Alternatives Research
Real Estate

July 2021

DWS

Marketing Material

U.S. REAL ESTATE STRATEGIC OUTLOOK

Mid-Year 2021

IN A NUTSHELL

_ U.S. real estate started the year on a strong footing. Fundamentals and prices stabilized as the economy gathered momentum. Investment performance returned to pre-COVID levels.
_ We believe that the real estate outlook is bright, supported by a sharp economic recovery, disciplined supply, low real interest rates, and elevated inflation. In our view, the macro backdrop could hardly be more favorable for real estate.
_ The picture is more complicated at the sector and market levels, where structural forces - including e-commerce, digitization, remote working, migration, and suburbanization - will drive divergent outcomes, in our view.
_ We believe that warehouses, garden apartments, grocery-anchored retail centers, tech hubs and population magnets stand to benefit. Conversely, malls, urban apartments, and office buildings may struggle, particularly in more demographically stagnant locations.

Recent Performance

Having weathered the COVID crisis remarkably well in 2020, U.S. real estate started 2021 on a strong footing. The rollout of vaccines together with a second ($900 billion) and third ($1.9 trillion) round of fiscal stimulus (on top of the initial $2 trillion package in April 2020) accelerated the economic recovery.[1] Job creation, the lifeblood of real estate demand, totaled 3.2 million in the first half of 2021, nearly double that of an average year over the past decade.[2] Office leasing was moribund, but apartment, industrial, and even retail property generated net absorption in excess of pre-COVID norms (in the case of industrial, it was the second strongest quarter on record, after the fourth quarter of 2020).[3] Though still negative, NOI growth trended higher on a year-over-year basis, and CMBS delinquencies stabilized.[4]

Green shoots appeared in the capital markets as well. Treasury yields increased 50 basis points in the first half of 2021 as investors priced in an improving economy and the prospect of higher inflation.[5] Mortgage rates ticked slightly higher, even as credit spreads tightened.[6] However, listed REITs (up 20% year-to-date in June) outperformed the S&P 500 (14%).[7]

[1] Moody's Analytics as of July 2021.
[2] Bureau of Labor Statistic as of June 2021.
[3] CBRE-EA as of March 2021.
[4] NCREIF (NOI), Moody's Analytics as of March 2021.
[5] Bloomberg as of June 2021.
[6] Real Capital Analytics as of May 2021.
[7] Bloomberg as of June 2021.

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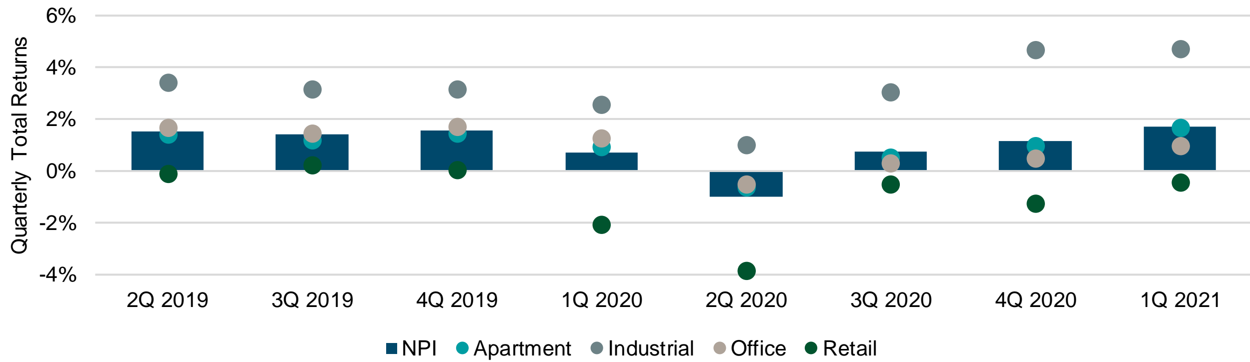
And in the private markets, real estate prices rose 1% overall in the first quarter, retracing their 2020 decline.[8] Unlevered core commercial property produced a 1.7% quarterly total return, the highest in two years, although gains were uneven, with solid increases in industrial property offsetting declines in the retail sector (see Exhibit 1).[9]

EXHIBIT 1: NPI TOTAL RETURNS BY SECTOR (2Q 2019 – 1Q 2021)



Source: NCREIF Property Index (NPI) as of March 2021.

[8] NCREIF as of March 2021.

[9] NCREIF as of March 2021.

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1 / Real Estate Outlook

The outlook for real estate is bright, in our view, driven by a combination of tightening fundamentals and supportive financial conditions. America's fiscal stimulus, totaling nearly $6 trillion (25% of GDP), is by far the largest in the industrialized world (Japan and the UK follow at 16%-17% while Germany and France are near 10%).[10] These figures do not include the Biden Administration's planned infrastructure and antipoverty and educational initiatives, which may total another $4 trillion or more. Persistently high personal savings rates (averaging 17% since the beginning of 2020 compared with about 7% in the decade through 2019) attest to the spending power accumulated by house-bound consumers during the pandemic.[11] Meanwhile, COVID vaccines promise to unlock the supply side of the economy.

Some fiscal measures may be scaled back and others will be spread over several years. Households may not release all of their spending power at once. The borrowing and taxes used to pay for fiscal largesse raise the specter of inflation, higher interest rates, and lost productivity (not to mention concerns around sustainability and intergenerational equity). In some industries, supply-chain bottlenecks (manufacturing), labor shortages (construction), and shifting preferences (business travel) may hamper the recovery. Nevertheless, in the short-term it seems inevitable that pent-up demand will jolt the U.S. economy. DWS predicts that GDP will expand 6.7% in 2021, the most since 1984, and 5.2% in 2022.[12]

If history is a guide, an accelerating economy will foster a recovery in fundamentals. Over the past 20 years, net absorption (averaging across the four main sectors) has exhibited a strong correlation (0.8) with economic growth.[13] This does not necessarily mean that space demand will match the economy's breakneck pace. The drop in absorption in 2020 was less pronounced than that of GDP, suggesting that the rebound may be similarly muted. It is also arguable that structural headwinds in the office (remote working) and retail (e-commerce) sectors may temper demand, although these should be at least partly offset by tailwinds in the apartment (housing shortages) and industrial (e-commerce) sectors.

Supply-side discipline will also help to promote recovery, in our view. Multifamily and commercial construction starts ended the first quarter of 2021 down 10% and 30%, respectively, from year-end 2019.[14] Although debt markets have thawed since mid-2020, a net 14% of banks continued to tighten underwriting standards on construction loans in the second quarter.[15] Building costs increased 10% year-over-year in June, the most in 16 years, as prices for key commodities such as steel and lumber soared (see Exhibit 2).[16] In our view, moderate supply and resurgent demand will stabilize occupancies, rents, and NOIs, first in the apartment sector, and later (in 2022) in the office and retail sectors (while industrial property will remain strong throughout).

[10] Moody's Analytics as of July 2021.
[11] Census Bureau as of May 2021.
[12] DWS as of July 2021.
[13] Bureau of Economic Analysis (GDP), CBRE-EA (absorption), DWS calculations as of March 2021.
[14] Dodge Data & Analytics (commercial construction), Census Bureau (multifamily construction) as of March 2021.
[15] Federal Reserve as of June 2021.
[16] Engineering News Record (ENR) as of May 2021.

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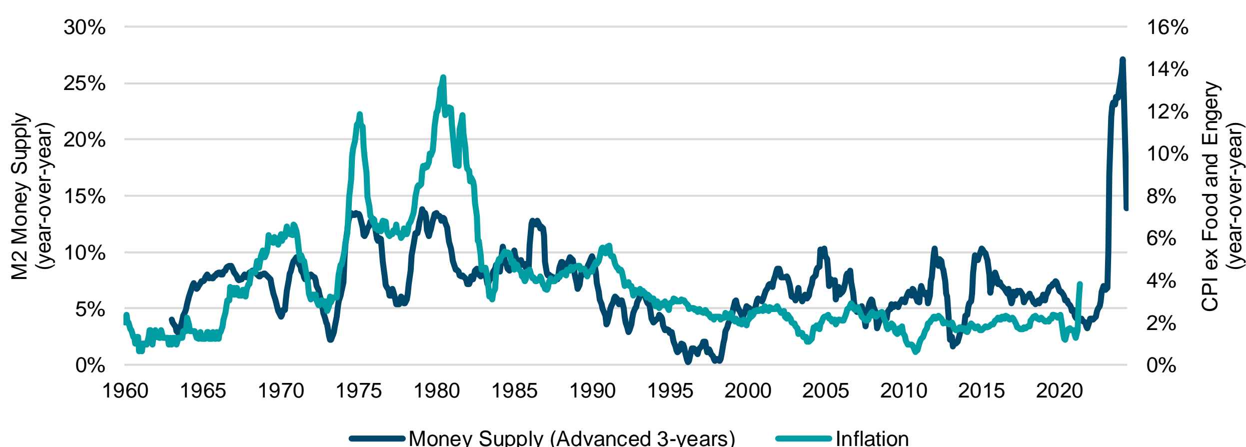
EXHIBIT 2: ENR BUILDING COST INDEX

Source: Engineering News Record (ENR) as of June 2021.

