YARDI® Matrix

U.S. Multifamily Outlook

Fall 2016

Rents Stay Strong, But See Deceleration

Rent Growth Drops to More Sustainable Levels

Multifamily Construction Maintains High Volume

Investors Lose Zeal, Fearing Overheating

Market Analysis

Fall 2016

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Multifamily Outpaces Economy

After a couple of brief periods earlier in the year in which it seemed that the U.S. economy was teetering, pessimism was washed away by a couple of strong jobs reports during the summer. Since then—despite two quarters of weak GDP growth and concerns about growth overseas—equity markets have bounced to record highs and volatility in the capital markets has diminished. What's the midpoint between healthy employment and slow growth? Continued moderate growth, which has served the commercial real estate market well in recent years.

Slo-Go Economy: Growth has not been as robust as the consensus forecast at the beginning of the year, but weaker-than-expected GDP has largely been offset by strong employment gains and low inflation. Metrics such as consumer spending, wage growth and business inventories indicate that growth may bounce back. At the least, worries that the recovery is on its last legs appear to have subsided, and financial markets have posted strong results during the summer.

Decelerating Rents: Rent growth remains strong in the vast majority of metros, and nationally rents were up 5.0% year-over-year through August. However, that is a deceleration from the 6%-plus increases seen for most of the last year. Although we expect demand and occupancy levels to remain healthy, we foresee more moderation in rents in line with wage increases and affordability issues. Deceleration is most pronounced in tech-centric metros that have had a large run-up in rents and heavy increases in supply.

Peaking Supply: 2016 is set to be a peak year in terms of construction, with 360,000 units set to be delivered nationally, up 45% from the 249,000 units that came online in 2015. With continuing strong demand from the growing Millennial population and downsizing retirees, and occupancies at or near record levels in most markets, the new supply is being absorbed in most metros. However, the increase in stock is an issue in a few markets that are building too much or where job growth is weakening.

Capital Still in Place: Although the amount of capital drawn to the sector has cooled a little due to concerns about the market peaking or a slowing economy, multifamily real estate remains near the top of the list of safe investments for institutions both foreign and domestic. As a result, price appreciation has picked up again after flattening in the spring, and secondary markets and value-add apartments near core markets are in high demand. We do expect appreciation to flatten in the next year or so, as property yields are near bottom, with returns mostly coming from increases in income.

Cover image by Christian Wheatley/iStockphoto.com

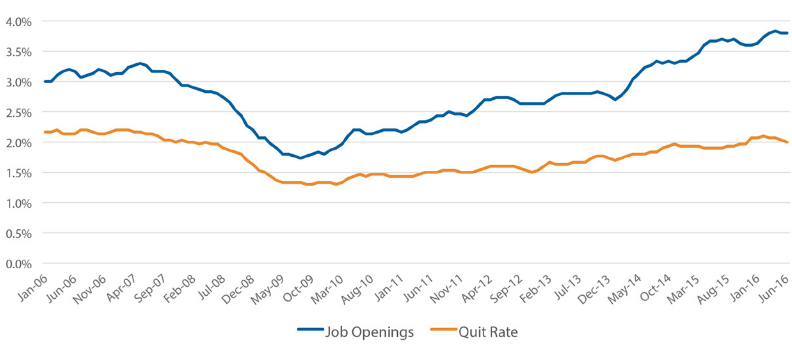
Economic Outlook

Economic expansion has remained steady, albeit slower than most analysts had originally projected for 2016. Job growth continues to be the backbone of the recovery, and low energy costs have kept a lid on inflation, although GDP growth has underperformed compared to expectations. The Brexit vote and its economic impacts seem to be more bark than bite, although there is still plenty of time before the full effects come into view.

Employment growth is the leading economic engine in the U.S. More than 2.3 million jobs have been created over the last year, and the monthly average year-to-date through July was 186,000. Though the growth is slowing somewhat, an average of 150,000 to 200,000 new jobs per month seems to be a more sustainable growth forecast, given that unemployment sits at 4.7%. While labor force participation hovers near 40-year lows, the progression of the job market should incentivize more people to re-enter the labor force. Wages have shown signs of growth—up 2.4% year-over-year through August—but they are not growing as fast as rents and home prices, which could exacerbate the housing affordability crisis.

