Real Estate Research

January 2023

U.S. Real Estate Strategic Outlook

First Quarter 2023

IN A NUTSHELL

- U.S. real estate investment performance has stumbled in response to rising interest rates.
- However, property fundamentals are robust. While a mild recession might soften leasing momentum, we believe that markets will remain historically tight as construction slides.
- In our view, high interest rates will put further downward pressure on real estate values in 2023. This repricing, amid healthy underlying fundamentals, should create attractive investment opportunities.
- COVID aftershocks have temporarily cooled the industrial and apartment sectors and Sun Belt markets. Nevertheless, our conviction around these investment targets, rooted in longer-term forces, remains undimmed.

1 / Real Estate Outlook

Capital markets were volatile in the second half of 2022 as the Federal Reserve aggressively hiked interest rates in a battle to contain inflation hovering near 40-year highs. As 10-year Treasury yields approached 4%, up from 1.5% at the beginning of the year, bond and equity prices tumbled, down about 15% year-to-date through November.[1] Real estate prices, which had climbed in the first half of the year, ultimately stalled against this difficult financial backdrop. Total returns for the property-level NCREIF Property Index (NPI) and the fund-level Open-End Core Diversified (ODCE) index slid to 0.6% and 0.5%, respectively, from an average of 4.3% and 6.1% in the first two quarters of 2022.[2]

The disappointing performance belied enduring strength in the underlying fundamentals. Vacancy rates fell to a new all-time low (since records began in 1988) of 5.3% and net operating income (NOI) expanded 7.9% year-over-year, also a record, excluding a brief post-COVID rebound.[3] To be sure, demand growth for apartments and industrial properties cooled from its frenetic 2021 pace. Yet the slowdown can be readily explained: In the waning months of the pandemic, a leasing recovery was amplified by a spending shift from vacations, dining, and other entertainment toward housing (both for-sale and rentals) and goods ordered online (fueling a need for distribution space). This demand surge dissipated as spending patterns normalized, but we believe that the correction has largely run its course.

The outlook for U.S. real estate is mixed, in our view. Inflation shows scant signs of abating: the Federal Reserve's preferred measure, core PCE (excluding food and energy), was stuck at 4.7% (year-over-year) in November, well above the central

[1] Federal Reserve (10-year Treasury); Bloomberg (S&P 500, Bloomberg U.S. Aggregate). As of December 2022.
[2] NCREIF. As of September 2022.
[3] NCREIF. As of September 2022.

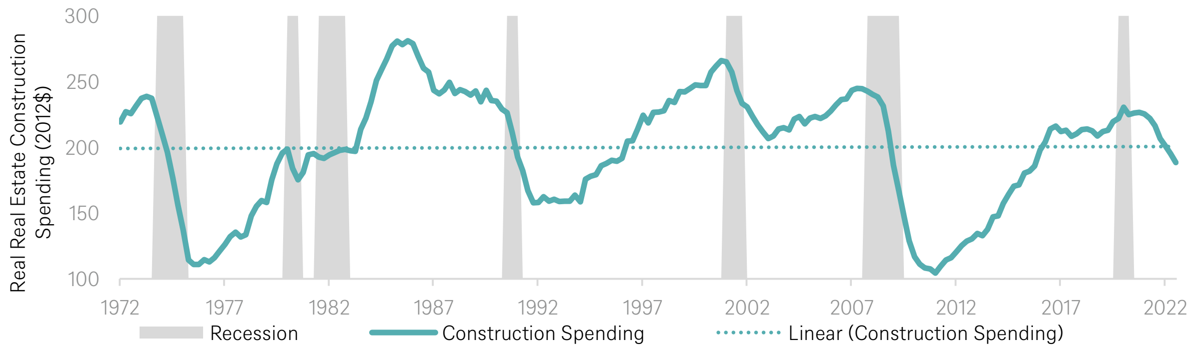
bank's unofficial 2% target.[4] While there is hope that loosening supply chains will provide some relief, it will be difficult to bring inflation down sustainably with wages growing 5%-6% annually in a tight labor market.[5] In our view, further interest-rate pressure seems likely, challenging valuations for most asset classes, including real estate.

Leading indicators such as the yield curve also signal a potential recession in the second half of 2023, triggered by inflation and high interest rates.[6] Yet household finances are healthy: debt and housing obligations remain near 40-year lows, despite rising rents and interest rates, and households stockpiled more than $1.5 trillion of surplus savings during the pandemic.[7] Pent-up demand for labor (more job openings than unemployed workers) should prevent significant job losses.[8] And the two industries most sensitive to interest rates – housing and autos – are undersupplied (housing vacancies are near 40-year lows, and vehicle sales have been suppressed by supply-chain disruptions).[9] Accordingly, we believe that any recession, and corresponding pullback in real estate leasing, will be mild.

Moreover, unlike during past cycles, the industry approaches this looming recession with supply well under control, as labor shortages and soaring materials costs (up 45% since pre-COVID) have curbed development.[10] Real estate construction spending (inflation-adjusted) is down 18% since the beginning of 2020 to its lowest level since 2015, and the rising cost and tighter availability of financing, as well as mounting economic jitters, seem likely to squeeze activity further (see Exhibit 1).[11] Completions lag behind construction spending by about a year, but we believe that supply is cresting and will drop sharply toward the end of 2023.

In a notable departure from past real-estate cycles, we believe that a combination of low vacancy rates, a modest recession, and constrained supply will sustain positive, albeit moderate, NOI growth in 2023. In our view, this will not be sufficient to prevent value erosion driven by rising interest rates. However, once interest rates plateau and capital markets normalize, we believe that strong underlying fundamentals – coupled with higher cap rates – will set the stage for a strong rebound in 2024.

Exhibit 1: Real (Inflation-Adjusted) Commercial Real Estate and Multifamily Investment



Source: Bureau of Economic Analysis (real estate construction spending); National Bureau of Economic Research (recessions). As of September 2022

[4] Bureau of Economic Analysis. As of November 2022.
[5] Bureau of Labor Statistics (median hourly earnings); Atlanta Federal Reserve (wage tracker). As of November 2022.
[6] Federal Reserve. As of December 2022.
[7] Federal Reserve (financial obligations ratio); Census Bureau (household savings); DWS calculations. As of September 2022.
[8] Bureau of Labor Statistics (job openings, unemployment); DWS calculations. As of November 2022.
[9] Census Bureau (housing vacancies); Bureau of Economic Analysis (auto sales). As of September 2022.
[10] Census Bureau. As of September 2022.
[11] Bureau of Economic Analysis. As of September 2022.

2 / Investment Strategy

Our investment strategy is informed by cyclical dynamics (including inflation and recession) and anchored in longer-term structural forces (including e-commerce and demographics). We have argued that these factors favored the industrial and apartment sectors over office properties, and Sun Belt (e.g., Texas and Florida) over "gateway" (e.g., New York) markets.

Our conviction around these themes has not wavered. Yet COVID and its aftershocks have scrambled commercial and demographic trends over the past two years. E-commerce jumped from 14% of retail sales (including restaurants but excluding autos and gas) in 2019 to 21% in April 2020; it has since drifted back to 18% as stores have reopened.[12] Household formation soared from 700,000 in 2020 to 2.3 million in 2021 (having averaged 1.1 million over the past 20 years); muted apartment absorption implies that it has collapsed in 2022 (see Exhibit 2).[13] Subdued apartment leasing in several Sun Belt markets (e.g., Phoenix, Texas, and Florida) over the past three quarters also suggests that a decade-long migration from gateways cities (e.g., New York and Chicago), which accelerated dramatically during the pandemic, has essentially stalled, perhaps because an exodus of provisionally remote employees has subsided.[14]

