AEW RESEARCH

U.S. ECONOMIC & PROPERTY MARKET PERSPECTIVE

Q3 2021

AEW

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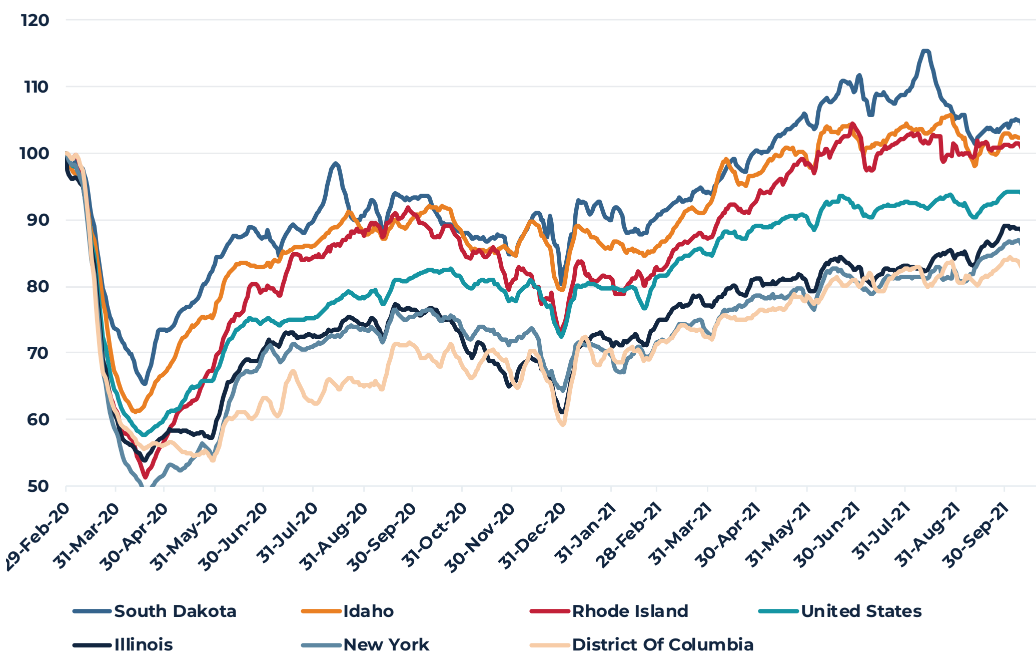
2021 Q3 – COVID Recovery Pausing?

U.S. economic growth slowed sharply during the third quarter of 2021 as the Delta variant of COVID-19 surged across large swathes of the country during July, August and September. While the hardest-hit states imposed few (or no) activity restrictions or other mandates, aggregate economic activity clearly slowed as evidenced in the broad flattening of various measures such as Moody's "Back to Normal Index," which tracks dozens of real-time and government-reported economic measures compared to pre-pandemic levels. Figure 1 highlights the three most and least "back to normal" state economies, underscoring the large degree of geographic variation in pandemic-related economic contraction and recovery. In general, more urbanized and higher density areas experienced more significant reductions in economic activity during the pandemic period as well as slower and more modest recoveries. More recently, COVID-related growth impacts have also been compounded by broad global supply chain disruptions creating significant production disruptions, most visibly perhaps in the U.S. auto sector.

FIGURE 1
"BACK TO NORMAL" ECONOMIC ACTIVITY INDEX
FEBRUARY 2020 = 100

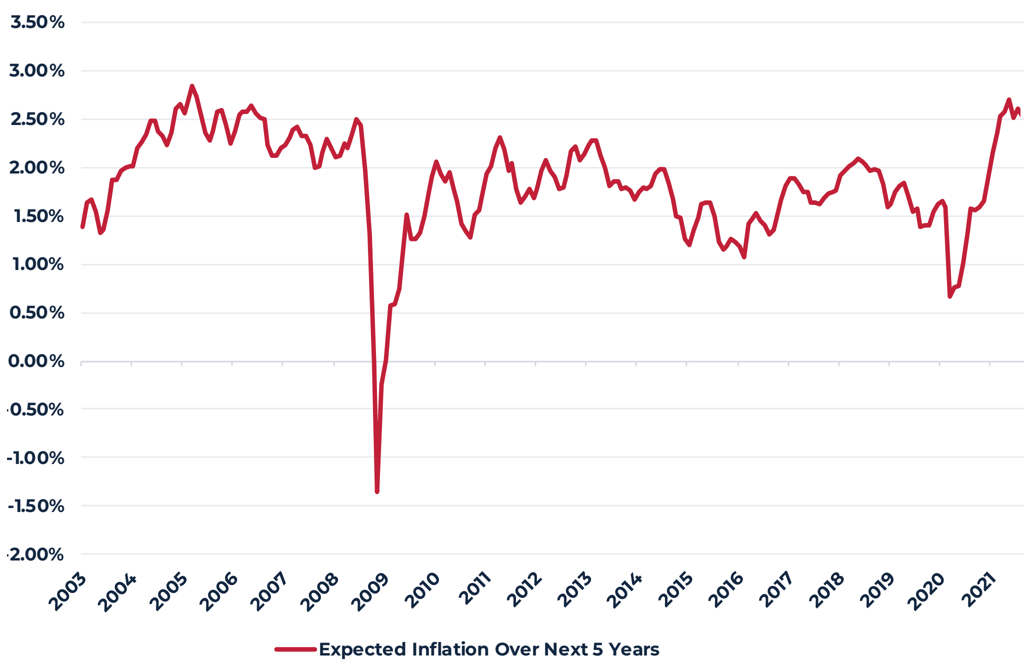


Source: Moody's Analytics

Overall, U.S. real GDP increased at an annual rate of only 2.0% during the quarter, far below the first-half growth rate of 6.5% as well as the consensus expectation of 2.6%. Growth is expected to re-accelerate through the remainder of the year and into 2022, with 2021 full-year growth of more than 5% and a 2022 growth rate of more than 4%. Longer term, we expected aggregate economic growth to slow to the more sustainable annual range of 2.0%-2.5%.

As with real GDP, total employment growth slowed more quickly than expected during the quarter. After increasing more than 10% in April relative to the same month in 2020, year-over-year job growth has slowed each month since, with September showing only a 4% gain year over year. Overall, total employment in the U.S. remains nearly five million below the February 2020 pre-pandemic peak and U.S. employers currently report approximately 10.5 million open positions, the largest number ever reported since this particular survey began at the end of 2000. Indeed, businesses across a wide range of industries and geographic locations report difficulty finding workers, particularly for lower-wage and public-facing positions in sectors such as hospitality, food service and health care. Within the commercial property sector, labor constraints are resulting in slowdowns in new construction as well as staffing shortages in higher operating profile properties such as hotels and seniors housing. Labor market dislocations are expected to ease during 2022 but employers will likely continue to face near-term staffing problems as we move through the fourth quarter and seasonal holiday worker demand.