The economic recovery following the Great Recession has been one of the slowest in the post-World War II period, and 2016 is shaping up to be the slowest year yet. Through the first two quarters, the annualized GDP growth rate was less than 1%; in order to meet the initial projections, the third and fourth quarters would have to grow by an outsize 3 to 4%. Despite the relatively slow growth, however, consumers have shown significant signs of strength over the past few months. July marked the fourth consecutive month of consumer spending increases, driven predominantly by demand for automobiles.

Job Openings and Quit Rate (% of labor force)

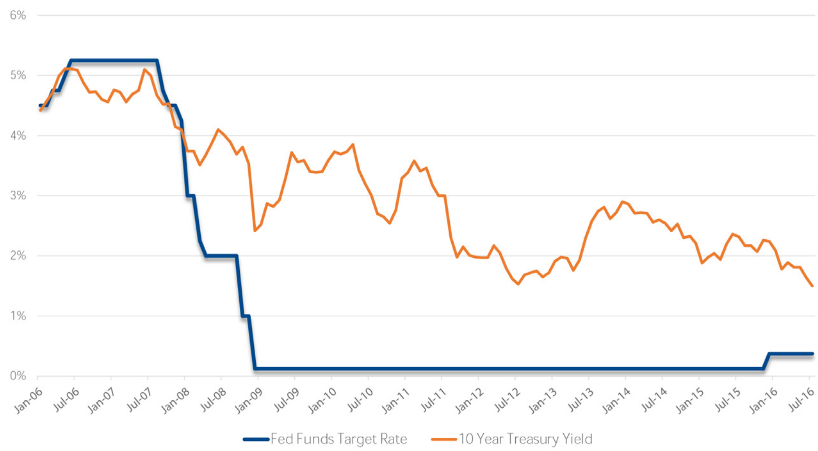


Source: U.S. Bureau of Labor Statistics

Supporting the advances in consumption are the ever-improving job market, early signs of wage inflation, strong gains in home values and the stock market, and discretionary income saved as fuel and energy costs remain low. Many Americans were hesitant to spend when oil and gas prices initially dropped, preferring to save or invest the cost savings rather than consume. However, as prices at the pump remain low, many people are beginning to feel comfortable with a new level of energy expenses in their budget and as a result, they are choosing to spend their excess income.

The low interest rate environment seems destined to continue for a while, which would not have been expected at the beginning of the year, when the Federal Reserve laid out a hawkish strategy, with as many as four interest rate increases expected. However, the continuous drop in oil prices and the selloff in the equity markets put the Fed on hold through the spring. Now it seems to be a toss-up as to whether or not Janet Yellen and the Fed governors will vote to increase rates by year-end. Employment fundamentals remain strong, but inflation, the second half of the Fed's dual mandate, is well below long-run expectations due to low commodity costs and cheap goods coming from overseas.