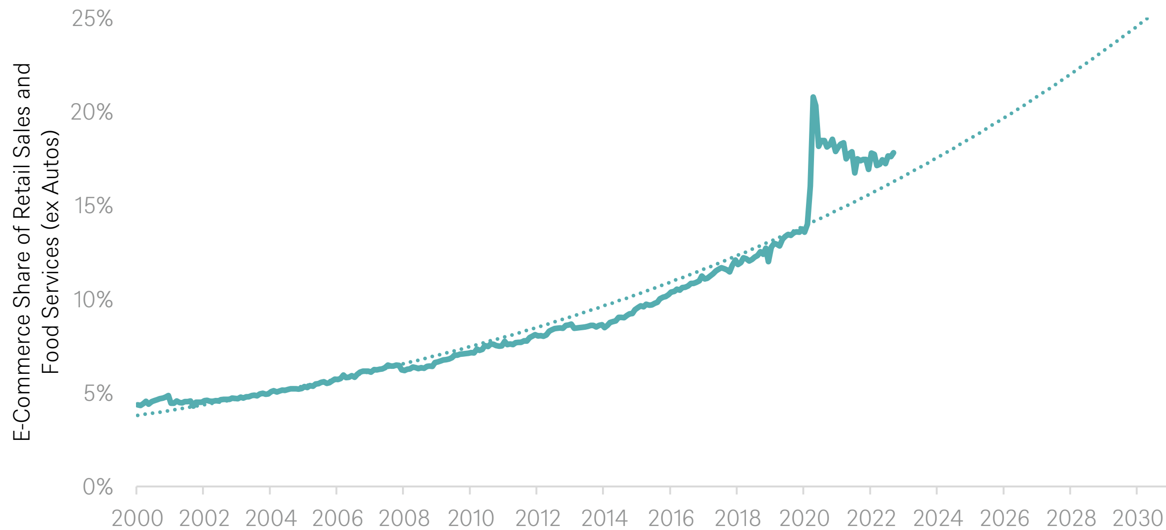
Exhibit 2: Household Formation

Source: Census Bureau (average of Current Population and American Community surveys). As of December 2022.

We believe that it would be mistaken to extrapolate the vagaries of the past two years to a longer-term investment horizon. COVID and its aftermath temporarily accelerated, and then softened, demand for industrial, apartment, and Sun Belt properties. Yet the underlying forces that underpinned these investment targets are not only intact; in our view, they have likely strengthened. Abstracting from the recent volatility, we believe that e-commerce penetration will rise to at least 25% by the end of the decade; meanwhile, efforts to secure supply chains in the wake of COVID disruptions and geopolitical tensions will add further support to industrial demand (see Exhibit 3). High interest rates may skew residential demand toward rental housing, which is also (thanks to short lease terms) inflation-sensitive and (as a necessity) cyclically defensive. Finally, even if remote working recedes from pandemic levels, it is unlikely to completely reverse. Greater corporate acceptance of distributed working will, after a transitory pause, continue to facilitate the migration of young Millennial families (joining Baby Boomers and others) to lower-cost cities in the Sun Belt and Mountain West, a trend that was in place well before COVID. At the same time, it will continue to weigh on the office sector, in our view, compounding the damage from a possible recession.

[12] Census Bureau. As of September 2022.
[13] Census Bureau, average of American Community and Current Population survey (households); CBREA-EA (absorption). As of December 2022.
[14] CBRE-EA. As of September 2022.

Exhibit 3: E-Commerce Share of Retail Sales



Source: Census Bureau. As of September 2022.

Industrial (Strong Overweight)

NOI growth accelerated to a new all-time high (since 1983) of 13.6% (year-over-year) in the third quarter as vacancies slipped to 1.5%, also a record (since 1988).[15] The outlook for warehouses is bright, in our view. A post-COVID normalization of spending patterns has dampened absorption this year, but we estimate that this correction is largely complete (spending on goods and e-commerce is mostly back to trend levels). With vacancy rates below 2%, it seems likely that a dearth of available space has created a backlog of pent-up demand.[16] Meanwhile, several longer-term growth drivers remain intact: In our view, e-commerce penetration is poised to increase from 18% to 25% by the end of the decade. Notwithstanding anecdotal reports of bloated stocks at some retailers, overall business inventories remain well below 2019 levels.[17] We believe that efforts to protect supply chains from geopolitical, pandemic, and other disruptions will accelerate the pre-COVID tend toward increased inventory accumulation. While the development pipeline is active (about 600 million square feet underway), warehouse construction spending (inflation-adjusted) is down 14% from last year's peak, signaling that supply will ebb in the next few quarters.[18]

Residential (Overweight)

Vacancies ticked up and NOI growth slipped back in the third quarter, but at 5.9% and 17.6% (year-over-year), respectively, they remained near record levels (since 1983).[19] Residential demand has moderated as Americans have reallocated spending from housing to recreation and other services. However, we believe that this reset is largely finished (apartment demand has reverted to trend levels). Looking ahead, we believe that Millennial household formation will provide enduring support, while rising mortgage rates will skew demand toward rental properties. A dearth of construction since the Global Financial Crisis (GFC) has also created a structural housing deficit: rental vacancy rates (across both single- and multi-family units) are near their lowest level since 1984.[20] Finally, thanks to their shorter (typically one-year) lease terms and essential nature, residential properties have historically proved resilient under both inflation and recession.

[15] NCREIF. As of September 2022.
[16] NCREIF. As of September 2022.
[17] Census Bureau. As of October 2022.
[18] CBRE-EA (development pipeline); Bureau of Economic Analysis (construction spending). As of September 2022.
[19] NCREIF. As of September 2022.
[20] Census Bureau. As of September 2022.

Retail (Overweight)

Retail conditions have tightened further, driven by the neighborhood and community (N&C) segment, where vacancies fell to their lowest level in at least 17 years.[21] N&C centers have benefited from a recovery of in-store shopping following the pandemic. Given that they are largely service-oriented, they are also relatively 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 construction and kept yields at comparatively attractive levels. Finally, necessity-based centers have historically proved resilient through recessions.

Office (Strong Underweight)

The office market stagnated in the third quarter of 2022. According to CBRE, vacancy rates climbed to their highest levels since the early-1990s (above their Global Financial Crisis peak) as absorption slumped.[22] Prospects for the office sector are challenged, in our view. Although more employees will likely return to the office as the pandemic fades, the widespread adoption of hybrid working may leave a permanent dent in demand. Over time, this slack may be absorbed through population and job growth, particularly as construction shuts down and some existing buildings are converted to alternative uses (net deliveries are poised to plummet after next year, based on current pipelines).[23] However, the experience of the retail sector, which is now successfully emerging from an equivalent structural change (e-commerce), implies that this adjustment can take several years. Even without remote working, office is the most cyclically sensitive of the major sectors, and therefore most at risk from a possible recession.

[21] CBRE-EA. As of September 2022.
[22] CBRE-EA. As of September 2022.
[23] CBRE-EA. As of September 2022.

3 / Residential Outlook and Strategy

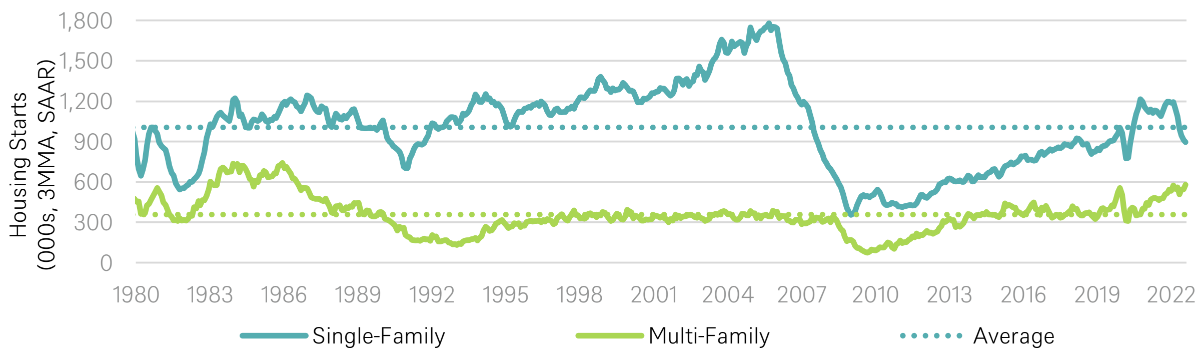
3.1 Current Conditions

In the first half of 2022, strong household formation and barriers to homeownership continued to drive robust rental demand and rent growth for the residential sector. However, during the second half of the year, the sector has been experiencing a normalization from its post-COVID peak. As of September 2022, net absorption in the sector has been negative for two straight quarters and rents continue to decelerate year-over-year. Despite housing affordability only getting worse from rising mortgage rates, persistent inflation has created broader cost uncertainty for renters, and consumption preferences continue to shift from goods/housing to services. This uncertain environment has weakened household formation and leasing velocity, reducing rental demand across all markets, and driving vacancy rates higher. At the same time, rental units under construction are at record levels, which is only adding upward pressure to current vacancy. This was evident in the third quarter of 2022 when the sector saw negative demand, marking only the fourth time since the Global Financial Crisis (13+ years) that the sector saw quarterly demand drop below zero. As a result, the third quarter vacancy rate for DWS's 31 Investable Markets ("Investable Markets", "Investable Universe")[24] increased to 3.9%, which is 100 basis points higher year-over-year, and 160 basis points higher than the historic low of 2.3% seen in the first quarter of 2022. This volatility is expected to be a near-term concern, however. The DWS House View is maintaining its overweight allocation to the residential sector based on strong structural demand drivers remaining in place long term.