FIGURE 2
EXPECTED INFLATION OVER THE NEXT FIVE YEARS

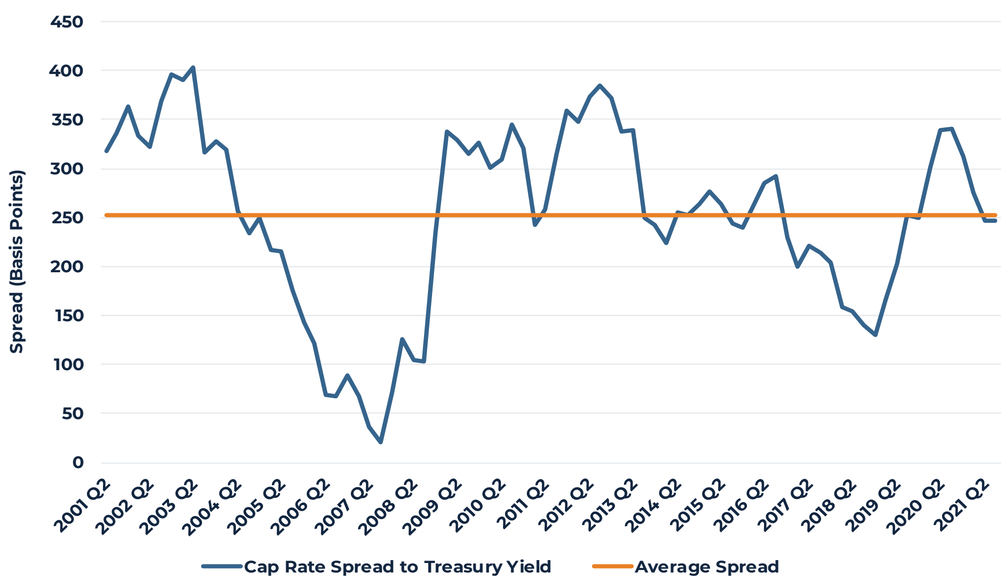


Source: U.S. Department of the Treasury

Despite slower aggregate growth, measures of inflation accelerated over the past quarter with the overall consumer price index (CPI) recording a year-over-year increase of more than 5%, the highest level since the summer of 2008. Until recently, the bond market has largely discounted elevated inflation concerns with yields on Treasury bonds holding far below pre-pandemic levels. Over the past quarter, however, the ten-year Treasury yield has increased from a low of 1.2% in mid-July to more than 1.5% in October. More significantly, implied expected inflation imbedded in inflation-indexed Treasury bond pricing (i.e. TIPs) suggests that bond investors have increased their expectation for average inflation over the next five years from 2.5% at the end of September to 3% at the end of October. While there remain many reasons to believe that overall inflation will ease during 2022 as labor shortages and various supply chain issues are resolved, expected inflation is now at the highest level since the U.S. inflation index bond market began operation in 2003, albeit at a fairly low level relative to the high inflation periods of the late 1970s and early 1980s.

Taken together, current bond market pricing (i.e. forward Treasury yields and expected inflation) indicate negative real Treasury yields for the foreseeable future. If correct, persistent negative real yields will likely continue to direct capital into a wide range of return-seeking and/or yield-enhancing asset classes with real assets generally and income-producing commercial property specifically remaining highly attractive to myriad investors around the globe. Even with the recent increase in Treasury yields, U.S. commercial property pricing at the end of the third quarter remained highly attractive on a spread basis with property yields holding at the twenty-year average spread to Treasury yields.

FIGURE 3
NCREIF PROPERTY INDEX YIELD RELATIVE TO U.S. TREASURY BOND YIELD

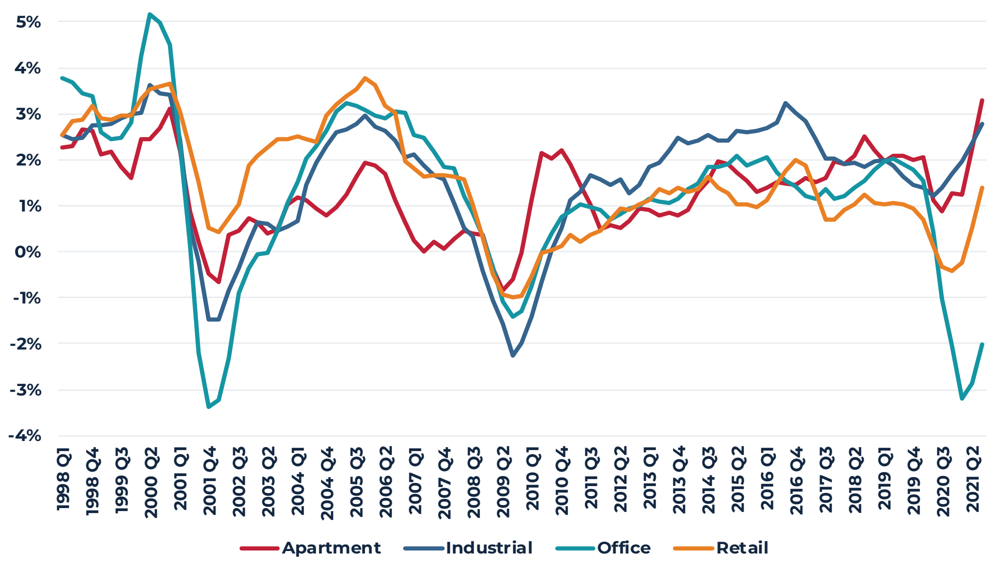


Source: Federal Reserve, NCREIF

U.S. Commercial Property

In contrast to slower than expected economic growth, U.S. property markets largely showed improving demand characteristics during the third quarter with absorption of industrial, apartment and retail space accelerating and the decline in demand for office space slowing somewhat. In total, the data for multi-tenant competitive office space shows an aggregate decline in occupied office space of nearly 4% compared with pre-pandemic peak.

