

“New” Real Estate Sector Not a Game Changer for All

Commentary

The upcoming presidential election is one of the wild cards that will hang over the economy and real estate activity for the balance of the year. Among the issues on the political scene, the debates over tax policies—especially the special focus on tax rates and brackets, capital gains and carried interest—may have a material effect on the real estate market. Given the dramatic differences in the positions of the candidates, the market will have to deal with short-to-intermediate uncertainty. Some investors are expected to make moves ahead of the election. This could affect transaction volume, as investors hedge a change in capital gains by capitalizing on what appears to be a fully priced commercial real estate market. This is especially true if the Federal Reserve (Fed) continues to strengthen signals that interest rates are in play. While such concerns are not new, the tenuous nature of the economy increases the stakes.

Setting the election aside, the US economy has faced some other downward drags. These have manifested themselves as a slowdown in economic growth, which fell toward 1% for the first half of 2016. Looking forward, growth rates are expected to improve modestly in the second half of the year. Other economic indicators are mixed to positive, which might explain the absence of significant recessionary fears. In terms of downside risks, the continued global economic weakness and uncertainty triggered by Brexit is likely to place a dampener on exports. This in turn will place downward pressure on manufacturing and lead to additional increases in the trade deficit. Budget deficit concerns will be exacerbated by the strengthening of the dollar in the face of economic uncertainty abroad and by signals that the Fed is poised to raise

interest rates. Despite these and other pressures, the economic recovery is expected to continue, albeit at a somewhat anemic rate.

On the real estate front, the market appears to be entering a mature life cycle phase. As in other competitive settings it is important for real estate players to bring their A game, however the market has become so enamored with the A side of the market that asset prices have been pushed out of bounds. Indeed, there are signs that the upper end of the commercial market may have priced itself out of play. This is evidenced by several factors, including the recent cooling off of the market in terms of transaction volume and prices as well as capitalization rate compression, which has been particularly pronounced at the top of the market. Additional insights into where the market is at, and what investment game strategy is appropriate, can be gleaned from the apartment market. For some time, apartment developers, lenders, and investors have focused almost exclusively on the upper end (the “A game”) of the market. While investors continue to flock to the sector, the popular press is replete with articles extolling the virtues of looking at Class B assets, including two August 23 articles, “Value-Add Projects Remain and Attractive Option for Multifamily Developers” (NREIonline.com) and “Why Choose Class B Apts. Over Class A?” (GlobeSt.com).

This is not to say investors should abandon Class A assets, but they should realize that it takes a balanced and disciplined approach to win in the current environment. Also, it should be noted that there is some uncertainty as to whether the commercial market has fully peaked. For example, after a downward trend in the first half of 2016, commercial price indices were stable to positive during the summer. This improve-

ment was fairly widespread, although not at the previous pace. This pattern suggests the market may be in for a pause, even if it does not reach an outright inflection point. There are increasing signals that current prices may lead to a decline in investor confidence levels, especially for passive investors relying on a rising tide to support inflated prices. As observed in earlier cyclical corrections, investor behavior is based on expectations that can shift more rapidly than underlying fundamentals. Regardless of whether prices continue to come under pressure, investors are likely to start shifting attention back to the risk side of the equation. While the relationship between risk and return is a fundamental axiom of investments, many investors may find this realization novel and disconcerting given the prolonged commercial bull market. This will create opportunities for those with strategies on how to elevate Class B assets to Class A performers.

In addition to some risks within the real estate industry, the market faces uncertainty (both downside and upside) from overall economic conditions. For example, on the downside, the unprecedented nature of Brexit has created global uncertainty and risk for the global economy that could spill over to the United States and its real estate markets. Conversely, the reclassification and elevation of listed real estate companies and equity real estate investment trusts (REITs) to a distinct “Real Estate Sector” (rather than a subset of the “Financial Sector”) for the S&P Dow Jones Indices and MSCI will cause increased interest in real estate investments as asset allocators to consider real estate as part of their mixed-asset portfolio strategies. While the ultimate impact of the change will take some time to play out, the trend bears close attention since it could have a significant impact on capital flows to real estate. To address this new asset class treatment, “Financial Views” will continue its expanded coverage of REITs at an aggregate level as well as at a property-sector level.

The Economic Environment

According to the Federal Reserve’s July Beige Book, the economy continued to show modest improvement across most of the Fed districts through the second quarter. In general, labor markets were stable, with modest increases in employment and wages. Consumer spending was positive

but began to show some signs of tapering off. On the manufacturing front, results were mixed but generally positive. Real estate activity continued to improve as did demand for loans. Looking forward, the outlook was positive, especially for retail sales, manufacturing, and real estate.

The generally positive but modest outlook reported in the Beige Book was echoed in *The Wall Street Journal’s* poll of economists. Despite disappointing gross domestic product (GDP) growth of 1.1% in the first quarter, the economists projected a modest increase for the second quarter, with GDP growing in the mid-2.5% range for the balance of the year. (However, the Bureau of Economic Analysis estimated GDP growth for the second quarter at a disappointing 1.2% rate.) Respondents to the economic poll also projected that the Consumer Price Index (CPI) would increase in the second half of the year, although the 1.7% estimate remains below the Fed’s target. Unemployment rates are expected to remain relatively flat in the sub-5% range. The economists put the probability of recession at around 20% for the first eight months of the year, although they reported more downside risk to their forecasts than upside potential. In addition to downside risks, the surveyed economists identified four factors that could surprise on the upside, including consumer spending, business investment, home construction, and favorable economic policies that might emanate from outcomes in the elections.

In terms of economic indicators, the general environment remains mixed to positive. The Conference Board’s Leading Economic Indicators showed modest improvement in July, coming in slightly ahead of expectations and making up some ground lost at the end of the second quarter. The improvement was fairly widespread, with eight of the ten indicators on the positive side, but consumer expectations related to business conditions created a drag and building permits came in at a neutral pace. The Economic Cycle Research Institute’s (ECRI) weekly index continued to improve through mid-August, rising to 138.1 from 130 at the beginning of the year, and reversing some of the first-quarter declines. The ECRI US Coincident Index growth rate, which has fallen through much of the year, remained flat at 1.5%—a thirty-month low. On the other hand, the ECRI Future Inflation Gauge increased at midyear, reaching an eight-year high and suggesting that inflation pressures were continuing to increase.

On the manufacturing front, the news was mixed at midyear. The US Census Bureau reported new orders for manufactured goods fell at midyear, with the June figures down 1.5% on the heels of a 1.2% decline in May. Shipments increased \$3.1 billion, marking four months of increases. Unfilled orders fell \$9.6 billion, reversing three months of increases. New orders for manufactured durable goods slid in May and June, led by a 10.5% decline in transportation. On the other hand, shipments of durable goods increased modestly in June, reversing the previous decline, while shipments of non-durable goods continued a four-month string of increases. Industrial production increased modestly in July, outperforming expectations and reversing the decline in the previous month. Manufactured durable goods inventories were down, as was the case in eleven of the past twelve months. On the other hand, nondurable inventories rose modestly, continuing a three-month trend. The Chicago Fed National Activity Index was up moderately in June, reversing a decline in May but still in negative territory on a rolling three-month basis.