Federal Funds—Target Rate and Weekly 10-Year Treasury Yield



Sources: Federal Reserve, Moody's Analytics

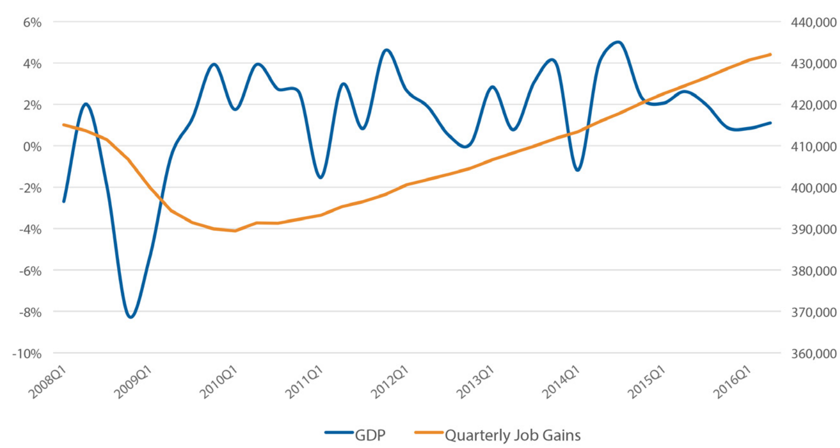
Even if short-term rates rise by 25 basis points, that would likely have little effect on commercial real estate. The U.S. fixed income market has attracted an influx of international funds, especially since the sovereign debt of Japan and some European nations has negative yields. Low 10-year Treasury rates have helped keep mortgage costs low, which has helped to mitigate potential problems refinancing the 2006-07 vintage debt that comes due over the next year.

As the United Kingdom's Brexit vote moves further into the rear-view mirror, it seems that the hype surrounding the historic referendum was more significant than the act itself. While we will not see the full effect of the Brexit for years to come, early indications are that the U.K.'s decision to leave the European Union will not have a significant impact on the global economy.

The U.S. presidential election has had little effect on the financial markets to date. It's hard to say whether that's because investors don't believe the election will have a big impact on policy or if the market is factoring in the odds of a new Clinton regime, which would portend a status quo in many policies. Whatever the case, the potential uncertainty of a new president's policies has not created much volatility to date.

While the United States economic growth is by no means off the charts, its steady, moderate gains are attractive compared to the rest of the world and it has proven to be favorable for commercial real estate. The combination of robust capital markets, strong job growth and low inflation has enabled fundamentals to gradually improve without a rush to overdevelop in most markets, and we see those conditions continuing.

GDP and Quarterly Job Gains



Source: U.S. Bureau of Economic Analysis (BEA): National Income and Product Accounts (NIPA)

Rent Growth and Occupancy

It may have taken a little longer than expected, but rents are finally beginning to decelerate. As of August, multifamily rents were up 5.0% year-over-year nationally, which is down 50 basis points month-over-month, 110 basis points from April and 170 basis points from the recent peak last October. In other words, rent growth is falling to more sustainable levels after flirting with the 6%-plus range for almost two years.

And decelerating growth is not the same as negative growth—not by a long shot. Rent growth generally remains solid across much of the country. On a year-over-year basis through August, rents increased between 5 and 8% in many metros in the Sun Belt, Southwest and Southern California. Even markets in the East (including Philadelphia; Washington, D.C.; and Baltimore) and the Midwest (including Kansas City and Chicago) are recording growth of 3 to 5% year-over-year, which is above the rate of inflation and more than the 2.2% long-term national average. The number of metros with outsize year-over-year rent gains has declined to a small quantity compared to the second half of 2015 and early 2016, but 18 of Yardi Matrix's top 30 metros—60%—have seen solid growth of between 4 and 7% over the past year. Rent increases were led by Sacramento (11.9%), Seattle (9.3%) and the Inland Empire (9.2%).

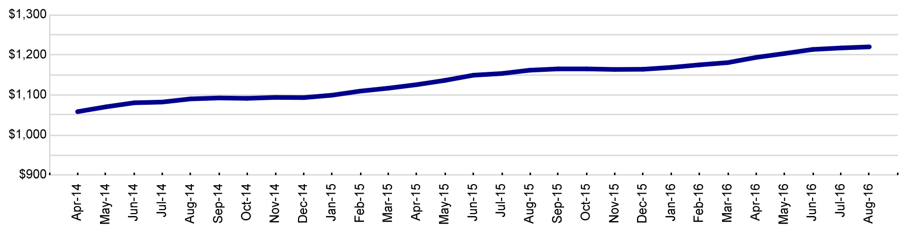
As fundamentals in most of the country remain healthy, metros that have not gotten ahead of themselves should continue to see moderate to strong gains. All of the demand drivers that have propelled the market—rising Millennial population, the growing Baby Boomer generation increasingly downsizing, reduced homeownership levels and strong employment growth—are still in effect and not likely to change much over the next few years. Those factors have kept occupancy rates of stabilized properties extremely high across the country, near all-time highs of 95.9% as of July. Even in the face of growing supply, occupancy rates have only decreased by 20 basis points from their highs.