Financial conditions will also contribute substantially to real estate performance, in our view. The Federal Reserve's "dot plot" indicates that its members expect to keep short-term interest rates near zero until 2023.[17] Despite an uptick in longer-term interest rates this year, the spread between core cap rates and 10-year Treasuries is slightly above its 20-year average, notable given that spreads in equities and fixed income are at the low end of historical norms.[18]

Moreover, this year's increase in interest rates has been largely driven by rising inflation expectations.[19] As of May, prices were up 3%-5% year-over-year (depending on the source), the most since at least 2008 and by some measures since 1992. Annualizing the monthly numbers from March to May, inflation ran at a 6%-8% pace, well above the Federal Reserve's long-run 2% target.[20] Conventional wisdom holds that this was an aberration that will soon fade as constraints on the economy are lifted. However, there is arguably a risk that a burgeoning money supply (courtesy of the Federal Reserve), coupled with rampant fiscal stimulus, will foment an inflationary spiral (see Exhibit 3).[21]

EXHIBIT 3: MONEY SUPPLY AND INFLATION



Source: U.S. Bureau of Labor Statistics, U.S. Board of Governors of the Federal Reserve System as of May 2021.

[17] Federal Reserve as of June 2021.

[18] NCREIF (cap rates), Federal Reserve (interest rates) as of June 2021.

[19] Federal Reserve as of June 2021.

[20] Bureau of Labor Statistics (Consumer Price Index), Bureau of Economic Analysis (Personal Consumption Expenditure deflator) as of May 2021.

[21] Federal Reserve (money supply), Bureau of Labor Statistics (inflation) as of May 2021.

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Historically, real estate has performed well as a hedge against rising prices. Rents typically respond positively to inflation as rising earnings support nominal rental demand, while higher construction costs restrict supply. Over time, real estate prices converge to replacement costs, which are directly tied to inflation. In our statistical analysis, correlations and sensitivities (i.e., “betas”) of real estate prices to inflation have measured approximately 0.5 and 1, respectively. Accordingly, we believe that valuations are more accurately compared with real (inflation-adjusted) interest rates, which have been quiescent. On this measure, spreads remain wide, particularly relative to the negative levels observed during the inflationary 1970s and 1980s. The upshot is that although nominal interest rates might increase further (futures markets anticipate a 2% Treasury in 2025), cap rates could remain stable or even compress further provided that real interest rates remain intact.[22]

[22] Bloomberg as of June 30, 2021.

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2 / Investment Strategy

In the first quarter of 2021, the dispersion of performance across sectors was at its widest in 40 years. Considerable disparities were also visible within sectors and across markets. Notwithstanding our generally optimistic view around the real estate outlook, we believe that outcomes will remain highly divergent, putting a premium on judicious sector and market allocation as well as asset selection.

In our view, "winning" and "losing" strategies will be largely defined by their exposure to two key forces: technology and migration. Last year underscored the degree to which Americans depend on technology to shop, learn, work, and socialize. This trend was evidenced in the stock market, where the tech-heavy NASDAQ posted a 44% gain compared with the S&P 500's 16%.[23] At the same time, booming home prices (up 15% year-over-year in April 2021) testify to an apparent migration from "gateway" city centers toward suburbs and the Sun Belt.[24]

While some may argue that these developments were a transitory response to the pandemic, we believe that they are more durable, rooted in longer-term economic and demographic trends, and will have a significant influence on future real estate performance. In our view, warehouses, garden apartments, grocery-anchored retail centers, tech hubs and population magnets stand to benefit. Conversely, malls, urban apartments, and office buildings may struggle, particularly in more demographically stagnant locations.

_ **Industrial (Strong Overweight):** The industrial boom continues. Total returns of 14.1% (trailing four quarters) in the first quarter of 2021 outpaced the broader index (2.6%) by a wide margin, fueled in part by a 6.8% (year-over-year) increase in NOI.[25] E-commerce (a technology driver), up 39% year-over-year in the first quarter, was a powerful tonic for warehouse demand, driving retailers' efforts to expand and expedite online fulfillment.[26] While the industrial sector has outperformed for more than five years, we believe that its strong momentum has further to run. Even after last year's surge, America's e-commerce penetration (17%) remains well below levels in the UK and South Korea (around 30%) and China (50%).[27] While there is new supply, land constraints and rising costs are keeping it in check, especially in infill markets. Cap rates have compressed, but they remain reasonable, in our view, considering the sector's strong growth prospects. To the extent that valuations are elevated, development may provide an attractive alternative to acquisitions.

_ **Residential (Overweight):** Apartment total returns hugged the index in the first quarter of 2021 at 2.6% (trailing four quarters).[28] In our view, a strong jobs recovery augurs well for apartment leasing this year and next. More generally, we believe that an acute housing shortage — the national rental vacancy rate is near its lowest level since the 1980s, a legacy of the Global Financial Crisis (GFC) homebuilding bust — will support residential property (see Exhibit 4).[29] However, in our view, an ongoing migration of ageing Millennials to the suburbs, a trend that first surfaced in 2015, will favor Garden apartments and single-family rentals over High-Rise assets.

[23] Bloomberg as of March 2021.
[24] S&P/Case-Shiller as of April 2021.
[25] NCREIF as of March 2021.
[26] Census Bureau as of March 2021.
[27] eMarketer as of February 2021.
[28] NCREIF as of March 2021.
[29] Census Bureau as of March 2021.

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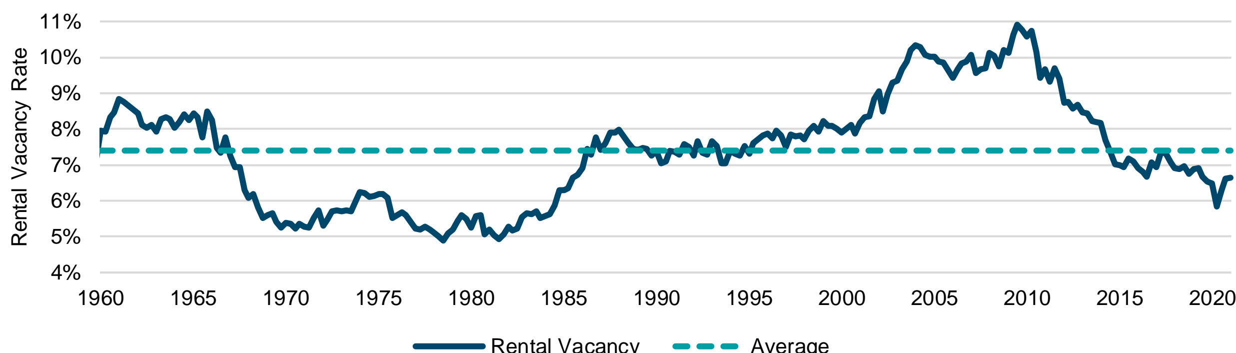
EXHIBIT 4: RENTAL VACANCY RATE



Source: U.S. Census Bureau (BOC) as of March 2021.

- **Retail (Underweight):** The COVID crisis leveled a heavy blow to the retail sector. Total returns measured -6% (trailing four quarters) in the first quarter of 2021 as store closures and bankruptcies throttled NOI (down 17% year-over-year).[30] There is no denying, in our view, the relentless challenge posed by e-commerce to the viability of physical retail centers. Malls, which typically house a large contingent of department and apparel stores selling merchandise that can be readily acquired online, are in the crosshairs. Some may thrive in the future as entertainment-infused destinations, but the cost of managing their transition may detract from investment performance. Conversely, necessity- and service-oriented neighborhood and community centers, though adversely affected by mandated store closures in 2020, do not face the same existential threat, in our view. Moreover, they may benefit from the emerging consumer-driven economic recovery, as well as suburban migration.

- **Office (Strong underweight):** Office was the only sector where performance deteriorated in the first quarter of 2021, although total returns remained positive at 1.3% (trailing four quarters).[31] While workplace occupancy remained depressed at about 30%, NOIs were stable as corporate tenants continued to honor lease obligations.[32] Still, the challenges facing the office sector should not be understated: The first quarter registered the largest decline of net absorption in history, eclipsing the worst quarters of the GFC, and vacancies increased to their highest level since 2012.[33] Some investors may have written off the sector, believing that corporate America's embrace of remote working has rendered office space obsolete. We disagree. In our view, offices will retain an important role as centers of collaboration, training, innovation, and business development. Companies may also de-densify their workspace to provide a healthier working environment. And a growing labor force should generate more demand, at least in expanding areas of the country. Nevertheless, it is prudent, in our view, to consider the risks posed by remote working, which may play out over time (given average lease durations of about six years).[34] Traditionally a late-cycle performer, the office sector may lag even further behind in this real estate recovery.

- **Markets:** Over the past year, Sun Belt and comparatively low-cost markets in the Mountain West have delivered stronger total returns than "gateway" markets: compare Salt Lake City (11%) and Atlanta (6%) to New York and Chicago (both 0%).[35] In our view, future performance will largely hinge on exposure to the dual forces of technology, including life sciences (e.g., Boston, San Francisco, and Seattle), and migration (e.g., Texas, Florida, Phoenix, Atlanta, and Nashville). Some may benefit from both (e.g., Austin, Raleigh, and Denver). A handful of major markets — namely Los Angeles, Chicago, and New York — may struggle overall, although they may offer opportunities in certain sectors or within more dynamic local communities.

