

EA Quarterly: The Full Picture

CHARTBOOK

U.S. Quarterly
Outlook

ECONOMETRIC ADVISORS
December 20, 2023

Table of Contents



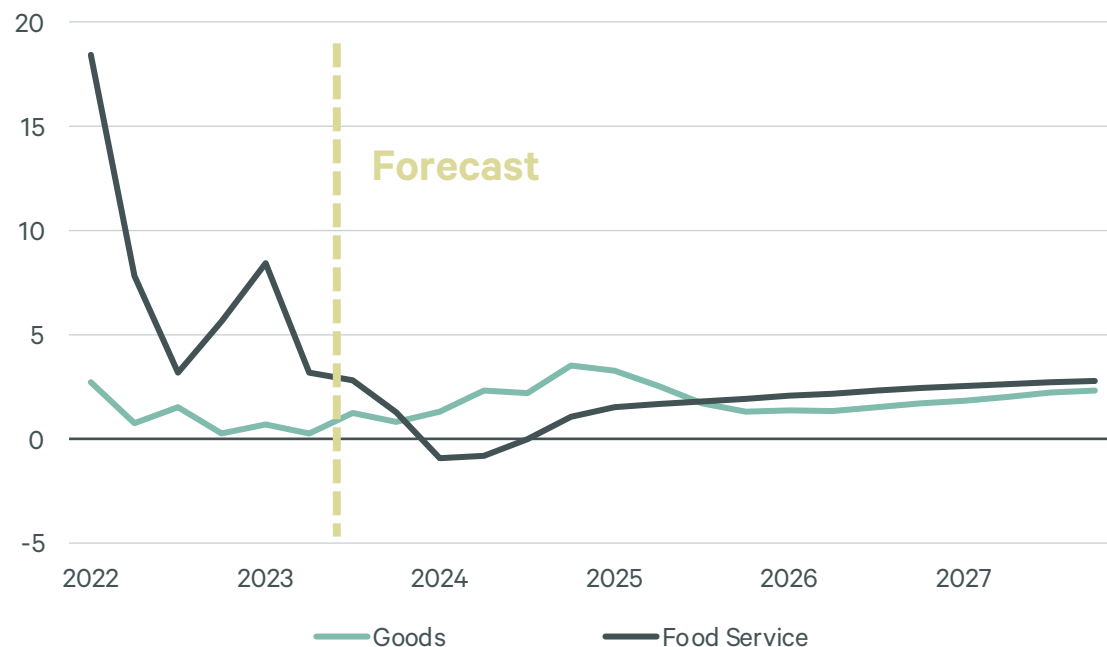
- 1 [Macroeconomic Backdrop](#)
- 2 [Capital Markets and Commercial Real Estate](#)
- 3 [Bird's Eye View](#)
- 4 [Industrial](#)
- 5 [Multifamily](#)
- 6 [Office](#)
- 7 [Retail](#)

1

Macroeconomic
Backdrop

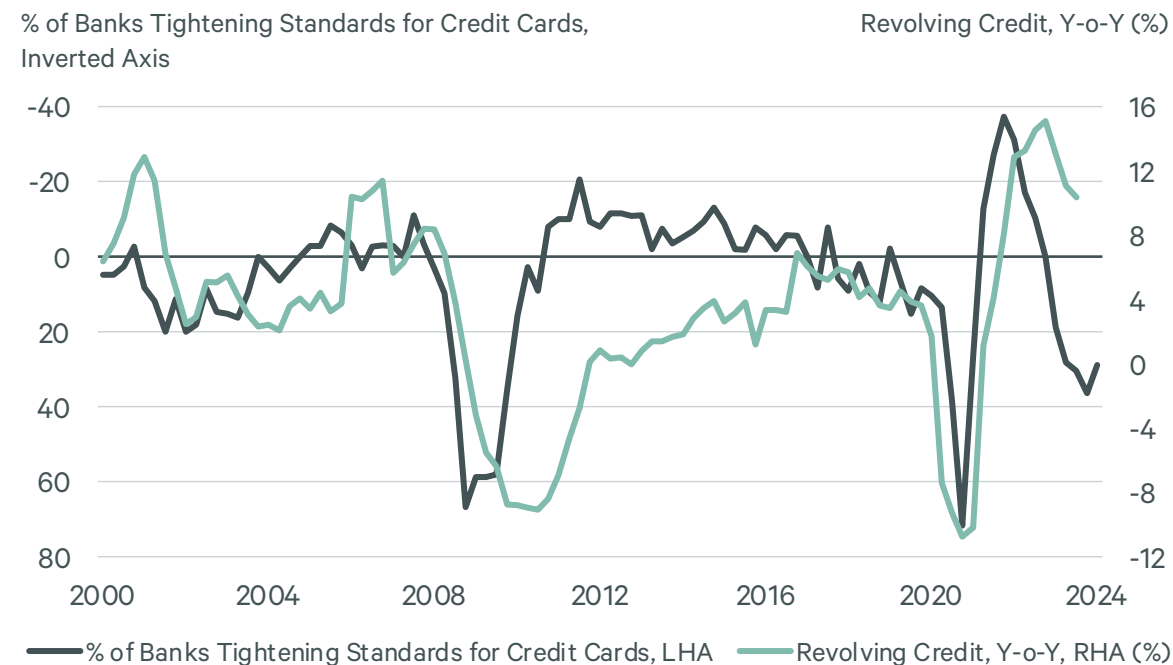
The consumer will struggle to accelerate from here