The Institute for Supply Chain Management's Non-Manufacturing Index (NMI) fell 1% in July to 55.5%, but this still represented continued growth in the sector. The Non-Manufacturing Business Activity Index also slipped to 59.3%, but this still represented eighty-four straight months of growth. The New Orders Index rose to 60.3%, while the Employment Index and Prices Index slipped to 51.4% and 51.9%, respectively. Despite a modest slowdown, the indices reflected continued broad growth, with fifteen nonmanufacturing industries expanding in July, while only three categories declined (i.e., other services; agriculture, forestry fishing and hunting; and, mining). The weak global economic environment led to an increase in the trade deficit in June, rising to \$63.3 billion—a \$2.2 billion increase over May. Although exports rose modestly to \$120.2 billion, imports grew at a faster pace to \$183.5 billion, which widened the trade deficit.

At this point in the cycle, it looks like the US economy is poised to continue its moderate expansion. As noted by the various economic indicators, however, there are a number of risks that could lead to disappointment. Some of these factors emanate from domestic and offshore political situations. In this environment of uncertainty, businesses and consumers are likely to be somewhat tenuous, which could place a dampener on economic growth.

Business Indicators

As with economic indicators, business indicators have been mixed, contributing to some of the uncertainty about the sustainability of the tepid economic recovery that has characterized the post-recession. Small business optimism leveled off in July, as reflected by the 94.6 rating (compared to the forty-two-year average of 98) reported in the Index of Small Business Optimism published by the National Federation of Independent Business (NFIB). The ten components of the index were mixed, with four declining, four increasing, and two stable. The share of respondents anticipating improvement in the next six months increased, although more owners still expect further erosion. Of particular concern are several key issues: earnings trends and sales expectations, the political climate, and inability to find qualified workers. The NFIB reports the combination of these factors and the slow recovery have persisted for eighty-nine of the past ninety-one months and have manifested themselves in the lack of optimism necessary to trigger small businesses to invest and take on debt needed to create new jobs and expand capacity.

The confidence levels of CEOs of larger companies was a bit more upbeat than their small business counterparts. As of July 2016, the Conference Board Measure of CEO Confidence rose from 47 to 52 in the second quarter, which moved it into positive territory (50 points is neutral). The rating was bolstered by the fact that 75% of CEOs expected profits to increase over the next twelve months, with 35% anticipating an increase in demand and 41% a reduction in costs. CEOs' confidence also rose with respect to general economic conditions as well as in relation to their own industries. Despite this improvement, global weakness could affect exports and place a dampener on CEO confidence.

Employment

Indicators point to continued improvement in the US employment situation during the second quarter and into summer. According to the Bureau of Labor Statistics, the number of job openings rose to 5.6 million during the trailing twelve months through June 2016. Of the 445,000 new openings during that period, the strongest growth was in the health care and social assistance fields, followed by manufacturing, leisure and hospitality, and government. On the other

hand, there was a decline of some 78,000 jobs in professional and business services. During July, employers added 255,000 jobs, helping sustain a two-month improvement over the disappointing results in May. Despite that improvement, the average monthly pace of job growth in 2016 was 186,000, which was disappointing compared to the 228,000 in 2015.

On a positive note for employees, hourly earnings were up 2.6% over the prior year, which was the strongest rate of growth since the end of the recession. Unfortunately, the improving employment scene has not played out across the board, varying by education, race, and gender, although most segments have seen some improvement. Increases in the number of new, part-time jobs continued to outpace full-time positions. On the other side of the equation, the number of announced layoffs remained moderate during the second quarter and into July, marking a significant improvement over the first quarter. Reflecting improved employment conditions, the rate of voluntary quits held steady during the second quarter, with the 2.9 million figure up some 200,000 over the prior year.

The labor force participation rate has been fairly stable at 62.8%, with the highest rates in the middle-age brackets. Despite improvement on the employment front and plateauing of the unemployment rate around 4.9%, a number of worker segments continue to struggle. With respect to ethnicity and gender, the unemployment rate for black men and women was around 7.5%, while the rate for Hispanics hovered around the 5% average, and white men and women fell below 4% overall. The ranks of short-term unemployed have fallen below recessionary levels, but the rate of long-term unemployment continues to hold at a higher rate. The median duration of job search has plateaued at eleven to twelve months, which is high by long-term historical levels but less than half of the recessionary peak. The underemployment rate (i.e., unemployed, discouraged workers who have dropped out of the workforce; marginally attached workers; and those employed part-time for economic reasons) slipped below 10% by midyear. While down significantly from the 2009 peak (17.5%), the rate of improvement in the ranks of the underemployed has begun to taper off. When all is said and done, the outlook for employment is relatively positive, although it continues to be monitored for downside risks.

Inflation and Interest Rates

The Bureau of Labor Statistics (BLS) reported that on a seasonally adjusted basis, the Consumer Price Index for All Urban Consumers (CPI-U) remained flat in July. BLS reported a minor increase (0.8%) in the trailing one-year CPI-U figures before seasonal adjustments. In July, the energy component of the index continued to create a drag, with twelve-month inflation down -10.9%. The food component was up a modest 0.2% over the twelve-month period, with food away from home up 2.8% and food at home down -1.6%. Excluding energy and food, the rolling twelve-month increase in CPI-U was around 2.2%, with medical care services leading at 4.1%, followed by medical care commodities (3.6%), shelter (3.3%), services less energy services (3.1%), and apparel and transportation services (3%). The Producer Price Index (PPI) fell in July, declining -0.4%. The declines were fairly widespread and reversed three months of sustained improvement.

Productivity continued to disappoint in the second quarter, marking a string of three-consecutive quarters of declines. With a slight improvement in hourly compensation for nonfarm employees, the decline in output resulted in an annualized 2% increase in unit labor costs in the second quarter. Manufacturing output per hour was also off slightly, with a 2.9% increase in hourly compensation increasing unit labor costs 3.1% on an annualized basis. The ECRI US Future Inflation Gauge (USFIG) increased to 112.6 in July, which was a ninety-seven-month high and suggested that inflationary pressures are rising despite modest increases in the current rate of inflation.

The low interest rate environment that has bolstered the economic recovery and capital markets continued into the summer, as the Fed deferred increases in the first half of 2016 in the face of economic weakness and an uncertain recovery. As might be expected, the markets have paid close attention to signals from the Fed, which has struggled with the timing and level of interest rate increases. After the disappointing jobs report in May, it appeared that the Fed would forestall increases in the federal funds rate until late 2016 at the earliest. However, the strong employment growth in June and July compared to earlier in the year, and the strong stock market, may have opened the door for increases in the early fall. Despite improvement

in some elements of the US economy, the Fed remains justifiably concerned about a number of factors, including declining business investment, falling productivity, uncertainty surrounding Brexit, and generalized weakness in the global economy.

The Fed has opportunities to increase rates at its September, November, and December meetings, and there are significant debates regarding when it will finally make the second such increase since the recession. Thus, the meeting of Federal Reserve policymakers at the Kansas City Fed's annual research conference at Jackson Hole on August 26 garnered significant attention. Chairwoman Janet Yellen and other Fed officials used this forum to prepare the market for a possible increase, citing continued improvement in the labor market, economic activity, and inflation. However, officials hedged their comments by noting they would be closely tracking data to ensure the economic recovery could withstand an increase. Despite the hedging, the market appears to recognize the increased probability of a rate increase before year-end. For example, *The Wall Street Journal's* poll of economists reveal that some 71% anticipate an increase in December, with 11% anticipating one in September and 6.5% in November.

The Global Scene

The global economy continued to struggle with a number of factors dragging down the economic outlook. The Organisation for Economic Co-operation and Development (OECD) has labelled the global economy as one that is stuck in a low-growth trap. This situation is fairly widespread, with flat growth in advanced economies and OECD forecasts of sub-2% growth in most markets, including the United States, Europe, and Japan. The outliers in this forecast are China and India, which were forecasted for 6%–7% growth, although China's outlook has slipped and India has plateaued. While most agree the Brexit will have a negative impact on the UK economy, it is less certain how it will play out in the eurozone and beyond. This has forced governments to develop defensive policies, which has been particularly challenging in the face of this unprecedented situation. Indeed, European Central Bank (ECB) policymakers struggled to come up with a unified approach in their August meeting, concluding that it was too early to project what might happen or to

determine what policy changes should be launched to dampen the downside risk.