[30] NCREIF as of March 2021.
[31] NCREIF as of March 2021.
[32] Kastle Systems (workplace occupancy); NCREIF (NOI) as of March 2021.
[33] CBRE-EA as of March 2021.
[34] NCREIF as of March 2021.
[35] NCREIF as of March 2021.

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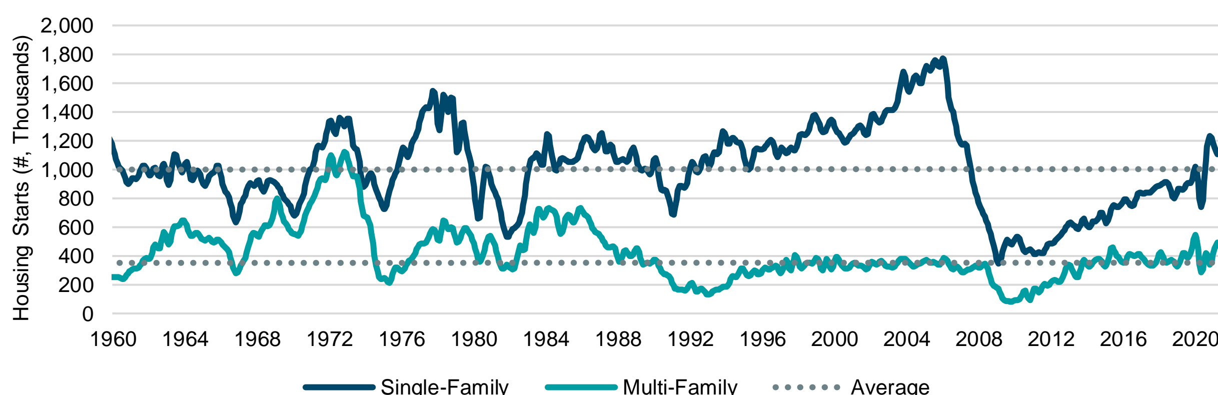
3 / Apartment Outlook and Strategy

3.1 Current Conditions

As the economy reopens and the labor market improves, the apartment sector is already showing signs of recovery from the COVID-19 recession. The sector faced economic and social challenges caused by the pandemic, as evidenced by the significant year-over-year decline in demand during 2020. The pandemic impacted all markets, though the gateway markets clearly faced the most disruption given their extensive lockdowns and density concerns. Those restrictive lockdowns, and the resulting unemployment, essentially cut demand in half year-over-year, while at the same time, new deliveries outpaced their five-year average.[36] Additionally, the number of prime renter households between ages 18 and 29 decreased by almost three million between the first and third quarters of 2020, as young adults moved in with their parents and friends to save money and quarantine.[37] However, that trend has quickly reversed as the U.S. economy has reopened over the past six months, and pent-up demand is driving strong absorption and rent growth, especially in the Sun Belt and Mountain West.

While apartments struggled last year, performance was not consistent across markets and product types. Suburban product in Sun Belt markets continued to perform well due to ongoing in-migration and limited housing supply. Conversely, high-rise buildings in gateway markets performed poorly due to out-migration, which accelerated due to density concerns, against a backdrop of oversupply and concessions. Demographic trends, lifestyle preferences, and barriers to homeownership were already supporting suburban rental demand prior to the pandemic, and those dynamics only became more pronounced over the past year. Ageing Millennials continue to move to the suburbs to raise young families, driving the need for larger, modern living spaces proximate to highly rated schools — and now, given work-from-home trends, space for a home office as well. While homeownership remains the goal for Millennials, the more affordable option right now is rental housing, whether garden-style apartment or build-for-rent single-family. Limited construction of single-family homes (see Exhibit 5) has resulted in continued home price appreciation, and the pandemic has only accelerated that trend.[38] Strong demand has pushed home prices 24% higher year-over-year and driven inventories for both new and existing homes to record lows.[39] Median household income growth has lagged median home price appreciation in most markets over the past ten years (see Exhibit 6); although interest rates are low, this means that many first-time homebuyers do not have enough savings for a down payment while also paying down student debt.

EXHIBIT 5: U.S. HOUSING START TRENDS FOR SINGLE- AND MULTI-FAMILY PRODUCT TYPES



Source: Moody's Analytics and DWS as of June 2021. Past performance is not indicative of future results.

[36] CBRE as of June 2021.
[37] Pew Research Center as of March 2021.
[38] U.S. Census Bureau and National Association of Realtors as of May 2021.
[39] National Association of Realtors as of May 2021.

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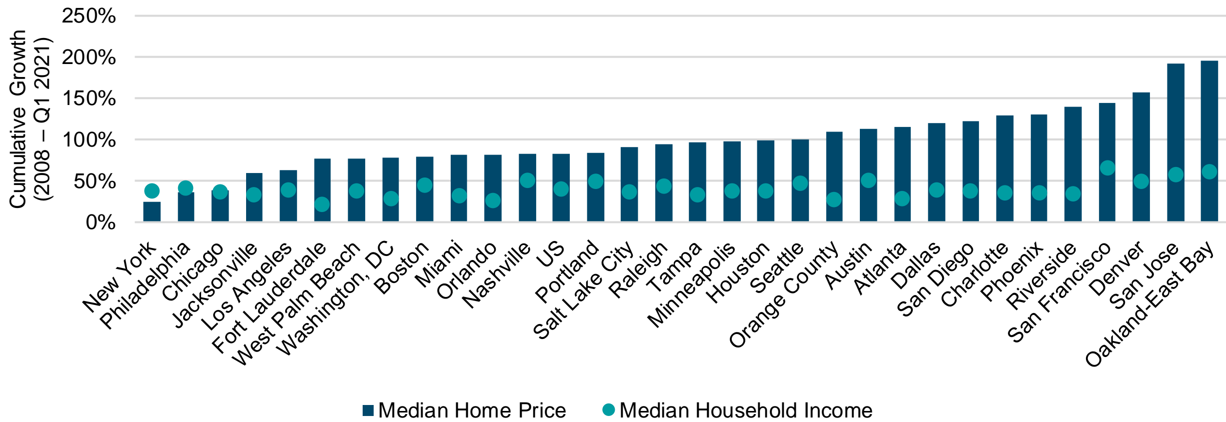
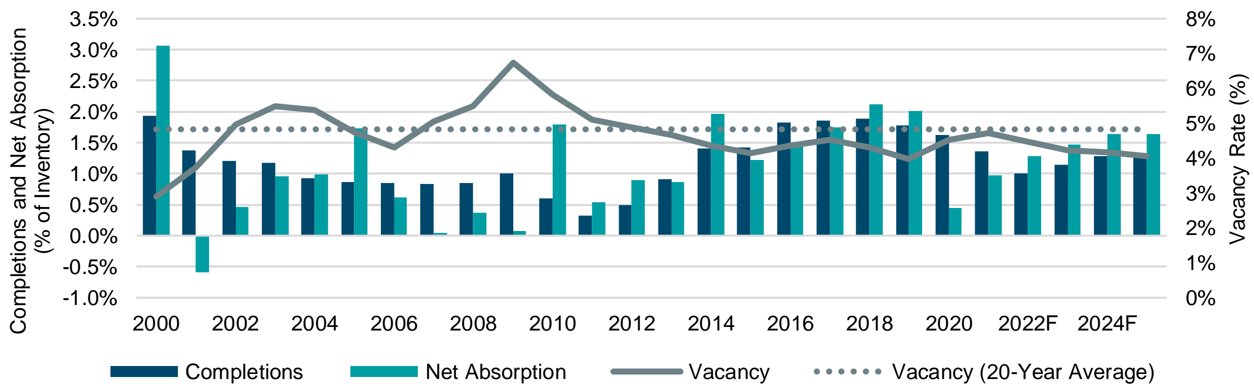
EXHIBIT 6: CUMULATIVE GROWTH OF HOUSEHOLD INCOME AND HOME PRICES BY INVESTABLE MARKET (2008 – Q1 2021)



Source: Moody's Analytics and DWS as of June 2021. Past performance is not indicative of future results.

There is plenty of new supply scheduled for delivery across DWS's 31 Investable Markets ("Investable Markets", "Investable Universe"). However, a pullback in supply is expected over the forecast period, driven by rising construction costs, which will likely cause projects to be delayed at minimum, and possibly even shelved. The vacancy rate is therefore expected to crest in the second half of 2021 as the broader economy recovers (see Exhibit 7).[40]

EXHIBIT 7: APARTMENT NET ABSORPTION AND COMPLETIONS AS A % OF INVENTORY AND VACANCY RATE (2000 – 2025)*



*DWS's 31 Apartment Investable Markets
Source: CBRE-EA (history) and DWS (forecast) as of June 2021.
Note: F = forecast. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved.

DWS's market rent growth forecast expects the apartment sector to continue its recovery in 2021. Pent-up demand should continue building strength in the second half of this year and early next year, as vaccines are rolled out and an improving job market drives new household formation. Weighted-average market rent growth for the Investable Universe is expected to be 3.5% annually over the forecast period. In the near-term, low-cost Sun Belt markets are expected to lead, while larger gateway markets (i.e., New York, Los Angeles, and Chicago) are expected to lag behind.

