# Alternatives Research Real Estate

January 2021



## U.S. REAL ESTATE STRATEGIC OUTLOOK

Low interest rates and potential inflation are setting the stage for a strong recovery. But it will be highly uneven.

# IN A NUTSHELL

- Real estate has begun to reflect the dislocation caused by COVID-19. We believe that there will be further erosion in the first half of 2021, but only to a limited extent, thanks largely to low interest rates.
- We expect that a powerful rebound will take hold in the summer of 2021 as COVID vaccines promote a reopening of the economy. We believe that attractive relative yields and potential inflationary pressures will help to drive strong real estate returns over the medium term.
- Yet in our view, performance will diverge markedly across sectors and markets. We believe that success or failure will largely hinge on exposure to two key forces reinforced (but not spawned) by the COVID crisis: technology and migration.



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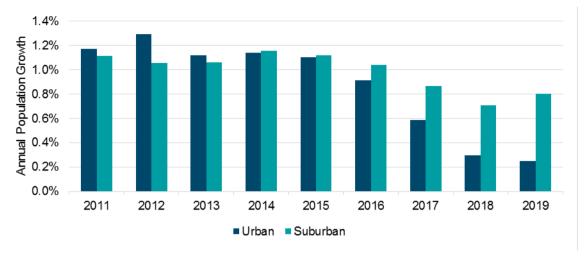
## 1 / Overview

- Real estate fundamentals and prices have begun to reflect the dislocation caused by COVID-19. We believe that there
  will be further erosion in the first half of 2021 as elevated COVID infection, hospitalization, and mortality rates suppress
  economic and leasing activity. Still, the downside will be limited, in our view, thanks to low vacancies, moderate
  construction, and most importantly, low interest rates. Including income, we believe that total returns will be roughly flat,
  more akin to the moderate cycle of 2001 than the major corrections of the Savings and Loan (S&L) Crisis or the Global
  Financial Crisis (GFC).
- We expect that a rebound potentially a powerful one will take hold in the summer of 2021 as COVID vaccines
  promote a re-opening of the economy, fueling occupational demand. Apartments are expected to lead the recovery,
  followed by office and retail property in 2022, while the industrial sector is expected to escape relatively unscathed. More
  generally, we believe that attractive relative yields and potential inflationary pressures will help to drive strong real estate
  returns over the medium term.
- Yet in our view, performance will diverge markedly across sectors and markets. We believe that success or failure will largely hinge on exposure to two key forces reinforced (but not spawned) by the COVID crisis: technology and migration.
- As COVID has gripped the nation, Americans have relied on technology more than ever before to shop, work, and socialize. In our view, the NASDAQ's 44% gain in 2020 testifies to the confidence investors have placed in technology as a critical growth engine for the U.S. economy.¹ We believe that this trend has several implications for real estate: First, it should favor local economies that host concentrations of technology firms. Second, it will likely continue to drive ecommerce penetration, to the benefit and detriment of industrial and retail property, respectively. Third, it may facilitate the post-COVID continuation of work-from-home (WFH) practices, enabling the dispersal of employees and raising (in our view, exaggerated) fears around the future of office space.
- Liberated from their offices and deprived of urban amenities, residents reportedly fled coastal cities in 2020. Yet this trend
  pre-dates COVID, as companies and households (including young Millennial families and retiring boomers) were already
  migrating to lower-cost locations (see Exhibit 1). In our view, greater corporate acceptance of a distributed workforce will
  reinforce this trend, supporting real estate in select suburbs and high-growth (largely southern) markets.

<sup>&</sup>lt;sup>1</sup> SIX Financial Information as of December 2020.



#### **EXHIBIT 1: URBAN AND SUBURBAN POPULATION GROWTH**



Source: U.S. Census Bureau, Moody's Analytics and DWS as of 12/01/20. Note: Aggregate of DWS investable metros.

#### 1.1 House View Summary

- Industrial (Strong Overweight): Industrial performance has not wavered during the COVID crisis. Net absorption in the first three quarters of 2020 matched that of the year before, vacancy rates remained near all-time lows, rents and Net Operating Income (NOI) increased roughly 6.5% (year-over-year), and total returns topped 10% (trailing four quarters).<sup>2</sup> COVID has been a boon for warehouses, diverting spending from services to goods, and from stores to online platforms, which consume more distribution space. E-commerce increased 37% (year-over-year) in the third quarter, rising from 13% to 17% of total retail sales (ex. autos) in just six months.<sup>3</sup> We believe that this shift in consumer behavior will endure post-COVID, providing ongoing support to the industrial sector.
- Apartment (Overweight): Apartment total returns have faltered somewhat, dropping to 2.3% (trailing four quarters) in the third quarter of 2020.4 Weakness was concentrated in the high-rise segment, more exposed to the travails of some city centers. Conversely, garden apartments were the third-best performing subsector in the NCREIF index, after warehouses and other industrial buildings. There are near-term risks from job losses and rising homeownership. Yet demand for apartments has historically proved relatively inelastic (it did not fall, for example, during the GFC). And despite low interest rates, many people do not have the financial wherewithal to assemble down payments and qualify for mortgages. Moreover, limited homebuilding over the past decade has created a housing shortage, driving home prices higher (by 4%-5% annually) and rental vacancy rates (including both single-family and multifamily) down to their lowest level since 1985.5
- Retail (Underweight): The COVID crisis has dramatically intensified existing pressures on retail real estate. The retail industry experienced 44 major bankruptcies in 2020, more than double the number from the year before.<sup>6</sup> This was an acute challenge for malls, which typically feature a large contingent of vulnerable department and apparel stores. Neighborhood and Community centers have not been spared, since some of their tenants, such as gyms and restaurants, were forced to close or reduce capacity. Yet they have held up much better: their total returns were -1.9% (trailing four quarters) in the third quarter of 2020, compared with -8.8% for malls.<sup>7</sup> While there is a post-COVID future for some malls as entertainment-driven destinations, in general we believe that this segment will continue to struggle. We favor grocery-

<sup>&</sup>lt;sup>2</sup> CBRE-EA (absorption, rents); NCREIF (vacancy, NOI, total returns) as of September 2020.

<sup>&</sup>lt;sup>3</sup> Census Bureau as of September 2020.

<sup>&</sup>lt;sup>4</sup> NCREIF as of September 2020

<sup>&</sup>lt;sup>5</sup> Standard & Poor's Case Shiller (home prices); Census Bureau (rental vacancy rate) as of September 2020.

<sup>&</sup>lt;sup>6</sup> Bloomberg as of December 2020.

<sup>&</sup>lt;sup>7</sup> NCREIF as of September 2020.



anchored centers, whose base of necessities and services is more insulated from e-commerce, and the need for which might increase over time to meet the needs of a growing population.

- Office (Strong underweight): Although many offices stand empty as employees work from home, cash flows and building values have remained remarkably steady, generating total returns of 2.8% (trailing four quarters) in the third quarter of 2020.8 Yet signs of weakness have begun to emerge: Net absorption was substantially negative and vacancy rates jumped in the second and third quarters of 2020.9 We do not believe that the office sector is permanently impaired. In the wake of COVID, more people may work from home, at least part time. But there may be at least a partial offset from companies de-densifying their workspace to provide a healthier working environment. Meanwhile, population growth and the shift from blue-collar to white-collar occupations supports long-term growth, at least in expanding areas of the country. Nevertheless, we expect that cyclical forces bankruptcies and job losses will weigh on office fundamentals for several quarters, as they have in past downturns.
- Markets: In general, we expect that markets with substantial technology exposure and low costs (e.g., Austin, Raleigh, Denver, Salt Lake City, and Seattle) will perform well. Sun Belt markets, including Texas and Florida, should benefit from in-migration. However, demographics and professional mobility will militate against expensive "gateway" cities. In San Francisco, Boston, and Washington D.C., vibrant technology clusters should help to offset this challenge. But Chicago and New York, having smaller technology industries (relative to the size of their economies), may suffer further population decline (see Exhibit 2).

#### **EXHIBIT 2: CUMULATIVE POPULATION GROWTH (2016-2020)**



Source: U.S. Census Bureau, Moody's Analytics and DWS as of 12/01/2020. Note: "Other" is defined as rest of country.

<sup>8</sup> NCREIF as of September 2020

<sup>&</sup>lt;sup>9</sup> CBRE-EA as of September 2020.



# 2 / Real Estate Fundamentals

Real estate fundamentals have begun to reflect the dislocation caused by COVID-19. NCREIF vacancy rates increased from 5.9% at the beginning of the year to 7.0% in the third quarter of 2020. NOI slumped 7.2% (year-over-year), its largest decline since at least 1983 (see Exhibit 3). 11 Yet the impact was uneven. Cash flow tumbled at retail properties, as shuttered stores struggled to meet rental obligations. 12 It also fell sharply at apartments, particularly high-rise buildings, which are typically located in more densely-populated, urban locations. 13 Meanwhile, corporate tenants generally continued to pay rent on their office space even as most of their employees worked from home. And the industrial sector was largely impervious, generating some of its highest NOI growth on record. 14

#### **EXHIBIT 3: NOI GROWTH BY SECTOR (3Q 2020)**



Source: NCREIF and DWS as of 09/30/20. Note: NOI defined as "Net Operating Income".

Thankfully the economy has made significant strides since the spring, as businesses have reopened and fiscal and monetary stimulus has buoyed financial markets and household finances. Three-quarters of the decline in GDP has been recovered and retail sales have eclipsed all-time highs.<sup>15</sup> Labor markets have lagged behind, but even so, more than half of the 22 million jobs destroyed in March and April have been restored.<sup>16</sup>

This progress is reassuring, but it may be too early to declare victory. Economic activity this year has correlated closely with COVID mortality rates; a recent resurgence of infections and hospitalizations raise the specter of further business restrictions and weakened confidence. It is therefore likely, in our view, that economic and real estate conditions will remain turbulent until the health crisis is more definitively resolved, likely with the widespread distribution of a vaccine in mid-2021.

Yet that does not mean that the downturn will be particularly severe. Vacancy rates were at a 20-year low coming into this crisis, and remain below their 30-year average overall (and only slightly above it in the retail and apartment sectors).<sup>17</sup>

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<sup>&</sup>lt;sup>10</sup> NCREIF as of September 2020.

<sup>&</sup>lt;sup>11</sup> NCREIF as of September 2020.

<sup>&</sup>lt;sup>12</sup> NCREIF as of September 2020.

<sup>&</sup>lt;sup>13</sup> NCREIF as of September 2020.

<sup>&</sup>lt;sup>14</sup> NCREIF as of September 2020.

<sup>&</sup>lt;sup>15</sup> Bureau of Economic Analysis (GDP); Census Bureau (retail sales) as of September 2020.

<sup>&</sup>lt;sup>16</sup> Bureau of Labor Statistics as of December 2020.

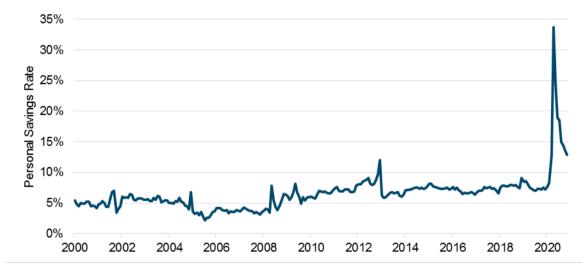
<sup>&</sup>lt;sup>17</sup> NCREIF as of September 2020.