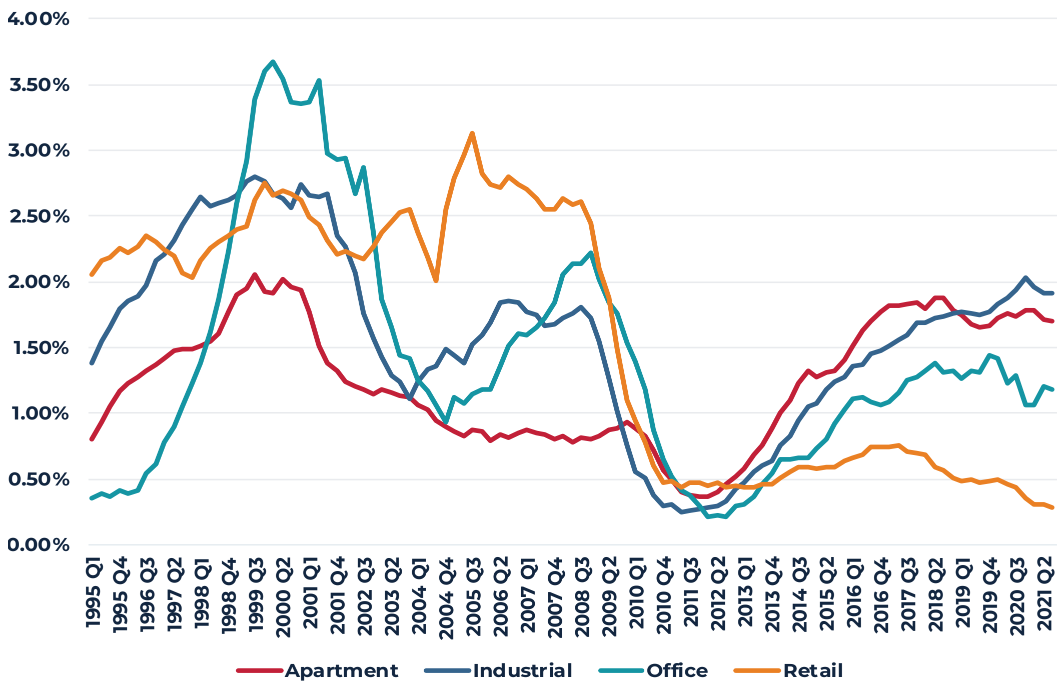
FIGURE 4
ABSORPTION: YEAR-OVER-YEAR GROWTH IN OCCUPIED STOCK



Source: CBRE-EA 2021 Q3

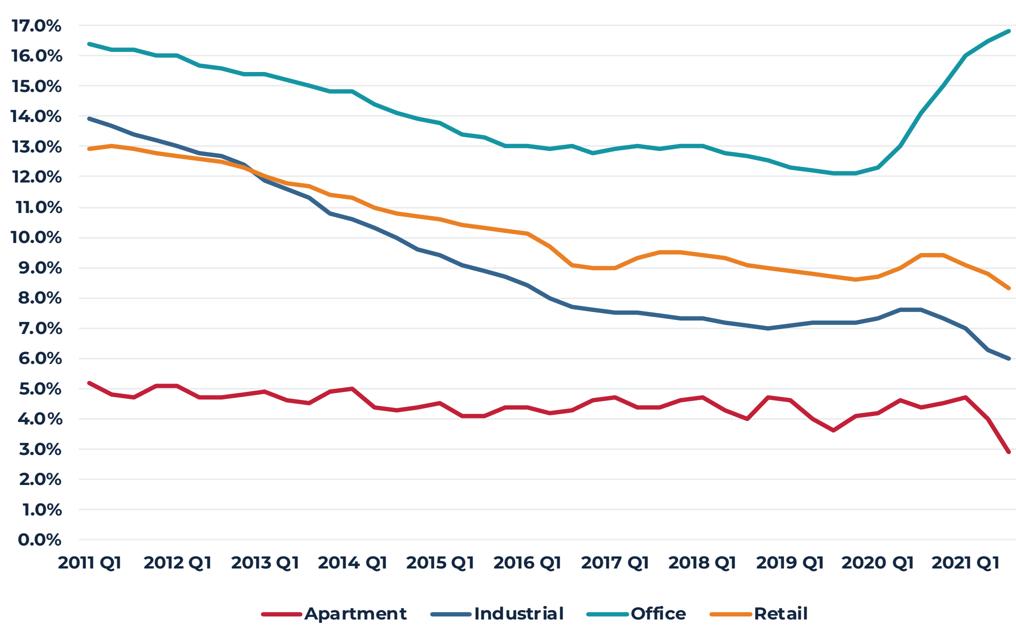
At the same time, new property supply remains generally range bound with the aggregate growth in stock of apartment and industrial space holding steadily between 1.5%-2% per year compared with demand growth of nearly 3% in both cases. For its part, the new stock of retail space in the country has been growing at an annual pace of 0.5% or less for several consecutive quarters, essentially no growth in aggregate stock when physical depreciation and obsolescence is considered. Growth in the nation's total office stock, while quite low by historical standards, remains problematic given widespread contraction in office demand. While it is still highly uncertain how (and how much) office tenants will use space going forward, it seems likely that aggregate demand for office space will remain weak, at best, in the near term. Taken together, property market supply and demand changes combined to produce broadly declining occupancy/ availability rates in most industrial, apartment and retail property markets with sharply higher vacancy rates in most office markets.

FIGURE 5
SUPPLY: YEAR-OVER-YEAR GROWTH IN TOTAL STOCK



Source: CBRE-EA, 2021 Q3

FIGURE 6
VACANCY/AVAILABILITY RATE



Source: CBRE-EA, 2021 Q3

Changes in property net operating income (NOI) during the pandemic period have not correlated directly with supply and demand fundamentals in all cases. Overall, apartment vacancy rates have remained low over the past two years with overall demand growth remaining positive in all quarters, but total apartment NOI showed a peak-to-trough decline of more than 10% during 2020 and, while quickly recovering, remains below prior peak as of the third quarter.

In contrast, office vacancy rates have increased significantly since the beginning of 2020, but average office NOI remains above pre-pandemic prior peaks. For their parts, overall industrial NOI has increased steadily and significantly and is now 25% above pre-pandemic levels, while average retail NOI fell 35% during 2020 and has since recovered to a level approximately 15% below prior peak. Looking ahead, we expect strong and widespread near-term growth in industrial and apartment NOI, somewhat mixed recovery in retail properties and generally flat to declining office NOI.

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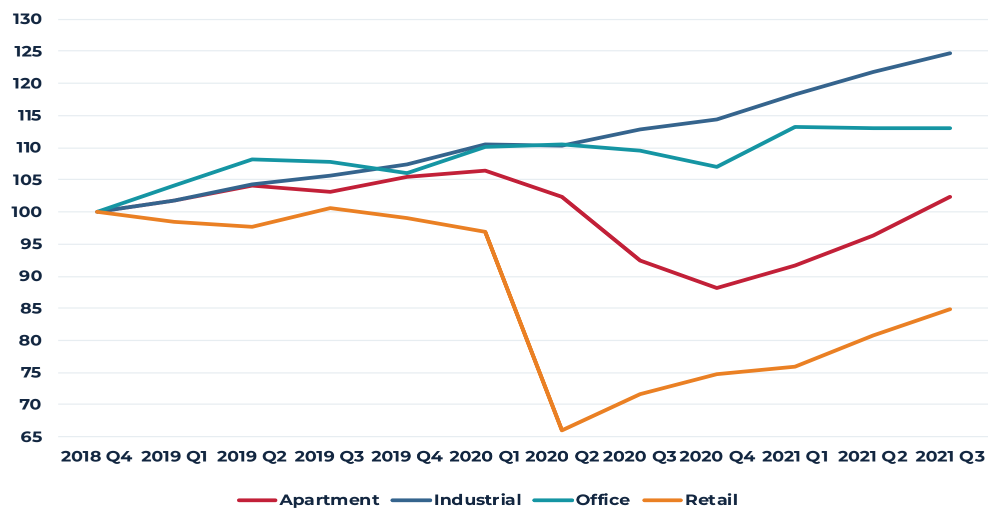
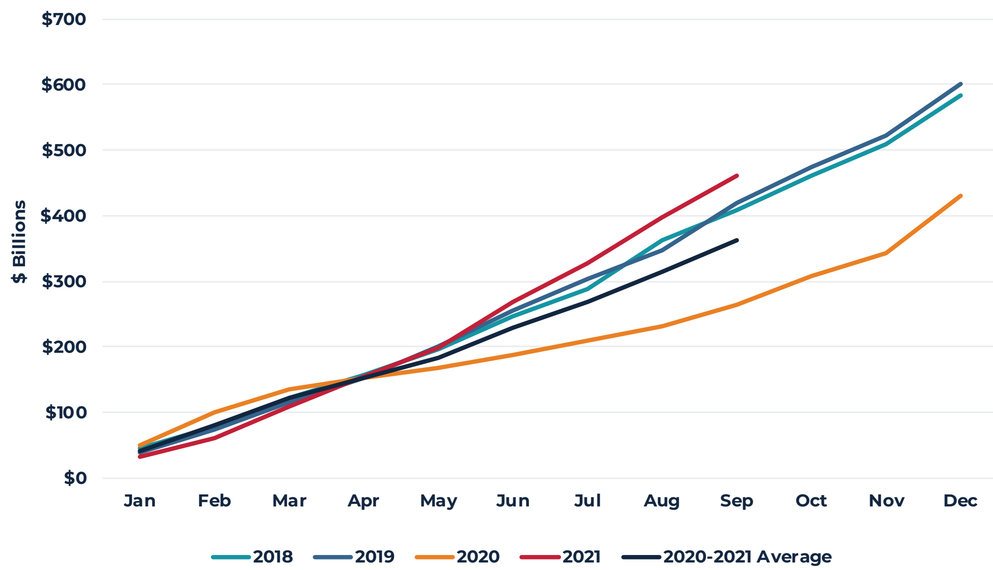
FIGURE 7
NOI GROWTH INDEX, 2018 Q4 = 100



Source: NCREIF, 2021 Q3

Finally, led by very strong investor demand for industrial and multifamily properties, third-quarter U.S. commercial property transaction volume has moved above the transaction volume pacing of 2018 and 2019 and is close to undoing the gap incurred during 2020 (see 2020-2021 Average Transaction Volume line in Figure 8). While office and retail transaction volumes remain well below the pacing of 2018 and 2019, property sectors such as industrial, apartment, hotels and seniors housing have all moved above the pacing of the most recent pre-pandemic years. Given the large amount of “dry powder” capital held by real estate private equity funds, the return of neutral or positive investment queues in core open ended funds (ODCE) as well as the rapid growth in capital formation by formerly nascent non-traded REITs (NTRs), we expect overall transaction volume to continue to accelerate through the remainder of 2021 and through 2022.

