Alternatives Research Real Estate





U.S. REAL ESTATE STRATEGIC OUTLOOK

January 2022

A NUTSHELI

- _ U.S. real estate performed remarkably well in 2021. With vacancy rates sitting near historic lows across most sectors, real estate is starting 2022 on a strong footing.
- _ We believe that an unusually supportive macro environment above-trend economic growth, elevated inflation, and low real interest rates — will continue to support real estate performance this year and likely beyond.
- Outcomes will remain highly divergent across sectors and markets, in our view. Technology and migration, together with idiosyncratic factors, will favor warehouses, garden apartments, and grocery-anchored retail centers in tech hubs, the Sun Belt, and the Mountain West. Malls and office buildings may struggle in demographically challenged locations.
- _ Risks to the outlook are relatively subdued, in our view. A COVID resurgence could dampen economic, leasing, and investment activity. Longer-term, inflation could sow the seeds of the next recession, although likely not for another few years.

Recent Performance

U.S. real estate performed remarkably well in 2021. Although the year began tepidly amid a surge of COVID infections, the steady rollout of vaccines unleashed a resurgence of economic, leasing, and transactions activity in the spring and summer. By the third quarter, overall vacancy rates had dropped to nearly their lowest levels in more than 30 years. Net Operating Income (NOI) increased 9% year-over-year, a rate eclipsed only once (during the dot-com boom) since 1983. Transaction volume of \$462 billion in the first three quarters of 2021 was the highest in at least 20 years. Finally, the fund-level ODCE real estate index delivered its strongest total returns in history (since 1978).

A flood of capital, reflected in compressing cap rates, played a role in pushing values higher. Yet the rebound was largely driven by fundamentals. The apartment sector absorbed 251,000 units in the third quarter — more than the annual average

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¹ NCREIF. As of September 2021.

² NCREIF. As of September 2021.

³ Real Capital Analytics. As of September 2021.

⁴ NCREIF. As of September 2021.



over the past decade (208,000).⁵ Absorption of nearly half a million units in the first three quarters shattered annual totals back to 1996.⁶ Industrial absorption of 432 million SF was the highest since at least 1989.⁷ Even the retail sector, which suffered well-documented pressure from e-commerce as well as mandated store closures, registered its fifth consecutive quarter of positive net demand.⁸ In all three sectors, vacancy rates dropped to their lowest levels in history, underpinning solid year-over-year rent growth (about 10% in the case of apartments and industrial buildings; 2% for retail centers).⁹

Amid last year's upswing, the office sector stood out as a notable exception. To be sure, valuations held steady, and the market displayed scant signs of distress (office CMBS delinquencies of 2.4% in October were below pre-pandemic levels and a fraction of their 10%+ Global Financial Crisis (GFC) peaks). Regardless of whether they were using their space (national office usage remained mired at 40% in December), tenants generally continued to meet their lease obligations, keeping NOIs stable. Yet a second year of negative absorption reduced office demand by a cumulative total of 100 million SF, more than twice as much as in 2009 (40 million SF), driving vacancies to dot-com and GFC era highs.

⁵ CBRE-EA. As of September 2021.

⁶ CBRE-EA. As of September 2021.

⁷ CBRE-EA. As of December 2021.

⁸ CBRE-EA. As of December 2021.

⁹ CBRE-EA. As of December 2021.

¹⁰ NCREIF (valuations); Moody's Analytics (CMBS delinquencies). As of October 2021.

¹¹ Kastle (office usage); NCREIF (NOI). As of December 2021.

¹² CBRE-EA. As of December 2021.



1 / Real Estate Outlook

We believe that U.S. real estate is poised to sustain its strong momentum, courtesy of an unusually favorable set of macroeconomic and financial conditions. Fueled by extraordinary fiscal stimulus (approximately \$5.5 trillion, equivalent to 25% of GDP), we estimate that the economy expanded by about 5.5% in 2021.¹³ In our view, we are unlikely to see similar levels of fiscal support in 2022. Nevertheless, we believe that a strong labor market and elevated asset prices ((home prices and the stock market are up 25% and 35%, respectively, since before the pandemic) will motivate consumers to release at least some of the \$2.5 trillion (12% of GDP) in surplus savings that they accumulated during the pandemic.¹⁴ GDP growth may slow toward 4%, but this would still rest well above trend levels (about 2%) and cap the fastest two-year expansion since the early-1980s.¹⁵ Consistent with last year, we expect that strong economic growth (characterized by healthy job, wage, and business revenue gains) will fuel robust leasing activity across most types of residential and commercial property.

As the economy has recovered, inflation concerns have taken center stage. Consumer prices soared 7.1% year-over-year in 2021, the most since the early-1980s; the Federal Reserve's (Fed) preferred measure, which strips out surging food and energy prices, jumped the most since 1989 (4.7% year-over-year in November 2021). There has been a raging debate about whether inflation is transitory or more persistent. We believe that transitory supply-side issues have played a role. Yet it is also worth noting that the Federal Reserve has more than doubled its balance sheet, creating more than \$4 trillion in base money. While the Fed embarked on a similar program during the GFC without igniting inflation, this latest iteration differs in two respects: First, it amounts to roughly twice the stimulus over a third of the time (two years instead of six). Second, unlike during the GFC, when much of the liquidity was trapped in a broken financial system, this time it has entered circulation via debt-financed fiscal channels. The result: Broad ("M2") money supply has jumped 40%, an order of magnitude above anything seen in more than 50 years (see Exhibit 1). Experience from the 1970s suggests that money growth can feed inflation with a lag of two to three years. Regardless of the catalyst, once ignited, inflation can become self-perpetuating if it is embedded in expectations, spawning a wage-price spiral.

EXHIBIT 1: M2 MONEY SUPPLY AND INFLATION



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

The "transitory versus persistent" debate has not been conclusively settled. However, it has rekindled interest among investors in strategies to mitigate inflation risks. Property has traditionally been viewed as an inflation hedge, and for good reason: Commercial real estate has historically exhibited a strong correlation and an even stronger sensitivity (or "beta") to

¹³ Moody's Analytics (fiscal stimulus); DWS (GDP growth). As of December 2021.

¹⁴ Case-Shiller (home prices); S&P 500 (stock prices); DWS (savings). As of December 2021.

¹⁵ DWS. As of December 2021.

¹⁶ Census Bureau (consumer prices); Bureau of Economic Analysis (Fed's preferred personal consumption expenditure price index). As of December 2021.

¹⁷ Federal Reserve. As of December 2021.

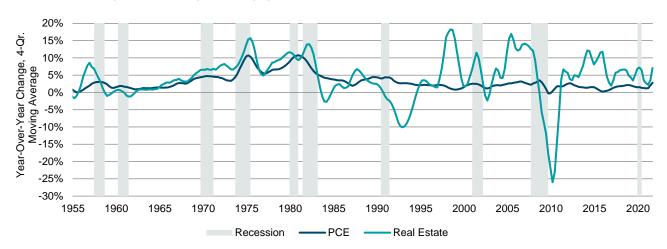
¹⁸ Federal Reserve. As of December 2021.

¹⁹ Federal Reserve (money supply); Bureau of Economic Analysis (inflation); DWS. As of December 2021.



rising price levels (see Exhibit 2).²⁰ These relationships appeared even more powerful during the 1970s and early-1980s, when inflationary pressures were more acute. There are two mechanisms through which inflation feeds into real estate prices: Rising (nominal) wages and sales can augment renters' spending power. Higher construction costs can also constrain competitive supply. Materials prices soared 35% year-over-year in November, while a broader measure that includes wages increased 14% — the fastest increases in 50-70 years.²¹ Over time, real estate prices have tracked replacement costs, which are directly tied to inflation.