Consequently, the greatest deceleration is concentrated in metros that are seeing some combination of slowing job growth and increased supply. Most of the rapid deceleration is occurring in metros in which supply is getting ahead of demand. Houston, for instance, is being hit with a shrinking job market and a large increase

Market	2016 Rent Forecast	Y-O-Y Rent Growth Aug 2016
Sacramento	10.1%	11.9%
Seattle	9.8%	9.3%
Tacoma	9.5%	12.7%
Phoenix	8.6%	6.5%
Portland	8.6%	6.8%
Inland Empire	7.9%	9.2%
Las Vegas	7.5%	4.8%
Orlando	7.3%	6.3%
TN Metro	7.1%	6.5%
San Fernando Valley	6.6%	9.2%
San Francisco	6.5%	1.6%
Dallas	6.4%	6.6%
Colorado Springs	6.3%	10.9%
San Diego	6.3%	6.2%
Miami	6.2%	4.6%
NC Triangle	5.7%	5.8%
Orange County	5.6%	5.6%
Los Angeles	5.6%	6.9%
Tampa - St. Petersburg	5.5%	6.2%
Atlanta	5.5%	7.8%
Austin	5.4%	4.8%
Denver	5.4%	3.5%
Philadelphia	5.2%	4.4%
White Plains	4.5%	5.6%
Boston	4.2%	2.2%
Long Island	3.8%	3.7%
Kansas City	3.5%	4.5%
Memphis	3.5%	4.4%
Twin Cities	3.5%	4.4%
Chicago	3.4%	3.9%
Jacksonville	3.4%	4.3%
Indianapolis	3.1%	3.4%
Baltimore	2.8%	3.2%
Louisville	2.7%	4.6%
Richmond - Tidewater	2.7%	2.7%
San Antonio	2.6%	4.0%
St. Louis	2.6%	3.5%
Washington, D.C.	2.4%	3.6%
Bridgeport - New Haven	1.9%	2.7%
Birmingham	1.6%	2.2%
Houston	1.6%	0.3%
Oklahoma City	0.1%	-0.3%

Source: Yardi Matrix

National Average Rents



Source: Yardi Matrix

in supply (10,000 new units completed year-to-date through July, and another 15,000 are expected to be completed by year-end). Predictably, the metro has become the worst performing in the U.S. during the past year when it comes to rent growth.

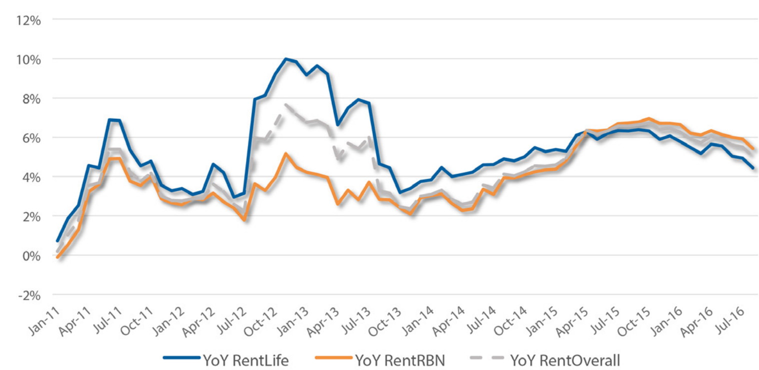
Outside Houston, the recent deceleration has been most pronounced in some technology-centric metros, which are coming back to earth due to the combination of waning demand and affordability issues in the face of growing supply.

- San Francisco, which had 12% growth in rents in 2015, slowed to 1.6% year-over-year through August. The metro has added 3,900 units year-to-date, with 11,000 more scheduled to come online by year-end.