FIGURE 8
COMMERCIAL PROPERTY TRANSACTION VOLUME PACING BY YEAR (BILLIONS)



Source: RCA 2021 Q3

Office

The U.S. office market took another step back in the third quarter of 2021 as the vagaries related to the pandemic cloud the vision of both employees and employers on how best to manage a re-entry into a post-pandemic world. Office vacancies edged higher by 30 basis points (bps) in the third quarter from last quarter to 16.8% as net absorption recorded another negative quarter (-5.2 msf) compounded by new supply. That said, the absorption trend has improved materially from the significant drops registered in 2020 and early 2021 (-20 to 30 msf per quarter). Vacancies now stand at the peak achieved during the Great Financial Crisis and are only 20 bps below the cyclical high of 17.0% in the Tech Crash that was prefaced by a more aggressive supply situation. Total office availability held steady at 22.7% (includes space being actively leased for occupancy in addition to vacant square footage) over the quarter. Overall, the spread between the vacancy and availability rate stands at 590 bps, which is not materially different from the 570 bps averaged over the five years leading up to the pandemic, suggesting firms either haven't changed their longer-term thinking about space needs or are constrained by their leases from implementing changes. While the amount of sublease space has increased, it remains low at just over two percentage points of total available space. Office tenants appear to be taking a more measured approach to making significant changes to their space needs at this juncture as the return-to-work dynamics continue to evolve.

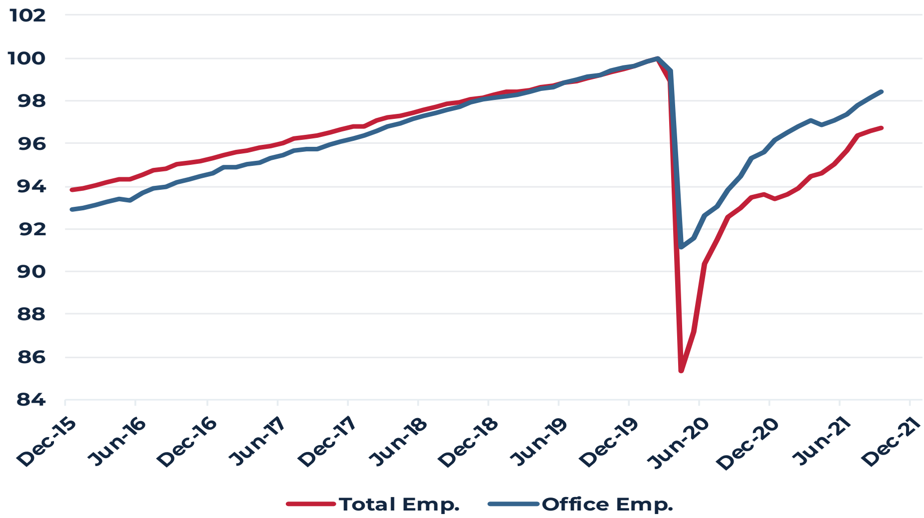
An encouraging sign for the sector is the relative strength of the underlying office employment picture. Office-using jobs were expanding faster than overall employment in the relatively healthy economic landscape prior to the pandemic. As the pandemic took hold, the office-oriented service sectors were less impacted with many of those jobs benefitting from the ability to work from home. Correspondingly, the bounce back has been more significant as the economy has worked towards reopening with office using jobs climbing to within 1.6% the February 2020 peak versus total employment, which remains 3.3% shy of the previous peak.

The upward trend in office vacancies across markets has not changed materially over the most recent quarter. Of the 64 markets tracked by CBRE-EA, 51 have seen an increase in vacancies since the start of the year with 35 at vacancy rates equal to or above 15.0%. Primary markets like Houston (26.1%), Dallas (23.6%), Chicago (19.4%), Atlanta (18.7%), Los Angeles (18.0%) and Washington, DC (18.0%) are seeing some of the highest vacancy rates but are not alone. Most of the tech-centered markets experienced year-to-date increases in vacancies including San Francisco (300 bps), Austin (320 bps) and Seattle (340 bps) along with Denver (320 bps) and Portland (370) all above the national increase of 190 bps. On the flip side, San Diego saw conditions improve 20 bps while San Jose (130 bps) and Boston (160 bps) outperformed the nation, maintaining vacancies below 15%. Significant concentrations in Life Science properties are helping performance in Boston and San Diego.

The correlation between employment and office-space demand is clearly shifting in real time as many employers integrate some form of a hybrid (remote/in-person) work model, but the longer-term dynamics remain in question. The rise and subsequent decline of the Delta variant put a damper on what was thought to have been a positive turning point from a return-to-office perspective, especially as the school year began. Kastle System's Back-to-Work Barometer, which tracks physical occupancy in a building based on security card swipes, highlights the fact that although there has been some improvement, physical office use remains low at just over one third of pre-pandemic levels. This varies more widely by market and tenant type (e.g. legal services are roughly 60% of pre-pandemic use levels) with San Jose, San Francisco and Manhattan lagging well behind the aggregate benchmark while the major Texas markets are trending well above. In some cases, these differences reflect municipal restrictions and/or local mindsets, but these dynamics also extend to the corporate level where the disparity on return to work policies remains wide and continues to evolve.

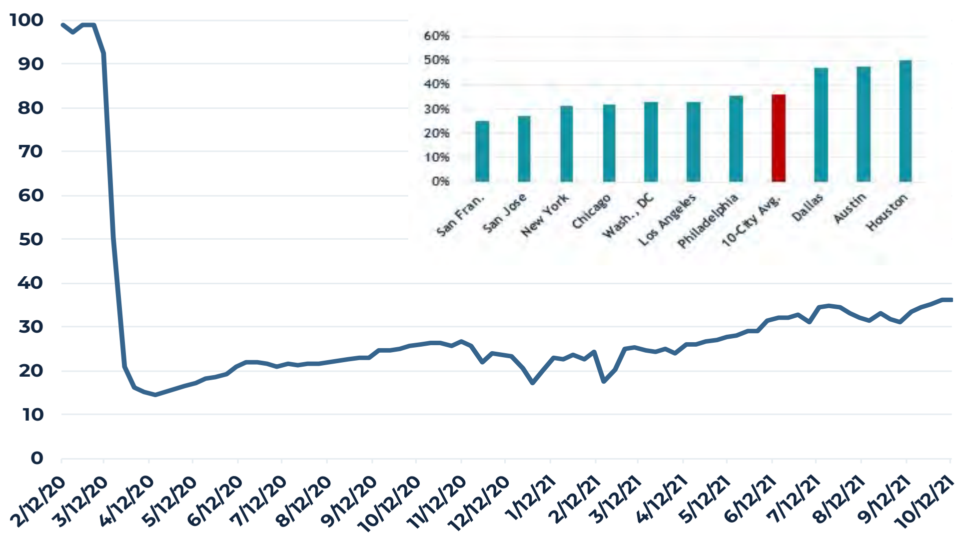
Overall, AEW Research affirms the belief that many firms will embrace a more fully integrated hybrid work model that will translate into a reduction in aggregate demand. That said, it will take time to play out as firms assess the impact of the shifting work model on productivity, profitability and the ability to retain talent. This will also translate into flight-to-quality space and location premiums that often show up at this point in the cycle but will expand to incorporate health and safety attributes at the expense of commodity office space. Short term, however, there has been a more significant pickup in leasing volumes over the last two quarters suggesting that the momentum is at least moving in the right direction with higher tenant velocity.

FIGURE 9
U.S. OFFICE USING VS. TOTAL EMPLOYMENT LEVEL (FEBRUARY 2020 = 100)



Source: Bureau of Labor Statistics, Moody's Analytics

FIGURE 10
BACK-TO-WORK BAROMETER – 10 CITY AVERAGE



Source: Kastle Systems

OFFICE	
Vacancy Rate	16.8%
12-Month Historical Trend	
Vacancy Change	↑
Rent	↓
Absorption	↓
Completions	↔
Cap Rates	↑
Transaction Volume	↑

Source: CBRE-EA

Apartment

The apartment recovery accelerated further in the third quarter of 2021. Per CBRE-EA, the national apartment market vacancy rate declined to only 2.9% in the quarter, down 120 basis points (bps) from the previous quarter and 150 bps from a year earlier. The market has more than recovered from the sluggishness brought about by the COVID-19 pandemic in 2020 and vacancies are now at a historic low, dropping 70 bps below the pre-pandemic low of 3.6% in late 2019.