All rental product types benefitted from the abnormal growth environment over the past 18 months, particularly modern Class-A product in the suburbs across the Sun Belt and Mountain West. These markets are still expected to lead the way with strong population growth and growing, diversified economies. However, there is volatility expected in those markets over the near term as they not only deal with post-COVID normalization of migration patterns and broader cost uncertainty but significant construction pipelines as well. These markets have already been experiencing deceleration in both rent growth and market occupancy as these headwinds weigh heavily on near-term performance. It is important though to look through the near-term volatility and focus on expectations for long-term performance. DWS maintains its favorable view for the Sun Belt and Mountain West over the long term, as rental demand in those markets should remain supported by continued in-migration, strong job growth, and low living and business costs. Additionally, on a relative basis, these regional markets are expected to continue to outperform the gateway markets, especially the urban cores of these markets. The gateway markets continue to face longer-term concerns around quality of life and relative affordability, especially with work-from-home trends becoming more entrenched; this will likely result in jobs and people continuing to move out of these markets. Additionally, within these regional markets, the same demographic trends, lifestyle preferences, and barriers to homeownership that were already tailwinds for suburban rental demand prior to the pandemic should remain in place over the long term. Even after the current construction pipeline is delivered, suburban markets should continue to see a favorable supply-demand imbalance for both multi-family and single-family housing, one that is only being exacerbated by zoning restrictions, NIMBYism, and rising construction costs. Ageing Millennials continue to drive housing demand in the suburbs as they start 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 remains rental housing, both garden-style and build-for-rent communities. Limited construction of single-family homes (see Exhibit 4) since the Global Financial Crisis has resulted in continued home price appreciation, and the pandemic only accelerated that trend.[25] Strong demand has resulted in significant home price appreciation and a historically low inventory of available homes.[26] Recently, rising mortgage rates and weaker housing demand have driven single-family housing starts once again below their historical average, while supply chain issues, as well as skilled labor shortages, are increasing construction costs and delaying delivery of homes currently under construction.[27]

[24] CBRE-EA. As of September 2022.
[25] U.S. Census Bureau; National Association of Realtors. As of September 2022.
[26] U.S. Census Bureau; National Association of Realtors. As of September 2022.
[27] National Association of Realtors. As of September 2022.

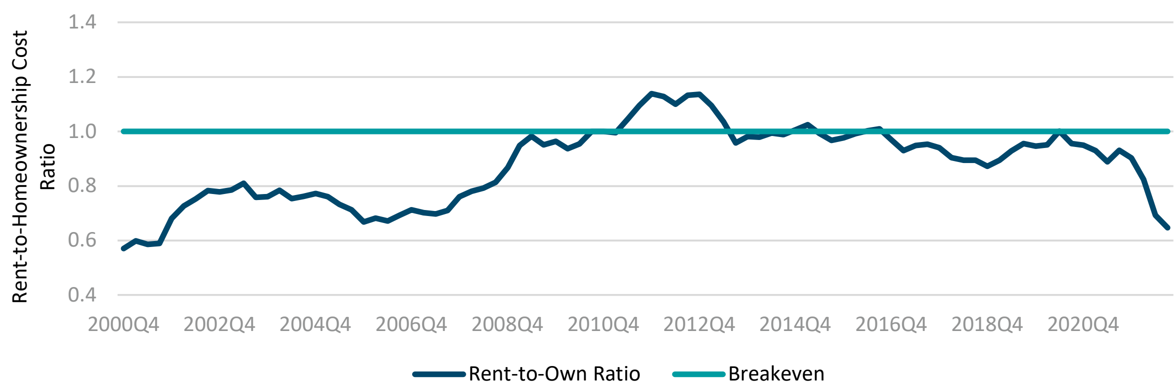
Exhibit 4: U.S. Housing Start Trends for Single and Multi-Family Product Types



Source: Moody's Analytics; DWS. As of October 2022.

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, many first-time homebuyers do not have enough savings for a down payment while also paying down student debt. Combine that with rising mortgage rates that now sit around 7.0% (30-year fixed), and the result is an affordability gap that continues to widen in favor of renting and support long-term rental demand in the suburbs.

Exhibit 5: Rent-to-Homeownership Cost Ratio (2000 – Q3 2022)

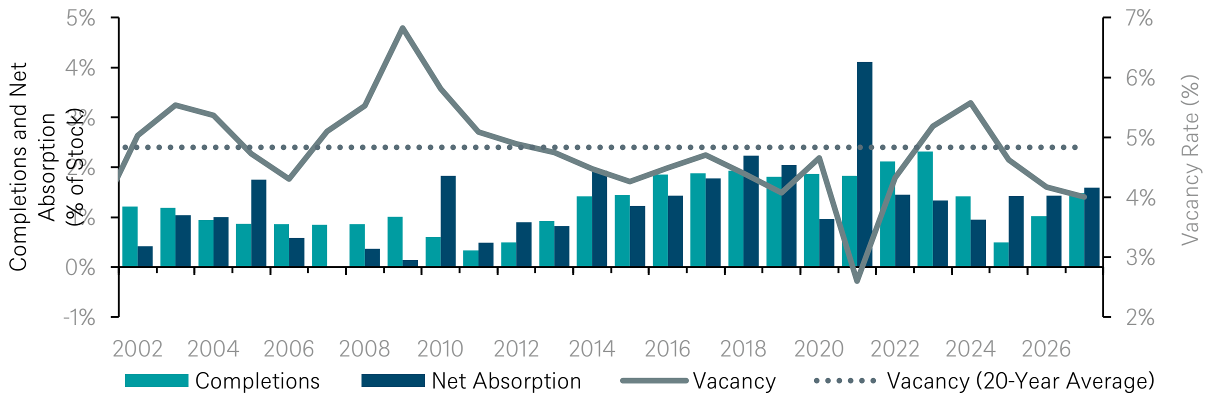


Source: Moody's Analytics; Yardi Matrix; DWS. As of September 2022. Past performance is not indicative of future results.

DWS's House View expects a modest recession in 2023 so the residential sector forecast has been adjusted to reflect weaker rental demand in the near-term (see Exhibit 6). Vacancy is expected to peak in 2024 in tandem with the expected delivery timeframe for the current construction pipeline. The sector is expected to begin its recovery alongside the broader economy in the middle of the forecast period, with strong demand being supported by job growth coming out of the recession, as well as continued household formation and better relative affordability. This combination of factors should once again drive vacancy quickly below its historical average. Expected declines in vacancy should be further supported by the slowdown in new rental deliveries expected in 2025 and 2026, as well as the ongoing structural deficit in single-family homes. This anticipated slowdown is the downstream impact of current challenges to new development, primarily the rising cost of debt and the rising costs of construction like labor and materials. For units to deliver in 2025 and 2026, projects would likely have to break ground in the next six to twelve months, which is unlikely to happen in any meaningful number, particularly given the volatility in the debt capital markets. When you factor in that construction costs are unlikely to decline in the near term, and therefore minimum construction timelines of 24 months are unlikely to improve, the result is only further support for this expected slowdown in development during those outer years. As financing conditions improve though, we expect new supply to eventually return to levels in line with what we have seen over the past five years to meet expected rental demand.

However, it will take time for any positive change in financing conditions to impact the construction pipeline, so we expect new supply to ramp up at a more gradual pace.

Exhibit 6: Rental Net Absorption And Completions As A Percent Of Inventory And Vacancy Rate (1999 – 2027)*



*DWS's 31 Apartment Investable Markets
Source: CBRE-EA (history); DWS (forecast). As of November 2022.
Note: F = forecast. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved.