Until late 2020, transactions markets were quiet due to COVID-19 concerns. However, with debt and equity capital abundant, investor appetite for apartments rebounded sharply. Coupled with lingering operational challenges (i.e., lower rent

[40] DWS: Apartment Investable Markets include 31 major metros in the U.S.

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collections, higher economic vacancy), this competitive landscape has driven going-in yields below pre-COVID levels in many markets.[41] Cap rates for prime apartment assets range between 3.0%-4.0% across markets, with garden-style and build-for-rent product the primary targets. Even with strong NOI growth expected, these low cap rates will likely keep total returns hovering between 5.0-5.5% for Class-A properties in prime locations.[42]

Annual NCREIF Property Index (NPI) total returns for the Apartment sector equaled 2.6% (trailing four quarters) in the first quarter of 2021 – a decline of over 250 basis points from a year earlier.[43] Sector performance was weighed down by large, gateway markets that have seen an abundance of new supply (mainly luxury high-rise product) as well as out-migration. Conversely, fueled by strong economic and demographic drivers, Sun Belt and Mountain West markets such Riverside, Phoenix, Raleigh, Charlotte, Salt Lake City, and Denver all produced annualized total returns of at least 8% through the first quarter of 2021. Among apartment property subtypes, garden-style assets were once again the top performers, returning 7% as of the first quarter of 2021. High-rise properties continued to lag well behind, returning just 0.3% over the same time period. As of the first quarter, garden-style product had extended its streak of outperformance to 28 consecutive quarters. High-rise properties are expected to continue to underperform in the near term as a significant supply pipeline is delivered to the urban core and preferences for lower-density living persist.

3.2 Outlook and Strategy

While the economy reopens and the job market improves, the sector is already showing signs of bouncing back strongly, indicating it is well-positioned to benefit from all the in-place demand drivers mentioned earlier. Expected performance within the Investable Universe should be bifurcated between gateway and regional markets, and even further between urban and suburban submarkets. Investors will likely continue to outperform the benchmark by targeting affluent, inner-ring suburbs of regional markets that have limited housing supply, strong population growth, and diversified, tech-driven economies. Examples include Sun Belt and Mountain West markets like Austin, Raleigh, Phoenix, Denver, and Salt Lake City. The factors driving economic growth in these metros include continued in-migration, a highly educated workforce, and low living and business costs, all of which are helping to support quicker recoveries in these markets. These regional markets are expected to continue outperforming the gateway markets, which face an abundance of new supply and weaker job and population growth. Investors should continue to be very selective in the gateway markets, with a clear lean towards tech-driven metros like Boston and Washington, DC (particularly Northern Virginia).

The central themes that are shaping our apartment strategy include:

_ **All Roads Lead to the Suburbs:** Suburban rental demand should continue to benefit in the near term from ongoing migration out of the urban core, demographic tailwinds, evolving lifestyle preferences, and barriers to homeownership, all trends that accelerated as a result of COVID. The development of more urbanized suburbs and the ability to work from home should support rental demand over the long term as well, and lead to outperformance. In terms of asset selection, investors should focus on well-amenitized garden-style and mid-rise apartments, as well as build-for-rent communities. These properties should be near jobs, well-rated schools, and neighborhood amenities; walkability is one amenity that continues to command a sizeable rent premium in the suburbs. Also, given the strong demand for more space, investors should target larger floor plans and an abundance of open and outdoor amenity space.

_ **Student Housing Remains Resilient:** At Tier 1/Power 5 universities, demand is expected to remain strong for modern, purpose-built properties that are walkable to campus and have bed-bath parity. The sector performed well during the pandemic, with occupancy and rent collections remaining stable throughout the most recent school year. As was the case pre-COVID, modern product that is walkable to campus continued to see the highest occupancy levels this past school year, as well as the strongest pre-leasing velocity and rent growth for the upcoming school year.[44]

[41] Real Capital Analytics as of June 2021.
[42] DWS as of June 2021.
[43] NCREIF as of March 2021.
[44] Yardi Matrix as of June 2021.

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_ **Expect a Longer Recovery in the Urban Core:** High-rise product was already underperforming pre-COVID due to oversupply resulting in one to two months of concessions, on average, as units were being absorbed. So, while construction delays may help some urban markets manage the flow of new deliveries, migration to the suburbs will likely continue to challenge demand. Long term, performance in the urban core is expected to stabilize as supply comes more into balance with demand and the impact of flexible work arrangements becomes better understood. Gen Z is also expected to backfill Millennials as they graduate college and seek out a live-work-play lifestyle.

_ **Potential Mark-to-Market Opportunities Make Value-Add Increasingly Attractive:** Greater upside potential exists with value-add strategies right now based on how quickly the apartment sector, especially Class-A product, has recovered. Investors should have optionality in their approach to growing NOI, as stabilized Class-B deals were managed for occupancy during the pandemic and renovation programs were paused. Proforma NOI targets should be more achievable through a blend of marking rents to market and, when appropriate, generating rent premiums through renovations. Given Class-A product is already showing signs of recovery, and its rent spread over Class-B product should continue to widen, it may be time for investors to begin positioning their portfolios in advance to take advantage of these market dynamics.

_ **Ground-Up Development Still Makes Sense but Prepare for Sticker Shock:** Apartment projects that break ground in the next 12 to 18 months should deliver into the broader economic recovery and a more balanced supply-demand environment. However, as construction costs increase, project timelines are expanding and yield premiums over core product are narrowing. Still, untrended returns on cost for new development remain attractive, in our view, with spreads averaging 75 to 100 basis points.

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4 / Industrial Outlook and Strategy

4.1 Current Conditions

The U.S. industrial market has entered 2021 on a very strong footing, with property market fundamentals unscathed from the economic turmoil of the past year. Contrary to the lengthy recovery periods experienced in past cycles, market conditions in early-2021 are stronger than they were pre-recession, with lower vacancy, stronger demand and higher rents.[45] Warehouse demand, stimulated by the emergency roll-out of logistics capacity to bolster direct-to-consumer fulfillment, surged in the fourth quarter of 2020 and the first quarter of 2021.[46] Net absorption in the two quarters combined totaled 215 million square feet, more than was achieved in all of 2019.[47] Absorption within the development pipeline has been very healthy, while conditions in the existing base of older properties have also been rock solid, with only temporary occupancy losses early in 2020.[48]

There were few weak spots in the first quarter of 2021, with all but two markets in our investable universe experiencing positive absorption and low or declining availability rates. For the most part, the markets that exhibited mixed conditions in the first half of 2020 have begun to rebound with the reopening of their economies. The broader rollout of vaccines (and improved COVID-19 infection metrics), have supported further recovery of the job market and increased consumer and business confidence.[49] Expectations are that the full reopening of businesses will fuel strong growth through this year and into 2022. Pent-up demand from consumers should flow vigorously into goods consumption as well as to service industries.

The industrial market appears set to continue its strong performance. Demand and supply have been in balance, with about 358 million square feet of new construction, matched by about 357 million square feet of absorption in the five quarters ending the first quarter of 2021 (see Exhibit 8).[50] Market rent growth has fueled strong demand and cycle-low availability (7%) and vacancy rates (4.4%), in the first quarter of 2021. Rising land values (especially in large population centers), as well as increasing construction costs, have fueled rising replacement rents across our investable universe.

New demand has been supported by broad economic growth and importantly, the continued shift to online shopping and direct-to-consumer fulfillment. Between June of 2020 and February of 2021, Amazon reportedly increased its U.S. fulfillment, sort and delivery facility footprint by nearly 50% (85 million square feet).[51] This figure equates to roughly one-third of the national absorption total in 2020. Traditional retailers and third-party logistics providers were also expanding capacity to accommodate surging in e-commerce activity. Online retail sales jumped 32% in 2020, capping a multi-year trend of mid-teens annual growth.[52] Outside of the 2020 surge, we believe the secular shift to online retail sales will continue. Moreover, the industrial sector is expected to have relatively strong occupancy and rent performance, which should translate into favorable investment performance.[53]

Total returns of 14.1% (trailing four quarters) in the first quarter of 2021 outpaced the broader index (which returned 2.6%) by a wide margin, fueled in part by a 6.8% (year-over-year) NOI growth. Strong investment performance has broadened across markets, highlighting both fundamentals strength and growing investor interest. More than 80% of markets have maintained double-digit returns over the past one and three years.[54] Smaller high-growth markets such as Austin and Nashville, as well as late recovery markets like Phoenix, San Diego and Baltimore, posted strong returns in the past year.[55]

[45] CBRE-EA and DWS as of March 2021.
[46] CBRE-EA and DWS as of March 2021.
[47] CBRE-EA and DWS as of March 2021.
[48] CoStar and DWS as of March 2021.
[49] Moody's University of Michigan Consumer Sentiment Index and OECD as of March 2021.
[50] CBRE-EA and DWS as of March 2021.
[51] MWPVL as of March 2021.
[52] US Census Bureau. Quarterly Retail E-Commerce Sales as of May 2021.
[53] DWS, NCREIF and CBRE-EA as of March 2021.
[54] NCREIF as of March 2021.
[55] DWS, CBRE-EA, Real Capital Analytics and NCREIF as of March 2021.

