.8</td>
</tr>
<tr>
<td>Lodging</td>
<td>$20.0</td>
</tr>
<tr>
<td>Industrial</td>
<td>$11.9</td>
</tr>
<tr>
<td>Total</td>
<td>$205.2</td>
</tr>
</tbody>
</table>

Source: Trepp LLC

Interest rates would have to rise substantially for debt service coverage levels to become a refinancing issue during the next two years. Interest rates remain below where most loans were originated in 2006 and 2007.

The average coupon for CMBS loans that were originated last year through mid-November was about 4.5 percent. At that coupon, net operating income easily covers debt service for most loans and property types. However, last month, the Fed began to increase its benchmark interest rate that had stayed near zero since 2008. Movement by the Fed sets the tone for other interest rates and could portend an increase on the long end of the yield curve.

We’ve reviewed how higher rates would affect borrowers’ ability to meet a 1.2x debt-service coverage ratio, a level that is generally considered to be the minimum required by lenders. It indicates that a property would generate 20 percent more in cash flow than that needed to fully service its loan. The data show that 96.5 percent of loans slated to mature through 2018 would meet that level at current rates. That’s up from 93.9 percent a year ago.

But as interest rates increase, meeting the DSCR requirement becomes more difficult. With a 100 basis point increase in interest rates, the proportion of loans meeting the DSCR hurdle falls to 94 percent. That compares with 88.9 percent a year ago. And if rates climb by 200 bps, 10.9 percent of loans could face difficulty refinancing, down from 19.8 percent in late 2014.

Office and retail, the two property types with the largest representation in the CMBS universe, face the greatest refinancing risk. About $65 billion of office loans are set to

Continued on next page

mature through 2018. A total of 7.8 percent of those loans already are at risk of not meeting the DSCR hurdle. That proportion climbs to 20.7 percent with a 200 bps increase in rates. Similarly, $63 billion of retail loans come due through 2018. A comparable increase in rates would make it challenging for nearly 15 percent of those loans to refinance.

Hotel properties would have the easiest time meeting the DSCR requirements despite their higher initial coupon rate. More than 90 percent of hotel loans facing maturity would meet the hurdle, even after a 200 bps increase in rates. But hotel cash flows are far more fickle than those of office and retail properties because of the properties’ reliance on transient leases.

Loan-to-Value Requirements

The picture’s not so rosy when loan-to-value ratios are used as the refinancing benchmark. Last year, the average underwritten LTV ratio for CMBS loan originations was 63 percent and ranged between 62 percent and 70 percent, depending on property type. The consensus has been that underwriting standards have softened, so stressed LTV levels are likely greater.

The amount that borrowers can refinance based on current collateral appraised values in some cases falls below the amount owed against the loan in need of refinancing. However, because lenders generally have been willing to provide more loan proceeds against apartment properties, which results in greater LTV ratios (leverage levels have been just shy of 70 percent), few such loans would have difficulty refinancing.

Meeting current LTVs is a more significant issue for retail properties, where the amount that could be financed, based on leverage levels lenders are providing, would fall below the balance that needs to be refinanced. That could create opportunities for providers of mezzanine financing or preferred equity, or other capital that could be used to fill the gap needed to meet current LTV requirements.

So the wall of CMBS loan maturities has shrunk, but remains significant. Widening bond spreads have translated to higher costs for borrowers in last year’s second half and could remain an issue this year. Borrowers will need to consider the impact of higher interest rates and lower LTV requirements on their ability to refinance.

### Loan-to-Value Ratio - 2015

<table>
<thead>
<tr>
<th></th>
<th>2015 LTV %</th>
<th>Total Appr Value ($bln)</th>
<th>Amt. Could Refi ($bln)</th>
<th>Outstanding Loan Bal ($bln)</th>
<th>Difference ($bln)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial</td>
<td>65.50</td>
<td>19.00</td>
<td>12.41</td>
<td>11.90</td>
<td>0.53</td>
</tr>
<tr>
<td>Lodging</td>
<td>62.46</td>
<td>32.70</td>
<td>20.41</td>
<td>20.00</td>
<td>0.45</td>
</tr>
<tr>
<td>Multifamily</td>
<td>68.91</td>
<td>37.70</td>
<td>26.39</td>
<td>24.80</td>
<td>1.63</td>
</tr>
<tr>
<td>Office</td>
<td>63.89</td>
<td>103.60</td>
<td>66.21</td>
<td>64.60</td>
<td>1.61</td>
</tr>
<tr>
<td>Retail</td>
<td>66.43</td>
<td>94.40</td>
<td>62.73</td>
<td>63.20</td>
<td>-0.43</td>
</tr>
</tbody>
</table>