While some factors inhibiting global economic growth are new, the fact remains that slow growth has already dragged on for eight years. This extended period of underperformance has stifled investment and has helped prolong the situation. Unfortunately, monetary policies have been ineffective in breaking the cycle, putting more pressure on fiscal policies at a time when many countries are facing budget crunches that make spending programs difficult to implement.

In the United States, the weak global economy has placed an additional drag on the trade deficit. After some improvement in the 2016 second quarter—which translated to a lower negative balance—the deficit recently increased to \$41 billion. This was the greatest deficit over the past twelve months and was disappointing news on the export front. The account deficit has continued to deteriorate, with the strengthening of the dollar in anticipation of the interest rate increase playing into the equation. The outlook for the global economy and the US deficit, however, is fairly sanguine, with the same downside risks that are hanging over other prognostications.

Consumer Confidence

Consumer confidence levels fluctuated during the first half of 2016, as reflected in three straight months of declines in the University of Michigan Index of Consumer Sentiment. In August, the index firmed up slightly, coming in at 89.8, virtually the same as in July (90.0) after falling from 94.7 in June; the index is down 2.3% on a year-over basis. The biggest declines were among younger households struggling with personal finances as expenses increased and incomes were smaller than expected.

The Conference Board Consumer Confidence Index plateaued in July, losing some of the upward momentum from the prior month. In general, confidence levels were on par with the beginning of the year but remained significantly below the optimistic levels going into the 2015 third quarter. Over the near term, consumers are expected to remain guarded.

Retail Sales

Going into the second quarter, retail sales were flat as consumers pulled back from the registers. When vehicles sales are removed from the equation, retail sales actually declined. The disap-

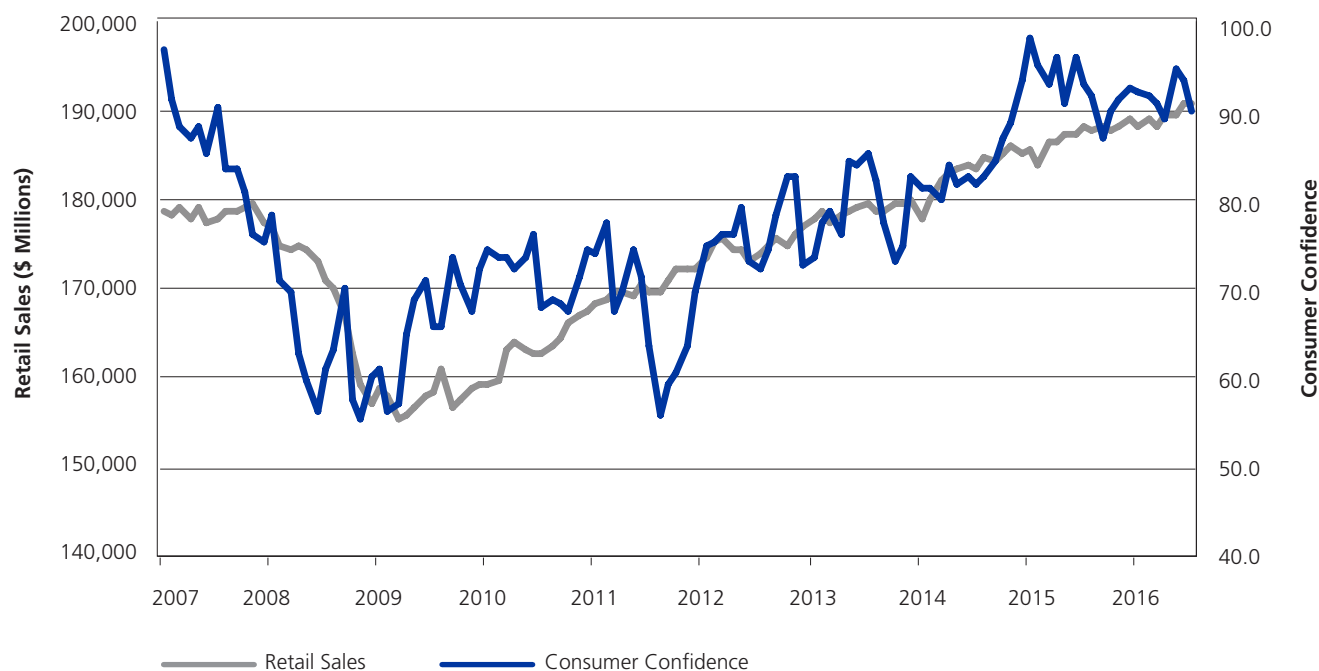
pointing results hit a number of sectors including sporting goods, hobby, grocery, building supply, department, and apparel stores. On a positive note, vehicle sales recovered in July, rising 3.5% over the first half of the year and reversing the downward trend that occurred during the second quarter. The biggest increase was in light truck sales, which experienced a 10% increase while auto sales declined at the same pace.

Internet retail sales continued their upward trajectory during the second quarter, rising 4.5% over the prior quarter and 15.8% on a year-over basis. In terms of market share, Internet sales rose to 8.1% of total retail sales. This continued a thirty-quarter increase in Internet sales, outperforming total sales, which saw some quarterly declines during the same period. Traditional retail stores also bolstered online sales, with a number of firms taking advantage of their physical presence to leverage their operations. One example is Home Depot Inc., which reported that 42% of online sales were picked up in stores (and 90% of returns occurred there as well).

Large retail trade corporations with assets over \$50 million accounted for \$20.6 billion

seasonally adjusted after-tax profits during the first quarter. This reflected a \$3 billion decline from the prior quarter and \$2.4 billion from the prior year. In terms of total sales, large retailers sold \$682.5 billion in merchandise, which was on par with the prior quarter and \$27.8 billion over the prior year. A number of store segments have had a rough time in terms of retail sales, with profit pressure translating to store closings and management changes. This situation is expected to continue to play out as consumers remain somewhat guarded and continue their search for value. For many, the Internet will remain the primary retail search mode, although bricks and mortar stores will continue to play a role as retailers adopt an omnichannel strategy and use their significant drawing power to attract shoppers. In the meantime, the retail industry will attempt to draw holiday shoppers to their cash registers sooner than they have in the past several years. If the procrastination that characterized back-to-schools sales is any sign, that may prove to be a challenge. This is especially true if the economy struggles and uncertainty starts nagging away at consumer confidence.

Exhibit 1 Retail Sales and Consumer Confidence



Sources: Federal Reserve Bank St. Louis, University of Michigan

Housing Market

The single-family housing market has been mixed to positive through much of the year, with some indicators improving while others lost ground. The Census Bureau reported the pace of residential housing starts continued its upward trend in July, with housing starts coming in at a seasonally adjusted rate of 1.2 million units. This represented a modest increase from the beginning of the year. The annualized rate of single-family construction in July was 770,000 units, a slight decrease from the beginning of the year but an increase from the trough in May.

Apartment starts picked up in June and July, rising to 441,000 units, which was a 25% increase over the pace at the beginning of the year. Housing vacancy rates declined moderately on a year-over basis, falling to 6.7% in the second quarter with improvement across most regions. At the same time, the median asking price for existing vacant housing increased to \$164,500 compared to \$156,300 in 2015. One concern for homebuilders is the continued decline in the homeownership rate, which fell to 62.9% in the second quarter, the lowest rate in over fifty years. The decline was particularly frustrating after a brief first-quarter rally that some hoped signaled a reversal in the prolonged downward trend.