- Denver's year-over-year growth rate fell to 3.5% in August after rising by 11% in 2015. The metro has had 6,200 units come online year-to-date, with 5,500 more scheduled to be added by year-end.

- Austin was up 4.8% year-over-year through August, compared to 6.9% growth in 2015. The metro has added 6,700 units year-to-date, with 7,700 more scheduled to come online by year-end.

U.S. Rent Growth, YOY Change

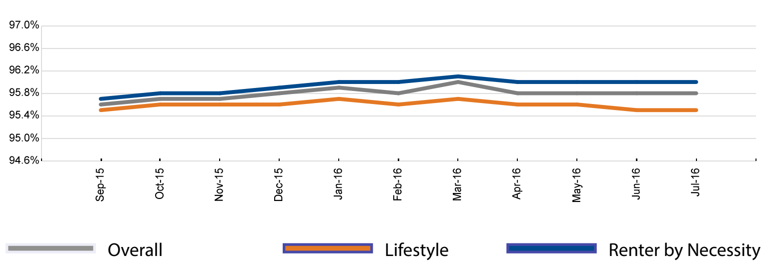


Source: Yardi Matrix

- Boston rents were up 2.2% year-over-year through August, compared to 5.2% in 2015. Urban Boston has added 2,900 units year-to-date, with 4,300 more scheduled to come online by year-end.

- Even Portland, which was up 6.8% year-over-year through August, less than half of the rate earlier in the year, might be an example of this trend. In Portland, 2,200 units have come online year-to-date with 2,700 scheduled by year-end.

Occupancy—All Asset Classes by Month



We don't foresee calamity for these tech-centric metros, but they will see more moderate growth until the current batch of supply is absorbed. The deceleration is in line with our expectations, given the natural limits when income growth is roughly 2.5%. In that environment, rent growth can only return to more moderate levels. We forecast 4.5% growth for 2016, so if anything, year-to-date increases of 4.8% through August have surprised on the upside.

Supply

New home construction remains strong on both the multifamily and single family sides. Housing starts rose to an annualized rate of 1.2 million units in July, marking the highest rate since February. Yardi Matrix currently forecasts 360,000 new multifamily units to hit the market in 2016. Of that, 162,000 units have already come onto the market, with another 198,000 expected to be completed before the end of the year. The recent cooling of rent growth has in part been a reaction to the significant new supply.

Builders have continued to favor high-end Lifestyle apartments, as they can command substantially higher rents that greatly offset the minimal increase in construction costs. However, the lack of supply in the Renter-by-Necessity category may lead to an affordability issue down the road. Housing demand and occupancy may become bifurcated as more affordable units become harder to find.

Market	2016 Forecast Completions	Completions % Stock
Houston	25,851	4.2%
Dallas	21,369	3.1%
Washington, D.C.	17,800	3.6%
San Francisco	15,292	4.3%
Austin	14,397	6.8%
NC Triangle	14,167	5.0%
Miami	13,423	5.1%
Los Angeles	12,955	5.0%
Atlanta	11,805	2.9%
Seattle	11,724	5.4%
Denver	11,490	4.8%
Northern New Jersey	9,007	4.4%
Phoenix	8,685	3.1%
Chicago	8,319	2.6%
TN Metro	7,955	5.2%
Boston	7,229	3.7%
San Antonio	7,158	4.0%
Orlando	6,895	3.5%
Manhattan	6,327	2.6%
San Diego	6,002	3.4%
Philadelphia	5,752	2.1%
Salt Lake City	5,165	6.0%
Portland	4,970	3.6%
Kansas City	4,378	3.0%
Tampa - St. Petersburg	3,958	2.0%
Orange County	3,922	2.0%
Baltimore	3,887	1.9%
Bridgeport - New Haven	3,580	2.9%