Commercial and multifamily construction (measured as a share of the economy) was 20% below its Global Financial Crisis (GFC) peak and about half the levels of the late-1980s (preceding the S&L Crisis). <sup>18</sup> Coupled with the speed and scale of the economic rebound to date, these factors should alleviate downward pressure on rents.

We are optimistic about prospects for rent growth once the COVID-19 crisis passes. We believe that construction will plunge due to restrictive financing and uncertainty around future demand (a Federal Reserve survey indicated that a net 57% of banks were tightening standards on construction loans).<sup>19</sup> Moreover, it is possible that the economy could rebound sharply in the second half of the year as the lifting of COVID restrictions unleashes the considerable savings accumulated over the past year thanks to government stimulus (see Exhibit 4). Yet the real estate recovery will not be uniform: We believe that the apartment sector will revive in the summer, followed by the office and retail sectors in 2022. Meanwhile, we expect that the industrial sector will escape relatively unscathed.

#### **EXHIBIT 4: PERSONAL SAVINGS RATE**



Source: U.S. Bureau of Economic Analysis (BEA), DWS as of 11/30/20

<sup>&</sup>lt;sup>18</sup> Bureau of Economic Analysis as of September 2020.

<sup>&</sup>lt;sup>19</sup> Federal Reserve as of December 2020.

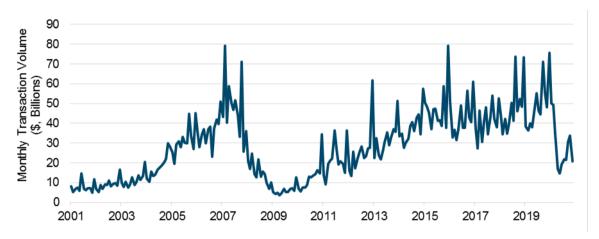


# 3 / Real Estate Capital Markets

The Federal Reserve's (Fed's) aggressive liquidity measures — totaling \$3 trillion (13% of GDP), or three times the support provided in the months following the GFC — have proved remarkably effective in shoring up financial markets.<sup>20</sup> At year-end, investment-grade credit spreads were little changed since January, while the S&P 500 was 16% higher and 10-year Treasury yields were 100 basis points lower. Listed real estate also rebounded from its March lows, but to a lesser degree. The market remained 8% lower, albeit with significant dispersion: malls were down by 40% while the industrial sector was in positive territory. Within CMBS markets, spreads fell back to pre-COVID levels for Agency CMBS; they remained wider for non-Agency CMBS, but lower risk-free rates generally outweighed the difference.<sup>21</sup>

Private real estate markets, on the other hand, remained quiet. Transaction volume picked up in the fall but was nevertheless lackluster, down 57% year-over-year in November and 40% year-to-date (see Exhibit 5).<sup>22</sup> In our view, logistical hurdles, uncertainty around fair-market values, and conservative financing contributed to the sluggishness. While low interest rates have reduced the cost of borrowing for high-quality assets, its supply remains somewhat constrained: Within the banking community, which accounts for more than half of outstanding mortgage debt, a net 55% and 45% of institutions tightened standards on commercial and multifamily lending, respectively, in December 2020.<sup>23</sup>

#### **EXHIBIT 5: MONTHLY REAL ESTATE TRANSACTION VOLUME**



Source: Real Capital Analytics and DWS as of 11/30/20.

We believe that trading will pick up in 2021 for several reasons. First, a gradual resumption of travel should facilitate the process of underwriting and executing transactions. Second, a market may form for high-quality assets as sellers (e.g., developers, listed REITs trading at Net Asset Value (NAV) discounts, and funds in need of liquidity) meet levered and yield-seeking investors. Third, while we do not expect a deluge of distress, pockets of stress may push more troubled assets to market. CMBS loans in delinquency and special servicing nearly tripled from January through October, and while this increase was concentrated in hotel and retail properties, it may broaden to other sectors as forbearance measures run their course.<sup>24</sup>

In past recessions, cap rates increased as risk appetites, debt financing, and growth forecasts diminished. In the early 1990s and the GFC, rising cap rates accounted for two-thirds price corrections, the balance coming from falling cash flows. In a notable departure from the past, we expect that cap rates will not increase materially in this downturn, at least overall. Where cash flows are highly uncertain — e.g., a lower-quality mall occupied by struggling department and apparel stores — cap rates

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<sup>&</sup>lt;sup>20</sup> Federal Reserve as of December 2020.

<sup>&</sup>lt;sup>21</sup> Bloomberg as of December 2020.

<sup>&</sup>lt;sup>22</sup> Real Capital Analytics as of September 2020.

<sup>&</sup>lt;sup>23</sup> Federal Reserve as of December 2020

<sup>&</sup>lt;sup>24</sup> Moody's Analytics as of October 2020.



could certainly escalate. However, we believe that very low interest rates will support valuations for higher-quality assets, such as warehouses occupied by strong tenants on long-term leases.

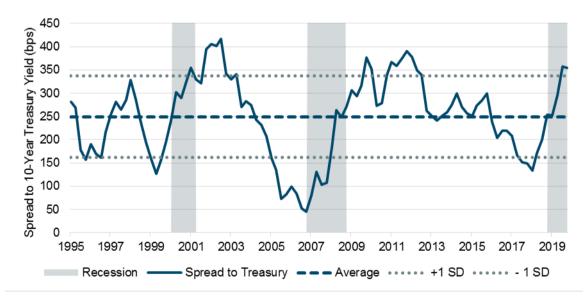


## 4 / Real Estate Performance

Available data suggests that real estate prices have hardly moved since the beginning of 2020, down around 2%.<sup>25</sup> NCREIF Property Index (NPI) total returns slipped to 2% (trailing four quarters) in the third quarter of 2020 from 6.4% in 2019, but were up slightly on a sequential basis.<sup>26</sup> In part, this resilience might stem from a dearth of trading, which has complicated measures of fair-market value. In our view, core real estate will absorb further price declines of 2%-4% as transactions markets clear. In this scenario, total returns (including income) would be roughly flat over 2020 and 2021, more akin to the mild downturn of 2001 than the severe retrenchments of the S&L Crisis and the GFC.

Taking a longer view, we believe that real estate is poised to perform well on a relative basis. Well after the crisis has passed, interest rates will likely remain low, a pattern that is reflected in long-term bond yields. Cap rates provide an attractive spread that could power robust returns for several years (see Exhibit 6). Furthermore, unprecedented peacetime levels of fiscal and monetary stimulus, coupled with supply-side constraints in some areas of the economy (e.g., travel) and a reversal of globalization, arguably raise the specter of inflation over the medium term. Financial markets currently place low odds on an inflationary spiral (implicit expectations are near 2% for the foreseeable future), but real estate and other tangible assets may gain currency as a partial hedge over time.<sup>27</sup>

#### **EXHIBIT 6: CAP RATE SPREADS TO TREASURIES**



Source: NCREIF, Federal Reserve and DWS as of 09/30/20.

<sup>&</sup>lt;sup>25</sup> RCA; NCREIF as of September 2020.

<sup>&</sup>lt;sup>26</sup> NCREIF as of September 2020.

<sup>&</sup>lt;sup>27</sup> Federal Reserve and DWS calculations as of December 2020.



# 5 / Special Feature: 2020 Legislative & Ballot Initiatives

While all eyes were focused on the outcome of the Presidential and Congressional elections on November 3rd, the results of a number of down-ballot measures had significant implications from a commercial real estate perspective. Traditionally a bellwether for political trends, California voters were asked to repeal two long-standing pieces of legislation: Proposition 13 (a property tax law enacted in 1978)<sup>28</sup> and the Costa-Hawkins Rental Housing Act (which limits rent control, enacted in 1995).<sup>29</sup> States with multibillion-dollar revenue shortfalls looked to high earners to pay for more of the costs of the coronavirus pandemic and to make up for lost revenue from shuttered businesses.<sup>30</sup> Rent control has become a hot-button issue again, and it's starting to affect more states.<sup>31</sup> On the local side, voters in Austin were asked to approve a permanent increase to the city's property tax rate to fund a mass transit system.<sup>32</sup> After voters weighed on these various ballot measures, most of the consequential outcomes for real estate investors were defeated.<sup>33</sup>

With California's current market value over \$185 billion representing 26% of the overall NCREIF Property Index<sup>34</sup>, Proposition 15 was the most hotly-watched ballot measure by institutional investors in 2020. If passed, Prop. 15 would have raised property taxes on certain commercial and industrial properties by requiring them to be taxed based on market value rather than their purchase price.<sup>35</sup> As a result, property owners hardest hit would have been those who had owned their buildings the longest. While this measure had significant implications for property owners, it also had implications for tenants, particularly retailers and net lease tenants responsible for paying property tax. The largest proposed tax increase in California history was defeated by voters, 52% to 48%.<sup>36</sup> Though denied, supporters pointed to the measure's relatively narrow defeat as evidence of a desire for reforming California's property tax code.<sup>37</sup>

Affordability concerns have led to a renewed push from advocates for states to set limits on rent increases.<sup>38</sup> Across the country, tenant campaigns promoting rent caps and "just cause" eviction legislation continue to gain momentum. Legislators in three states – Oregon, New York and California – passed rent control measures in 2019, and the groundswell may be just beginning. Since 2017, more than a dozen other states – including Washington State, Illinois, Colorado, and Massachusetts – have considered legislation and/or ballot initiatives that would regulate rent growth.<sup>39</sup> Despite the proposed legislation and a closely watched ballot initiative in California (Proposition 21), little changed in terms of housing policies in 2020.<sup>40</sup> For the second time in as many election cycles, the voters of California decisively rejected rent control ballot measures. In 2021, we anticipate rent control threats to continue to emerge in various parts of the country, particularly in light of the COVID-19 pandemic.

After lawmakers in New Jersey passed a "millionaire's tax" in September 2020, raising the income tax rate for those making \$1 million or more, legislators in at least eight other states — including California, Massachusetts and New York — considered proposals to increase taxes on high-income residents. <sup>41</sup> Ultimately most states decided not to focus on taxes during their 2020 fiscal years, opting instead to draw on reserves, freeze spending and borrow money. Though faced with budget shortfall of more than \$6 billion, Illinois lawmakers looked to the state's high earners to help fill the growing budget hole. <sup>42</sup> Dubbed the "Fair Tax for Illinois," this ballot measure would have repealed the state's constitutional requirement for a flat income tax and replace it with a series of higher tax rates on roughly the top 3% of earners in the state. Illinoisans voted in November to reject

- <sup>28</sup> Wall Street Journal as of 10/27/20.
- <sup>29</sup> Ballotpedia as of 11/30/20.
- <sup>30</sup> CNBC as of 09/25/20.
- <sup>31</sup> National Multifamily Housing Council (NMHC) as of 11/16/20.
- <sup>32</sup> Austin American-Statesman as of 10/10/20.
- 33 Ballotpedia as of 11/30/20.
- <sup>34</sup> NCREIF Property Index as of 9/30/20.
- 35 GlobeSt. (Marcus & Millichap) as of 09/10/20.
- <sup>36</sup> Ballotpedia as of 11/30/20.
- <sup>37</sup> Associated Press as of 11/10/20.
- 38 MHN as of 12/26/2019.
- <sup>39</sup> National Multifamily Housing Council (NMHC) as of 11/16/20.
- 40 Ballotpedia as of 11/30/20.
- <sup>41</sup> CNBC as of 09/26/20.
- <sup>42</sup> CNBC as of 09/09/20.