EXHIBIT 2: INFLATION AND REAL ESTATE PRICES



	Inflation	Real Estate Price Growth	Correlation	Beta
1971-1985	6.5%	7.8%	0.74	1.44
1955-2021	3.1%	4.4%	0.35	1.04

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

With inflation mounting, the Federal Reserve has signaled its intention to suspend asset purchases in March and lift short-term interest rates several times in 2022. Some investors may wonder whether higher interest rates will undermine real estate valuations. We do not believe so, for several reasons. First, monetary tightening will not necessarily translate into higher long-term interest rates. Second, even if long-term rates were to increase, they should not be divorced from the inflationary context. Given that property is a real asset whose cash flows and intrinsic value increase with inflation (unlike nominal Treasuries), we believe that its valuations are driven more by real interest rates. Real yields (measured by the 10-year Treasury Inflation Protected Security (TIPS)) have hardly moved from their record lows of about -1%, and futures markets imply that they will remain below -60 basis points through 2022 (see Exhibit 3).²² Third, the spread between cap rates and TIPS yields, about 500 basis points (bps), is well above its long-term average (400 bps), suggesting that there is room for real estate to absorb any upward pressure on real rates.²³

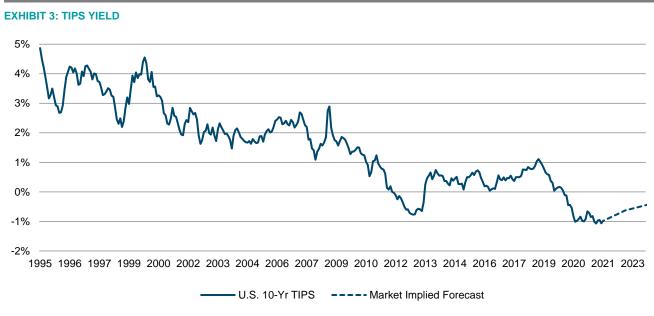
²⁰ Federal Reserve (commercial real estate prices); Bureau of Economic Analysis (inflation); DWS. As of December 2021.

²¹ Census Bureau (construction materials costs); Engineering News-Record (building costs). As of November 2021.

²² Bloomberg. As of December 2021.

²³ NCREIF (cap rates); Federal Reserve (TIPS); DWS (spreads). As of September 2021.





Sources: U.S. Board of Governors of the Federal Reserve System, Bloomberg as of December 2021.

There are risks to the outlook. In the near-term, the COVID Omicron variant introduces risks to the economy and therefore leasing fundamentals. We believe that any disruption is unlikely to derail the expansion: Americans have learned to manage through COVID flare-ups; vaccines, boosters, and therapies promise at least a partial antidote; and there appears to be limited political appetite to impose draconian restrictions. Nevertheless, more adverse scenarios cannot be ruled out. Over the medium-term, there is a risk that the inflationary rebound currently underway may ultimately necessitate a more forceful Fed response, reminiscent of the early-1980s under Chairman Paul Volcker, that would tip the economy into recession. Still, today's upward-sloping yield curve suggests that recession risks are several years off. For now, we believe that robust economic growth, elevated inflation, and low real interest rates set the stage for a strong real estate market in 2022 and likely beyond.



2 / Investment Strategy

The dispersion of performance across sectors and markets is at its widest in 40 years. Notwithstanding our generally optimistic outlook, we believe that outcomes will remain highly divergent, largely driven by two key forces: technology and migration.

Technology: Information technology has permeated professional and social life, with far-reaching consequences for local economies as well as shopping and working patterns. Seven of the 10 largest listed companies in the world are technology firms, the top five of them based in the United States.²⁴ E-commerce has increased to 14.4% of retail sales and food services (ex. autos) from about 1% two decades ago and 12.4% just before the pandemic.²⁵ Even as employment in traditionally office-using sectors has returned to its pre-COVID peak, office utilization of just 40% (albeit up from 20% in March 2020) is a testament to how video conferencing and other communication tools have facilitated remote working.²⁶ Meanwhile, venture capital has flooded into the life science industry (up 40% in 2020), which together with government and corporate sources, has driven total research and development investment to \$300 billion, twice what it was a decade ago.²⁷ COVID has no doubt contributed to these trends, but in our view, the inexorable march of technology will continue post-pandemic.

Migration: Over the past five years, key "gateway" markets including Los Angeles, Chicago, and New York have lost population, while "regional" markets in the South (e.g., Dallas, Austin, Atlanta, Charlotte, and Orlando) and Mountain West (e.g., Denver, Phoenix, and Salt Lake City) have grown at three to five times the national pace. Meanwhile, suburbs have expanded twice as fast as cities. Once again, we believe that COVID accelerated these trends, as people, untethered from their offices and deprived of urban amenities, sought more comfortable spaces in which to live and work. Yet these trends did not originate with the pandemic. Around the turn of the century, gateway cities enjoyed a much-celebrated urban renaissance as the influential Millennial generation (those born between 1980 and 2000) sought vibrant live-work-play environments, reinforced by "agglomeration effects" (a tendency for educated professionals and high-value businesses to congregate). However, this trend began to reverse around 2015 as the oldest Millennials (now in their early-40s), like generations past, looked for more affordable places to raise families. This demographic shift is still in its infancy: The youngest Millennials are in their early-20s. Meanwhile, remote working may have loosened the ties that previously bound businesses and people to a small number of dense, high-cost urban areas.

From a sector perspective, we believe that these twin forces, coupled with more idiosyncratic factors, will continue to favor industrial and residential over retail and office properties (with important exceptions). From a geographic perspective, expanding regional markets in the south and Mountain West are generally poised to outperform, in our view. While we are generally less enthusiastic about gateway cities, we believe that several coastal markets with dynamic technology and life science industries (e.g., Boston, San Jose, San Diego, and Seattle) will fare better.

Industrial (Strong Overweight): Total returns of 32.4% (trailing four quarters) in the third quarter of 2021 were the strongest ever recorded by any sector in the history of the NCREIF Property Index (NPI), fueled in part by a 10.2% year-over-year increase in NOI.³⁰ E-commerce has been a pivotal driver of the sector's impressive performance in recent years, as retailers have scrambled to build out distribution capacity. Online sales continue to expand briskly (up 6.6% year-over-year in the third quarter), even though physical stores have reopened.³¹ With e-commerce retail penetration sitting at about 14%, the U.S. still has a ways to go to catch up with the UK, China, and South Korea (around 25% and rising).³² Additionally, due to supply-chain dislocations, business inventories are severely depleted.³³ A push to rebuild inventories, as well as to

- ²⁴ Bloomberg. As of December 2021.
- $^{\rm 25}$ Census Bureau. As of September 2021.
- ²⁶ Moody's Analytics (office employment); Kastle Systems (office utilization). As of December 2021.
- ²⁷ S&P Capital IQ; CBRE Research, NIH, PwC MoneyTree & DWS. As of 1Q 2021.
- ²⁸ Moody's Analytics. As of December 2021.
- ²⁹ Moody's Analytics; DWS. As of December 2021.
- ³⁰ NCREIF. As of September 2021.
- ³¹ Census Bureau. As of September 2021.
- ³² Census Bureau (retail sales); UNCTAD, "Estimates of Global E-Commerce 2019 And Preliminary Assessment of COVID-19 Impact on Online Retail 2020." As of June 2021.
- ³³ Census Bureau. As of December 2021.



accumulate buffer stock to protect against future disruptions, will add further support to industrial absorption. Finally, we believe that a dearth of available space has created pent-up demand. While it is theoretically possible for developers to overbuild to this compelling demand picture, there is no sign of that yet: With 400-450 million SF of industrial space under construction (compared with about 430 million SF of absorption in 2021), we believe that supply and demand will remain balanced in 2022.³⁴ Cap rates have compressed, but they remain reasonable, in our view, in the context of very low interest rates and the sector's strong growth prospects. To the extent that valuations are elevated, development may provide an attractive alternative to acquisitions.