Market rent growth has continued at a strong pace, at 7.9% year-over-year through October 2022[28]. However, as expected, rents have been decelerating year-over-year in 2022 as the sector comes off unsustainable growth in 2021. As year-end approaches, that moderation in rents has been visible across all markets, though it has varied widely in terms of pace and magnitude. DWS's five-year forecast (3.5% annual average) has been adjusted to show further normalization over the near term, reflecting the post-COVID shifts in consumption from housing/goods to services, as well as broader cost uncertainty from rising inflation. Mixing a record level of new deliveries with weaker consumer sentiment due to an expected recession should only reinforce tempered rent growth over the near term. However, the sector is very well-positioned long term, and as construction and inflation recede, pent up housing demand should once again drive strong rent growth performance starting in the middle of the forecast period. Household formation from Millennials and Gen Z is expected to ramp back up quickly, especially since widespread job losses are not expected in the upcoming recession. Additionally, despite the significant increase in market rents through the middle of this year, the financial well-being of residents remains favorable. A strong economy has continued to produce above-average income growth and savings levels are near record highs. As a result, rent-to-income ratios remain below the 30% cost-burdened threshold, currently in the 20-30% range[29], which should provide comfort to support future rent growth once broader economic volatility declines. Further support for strong rent growth later in the forecast comes from the expected drop off in rental supply as households continue to grow, as well as from the continued lack of affordability and availability of single-family homes. The ongoing deficit of single-family homes, especially modern, entry-level homes, and the high monthly cost of homeownership, are only expected to worsen as homebuilders slow down construction and 30-year fixed mortgage rates hover above 7%.

Annual NCREIF Property Index (NPI) total returns for the apartment sector equaled 18.2% (trailing four quarters) in the third quarter of 2022 – roughly 40% higher than one year ago.[30] Fueled by strong economic and demographic drivers, Sun Belt and Mountain West markets remained the clear leaders. Among apartment property subtypes, garden-style assets were once again the top performers, realizing an annualized total return of 24.2%. High-rise property performance continued to lag well behind the benchmark, returning 14.9%. Also, through the third quarter of 2022, garden-style and mid-rise assets continued their run of outperforming high-rise assets on an annualized total return basis, with streaks of 38 and 48 consecutive quarters, respectively; this outperformance is consistent across all historical time series as well.

[28] Yardi Matrix. As of October 2022.
[29] Moody's, Yardi Matrix, John Burns. As of September 2022.
[30] NCREIF. As of September 2022.

3.2 Outlook and Strategy

While economic growth continues to slow and a recession is expected in 2023, the residential sector remains well-positioned over the long term to benefit from all the sector's in-place demand drivers and better navigate current inflationary pressures. As interest rates continue to rise, the resulting pricing volatility in our target markets should create attractive buying opportunities over the next two years, at or below replacement cost, especially as cap rates expand and significant amounts of modern product get delivered. Given our view on long-term fundamentals, investors should be prepared to deploy capital in these markets over the next few years, as they will likely prove to be good vintage years for buying residential real estate. Expected performance within the Investable Universe should be bifurcated between gateway and regional markets, and even further between urban and suburban submarkets. Over the long term, 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 economies. 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, the gateway markets continue to face longer-term concerns around quality of life and relative affordability, especially with work-from-home trends becoming more entrenched and jobs and people continuing to move out of these markets. Investors should continue to be very selective in these gateway markets, focusing on tech-driven metros like Boston and Washington, DC (particularly Northern Virginia).

See Exhibit 7 for central themes that are shaping our residential strategy:

Exhibit 7: DWS Residential Strategy

All Arrows Point to the Suburbs	Suburban rental demand should continue to benefit over the long term from ongoing migration out of the urban core, demographic tailwinds, evolving lifestyle preferences, and significant barriers to homeownership; pre-existing trends that only accelerated because 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 modern, 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 demographic trends and 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, as well as 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.[31]
Relative Underperformance in Urban Core	High-rise properties have seen improved performance recently. However, large supply pipelines, ongoing migration to the suburbs, work-from-home trends, and an increasingly high cost of living continues to drive relative underperformance. Long term though, performance in the urban core is expected to stabilize as supply comes more into balance with demand and the impact of hybrid working becomes better understood. Gen Z is also expected to backfill Millennials as they graduate college and seek out a live-work-play lifestyle.
Structural Housing Shortage Signals Need for Development	The rising costs of debt and construction are headwinds to new development currently, but investors should look through that and focus on the strength of the sector's long-term demand drivers and an ongoing shortage of all types of housing, estimated to be between two to four million homes[32].

Source: DWS. As of December 2022.

[31] Yardi Matrix. As of October 2022.
[32] Fannie Mae. As of October 2022.

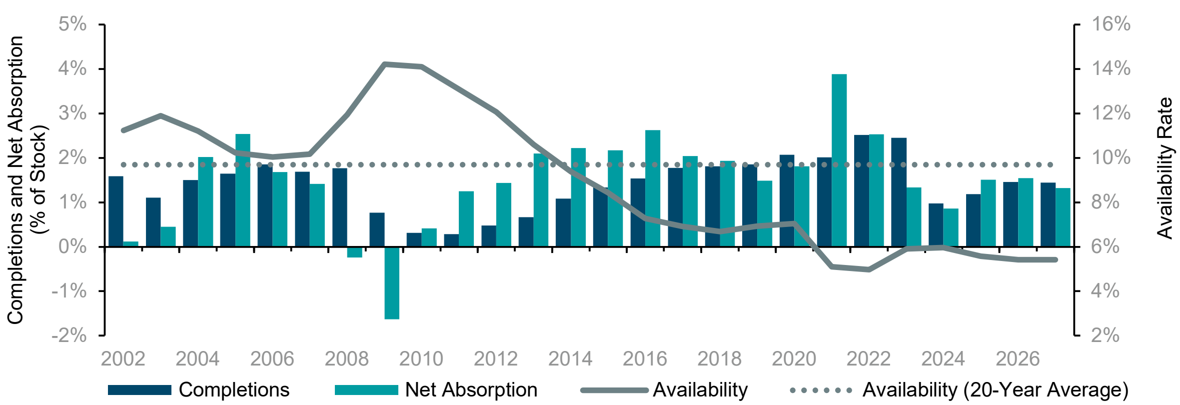
4 / Industrial Outlook and Strategy

4.1 Current Conditions

The industrial market continued to show strength in late 2022. Despite capital markets volatility, recent market data reflect very strong leasing demand, persistent near-record low vacancy rates across markets and double-digit market rent growth.[33] Record high space demand in 2021, which measured 574 million square feet of absorption, was followed by 326 million square feet of absorption through third quarter 2022.[34] The pace of demand in 2022 moderated and may have been more heavily weighted to the first half of the year, as retailers shifted their goods imports for the holiday shopping season earlier in order to avoid potential supply chain bottlenecks in the second half.[35] Although demand has moderated, in our view, property market fundamentals remain strong.

Construction deliveries totaled 267 million square feet year-to-date and market availability ended the third quarter at 4.7%, 50 basis points below year-end 2021.[36] The vacancy rate inched up 10 basis points to 2.9% in the third quarter, as 114 million square feet of construction deliveries outpaced the 89 million square feet of absorption.[37] Market rent growth across our 31-market investable universe averaged about 10% in 2022.[38] There was great variation across markets, with some in southern California and Florida measuring 20% rent growth during the year.[39] Anecdotal information from brokers and leases signed in the development pipeline indicates continued strong upward pressure on rents, particularly in the West and Northeast regions.

