QUARTERLY INSIGHTS | INVESTMENT RESEARCH

UNITED STATES

Key Themes

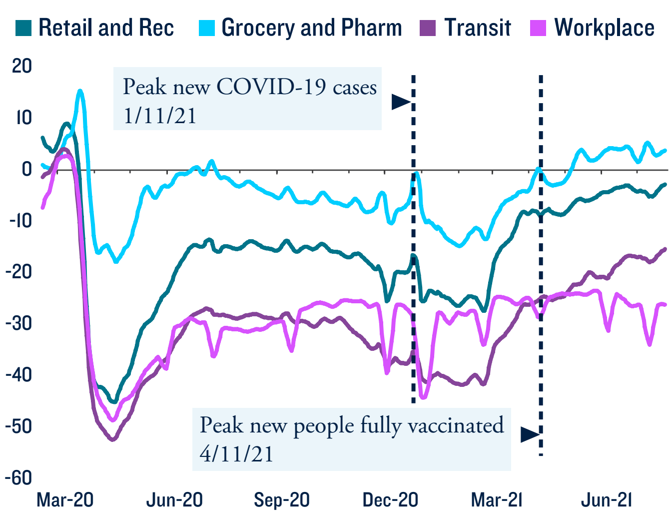
- While COVID-19 Cases Wax and Wane, Real Estate Investor Demand Will Keep Rising
- Looking for an Affordable Apartment? Try San Francisco

While COVID-19 Cases Wax and Wane, Real Estate Investor Demand Will Keep Rising

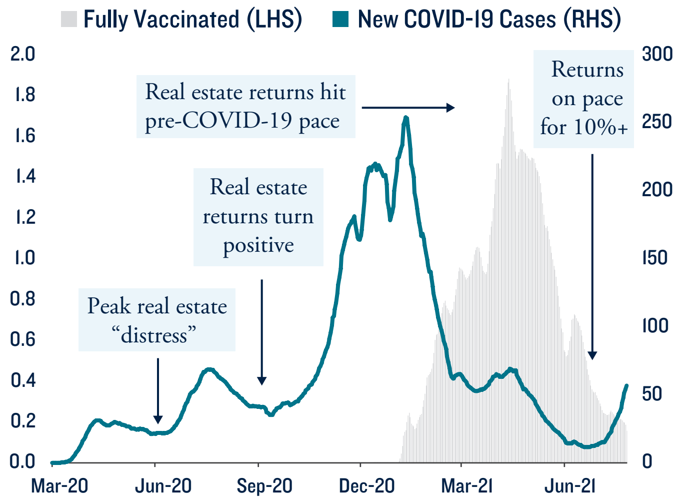
As of early Summer 2021, the trajectories of mobility, vaccinations and commercial real estate demand were all headed higher. As shown in exhibit 1, people who had become accustomed to limiting their activity were venturing out more—particularly for leisure activities such as shopping—though most were in no rush to head back to their offices. The increase in mobility started as vaccine rollouts began, which was also when the number of new COVID-19 cases began to decline.

Exhibit 1: Real Estate Returns Have High Immunity to COVID-19…

Google Mobility Trends (Weekly Average % Change Since March 2020)



Fully Vaccinated Population (Millions) **Vs. New COVID-19 Cases** (Thousands)



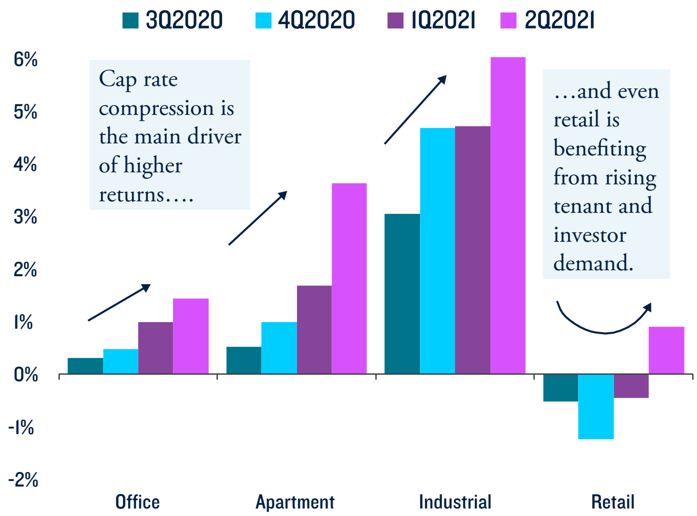
Sources: Google, Centers for Disease Control and Prevention, PGIM Real Estate. As of September 2021.

We now pose the question, Does the emergence of more-contagious variants of the COVID-19 virus change our positive outlook for real estate returns? Based on the past 16 months, the answer has to be no. Note that the boxes in exhibit 1's right-side graph show the inflection points of real estate returns from negative (barely) to positive, to a current trajectory wherein a 10% core unlevered return in 2021 is likely. There is no relationship between returns and COVID-19 cases; numbers of the latter have fluctuated up and down, but investors have consistently become more optimistic about the real estate outlook.