Residential (Overweight): Apartments were the second-best performing sector in the third quarter of 2021, producing total returns of 13.4% (trailing four quarters).³⁵ At first, the residential upswing appeared to stem from COVID-driven migration: In 2020, high-rise (typically urban) rents slid 8%, while garden (largely suburban) rents slightly increased and home prices climbed 10%.³⁶ Recently, the boom has been more broad-based: Rents in garden and high-rise units increased roughly in tandem (10%-12%) in 2021 (although the former outperformed from a total return perspective), while home prices jumped 20%.³⁷ These residential gains are remarkable in a year when population growth tumbled to an all-time low of just 0.1% due to ageing and curtailed immigration.³⁸ In our view, they appear to be partly a byproduct of COVID — as households diverted funds previously used for recreational activities toward housing — and may dissipate once spending patterns normalize. However, they also reflect burgeoning Millennial household formation, a more durable trend. Furthermore, a dearth of construction since the GFC has created a structural deficit of about six million homes, according to one study, equivalent to four years of new supply.³⁹ Rental vacancy rates (across both single- and multifamily units) are at their lowest level since 1984.⁴⁰ Finally, thanks to their shorter (typically one-year) lease terms, residential properties have historically responded well to inflation. Accordingly, we believe that the sector will remain a strong performer, particularly suburban assets in expanding areas of the country.

Retail (Underweight): Total returns for retail property were muted in the third quarter of 2021, at 0.7% (trailing four quarters). However, the market was bifurcated, with malls (about half the index) generating negative returns, and neighborhood (7.1%) and community (4.1%) centers faring better. In our view, e-commerce continues to threaten the viability of malls, which typically house a large contingent of department and apparel stores selling merchandise that can be readily acquired online. Yet several factors may combine to support neighborhood and community (N&C) centers. To be sure, any further disruption to retail traffic due to a resurgent pandemic could put fragile local tenants, and therefore property cash flows, at risk. However, given that N&C centers are largely service-oriented, they are more insulated from e-commerce threats, and to the extent that they dispense goods (e.g., groceries), they can help to fulfill online orders (i.e., delivery or pickup from store). Since they are typically located in or near residential areas, they may capture more sales as people move to suburbs and spend more of their workweek at home. Years of underperformance have also largely curtailed new construction and kept yields at comparatively attractive levels. While in our view an underweight to the sector remains appropriate, we believe that there are pockets of opportunity.

Office (Strong Underweight): Office values treaded water in the third quarter, delivering total returns of 4.9% (trailing four quarters).⁴³ While workplace occupancy remained depressed, NOIs were stable as tenants continued to honor lease obligations.⁴⁴ In our view, offices will retain an important role as centers of collaboration, training, innovation, and business development. Companies may also de-densify their workspace to provide a healthier working environment. Yet the challenges should not be understated. Even a relatively small shift toward hybrid working (where employees spend part of their week at home) could weigh on office absorption over time as tenants run out their existing leases (averaging

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<sup>34</sup> CBRE-EA. As of September 2021.
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³⁵ NCREIF. As of September 2021.

³⁶ CBRE-EA (rents); Case-Shiller (home prices). As of December 2021.

³⁷ CBRE-EA (rents); NCREIF (total returns); Case-Shiller (home prices). As of December 2021.

³⁸ Census Bureau. As of December 2021.

³⁹ Rosen Consulting Group, "Housing Is Critical Infrastructure: Social and Economic Benefits of Building More Housing." June 2021.

⁴⁰ Moody's Analytics. As of September 2021.

⁴¹ NCREIF. As of September 2021.

⁴² NCREIF. As of September 2021.

⁴³ NCREIF. As of September 2021.

⁴⁴ NCREIF (NOI). As of September 2021.



approximately six years).⁴⁵ We do not believe that office values are poised to crash; however, they may stagnate for several years. Exceptions include medical and life science space, whose occupants generally have less flexibility to work remotely, and which benefits from an expanding health care industry. More generally, some Sun Belt and tech markets may buck the trend, as expanding employment soaks up slack created by the work-from-home shift.

Markets: In general, we believe that the migration of people and jobs from "gateway" city centers toward the Sun Belt, Mountain West, and suburbs will continue, with real estate performance following in its wake. However, there are exceptions: Some growth markets (e.g., Houston) are saddled with surplus supply. Conversely, some coastal markets and submarkets hosting dynamic technology and life science industries (e.g., Seattle, San Jose, west Los Angeles, San Diego, Cambridge, and northern Virginia) may be better positioned. Others may offer opportunities within certain segments (e.g., industrial in New York). Ultimately, both opportunities and risks remain diffuse across the nation.

⁴⁵ NCREIF. As of September 2021.



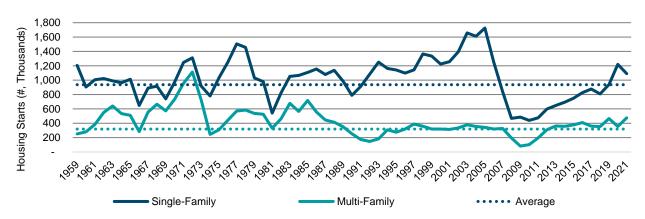
3 / Apartment Outlook and Strategy

3.1 Current Conditions

Strong household formation and barriers to homeownership are driving record demand and rent growth for the apartment sector in 2021, paving the way for the sector's full recovery from the COVID-19 pandemic. Demand in the third quarter of 2021 alone was higher than the five-year annual average for DWS's 31 Investable Markets ("Investable Markets", "Investable Universe")⁴⁶, driving the vacancy rate down to a near-record low of 3%. This is particularly impressive given how new supply continues to be delivered at historically high levels. This robust recovery in demand is happening across all Investable Markets, even the gateway markets that faced the most disruption due to extensive lockdown measures and density concerns.

All apartment product types are benefitting from this environment, but modern Class-A product, particularly in the suburbs across the Sun Belt and Mountain West, is the clear leader. Demographic trends, lifestyle preferences, and barriers to homeownership were already providing tailwinds for suburban rental demand prior to the pandemic, and those dynamics have only become more pronounced. Ageing Millennials continue to move to the suburbs to raise young families, driving the need for larger, modern living spaces and highly rated schools — and now, given work-from-home trends, space for a home office as well. While homeownership remains the goal for Millennials, the more affordable option right now is rental housing, both garden-style and build-for-rent communities. Limited construction of single-family homes (see Exhibit 4) since the GFC has resulted in continued home price appreciation, and the pandemic has only accelerated that trend.⁴⁷ Strong demand has pushed home prices 20% higher year-over-year and driven inventories for existing homes to record lows.⁴⁸ Even as single-family housing starts have recently climbed above their historical average, it has not been nearly enough to satisfy demand.⁴⁹





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

Median household income growth has also significantly lagged median home price appreciation in most markets over the past ten years (see Exhibit 5). As a result, even though interest rates remain historically low, many first-time homebuyers do not have enough savings for a down payment while also paying down student debt.

⁴⁶ CBRE. As of September 2021.

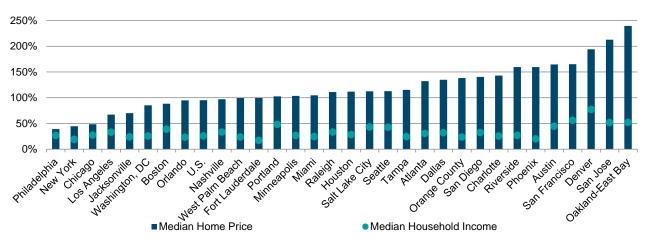
⁴⁷ U.S. Census Bureau and National Association of Realtors. As of October 2021.