The National Association of Home Builders (NAHB) Housing Market Index, which reflects builder confidence levels, showed a generally downward trend before a modest uptick in June followed by a decline in July. The index improved to 60 in August, which was on par with the rating at the beginning of the year. Significantly, the index remains above 50, which is the breakpoint between expansion and contraction. According to the Department of Commerce, single-family new home sales rose to a seasonally adjusted annual rate of 654,000 in July. This was a positive note for homebuilders and represented a 12.4% increase over June and a 31% increase over the prior year. The median price of new houses was \$294,600, with a \$355,800 average price, and there was a 4.3-month supply of stock of new residential properties.

Housing prices continued to increase in most metropolitan areas across the country. The National Association of Realtors (NAR) reported that in 148 of the 178 markets they studied second quarter transaction prices rose compared to the prior year. This increase was attributed in large part to a decline in inventory, which placed upward pressure on prices. Existing-home sales

rose 3.8% over the first quarter, coming in at an annualized rate of 5.5 million single-family and condo sales. The majority of transactions were from repeat buyers buying replacement housing, which created additions to available stock. The inventory of available existing houses came in at 2.12 million, which was below the 2.25 million available in the prior year. According to NAR, the increase in demand for housing—coupled with a shortage of new construction—put upward pressure on prices, reduced the average time on the market to a month, and resulted in 40% of sales at or above list prices. The condo market also improved in the second quarter, with the median price rising to \$227,200, which was up 4.8% over the prior year. The improvement in the sector was widespread, with 75% of the fifty-nine metro areas reporting increases.

There are a number of housing-price indices that track changes in housing values. The Black Knight Home Price Index rose 0.8% in June, with a home price index of \$265,000. This was a 5.3% increase over the prior year and a 32.6% increase from the bottom of the market in January 2012. Despite the improvement, this index remained -1.1% below the peak of the market in June 2006. The improvements were fairly widespread, with the ten largest states and metro areas all racking up modest price increases.

The CoreLogic Case-Shiller Home Price Index rose in June, with a 1.1% increase over May and 5.7% over the prior year. Despite this improvement, the CoreLogic index was down -6.7% from the peak of the market. However, as a testament to the durability of the housing price recovery, the index has increased for fifty-three straight months. That string is even more impressive in that the index was up more than 5% for 85% of that time. As might be expected, the price recovery has been uneven, with some markets ahead of the curve and others trailing.

The FHFA Purchase-Only House Price Index tapered off in June, continuing a three-month trend. Despite this slowing down, the FHFA index was up 5.6% on a year-over basis, and the FHFA index was up 3.5% compared to the peak in March 2007. On a regional basis, annual appreciation rates were up in all divisions. At the same time, the New England, Middle Atlantic, South Atlantic, and Pacific divisions were still off of their previous peak levels.

In addition to construction and price trends, several other indices provide insights into

the relative health of the single-family market. For example, the Housing Affordability Index (HAI), published by NAR, compares the median-priced single-family house to the median family income and current mortgage rates. In June, the HAI was at 152.3, which suggests median housing was relatively affordable. However, the index was down from 171.2 at the beginning of the year (a 10.5% decline) due to rising median prices (up 16% from January) and flat incomes.

The NAHB/Wells Fargo Housing Opportunity Index (HOI) estimates the percent of families in the market that can afford the median house given housing costs based on actual transaction prices, interest rates, property taxes, and insurance; income levels; and allowable housing budget ratios. For the second quarter, the HOI stood at 62, which was 3 points lower than the first quarter, and 1.2 points below the prior year. The median housing price in the HOI was \$240,000, which was up 8% over the prior quarter. At the same time, the median average fixed-rate mortgage fell to 3.88%, which helped offset some of the increase in median prices. The outlook for the single-family market is relatively healthy, assuming the economy stays on track, interest rates stay low, and personal income continues to rise.

Real Estate and Capital Markets

Overview

At a national level, the capital markets took a pause in the first quarter but then regained some lost momentum in the second quarter. This fluctuation was disappointing but consistent with what would be expected as the market cycle approaches an inflection point or possibly a temporary pause. According to Real Capital Analytics (RCA), transaction volume in the first half of the year came in at \$219.2 billion, a 16% decline over the prior year. The decline in sales levels was fairly widespread, affecting all property types with the exception of apartments, which enjoyed a 10% increase. On the other hand, hotel transaction volume was down 55%, with industrial off 31%, development sites down 22%, retail off 20%, and offices down 12% on a year-over basis. Part of the decline in transaction volume was attributable to a shift away from large-portfolio and entity-level investments. Capitalization

rates have started to plateau with the exception of apartments, which have continued a moderate decline, and hotels which have increased. The recent slowdown can be attributed to an increased difference between the expectations of buyers and sellers, which is another signal of a potential inflection point in the market.

Real estate investment performance has cooled off a bit on the private side of the market, while the public side rebounded from a disappointing 2015. The NCREIF Property Index (NPI) continued to decline through midyear (Exhibit 2), with trailing twelve-month returns at 10.6%, which benefited from strong numbers in the second half of 2015. Indeed, year-to-date returns through the second quarter came in at 4.24%, which brought down the annualized returns into the upper single-digit range consistent with long-term returns. Income returns slipped to 4.88%, a historical low and dramatically lower than the 7.36% annualized return since inception of the NPI. The PREA/IPD US Property Fund Index was also flat for the second quarter, with total returns on par with the NPI at 2.3% and returns split about equally between income and appreciation. As a sign of a maturing cycle stage, the capital value growth figures declined four consecutive quarters. Despite moderate improvement in June, a similar slowdown in the first half of the year was reported in other commercial property price indices.

At an overall level, capital flows in the commercial mortgage market continue to support transactions, although lenders have started to tighten underwriting standards. Of particular concern are hotels and apartments, which are receiving added scrutiny. Some construction lenders are also pulling back and focusing on relationship business rather than new customers. On the public front, the commercial mortgage-backed securities (CMBS) industry has had a tough time in 2016. According to Trepp, through July only \$37.2 billion of private-label CMBS were issued in the United States. If this pace continues, the annualized rate of issuance would represent an approximately 40% decline over 2015 when issuances reached \$95.1 billion. With this contraction in the CMBS industry, there is \$515 billion in outstanding issuances—a significant decline over the \$700 billion at the peak of the market.

Looking forward, commercial lenders are expected to be more guarded, especially with new risk-retention rules looming when the Credit Risk Retention Rule (Section 941) of

Exhibit 2 NCREIF Property Index Snapshot, 2016 Second Quarter

Property Type	Number of Assets	Market Value			Component	Returns (%)		
		Total (\$)*	Share (%)	Average (\$) [†]		2Q 2016	1Q 2016	1 Year
Office	1,398	186.67	36.9	133.53	Income	1.15	1.12	4.63
					Appreciation	0.59	0.59	4.52
					Total Return	1.74	1.72	9.31
Retail	1,126	117.17	23.2	104.06	Income	1.19	1.21	5.00
					Appreciation	0.98	1.75	6.96
					Total Return	2.17	2.96	12.22
Industrial	3,089	71.86	14.2	23.26	Income	1.31	1.30	5.39
					Appreciation	1.58	1.65	7.64
					Total Return	2.90	2.96	13.33
Apartment	1,626	124.06	24.5	76.30	Income	1.15	1.14	4.68
					Appreciation	0.73	0.73	4.89
					Total Return	1.88	1.87	9.74
Hotel	114	5.58	1.1	48.91	Income	2.26	1.34	8.02
					Appreciation	-0.81	-0.18	1.36
					Total Return	1.46	1.16	9.46
Total Index NPI	7,353	505.33	25.7	68.72	Income	1.19	1.17	4.88
					Appreciation	0.84	1.04	5.56
					Total Return	2.03	2.21	10.64

*Value in billions

[†]Average value in millions

Source: National Council of Real Estate Investment Fiduciaries, 2Q 2016

the Dodd-Frank Act kicks in on December 24, 2016. The provisions require managers to retain 5% of the fair market value in reserve of any collateralized loan obligations (CLOs). As a result of these forces, both the equity and debt sides of the market may face some headwinds that will help delineate where the real estate industry is in the cycle and whether an inflection point is near or has been reached.