Retail Sales, Y-o-Y (%)



Source: U.S. Census, CBRE Econometric Advisors

Share of Banks Tightening and Consumer Credit Change, Y-o-Y (%)



Source: Federal Reserve, CBRE Econometric Advisors

- Consumer services (e.g., dining out, travel, recreation) is driving the boom in consumption. As the pace of economic growth slows, we believe spending on discretionary services will slightly contract in 2024.
- Although interest rates are poised to trend downward, consumer credit costs remain heightened, which will restrain big ticket purchases.

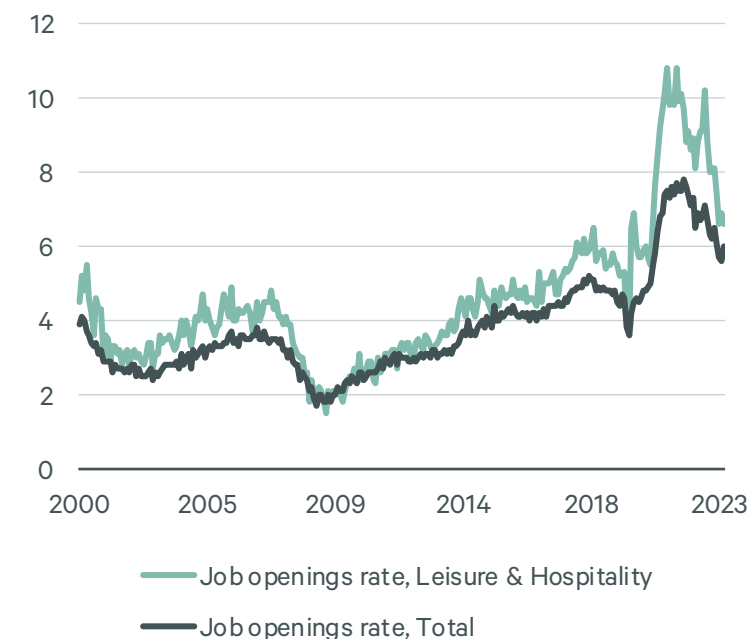
The labor market will not likely provide a significant boost

**Average Hours Worked Per Week
(2-Month Rolling Average)**



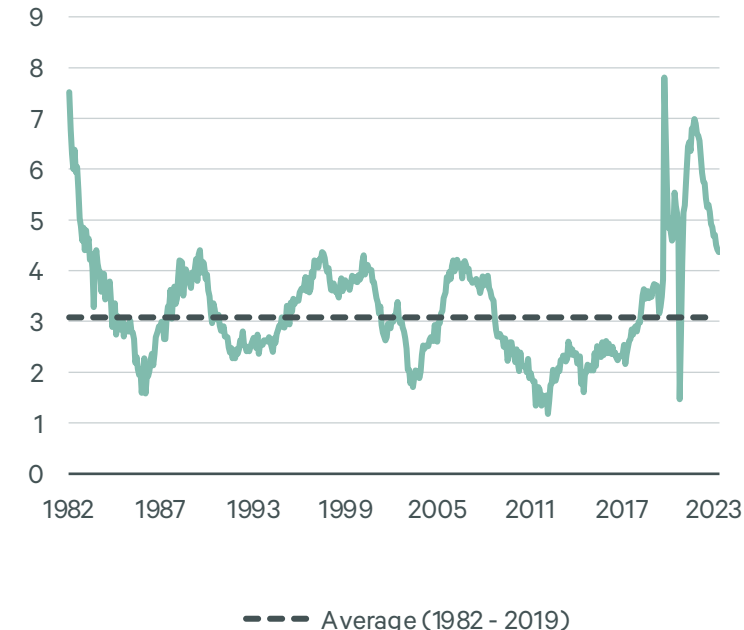
Source: BLS

Job Opening Rates Are Trending Down (%)



Source: BLS

Average Hourly Earnings, Y-o-Y (%)