⁴⁸ U.S. Census Bureau and National Association of Realtors. As of October 2021.

⁴⁹ National Association of Realtors. As of November 2021.



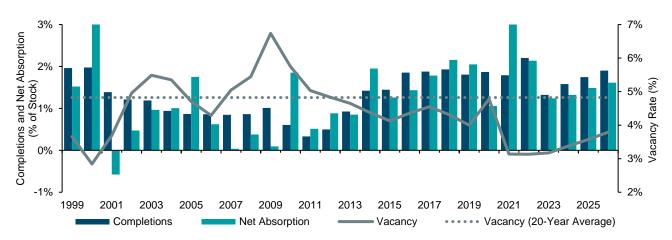




Source: Moody's Analytics and DWS as of December 2021. Past performance is not indicative of future results.

While record demand continues to absorb new supply, a significant number of units are still scheduled for delivery over the next 12 to 18 months across the Investable Universe. However, a pullback in supply is expected by the middle of the forecast, driven by rising construction costs for labor and materials, as well as a backlog of project zoning/entitlement approvals. At a minimum, this should delay project starts/completions, but could lead to some projects being shelved altogether. The sector's vacancy rate is therefore expected to remain very low in the near term (see Exhibit 6).⁵⁰ Once supply chain bottlenecks are reduced, apartment construction is expected to bounce back to meet sustained demand, which should push vacancy modestly higher. Supply should also receive a boost from the growth of the single-family rental sector, specifically build-for-rent communities, as well as from more office/mall conversions.

EXHIBIT 6: APARTMENT NET ABSORPTION AND COMPLETIONS AS % OF STOCK AND VACANCY RATE (1999 - 2026)1



Source: CBRE-EA (history) and DWS (forecast) as of December 2021.

Note: F = forecast. (1) 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.

Market rent growth is unlikely to remain at the supercharged level of 11.4% growth seen year-over-year through the third quarter of 2021⁵¹. Some of the record household formation supporting this double-digit push is likely transitory, with a portion likely pulled forward by pandemic-related factors including roommates splitting up to get more space, a shift in renter consumption preferences, young adults leaving parents' homes, apartments being used as second homes, and stimulus

⁵⁰ DWS: Apartment Investable Markets include 31 major metros in the U.S.

⁵¹ Yardi Matrix. As of September 2021.



checks boosting consumer wallets. However, with vacancy expected to remain tight over the near term and lease renewals being marked to market, the apartment sector should continue to see strong rent growth performance. Weighted-average market rent growth for the Investable Universe is expected to be 3.8% annually through 2026.

Debt and equity capital for residential investment remains abundant as institutional investors continue to rotate out of less-favored real estate sectors. A very competitive landscape continues to drive going-in yields below pre-COVID levels in many markets⁵², with cap rates for prime apartment assets ranging between 3%-4%.⁵³

Annual NCREIF Property Index (NPI) total returns for the apartment sector equaled 13.4% (trailing four quarters) in the third quarter of 2021 – roughly six times higher than one year ago.⁵⁴ Fueled by strong economic and demographic drivers, Sun Belt and Mountain West markets remain the clear leaders. Among apartment property subtypes, garden-style assets were once again the top performers, realizing an annualized total return of 21.2%. High-rise property performance improved dramatically, yet continued to lag well behind, returning 9.7%. Also, through the third quarter of 2021, garden-style and midrise assets continued their run of outperforming high-rise assets on a quarterly total return basis, with streaks of 30 and 26 consecutive quarters, respectively; this outperformance is consistent across all historical time series as well.

3.2 Outlook and Strategy

With the economy open and the job market greatly improved, the sector has bounced back very strongly, proving it is well-positioned to benefit from all the sector's in-place demand drivers. Expected performance within the Investable Universe should be bifurcated between gateway and regional markets, and even further between urban and suburban submarkets. Investors will likely continue to outperform the benchmark by targeting affluent, inner-ring suburbs of Sun Belt and Mountain West markets that have limited housing supply, strong population growth, and diversified, tech-driven economies; markets like Austin, Raleigh, and Denver. The factors driving economic growth in these metros, including continued in-migration, a highly educated workforce, and low living/business costs, are expected to continue. Conversely, while the gateway markets are recovering quicker than expected, they still face an abundance of new supply and weak job/population growth. Investors should continue to be very selective in these gateway markets, focusing on tech-driven metros like Boston and Washington, DC (particularly Northern Virginia).

The central themes shaping our apartment strategy include:

- Still Sunny in the Suburbs: Suburban rental demand should continue to benefit in the near term from ongoing migration out of the urban core, demographic tailwinds, evolving lifestyle preferences, and barriers to homeownership, all trends that accelerated as a result of COVID. The development of more urbanized suburbs and the ability to work from home should support rental demand over the long term as well, and lead to outperformance. In terms of asset selection, investors should focus on well-amenitized garden-style and mid-rise apartments, as well as build-for-rent communities. These properties should be located near jobs, well-rated schools, and neighborhood amenities. Also, given the strong demand for more space, investors should target larger floor plans and an abundance of open and outdoor amenity space.
- Student Housing Remains Resilient: At Tier 1/Power 5 universities, demand is expected to remain strong for modern, purpose-built properties that are walkable to campus and have bed-bath parity. As was the case pre-COVID, and throughout the pandemic, modern product that is walkable to campus continued to see the highest occupancy levels this past school year, as well as the strongest pre-leasing velocity and rent growth for the upcoming school year.⁵⁵
- _ Urban Core Improving, but Headwinds Remain: While high-rise properties have seen improved performance in 2021, they are expected to continue to underperform over the near-term with a significant pipeline scheduled for delivery and preferences for lower-density living persisting. Long term though, performance in the urban core is expected to stabilize

⁵² Real Capital Analytics. As of September 2021.

⁵³ DWS. As of December 2021.

⁵⁴ NCREIF. As of September 2021.

⁵⁵ Yardi Matrix. As of December 2021.



as supply comes more into balance with demand and the impact of flexible work arrangements becomes better understood. Gen Z is also expected to backfill Millennials as they graduate college and seek out a live-work-play lifestyle.

- Value-Add Increasingly Attractive: Class-A property rents continue to widen their spread over Class-B rents, providing greater upside potential for value-add strategies. Investors should have optionality in their approach to growing NOI, as many stabilized Class-B deals were managed for occupancy during the pandemic and renovation programs were paused. Proforma NOI targets should be more achievable through a blend of marking rents to market and, when appropriate, generating rent premiums through renovations.
- _ Keep Building (Even as the Price Tag Climbs Higher): Given the strength of the sector's long-term demand drivers, and a current vacancy rate that seems to point to a shortage of rental housing, institutional investors are flooding the sector with capital and driving further compression of core cap rates. Even as construction costs increase and project timelines expand, ground-up development continues to maintain an attractive yield premium, in our view, of 100 to 150 basis points over core cap rates.



4 / Industrial Outlook and Strategy

4.1 Current Conditions

In our view, industrial property market fundamentals and the related economic supports currently appear as strong and durable as in any period of time during the past 30 years. The industrial market posted an all-time high level of net absorption and also a record low vacancy rate in 2021. Net absorption totaled 432 million SF, widely outpacing 268 million SF of new construction deliveries. Fight market conditions continued to support strong rent growth, which we believe averaged 5%-6% nationally in 2021, the highest annual figure since 2016. It appears that strong demand will persist into the near-term future. Warehouse space demand is being stimulated by renewed economic growth and the continued roll-out of logistics capacity to support direct-to-consumer rapid fulfillment across a greater number of markets. We believe that pent-up demand from consumers should stimulate strong consumption in the coming year and retailers will look to take advantage of this, building appropriate levels of stock.