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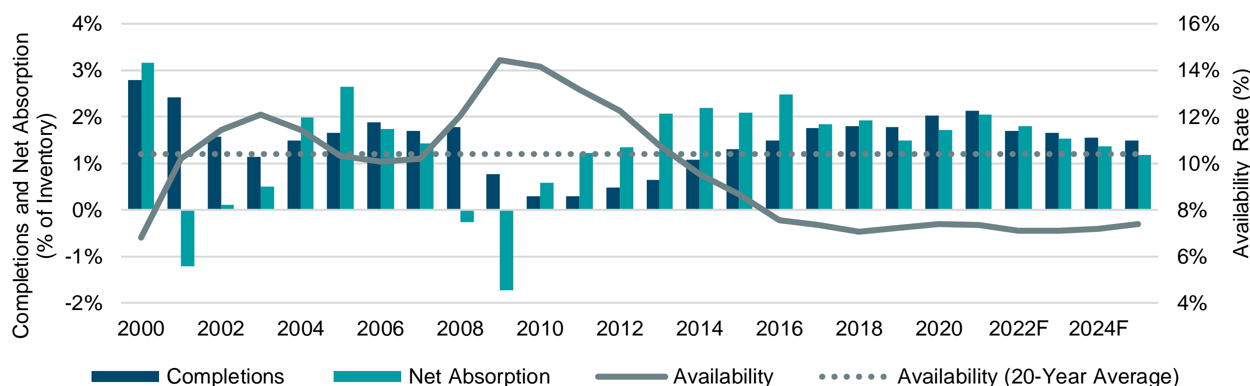
Investor activity seems aligned with a theme that local logistics capacity and the speed of the supply chain have become essential in a greater number of markets. Strong investor sentiment has compressed going-in yields, reflected in a 30 basis point decline in the NPI value weighted cap rate (4.1%) year-over-year in the first quarter of 2021.

EXHIBIT 8: INDUSTRIAL NET ABSORPTION AND COMPLETIONS AS A % OF INVENTORY AND AVAILABILITY RATE (2000 – 2025)*



* Total for U.S. Sum of Industrial Markets (CBRE-EA)
Source: CBRE-EA (History) and DWS (Forecast) as of June 2021.
Note: F = forecast. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved.

4.2 Outlook and Strategy

Our near-term outlook for the industrial market, while not without risks, is bright. The successful rollout of vaccines through this year and a steady reopening of the economy should help unleash the pent-up spending power of consumers. We believe this will stimulate strong expansion in 2021, translating into robust space demand broadly across markets. Perhaps the greatest potential offset to what appears to be synchronized economic expansion could be synchronized global supply chain disruptions. The impairment of materials production (plastics), computer chip manufacturing, port disruptions, and persistent container imbalances, could serve to moderate growth in 2021.[56] Nonetheless, the year is off to a strong start.

We believe that the market is currently highly constrained and poised for continued strong demand and rent growth in 2021 and 2022. The pent-up demand levels experienced recently may ease from record highs, but growth drivers are expected to remain persistent into the foreseeable future. CBRE data indicates that market rents, on average, grew about 3% in 2020, largely in the second half of the year.[57] Favorable demand and vacancy trends in 2021 have likely created greater upward pressure on rents this year. We believe that strong leasing and pre-leasing in the new construction pipeline will continue to benefit fundamentals and support rent growth. The recent cost inflation of construction materials, labor and land should also drive replacement rents higher and stimulate rent growth for functional second-generation space.

In 2020 new construction totaled 296 million square feet (about 2% of stock), and we estimate that deliveries in 2021 will be in the range of 300 to 320 million square feet, depending on the ability to source materials and produce approved land sites in a timely manner. Demand should rise to meet new supply, given growth momentum, so our availability outlook calls for persistently tight markets conditions and strong rent growth momentum, about 4%-6% across markets in coming years. This is a similar pace to the dynamics experienced in the past five years.

With vacancy at or near record lows in many larger primary markets, we believe that future logistics capacity growth will continue to push into less constrained regional hubs in the West and Mountain West, as well as into Southern New Jersey

[56] DWS as of June 2021.
[57] CBRE-EA and DWS as of March 2021.

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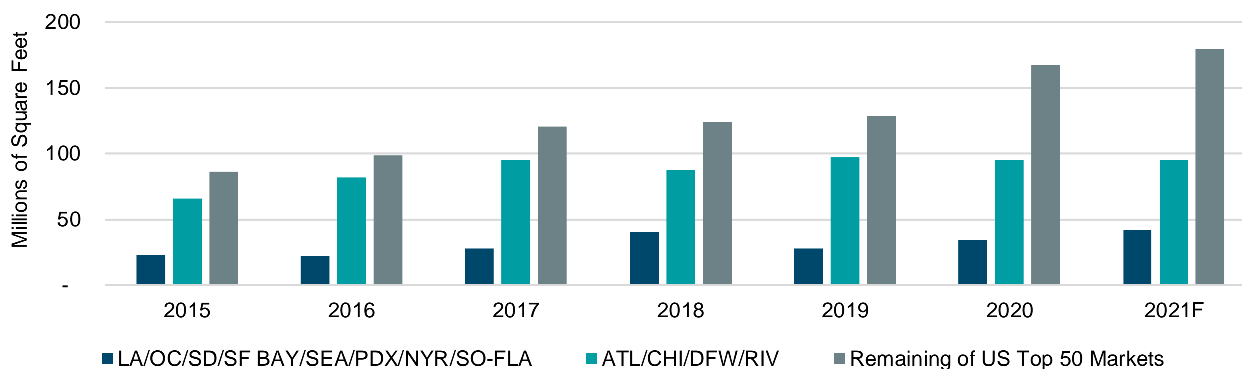
and Pennsylvania in the Northeast.[58] Development patterns are also pushing out into the exurbs of the Southwest and Southeast (generally for larger bulk warehouses).[59] Exhibit 9 highlights the substantial shift, beginning in 2020, away from coastal markets and the national logistics hubs. These expansion corridors may ease rent growth in less densely populated areas where facilities can more easily be substituted within a region. Nonetheless, we expect persistent rent growth pressure within the traditional boundaries of major metro areas.

EXHIBIT 9: INDUSTRIAL CONSTRUCTION BY MAJOR MARKET GROUPING



Source: CBRE-EA (history) and DWS (forecast) as of June 2021.
Note: F = forecast. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved.

The central themes that are shaping our industrial investment strategy:

Strong relative performance: We believe the industrial sector will provide compelling relative performance in coming quarters. Better than expected rent growth should enable landlords to benefit from strong mark-to-market opportunities in their rent rolls. This potential NOI boost is the strongest among the NPI sectors and should help fuel strong relative returns.[60]

Logistics is more essential in more places: Sustained demand momentum supports our current market selections and validates an expansion into new areas, primarily fast-growing local markets and regional hubs in the Mountain West, Northeast and South. Development in these regions has been well received and we believe that this will continue in 2021 and 2022. Recent rent growth and high relative NPI total returns also support this thesis.

Large population centers underserved by modern logistics: We maintain strong convictions for the prospects of large coastal metropolitan areas on the west coast as well as those that serve the large Northeast region, supported by the need for greater logistics capacity. In our view, Florida, with its tourism and hospitality exposure, may be subject to a longer recovery, but over the longer term, Miami and Orlando stand out as having good prospects.

Bounce back for markets with protracted lockdowns: After a difficult year in 2020, with persistently high COVID infection rates and prolonged economic lockdowns, we believe that markets in Northern and Southern California, as well as Seattle and Portland should turn the corner in 2021, as vaccine rollouts ease health conditions and allow for restored economic activity. Very low going-in returns for industrial properties may guide investors toward properties with value-add profiles.

Future growth and prosperity: We believe that markets with favorable exposures to knowledge-based industries as well as metros with large economies and resilient growth prospects will fare best over the longer term. Notably, we continue to favor the San Francisco Bay Area, Southern California, Seattle, Portland, Philadelphia and New York/New Jersey. We also

[58] DWS and CoStar Property Database as of March 2021.
[59] DWS and CoStar Property Database as of March 2021.
[60] DWS, CBRE-EA and NCREIF as of December 2020.

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believe that the prospects for Baltimore, Washington D.C., Atlanta, Dallas/Fort Worth and Phoenix have improved due to their favorable economic structures and improved growth prospects.

Primary considerations for 2021 and ahead:

_ **Development/Build-to-core:** New speculative development has been well-received throughout this cycle, including during the recession. A build-to-core strategy within our investable universe should enhance returns, while tight availability and strong demand offer an element of risk mitigation.

_ **Large Bulk, Mid-sized and Multi-tenant Facilities in Core Urban Locations:** Development has pushed to exurban locations with successful leasing activity. But we contend that market rent and occupancy performance will be superior in locations that are closer to resident consumers, businesses and workers within the traditional boundaries of markets and core submarkets. These features offer the deepest demand profile for industrial uses.

_ **Food-Related/Cold Storage:** This segment continues to exhibit strength, as the cold logistics supply chain evolves. We think that food-related assets can offer compelling long-term prospects as a function of future growth and the need for replacement stock of older, obsolete facilities. We believe demand for refrigerated food facilities will benefit from traditional grocery stores, as well as rising direct-to-consumer food delivery initiatives. We prefer markets that are food import/export corridors and also have large downstream demand from businesses and consumers.

_ **R&D/Flex/Light Industrial:** We have few recommended targets for higher finish industrial properties, limited to about six major markets that have large technology and life science industries. Functional and well-located light industrial facilities should perform well in highly constrained markets and serve as covered land plays in high value locations.