Market	2016 Forecast Completions	Completions % Stock
Columbus	3,353	2.2%
Oklahoma City	3,277	3.3%
Pittsburgh	3,183	3.7%
Cincinnati	3,061	2.9%
Richmond - Tidewater	2,922	1.4%
San Fernando Valley - Ventura County	2,781	2.0%
Indianapolis	2,398	1.5%
Twin Cities	2,382	1.3%
Inland Empire	2,363	1.6%
Milwaukee	2,014	2.6%
Las Vegas	1,812	1.1%
St. Louis	1,797	1.5%
Birmingham	1,652	2.4%
White Plains	1,462	2.2%
Cleveland - Akron	1,438	0.9%
Long Island	1,349	2.8%
Tacoma	1,178	1.9%
Detroit	1,156	0.6%
New Orleans	1,047	2.0%
Memphis	1,009	1.0%
Louisville	928	1.3%
Jacksonville	757	0.8%
Central New Jersey	728	0.6%
Sacramento	517	0.4%
Colorado Springs	442	1.2%
Buffalo	402	0.9%
Columbus, Ga.	292	0.9%

Source: Yardi Matrix

- Roughly 20% of the nation's new supply is located in Texas, and Houston, Dallas, Austin and San Antonio will all see significant increases in 2016. Dallas and San Antonio should have decent success absorbing the new apartments; however, Houston has seen demand dip as oil continues to weigh on the economy, and Austin faces absorption issues as funding in the tech industry slows down slightly.

- The largest supply growth as a percentage of total stock can be found in secondary markets with heavy tech and startup based economies. Seattle, Denver, Austin and the NC Triangle all saw completions as a percentage of total stock above 4% as of August 2016.

- Supply growth also picked up in Phoenix, Nashville and Portland, three cities that have shown some of the strongest rent growth in the country. These lifestyle cities saw significant declines in construction following the recession, but the extended recovery has allowed builders to re-enter the markets.

- Los Angeles and the surrounding metros are struggling with insufficient supply, as the Inland Empire, Orange County and Los Angeles all have completions as a percentage of total stock under 2%.

As the glut of new supply reaches the market over the next 12 to 18 months, occupancy will likely retreat from its recent highs. To lure renters into the market, apartments may increase concessions and rents may moderate, but the trend will not last forever. Demand for housing is likely to remain high and new household formation will continue to grow, which should drive housing construction for the foreseeable future.

Capital Markets

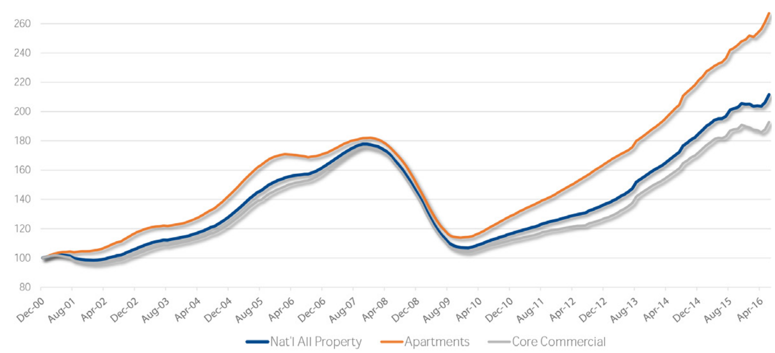
Like multifamily rents, the capital markets have cooled after teetering on the verge of overheating. Also like the rent picture, the cooling is more likely a sign that capital indicators will slow or flatten rather than turn negative.

The amount of capital looking to buy commercial real estate has slowed somewhat in 2016, prompting sales volume to level off somewhat. After several years of solid gains, some investors are concerned that the sector has gotten too rich and competition too overheated, prompting some to pull back, especially from the red-hot core markets.

But the slowdown is relative rather than absolute, as the conditions that have driven the capital flows mostly remain intact. Performance of commercial properties—and multifamily in particular—continues to be robust, with a favorable outlook. The sector provides investors with high income compared to bonds, and the U.S. is considered a safe haven compared to Asia, Europe or emerging markets. Brexit has yet to take effect, and the ultimate impact on the British and European economies is debatable, but it does illustrate the relative stability of the U.S. economy at the moment. Add all those factors up, with the result that capital will continue to work its way into the commercial real estate sector, even if the target of that capital shifts. The fact is that investment dollars have been shifting slowly for some time, with secondary markets and value-add properties being the main beneficiaries.