Exhibit 8: Industrial Net Absorption and Completions as a % of Stock and Availability Rate (2002 – 2027)*



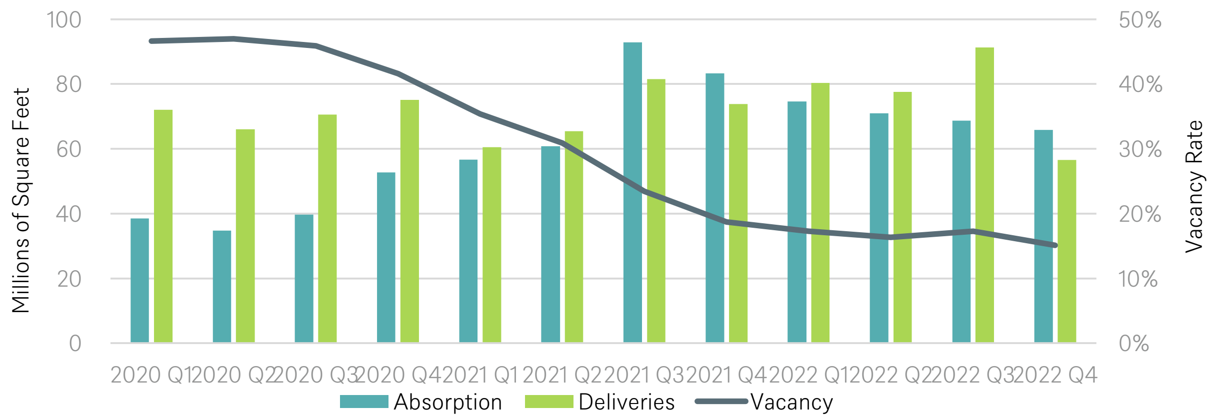
Source: Source: CBRE-EA (history) and DWS (forecast). As of December 2022.
Note: Note: F = forecast. (1) Forecast for US top 54 markets. There is no guarantee the forecasts shown will materialize. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved.

Developers have responded to the surge in demand and rents, and we believe that the development pipeline has grown to peak levels. We estimate that after the 267 million square feet delivered through third quarter 2022 there is another 600 million square feet underway and expected to be delivered through 2024.[40] New supply has been well received, as re-flected in vibrant pre-leasing activity. Of the 871 million square feet of industrial stock delivered since 2020, within our in-vestable universe of markets, only about 132 million square feet (or 15%) remained available in December of 2022 (Exhibit

[33] CBRE-EA and DWS. As of September 2022.
[34] CBRE-EA and DWS. As of September 2022.
[35] DWS and Journal of Commerce As of September 2022.
[36] CBRE-EA. As of September 2022.
[37] CBRE-EA. As of September 2022.
[38] CBRE-EA. As of September 2022.
[39] CBRE-EA. and DWS As of September 2022.
[40] DWS; CoStar. As of September 2022.

9).[41] New demand has averaged about 85 million square feet per quarter during the past five years.[42] Growing land constraints and supply chain disruptions have served to push out development schedules in the past year, smoothing the pace of deliveries.[43] Financial market turmoil, economic uncertainty and rising interest rates have also caused lenders to become more risk averse and tempered new lending in recent quarters,[44] so it appears that filling the potential speculative development pipeline beyond 2023 has become more challenging.

Exhibit 9: Construction Deliveries, Absorption and Vacancy in Post-2020 Stock



Source: DWS and CoStar Property Analytics (35 selected primary markets). As of December 2022.

In our view, strong demand should persist through this year and in 2023, but we expect the current development pipeline to outpace new demand if recession sets in during the coming the year. Overall, we believe that healthy vacancy and rent conditions will be maintained in the near term, as a shallow and brief recession with limited job losses will not be enough to outweigh the structural need for modern warehouses to replace an aging stock. We believe the highly constrained southern California and Northeast and Mid-Atlantic markets, as well as those in south Florida, will continue to fare relatively well in the near term.

Investment sales volume of industrial properties remained elevated in the first three quarters of 2022, but year-over-year volume in the third quarter fell 18%.[45] In our view, pricing uncertainty associated with rising interest rates and also tightened financing availability may curb the flow of transactions. Year-to-date investment volume through the third quarter totaled $113.4 billion in 6,000 properties containing 775 million square feet.[46]

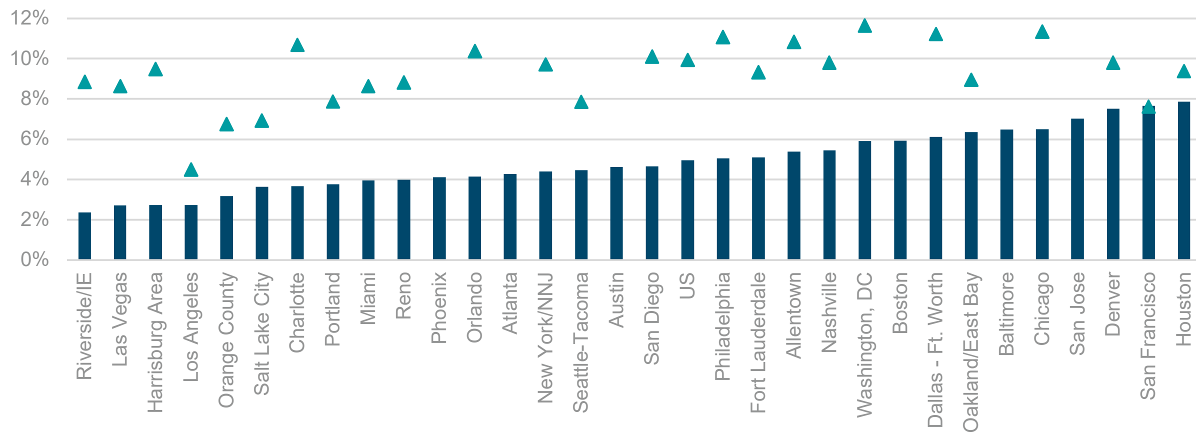
Total returns for the industrial subsector decelerated sharply to just 1.1% in third quarter 2022, down from a recent peak of 13.3% in fourth quarter 2021.[47] The industrial subsector returned 34.6% in the trailing four quarters as of third quarter 2022.[48] NOI growth was estimated at 13.6% (year-over-year), but appreciation flattened to 0.35%, with results across markets ranging from slightly positive to slightly negative.[49] Recent increases to interest rates as well as near term recession potential could set the stage for negative appreciation in coming quarters, but in our view strong rent and NOI growth, as well as resilient investor interest, should support strong relative performance for industrial properties.

Top performing markets in the NPI included Los Angeles, Orange County, Riverside and San Diego in southern California, Las Vegas and Reno in Nevada, and New York/New Jersey, Trenton and Baltimore in the Northeast, as well as Miami and Ft.

[41] DWS; CoStar. As of December 2022.
[42] DWS; CBRE-EA. As of September 2022.
[43] DWS; CoStar. As of September 2022.
[44] DWS; NAIOP. As of September 2022.
[45] Real Capital Analytics. As of September 2022.
[46] Real Capital Analytics. As of September 2022.
[47] NCREIF. As of September 2022.
[48] NCREIF. As of September 2022.
[49] NCREIF. As of September 2022.

Lauderdale in South Florida.[50] Total returns have been well-aligned with property market fundamentals in recent years: many of the markets with the lowest vacancy rates have also been strong performers in the NPI. The following chart exhibits almost uniformly tight market conditions across our investable universe, with many carrying availability rates 400-plus basis points lower than longer term averages.

Exhibit 10: Availability Rates Across Markets (2022 Outlook vs. Long-Term Averages)



Source: DWS; CBRE-EA, as of December 2022.

4.2 Outlook and Strategy

We believe that the industrial property market should be well-positioned if the U.S. economy enters a recessionary environment in late 2023 or soon thereafter. Not only are rent and occupancy fundamentals strong (at or near record levels), but we are still bullish about the foundation of support for demand (e-commerce and greater inventories), and the positive implications of rising land constraints in and around large population centers. We expect that demand will moderate compared to the record setting levels of 2021, but our near-term outlook reflects healthy absorption and persistently low vacancy rates across our investable markets. We believe that while the new supply pipeline is large, it is not a threat to market balance. Individual market performance may vary in the coming two years but, overall, our outlook and core investment themes remain consistent with recent quarters.

Demand and supply were in balance in 2022 with about 380 million square feet (2.5 percent of stock) of new construction deliveries and absorption expected during the year.[51] The development pipeline is expected to remain at that level in 2023, while demand is forecast to moderate in the second half of the year. [52] If demand slows to the low-200 million square foot range in 2023, this would cause a 110 basis point rise in availability, to 5.8%. [53] This rate would amount to the third lowest annual figure on record in the past 25 years and 310 basis points lower than the average during this time. [54] We also believe that this downshift in demand, paired with economic uncertainty and a constrained financing environment, will result in a sharply lower speculative development pipeline by 2024, so potential excess supply will be limited.

In our view, favorable supply and demand dynamics should allow for continued healthy vacancy and rent conditions, with forecasted rent growth decelerating from the 11% to 13% averages achieved in 2021 and 2022, to the 2% to 4% range through 2024. We believe that rent growth should accelerate again in 2025 as the pace of economic growth picks up.