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5 / Office Outlook and Strategy

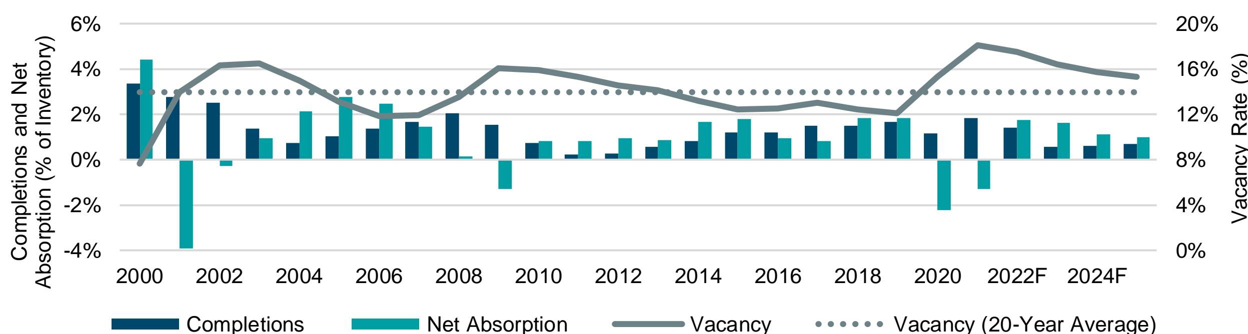
5.1 Current Conditions

U.S. office markets are beginning to see signs of life as COVID-19 vaccinations advance throughout the nation. Cities are reopening with rising activity on streets, in shops, at restaurants, and on public transportation. Office attendance is picking up and leasing tours are increasing. GDP is expected to grow between 6.5% and 7% in 2021, its fastest rate in nearly 40 years,[61] adding over one million office-using jobs to the labor market.[62] Brokers are expecting substantial deal flow in the coming quarters once tenants can occupy space at scale and test out new working arrangements.

Yet the office sector is beset with challenges. Market dynamics in the first half of 2021 were similar to those in 2020, marked by extensive space givebacks, rising vacancies and falling rents. Tenants held significant leverage, extracting rental abatements, termination rights, and build-out allowances from beleaguered landlords.[63] Leasing activity has been weak, consisting primarily of short-term extensions. Mega-cap tech users remain the core drivers of leasing activity and expansion.

As office buildings emptied in the wake of shelter-in-place policies that started in March 2020, many companies switched to a work from home ("WFH") mandate which caused a sharp fall in office attendance. Many companies remained profitable and continued to pay rents for their committed space. However, the pandemic caused some firms to reconsider their space needs, leading to substantial negative net absorption, pushing the vacancy rate up to 16% in the first quarter of 2021 (see Exhibit 10).[64] Rents fell for a fourth consecutive quarter, with San Francisco faring the worst.[65]

EXHIBIT 10: OFFICE NET ABSORPTION AND COMPLETIONS AS A % OF INVENTORY AND VACANCY RATE (2000 – 2025)



Source: CBRE-EA (history) and DWS (forecast) as of June 2021.
Note: Note: F = forecast. Aggregate of DWS's investable universe of markets. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved.

[61] DWS COI View as of June 2021.
[62] Moody's Analytics as of June 2021.
[63] JLL as of June 2021.
[64] CBRE-EA, DWS as of June 2021.
[65] Costar as of June 2021.

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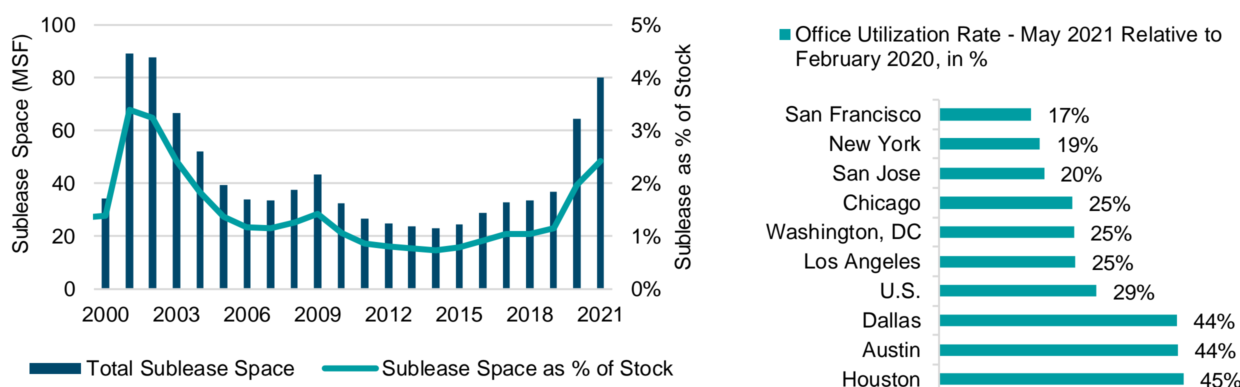
With many cities across the U.S. still imposing occupancy restrictions, office towers and nearby businesses in central business districts ("CBD") are not benefiting from the strong economic recovery. Fewer than three out of ten white-collar employees were working at the office on average in ten major U.S. cities, including New York, Los Angeles, San Francisco and Washington, D.C. as of May 2021 (see Exhibit 11).[66] In some cases, employees have resisted employers' requests to return to the office, while in others, companies have pushed off reopening to the Fall — when vaccinations will be even more widespread and schools will be in session.[67] The amount of sublease space on the market has continued to set new records (see Exhibit 11). Sublease space reached 80 million SF (2.5% of inventory) across DWS Investable Markets. While new starts have slowed considerably, roughly 155 million SF (about 2% of inventory) remains under construction, with tech hubs (e.g., Austin, San Jose, San Francisco, Boston, and Seattle) and high-growth Sun Belt markets (e.g., Nashville, Charlotte, and Atlanta) accounting for most of the activity.[68]

EXHIBIT 11: HISTORICAL SUBLEASE SPACE AND CURRENT OFFICE UTILIZATION RATES



Source: Costar, Kastle and DWS as of June 2021.
Note: Aggregate of DWS's investable universe of markets. Kastle is a managed security firm for >2,600 office buildings in 138 cities.

5.2 Outlook and Strategy

In our view, office vacancy rates will remain elevated over the next two years and fall gradually as the return to office accelerates. We believe that rent losses will extend through mid-2022 as vacancies increase and competition from less expensive sublet space lingers.

There is some debate about whether the ramp-up in vaccinations and easing of restrictions in various parts of the country will usher in a large-scale return of office demand. While space utilization remains below 30% on average and lower in major gateway cities, recent announcements by large users, including several financial institutions, suggest that the return to office has already begun and will accelerate in early September. A recent KPMG survey noted that only 17% of CEO respondents plan to give back office space, down from 69% in August 2020.

But having experienced strong productivity during the pandemic, even as they used less than 15% of their office space, many users are reassessing their office needs, with the potential to reduce demand.[69] Post-pandemic, many companies are envisioning a hybrid model that integrates WFH and office-based functions. One major bank publicly stated that for every 100 employees, they may need seats for only 60 on average, reducing their need for real estate.[70]

[66] Kastle Systems as of June 2021.
[67] WSJ as of June 2021.
[68] CBRE-EA, Costar, DWS as of June 2021.
[69] Barclays as of June 2021.
[70] JP Morgan as of June 2021.

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Offices are expected to remain critical for employers and employees to do business. However, the function of the office may change, becoming the gathering place for social interactions and a place for collaboration and creativity-inspiring discussion, informal training and general communication, as opposed to the process and task-driven space it has often been in the past. In our view, this will require new office layouts (more meeting rooms, break-out areas, collaboration spaces, desk-sharing areas, permanent desks for those not working under hybrid, etc.). Individual work will be done from home, whereas meetings, discussion and wider collaboration will mainly take place in the office.[71]

Near-term new construction is expected to remain concentrated in select tech-oriented markets (Austin, San Jose and San Francisco) and large core markets (New York, Chicago and Washington D.C.). The top eight markets account for 50% of all scheduled office supply.[72] Beyond 2022, new supply is expected to dwindle as developers avoid purely speculative projects.

Going forward, investors will likely remain cautious and selective as it relates to new office investments. Stable rent roll and limited tenant risk are recommended, as well as higher quality assets with credit leases and low near-term capital requirements. As we progress towards the end of the pandemic, we believe the utilization of office space will adapt to the new tenant preferences as it has done historically.

The central themes that are shaping our office strategy include:

_ **High-Quality/Flexible Office Product:** In a world of hybrid working, office space that encourages collaboration, inspires, is well connected, and has the right amenities will become more important than ever before. While desk- and task-based work can be done from home, collaboration and discussions may need to take place in the office for best results, and employees will likely be encouraged to come to the office. Employers will likely gravitate towards the best-quality office space. This was a trend already evident prior to COVID, but may now accelerate, as offices are no longer the standard place to go to work. Best-quality offices are those that have the right look and feel, are well located, offer the right amenities and provide a sense of the company culture.