Consequently, property values, which flattened in the first quarter, resumed rising in the second. According to the Moody's/Real Capital Analytics Commercial Property Price Index (CPPI), all commercial real estate rose by 3.2% in the second quarter after increasing by only 0.5% in the first quarter. Meanwhile, apartments gained 5.4% in the second quarter after increasing by 1.8% in the first quarter. For the 12 months ending in June, apartments gained 14.3%, compared to 8.4% for all commercial properties, according to the CPPI.

Commercial Property Price Index (Jan. 2000=100)



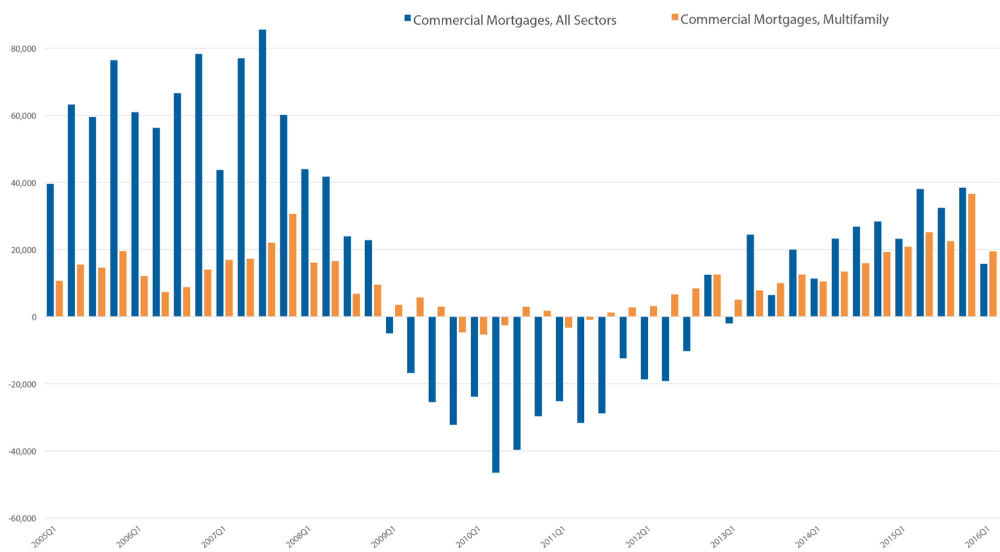
Sources: Moody's Analytics, Real Capital Analytics

While we are optimistic about fundamentals, we do expect that the appreciation gains (again, much like rents) are due to flatten. Since the trough in late 2009/early 2010, apartments have gained 134% and all properties 98%. Property yields have basically bottomed, and future gains will have to rely on higher income. Yields, on average, are more than 400 basis points above the 10-year Treasury rate, so there is room to absorb some of the inevitable increase in rates. However, we do not expect rates to increase enough to affect acquisition yields within the next two quarters, at least.

The debt markets remain stable for multifamily properties. Fannie Mae and Freddie Mac continue to grow to record levels, not only because the allocation for core products is rising but because the government-sponsored enterprises (GSEs) are also expanding into products such as small-balance apartments and properties that are increasing their sustainable measures.

Given the election season, it's natural to worry about the impact of the next president on the GSEs. The future shape of the entities will depend on which party takes control, and there could be radically different plans, depending on which party wins the presidency and Congress. At this stage, a split between Congress and the presidency seems the most likely outcome, and that would likely mean any major changes to the GSEs' mission would be gridlocked. Not only would a solution be difficult from an ideological point of view but it's hard to generate political will to make major changes to housing when the sector is not experiencing any major crisis at the moment.

Quarterly Change in Mortgage Holdings (Mil)



Sources: Federal Reserve, Moody's Analytics

Banks and life companies were also very active in the first half. Banks' multifamily holdings rose by $18 billion in the first half, on par with last year's record rate, while activity in other property segments was up 50% over last year, according to the Mortgage Bankers Association. However, there is concern that banks might put the brakes on in the second half, as regulators warn of overexposure to commercial mortgages.