The development pipeline has responded to the surge in demand, but supply chain disruptions, tight labor conditions, and constrained land supplies in the major population centers have served to limit and delay construction deliveries. The resulting mismatch between demand and supply has resulted in a 33-year record low national U.S. availability rate of 5.2%.⁵⁷ The U.S. vacancy rate also continued to fall in 2021, measuring just 3.2% in the fourth quarter. ⁵⁸ Many markets are highly constrained with vacancy rates well below their long-term averages. Boston, for example, reached a 25-year record low vacancy rate of 3.4% in 2021Q4, which only ranked 29th lowest among a group of 59 markets tracked by CBRE-EA.

Cumulative rent growth within our investable universe of markets has averaged about 25% during the past five years, but anecdotal information suggest that the pace of growth has been as much as 50% in some markets. ⁵⁹ There were few weak spots in 2021, with only two markets (San Francisco and the New York Boroughs) experiencing negative absorption through 2021Q3. For the most part, local markets are now recovering strongly with the reopening of their economies. ⁶⁰

In our view, the primary driver of warehouse space demand in this cycle has been the rapid growth of e-commerce. Online retail sales jumped 32% in 2020 and 6.6% year-over-year in 2021Q3. ⁶¹ The share of online retail sales to total retail sales (ex. autos) nearly doubled from 7.9% to 15.3% between 2015 and 2020. ⁶² We believe this mode shift will continue and support increased warehouse demand across markets into the foreseeable future. If online retail sales growth moderates to an annual pace of 10% in the next five years (two-thirds the pace of 2010-2019), its share will grow to about 19%, which seems possible given current motivations of traditional retailers to expand their fulfillment capabilities and pure play e-commerce retailers jockey to capture share.

Capital markets activity reached record levels through the third quarter of 2021 as U.S. investment sales volume of industrial properties reached \$94.8 billion. Recent transaction and appraisal data reflect persistent cap rate compression through 2021Q3.⁶³ The NCREIF value-weighted current value cap rate fell to 3.6% in 2021Q3, 60 basis points lower than 2020Q4. Total returns for the industrial sector posted 10.9% in the third quarter and a 32.4% in the trailing four quarters.⁶⁴ NOI growth was estimated at 10.2% year-over-year in the third quarter, 300 basis points higher than trend levels in the five years ending 2019.

⁵⁶ DWS; CBRE-EA. As of December 2021.

⁵⁷ DWS; CoStar. As of December 2021.

⁵⁸ DWS; CBRE-EA. As of December 2021

⁵⁹ DWS; CBRE-EA. As of September 2021.

⁶⁰ DWS; Moody's; CBRE-EA. As of September 2021.

⁶¹ US Census Bureau. As of September 2021.

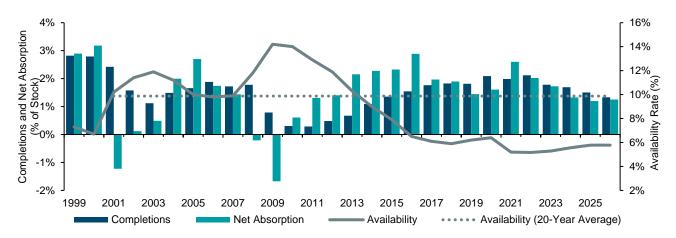
⁶² US Census Bureau; Moody's. As of September 2021.

⁶³ NCREIF; Real Capital Analytics; U.S. capital markets data 3Q21 reports. As of September 2021.

⁶⁴ DWS; NCREIF. As of September 2021.



EXHIBIT 7: INDUSTRIAL NET ABSORPTION AND COMPLETIONS AS % OF STOCK AND AVAILABILITY RATE (2000 - 2026)1



Source: CBRE-EA (History) and DWS (Forecast) as of December 2021.

Note: F = forecast. (1) 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.

Strong investment performance in the NPI was exhibited across a broad number of markets. The top performing industrial markets in the NPI included fast rising regional hubs and strong local markets like Las Vegas, Austin, Reno and San Diego, as well as Riverside (a 13.2% weight in the industrial sector), which posted the highest 1-year return of 53.2%. In our view, recent extreme appreciation across many markets reflects intense investor appetite that may be more uniform than the long-term future fundamentals prospects across markets. We believe that judicious market and asset selection will lead to relative outperformance for industrial assets.

4.2 Outlook and Strategy

The current and expected near-term macroeconomic, financial and property market conditions support a bullish outlook for industrial properties. Our baseline view calls for strong near-term economic growth with less severe disruptions from COVID. The pent-up spending power of U.S. consumers should stimulate broad economic expansion into 2022 and translate into very strong demand for industrial space at least through 2023.⁶⁵

Countering strong demand-side momentum, uncertain global supply chain dynamics have persisted, and this could dampen the full potential for industrial space demand if materials and consumer products are not available in a reliable and cost-efficient manner. It is also possible that materials price uncertainty and disrupted production cause delays in construction, which could dampen net absorption in early 2022 due to lack of available space. We believe that resolution will ultimately come, but supply-side constraints may persist well into 2022.

Our baseline view for the U.S. industrial sector recognizes record-level absorption in 2021, totaling 432 million SF and a constrained 268 million SF of new deliveries in 2021. ⁶⁶ We estimate that about 10% of deliveries scheduled for 2021 have pushed into 2022 and we are currently tracking more than 450 million SF currently underway. New supply in both 2022 and 2023 should reach or surpass the 300 million SF level. The demand experienced in 2021 may ease from record highs, yet we expect healthy demand to persist during our five-year outlook. In our view, strong demand and low availability rates should also drive strong rent growth of about 6% per year in 2022 and 2023, although with wide variations across markets. ⁶⁷

Strong leasing and pre-leasing in the new construction pipeline supports our view that market vacancy rates will remain near all-time lows in the coming year. ⁶⁸ We estimate that occupancy in recently delivered industrial stock, about 715 million SF

⁶⁵ CBRE-EA; DWS. As of September 2021.

⁶⁶ CBRE-EA; DWS. As of September 2021.

⁶⁷ CBRE-EA; DWS. As of September 2021.

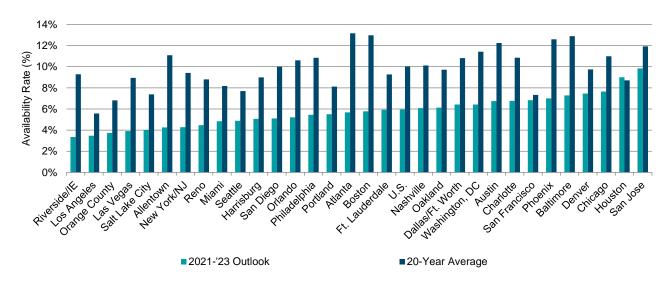
⁶⁸ DWS; CoStar. As of October 2021.



since 2019, measured 83% as of mid-November 2021.⁶⁹ The development pipeline completing in late 2021 through early 2022 totals 160 million SF, equating to about four months of average demand over the past five years, and is 50% leased.⁷⁰

Our outlook across markets in our investable universe has improved in the past two quarters. ⁷¹ We believe that availability rates will remain well below their long-term averages (near record lows) in many of our investable markets; this should drive performance for core assets and provide for excellent development opportunities. Our top picks for rent and income growth in core properties include Riverside, Los Angeles/Orange County and New York/New Jersey. We believe that strong local/regional markets like Las Vegas, Salt Lake City, Phoenix and Philadelphia will also perform well and accommodate productive development. Allentown, Atlanta, Baltimore, Washington D.C., and Boston, which have had higher long-term availability rates, are the furthest below those at present and have great potential given recent strong market rent growth.