Demand has continued to surge. In 2021 Q2, a record number of roughly 181,200 units was absorbed on a net basis; that record was completely shattered in 2021 Q3 as nearly 251,500 units were absorbed. Demand in the quarter was nearly six times the quarterly historical average of 43,000 units from 1996 through 2021 Q2. Further, the rolling four-quarter absorption rate jumped to 3.1%, up from 2.2% in the previous quarter and far outpacing the 1.7% increase in supply. This is not to say that construction activity has slowed meaningfully, rather the improvement in the market has been solely driven by demand. Indeed, completions as a share of inventory have lingered in the 1.7%-1.9% range since late-2016.

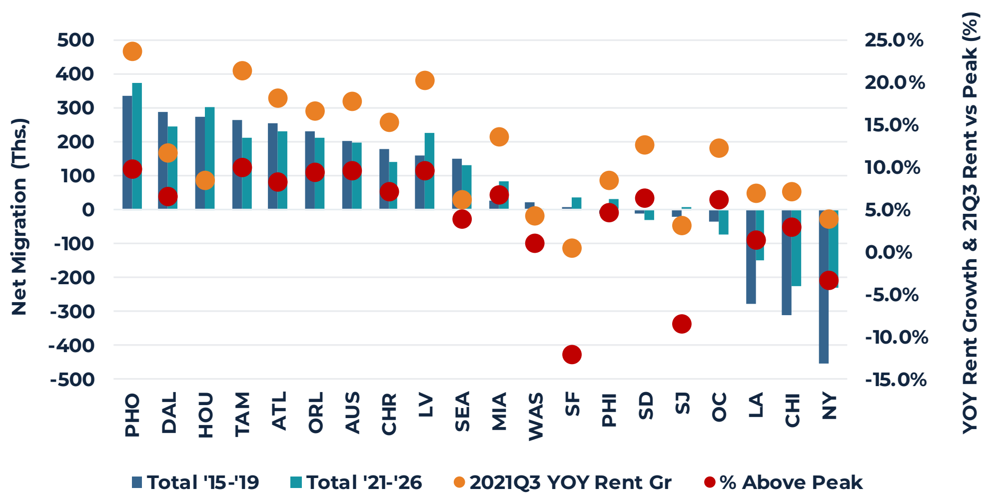
Regionally, eight markets reported vacancies of 2.0% or less. The Southern California markets of Orange County, Riverside, Ventura, and San Diego were among the eight; Providence, Norfolk, Detroit and Miami made up the remaining markets. An additional 42 markets reported vacancies between 2.1% and 3.0%. Overall, vacancies in roughly 40% of all major markets are at or very near (within 30 bps) historic lows.

In addition to record-breaking demand and vacancy levels, the pace of rent gains has eclipsed prior records. Nationally, rents advanced 7.8% year over year (YOY), outpacing the previous record by roughly 60 bps. By market, 36 of the nation's 65 largest markets reported record-breaking YOY rent growth. Per CBRE-EA, YOY rent growth ranged from a high of 23.8% in Phoenix to only 0.5% in San Francisco. Overall, however, only one other market – Minneapolis (2.7%) – reported YOY growth below 3%; only four additional markets reported YOY growth between 3% and 5%. These markets included New York (4.0%), Oakland (4.3%), Washington DC (4.4%) and Pittsburgh (4.6%). Not surprisingly, many of the markets are dense, urban markets, hardest hit by the pandemic. Many midwestern markets reported growth between 6% and 8.5%, including Milwaukee, Cleveland, Cincinnati, Dayton, St. Louis, Chicago, Kansas City, Columbus and Detroit. Outperformers included many Sun Belt and southwestern markets; indeed, Phoenix, West Palm Beach, Tampa, Las Vegas, Tucson, Albuquerque, Fort Lauderdale, Jacksonville, Atlanta, Austin, Raleigh, Orlando, Riverside, Charlotte and Sacramento all reported YOY rent growth in excess of 15%.

Many markets that have exhibited the strongest YOY rent growth have historically been leaders in net migration and are expected to be in the future. Thus, demand in these markets should outperform. Supply, however, is picking up with 18 markets reporting units under construction of over 5%. Austin (11.8%), Nashville (11.0%), Colorado Springs (8.9%), Orlando (8.8%), Salt Lake City (8.3%), Richmond (7.6%), Charlotte (6.4%), Greenville (6.3%) and Phoenix (6.0%) lead the way in terms of supply under construction. Based on pre-pandemic demand trends, however, demand and supply should remain roughly balanced in the aforementioned markets, particularly as the supply underway will be delivered over the course of the next few years.

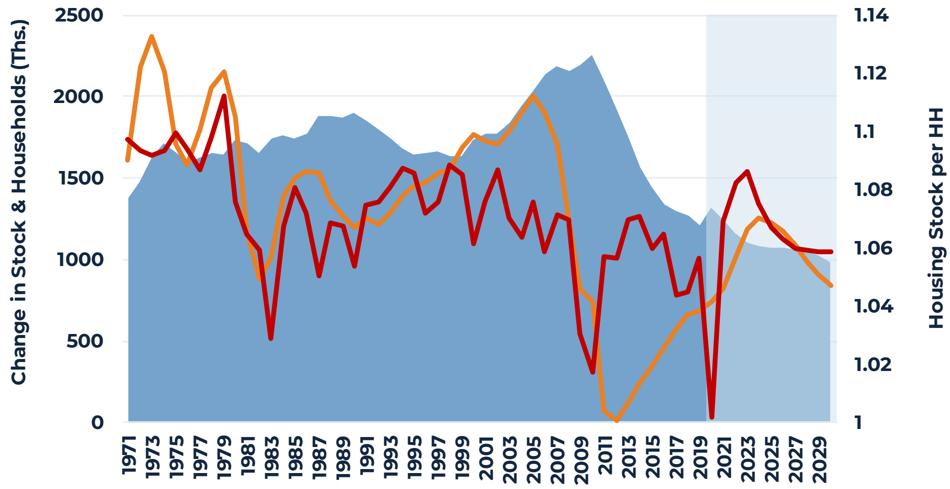
Going forward, demand will be supported by the continued economic recovery and accelerating job growth, which should support household formation. Meanwhile, a broad lack of affordability with respect to for-sale housing and limited supply of homes for sales continues to push many households into rental units. Overall, we believe the long-term prospects for the apartment market should remain favorable as the U.S. is undersupplied in housing relative to the demographic-driven demand expected. Indeed, the housing stock per household has been on the decline since 2010 (see chart). Further, the growth in stock going forward is expected to remain modest, increasing at an average annual rate of only 0.7% from 2020 to 2030, below the 0.9% average annual increase in households. That said, with home prices and apartment rents soaring, construction may accelerate; thus, we will continue to monitor new supply.

FIGURE 11
NET MIGRATION - TOP 10 AND BOTTOM 10 MARKETS



Source: Moody's Analytics and CBRE-EA

FIGURE 12
HOUSING STOCK VS. HOUSEHOLDS



Source: Moody's Analytics

APARTMENT	
Vacancy Rate	2.9%
12-Month Historical Trend	
Vacancy Change	↓
Rent	↑
Absorption	↑
Completions	↔
Cap Rates	↓
Transaction Volume	↑