Office Market

Office market fundamentals improved during the first half of the year, with national vacancy rates falling and rents increasing. This improvement was attributable to a combination of increased employment among office tenants as well as limited construction activity. CBRE's Marketview report indicated that office completions have declined in 2016, with over half of the national activity concentrated in a handful of markets: Manhattan, San Jose, Dallas/Ft. Worth, Seattle, and San Francisco. The recent

slowdown in economic growth is expected to place a dampener on near-term performance in the office sector and suggests there may be a period of stabilization in underlying fundamentals of supply and demand. Interestingly, vacancy rates in suburban office markets continued to decline in the first half of the year, while central business district (CBD) rates plateaued. Despite this improvement, rent growth in CBDs outperformed that of the suburbs; however, the economic slowdown may place a dampener on both sectors of the market. Collier's had a similar take on the office market and reported a combination of flattening vacancy rates, positive absorption, slower construction, and rising rents. The story from Marcus and Millichap echoed that of its peers, suggesting the brokerage side of the industry is at a relative consensus regarding the state of the industry. This should lead to a more orderly transaction and investment market than might be expected at other stages of the cycle. Within the office sector, health care and medi-

cal offices appear to be poised to outperform the overall market. Similarly, some markets can be expected to outperform the national averages.

At the end of the second quarter, office investments accounted for 37% of the \$505.3 billion NCREIF Property Index (NPI), the largest market share of any major property type. The average size of office investments (\$133.5 million) was significantly larger than the overall NPI average (\$68.7 million). However, office investments lagged the overall NPI, in terms of investment performance for the second quarter of 2016, with office total returns of 1.74% (0.59% appreciation, 1.15% income) compared to the NPI's 2.03% total (0.84% appreciation, 1.19% income). On a trailing twelve-month basis, total returns in the office sector came in at 132 basis points below the overall NPI, with office appreciation at 4.52% (NPI, 5.56%) and office income at 4.6% (NPI, 4.88%).

Within the office subindex, investors showed a preference for CBD properties, which accounted for 58% of offices in the NPI. Reflecting their larger size and value, CBD investments averaged \$270.3 million, compared to \$79.1 million for their suburban counterparts. On the performance front, CBD properties also maintained an edge in the second quarter, with 1.86% returns leading suburban properties by 30 basis points. Reflecting strong investor demand and valuations, quarterly income returns for CBD offices held fairly stable at 1.05% (4.2% on a trailing twelve-month basis), and were 102 basis points below suburban offices and 82 basis points below the overall NPI.

On the public front, there are twenty-six office equity REITs in the FTSE NAREIT All Equity REITs Index, with a market share of 10% of the total as of the end of July 2016 (Exhibit 3). The average office REIT had a market value of \$4.36 billion. The office REITs are fairly concentrated, with the five largest REITs accounting for some 48% of the property sector (i.e., Boston Property, 21%; SL Green Realty, 10%; Alexandria Real Estate Equity, 7%; Kilroy Realty, 6%; Douglas Emmett, 6%). The average debt ratio for office REITs was 42.4%, with a 0.66 relative liquidity ratio (i.e., average daily dollar volume divided by equity market capitalization). In terms of performance, office REITs through July

18 had a year-to-date total return of 18.5%, with an 18.5% trailing one-year return. In terms of pricing, the average office REIT had a 16.7 price/FFO ratio for 2016.¹ Office REITs also reported a 3.86% dividend yield, and a relatively low 56.1% FFO payout ratio.

The pace of office transactions fell during the second quarter, with Real Capital Analytics (RCA) reporting \$31.9 billion in transactions. This was a 10% decline from the first quarter and a 12% year-over decline for the first half of the year. In July, transaction volume was \$8.4 billion, which reflected a 21% decline from the prior year. In terms of submarkets, the decline in transactions was concentrated in suburban markets, which were down 21%, while CBD transaction volume was flat. The declines hit all market classes, led by tertiary markets, which took the biggest hit in transaction volume (-36%), followed by secondary markets (-17%) and major metros (-7%). Interestingly, single-asset sales remained flat on a year-over basis, compared to a -45% change in portfolio transactions. Capitalization rates for CBD properties were relatively flat at 5.7% compared to 6.9% for suburban offices.

Retail Market

The retail market has continued to attract a lot of attention, which is understandable in light of the hypercompetitive nature of the industry. This scrutiny is being driven by concerns beyond traditional competition from new retailers and new shopping center formats. More recently, concerns over the impact of e-commerce and non-store competitors have called into question the survival, and thus investment performance, of traditional retailers. Most successful retailers have adjusted to the changing competitive environment and have aggressively launched their own e-commerce operations. The result is that most retailers have adopted multichannel and omnichannel capabilities, with the most successful companies using brick-and-mortar outlets as a competitive advantage over their purely virtual competitors. That is not to say there has not been some fallout affecting shopping centers, as many companies are pulling back as they rationalize their store counts. Other retailers have been introducing new, and often smaller, formats

1. REITs use funds from operations (FFO) as a measure of cash flow. FFO = Net Income + Depreciation + Amortization - Gains on Sales of Property.

that allow a more nimble approach to shifting consumer tastes. Many have also taken advantage of technological innovations that provide more efficient supply chains and the rapid fulfillment demanded by consumers. At the same time, a number of online retailers are opening physical outlets, indicating that both sides of the market are trying to find the optimal mix to respond to the demands of consumer segments.

While the retail side of the industry has been going through a shake-up, the shopping center industry has also been making a lot of changes. In the face of declining traffic, which is the lifeblood of shopping centers, some operators have renewed interest in the entertainment side of the shopping experience. This has manifested itself in a number of trends. Malls are replacing traditional department stores with sporting goods and entertainment-oriented retailers, and opening the doors to restaurants, theaters, and niche retailers that add to the ambience and energy of the centers. Others are moving to “experiential” and recreational retail, such as climbing walls, gyms, and other outlets that fall under that umbrella. Some shopping centers are also focusing on bringing in a range of services—business and government as well as medical, educational, and related operations. Other shopping centers have accelerated efforts to attract pop-up stores, short-term tenants that in the past had largely been confined to holiday sales programs. While the recent trends in tenant mix can be positive for well-located centers, many others struggle to fill space as the pace of store closings continues to accelerate with retailers such as Aeropostale, Barnes and Noble, Children’s Place, Macy’s, Office Depot, Sears, Walmart, and Wet Seal.