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the tax hike 55% to 45%. 43 Nonetheless, more states are expected to start looking at tax increases to address budget shortfalls as the 2021 fiscal year progresses, particularly if Congress doesn't approve any additional federal aid.

With its emergence as a viable alternative to Silicon Valley, Austin approved perhaps the most ambitious mass transit item ever to come before city voters. 44 Proposition A calls for a permanent increase to the city's property tax rate to fund a \$7.1 billion high-capacity transit system, dubbed Project Connect. Proponents claim that the project will solidify Austin's prominence as a high-tech hub by addressing access/congestion concerns and the city's lack of public transit.

<sup>43</sup> Ballotpedia as of 11/30/20.

<sup>&</sup>lt;sup>44</sup> GlobeSt. as of 11/19/20.

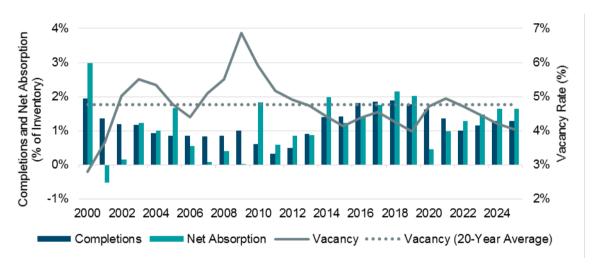


# 6 / Apartment Outlook and Strategy

#### 6.1 Current Conditions

Apartment fundamentals were healthy going into the current recession, however the sector has been negatively impacted by economic and social challenges caused by the COVID-19 pandemic. While unemployment levels have declined dramatically since the early days of the pandemic, more quickly than most expected, those levels are still roughly double what was seen pre-COVID.<sup>45</sup> COVID cases are also having a resurgence, which could cause further economic disruption through lockdown measures such as business closures and travel restrictions. As eviction moratoriums expire in many markets, this is expected to weigh on apartment demand (see Exhibit 7) across DWS's 31 Investable Markets ("Investable Markets", "Investable Universe"). He Project delays and concessions are helping to moderate the resulting uptick in vacancy, but it is nevertheless expected to push higher in the near-term before cresting in mid-2021 as the broader economy recovers.

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



Source: CBRE-EA (history) and DWS (forecast) as of 12/31/20.

Note: Aggregate of DWS's investable universe of markets. No assurance can be given that any forecast or target will be achieved.

While units under construction are still elevated, multifamily starts have stabilized close to their five-average as of the third quarter of 2020, are roughly flat year-over-year, and are only one quarter removed from hitting their lowest level since 2013.<sup>47</sup> This stabilization is likely being driven by several factors: COVID-forced shutdowns/delays in construction, less financing available and tighter lending standards due to the pandemic, continued price discovery, and perhaps a normalization of supply from levels that were not sustainable. Multifamily permitting also dipped to 378,000 units on a seasonally-adjusted annual basis as of October 2020<sup>48</sup>, the lowest rate in over two years and a 10.2% decline year-over-year. Given this discipline, as well as construction delivery times likely averaging at least the 18 to 24 months they did pre-COVID, a pullback in completions is expected by late 2022. While the expected overall increase in vacancy rates is proportional to that of the global financial crisis (around 100 basis points), strong rental demand over the last several years (five-year average absorption: 208,000 units)<sup>49</sup> has provided the sector with a much lower starting point at 4.4% as of the third quarter of 2020. Therefore, at its cyclical peak, vacancy only rises modestly above its long-term average.

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<sup>&</sup>lt;sup>45</sup> Bureau of Labor Statistics as of November 2020.

<sup>&</sup>lt;sup>46</sup> DWS: Apartment Investable Markets include 31 major metros in the US

<sup>47</sup> Moody's as of September 2020.

<sup>&</sup>lt;sup>48</sup> Axiometrics as of October 2020.

<sup>&</sup>lt;sup>49</sup> CBRE-EA as of September 2020.



The apartment sector has averaged 3.1% annual effective rent growth since 2015<sup>50</sup>, peaking at 5.2% in the first quarter of 2015. While rent growth had been moderating since that time, the recession has clearly weighed on the apartment sector. As of the third quarter of 2020, weaker fundamentals and above-average concessions resulted in effective rent declines of 4.1% year-over-year across the Investable Universe. This decline in rents was not, however, consistent across product subtypes. Rents have been fairly stable in garden-style apartments that have seen limited new supply and an acceleration of pre-existing migration trends to suburban areas. Most downtown submarkets, however, underperformed due to the oversupply of luxury high-rise product as well as density concerns due to COVID. These dynamics resulted in higher concessions, which are now pervasive in the urban core of large markets like New York, Chicago, Los Angeles, San Francisco, and Houston. Concessions and muted rent growth are expected to persist in the near-term. As deliveries slow and the economy recovers, rent levels are expected to rebound by the end of 2022. From 2021 to 2025, we expect that rent growth will average 3.2% annually.

As of the third quarter of 2020, the cost of renting versus owning still favored homeownership, despite home prices continuing to appreciate at a faster rate than rents. Through the end of September 2020, U.S. home prices have grown 68.3% cumulatively since 2008, primarily driven by a lack of new housing, especially entry-level homes. <sup>51</sup> Nevertheless, the significant decline in interest rates continues to ensure that the monthly cost of owning a median-priced home in the U.S. is more affordable than renting an apartment. Additionally, while developers have been mostly building more expensive homes due to high costs of construction, there have been recent signs of those costs possibly waning, which will likely provide a favorable boost to starter-home supply. This already seems to be taking place: single-family starts climbed above their historical average earlier this year and eclipsed one million in the third quarter of 2020, the first time they crossed both thresholds since 2007. <sup>52</sup>

Despite these positive developments for entry-level buyers, current economic volatility, as well as social distancing requirements on work sites, have disrupted construction timelines and will likely keep the single-family supply pipeline fairly restrained. Fires on the West Coast, as well as increased home renovations, have also created shortages of materials for developers, particularly lumber. Higher lumber costs have driven single-family and apartment prices up by approximately \$14,000 and \$5,000 per home/unit, respectively. Furthermore, the failure of household incomes to keep pace with home prices (see Exhibit 8) has reinforced the most significant barrier to homeownership: insufficient savings. Despite historically low mortgage rates making homeownership more affordable than it was a year ago, first-time homebuyers often do not have sufficient savings for a down payment while in many cases also paying down student debt; in 2019, 30% of this group used down payment assistance from family and friends, and the median down payment was still only 6%. Combined with stricter lending standards due to the recession, these buyers will continue to find it very challenging to qualify for a mortgage. This lack of affordability, combined with limited new construction relative to history, should continue to support apartment demand.

<sup>&</sup>lt;sup>50</sup> CBRE-EA as of September 2020.

<sup>&</sup>lt;sup>51</sup> Moody's Analytics as of September 2020.

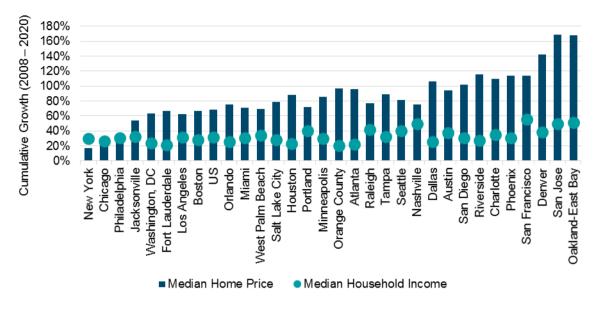
<sup>&</sup>lt;sup>52</sup> Moody's Analytics as of September 2020.

<sup>&</sup>lt;sup>53</sup> National Association of Home Builders as of September 2020.

 $<sup>^{\</sup>rm 54}$  National Association of Realtors as of November 2019.







Source: Moody's Analytics and DWS as of 09/30/20. Past performance is not indicative of future results.

As we move beyond 2021, the sector is positioned to bounce back strongly as the sustainable drivers of rental demand remain in place. The demand for rental housing is not only driven by relative affordability, but a more desirable lifestyle choice with convenience and flexibility. Demographic trends and barriers to homeownership were already providing tailwinds for suburban apartment demand prior to the pandemic, and those should only become more pronounced moving forward. While homeownership may still be the goal for ageing Millennials, the more affordable option right now is renting garden-style apartments. Ageing Millennials continue to move to the suburbs to raise young families, driving the need for larger living spaces and highly-rated schools, and now with COVID, space for a home office as well. This cohort typically wants high-quality housing that maximizes space, offers outdoor living, is located near highly-ranked schools, and provides access to employment centers. Proximity to walkable neighborhoods and a highly-amenitized, mixed-use town center is also important.

Despite weaker fundamentals in many downtown submarkets, investors had not been deterred from seeking trophy properties until the health pandemic froze activity. Leading up to the recession, the average going-in cap rate for Class-A urban core product remained in the low-4% range, with many prime stabilized assets trading in the high-3% range. Bolstered by positive demographic trends and limited new construction, suburban garden-style product had seen stable rent growth and persistent cap rate compression, with its spread over mid/high-rise cap rates narrowing to just 30 basis points as of the third quarter of 2020; that is its lowest spread since 2004, and 40 basis points below its long-term average. <sup>55</sup>

Until the fourth quarter of 2020, transactions markets had remained relatively quiet due to COVID-19; however, with debt and equity capital abundant, investor appetite has revived. As a result of this competitive investment landscape, as well as operational challenges (i.e. lower rent collections, higher economic vacancy), going-in yields have fallen below pre-COVID levels in many markets. Even with this backdrop, lower borrowing costs and stronger NOI growth relative to other sectors have made investors willing and able to accept lower total returns for prime assets. Average apartment cap rates across the quality spectrum have remained relatively stable over the past five years, despite the surge in new supply, so it is not difficult to see cap rates holding firm through this difficult time, or even compressing further, especially with apartment cap rate spreads over the 10-year Treasury rate remaining historically wide. Though low cap rates, coupled with weak NOI growth in the near-term, will likely keep total returns hovering around 5.5% for Class-A properties in prime locations. 56

<sup>55</sup> Real Capital Analytics as of September 2020.

<sup>&</sup>lt;sup>56</sup> DWS as of December 2020.



Annual NCREIF Property Index (NPI) total returns for the apartment sector equaled 2.3% (trailing four quarters) in the third quarter of 2020 — a decline of 310 basis points from a year earlier. Sector performance continues to be weighed down primarily by large, gateway markets that have seen an abundance of new supply (mainly luxury high-rise product), and that continued underperformance has only been exacerbated by the pandemic. While the western and southeastern metros have not been immune to virus-related performance headwinds, they continued to be the primary outperformers. Fueled by strong economic and demographic drivers, markets such Denver, Phoenix, Orlando, Salt Lake City, and Riverside all produced total returns of 5% or more over the past year. In contrast, several large, slower-growth markets, such as Chicago, New York, and Houston, saw negative total returns. Among overall apartment property subtypes, garden-style apartments were once again the top performers, returning 4.7% as of the third quarter of 2020. Despite their popularity with investors, high-rise properties continued to lag well behind, returning 1.1% over the same time period; in fact, garden-style product extended its streak of outperformance to 30 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 de-densification trends continue.

#### 6.2 Outlook and Strategy

Construction already underway, combined with economic volatility driven by the pandemic, is expected to push vacancy rates higher in the near-term. New deliveries to the Investable Markets are projected to average around 185,000 units per year in 2020 and 2021, above their long-term average of 130,000 units per year. Upward pressure on vacancies is expected to cause effective rent growth to weaken in the near-term. However, new supply is expected to recede in the outer years of the forecast, placing fundamentals more in balance. Favorable demographic trends and barriers to homeownership should continue to sustain healthy renter demand over the long-term and lead to strong performance.