Industrial

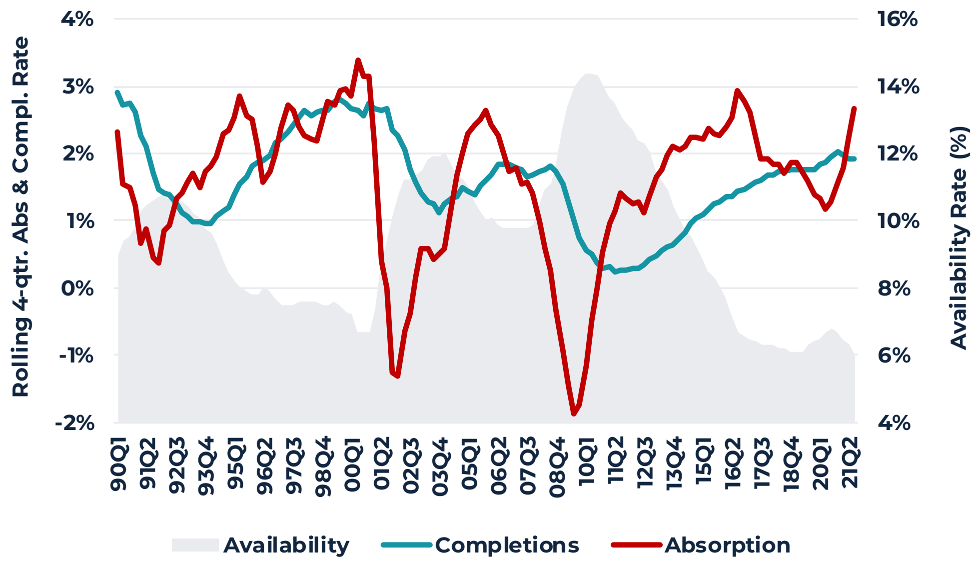
The third quarter of 2021 proved to be yet another strong quarter for the industrial property sector. Availability declined to 6.0%, down 30 basis points (bps) from the prior quarter and 80 bps from a year earlier. Availability is now at a historical low and is 380 bps below the quarterly historical average from 2000 through 2020. Not surprisingly, demand was exceptionally strong with 120 million square feet (msf) being absorbed in the quarter and 395 msf over the previous four quarters. Further, the four-quarter absorption rate increased to 2.7%, a marked acceleration from the pre-COVID average of 1.7% (2018-2019). Retail sales growth among warehouse-dependent categories like home furnishing, building materials and garden equipment and sporting goods remains strong. Moreover, with supply shortages persisting for many goods, inventory management is shifting from just-in-time inventory practices to allow for greater safety stocks. Indeed, to prevent future inventory shortages leading to production shutdowns, manufacturers will keep more inventory (buffer stock) on hand. This will continue to put upward pressure on demand for industrial space.

While retailers and manufactures alike work to rebuild inventories, the flow of goods into the U.S. has been stymied by bottlenecks at U.S. ports, most notably the Ports of Los Angeles and Long Beach. As of mid-October, there were 100 ships waiting to enter and unload in Southern California and an additional 45 ships were expected to arrive off the coast of Southern California by late October. Altogether, the backlog represents more than half a million 20-foot equivalent containers; to put this in perspective, on average nearly 725,000 loaded inbound containers passed through the ports monthly from 2017 to 2019. At the Ports of LA and Long Beach operations have expanded to run 24 hours a day, 7 days a week; however, the backlog is not just related to operating issues at the ports, which were reportedly running at 60%-70% capacity. Shortages of truck drivers, capacity limits on rail and constraints at warehouses and retailers receiving goods are all contributing to the bottleneck. To alleviate some of the backlog, Long Beach has allowed warehouses and industrial sites to stack containers four high in their yards, twice the normal limit, for the next 90 days; even this as a remedy will prove challenging, however, as the lack of truck drivers is forcing available appointments at the docks to remain unfulfilled. The snarls in the supply chain are not relegated to just Southern California or the U.S. There are also backlogs reported in New York/New Jersey, Georgia and Texas; globally, Chin's Yantian port in Shenzhen has more than 67 container ships waiting to unload while the Ports of Malaysia, Singapore, Hong Kong and Shanghai all had 10 or more container ships waiting to offload.

Warehouse capacity constraints are very real at this point. New supply continues to be delivered but is well short of new demand. Indeed, year-to-date demand exceeded supply by more than 10% in 46 of 69 markets. Additionally, year-to-date net absorption was more than double supply in 20 markets, including Southern California, Charlotte, Greenville, Portland, Central New Jersey and Washington, DC, to name a few. This, of course, is a trend that has continued for several years, leading to record low availability in 15 markets and near-record low availability in 13 additional markets. Overall, 10 markets currently have an availability rate below 4%, including all three major Southern California markets – Riverside (2.0%), Los Angeles (3.3%) and Orange County (3.4%) – as well as Ventura (3.2%). Salt Lake City, Central New Jersey and Las Vegas also reported availability less than 4%, while Charleston, Indianapolis, Raleigh, San Diego, South Central PA, Allentown, Portland, Atlanta, Miami, Sacramento, Columbus, Charlotte, Phoenix and Philadelphia reported availability between 4% and 5.5%.

Going forward, consumer spending is expected to remain strong in the near term, driven by strong consumer finances and so-called "revenge spending." Durable goods spending in 2021 is forecasted to be up 18%, an increase from second-quarter projections of 14%. Meanwhile, according to Moody's Analytics, e-commerce spending is expected to increase by 15% in 2021, before growth moderates to roughly 4.3% per year through 2030. Overall, this translates into an increase in sales of over $400 billion during that time frame. The increase in e-commerce spending alone is expected to generate over 500 msf of industrial demand. Per CBRE, each incremental $1 billion growth in e-commerce sales generates an additional 1.25 msf of industrial space demand. Further, e-commerce is only one source of demand and, historically, it has accounted for roughly 35% of demand. That share has increased recently to roughly 50% but demand from manufacturing, cold storage, auto, construction, and medical sectors have also been driving demand. With continued economic growth, spending on goods booming in 2021 and e-commerce sales continuing to expand, the perspective on the industrial sector is highly favorable in the short and long term.

FIGURE 13
DEMAND HAS MORE THAN RECOVERED FROM THE PANDEMIC AND HAS DRIVEN AVAILABILITY TO A HISTORIC LOW



Source: CBRE-EA

INDUSTRIAL	
Availability Rate	6.0%
12-Month Historical Trend	
Availability Change	↓
Rent	↑
Absorption	↑
Completions	↔
Cap Rates	↓
Transaction Volume	↑

Source: CBRE-EA

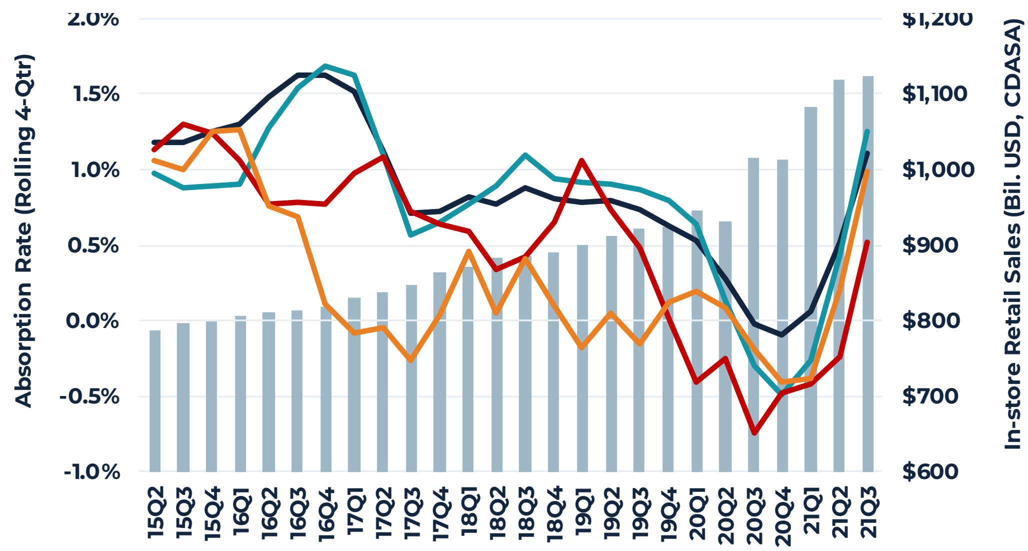
Retail

The broad retail sector continued to improve modestly in the third quarter of 2021; however, results were varied by retail type. In 2021 Q3, total retail availability declined to 5.9%, down 30 basis points (bps) from the prior quarter and down 70 bps year over year (YOY). This quarter, 36.7 million square feet (msf) were absorbed, vastly above completions of 6.4 msf. Demand has outpaced completions in each of the last four quarters, with 88.2 msf of net absorption in total eclipsing the 28.5 msf of deliveries. The sector saw rising availability during the depths of the COVID-19 pandemic, increasing 40 bps from the 6.2% reported in the pre-pandemic first quarter of 2020, to a pandemic peak of 6.5% in 2021 Q1. Both 2021 Q2 and Q3 saw the largest quarter-over-quarter improvement (down 30 bps each) since mid-2016. With retail availability improving swiftly these last two quarters, the sector now stands at 30 bps below its pre-pandemic availability. In fact, total retail availability is at its lowest recorded rate (tracked since 2005 Q1) and is currently 170 bps below its historical average of 7.6%. Additionally, rents are setting records as well, with the net asking rent reaching its highest level yet of $19.55 this quarter, up 4.4% YOY.