[50] NCREIF. As of September 2022.
[51] DWS, CoStar and CBRE-EA. As of September 2022.
[52] DWS As of September 2022.
[53] DWS. As of September 2022
[54] DWS; CBRE-EA. As of September 2022.

We believe that the Northeast and Mid-Atlantic regions will perform relatively well in the near term, as they remain starkly underserved by modern logistics facilities, have smaller development pipelines, and have more stable local economies. [55] In south Florida, we believe that Miami will be a star performer, having reached a record low 1.6% vacancy rate and achieving about 20% rent growth in the past year. [56]

Supply risks are most apparent in a few markets with outsized development pipelines (Austin, Dallas, Denver, Houston, Las Vegas, Phoenix and Salt Lake City). Although demand in these markets has also been very strong in the past year, given the economic outlook, they should be considered higher risk markets in the near term. Ultimately, over the longer term, we believe that they will be good relative performers due to favorable local economic growth and regional drivers.

See Exhibit 11 for central themes that are shaping our industrial strategy:

Exhibit 11: DWS Industrial Strategy

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. In our view, this potential NOI boost is the strongest among the NPI subsectors and should help offset broader capital markets trends in a rising interest rate environment, and still fuel strong relative returns.
Rolling out Logistics Capacity in Emerging Regional Hubs	Our current market selections in the Mountain West, Northeast and Southeast regions continue to perform well, absorbing new stock as it was completed. Rent growth momentum accelerated over the past year but may decelerate new supply outpaces demand in 2023. While our long-term outlook is favorable, and strong leasing activity supports maintaining an active build-to-core strategy, current risks warrant prudent market, submarket and site selection. In our view, new development in locations with large in-place pipelines may face intensifying leasing competition next year.
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. Additionally, Miami has been a late recovery market that is now highly constrained with surging demand and market rents.[57] Despite lagging performance in the NPI, we believe it will be a very strong relative performer in the next few years.

Source: DWS. As of December 2022.

[55] DWS; CBRE-EA; Moody's. As of September 2022.
[56] DWS; CBRE-EA. As of September 2022.
Past performance or any prediction or forecast is not indicative of future results. There is no assurance that investment objectives can be achieved. Investments are subject to risks, including possible loss of principal amount invested.
[57] DWS; CBRE-EA. As of September 2022.
Past performance or any prediction or forecast is not indicative of future results. There is no assurance that investment objectives can be achieved. Investments are subject to risks, including possible loss of principal amount invested.

5 / Office Outlook and Strategy

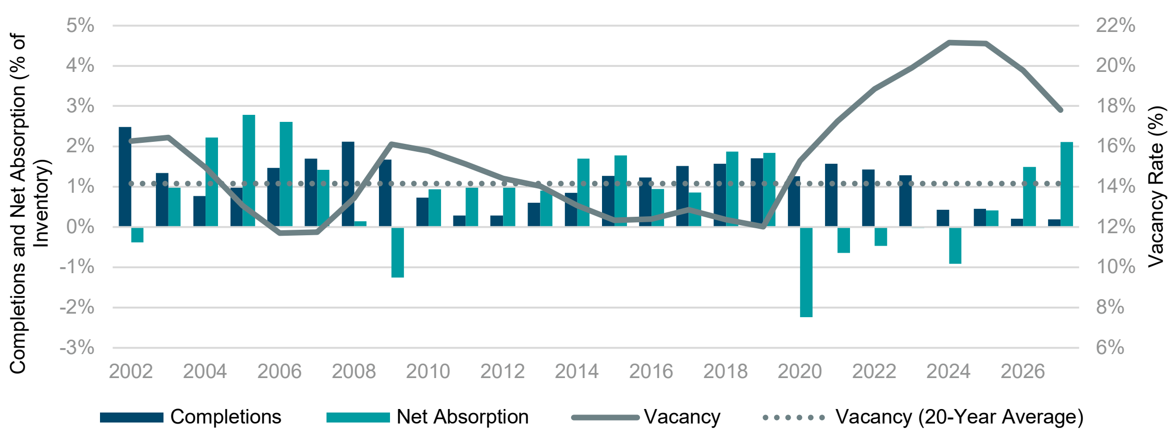
5.1 Current Conditions

The U.S. office market is continuing to encounter severe headwinds and uncertainties. While job growth has been robust in 2022, office demand remained weak. The correlation between job growth and office demand is currently tenuous given that many businesses are still recalibrating workplace strategies to include more remote work. Concerns over elevated inflation coupled with higher interest rates and steep declines in financial assets are hindering the sector's near-term outlook. Layoffs are on the rise, particular in the technology sector where firms are cutting tens of thousands of jobs in an effort to reduce costs.

The growing threat of a recession has office tenants adopting more defensive leasing strategies, generally halting expansion plans or downsizing footprints. This resulted in a moderate slowing of leasing activity in the second half of 2022 and in an acceleration of space being placed on the sublease market. Renewal rates are declining, while tenants are frequently opting to downsize while upgrading to higher quality space rather than renewing in place.[58] Given the economic uncertainty, average lease terms are again beginning to decline. The average lease term had grown to 9.1 years over the past 12 months but fell back to just 6.2 years in the third quarter of 2022.[59]

Not surprisingly, current office vacancy levels are close to 19% across our Investable Markets and stand at highs not seen in more than two decades.[60] Given weak demand prospects and a recessionary economic environment, we expect vacancy levels to increase further over the forecast near term, exceeding 21% by 2025.[61]

Exhibit 12: Office Net Absorption and Completions as a % of Inventory and Vacancy Rate (2002 – 2027)



Source: CBRE-EA (history); DWS (forecast). As of December 2022.
Note: Note: F = forecast. Aggregate of DWS's investable universe of markets. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved..

Despite a recent uptick in office completions, the construction pipeline continues to contract nationally. Also, net additions to supply are further reduced by increasing demolition and conversion of functionally obsolete office stock, particularly in large CBDs. Our forecast expects the pace of office deliveries to dissipate starting 2024 as construction starts remain muted given the sector's weak fundamentals and tighter financing conditions. This drastic pullback in new supply will likely help vacancies improve during the later years of the forecast.

[58] Costar. As of December 2022.
[59] JLL. As of December 2022.
[60] CBRE-EA. As of December 2022.
[61] DWS. As of December 2022.

Flight to quality is affecting overall market performance: Divergence in absorption, vacancy and rents is widening between first- and second-generation product, with little sign of slowdown.[62] Asking rents remain stable, yet landlords are offering high lease concessions irrespective of building quality. The gap between asking and effective rents remains significant with tenant improvement allowances of $100 per square foot or more and 12 to 15 months of rent abatement available for 10-year lease terms.[63] Many tenants remain drawn to the discounted space in the sublet segment, which will likely continue to undermine landlords' ability to raise effective rents.

Relatively healthier demand continues to be seen in a few market categories, including, life sciences markets buoyed by demand for both lab and office space (e.g., San Jose, San Diego, Suburban MD, Boston, and S.F. Peninsula); large Sunbelt markets with strong job growth and appeal for growing technology tenants (e.g., Dallas, Austin, Atlanta and Miami); and small Sunbelt markets with lower costs of living and of doing business (e.g., Charlotte, Nashville).

5.2 Outlook and Strategy

Weak fundamentals, rising interest rates and a slow return to offices have led to deteriorating investment performance. Sector total returns were the lowest among major property types in the third quarter of 2022 (3.2% on a trailing four-quarter basis), amid high vacancies and concerns over the effects of remote work.[64] Suburban outperformed CBDs by a wide margin (6.3% vs. 0.8%, respectively), and NOI losses are starting to materialize as tenants reassess their space needs at lease expiration.

In our view, overall office vacancy rates will likely remain elevated over the near term and above historical averages until return to office becomes broader based. Effective rent losses are expected to continue as long as vacancies continue to be elevated and competition from less expensive sublet space lingers. Rising costs of capital will increasingly hamper landlords' ability to offer large concessions packages going forward, which could narrow the discount between market rent and effective rent as market rent faces increasing downward pressure, particularly for aging product.