As the U.S. economy recovers, one demographic trend in particular that could provide a tailwind for rental demand is the record number of young adults living with their parents, particularly the 18 to 29 age cohort. While that figure was already high going into the pandemic, economic and social distancing concerns driven by the presence of the virus have resulted in this group experiencing a 2.6 million increase since March<sup>58</sup>; this population now totals roughly 27 million, surpassing the previous peak seen during the Great Depression. This represents a large source of untapped rental demand for current and future housing supply. With two-thirds of this age group living in rentals, they are a dominant force supporting apartment demand, and a job market recovery will likely empower more of them to move out on their own and form new rental households.

Given our expectations for volatile rent growth in the near-term, investment strategy should focus on stabilizing cash flow within apartment portfolios; buying modern product with limited CAPEX exposure, and optimally targeting developers with strong track records in a given market. Pre-COVID, large coastal markets were exhibiting decelerating effective rent growth, and the pandemic has only exacerbated that pain. These metros are also some of the largest, and have therefore had an outsized effect on national performance. In the third quarter of 2020, markets like Chicago, New York, and Los Angeles all trailed the U.S. average. If renters' living choices are less constrained by where they work, the most expensive areas of the country may continue to lose some of their appeal, especially where density is the highest. From a landlord's perspective, eviction moratoriums and rent control are added risks. Although prime markets may be viewed as stable long-term performers, elevated pricing and declining rent growth in these locations may continue to constrain total returns in the near-term.

While not immune to near-term volatility, the high-growth Sun Belt and Western-regional markets, particularly in the suburbs, should continue to outperform over the next several years. Regional metros such as Austin, Raleigh, Nashville, and Phoenix are expected to outperform based on strong economic and demographic drivers. The factors that are driving long-term economic growth — favorable demographics, a lower cost of living, and a pro-business climate — were already present pre-COVID and are expected to remain in place. These markets have well-diversified, knowledge-based economies with large or growing concentrations in technology.

Slowing rent growth and rising vacancy, combined with low yields, will likely limit the apartment sector's ability to produce outsized total returns in the near-term. However, relative to the other major property types, the apartment sector should recover more quickly given the sustainable demand drivers that remain in place. While certain metros are not considered favorable

<sup>57</sup> NCREIF as of September 2020.

<sup>&</sup>lt;sup>58</sup> Pew Research Center as of November 2020.



currently, we should bifurcate expected performance within the Investable Markets between downtown and suburban. Investors will likely continue to outperform the index in inner-ring suburban markets with limited new supply, particularly with assets that are near highly-rated school districts, employment centers, and a well-amenitized town center. Conversely, assets in downtown urban core submarkets will likely continue to underperform the index due to oversupply, low cap rates, and limited NOI growth in the near-term.

The central themes that are shaping our apartment strategy include:

- Fundamentals and Demographics Continue to Support a Suburban Strategy: Limited new construction, in-migration of ageing Millennials in search of more space and highly-rated schools, and now due to COVID concerns, a stronger preference for low density product, are all expected to sustain garden-style apartment performance. Over the long-term, barriers to homeownership, the development of more urbanized suburbs, and satellite office access should sustain strong suburban demand and lead to outperformance. And while homeownership may still be the goal for many households, the more affordable option right now is renting garden-style apartments. Limited supply of single-family homes has resulted in continued home price appreciation, and the pandemic has only accelerated that trend. Strong demand has pushed home prices 12.0% higher year-over-year and driven inventories for both new and existing homes to record lows. Even with low interest rates currently, many first-time homebuyers still do not have sufficient savings for a down payment while also paying down student debt. To capitalize on these trends, suburban properties should meet very specific investment criteria, foremost being that they should be located in highly-rated school systems, as well as have proximity to employment centers and urbanized lifestyle amenities.
- Resilient Performance and Density Concerns Keep Target on Student Housing: At Tier 1/Power 5 universities, we expect demand to remain strong for modern, purpose-built properties that are walkable to campus and have bed-bath parity. Even as the majority of universities moved to a predominantly virtual learning platform this fall due to COVID, many students still wanted to live at school and be close to friends, but were pushed off-campus due to the de-densification of residence halls. As was the case pre-COVID, modern product that is walkable to campus continued to see the highest occupancy levels this school year, as well as the strongest pre-leasing velocity and rent growth for next school year. While supply pressures may offset some of this increased demand, these assets are best positioned to outperform.
- Expect Underperformance in Urban Core to Continue: High-rise product was already underperforming pre-COVID due to oversupply and 1-2 months of concessions, on average, present as units were being absorbed. 60 So while construction delays may help some urban markets continue to manage the flow of new deliveries, this product type is most often concentrated in densely populated areas that rely on public transit; this amenity should continue to have a much lower premium attached to it until an effective vaccine has been made widely available. Therefore, given the trend towards dedensification due to the pandemic, demand for high-rise will likely weaken further, leading to higher concessions and continued underpeformance in the near-term. Long-term, high-rise supply is expected to come more into balance with demand. Also, Gen Z is anticipated to backfill Millennials as the dominant renter cohort. They are expected to continue seeking out the live-work-play lifestyle that urban apartments provide them, leading to stronger future performance.
- Pandemic Could Lead to Attractive Pricing on Value-Add Properties: With a grim economic backdrop in place due to COVID, the near-term ability to execute a successful renovation strategy to achieve higher yields is challenged. Sustained investor demand for Class-B product leading up to the recession caused cap rates on these properties to greatly compress. However, residents at these communities are more likely to work in sectors hit hardest by the recession. NOI growth is expected to be weak for these assets, which may push prices lower. Investors should target stabilized assets built coming out of the financial crisis that do not need renovations now, but could provide stable cash flow in the near-term and upside opportunity long-term. That upside is optionality complete the appropriate renovation as the economy recovers for an acceptable return on cost or sell once capital markets shift back to value-add strategies.
- Take Advantage of Ground-Up Development Opportunities: Apartment projects that break ground in the next 12 to 18
  months should deliver into the broader economic recovery and a much more balanced supply-demand environment. With
  yields remaining low for Class-A apartments, the untrended return on cost for new development should continue to be
  very attractive relative to stabilized product, with spreads likely between 100-150 basis points on average.

<sup>&</sup>lt;sup>59</sup> National Association of Realtors as of September 2020

<sup>&</sup>lt;sup>60</sup> Yardi Matrix as of November 2020.



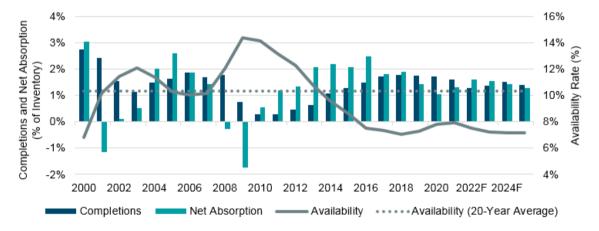
# 7 / Industrial Outlook and Strategy

#### 7.1 Current Conditions

The U.S. industrial market has weathered the COVID-19 recession quite well, outperforming all property sectors in the NPI, supported by resilient leasing demand and healthy occupancy and rent levels, as well as intense investor interest. While overall trends in 2020 have been good, the sector is cyclical and relies on broad economic health to maintain strongly positive momentum. There are variations across markets, with many experiencing mixed conditions across property type segments and based on the pace of reopening local economies. Even so, negative fallout has been very limited and in our view the pace of recovery will be swift, especially when compared to the economic cycles of the past three decades. 62

We believe the key factors supporting relatively strong industrial property fundamentals were that US consumers were able to sustain spending (aided by stimulus and initial re-openings of the economy), and importantly, the surge of online shopping that occurred in response to the lockdowns. The substantial shift to online shopping (a 37% spike, year-over-year in the third quarter of 2020), has stimulated warehouse absorption in nearly all major markets. <sup>63</sup> Near cycle-low vacancy rates pushed new demand to the development pipeline, as retailers and logistics providers scrambled to find space to accommodate the continuing surge in e-commerce activity and inventory restocking. <sup>64</sup> Additionally, logistics providers and other service operations were generally deemed essential and were able to resume operations more quickly.

EXHIBIT 9: INDUSTRIAL NET ABSORPTION AND COMPLETIONS AS A % OF INVENTORY AND AVAILABILITY RATE (2000-2025)



Source: CBRE-EA (History) and DWS (Forecast) as of 12/31/20. F=Forecast

Note: Aggregate of CBRE-EA U.S. industrial markets. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved.

Sustained low vacancy rates and persistent demand (even if modest or slightly negative in some markets) has allowed landlords to hold occupancy and rent in a manner that was not achieved in prior cycles. The national availability rate has risen only 40 basis points year-to-date (to 7.6%), just 60 basis points above 2018's cycle-low. Absolute vacancy measured just 4.7%, also very close to cycle lows. <sup>65</sup> This appears to have limited tenant choices when considering renewals in place versus moving, as a significant portion of available space lies within the development pipeline.

This information is subject to change at any time, based upon economic, market and other considerations and should not be construed as a recommendation. Past performance is not indicative of future returns. Forecasts are not a reliable indicator of future performance. Forecasts are based on assumptions, estimates, opinions and hypothetical models that may prove to be incorrect. Investments come with risk. The value of an investment can fall as well as rise and your capital may be at risk. You might not get back the amount originally invested at any point in time. Source: DWS Investment GmbH

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DWS, NCREIF and CBRE-EA as of September 2020.

<sup>62</sup> DWS and CBRE-EA as of September 2020.

<sup>&</sup>lt;sup>63</sup> DWS, US Census Bureau and CBRE as of September 2020

DWS, US Census Bureau and CoStar as of September 2020.

CBRE-EA as of September 2020.



The pace of construction has not faltered in 2020, with new deliveries totaling 200 million square feet through the third quarter of 2020. 66 This new stock was approximately 50% leased upon delivery. New space demand was muted in the first half of 2020, totaling just 66 million square feet (about 50% of 2019 levels). Demand accelerated in the third quarter, aligned with economic stimulus and a partial restart of economic activity, as well as pressure for e-commerce retailers and logistics providers to ramp up capacity for the coming holiday season. Net absorption jumped to 58 million square feet during the third quarter, bringing the year-to-date total to 124 million square feet. New leasing largely occurred in newly developed warehouses (2018 – 2020), while demand trends in existing stock (pre-2018) was mixed and reflected modest negative absorption (about -10 million square feet per quarter).

While some fallout across markets can be expected during a recession, the unique nature of this one appears to have helped limit negative property market trends. Through the third quarter of 2020, 16 of the 50 markets in our national baseline exhibited negative or weak demand.<sup>71</sup> Most of these markets also had low vacancy rates entering recession, so market fundamentals generally held steady. About 15 other markets saw availability rates fall year-to-date through the third quarter.<sup>72</sup>

By our estimates, the pace of market rent growth has eased in 2020, ranging from -3% to 2% through the third quarter in most markets. Very few markets showed significant weakness, while a few others continued to achieve record high rents, notably New York/New Jersey and in Southern California. Rent gains have averaged about 26% in our universe of investable markets over the past five years, and significantly higher gains in the coastal markets, so a slight step-back should not dampen income growth prospects in the near term.<sup>73</sup>

We believe that the industrial property market will maintain its distinct advantages into the foreseeable future. There may be negative trends yet to come for some industrial users, but, in our view, the unique dynamics of this cycle has accelerated the adoption of online shopping and rapid fulfillment. We believe that businesses (by necessity) are using the current circumstances to implement and refine new and more efficient concepts to serve a growing consumer base. As the economy opens further and people revert to more normalized work and travel behaviors, we think that much of what was implemented will remain in place. Recent disruptions to transportation and production processes have also highlighted the need for a more flexible and resilient supply chain, and this could also support greater warehouse demand in the future.