When narrowing in on specific retail subtypes, power centers (PC) and neighborhood & community shopping centers (NCSC) are reporting large improvements both on the quarter and on the year. Per CBRE-EA, PC retail had a third-quarter availability rate of 6.7%, down 70 bps on the quarter and down 60 bps on the year. NCSC retail posted a 2021 Q3 availability rate of 8.3%, down 50 bps from the prior quarter and down 100 bps YOY. The lifestyle center and mall sector (L&M) recovery was more modest, with availability dropping to 6.5%, down only 10 bps from the prior quarter and flat on a YOY basis. Within the L&M sector, malls remain more challenged compared to open-air lifestyle centers, which helped alleviate some pandemic aversion to indoor retail. Lifestyle centers are often more conveniently located for customers and offer more of an experience when shopping in person. The relative outperformance of the lifestyle centers compared to malls is seen in data from both JLL and CoStar, as CBRE-EA does not separate performance between the two. Per JLL, lifestyle vacancies stood at 6.5% compared with 6.8% for super regional malls and 10.0% for regional malls. CoStar, meanwhile, reports a 5.9% vacancy rate for the lifestyle subtype, above the total retail rate of 4.7% but well below the mall rate of 7.1%. Lifestyle centers are also reporting increasing customer foot traffic. Based on data from Placer.ai, when analyzing the top 20 lifestyle centers in the largest U.S. metros, visits reached 8.1 million in August 2021, a large jump in foot traffic compared to 1.3 million visits in April 2020, and only 7.2% below the August 2019 pre-pandemic level. Urban Edge is reporting that several key retailers, like Sephora, American Eagle, and Gap, have plans to leave malls and move into lifestyle centers, providing support for lifestyle centers to outplay malls within the L&M retail type.

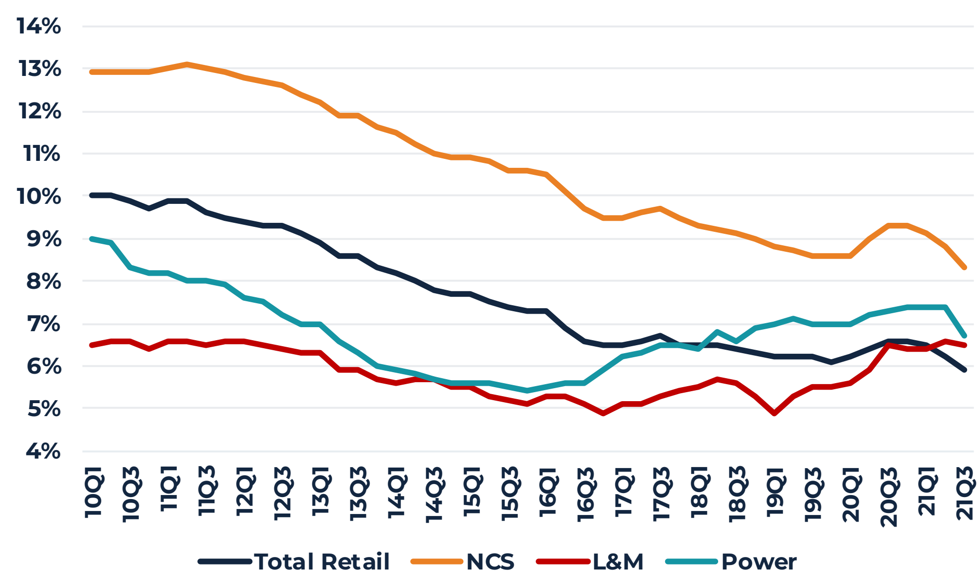
Overall retail sales were up in the quarter and, more importantly, in-store retail sales followed suit. With lockdown restrictions lifted in most metros, consumers have been driven towards "revenge shopping," making brick-and-mortar sales especially enticing after many months of being unable to try on apparel or beauty products when it was prohibited. Per Moody Analytics, total retail sales and food service, excluding motor vehicles and gas stations, totaled $1.3 trillion in the third quarter of 2021, up 13.8% from 2020 Q3; this follows a 26.2% YOY increase in 2021 Q2. More importantly, 2021 Q3 in-store retail sales (retail sales excluding motor vehicles and parts, food service, gasoline stations and non-store sales) totaled $1.1 trillion, up 10.6% from a year earlier. Again, this follows a YOY increase of 20.2% in 2021 Q2. This increase in in-store retail sales should support the post-pandemic demand recovery in the property sector. When narrowing in on specific retail product categories, clothing and clothing accessories have been particularly strong as consumers return to in-person gatherings and find themselves needing something new to wear. Clothing sales totaled $77.8 trillion in 2021 Q3, up an impressive 33.9% from the $58.1 trillion in clothing sales seen in 2020 Q3, the largest increase in any retail category (excluding gasoline stations). Additionally, 2021 Q3 retail sales for furniture, electronics, & appliances are up 16.0% and sporting goods, hobby, instruments, & bookstores are up 15.7% from 2020 Q3.

FIGURE 14
A RECOVERY IN IN-STORE SALES IS SUPPORTING RETAIL DEMAND



Sources: CBRE-EA, Moody's Analytics and AEW Research

FIGURE 15
RETAIL AVAILABILITY BY TYPE



Sources: CBRE-EA

RETAIL	N&C Shopping Centers	Lifestyle & Mall	Power Center
Availability Rate	8.3%	6.5%	6.7%
12-Month Historical Trend			
Availability Change	↓	↑	↓
Rent	↑	↔	↑
Absorption	↑	↑	↑
Completions	↓	↓	↔
Cap Rates	↑	↑	↑
Transaction Volume	↑	↓	↑

Capital Markets

As noted previously, the pace of U.S. property transactions has eclipsed pre-pandemic levels. A total of $193 billion in properties closed in 2021 Q3, up 151% year over year (YOY); meanwhile, year to date through 2021 Q3, $462 billion in property changed hands, a record year-to-date (YTD) level and up 75% over the same period last year. The apartment and industrial sectors are driving total transaction volumes, accounting for nearly 60% of all trades. Roughly $79 billion in apartments changed hands in the quarter, up 192% YOY, while a total of $180 billion have closed YTD, a 115% increase over 2020. Nearly $40 and $95 billion in industrial properties were sold in 2021 Q3 and YTD, respectively, up 130% and 48%. Office and retail volumes have picked up but remain well below their pre-pandemic levels while apartment and industrial volumes are 31.5% and 18% above 2019 levels.

Among other property types, hotel and seniors housing volume continued to recover; YTD through 2021 Q3, roughly $30 and $15 billion in properties have changed hands in the respective sectors. Volume in both sectors were up 268% and 102%, respectively, and are now above their YTD 2019 levels. Meanwhile, development site sales held steady with YTD volume of $18 billion, up only 10% from the first three quarters in 2020 and 10% above the 2019 level.