EXHIBIT 8: INDUSTRIAL AVAILABILITY RATE BY MARKET



Source: CBRE-EA; DWS as of December 2021. Past performance is not indicative of future results

The central themes that are shaping our industrial investment strategy include:

- _ Strong Relative Performance: Better than expected recent rent and occupancy movements, plus our projections, should enable industrial landlords to continue to benefit from strong mark-to-market opportunities in their rent rolls. This potential NOI boost is the strongest among the NPI sectors and should help fuel strong relative returns.⁷²
- _ Logistics is more essential in more places: Sustained demand momentum supports our current market selections and validates the expansion into new investable markets the Mountain West, Northeast and South regions. Development in these regions has been well received and we believe that this will continue in 2022 and 2023. Recent market rent growth and the success of leasing in the development pipeline also supports maintaining an active build-to-core strategy.
- _ Large population centers underserved by modern logistics: We maintain strong convictions for the prospects of large coastal metropolitan areas on the West Coast as well as those that serve the large Northeast region, supported by the need for greater logistics capacity.

⁶⁹ DWS: CoStar, As of October 2021.

⁷⁰ DWS; CoStar. As of October 2021.

⁷¹ DWS; CBRE-EA. As of September 2021.

⁷² DWS, CBRE-EA and NCREIF. As of December 2021.



_ Bounce back for markets with protracted lockdowns: After a difficult year in 2020, with persistently high COVID infection rates and prolonged economic lockdowns, we believe that markets in northern and southern California, as well as Seattle and Portland will see stronger improvements in 2022 as further re-opening supports stronger economic activity.

Primary considerations for 2022 and ahead:

- _ Development/Build-to-core: New speculative development has been well-received throughout this cycle, including during recession. A build-to-core strategy within our investable universe should enhance returns potential, while current and expected tight availability conditions and strong demand potential offers an element of risk mitigation.
- Large Bulk, Mid-sized and Multi-tenant Facilities in Core Urban Locations: Development has pushed to exurban locations with successful leasing activity. But we contend that market rent and occupancy performance has been and will continue to be superior in locations that are closer to resident consumers, businesses and workers within the traditional boundaries of markets and core submarkets. These features offer the deepest demand profile for industrial uses.
- Food-Related/Cold Storage: This segment continues to exhibit strength as the cold logistics supply chain evolves. We think that food-related assets could offer compelling long-term prospects as a function of future growth and the need for replacement stock of older, obsolete facilities. We believe demand for refrigerated food facilities will benefit from traditional grocery stores, as well as rising direct-to-consumer food delivery initiatives. We prefer markets that are food import/export corridors and also have large downstream demand from businesses and consumers.
- _ R&D/Flex/Light Industrial: We have few recommended targets for higher finish industrial properties, limited to about six major markets that have large technology and life science industries. Functional and well-located light industrial facilities should perform well in highly constrained markets and can also serve as covered land plays in high value locations.



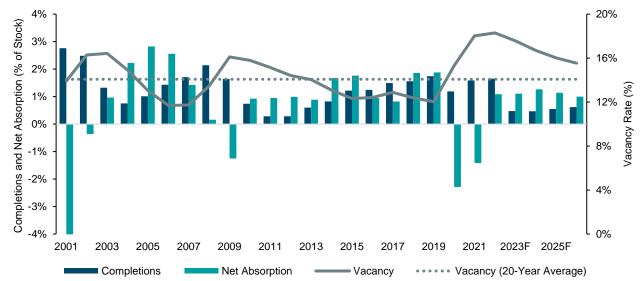
5 / Office Outlook and Strategy

5.1 Current Conditions

The office market is showing early signs of stabilization as the U.S. economy continues to exhibit robust growth and the nation emerges from the COVID pandemic. Real GDP expanded about 5% in 2021, creating almost a million office-using jobs and pushing the unemployment rate close to 4% across the nation.⁷³ Office-using jobs recovered faster than the overall job market and are only 1.2% below the pre-COVID level. Robust growth is expected to continue over the next few years, a tailwind for the sector.⁷⁴

While uncertainty persists and the office sector has a long way ahead before it fully recovers, market dynamics are starting to improve. With tenants firming their long-term utilization plans, leasing activity picked up in the second half of 2021.⁷⁵ Tech leasing has led other industries, accounting for 23.6% of all leasing in 3Q 2021.⁷⁶ High market capitalization and record venture capital funding are enabling tech users to continue growth, as evidenced by approximately nine million SF of expansion seen during the pandemic from large tech tenants.⁷⁷ Importantly, leasing terms are returning to normal ranges – 38% of all space leased in 3Q 2021 and 43% of Class A space was part of leases for 10 years or longer, outpacing historical averages (32% and 37%, respectively).⁷⁸





Source: CBRE-EA (history) and DWS (forecast) as of December 2021.

Note: Note: F = forecast. (1) 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.

Sublease space contracted modestly after increasing for a year and a half. However, leasing volume is still below pre-COVID norms, and the amount of sublet space on the market remains near record highs. The amount of sublease space was particularly elevated in tech hubs such as Austin, San Francisco and Seattle. The sector continues to struggle with high vacancy, a still-robust supply pipeline, and persistent uncertainty around more-permanent remote and flexible work and its impact on traditional space-use strategies. The sector continues to struggle with high vacancy, a still-robust supply pipeline, and persistent uncertainty around more-permanent remote and flexible work and its impact on traditional space-use strategies.

⁷³ Moody's Analytics. As of December 2021.

⁷⁴ Moody's Analytics. As of December 2021.

⁷⁵ JLL. As of December 2021.

⁷⁶ JLL. As of December 2021.

⁷⁷ JLL. As of December 2021.

⁷⁸ C&W. As of December 2021.

⁷⁹ Costar. As of December 2021.

⁸⁰ CBRE-EA; Costar; DWS. As of December 2021.



Office owners are contending with a sizable near-term supply pipeline. Though the amount of office space under construction is down from roughly 160 million SF before the pandemic to about 140 million SF today, nearly 40% of the current pipeline is unleased.⁸¹ In addition, it has been a challenging environment for recently completed buildings with 25% of space delivered since the start of 2020 still unleased.⁸² With companies still working remote, many of the newly delivered and leased assets in large urban centers remain unoccupied.

Fortunately, construction starts decreased at the onset of the pandemic and are expected to remain muted given the sector's weak fundamentals and tighter financing conditions. Therefore, speculative supply may not be a concern over the forecast as the pace of office deliveries is expected to dissipate in the second half of 2022 (see Exhibit 9).⁸³

The modest market rent performance has been largely driven by new blocks of top-priced space delivering vacant or waiting to be occupied. Landlords continue to offer elevated concession packages: Tenant improvement allowances and free rent periods are 18.3% and 41.3% above pre-pandemic levels, respectively.⁸⁴ Many tenants remain drawn to the discounted space in the sublet segment⁸⁵, which will likely continue to undermine landlords' ability to raise market rents.

While the traditional office sector has been struggling, the medical and life science segments have been performing very well. Healthy occupancies have driven strong rent and NOI growth (~3% annually). Their resilient cash flow prospects have attracted significant investor capital, driving cap rates lower in recent quarters.⁸⁶ Development and the conversion of office to labs is a focus across major life science markets given a lack of space and rising demand. Yet supply risk does not appear material given a multiyear runway of limited availability and rising demand.⁸⁷

5.2 Outlook and Strategy

While the different COVID variants have hindered return-to-work plans for many firms, workers are returning to the office in higher numbers. The share of workers returning to the office reached almost 40% in December 2021⁸⁸, still well below prepandemic rates, but the highest level since March 2020. We expect office utilization to improve as vaccination rates trend higher and local governments lift occupancy restrictions – assuming future waves of the virus are less disruptive than prior ones.