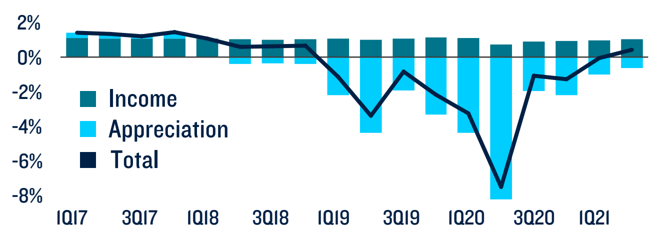
Further evidence for a sustained rebound in property values can be found in exhibit 2. On the left side, note that returns are improving not just for apartments and industrial but also for property types with more-uncertain tenant demand outlooks (office) and direct exposure to drops in consumer activity (retail). Within retail, returns have turned positive not just for more-defensive non-mall formats but even for the beleaguered mall sector. The broadening in investor demand suggests continued real estate value growth—whatever new variants of the virus may bring.

Exhibit 2 : . . . Even For Property Types With Less Certain Tenant Demand Outlooks

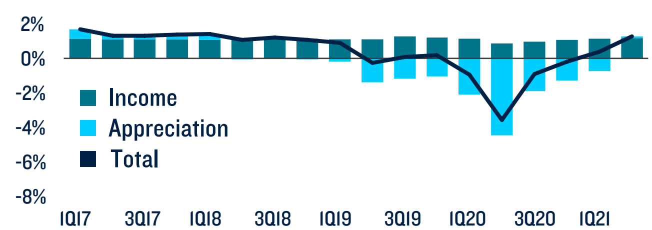
NCREIF Property Index Total Returns by Property Type (%)



ODCE Retail, Mall Returns (%)



ODCE Retail, Non-mall Returns (%)



Sources: NCREIF, PGIM Real Estate. As of September 2021.

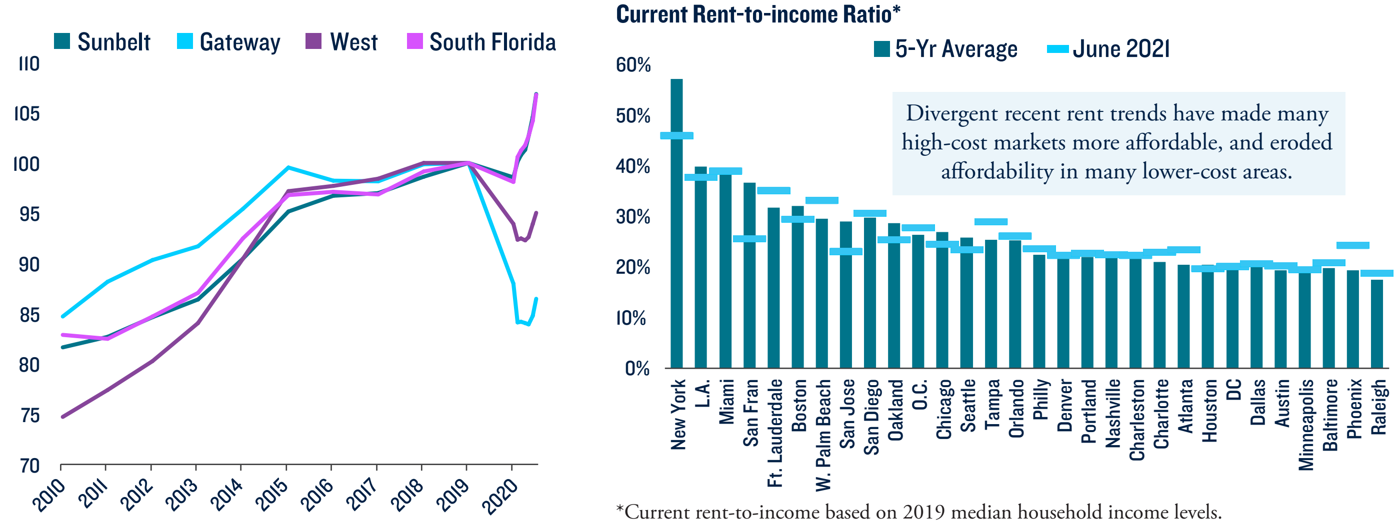
Looking for an Affordable Apartment? Try San Francisco

The divergence in apartment rent trajectories since the beginning of 2020 has been unprecedented. As shown in exhibit 3, apartments in the Gateway[1] markets experienced steep rent declines that are only now beginning to reverse. At the same time, apartment rents in most Sunbelt and South Florida markets held up well during the beginning of the pandemic—and then began spiking upward. As a result, many of the affordability[2] metrics have been turned upside down from their pre-2020 levels. Sunbelt cities such as Phoenix and Atlanta became much less affordable because of rising rents, whereas Gateway cities such as New York and Los Angeles became much more affordable. Most strikingly, San Francisco's affordability is now *higher* than the national average.