On the investment side of the retail market, the industry is a bit more stable than on the spatial side, although there are some obvious connections. On the private side of the industry, the retail market share of the overall NPI was 23.2% at mid-2016, with \$117.2 billion of investments. The average retail investment value was \$104.1 million, which was significantly above the overall NPI average. In terms of performance, the retail property sector outperformed the NPI, with 12.2% total returns for the trailing twelve months. The total returns benefited from stronger appreciation (6.96%), with 5% income returns on par with the overall NPI. The retail component of the NPI is the most diverse of the property subtypes; the category includes seven

distinct subindices: community center, fashion/specialty, neighborhood, power center, regional mall, super-regional mall, and single-tenant. In terms of investment performance, each of the retail components came in at 10% or higher trailing twelve-month returns, with super-regional malls leading at 13.3% (8.4% appreciation, 4.6% income). With the exception of single-tenant properties (which are not popular among institutional investors) income returns for the other subretail types were somewhat higher, with power centers at 5.76%, and community and neighborhood properties with income returns at 5.4% on average.

On the public front, retail equity REITs had implicit market capitalization of \$263 billion as of the end of July 2016, accounting for 24% of NAREIT segment. NAREIT classifies retail REITs into the following three categories, with the indicated implicit market capitalization shares for the property sector: shopping centers (33% share of value), regional malls (52%), and freestanding (15%). Within the broad shopping center category, the top-five REITs control about 58% of the sector: Kimco Realty Co., 16%; Federal Realty Investors, 14%; Brixmor Property Group, 10%; Regency Centers, 10%; and DDR Corp, 8%. The average debt ratio for the subsector was 42.5, with a 0.63 relative liquidity ratio. The year-to-date total returns through mid-July were solid at 22.5%, with 28.7% one-year trailing returns. The price/FFO ratio was 15.8, with a 63.5% FFO payout ratio. Shopping center REITs reported a 3.6% dividend yield through mid-July.

The regional mall category consisted of seven REITs, with a total implicit market capitalization of \$139.2 billion, which accounted for 52% of the overall NAREIT index. Simon Property Group was the dominant regional mall REIT, accounting for 59% of the subcategory and 31% of shopping center REITs. The next two players trailed dramatically, with General Growth Properties at 31%, and Macerich at 10% of the retail subsector. The average debt ratio for regional malls was 42.5, with a 0.84 relative liquidity ratio. The price/FFO ratio was 15.8, with an average of 12.4% total return through mid-July, a 4.4 dividend yield, and a 59.7 FFO payout ratio, which lagged the sector.

The freestanding retail category included Realty Income, representing 47% of the subsector, followed by National Retail Properties (19%), Spirit Realty Capital (12%), and Store Capital REIT (12%). The debt ratio for freestanding

retail was relatively low at 31.9, with a 0.70 relative liquidity ratio. The subsector led all others in terms of total returns, with year-to-date returns of 40.7, and 53.5 trailing one-year returns, a 3.9% dividend yield, and a 76.5% FFO payout ratio.

Retail transaction volume came in at \$17.6 billion in the second quarter, which was a 10% decline over the prior year. For the first half of the year, the declines were even greater, with a 20% reduction on a year-over basis. The trend continued in July, with a 12% drop in transaction volume. At an aggregate level, the pattern of retail sales echoed that of the office sector, with year-over declines for the second quarter of 10%. However, for the first half of the year, the declines were even greater at 20%, suggesting a greater correction as the market tried to rationalize the property sector. The most dramatic decline in volume was in the “malls and other” category (-36%), while strip-center sales experienced a 6% increase. In terms of markets, both the primary (-27%) and tertiary (-41%) market transaction volumes were off the year-over pace. Transactions for grocery-anchored centers actually rose 7%, while regional malls and urban retail were off, -36% and -34%, respectively. As with offices, portfolio sales were down dramatically, falling -42% from the prior year. Retail capitalization rates continued to experience some compression, coming in at 6.4% for the first half of the year.

Industrial Market

The industrial market continued to improve during the first half of the year, and according to Marcus and Millichap, absorption was at the highest level since the recession. On a national level, positive absorption drove industrial vacancy rates down 50 basis points to 5.9%, the lowest level in this century. At the same time, improvement in supply and demand fundamentals resulted in a 6.2% increase in asking rents. Conditions were most favorable in port markets and in those inland markets that benefited from strong imports, which offset some of the softness associated with the slowdown in exports. On a trailing twelve-month basis through the first quarter, about 182 million square feet of industrial space was delivered in the United States. Industrial construction activity tended to be more concentrated than with other property types, with over half of the industrial construction activity underway located in just five markets: Atlanta, Chicago, Dallas/Ft. Worth, Houston, and the Inland Empire area of Southern California.

Changes in supply chains will create more opportunities for inland ports as shipping patterns readjust to avoid bottlenecks and other constraints choking some West Coast ports, and to take advantage of the expanded capacity in the Panama Canal. CBRE identified inland ports with faster-than-average growth rates in shipping, and these locations are, for the most part, the same as those seeing an increase in industrial construction: Inland Empire, Greenville, Dallas/Ft. Worth, Atlanta, Philadelphia, Kansas City, Houston, St. Louis, Columbus, Memphis, Chicago, and Phoenix. In addition to imports, some of these markets have benefited from changing logistical models of retailers, and the continued expansion of online sales that put additional pressure on fulfillment and rapid delivery. Given the trends in retail sales, this pressure is unlikely to abate, creating a dynamic

Exhibit 3 FTSE NAREIT All Equity REITs Index

Sector/Subsector	Number of REITs	Market Capitalization*	
		Value (\$) [†]	Share (%)
Industrial	11	63.29	6
Office	26	106.15	10
Retail			
Shopping Centers	17	82.60	8
Regional Malls	7	123.16	12
Freestanding	6	39.26	4
Residential			
Apartments	15	115.23	11
Manufactured Homes	3	12.34	1
Single-Family Homes	3	9.12	1
Diversified	15	58.23	6
Other			
Lodging/Resorts	17	45.93	4
Health Care	17	110.79	11
Self Storage	5	62.67	6
Timber	4	29.84	3
Infrastructure	5	87.47	8
Data Centers	6	55.64	5
Specialty	8	38.42	4
Totals	165	1,040.14	100

* Market capitalization equals common shares outstanding

[†] Value in millions

Source: NAREIT® REITWatch, August 2016

industrial market environment with winners and losers based on locations and connections.

The industrial property sector accounted for \$71.9 billion in activity and 14% of the NPI. At an aggregate level, the 3,089 industrial properties came in at an average value of \$23.3 million, the smallest of the core property types in the index. The industrial sector significantly outperformed the overall NPI through the first half of 2016, with total returns of 2.9% for the second quarter and 13.4% trailing twelve-month returns. This strong performance was led by 7.64% appreciation and income of 5.39%, which was the highest among core assets despite some capitalization rate compression associated with strong investor demand.

On the private front, the warehouse category dominates all industrial subtypes with a 91% market share, followed by flex space (5%), R&D (2%), and other (1%) subtypes. The average value among the subtypes was fairly consistent in the \$24–\$28 million range, with flex space trailing at \$14.2 million. The warehouse category had the highest total returns for the second quarter—a solid 13.65% for the trailing twelve months. This strong performance included 5.36% income returns, which outperformed the overall NPI by 48 basis points. The other industrial subtypes also racked up double-digit returns on a trailing twelve-month basis.

The industrial component of the Equity NAREIT Index is relatively modest, accounting for only about 6% of the total implicit market capitalization at the end of July 2016. The \$65.8 billion in industrial market capitalization was spread among eleven REITs. The sector is fairly concentrated, with Prologis accounting for a 45% market share, followed by Duke Realty (15%), and First Industrial Realty Trust (10%). The average debt ratio for industrials was fairly low at 30, with a 0.59 relative liquidity ratio. The average price/FFO was 21.6, which led all property types and reflected strong investor demand. The total return was fairly healthy on a year-to-date basis through mid-July at 35.1%, with a 42.8% trailing twelve-month return. The dividend yield was 3.3%, which slightly trailed the NAREIT average with a 71.5% FFO payout ratio.