The return to an office environment will continue to be gradual, however. Many office tenants will likely continue to delay real estate decisions, causing weakness in near-term net absorption. In our view, office vacancy rates will remain elevated over the next two years and fall gradually as the return to office accelerates. Rent losses will likely extend through mid-2022 as vacancies continue to increase and competition from less expensive sublet space lingers.

Metros with an expanding tech and life science presence and strong job and population growth are expected to outperform. Those include mature markets in the San Francisco Bay Area, Seattle, and Boston as well as Sun Belt markets such as Austin, Charlotte, Nashville and Atlanta. New York, Washington D.C. and Chicago are expected to produce weaker rent growth due to high vacancy levels, active new construction and weaker demand.

Co-working over-exposure in specific markets has been an issue. Some operators went through series of contraction and consolidation. Flexible office inventory declined by 7% between mid-2020 and mid-2021. The largest declines in inventory were in San Francisco (-36%), Washington, DC (-17%) and Dallas (-14%).⁸⁹ Moving forward, co-working providers are optimistic on demand prospects – 38% of tenants are currently providing employees with access to flexible office and half

⁸¹ Costar. As of December 2021.

⁸² Costar. As of December 2021.

⁸³ CBRE-EA, DWS. As of December 2021.

⁸⁴ JLL. As of December 2021.

⁸⁵ Sublease space discounts to direct rents range between 10% to 50% depending on the market and asset quality. C&W. As of December 2021.

⁸⁶ Green Street Advisors. As of December 2021.

⁸⁷ Green Street Advisors. As of December 2021.

⁸⁸ Kastle Systems. As of December 2021.

⁸⁹ C&W. As of December 2021.



are planning to increase employees' access to flexible office. 90 However, most of the current demand for space is being structured as management agreements, as opposed to flexible providers signing leases.

The nature of office work is in flux. Workforce agility is on the rise, suggesting that office space will be used differently. Recent surveys show that nearly three-fourths of large global occupiers expect employees to be in the office between two and four days in an average week. For most workers, three-plus days a week appear to optimize employee experience, productivity and engagement. For the foreseeable future, most firms will likely continue to give employees some level of autonomy and choice to determine when and where they work.

It appears the return to office is imminent and offices are expected to remain critical. So far, firms have been reluctant to invest in office redesigns and space restructures. Many are experimenting with different hybrid work models which, if successful, will be implemented across portfolios. In some cases, organizations may require the same footprint, though with a focus on an enhanced employee experience. In other situations, companies will find ways to reduce their office footprint. In either case, experience is going to be critical and will be driven by more emphasis on shared spaces, amenities, services, wellness, sustainability and technology. All of this points to the importance of de-commodifying office space; newer office product that focuses on experience is already outperforming.⁹²

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

See Exhibit 10 for central themes that are shaping our office strategy.

EXHIBIT 10: DWS OFFICE STRATEGY

High-Quality/Flexible Office Product	 Best-quality and commute worthy office space. Space that encourages collaboration, inspires, is well connected, has the right amenities and provide a sense of the company culture.
Dense Prime Suburban Office Nodes	 Locations in established suburbs with urban type amenities. Ample transit connections, vibrant neighborhoods offering a wide range of amenities, adjacent to major employment centers, and near large concentrations of highly skilled workers (examples include: West LA, Bellevue in Seattle, Northwest in Austin, Watertown & Waltham in Boston, Northern Virginia in D.C., and suburbs of San Jose).
Knowledge-Based & Innovation Metros	 Life sciences and tech are long-term growth drivers for the sector. Markets that boast global connectivity, a well-educated workforce, and an appeal to knowledge workers will outperform over the foreseeable future (examples include Boston, Seattle, San Diego, the Bay Area, and Austin).
Life Sciences and Medical Office	 Offer stability, diversification and strong performance to a traditional office portfolio. Impressive demand for life sciences R&D expected to continue for decades. The growing need for medical services at all ages and aging baby boomers expected to generate outsized demand for medical office.

Source: DWS as of December 2021.

⁹⁰ CoreNet Global-Cushman & Wakefield Survey. As of December 2021.

⁹¹ CoreNet Global-Cushman & Wakefield Survey. As of December 2021.

⁹² Cushman & Wakefield. As of December 2021



6 / Retail Outlook and Strategy

6.1 Current Conditions

The retail property sector continues its impressive recovery from the depths of the pandemic in 2020. Strong consumer demand is fueling improving retail fundamentals. Leasing velocity at neighborhood & community centers continued to move along at a faster pace through 2021. In-demand concepts, such as quick-service-restaurants, discount, grocery, and health and wellness dominate activity. Financially strong tenants are using the current environment as an opportunity to reposition themselves for the future to expand, upgrade locations, renew leases long term, remodel, relocate or open new store prototypes. With demand for space strong relative to recent history, net absorption has been positive over the last five quarters, totaling 48 million SF. As a result, the availability rate fell 130 basis points year-over-year, down to a low of 8%, and may be reaching an inflection point in the cycle. Market rents have stabilized and grew a modest 1.5% year-over-year, but requests for capital, whether tenant improvements, landlord base building delivery specs, and concessions have increased. New supply remains muted and we expect any supply growth going forward to be minimal and well below historical averages through the forecast period.⁹³

In 2022, we anticipate last year's robust recovery to continue as pent up consumer demand is released for goods and growth becomes more imbedded into the service sector. We see the potential for upside should the return to office, international tourism, and foot traffic on High Streets return to pre-pandemic levels. Near-term risks to the outlook include inflation, supply chain bottle necks and virus-related impacts to mobility. Over the medium-term, however, our market rent forecast for grocery-anchored centers over the next five years averages 2.7%. Ye expect the outcomes of retail's reboot and post-pandemic shopper behaviors to benefit neighborhood & community centers.

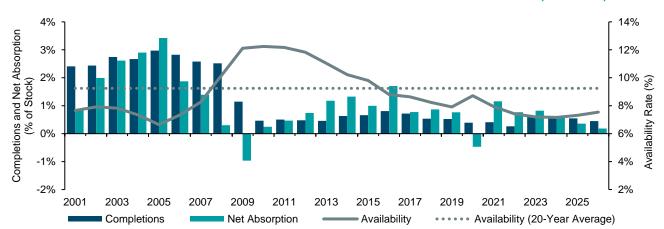


EXHIBIT 11: RETAIL NET ABSORPTION AND COMPLETIONS AS % OF STOCK AND AVAILABILITY RATE (2000 - 2025)1.2

Source: CBRE-EA (history) and DWS (forecast) as of December 2021.

Note: Note: F = forecast. (1) Forecast for Neighborhood and Community centers. (2) Aggregate of DWS's Investable Universe of markets. There is no guarantee the forecasts shown will materialize. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved.

Total U.S. retail sales, a measure of purchases made at stores, restaurants and online excluding auto, parts and gas, recorded an increase of 16.5% year-over-year in November 2021. Scategories driving gains were gas stations, sporting goods, hobbies, and books and food & beverage stores (see Exhibit 13). Department stores, electronics and appliances, and general merchandise stores saw month-over-moth sales declines, but this is likely due to timing of the 2021 holiday season and early holiday promotions. While down from the height of the pandemic, U.S. consumers are flush with savings,

⁹³ CBRE-EA. As of December 2021.