Individual sales continued to dominate the transaction landscape, accounting for roughly 73% of all sales, while portfolio and entity sales accounted for 23% and 4% of all sales, respectively. Overall, since 2010, individual transactions have accounted for 70% or more of transaction volumes in seven of eleven years. Portfolio sales, however, have picked up meaningfully in recent years. The YTD 2021, 2020 and 2019 portfolio sales at 21.9%, 23.0% and 25.1% of all trades, are up from 20.6%, 20.9% and 19.0% in 2016, 2017 and 2018. Entity sales, which peaked at 12.6% of all sales in 2018, have maintained a low single-digit share of all transaction volumes since, including YTD 2021. Blackstone is behind the three largest portfolio transactions of the year so far, including the acquisition of Extended Stay America with Starwood, which was the largest portfolio purchase YTD. Blackstone's joint venture acquisition of QTS Realty Trust with BREIT and their $3.4 billion acquisition of Brookfield's lab portfolio were the second and third largest transactions. In terms of overall volume, Blackstone is both the top buyer and seller YTD. By market, Dallas, Atlanta, Los Angeles, Phoenix, Boston, Houston, Seattle, Chicago, Austin and Denver were the most active markets.

Price appreciation, which was already rebounding strongly, accelerated in September, with the RCA Commercial Property Price Index (CPPI) advancing 16.1% YOY, up from 14.7% in August and 13.1% in July. September's YOY increase was the strongest ever reported since RCA began tracking repeat sales in 2001. Price appreciation was greatest in the non-major markets at 16.1% compared to 13.2% for major markets. By property type, price growth was greatest in the suburban office (20.2%), apartment (16.3%) and industrial (15.9%) sectors; additionally, all three sectors reported a meaningful pickup in growth. Retail property prices continued their upward climb with YOY growth accelerating to 12.4%, up from 10.7% in August and 8.8% in July. The late-summer gains are the first double-digit YOY increase in retail pricing since mid-2014. The CBD office sector is the only property sector to report a YOY decline in pricing. Per RCA, in September, the RCA CPPI for CBD office declined by 1.2%, the twelfth consecutive YOY decline in the sector.

Consistent with the property market performance and RCA transaction and pricing activity, industrial and apartment returns continued to outpace all other property types per data from NCREIF. The total NCREIF NPI return was 5.23% in 2021 Q3 and 12.15% over the previous four quarters, buoyed by industrial's 10.92% and 32.38% quarterly and annual returns, respectively, and the apartment sector's returns of 6.53% and 13.37% over the same periods. The office and retail sectors have continued to recover, boasting a positive quarterly return of 1.87% and 1.55%, respectively, and annual returns of 4.85% and 0.74%. The third quarter marked the first time since the pandemic that all property types reported positive quarterly appreciation; again, the magnitude of the appreciation returns followed the relative property sector performance with the industrial (9.93%) and apartment (5.59%) sectors leading the way, followed by the office (0.76%) and retail (0.36%) sectors.

Per NCREIF, cap rates across all property sectors remain exceptionally low. On a market value-weighted basis, the NCREIF industrial cap rate declined 30 basis points (bps) to 3.6%; the industrial sector was the only sector to report cap rate compression on a quarter-over-quarter (QOQ) basis. On a year-over-year basis, industrial cap rates compressed by 80 bps. Apartment cap rates were flat QOQ at 3.5% but were down 10 bps YOY. Office cap rates were also flat QOQ at 4.4% but were up 10 bps YOY. Meanwhile, retail cap rates expanded to 4.7%, up 20 bps QOQ and 80 bps YOY. The expansion in cap rates has occurred as market values have adjusted downward, while NOIs have recovered somewhat from the pandemic lows.

Going forward, with a wave of capital waiting to be deployed into real estate we expect the transaction market will remain extremely competitive and solid property market fundamentals will yield strong near-term rent and NOI growth for the industrial and apartment sectors. Office and retail rent and NOI growth will likely be more modest; however, there will be bifurcation within property subtypes. We expect rent and NOI growth for the more favored office and retail subtypes – creative office, life science/lab, medical office, neighborhood and community shopping centers and power centers – will remain solid, while traditional or commodity office and mall rent and NOI growth will be more challenged. We continue to expect cap rates to remain around their current level or perhaps nudge downward in the industrial, apartment and more favored office and retail subsectors.

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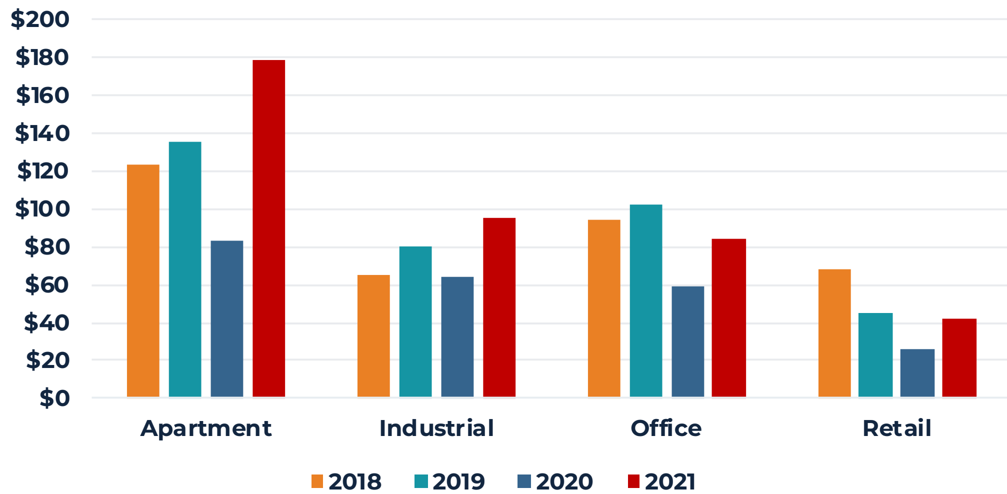
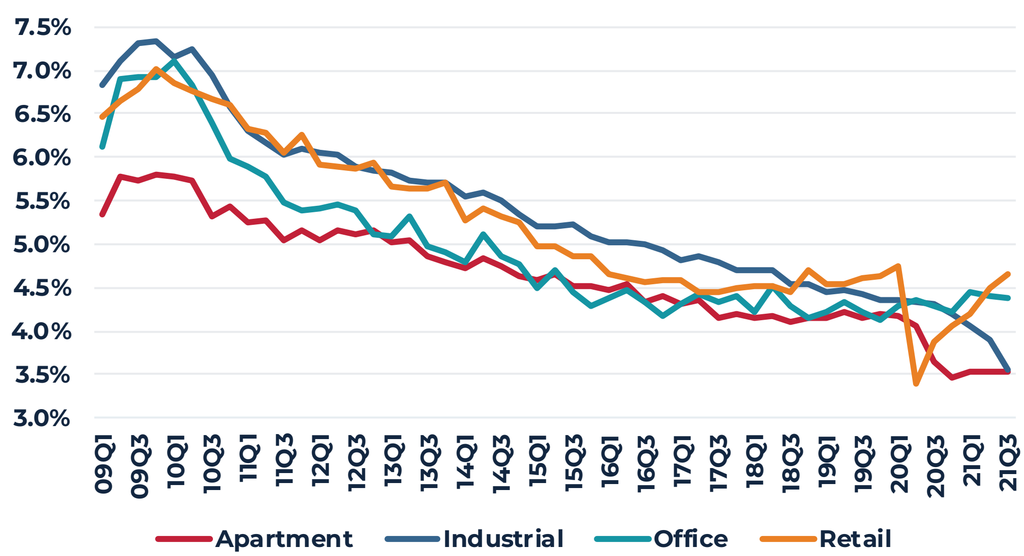
FIGURE 16
YTD TRANSACTIONS BY PROPERTY TYPE



Source: RCA

FIGURE 17
NCREIF CAP RATES BY PROPERTY TYPE
(MARKET VALUE BASIS)



Source: NCREIF

PREA CONSENSUS NPI TOTAL RETURN SURVEY - 2021Q3				
Sector	**2021**	**2022**	**2023**	**Avg. '21-'25**
NPI	8.0%	7.4%	7.6%	6.8%
Office	3.4%	5.1%	6.5%	5.0%
Retail	0.9%	5.0%	6.0%	4.5%
Industrial	19.7%	11.3%	10.3%	10.3%
Apartment	9.2%	8.4%	7.7%	7.3%

Source: PREA

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