_ **High Density Prime Suburban Office Nodes:** Locations in established suburban districts with urban type amenities will likely continue to perform well. These select suburbs include locations with ample transit connections, vibrant neighborhoods offering a wide range of amenities, adjacent to major employment centers, and proximate to large concentrations of highly skilled workers. Examples include: West Side of Los Angeles, Bellevue in Seattle, Northwest in Austin, Watertown & Waltham in Boston, Northern Virginia in Washington D.C., and select suburbs of San Jose.

_ **Knowledge-Based and Innovation Metros:** Life sciences, technology, and other innovative industries are long-term growth drivers for the U.S. and global economies. They are also a major force in the office sector. We believe that markets that boast global connectivity, a well-educated workforce, and an appeal to knowledge workers will outperform over the foreseeable future. Examples include Boston, Seattle, the Bay Area, and Austin. New York and Chicago may also benefit from these dynamics, particularly in certain submarkets, even as they contend with other challenges (e.g., a lagging financial sector and fiscal pressures).

_ **Life Sciences and Medical Office:** Life sciences and medical office could offer stability and diversification to a traditional office portfolio as healthcare services are in demand irrespective of the economic cycle.[73] The COVID pandemic has fueled impressive demand for life sciences research and development — and the space that houses it. Innovative sectors such as cell and gene therapies, artificial intelligence, and ancestry and genetic testing are all forecast to grow in the next five years, some as much as 37%, driving demand for R&D lab space, diagnostic centers and healthcare facilities.[74] Moreover, the growing need for medical services at all ages and among aging baby boomers is expected to continue to generate demand for medical office.

[71] Barclays as of June 2021.
[72] CBRE-EA as of June 2021.
[73] NCREIF, MSCI and DWS as of June 2021.
[74] Cushman and Wakefield as of June 2021.

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6 / Retail Outlook and Strategy

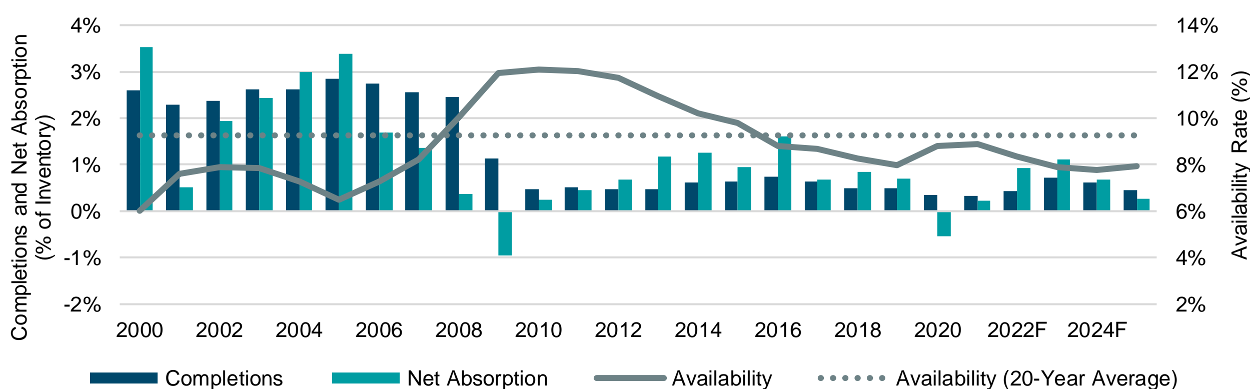
6.1 Current Conditions

The retail property sector is recovering from an incredibly challenging year, marked by a pandemic, shutdowns, and global recession. The consequences of mandated retail restrictions resulted in a spike of bankruptcies and permanent closures, lost revenue for landlords, and plummeting property NOIs. This dramatic event was virtually a complete shutdown and represented a hard reboot to the entire retail operating system — skyrocketing e-commerce, rethinking of lease structures, and the unmasking of new consumer trends. Nevertheless, retailers and consumers adapted to the constraints and a phased reopening is now fueling improving fundamentals.

Leasing activity at shopping centers continues to accelerate across the U.S. with healthy tenants expanding, upgrading to more visible locations, and negotiating favorable economics on new deals. In-demand concepts, such as quick-service-restaurants, discount, grocery, and health and wellness are leading the recovery. A surprise to the upside has been the absorption of larger boxes left behind by recently bankrupt tenants. Retail as a whole has yet to fully improve, but momentum is gathering at strong centers. Demand began to rebound in late 2020, as net absorption turned positive in the fourth quarter of 2020 and recorded 6.3 MSF in the first quarter 2021. Meanwhile, supply remained disciplined, as it had been before the pandemic, averaging just 0.5% of total stock over the last 10 years. As a result, the availability rate for neighborhood and community centers slipped to 8.7%, down 30 bps from its year-end peak. Market rents were surprisingly resilient, climbing 0.9% year-over-year, likely due to the influx of higher-priced space, although concessions such as free rent and generous tenant improvement packages persisted.[75]

Over the long term, we expect emerging demand patterns to benefit neighborhood & community centers the most of the major retail segments. We expect a more meaningful recovery to take hold in the second half of 2021 after the economy fully re-opens, and when business activity, travel and tourism, and spending return to pre-pandemic levels. Our market rent forecast for grocery-anchored centers over the next five years averages 2.3%, in line with inflation.[76]

EXHIBIT 12: RETAIL NET ABSORPTION AND COMPLETIONS AS A % OF INVENTORY AND AVAILABILITY RATE (2000 – 2025)[1,2]



Source: CBRE-EA (history) and DWS (forecast) as of June 2021.
Note: Note: F = forecast. (1) Forecast for Neighborhood and Community centers. (2) Weighted average of DWS Investable Markets. There is no guarantee the forecasts shown will materialize. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved.

Consumer spending is cycling out of necessity-based and home-centric categories, marking a pivot into the sectors that suffered the most during the pandemic: apparel, dining, fitness, entertainment, and other experiential retail. The great

[75] CBRE-EA as of March 2021.

[76] DWS Research as of June 2021.

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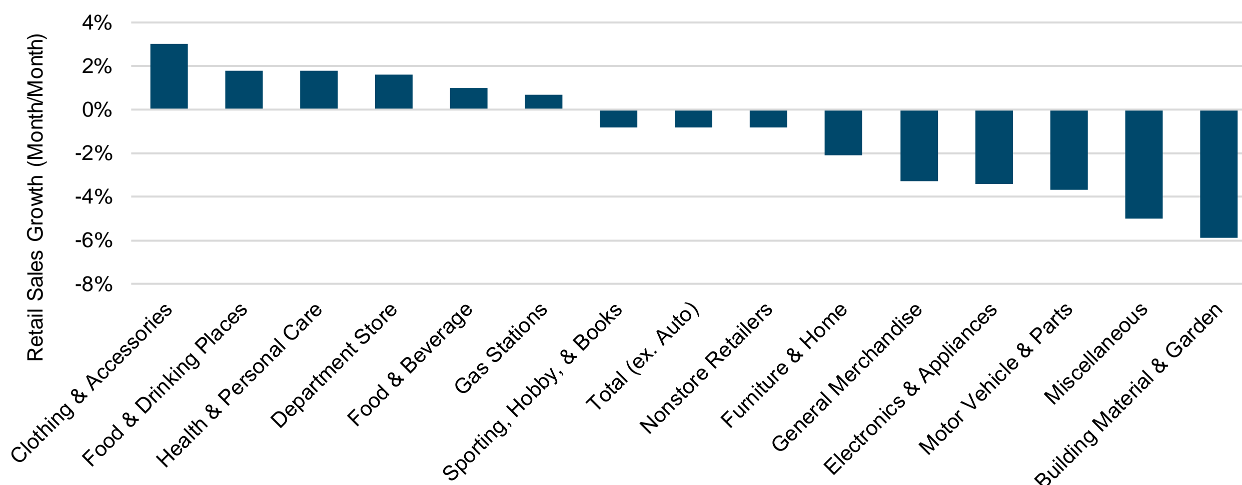
rotation away from pandemic related comforts is filtering into spending data. Total U.S. retail sales, a measure of purchases made at stores, restaurants and online excluding auto, parts and gas, recorded a decline of 0.8% in May 2021 from the prior month, but were up 18% from pre-pandemic levels.[77] Consumers began leaning into service sectors, dining, apparel, and health and beauty categories. Sales slipped for bigger ticket items from home improvement, motor vehicle and parts, and electronics stores (see Exhibit 13).

EXHIBIT 13: RETAIL SALES GROWTH (MONTH / MONTH, MAY 2021)



Source: U.S. Census Bureau, Advance Monthly Retail Trade Survey as of May 2021.

An improving economy, fiscal stimulus, strong employment growth, wide-spread vaccine rollout, rising optimism, and pent-up demand are setting up for a robust consumer-driven recovery. Oxford Economics forecasts real consumption growth at 9% this year — the strongest since 1946![78] Consumer spending will be supported by growth in disposable income thanks to more than $1 trillion in personal transfers and stimulus disbursed at the start of the year. We anticipate an exuberant release of pent up demand in the coming months leading into the holiday season.

Those effects will likely fade as unemployment benefits are pulled back later in the year and spending habits shift back to pre-pandemic norms. However, there are several structural, macroeconomic and demographic trends that will continue to support spending and could surprise to the upside. Specifically, a robust housing market, migration from cities to the suburbs, population growth in lower-cost regional markets, and more flexible workplace strategies will continue to buoy demand in suburban shopping centers.