The industrial sector achieved strong NOI growth through the third quarter of 2020 (6.5% year-over-year), helping fuel a one-year total return of 10.1% in the same period. Office was the next best performing sector, with 2.8% total returns during the same period, while the NPI all property index had total returns of 2.0%. The current eight percentage point performance gap between industrial and the NPI is the widest experienced in the past 20 years.<sup>74</sup>

#### 7.2 Outlook and Strategy

We believe that the industrial property sector is well positioned to continue its strong performance, but it will take until 2022 before demand strength is fully recovered across most markets. Our current economic outlook reflects a strong rebound in growth for the next three years, but we expect some segments of the economy (travel and hospitality) to take longer to recover. The baseline outlook is also dependent upon successful reopening of metro economies in 2021. For instance, the Florida and Las Vegas economies have outsized exposure to travel and tourism and some west coast economies experienced more prolonged shutdowns, translating into weak or negative absorption. We expect demand to bounce back with a resolution to COVID, but current challenges in some markets may carry into late-2021 and cause mixed conditions for some types of industrial properties.

- 66 CBRE-EA as of September 2020
- 67 CBRE-EA and CoStar as of September 2020.
- CBRE-EA and CoStar as of September 2020.
- 69 CBRE-EA and CoStar as of September 2020.
- <sup>70</sup> CBRE-EA and DWS as of September 2020.
- DWS and CBRE-EA as of September 2020.
- CoStar Property Survey and DWS as of September 2020.
- DWS, NCREIF and CBRE-EA as of September 2020.
- 74 NCREIF as of September 2020.



Net absorption totaled about 150 million square feet in 2020, driven by the largest retailers and the third party logistics firms that serve them. We forecast that absorption in 2021 will approach 200 million square feet (similar to 2019), and then surge to comparable levels of the last growth cycle in 2022 (about 250 million square feet per year). The development pipeline has approximately 300 million square feet of industrial properties underway that are slated for deliver mostly in 2021.<sup>75</sup>

Stronger than expected demand has improved our national availability forecast. We think it ended 2020 at about 8% and will remain at that level during 2021, as the construction pipeline delivers speculative properties. We believe that demand will begin to surpass supply in 2022, gradually tightening availability, as growth sets in across more markets. This outlook is favorable compared to past recessions and is premised on a steady re-opening of the economy in the coming year. Uncertainty around the timing of this represents a significant near-term risk. However, our longer term view on the prospects for the industrial property sector remains very positive.

We believe that effective market rents took a step back in 2020, with modest free rent concessions, and we expect that growth momentum in 2021 will moderate, generally ranging from flat to 3 percent. New warehouse properties as well as those in the most highly constrained markets should perform the best, but there will be pockets of weakness in some markets. We believe renewed fundamentals strength will form in 2022 and thereafter should stimulate stronger growth. Our five year outlook calls for average market rent growth of about 3.6% annually through 2025.

The central themes that are shaping our industrial investment strategy:

- We believe the industrial sector will provide a compelling opportunity for real estate investors in coming quarters. Given our current rent projections, five-year leases rolling in the next two years will be, on average, 13% below market.<sup>76</sup> The resulting NOI boost potential is the strongest among the NPI subsectors, and should fuel strong relative returns.<sup>77</sup>
- Sustained momentum supports our current market selections. We have also added new target markets to our investable
  universe, to include rising regional hubs in the Mountain West and Southeast regions. 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. Florida, with its tourism and hospitality exposure, may be subject to
  sharper economic contraction and longer recovery, but Miami and Orlando stand out as having good long-term prospects.

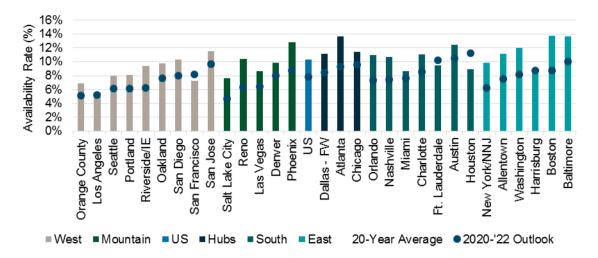
<sup>&</sup>lt;sup>75</sup> CoStar Property as of September 2020.

<sup>&</sup>lt;sup>76</sup> DWS and CBRE-EA as of September 2020.

<sup>&</sup>lt;sup>77</sup> DWS, CBRE-EA and NCREIF as of September 2020.



#### EXHIBIT 10: INDUSTRIAL AVAILABILITY OUTLOOK AND LONG TERM AVERAGES ACROSS MARKETS BY REGION



Source: CBRE-EA (History) and DWS (Forecast) as of 12/31/2020.

Note: US represented by CBRE-EA US Sum of Industrial Markets. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved.

- Exhibit 10 above, highlights the broadly strong conditions across the markets of our investable universe. Nearly all carried availability rates that were below their respective long-term averages and also below the U.S. average. Of these, Houston and Fort Lauderdale stand out as showing some weakness, but Baltimore, Boston, Phoenix and Atlanta show great improvement compared to past trends. It highlights that in each region, there are relative outperformers and underperformers and also exhibits the current strength of Mountain West markets of Reno, Las Vegas and Salt Lake City. In our view, these smaller regional hubs have weathered the recession well and are likely positioned to perform well in the future. However, due to the high concentration of hospitality and entertainment in Las Vegas, we think it may experience bifurcated conditions, with regional bulk warehouses faring well, but local-serving properties struggling.<sup>78</sup>
- Contrary to longer term trends, the coastal markets of the west (Northern and Southern California, Seattle and Portland), have exhibited mixed demand, due in part to later or longer shutdowns.<sup>79</sup> Generally these markets have re-hired workers at a slower pace compared to Sun Belt or southern metros. <sup>80</sup> We will monitor these markets for risks and opportunities, as we believe their long term prospects remain favorable.
- We believe that markets with favorable exposures to knowledge based industries as well as metros with large stable economies and resilient growth prospects will fare best over the longer term. Some of these are also underserved by modern warehouse facilities. Notably, we continue to favor the San Francisco Bay Area, Southern California, Seattle, Portland, Washington D.C., Philadelphia and New York/New Jersey. In our view, Central Pennsylvania may exhibit mixed trends, with Allentown outperforming due to its linkage to New York, and Harrisburg underperforming due to supply competition in the region. Notably, we believe that the prospects for Washington D.C., and Dallas/Fort Worth have improved due to favorable structure and growth prospects and strong demand fundamentals.

#### Primary considerations for 2021 and ahead:

Asset Fit & Location: It important to target appropriate physical features of industrial real estate for the market in which it
sits. In this cycle, several physical features seem to have increased in importance, such as lower site coverage (with
parking and loading implications), efficient circulation, and trailer storage for bulk warehouses. Specific locations can be
particularly important in larger population centers with significant traffic barriers, so proximate access to appropriate labor
pools, consumers, businesses and infrastructure (airports/ports) are vital. We believe that judicious asset targeting will
garner better rent and occupancy prospects in a full cycle.

<sup>&</sup>lt;sup>78</sup> DWS and Moody's monthly employment data as of September 2020.

<sup>&</sup>lt;sup>79</sup> DWS and Moody's monthly employment data as of September 2020.

<sup>80</sup> DWS and Moody's monthly employment data as of September 2020.



- Big Box Warehouse and Regional Hubs: Large retailers and 3PLs continue to drive demand for new bulk warehouses. We believe that the need for more flexible and resilient supply chains should support sustained demand, but persistent supply and competition in secondary and tertiary markets will likely serve to moderate rent growth prospects. Rising regional hubs in faster growth west and southeast locations are seeing reliable demand support as rising e-commerce sales puts pressure on supply chain throughput.<sup>81</sup> We think high quality of life locations such as Charlotte, Salt Lake City, Las Vegas and Phoenix offer compelling opportunities.
- Multi-Tenant Warehouse/Urban Last Mile: We expect resilient performance across many markets with fulfillment
  providers and essential businesses driving demand, but a longer recession or weaker recovery could hurt smaller local
  businesses and correspondingly, occupancy and rent fundamentals in harder hit metro economies. Short-term downside
  potential in this segment could afford good investment potential in higher-barrier markets.
- Food-Related/Cold Storage: This segment has had strong trends in this cycle, and we think the segment offers compelling
  long-term prospects, but this recession presents a big challenge for restaurant businesses, and that may impair demand
  for the temperature controlled warehouses that serve them in the near term. Demand for refrigerated food facilities that
  serve the traditional grocery chains should get a boost, as direct-to-consumer food delivery rises.
- R&D/Flex/Light Industrial: We have few recommended targets for higher finish industrial properties, limited to about six
  major markets with large technology and life science industries. Functional and well-located light industrial facilities could
  perform well in highly constrained markets and serve as covered land plays in high value locations.

<sup>&</sup>lt;sup>81</sup> DWS and CBRE-EA as of September 2020.



# 8 / Office Outlook and Strategy

#### 8.1 Current Conditions

The U.S. office market continued to weather COVID-19 and recession related headwinds in the second half of 2020. Office-using employment remained nearly 2 million jobs lower than the peak level from the first quarter of 2020. However, we expect office-using employment to return to pre-pandemic levels by the end of 2022, and continue to moderately accelerate from there. The office-using labor sector has been particularly resilient given that total employment remains 14 million jobs lower than the peak and may not return to pre-pandemic levels until mid-2023. Metros with high concentrations of tech and life science (e.g., San Francisco, San Jose, Austin, Seattle, and Boston) will likely perform better than the nation and lead the office-using job recovery over the next five years. However, office-using job growth in the large core markets such as New York, Chicago and Washington D.C. is expected to lag behind.

The decline in employment has caused a sharp fall in office occupancy, leading to substantial negative net absorption. Leasing velocity in 2020 was near the lows recorded during the GFC and more than 30% lower than the quarterly average over the past five years. 

84 Net absorption is estimated to have totaled -47 million square feet (MSF) across DWS's 22 Investable Markets ("Investable Markets") in 2020, by far the largest decline in any year since the 2001 dot.com bust (see Exhibit 11). The subdued leasing activity suggests many firms are delaying long-term real estate decisions and opting for short-term renewals if they are facing an upcoming lease expiration.

Given the work-from-home phenomenon and high business uncertainty, firms looking to reduce real estate costs are subletting either part or all of their current office space to recoup at least some of the cost. The pace of sublet additions accelerated sharply in 2020. Prior to the pandemic, the supply of sublet space in the U.S. had been generally stable, varying between 100 MSF and 110 MSF over the past decade.<sup>86</sup> That number totaled a record of 180 MSF nationwide in the third quarter of 2020, which represents a 43% increase from the end of 2019.<sup>87</sup>

The increase in sublease space was particularly severe in tech hubs such as Austin, San Francisco and Seattle. However, the spike was not limited to tech-centric areas, with Los Angeles, Dallas and Chicago also seeing heavy sublet additions. On a nominal basis, New York leads the way with 25 MSF of sublease space, a 28% increase from year-end 2019. Washington D.C. posted one of the smallest increases among major markets as the presence of the federal government appeared to bring some stability. Conversely, smaller Sun Belt and mid-western markets without a major concentration of tech or large financial institutions were not as severely affected. At the same time, flight-to-quality placed even greater strain on commodity and second-generation assets, with Class B occupancy losses occurring at triple the rates of those in Class A properties.