Industrial transaction volume, like other property types, declined during the first half of the year (-31% in value), despite some improvement in the second quarter. Given the relatively small size of individual transactions, the declines were

due, in large part, to the 64% decline in portfolio-level sales. In terms of subtypes, warehouse volume was off the most (-42%), while flex property volume increased 14%, which led most property types and subtypes although volume was slim. The decline in transactions occurred in all market tiers, including -42% in tertiary markets, -39% in secondary markets, and 18% in primary markets. Capitalization rates for major metropolitan areas have trended downward during 2016, with rates down to 5.1% compared to a stabilized rate of about 6.5% in other markets.

Apartment Market

Apartment market fundamentals continued to improve during the first half of the year, but there are some signs that the sector may be in for a pause. This is especially true for markets that have seen a continuous boom in new construction. According to National Real Estate Investor, the top-ten markets in terms of apartment construction, include Houston (25,935 units), Dallas (23,159), Manhattan (21,177), Los Angeles (20,025), Washington, DC (18,027), Austin (13,568), Seattle (13,384), Miami (13,245), Atlanta (11,988), and Denver (10,849). In terms of rents, increases are still on the horizon at the national level, although not at the same pace as in the years leading up to the 2014 peak.

Apartment returns in the NPI trailed the overall index in the second quarter (1.88% versus 2.03%), continuing the pattern of the prior twelve months. With \$124.1 billion in investments, the average value of apartments in the NPI was \$76.3 million at the end of the second quarter. The NPI apartment sector encompasses three subtypes: garden, high-rise, and low-rise apartments. Reflecting continued interest in larger, urban properties, the high-rise component accounted for 59% of the apartment allocation, followed by 33% garden, and 9% low-rise. During the second quarter, total returns for high-rise investments slipped to 1.58%, continuing a downward trend that translated to a disappointing 8.32% return for the trailing twelve months. This lagged the other apartment subtypes, with garden apartments coming in at a solid 12.4% and low-rise apartments at 9.8% total returns. The low total returns for high-rise properties was largely attributable to aggressive pricing, with trailing twelve-month income returns coming in at 4.3%, which was 105 basis points below garden apartments and 53 basis points below the overall NPI.

On the public front, apartment REITs are considered part of a larger set of residential REITs, which includes manufactured homes and single-family homes. Combined, the sector comprised some 13% of equity REITs in July 2016. Apartments dominated the sector, with 83% of the \$136.7 billion, followed by a 9% share by manufactured housing, and 7% for single-family homes. At a combined level, residential REITs accounted for some 13% of the Equity NAREIT Index, with apartments dominating the property sector with 83% of implicit market capitalization, followed by 9% for manufactured homes, and 7% for single-family homes. The public apartment segment is fairly concentrated, with the top-five REITs accounting for 73% of value led by Equity Residential (22%) and Avalon Bay Communities (21%), and followed by Essex Property Trust (13%), UDR (9%), and Camden Properties (7%). The average debt ratio was 39.4%, with a 0.64 relative liquidity ratio. The price/FFO ratio was 20.1 with a 75.7 FFO payout ratio. Total returns through mid-July were 16.96%, while trailing twelve-month returns were 25.95%, along with a 3.96% dividend yield, and a 75.7% FFO payout ratio.

Apartment transaction volume in the first half of 2016 belied that of other property types. Despite headwinds and concern over pricing of apartments at the top end of the market, sales volumes actually increased in the first quarter and held in the second quarter for a 10% increase in the first half of the year with \$32.7 billion of activity. However, sales plummeted -30% in July on a year-to-year basis, but it should be noted that decline came on the heels of a 33% increase in the June figures. Behind the scenes, some of the capital flowing into the apartment sector looked downstream a bit, opting for Class B properties with upside potential. For the first half of the year, garden apartments garnered the most attention, rising 15% while mid-rise and high-rise transactions were flat. Again, evidencing the search for value, transaction volume in major metros was flat, while secondary markets rose 19% along with a 12% increase in tertiary markets. Despite being a smaller component of the apartment market, student housing was on fire, rising 88% on \$5.2 billion of transactions, while senior housing cooled off. Apartment capitalization rates were relatively flat, ending the first half of the year at 5.6%, with some premium for top-end assets.

Other Property Type REITs

NAREIT tracks some property types that are not isolated in NCREIF; these property-type segments include the following categories: diversified, hotel, health care, self-storage, infrastructure, data centers, and specialty sectors. Both NAREIT and NCREIF report on timber and include some coverage of the lodging/resorts sector. Given the growing interest in REITs and non-core investments in general, it is useful to explore some of these niche plays to provide a more complete picture of investable real estate, especially on the public side of the market.

As of July 2016, the “diversified” category of equity REITs included seventeen companies with a total implicit market capitalization of \$62.2 billion. The sector, which accounted for some 9% of equity REITs in terms of company count and 6% of implicit market capitalization, was fairly concentrated with three REITs accounting for 63% of the sector allocation. The average debt ratio was fairly wide for the category, with an overall average of 48.4%. The price/FFO was 15.4 with a 5.1 dividend yield, a FFO payout ratio of 71.1%, and a 0.52 relative liquidity ratio. The diversified category generated total returns through mid-July of 20.3%, which reflected improvement over the 16.1% for the prior twelve months.

The hotel (lodging/resorts) property sector continued to be approached as non-core by institutional investors as reflected in the moderate share of the total investments. For example, on the private side of the market, the 114 properties reported an aggregate value of \$5.56 billion, which was slightly over 1% of the NPI. The share was somewhat higher on the public side, with hotel REITs accounting for some 4% of the total. On the performance front, there were significant difference between the private and public side of the hotel market. On the private side, hotels exhibited two consecutive quarters of negative appreciation, which dragged total returns down to 9.46% on a trailing twelve-month basis. Reflecting the perceived risk of the sector, income returns rose to 8% on a trailing twelve-month basis, although not enough to stay on par with other core property types. On the public front, lodging/resort REITs accounted for 10% of the number of companies and only 10% of the implicit market capitalization of equity REITs. Performance in the sector reflected recent improvement, with 12.3% year-

to-date figures, although due to a rocky second half of 2015 it still saw a -5.5% total return in the trailing one-year returns. Hotel debt ratios have been in line with other property types at 44.2% through mid-July. The price/FFO ratio lagged many other property types at 9.0%, with dividend yield of 4.8%, and a 68.4% average dividend payout ratio.

The health care sector is not isolated in the NCREIF Property Index, where its figures are embedded in the office and R&D sectors. On the public side, there were eighteen health care REITs through mid-July (10% of equity REITs), with a total implicit market capitalization of \$111 billion (11% of total market capitalization), and a \$6.2 billion average company size. The sector was fairly concentrated, with the top-three REITs accounting for 65% of the value (Welltower Inc., 25%; Ventas Inc., 23%; and HCP, 17%). The price/FFO ratio was 15.0, with a solid 80% FFO payout ratio. The dividend yield in mid-July was 5.7%, and after correcting for the outlier Global Medical REIT, the year-to-date total returns averaged 27.1%, which was an improvement of the trailing one-year return of 25%. The debt ratio for health care REITs was a conservative 37.5%, with a relatively modest 15.0 price/FFO ratio, an 80% FFO payout ratio, and a 5.7% dividend yield.