According to Coresight Research, store closings are slowing. At mid-year 2021, the firm tracked 4,626 closures so far this year, 5.7% fewer than at mid-year 2020.[79] Most of these closures were the result of bankruptcies and liquidations. The slower pace of store closures in 2021 is likely related to the lower rate of retail bankruptcies realized so far this year. In total, we have tracked nine major retail bankruptcies during the first half of 2021, compared to 25 in the first half of 2020.[80] Meanwhile, a greater sense of optimism and stability is leading to an increase in store openings. According to Coresight Research, openings to date stand at 4,311 stores, a 41.8% increase over the same period in 2020. The leaders in openings are predominantly dollar and discount concepts, which account for more than a third of openings.[81]

[77] U.S. Census Bureau, Advance Monthly Retail Trade Survey as of May 2021.
[78] Oxford Economics as of May 2021.
[79] Coresight Research as of June 2021.
[80] Coresight Research as of June 2021.
[81] Coresight Research as of June 2021.

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6.2 Outlook and Strategy

Despite retail's reboot, the industry continues to evolve. The rebalancing of retail is a real phenomenon, and will continue to progress as retailers find the right mix of physical stores to service customers profitably, an engaging digital presence that reinforces branding and commerce, and an agile logistics strategy. During 2020, U.S. e-commerce saw its highest level of growth since 2002. According to Forrester Research, U.S. e-commerce grew 30% in 2020, accelerating from 2019 across 28 of the 30 online categories. Online food and beverage grew more than twice as fast as e-commerce overall. Yet in-store visits were more frequently used to research beauty products and cosmetics (21% vs. 20%), pet supplies (21% vs. 18%), and beverages (15% vs. 7%) than sites like Amazon.[82] In our view, physical stores remain the lifeblood of the industry, retailers' main connection to consumers, and a strategic component of the supply chain. As a result, Forrester predicts that in-stores sales will account for 72% of total sales by 2024.[83]

The key themes that are underpinning our retail strategy include:

_ **Target Necessity-based Retail:** We anticipate the growing divide between malls and necessity-based retail to continue. Our conviction around daily needs and grocery-anchored retail remains high. Declining performance in the neighborhood & community sector was driven by disruption from COVID rather than structural trends. Grocery-anchored-retail will likely be less impacted over the long-term compared to other types of retail. Dominant power centers with a grocery component or tenants that can fulfil or deliver from their store could also be long-term winners. We believe these types of local centers will be able to sustain durable traffic over time. Moreover, these types of centers may benefit from the emerging consumer-driven economic recovery, as well as continued migration to the suburbs. More people working from home may lead to more local consumption of goods and services.

_ **Avoid Malls and Transitional Assets:** There is no denying the challenges posed by e-commerce to the viability of physical retail centers, particularly for malls, class B/C assets, apparel-heavy shopping centers or high street retail. We expect e-commerce penetration will continue to grow in the apparel and commodity goods sector, which impacts malls the most. Some malls may thrive in the future as redeveloped mixed-use or entertainment-infused destinations, but the cost of managing the transition may detract from investment performance. The weight of weak mall performance informs our underweight to the sector, which comprises about 40% of the benchmark.[84]

_ **Monitor Yields and Seek Strategic Opportunities:** This reboot period may provide interesting buying opportunities, as core or institutional investors look to rebalance portfolios. The uncertainty around the long-term risks of retail and tepid buyer interest may have opened a window of opportunity. As long as the underwriting and the return profile meet the investor's risk profile, income returns for retail can provide a meaningful spread compared to most office, apartment, and industrial investments. In the near term, 2021 has the potential to be a great vintage year to add well-located assets with strong credit tenants to an investor's portfolio before pricing returns to pre-pandemic levels.

[82] Forrester 2021 Online U.S. Retail Forecast as of June 2021.
[83] Forrester 2021 Online U.S. Retail Forecast as of June 2021.
[84] NCREIF as of March 2021.

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Appendix 1: U.S. House Portfolio

The DWS House Portfolio represents our opinion of the allocation by property sector for core portfolios in the United States which we believe would outperform the NFI-ODCE. We develop the House Portfolio as an unlevered portfolio of properties without regard to tax consequences. The House Portfolio is formulated using both quantitative and qualitative modeling, integrated with our House View. The resulting weights, we believe, aid in providing long-term risk-adjusted outperformance to our portfolios versus the market as a whole and against relevant benchmarks and indices. The analysis focuses on the four major property sectors and excludes hotels. The following table summarizes our conclusions on weightings in comparison with the NFI-ODCE.

Sector	NPI Weights	ODCE Weights	House Portfolio	Active Bet (vs ODCE)	Range
Apartment	25%	27%	31%	+4%	26% - 36%
Industrial	23%	23%	34%	+11%	29% - 39%
Office	34%	32%	24%	(8%)	19% - 29%
Retail	18%	14%	11%	(3%)	6% - 16%
Other	0%	4%	0%	(4%)	0%

Note: NPI weights calculated as gross real estate value excluding ownership share. ODCE weights calculated as gross real estate value at ownership share.
Sources: NCREIF and DWS as of June 2021.
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Appendix 2: Real Estate Target Markets

Investable Metros: We screened top U.S. metros, which represent 90% of the NCREIF Property Index, and identified the investment markets for each property sector that we believe have the best prospects during the market cycle or a portion of it. This metro selection is based on property market size, liquidity, growth characteristics, income, historical returns and other factors indicative of future performance. The list of these metros remains generally static, although some metros may be added or subtracted over time due to structural market changes.

Target Investable Metros: These are a subset of the universe of investable metros and include markets that we expect to outperform or market perform during the next three to five years.

INVESTABLE AND TARGET MARKETS

↑ Overweight ↓ Underweight ↔ Market Weight

Market	Apartments	Industrial	Office	Retail
Atlanta	↔	↔	↑	↔
Austin	↑	↑	↑	↑
Baltimore		↔		
Boston	↔	↔	↑	↔
Charlotte	↔	↔	↑	↑
Chicago	↓	↓	↓	↓
Dallas	↔	↔	↔	↔
Denver	↑	↔	↑	↑
Fort Lauderdale	↔	↓	↔	↑
Houston	↓	↓	↓	↔
Jacksonville	↑			↑
Las Vegas		↑		
Los Angeles	↓	↔	↔	↔
Miami	↓	↔	↔	↔
Minneapolis	↔			↓
Nashville	↑	↓	↑	↑
New York	↓	↑	↓	↓
Oakland / East Bay	↔	↑	↔	↔
Orange County	↔	↔	↓	↔
Orlando	↑	↔		↑
Philadelphia / Central PA	↓	↑		↓
Phoenix	↑	↑	↔	↔
Portland	↓	↔	↔	↑
Reno		↔		
Raleigh	↑			↑
Riverside	↑	↔		↔
Salt Lake City	↑	↑		
San Diego	↑	↔	↔	↔
San Francisco	↔	↔	↔	↔
San Jose	↔	↑	↑	↔
Seattle	↔	↔	↑	↑
Tampa	↑			↑
Washington DC	↔	↑	↓	↔
West Palm Beach	↑			↔

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Appendix 3: Performance over the past 5 years (12-month periods)

	3/20-3/21	3/19-3/20	3/18-3/19	3/17-3/18	3/16-3/17
NCREIF Property Index (NPI)	2.6%	5.3%	6.8%	7.1%	7.3%
NPI-Apartment	2.6%	5.1%	5.9%	6.4%	6.7%
NPI-Industrial	14.1%	12.9%	14.0%	13.5%	12.2%
NPI-Office	1.3%	6.2%	6.7%	6.6%	5.7%
NPI-Retail	-6.0%	-1.9%	3.2%	4.8%	7.6%
NPI-Apartment: High-Rise	0.3%	3.9%	4.6%	4.8%	5.6%
NPI-Apartment: Low-Rise	3.9%	5.9%	6.0%	7.0%	7.2%
NPI-Apartment: Garden	7.0%	7.5%	8.6%	9.3%	8.8%
NPI-Office: CBD	-0.2%	5.4%	6.1%	6.2%	5.7%
NPI-Office: Suburban	3.4%	7.4%	7.4%	7.2%	5.8%
NPI-Retail: Malls	-9.1%	-3.9%	2.1%	4.1%	7.8%
NPI-Retail: Power	-1.8%	-0.5%	4.1%	4.5%	6.8%
NPI-Retail: Neighborhood & Community	-1.1%	2.2%	4.7%	6.1%	8.1%
	6/20-6/21	**6/19-6/20**	**6/18-6/19**	**6/17-6/18**	**6/16-6/17**
NASDAQ Composite Index	44.2%	25.6%	6.6%	22.3%	26.8%
S&P 500 Index	38.6%	5.4%	8.2%	12.2%	15.5%
FTSE/NAREIT All Equity REITs Index	28.7%	-9.9%	8.6%	0.8%	-3.5%

Sources: NCREIF, Bloomberg, NAREIT and DWS as of 6/30/21. This information is intended for informational and educational purposes only and does not constitute investment advice, a recommendation, an offer or solicitation. The opinions and forecasts expressed are those of the authors of this report as of the date of this report and may not actually come to pass. This information is subject to change at any time, based on market and other conditions and should not be construed as a recommendation of any specific security or investment strategy.

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