While many firms are looking to reduce their office space, leasing is still occurring. Tech firms — a sector many believed would permanently shift to a work-from-home model, were responsible for some of the largest leases signed in 2020. Large tech tenants took significant amounts of space in core gateway markets such as New York and Seattle, even after stating publicly that they envisioned 50% of their workforce permanently working from home within the next five to 10 years. Moreover, despite fears of urban flight, 29% of all lease renewals in 2020 occurred in the CBD, consistent with the historic norm ranging between 20% and 30%. <sup>90</sup> The CBD/suburban mix of new leases was also roughly the same as the historical average. For the most part, companies appeared to be staying put.

Recently signed leases will not translate into net absorption for several quarters, however. We expect the significant pullback in demand which happened in 2020 to push office vacancy rates higher across most U.S. markets. As a result, we estimate

<sup>82</sup> Moody's Analytics as of December 2020.

<sup>83</sup> Moody's Analytics as of December 2020.

<sup>84</sup> Costar as of December 2020.

<sup>85</sup> CBRE-EA, DWS as of December 2020.

<sup>&</sup>lt;sup>86</sup> Costar as of December 2020.

<sup>&</sup>lt;sup>87</sup> Costar as of December 2020.

<sup>88</sup> Costar as of December 2020.

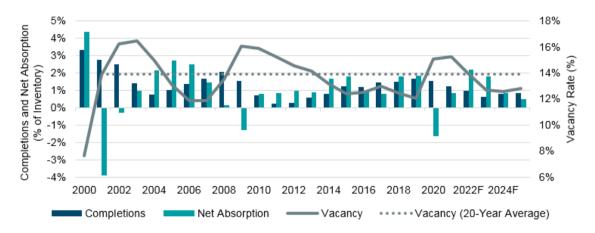
<sup>89</sup> JLL as of December 2020.

<sup>90</sup> Cushman & Wakefield as of December 2020.



that the vacancy rate reached a high of 15% at the end of 2020, about 300 bps above the 2019 level and the highest level in more than five years (see Exhibit 11).

EXHIBIT 11: OFFICE NET ABSORPTION AND COMPLETIONS AS A % OF INVENTORY AND VACANCY RATE (2000 - 2025)



Source: CBRE-EA (history) and DWS (forecast) as of 12/31/20. F=Forecast.

Note: 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.

New supply was well underway prior to the pandemic and many of those projects will deliver over the next couple of quarters. Most developers have stayed away from large purely speculative developments over the last several years, so it is unlikely a flood of uncommitted space in new developments will be the catalyst for a large spike in the vacancy rate. Depending on how office-use patterns evolve, one can make an argument that the upcoming deliveries in 2021-2022 may be well-timed.<sup>91</sup>

Nationally, there are 156 MSF of supply underway, or just under 2% of total inventory. <sup>92</sup> As the majority of absorption has been in Class A buildings over the last decade, it is not surprising that the space currently under construction falls in that top-quality segment. These buildings may see an even greater share of demand going forward as tenants look for the latest in HVAC, air quality control and filtration systems and other safety features that may be cost prohibitive for many landlords of older assets to retro-fit. <sup>93</sup> The markets with the most supply underway continue to be tech hubs such as Austin, San Jose, San Francisco, Boston and Seattle. These areas join high-growth Sun Belt markets such as Nashville, Charlotte and Atlanta. With demand slumping and the vacancy rate continuing to rise, rent growth is expected to remain negative through the end of 2021. The flood of heavily discounted sublet space will likely put additional pressure on effective rent growth over the near term. Yet, the decline is expected to be less severe than that of the GFC. Historically, the U.S. office market has seen a roughly 13% drop in asking rents over the course of a 12-quarter correction. Strong rent growth will likely resume by the middle of 2022, and stay positive through the remainder of the forecast.

While the deceleration in rent growth has been universal, Sun Belt markets such as Charlotte, Miami, Phoenix and Atlanta join biotech hubs like Boston and San Diego in continuing to post gains. Conversely, tech markets such as San Francisco, Austin, San Jose and Seattle joined the mature gateway markets seeing some of the worst rent growth in 2020.<sup>94</sup>

<sup>91</sup> Costar as of December 2020.

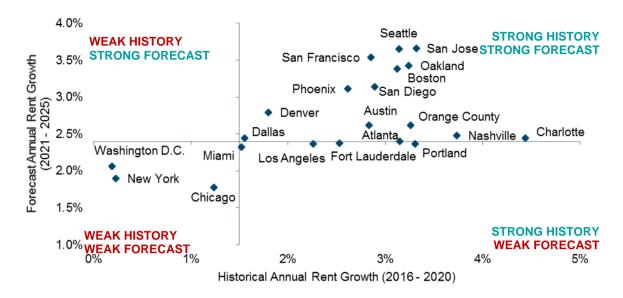
<sup>92</sup> CBRE-EA, Costar, DWS as of December 2020

<sup>93</sup> Costar as of December 2020.

<sup>94</sup> CBRE-EA, Costar, DWS as of December 2020



#### **EXHIBIT 12: OFFICE RENT GROWTH (ANNUAL, % YEAR-OVER-YEAR)**



Source: CBRE-EA (history) and DWS (forecast) as of 12/31/20. Note: 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.

Over the long term, metros with an expanding tech and life science presence and strong population growth are expected to outperform (see Exhibit 12). Those include mature markets in the San Francisco, San Jose, Seattle, and Boston as well as emerging markets such as Austin, Charlotte and Atlanta, while New York, Washington D.C. and Chicago are expected to produce weaker rent growth due to higher vacancy levels, active construction pipelines and a weak demand outlook.

#### 8.2 Outlook and Strategy

The course of the U.S. and global economic recoveries remain heavily impacted by the course of the pandemic. Still, the end of 2020 brings hope to most economies around the world as COVID-19 vaccines are approved and distributed. Though difficult to assess, economic conditions for the first half of 2021 will likely remain sluggish, but we expect a more pronounced reopening of the economy and return to the office in the second half of 2021 due to distribution of a vaccine, better therapeutics and more individual adoption of health safety protocols as we all learn how to combat and live with COVID-19.

The return to a pre-COVID type office environment will be gradual, however. Office tenants and their employees will likely remain reluctant to return to the traditional office space format right away. Companies may delay real estate decisions and wait to see how the economy emerges from the COVID-19 crisis. This would continue to cause weakness in near-term net absorption.

Many corporations have successfully adopted the work from home model and are planning to allow workers to work remotely for an extended period of time. Yet not much consensus exists on what office conditions will look like in a post-COVID world. 95 Most experts agree that working from home will increase and office attendance will fall. How much is still in flux. Workers may adopt flexible schedules, while maintaining in-person collaboration with teams for at least part of the week, keeping productivity as high as possible and giving time and space for thorough cleanings and social distancing. 96 Yet the long trend towards open floor plans and creative office space has led to crowding in the workplace. Over the past decade, we have seen office density rise substantially with the average space used per employee declining by almost 10% from 2009 to 2019. 97 As a result, most office space is not configured to facilitate the social and physical distancing recommended by the Center for Disease Control (CDC). We expect the office densification trends to pause or even reverse.

<sup>95</sup> Gartner CFO Survey Costar as of December 2020.

<sup>&</sup>lt;sup>96</sup> Costar as of December 2020.

<sup>&</sup>lt;sup>97</sup> CBRE-EA, BLS, DWS as of December 2020.



Co-working demand will likely be limited for the foreseeable future. More contraction and consolidation among co-working operators are probable. Long term, however, there is a role and a place for shared work space in the real estate industry. There are small companies that like the flexibility and the speed to market of the product and some enterprise customers will continue to want to lease a small percentage of their office space on a short-term basis. 98 Speed, flexibility and low initial capital outlay will remain major drivers of co-working office demand. 99

Near-term new supply 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 accounted for 50% of all scheduled office supply. The impact of active development and the recession may cause overall vacancies to rise over the near term. Over the long term, new supply is not expected to be the cause of significant vacancy increase as developers are staying away from purely speculative projects. The increase in CAPEX due to COVID-19 and relatively low yields across U.S. core markets and major CBDs are likely to restrict return performance for the sector.

Going forward, investors will likely remain cautious and selective as it relates to new office investment opportunities. Stable rent roll and limited tenant risk are recommended, as well as higher quality assets with long-term leases and low near-term capital requirements. There is no question the sector will likely go through lots of near-term disruption. Over the long term, the utilization of office space will adapt to tenant preferences as it has done historically. We remain convinced that successful companies will work in person. It is increasingly clear that there are significant gaps in conducting business on a fully remote basis in terms of maintaining company culture, creativity and productivity as well as on-boarding, training and developing talented employees.

The central themes that are shaping our office strategy include:

- High-Quality/Flexible Office Product: Given the public health nature of the current crisis, we expect the trend toward a preference for high-quality office space to accelerate. Tenants will be required to implement changes to their office space to create a safer, healthier work environments in the post-COVID era. As companies conceive plans to return to the office, they are already recalibrating their office space. Some of these changes include the reconfiguration of common areas to avoid crowding, design upgrades including touchless entry for doors and elevators, installation of thermal scanners to take employee temperatures, and addition of modern heating and air conditioning systems that avoid recirculation of air, as well as air purifiers. In PwC's recent COVID CFO Pulse Survey, 73% of respondents indicated that they would reconfigure work areas to promote health and safety. 101 Older, lower-quality space is more at risk in the current environment, given the higher cost of upgrading for health and safety standards. 102
- High Density Prime Suburban Office Nodes: Locations in established suburban districts with urban type amenities will likely gain in popularity due to lower density and access to private transportation options (ride sharing operators and personal cars). There is continuous evidence that Millennials are making lifestyle changes and migrating out of dense CBDs to more family friendly suburbs. This trend was happening before COVID and the pandemic further reinforced it. 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. economy, even more so during the COVID crisis. They are also a major force in the office sector.
  Strong educational institutions are vital to fostering innovative ecosystems that will attract talent, jobs and office demand.
  We believe that markets that boast global connectivity, a well-educated workforce, and an appeal to knowledge workers
  will perform well over the foreseeable future. Examples include Boston, Seattle, the San Francisco Bay Area, and Austin.

<sup>98</sup> Boston Properties as of December 2020.

<sup>99</sup> CBRE as of December 2020.

<sup>100</sup> CBRE-EA as of December 2020.

<sup>&</sup>lt;sup>101</sup> PwC as of December 2020.

<sup>102</sup> Costar as of December 2020.



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 Science and Medical Office: Life science and medical office could offer stability and diversification to a traditional office portfolio as healthcare services are in demand irrespective of the economic cycle. 103 While the COVID crisis could cause some short-term disruption to the life science real estate sector, the COVID pandemic will only fuel future demand for life science 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. 104 Moreover, the growing need for medical services at all ages and among aging baby boomers is expected to continue generate demand for medical office. Our strategy calls for investments in high-quality medical office facilities proximate to hospitals and in suburban areas or medical corridors where care can be delivered in an outpatient facility close to a large patient population. These are medical office facilities that offer specialized services (e.g., dialysis centers, ambulatory surgery centers, etc.).

<sup>&</sup>lt;sup>103</sup> NCREIF, MSCI and DWS as of December 2020.

<sup>104</sup> Cushman and Wakefield as of December 2020.