Self-storage is a distinct REIT classification consisting of five REITs with a market capitalization of some \$64.2 billion at the end of July; due to larger average sizes it comprised 6% of the Equity NAREIT index. The self-storage sector was more concentrated than other sectors, with the top-two REITs accounting for 82% of the sector. This concentration was led by public storage (64%) and extra space storage (18%). The sector had a very conservative debt ratio of 19.5%. Reflecting strong investor demand, self-storage was priced at an aggressive 21.6 price/FFO ratio, with a 76.7% FFO payout ratio, and a relatively low 3.5% dividend yield. Total returns through July were somewhat disappointing at 4%, although trailing one-year returns of 31.5% outpaced most other property types and sectors.

Despite dramatic growth over the past several years, investments in the infrastructure category are not isolated by NCREIF. The situation is a bit different on the public side, where six infrastructure REITs account for some 3% of REITs and 8% of implicit market capitalization with a \$14.6 billion average size. Infrastructure REITs

had a relatively low 42.1% debt ratio. In terms of pricing, the sector had an average price/FFO ratio of 14.9, with a 71.5% FFO payout ratio. Infrastructure performance in the first half of the year was outstanding, with total returns of 49.4%—a dramatic improvement over the trailing one-year returns of 22.2%—and a competitive 4.84% dividend yield.

Data centers are not isolated in the NCREIF Index and are likely embedded within the office and R&D categories. On the public side of the market, there were six data center REITs at mid-year, accounting for \$58 billion (5%) of the implicit market capitalization of REITs. The average size of data center REITs was \$9.7 billion with two REITs dominating the sector: Equinix Inc. at \$25.9 billion (44% of sector), and Digital Realty Trust at \$16.9 billion (29%). Data center REITs traded at a 22.8 price/FFO ratio, with a very solid 90% FFO payout ratio. Compared to prior quarters, total returns tapered off a bit to 40.7% through July, compared to a stellar 82.6% on a trailing one-year basis. Despite these strong returns, data center REITs only provided a 2.8% dividend yield.

As might be expected, the specialty REIT category includes a hodgepodge of industry sectors, including agriculture, entertainment, prisons, specialty storage, and outdoor advertising. In general, the average size of specialty REITs trailed other industry sectors. The category accounted for 4% of REITs in terms of implicit market capitalization, with a relatively low average of \$3.8 billion. The top-five REITs dominated the sector with 84% of the implicit market capitalization led by Iron Mountain (28%), Gaming and Leisure Properties (18%), Lamar Advertising (14%), ERP Properties (14%), and Corrections Corp of America (10%). The overall category had a 17.4 price/FFO ratio, with an industry-leading 98.9% FFO payout ratio and a 5.2% dividend yield. In terms of performance, the category experienced an uptick in 2016, with 25.1% total returns through mid-July, and 18.9% trailing one-year returns.

Conclusion

The summer of 2016 was perhaps a game changer for the commercial real estate markets, with the upcoming elections adding interest to the equation. In addition to domestic uncertainty, there

are a number of unknowns on the global front that create some downside risk to the economy. Given the tenuous nature of the economic recovery and the unexpected slowdown in the first half of the year, there are few degrees of freedom to accommodate a major shock. Despite that risk, the probability of a recession is rather muted at 21%, and there are some signs that the economy might pick up the pace of growth, although GDP growth will likely get stuck in the low 2% range in the near term. Improving fundamentals on the employment and market side of the equation may lead the Fed to an interest rate increase in 2016. Even if rates do increase, the relatively low interest rate environment that the economy and markets have come to depend on is likely to continue for some time.

The commercial real estate market is exhibiting some signs of peaking, with flattening of price indices, investment performance, and transaction volume. While yields remain at historically low levels on the private side of the market, the public side is doing well. This divergence may actually increase due, in part, to an anticipated inflow of capital to REITs as a result of the elevation of real estate to the level of a distinct industry sector. This will force asset allocators to consider adding real estate to their portfolios in a market share adjustment. Whether that change

is durable will depend on the ability of REITs to deliver competitive risk-adjusted returns on a consistent basis.

Within the real estate sector, underlying fundamentals of supply and demand are fairly stable, with some improvement for most property types and markets. This improvement should not to be viewed as durable, because commoditized price premiums are likely to evaporate with a correction or plateauing in the market cycle. In this environment, savvy investors are turning to Class B assets and other value-add opportunities to bolster returns and insulate portfolios from price pressure at the top end of the market. The ability to create value, rather than ride the crest of a rising market, is much more difficult than it might appear. This is especially true if interest rates and yield expectations rise and put downward pressure on prices with little differentiation for underlying spatial fundamentals. To take advantage of the opportunities that lie ahead, it is important to bring an A-game to the table. This will be easier for some who have been through a couple of market cycles, but for others it will require an Olympic effort. The good news is that it is easier to address this now, when there is still time to be ahead of the cyclical wave, rather than being on the defensive and trying to break through a downward crest.

About the Author

James R. DeLisle, PhD, is associate professor of real estate and director of Academic Real Estate Programs at the University of Missouri–Kansas City Henry W. Bloch School of Management. His charge is to help build a preeminent real estate program that strikes a balance between academic rigor and state-of-the-art industry practices. Drawing on this foundation, students are trained in critical thinking and the spirit of entrepreneurship necessary to take on the complex real estate problems that the next generation of industry leaders must be able to solve. He comes to the Bloch School from the University of Washington where he was Runstad Professor of Real Estate and director of the graduate real estate studies. DeLisle has spent almost half of his forty-year career in real estate as a professional with specializations in applied investment research and strategic portfolio management. Before returning to academia in 1999, he was an executive vice president and head of strategic planning for Lend Lease Real Estate Investments, a global company and the successor firm to Equitable Real Estate, where he founded the Investment Research Department. He has published widely in academic and professional journals. DeLisle received his BBA in real estate and MS in marketing from the University of Wisconsin. He received his PhD in real estate and urban land economics from the University of Wisconsin under his mentor, the late Dr. James A. Graaskamp, one of the leading academic proponents of applied real estate research. To increase industry connections, DeLisle has created a personal website, <http://jrdelisle.com>. **Contact:** delislej@umkc.edu

CONTINUED >

Additional Resources

Internet resources for additional reading

Bureau of Labor Statistics

- **Local Area Unemployment (LAU) Statistics**
<http://www.bls.gov/lau/home.htm>
- **LAU Alternative Measures of Labor Underutilization for States**
<http://www.bls.gov/lau/stalt.htm>

Conference Board

- **Business Cycle Indicators**
<https://www.conference-board.org/data/bci.cfm>

Economic Cycle Research Institute (ECRI)

- **All Indexes**
<https://www.businesscycle.com/ecri-reports-indexes/all-indexes#>

Federal Reserve

- **Chicago Fed National Activity Index (CNAI)**
<https://www.chicagofed.org/publications/cfnai/index>
- **Federal Reserve Economic Data (FRED)**
<https://research.stlouisfed.org/fred2/>

Institute for Supply Management (ISM)

- **Report on Business**
<https://www.instituteforsupplymanagement.org/ISMReport/>

International Monetary Fund (IMF)

<http://www.imf.org/external/index.htm>

MSCI

<https://www.msci.com/>

National Association of Home Builders (NAHB)

- **Housing Indexes**
<http://www.nahb.org/en/research/housing-economics/housing-indexes.aspx>

National Council of Real Estate Investment Fiduciaries (NCREIF)

- **Data and Products**
<https://www.ncreif.org/data.aspx>

National Federation of Independent Business (NFIB)

- **Economic Trends**
<http://www.nfib.com/surveys/small-business-economic-trends/>

University of Michigan

- **Survey of Consumers**
<http://www.sca.isr.umich.edu/>