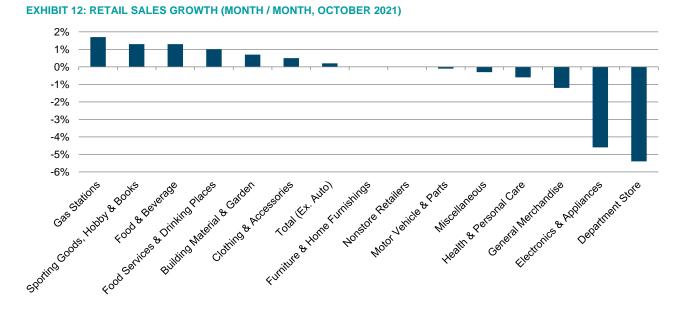
⁹⁴ DWS. As of December 2021.

⁹⁵ U.S. Census Bureau, Advance Monthly Retail Trade Survey. As of October 2021.

⁹⁶ U.S. Census Bureau, Advance Monthly Retail Trade Survey. As of October 2021.



and have \$2.5 trillion left in accumulated surplus savings as of October 2021.⁹⁷ Consumers remain willing to spend despite record setting price increases, supply chain inefficiencies (which constrain product availability), and fading fiscal support. Prices for goods bought online increased 3.5% year-over-year in November 2021, the most since tracking began in 2014, according to Adobe's Digital Price Index. Apparel price increases were aggressive, up 17.3% over the last 12 months.⁹⁸



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

Retail's reboot coincided with several favorable macro factors, including fiscal stimulus, strong employment growth, rising consumer sentiment, and pent-up demand. We anticipate a continued release of pent-up demand will propel retail demand into the first half of 2022. Those effects will likely fade deeper into the year as spending habits shift back to pre-pandemic norms and spending rotates away from goods into services. However, some structural and demographic trends should continue to support spending and could surprise to the upside. Upward pressure on wages, continued momentum in the housing market, migration from cities to the suburbs, population growth in lower-cost markets, and more flexible workplace strategies will continue to sustain demand at suburban shopping centers.

According to Coresight Research, store closures have leveled off. But closings have outpaced openings by a narrow margin. As of December 2021, the firm tracked 5,079 store closures for the year, which represents a decrease of 42% year-over-year. Store opening announcements are up 53% over the same period and have totaled 5,049 (approximately 70 million SF). The higher rate of store openings correlates to the elevated leasing activity and positive absorption recorded throughout 2021, in addition to the lower rate of retail bankruptcies realized so far this year. In total, DWS Research tracked 13 major retail bankruptcies during 2021, compared to 45 during 2020. A greater sense of optimism for normalized operations in 2022 is leading to an increase in store openings, particularly in the dollar and discount categories, which account for more than a third of the total. 101

6.2 Outlook and Strategy

The effects of COVID-19 and post-pandemic consumer behavior exacerbated on-going trends in retail, and also created new ones. It is clear open-air and grocery-anchored shopping centers have been the primary beneficiaries. Top-tier mall properties are seeing foot traffic recover and improved leasing, but overall we see secular pressures in this space continuing

⁹⁷ Moody's. Analytics. As of October 2021.

⁹⁸ Adobe's Digital Price Index. As of November 2021.

⁹⁹ Coresight Research. As of December 2021.

¹⁰⁰ Coresight Research. As of November 2021.

¹⁰¹ Coresight Research. As of December 2021.



to erode fundamentals over time. Nevertheless, we see retail's evolution continuing to progress and grow into a new phase of commerce, which blends the digital with the physical landscape. Retailers need to focus on branding, right sizing store fleets and realigning logistics strategies to stay relevant and more efficient; however, the store has proven to be vital during times of disruption. Physical stores remain strategic connections to consumers and tactical components of the supply chain. In terms of our strategy, we remain consistent with our last House View update, though the near-term outlook for fundamentals has improved. We continue to see a clear distinction in performance driven by geography, property subtype, and strength of the tenant line-up. We maintain our recommendation for a calculated tilt towards grocery-anchored retail and high growth regional markets.

The key themes that inform our retail strategy include:

- Target Necessity-based Retail: We anticipate the performance of malls and necessity-based retail to continue to diverge. Our conviction around daily needs and grocery-anchored retail remains high as the drivers and fundamentals will remain stable through the early years of the forecast. Declining performance in the neighborhood & community sector was due COVID-19's disruption rather than secular trends. Over time, grocery-anchored-retail will likely be more resilient against e-commerce trends and less impacted over the long-term when compared to other types of retail. Moreover, these daily needs shopping centers may benefit from increasing local consumption of goods and services.
- _ Avoid Malls and Transitional Assets: E-commerce continues to challenge the sustainability of physical retail centers, particularly malls, class B/C assets, and high street retail. We expect e-commerce penetration will continue to grow in the apparel and commodity goods sector, which impacts malls the most. Some malls may thrive in the future as redeveloped mixed-use or entertainment-infused destinations, but the cost of managing the transition may detract from investment performance.
- _ Monitor Yields and Seek Strategic Opportunities: The past 12 months provided opportunities to buy high-quality retail at a discount, as institutional investors looked to minimize exposure to retail. The uncertainty around future risks and tepid buyer interest opened a window of opportunity. It appears cap rates and pricing for top centers have quickly shifted back to pre-pandemic levels in target markets. However, grocery-anchored retail remains a compelling income-oriented investment opportunity. In the near term, 2022 has the potential to be another good vintage year to add well-located assets to an investor's portfolio.



Appendix 1: U.S. House Portfolio

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

Sector	NPI Weights	ODCE Weights	House Portfolio	Active Bet (vs ODCE)	Range
Apartment	26%	28%	32%	+4%	27% - 37%
Industrial	26%	25%	36%	+11%	31% - 41%
Office	31%	28%	20%	(8%)	15% - 25%
Retail	16%	13%	11%	(2%)	6% - 16%
Other	0%	6%	1%	(5%)	0% - 6%

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 January 2022.

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

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

INVESTABLE AND TARGET MARKETS

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

Source: DWS as of January 2022. 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.



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

	9/20-9/21	9/19-9/20	9/18-9/19	9/17-9/18	9/16-9/17
NCREIF Property Index (NPI)	12.2%	2.0%	6.2%	7.2%	6.9%
NPI-Apartment	13.4%	2.3%	5.4%	6.4%	6.2%
NPI-Industrial	32.4%	10.1%	13.6%	14.2%	12.8%
NPI-Office	4.9%	2.8%	6.5%	6.8%	5.7%
NPI-Retail	0.7%	-6.3%	1.4%	3.9%	6.1%
NPI-Apartment: High-Rise	9.7%	1.1%	4.1%	4.9%	4.9%
NPI-Apartment: Low-Rise	13.9%	3.3%	5.8%	7.2%	6.7%
NPI-Apartment: Garden	21.2%	4.6%	8.1%	9.3%	8.6%
NPI-Office: CBD	2.3%	1.8%	5.9%	6.3%	5.5%
NPI-Office: Suburban	8.5%	4.3%	7.5%	7.6%	6.1%
NPI-Retail: Malls	-4.1%	-8.2%	-0.3%	1.0%	5.0%
NPI-Retail: Power	4.0%	-2.6%	1.3%	5.1%	5.4%
NPI-Retail: Neighborhood & Community	7.1%	-1.2%	4.6%	6.5%	6.5%
	12/20-12/21	12/19-12/20	12/18-12/19	12/17-12/18	12/16-12/17
NASDAQ Composite Index	21.4%	43.6%	35.2%	-3.9%	28.2%
S&P 500 Index	26.9%	16.3%	28.9%	-6.2%	19.4%
FTSE/NAREIT All Equity REITs Index	37.3%	-8.4%	24.0%	-7.9%	4.5%

Sources: NCREIF, Bloomberg, NAREIT and DWS as of 12/31/21.

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