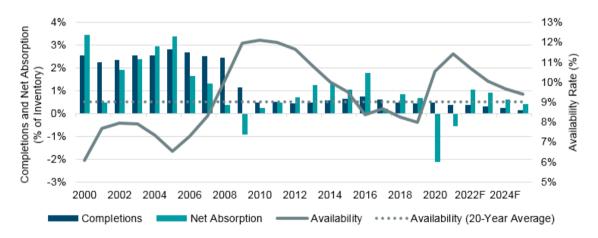


# 9 / Retail Outlook and Strategy

#### 9.1 Current Conditions

The challenges confronting retail property are being amplified by the COVID-19 pandemic, and the disruption transcends all segments of the sector. The trends that were materializing prior to the pandemic are intensifying the imbalances in retail. The fallout from mandated (and re-instated) store closures continue to ripple across the sector, and have resulted in lost revenue for tenants and landlords, as both parties share the pain. Availability rates for neighborhood and community centers increased to 8.8% at the end of third quarter of 2020, up 80 bps from the beginning of the pandemic in March 2020. Net absorption turned negative at mid-year 2020 and totaled -12.25 MSF year-to-date. Rent declines have yet to be recorded. Retail rent growth remained essentially flat, up 0.9% year-to-date in the third quarter of 2020, likely due to the influx of higher-priced space hitting the market. <sup>105</sup> In the near term, we see more downside risk to the forecast than six months ago and are projecting higher availability due to record retail bankruptcies, restructuring and resulting store closures. Our forecast reflects 2021 as the fall-out year where vacancies climb sharply higher and rent deferrals and abatements hit NOI.





Source: CBRE-EA (history) and DWS (forecast) as of 12/31/20. F=Forecast.

Note: 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.

Total U.S. retail sales, a measure of purchases made at stores, restaurants and online, recorded a broad decline of 1.1% across several sectors in November from the prior month, but were up 4.1% from 12 months ago, prior to the pandemic. 106 Consumers began making their holiday purchases modestly in the early weeks of the holiday season starting in early October, which likely had a softening effect on growth in November (the traditional start to the holiday season). While spending increased in the 'stay at home' categories that have continued to benefit from pandemic behaviors (i.e., food and beverage, home improvement, big-box retailers, and e-commerce), sales slipped in department stores, clothing, restaurant and electronics (see Exhibit 14).

<sup>105</sup> CBRE-EA as of September 2020.

<sup>106</sup> U.S. Census Bureau, Advance Monthly Retail Trade Survey as of November 2020.



EXHIBIT 14: U.S. RETAIL SALES YEAR-OVER-YEAR & MONTHLY PERCENT CHANGE (NOVEMBER 2020)



Source: U.S. Census Bureau, Advance Monthly Retail Trade Survey as of 11/30/20.

The impacts of cooling weather, a surging third wave of infections, re-instated restrictions on mobility, business closures, and a slowing job recovery are taking a toll on consumer spending and the economy. The spending declines realized in October and November mark the end of retail's comeback after a sharp pullback in consumption when the coronavirus prompted mass store closures in March and April during the early phase of the pandemic. Slowing momentum may be a sign the economic recovery is losing steam as coronavirus cases surge across the country.

New behaviors learned during the pandemic are altering how, where, and what we buy. Under stay-at-home orders, U.S. consumers were forced to shop online during government-mandated store closures. The stay at home culture has fueled online shopping as it continues to flourish. In November, non-store sales (largely e-commerce) increased 29.2% year-over-year, while department store sales fell 19% over the same period. The same of these shifts are permanent and structural rather than temporary and cyclical. According to eMarketer, the total share of U.S. e-commerce sales is projected to reach an all-time high of 14.5% of total retail sales in 2020. The terms of the critical holiday shopping season, this year is slated to be a banner year for online sales while in-store traffic is expected to languish due to health and safety concerns. According to Adobe Analytics data, Cyber Monday this year was slated to be the largest digital sales day ever, with spending reaching between \$10.8 billion and \$12.7 billion, which would represent growth of 15% to 35% from a year earlier. The most recent Annual Holiday Shopping Intentions Survey report, the International Council of Shopping Centers (ICSC) projected a 1.9% year-over-year spending increase this 2020 holiday season, with total spending to be \$862.2 billion.

Retailers with a significant online presence or those catering to a work from home demographic have generally performed better than retail concepts that rely upon socialization, interaction, in-person consumption, and experiential retail. Meanwhile, spending shifts from categories such as apparel, gas, and transportation may take longer to revert back to pre-pandemic levels if alternative workplace strategies are widely adopted by leading corporate occupiers. The casualization of work attire was already well underway, but the stay at home culture has likely impaired apparel's recovery longer term. Additionally, with spending on travel, dining out, services and other experiences well below prior years, consumers have shifted those dollars towards goods, home repairs, and other material comforts. This highlights a reversal of a long-term trend where a growing amount of a household budget was allocated to services such as education and healthcare, leaving less room for the discretionary purchase of goods. These household budget shift are the major factor propelling retail sales growth, despite wider economic challenges.

<sup>&</sup>lt;sup>107</sup> U.S. Census Bureau, Advance Monthly Retail Trade Survey as of November 2020.

<sup>&</sup>lt;sup>108</sup> eMarketer, e-commerce 2020 forecast as of July 2020

<sup>&</sup>lt;sup>109</sup> Adobe Analytics estimates as of November 2020.

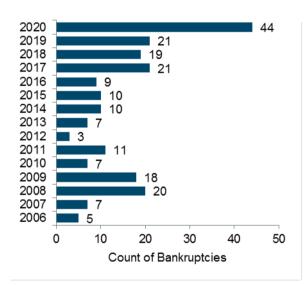
<sup>&</sup>lt;sup>110</sup> The International Council of Shopping Centers (ICSC) Annual Holiday Intentions Survey as of October 2020.

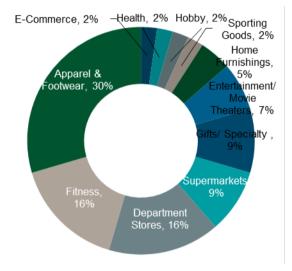


The sectors of retail that have been ravaged by the pandemic that will eventually recover include restaurants, gyms, movie theaters, entertainment, services, and local tenancy. Pre-COVID, these categories were re-invigorating centers as demand from apparel and soft goods retailers waned. It is clear, however, that social distancing measures will be a challenge for these categories to operate in the near term. We believe that these categories will recover as consumers gravitate towards a sense of community and interaction once there is a vaccine or it is otherwise safe to return to these activities. In-person services, salons, gyms, and health care will be good long-term tenants post-COVID because they are population-driven and naturally resistant to e-commerce.

We expect 2020 will be a record year for retail bankruptcies and store closures, followed by more distress in the first quarter of 2021. By mid-December 2020, 44 major retailers had filed for bankruptcy. The list of retailers in distress has ballooned well beyond the Great Recession years in 2008 and 2009 combined (see Exhibit 15). 111 According to Costar, U.S. retailers could close over 11,200 stores with a majority of those situated in malls. 112 This comes off a record year in 2019 when retailers shuttered approximately 9,300 stores. 113 This number is dwarfed by the 100,000 restaurants that closed permanently or long term due to the pandemic. The restaurant industry is on track to lose \$240 billion in sales by the end of the year, according to survey by the National Restaurant Association. 114 Accordingly, we see distress in this particular subset of retail climbing in 2021 as a result of the pandemic.

#### **EXHIBIT 15: 2020 MAJOR RETAIL BANKRUPTCIES**





Source: DWS, Bloomberg, Company filings and press releases as of 12/31/20. Note: Major retail bankruptcies exclude restaurants.

With respect to the consumer, the recent weakness sets the stage for a much slower start in 2021. However, there is some upside potential coming around the bend for improving conditions. Recent data points to a more conservative consumer as the country waits for widespread vaccine distribution. Elevated savings and steady employment for median- to high-income families should translate into a strong consumer spending rebound as pent-up demand is released from in the second half of 2021 and onward. However, many families on the lower-end of the income scale could take longer to recover.

<sup>&</sup>lt;sup>111</sup> DWS, Bloomberg, Company filings and press releases as of December 2020.

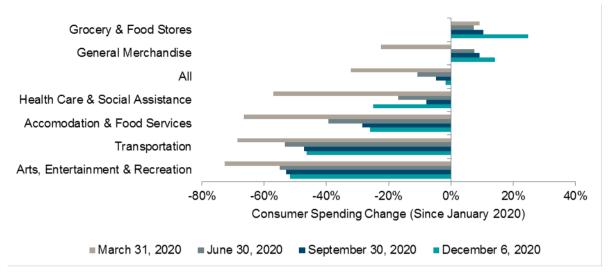
<sup>112</sup> Costar as of December 1, 2020.

<sup>&</sup>lt;sup>113</sup> Coresight Research as of June 2020.

<sup>&</sup>lt;sup>114</sup> National Restaurant Association, Press Release as of September 15, 2020.



EXHIBIT 16: REOPENING RETAIL, TRACKING THE RECOVERY: CONSUMER SPENDING BY CATEGORY



Source: Google, Tracktherecovery.org, Affinity Solution as of 12/06/20.

Note: Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved.

#### 9.2 Outlook and Strategy

The retail landscape is becoming much more nuanced and challenging for investors to negotiate than ever before due to rapidly changing consumer trends, disruption and shifting retailer relevancy. We see a clear distinction in performance forming. That said, the performance of individual centers is expected to be dispersed by geography, retail property type, quality of the real estate, position in the market, tenancy, and ability to absorb new retail concepts and evolve. Constraints to mobility and shifts in consumer behavior due to the pandemic will challenge property operations and fundamentals in the near term. As a result, we expect pricing metrics for retail to soften, however, there has been limited price discovery to date. The few trades of high-quality assets have pointed to a limited buyer pool and potentially lower valuations on lower rent collections, longer downtime to backfill vacancies and elevated leasing costs. In the near term, there may be a risk of further value write-downs by appraisers due to cap rate expansion coupled with challenges to income, which could be more severe for out-of-favor property subtypes such as malls than for dominant grocery-anchored neighborhood centers.

We anticipate that structural changes will continue to accelerate and reshape future demand. While it feels as if consumer behaviors and patterns will change dramatically, several aspects of our retail strategy remain valid. Accordingly, our acquisition criteria and recommendations remain highly selective and focused on stable, grocery-anchored or necessity-based retail. Anchored by strong credit tenants with long-term leases, durability of the tenancy or clarity in the income stream is more important than ever. Resilient shopping centers have been able to maintain traffic due to the presence of necessity-based tenants such as grocery, superstores, pharmacies, liquor stores, and home improvement supplies, and have been able to sustain rent collections in the 76-86% range as December 2020.<sup>115</sup> The pandemic is certainly a game changer for retail investors. This period of disruption may provide *selective* buying opportunities, as core or institutional investors look to outright exit the sector or minimize exposure and allocations to retail. We continue to watch yields for grocery-anchored retail and select power centers, as there could be opportunities to add well located, strong assets with credit tenants, and right-sized boxes to the portfolio. At the right risk-adjusted returns, retail investments can still provide stable income and cashflow.

Our target market recommendations remain stable from previous reports, however, Jacksonville was added to our list of investable retail markets due to its population growth and favorable retail dynamics. We continue to recommend a tactical tilt towards high-growth regional markets in the Sun Belt with favorable economic drivers for retail and real estate in general. We continue to believe in the growth of regional markets over the long term, and remain favorable to emerging technology-driven regional hubs. Job, population and economic growth should drive these markets to outperform over the medium term.