The tech and life sciences sectors have been major contributors to office demand recently, but the industry is heading to a slowdown over the near-term. With the Fed focused on tempering inflation, financial valuations are being reassessed, particularly for high-growth tech companies with questionable profitability. So far in 2022, there has been a number of headlines surrounding layoffs in the tech and start-up world with some firms announcing a third or more in staff reductions. The mass layoffs and reduced office footprint comes as venture capital funding and stock prices slide from their previous all-time highs. While we are monitoring the near-term volatility in the tech and life science industries, their long-term potential remains intact. The large biotech firms that have reached commercial stage are well capitalized with an estimated $500 billion of available cash available to be deployed.[65]

We continue to favor metros with an expanding tech and life science presence and strong job and population growth. Those include mature markets in San Jose, Seattle, and Boston, as well as Sunbelt markets such as South Florida, Austin, Charlotte, Nashville, Dallas and Atlanta. Core gateway markets such as San Francisco, New York, Washington D.C., Los Angeles, and Chicago are expected to produce weaker rent growth due to high vacancy levels, active new construction and lagging demand.

Going forward, we remain cautious in the near-term as it relates to office investments. As market conditions improve and values adjust, we would consider pursuing opportunities that offer attractive pricing for properties that would be well-positioned for the sector's expected recovey. 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 move beyond the pandemic, we believe that office space will adapt to new tenant preferences as it has done historically.

[62] JLL. As of December 2022.
[63] Colliers. As of December 2022.
[64] NCREIF; BLS. As of December 2022.
[65] Alexandria Real Estate. As of December 2022.

See Exhibit 13 for central themes that are shaping our office strategy:

Exhibit 13: 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 ("inner-loop") 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 San Francisco 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.

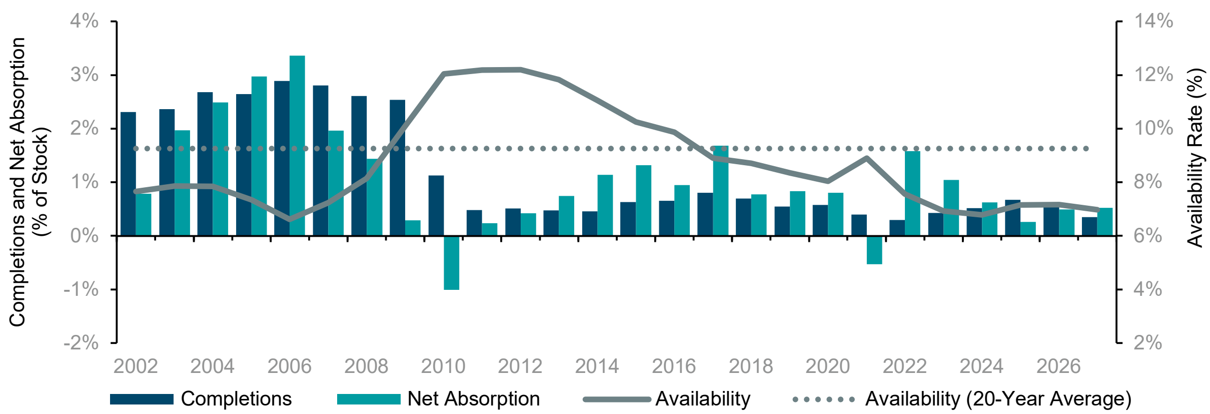
Source: DWS. As of December 2022.

6 / Retail Outlook and Strategy

6.1 Current Conditions

Fundamentals for the retail property sector continued to strengthen in the second half of 2022. Robust demand from discount, grocery, food and beverage, and wellness tenants is pushing vacancies to historic lows. Net absorption trended positive over seven consecutive quarters through the third quarter of 2022, and totaled approximately 40 million square feet (or 1.3% of total inventory) over the previous year. As a result, the availability rate declined 120 basis points year-over-year, falling to 7.1%. (The last time the market was this tight was in 2006.) The differentiator is the lack of new construction in conjunction with the rebalancing of retail tenants. Deliveries averaged less than 0.5% of total inventory annually since 2010.[66] With virtualy no new supply on the horizon, we expect healthy fundamentals to persist in the near term. Our market rent forecast for grocery-anchored centers over the next five years averages 2.8% annually.[67] Despite topline face rate growth, requests for capital, in the form of tenant improvements, landlord base building requirements, and concessions remain salient deal points.

Exhibit 14: Retail Net Absorption and Completions as % of Stock and Availability Rate (2002 – 2027)

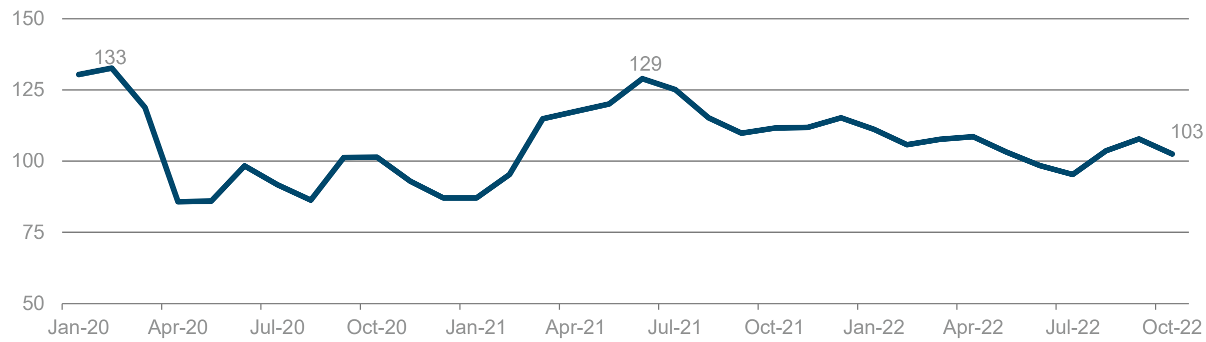


Source: Source: CBRE-EA (history) and DWS (forecast). As of December 2022.
Note: Note: F = forecast. (1) Forecast for Neighborhood and Community centers. (2) Aggregate of DWS's Investable Universe of markets. There is no guarantee the forecasts shown will materialize. Past performance is not indicative of future results. No assurance can be given that any forecast or target will be achieved.

Retail's robust post-COVID recovery overlapped with a favorable macroeconomic backdrop. Fiscal stimulus, strong employment and wage growth, a healthy savings cushion, and mounting confidence fueled consumer spending. As the pent-up demand for goods and "COVID-comforts" abates, spending habits are shifting back to pre-pandemic norms amidhigher inflation. Shoppers are trading down to lower-cost store brands, buying fewer home goods, and spending more on services (housing and utilities), healthcare, travel and entertainment. We are beginning to see a great reset from COVID-related behaviors. We expect that spending on experiences such as dining, travel, fitness, and entertainment will increase further.

[66] CBRE-EA. As of December 2022.
[67] DWS. As of December 2022.

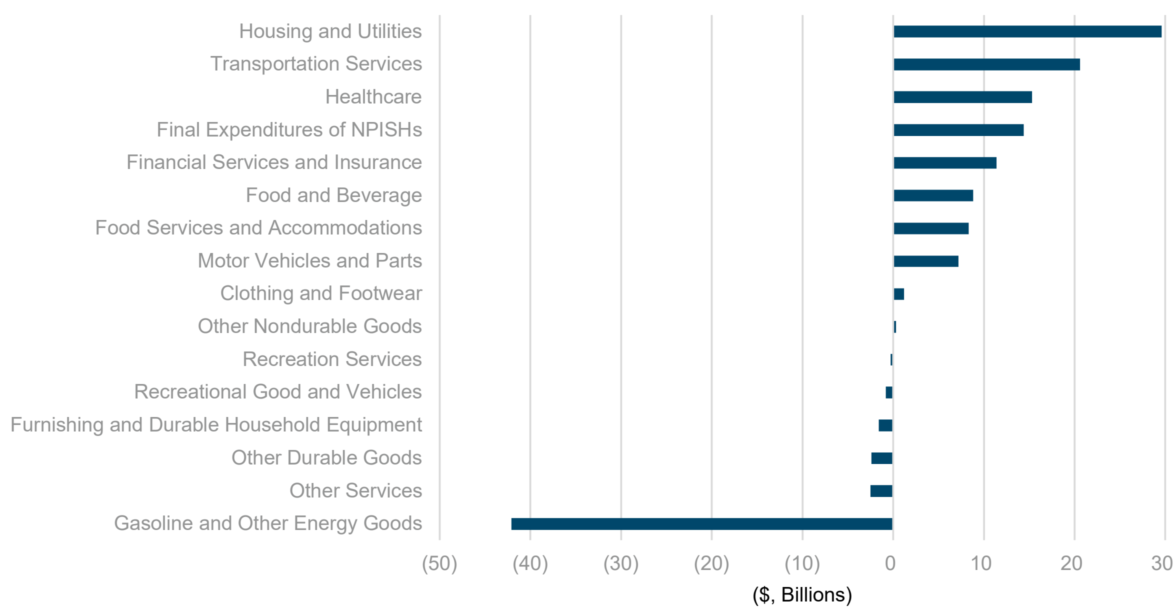
Exhibit 15: Consumer Confidence Index (Index 1985=100, SA)



Source: Moody's Analytics. Seasonally adjusted. As of December 2022.