Exhibit 3: As Rents Rise in Less Expensive Metros, Affordability Weakens

Real Apartment Rents by Region (Index: 100 = 4Q19)

5-Year Average Apartment Rent-to-income Ratio (2015-19) **vs. Current Rent-to-income Ratio***



*Current rent-to-income based on 2019 median household income levels.

Sources: Axiometrics, Moody's Analytics, PGIM Real Estate. As of September 2021.

[1] Gateway markets: Boston, Chicago, Los Angeles, New York, San Francisco, and Washington, D.C. Sunbelt markets: Atlanta, Austin, Charleston, Charlotte, Dallas, Houston, Nashville, Orlando, Phoenix, Raleigh, and Tampa. South Florida markets: Fort Lauderdale, Miami, and West Palm Beach. West markets: Denver, Orange County, Portland, San Diego, and Seattle.

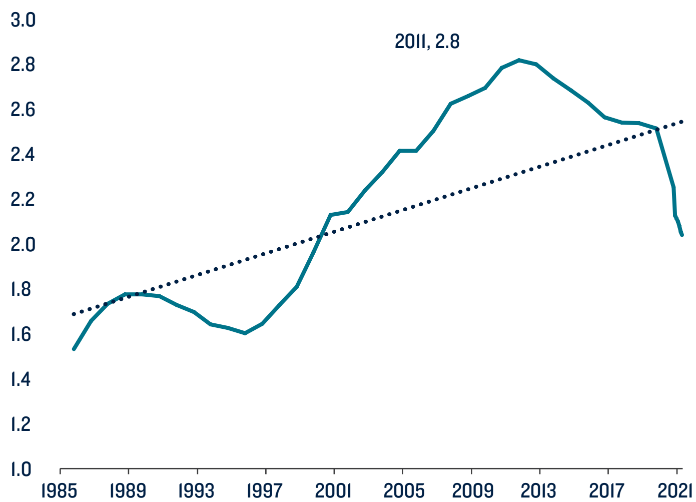
[2] Defined here as the ratio of average annual income to average annual apartment rent, assuming that incomes held steady from 2019 levels. It is possible that the stimulus and other transfer payments caused incomes to increase at atypically high rates since 2019—particularly in lower-cost areas—but we are using 2019 as a baseline to exclude the onetime effect of those payments.

This turns out to be another example of the pandemic's acceleration of trends already under way. Exhibit 4 illustrates two ways prices have evolved. The left chart shows the ratio of effective rents in Gateway versus Sunbelt markets. That ratio peaked a decade ago—in 2011—when rent was 2.8 times higher in the average Gateway market than the average Sunbelt market. The ratio steadily declined to 2.5 before falling off a cliff to just above 2.0 as of mid-2021 due to rapid increases in rents in the Sunbelt and declines in rents in Gateway cities.

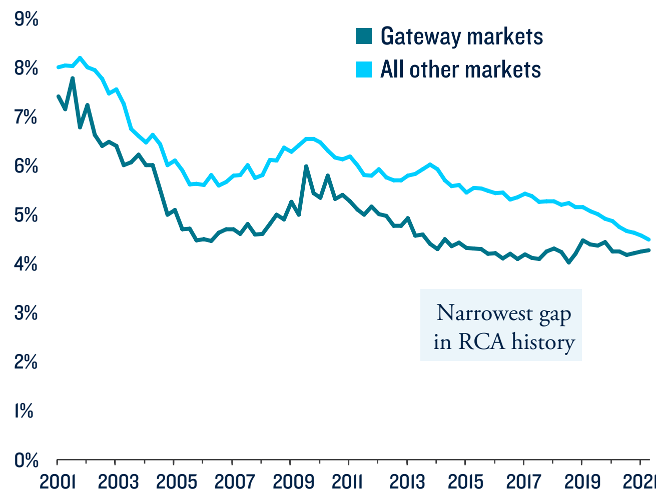
The graph at the right in exhibit 4 shows that investors have noticed, valuing properties at similar yields in major and nonmajor markets for the first time since at least 2001. Investors believe that the trend of faster rent growth in smaller markets has further to run, and over the near term, that may be the case. However, the trend line in the left graph suggests that a narrowing of the rent delta between Gateway and Sunbelt markets has overcorrected, signaling better rent growth in the Gateway markets in coming years.

Exhibit 4: Gateway-Sunbelt Convergence Has Accelerated During COVID-19

Gateway vs. Sunbelt Market Effective Rent Ratio (%)



Apartment Top Quartile Cap Rates (%)



Sources: Axiometrics, Real Capital Analytics, PGIM Real Estate. As of September 2021.

DR. PETER HAYES
Managing Director
Global Head of Investment Research
peter.hayes@pgim.com

LEE MENIFEE
Managing Director
Head of Americas Investment Research
lee.menifee@pgim.com

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