The lending segment in the most flux is CMBS, which is trying to adjust to the impact of new regulations while spreads have been volatile. CMBS programs were most concerned about the risk-retention rules, which go into effect in 2017 and require that issuers of securitized products retain 5% of the collateral pool. Market players worried that the rule would impair their ability to sell junior bonds and lead to a reduction in prices, which would force them to raise loan spreads and make the market less competitive.

However, initial fears may have been misplaced. The first transaction in which the participating banks retained 5% of the pool was issued in early August and fetched unexpectedly high prices. The deal priced at levels better than any seen in months. That's important because wide bond spreads had made the sector largely non-competitive for months in the spring and summer. With bond spreads reduced to a level at which CMBS programs can offer competitive loan rates, and confidence that the impact of the new structures is manageable at the very least and positive at best, CMBS is back on its feet. That's important because CMBS is the primary lender in tertiary and some secondary markets.

Outlook: Steady Economy, Multifamily Demand

Expect moderate economic growth to continue into next year. There are potential headwinds, such as weak GDP numbers, the length of the expansion, the impact of Brexit and the U.S. presidential election. However, we believe the potential impediments to growth are offset by continued healthy job creation, steady-if-not-great wage gains and consumer spending. Brexit has turned into a long-term issue, as nothing is likely to change until 2017 at the earliest; the economic impact of the upcoming presidential election in the U.S. is still unknown, as policy may be frozen by political gridlock. What's more, there is no underlying bubble such as housing or leverage in the financial system that seems ripe to pop.

Although we expect multifamily rents to moderate to levels closer to the 2.2% long-term average, the sector should continue to reap the benefits of stability. Demand factors that have driven record-high occupancies should continue, and investors will remain attracted to the sector's consistent record of income returns, even if appreciation is going to level off. We are concerned about a handful of metros in which job growth is slowing and/or luxury supply is too high, causing rents to flatten or even decline in some submarkets, but the big picture across the country is more benign, with rents rising 4 to 5% annually in most major metros.

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Definitions

Lifestyle households (renters by choice) have wealth sufficient to own but have chosen to rent. Discretionary households, most typically a retired couple or single professional, have chosen the flexibility associated with renting over the obligations of ownership.

Renter by Necessity households span a range. In descending order, household types can be:

- *A young-professional, double-income-no-kids household* with substantial income but without wealth needed to acquire a home or condominium;
- *Students*, who also may span a range of income capability, extending from affluent to barely getting by;
- *Lower-middle-income ("gray collar") households,* composed of office workers, policemen, firemen, technical workers, teachers, etc.;
- *Blue-collar households*, which may barely meet rent demands each month and likely pay a disproportionate share of their income toward rent;
- *Subsidized households*, which pay a percentage of household income in rent, with the balance of rent paid through a governmental agency subsidy. Subsidized households, while typically low income, may extend to middle-income households in some high-cost markets, such as New York City;
- *Military households*, subject to frequency of relocation.

These differences can weigh heavily in determining a property's ability to attract specific renter market segments. The five-star resort serves a very different market than the down-and-outer motel. Apartments are distinguished similarly, but distinctions are often not clearly definitive without investigation. The Yardi® Matrix Context rating eliminates that requirement, designating property market positions as:

Market Position	Improvements Ratings
Discretionary	A+ / A
High Mid-Range	A- / B+
Low Mid-Range	B / B-
Workforce	C+ / C / C- / D

The value in application of the Yardi® Matrix Context rating is that standardized data provides consistency; information is more meaningful because there is less uncertainty. The user can move faster and more efficiently, with more accurate end results.

The Yardi® Matrix Context rating is not intended as a final word concerning a property's status—either improvements or location. Rather, the result provides reasonable consistency for comparing one property with another through reference to a consistently applied standard.

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YARDI® Matrix

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