Recent data suggests consumers are increasingly cautious in the face of escalating inflation and rising interest rates. With rising prices for necessities such as gas and food, household budgets are being squeezed. As a result, consumer confidence and spending have been moderating in recent months. Consumers are behaving more thoughtfully, a bit cautiously, but yet they continue to spend of household priorities. Annual retail spending moderaged to 9% year-over-year in October 2022, its slowest pace this year and almost a flat level when adjusted for inflation.[68] While down from the height of the pandemic, U.S. consumers still have a hefty $1.7 trillion savings cushion left in accumulated surplus as of October 2022.[69] It is hard to say how long a saving drawdown could take given historically high prices. Consumers may need to dip further into their savings or credit reserves to fund future high priced purchases.

Exhibit 16: Changes in Consumer Spending – Services & Goods (Year / Year, August 2022)



Source: U.S. Bureau of Economic Analysis; Personal Income and Outlays. Seasonally adjusted, annual rates. As of December 2022.

[68] United States Commerce Department. As of October 2022.
[69] Oxford Economics. As of October 2022.

Near-term risks to the outlook include inflation and an overhang of excess inventory – particularly in the apparel, furniture, home goods, and department store segments. However, the outlook for necessity-based retail remains solid. Over the forecast periord, we expect the results of retail's transformation in post-pandemic buying patterns to benefit neighborhood & community centers. Structural and demographic trends should continue to support spending if economic drivers remain supportive. Migration from cities to the suburbs, population growth in lower-cost markets, and more flexible workplace strategies should continue to sustain demand at suburban shopping centers.

6.2 Outlook and Strategy

Strengthening fundamentals and reinvigorated retailer health have led to improving investment performance. Retail total returns in the third quarter of 2022 (trailing four quarters) continued to increase (6.7%), ahead of Office (3.2%), and registered the fifth positive quarter since 2019. Neighborhood (8.7%), Community (10.9%), and Power (9.7%) centers outperformed while malls, which comprise about half the index, generated the weakest returns.[70] Retail as a sector has undergone transformative changes as it has adapted to e-commerce and changing consumer preferences. With a majority of the distress worked through the system, the sector is on a sustainable tradjectory. Open-air and grocery-anchored shopping centers have been the beneficiaries of renewed demand and are likely best positioned over the long term. At the same time, apparel and lifestyle-oriented centers will likely continue to feel secular pressures over time and will require substantial investment to remain relevant.

The retail's post-pandemic revival will likely continue even as economic uncertainties weigh on consumers. Fueled by shoppers' renewed enthusiasm for the in-person shopping experience and retailers' optimism about long-term growth, tenants continue to seek out high-quality store locations amid limited supply. But the outlook has become more uncertain. Although household spending in 2022 has been resilient despite higher prices, consumer sentiment is weakening. Wage growth after adjusting for inflation—a key driver of future spending—has been in negative territory over the past twelve months, and some shoppers are pulling back on discretionary goods such as apparel, electronics and furniture. Declining real income, dwindling savings, greater use of credit cards and higher interest rates may soon impact households' ability and willingness to increase spending. Additionally, retailers have their own set of anxieties to deal with as the supply chain chaos of last year may have led to an overcorrection in terms of inventory accumulation. While this dynamic is most acute for large general merchandise operators, there is speculation that many retailers will turn to aggressive price discounting over the coming months in hopes of offloading costly excess inventories. This narrative is contributing to lower stock prices, which can potentially lead to less retail hiring, investment and store opening plans. Despite these challenges, an economic slowdown or even a mild recession should not be overly disruptive to the retail market. Corporate balance sheets in the retail sector are generally healthy, the e-commerce disruption has already peaked and overbuilding is not even a remote threat. A sharp decline in leasing activity is unlikely and despite the uncertain economic climate, retail is at low risk of a major disruption over the next few years.[71]

Our House View retail strategy favors an increased allocation to necessity-based retail. Our near-term outlook for fundamentals has improved and we believe the sector will continue to perform well given continuous retail demand and low vacancies. We continue to see a clear distinction in performance driven by geography, property subtype, and strength of the tenant line-up. During uncertain times, retail assets may be a solid income producing component of a portfolio. We maintain our recommendation to target grocery-anchored retail located in high growth regional markets.

[70] NCREIF Property Index. As of 3Q 2022.
[71] Cushman & Wakefield. As of 3Q 2022.

See Exhibit 17 for central themes that are shaping our retail strategy:

Exhibit 17: DWS Retail Strategy

Target Necessity-based Retail	Our conviction around daily needs and grocery-anchored retail remains high as the drivers and fundamentals are poised to remain stable through the early years of the forecast. Grocery-anchored-retail will likely be more resilient 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.
Proceed with Caution on Power Centers	While we believe that power centers will evolve into last-mile distribution locations over time, we continue to recommend an underweight to the segment. Caution is warranted in the near-term due to the interest-rate sensitivity of long-term leases. There is also a risk that demand for electronics, furniture, appliances, and other household goods has been satiated (for now) during the COVID housing boom. Shifting consumer preferences are less threatening to neighborhood and community centers, which are more oriented to daily necessities (e.g., food) and services.
Avoid Malls and Transitional Assets	We expect e-commerce penetration will continue to grow in the apparel and commodity goods sector, which impacts malls, class B/C assets and high street retail 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.

Source: DWS. As of December 2022.

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	28%	29%	34%	+5%	29% - 39%
Industrial	32%	31%	40%	+9%	35% - 45%
Office	26%	23%	11%	(12%)	6% - 16%
Retail	14%	10%	14%	+4%	9% - 19%
Other	0%	7%	1%	(6%)	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; DWS. As of December 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

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

Source: DWS. As of December 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

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

	9/21-9/22	9/20-9/21	9/19-9/20	9/18-9/19	9/17-9/18
NCREIF Property Index (NPI)	16.1%	12.2%	2.0%	6.2%	7.2%
NPI-Apartment	18.2%	13.4%	2.3%	5.4%	6.4%
NPI-Industrial	34.6%	32.4%	10.1%	13.6%	14.2%
NPI-Office	3.2%	4.9%	2.8%	6.5%	6.8%
NPI-Retail	6.7%	0.7%	-6.3%	1.4%	3.9%
NPI-Apartment: High-Rise	14.9%	9.7%	1.1%	4.1%	4.9%
NPI-Apartment: Low-Rise	19.0%	13.9%	3.3%	5.8%	7.2%
NPI-Apartment: Garden	24.2%	21.2%	4.6%	8.1%	9.3%
NPI-Office: CBD	0.8%	2.3%	1.8%	5.9%	6.3%
NPI-Office: Suburban	6.3%	8.5%	4.3%	7.5%	7.6%
NPI-Retail: Malls	2.9%	-4.1%	-8.2%	-0.3%	1.0%
NPI-Retail: Power	9.7%	4.0%	-2.6%	1.3%	5.1%
NPI-Retail: Neighborhood & Community	8.7%	7.1%	-1.2%	4.6%	6.5%
	11/30/2022	11/30/2021	11/30/2020	11/30/2019	11/30/2018
NASDAQ Composite Index	-26.2%	27.4%	40.8%	18.2%	6.6%
S&P 500 Index	-10.7%	26.1%	15.3%	13.8%	4.3%
MSCI US REIT Gross TR Index	-13.5%	36.0%	-11.1%	16.3%	3.7%

Sources: NCREIF; Bloomberg; NAREIT; DWS. As of November 2022.

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