<sup>&</sup>lt;sup>115</sup> Source: NCREIF (NFI-OE) Rent Collections Report as of October 2020.



However, regions that are being disproportionately impacted by another shut-down or wave of the pandemic could increase near term risks, including the coastal markets on the west coast, Florida and northeast.

Our retail strategy continues to follow our apartment and office strategy to the well-amenitized and transit centric suburbs gaining residents and jobs. Continue to seek the balance of strong demographics, population density, and disposable income growth for core investments. The impact of social distancing and shoppers avoiding density informs an underweight to urban retail, as we expect shopping and commuting patterns will continue to be disrupted in the near term.

However, our conviction around necessity-based or grocery-anchored retail remains high, and likely less affected over the long-term compared to malls or high street retail. Additionally, we feel consumer behavior will be impacted post pandemic. E-commerce adoption has moved far ahead of forecasts prior to the pandemic. But overall, we believe retail is not dead. Outside some pockets of retail, most retailers can thrive when the global health crisis reaches a conclusion. The convenience, social aspects, and experiences that brick and mortar retail can be provide will likely be the catalysts that revive shopping centers. The challenges of today are expediting the rebalancing of retail, which will bring the market to a new but stable equilibrium.

The key themes that inform our retail strategy include:

- Target Dominant Grocery-Anchored Product: We continue to believe this property type is efficient and can survive alongside the growth of e-grocery and click-and-collect models. There will certainly be more regular online grocery shoppers post pandemic, but this may affect trips to or time spent at the center. In the near term, store disintermediation in this space will likely be slow, and it will be difficult for most traditional grocers to fully automate orders from a warehouse at a reasonable cost. The grocery store will likely continue to be the most proximate, profitable, and last touch point for grocers to connect to customers. While we expect grocery, pharmacy, and daily needs to remain strong drivers, risks are elevated for small businesses, restaurants, and fitness that fill the remainder of grocery-anchored centers, due to their lack of credit, liquidity, and ability to resume normal operations quickly. Well-capitalized retailers will be able to ride out the storm, but the distinctive small businesses that are the lifeblood of these centers are in jeopardy.
- Follow the Evolution of Power Centers: For power centers, the term "essential" versus "non-essential" retail will disproportionately impact performance and their ability to adapt going forward. Additionally, the strength of retailer credit, longevity, and ability to compete online will continue to separate the winners and losers in this category. We believe there is potential for these types of centers to adapt to omnichannel retail uses such as showrooms, micro-distribution or online fulfilment centers, and customer service hubs. We believe that omnichannel strategies and innovative pick-up, delivery, or contact-free models will become more prominent. Retailers with the most agile logistics networks stand to outperform and meet consumer expectations. The proximity and reach of these types of assets lend well to this model.
- Malls and Fashion Centric Assets Face Significant Repricing: The decline of the department store and apparel sectors
  pose major challenges for malls, lifestyle centers, and high street retail assets. While we believe there is a future for mall
  assets and expect the most productive, high-quality assets to survive, they will struggle in the near-term. Repricing will
  be most severe for lower-quality assets, off main/main locations, and potentially those disproportionately dependent on
  tourism for sales. A recovery in those sectors will come once tourism, both foreign and domestic, resumes and office
  workers return to their offices in the major CBDs.



#### 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. In our view, the analysis results in an active overweight to the industrial sector, a market weight to the apartment and retail sectors, and an underweight to the office sector.

Sector	NPI Weights	ODCE Weights	Research Perspective	House Portfolio	Active Bet (vs ODCE)	Range
Apartment	25%	27%	<ul> <li>Risk from higher unemployment.</li> <li>Shortage of affordable housing.</li> <li>Preference for garden-style product.</li> </ul>	30%	+3%	25% - 35%
Industrial	21%	20%	<ul> <li>Risk to properties occupied by vulnerable retailers.</li> <li>Booming e-commerce supporting demand.</li> <li>Efforts to secure supply chains may drive further inventory accumulation.</li> <li>Smaller and mid-sized warehouses poised to outperform.</li> </ul>	32%	+12%	27% - 37%
Office	35%	34%	<ul> <li>Rent collections healthy despite workfrom-home directives.</li> <li>Supply generally under control outside a few cities.</li> <li>Bankruptcies may push occupancies and rents lower.</li> <li>Recovery expected to be slow, as in past cycles.</li> <li>Risk around future office needs (working from home vs. de-densification).</li> </ul>	27%	(7%)	22% - 32%
Retail	19%	15%	<ul> <li>Bankruptcies among mall-based department and apparel stores.</li> <li>Necessities (supermarkets, pharmacies, salons) cyclically defensive and grow with population.</li> <li>New supply is largely nonexistent.</li> <li>Favor strip centers with good demographics and relative e-commerce immunity (services, in-store pickup).</li> </ul>	11%	(4%)	6% - 16%
Other	0%	4%	N/A	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 December 2020.

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.

Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect.



#### Appendix 2: Real Estate Target Markets

Investable Metros: We screened top U.S. metros, which represent 86% 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	<ul><li>↓ Underweight</li><li>Industrial Office</li></ul>			
Market	Apartments				
Atlanta	$\leftrightarrow$	<b>\</b>	<b>↑</b>	$\leftrightarrow$	
Austin	<u>^</u>	<b>↑</b>	<b>↑</b>	<b>↑</b>	
Baltimore		$\leftrightarrow$			
Boston	$\leftrightarrow$	$\leftrightarrow$	<u> </u>	$\leftrightarrow$	
Charlotte	$\leftrightarrow$	$\leftrightarrow$	<b>↑</b>	<u> </u>	
Chicago	<b>↓</b>	<b></b>	<b></b>	<b></b>	
Dallas	<b>↓</b>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	
Denver	<u> </u>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	
Fort Lauderdale	$\leftrightarrow$	<b></b>	$\leftrightarrow$	$\leftrightarrow$	
Houston	$\leftrightarrow$	<b></b>	<b></b>	$\leftrightarrow$	
Jacksonville	<u> </u>			$\leftrightarrow$	
Las Vegas		$\leftrightarrow$			
Los Angeles	<b>\</b>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	
Miami	<b>\</b>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	
Minneapolis	$\leftrightarrow$			<b></b>	
Nashville	<u> </u>	$\leftrightarrow$	<u> </u>	<u> </u>	
New York	<b>↓</b>	<u> </u>	<b>+</b>	<b></b>	
Oakland / East Bay	$\leftrightarrow$	<u> </u>	$\leftrightarrow$	$\leftrightarrow$	
Orange County	$\leftrightarrow$	$\leftrightarrow$	<b></b>	$\leftrightarrow$	
Orlando	<u> </u>	$\leftrightarrow$		<u> </u>	
Philadelphia / Central PA	<del> </del>	$\leftrightarrow$		<del></del>	
Phoenix	<u> </u>	$\leftrightarrow$	$\leftrightarrow$	<b></b>	
Portland	<b>\</b>	<u> </u>	$\leftrightarrow$	<u> </u>	
Reno		$\leftrightarrow$			
Raleigh	<u> </u>			<u> </u>	
Riverside	$\leftrightarrow$	$\leftrightarrow$		$\leftrightarrow$	
Salt Lake City	<u></u>	<u> </u>			
San Diego	<u> </u>	$\leftrightarrow$	$\leftrightarrow$	$\leftrightarrow$	
San Francisco	$\leftrightarrow$	<b>↑</b>	<b>↑</b>	$\leftrightarrow$	
San Jose	$\leftrightarrow$	<b>↑</b>	<b>↑</b>	$\leftrightarrow$	
Seattle	$\leftrightarrow$	<b>↑</b>	<b>↑</b>	<b>↑</b>	
Tampa	<b>↑</b>			<b>↑</b>	
Washington DC	$\leftrightarrow$	<b>↑</b>	<b>\</b>	$\leftrightarrow$	
West Palm Beach	<u> </u>			$\leftrightarrow$	

Source: DWS as of December 2020. Forecasts are not a reliable indicator of future returns. Forecasts are based on assumptions, estimates, views and hypothetical models or analyses, which might prove inaccurate or incorrect. 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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# Research & Strategy—Alternatives

#### **OFFICE LOCATIONS:**

#### Chicago

222 South Riverside Plaza 34<sup>th</sup> Floor Chicago IL 60606-1901 United States Tel: +1 312 537 7000

#### Frankfurt

Mainzer Landstrasse 11-17 60329 Frankfurt am Main Germany Tel: +49 69 71909 0

#### London

Winchester House 1 Great Winchester Street London EC2N 2DB United Kingdom Tel: +44 20 754 58000

#### **New York**

875 Third Avenue 26<sup>th</sup> Floor New York NY 10022-6225 United States Tel: +1 212 454 3414

#### San Francisco

101 California Street 24<sup>th</sup> Floor San Francisco CA 94111 United States Tel: +1 415 781 3300

#### Singapore

One Raffles Quay South Tower 20<sup>th</sup> Floor Singapore 048583 Tel: +65 6538 7011

#### Tokyo

Sanno Park Tower 2-11-1 Nagata-cho Chiyoda-Ku 18<sup>th</sup> Floor Tokyo Japan

Tel: +81 3 5156 6000

#### TEAM:

#### Global

#### Kevin White, CFA

Co-Head of Real Estate Research & Strategy kevin.white@dws.com

#### Gianluca Minella

Head of Infrastructure Research gianluca.minella@dws.com

#### Americas

#### **Brooks Wells**

Head of Research, Americas brooks.wells@dws.com

#### Ross Adams

Industrial Research ross.adams@dws.com

#### Ana Leor

Retail Research ana.leon@dws.com

#### Europe

#### Tom Francis

Property Market Research tom.francis@dws.com

#### Rosie Hun

Property Market Research rosie.hunt@dws.com

#### Florian van-Kann

Property Market Research florian.van-kann@dws.com

#### Simon Wallace

Co-Head of Real Estate Research & Strategy simon,wallace@dws.com

#### Liliana Diaconu, CFA

Office Research liliana.diaconu@dws.com

#### Ryan DeFeo

Property Market Research ryan-c.defeo@dws.com

#### Joseph Pecora, CFA

Apartment Research joseph.pecora@dws.com

#### Siena Golan

Property Market Research siena.golan@dws.com

#### Martin Lippmann

Property Market Research martin.lippmann@dws.com

#### Aizhan Meldebek

Infrastructure Research aizhan.meldebek@dws.com

#### Asia Pacific

#### Koichiro Obu

Head of Research & Strategy, Asia Pacific koichiro-a.obu@dws.com

#### Seng-Hong Teng

Property Market Research seng-hong.teng@dws.com

#### Natasha Lee

Property Market Research natasha-j.lee@dws.com

#### Hyunwoo Kim

Property Market Research hyunwoo.kim@dws.com



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- \_ Adverse changes in law and regulation including environmental laws and regulations, zoning laws and other governmental rules and fiscal policies;
- Environmental claims arising in respect of real estate acquired with undisclosed or unknown environmental problems or as to which inadequate reserves have been established;
- \_ Changes in the relative popularity of property types and locations;
- Risks and operating problems arising out of the presence of certain construction materials; and
- \_ Currency / exchange rate risks where the investments are denominated in a currency other than the investor's home currency.

An investment in real estate involves a high degree of risk, including possible loss of principal amount invested, and is suitable only for sophisticated investors who can bear such losses. The value of shares/ units and their derived income may fall or rise.

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