Source: Trepp LLC

### Investor Highlights for Debt, Equity, and Cross-Border Capital Investment

#### Debt Transaction Highlights

<table>
<thead>
<tr>
<th>Non-Bank Financial Companies</th>
<th>Insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant source of capital for apartment loans, making up 10 percent of the market in first half 2015.</td>
<td>Third-biggest source of loan originations for retail properties, totaling $4.71 billion in the first half of 2015.</td>
</tr>
<tr>
<td>Average loan size for apartments increased to $14.8 million (up 29.7 percent) in first half 2015 compared to first half 2014.</td>
<td>Most active in lending for large quality assets like malls, originating 42.4 percent of loans for the sub-property types.</td>
</tr>
<tr>
<td>The riskiest apartment lender with a 78 percent LTV.</td>
<td>Retail properties have lowest LTV, averaging 60.6 percent for this lender type.</td>
</tr>
<tr>
<td>Though LTGs deteriorated the most for office loans (increasing to 81 percent) in first half 2015 compared to first half 2014, they have the lowest occupancy on average with 84.6 percent.</td>
<td>Average LTV for industrial properties increased to 66.8 percent, but is the second lowest average on the $2.38 billion originated in first half 2015.</td>
</tr>
</tbody>
</table>

#### National Banks

<table>
<thead>
<tr>
<th>Non-Bank Financial Companies</th>
<th>National Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Largest lender of industrial properties, originating $5.6 billion in loans (32 percent of total) in first half 2015.</td>
<td>Second largest originator of apartment loans behind government agencies, comprising 14 percent of loans originated for apartments in first half 2015.</td>
</tr>
<tr>
<td>Average industrial property loans are 66 percent larger (at $11.1 million) in first half 2015 compared to prior year, but cap rates went up only 10 basis points to 7.5 percent for similar quality properties.</td>
<td>While apartment loan size increased by 20.5 percent in first half 2015 compared to a year earlier, average loan size is $7.4 million, still lower than other lender types.</td>
</tr>
<tr>
<td>Second most consistent, with average LTV per loan changing only 2 percent for all major property types from the previous year.</td>
<td>Average LTV per loan changed only 1 percent from the previous year for all major property types.</td>
</tr>
</tbody>
</table>

#### Equity Transaction Highlights

| Private investors were the largest group of equity investors, making 43 percent of acquisitions and 46 percent of dispositions in third quarter 2015 on a 12-month trailing basis. | U.S. equity REITs outperformed the broader equity market during the first nine months of 2015. |
| Institutional/fund investors were the second-largest group of equity investors, with 25 percent of all equity acquisitions and 30 percent of all equity dispositions in third quarter 2015. | At the end of September 2015, the FTSE NAREIT All REITs Index included 223 REITs with a combined equity market capitalization of $890 billion. |
| Listed REITs made 13 percent of equity acquisitions and 11 percent of equity dispositions. | The self-storage sector was the top-performing property sector of the U.S. equity REIT market with a 20.46 percent gain during the first nine months of 2015, followed by manufactured homes with a 15.20 percent increase, and then apartments with a 7.52 percent gain. |
| Cross-border investors make 12 percent of equity acquisitions and 5 percent of dispositions. | Stock exchange-listed REITs raised a total of $49.05 billion in public capital year-to-date through the end of September 2015 compared with $51.18 billion raised during the same period in 2014. |

#### Cross-Border Highlights

| Global Logistic Properties from Singapore and the Singapore government top the list of largest volume acquired by cross-border capital with $12.5 billion and $9.4 billion, respectively, in 2015. | Ranking of countries for real estate acquisition plans for 2016 are the U.S., the UK, Germany, Canada, France, Australia, and China. |
| Canada is the country which invests the most in the U.S. (total of $23.9 billion). | Ranking of global cities for real estate investment include New York City, London, Los Angeles, Berlin, San Francisco, Paris, Tokyo, and Washington, DC. |
| Countries providing the best opportunity for capital appreciation are the U.S., Brazil, Spain, Ireland, the UK, Netherlands, China, and India. | A joint venture between Abu Dhabi Investment Authority and PSP Investments, a Canadian pension investment manager, purchased a 209-property $3.2 billion industrial portfolio in December 2015. |
| Manhattan became the central magnet in 2015 for cross-border capital, attracting 199 percent more than it did the previous year to total $27.1 billion. | The Waldorf Astoria was the largest single hotel purchase ever. The Anbang Insurance Group of China paid roughly $2 billion at a 3 percent cap. |

Sources: Real Capital Analytics, 3q 2015; AFIRE, January 2016; NAREIT, September 2015.
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- Market Studies
- Appraisal Reviews
- Due Diligence
- Litigation Support
- Financial Portfolio Valuation
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- Real Estate Market Studies
- Fairness Opinions

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- 6 of the top 10 apartment REITs based on equity market capital
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- Analysis of Distressed Real Estate, Debt and Equity
- Real Estate Due Diligence
- Real Estate Corporate Finance*
- Real Estate Valuations and Appraisals
- Regulatory Capital Markets
- Lease Advisory
- Real Estate Market Studies
- Fairness Opinions


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