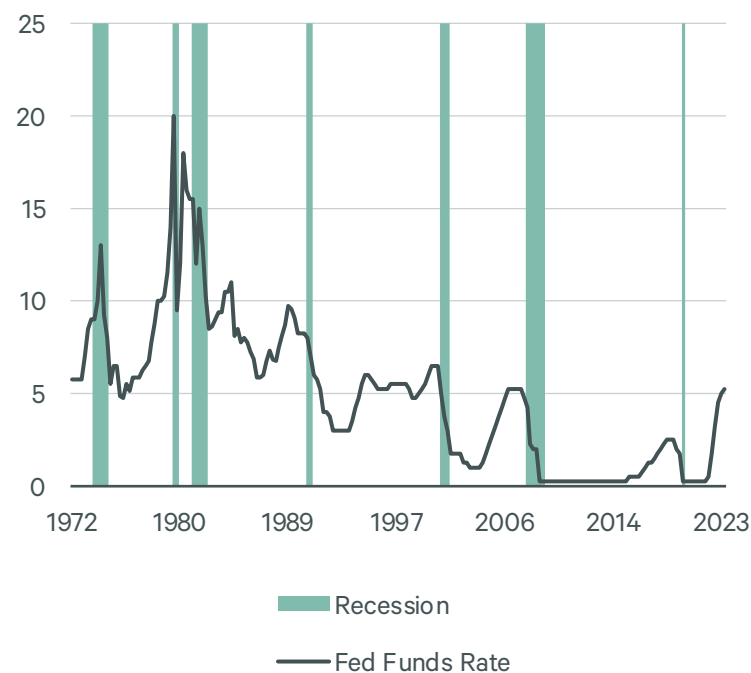


Source: BLS, CBRE Econometric Advisors

- A few signals suggest that the labor market is no longer tightening. Foremost, hours worked has declined from its 2021 peak signaling that demand for labor has softened.
- In a similar fashion the job openings rate has declined notably. Even the Leisure & Hospitality sector—suffering from an acute labor shortage—has seen the openings rate deteriorate. Nevertheless, the job openings rate remains elevated as labor force participation is only recently approaching pre-COVID levels.
- The job openings trend has influenced average hourly earnings. Although wage growth remains elevated—providing some consumer fire power—it is steadily trending downward. Slower wage growth will be needed for inflation to return to target.

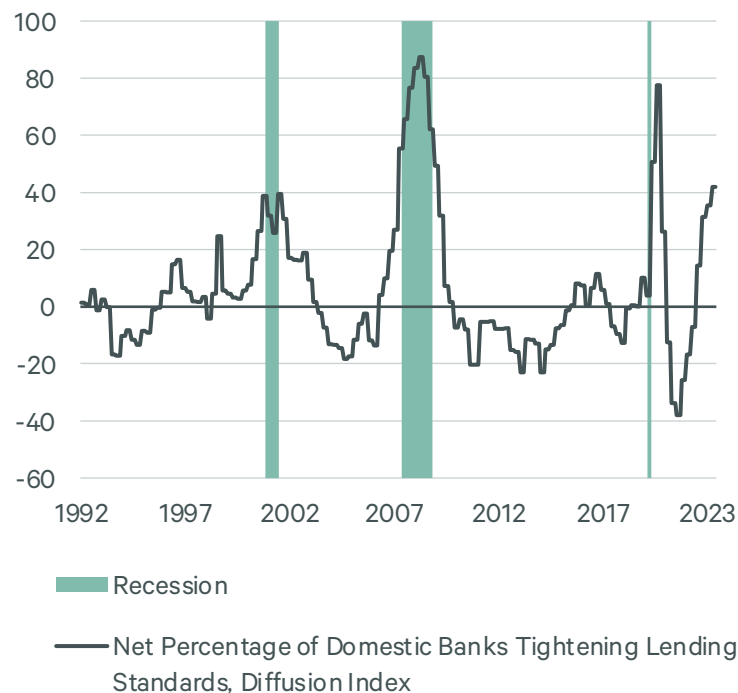
A surge in interest rates creates vulnerabilities

Fed Funds Lift-Off and Recessions



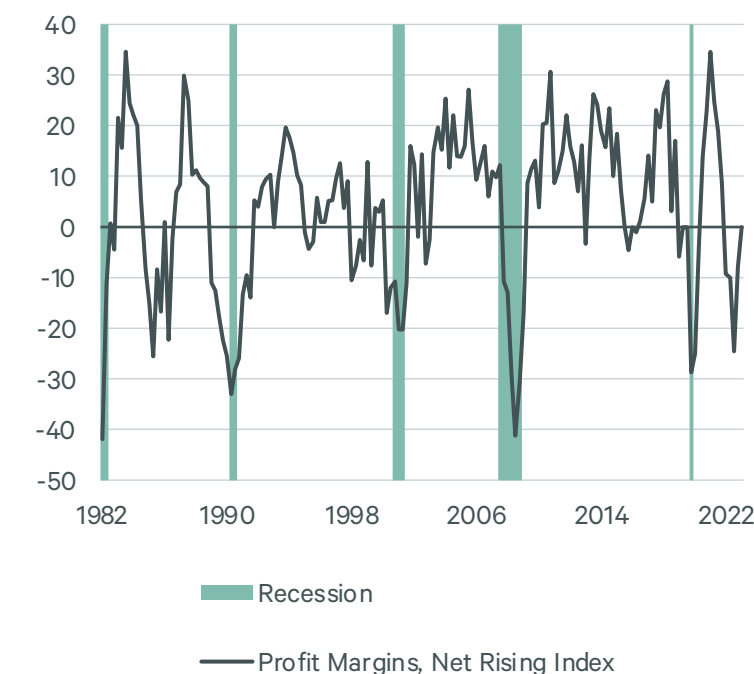
Source: Federal Reserve & NBER

Banks Tightening Standards and Recessions



Source: Federal Reserve & NBER

Corporate Profit Margins and Recessions



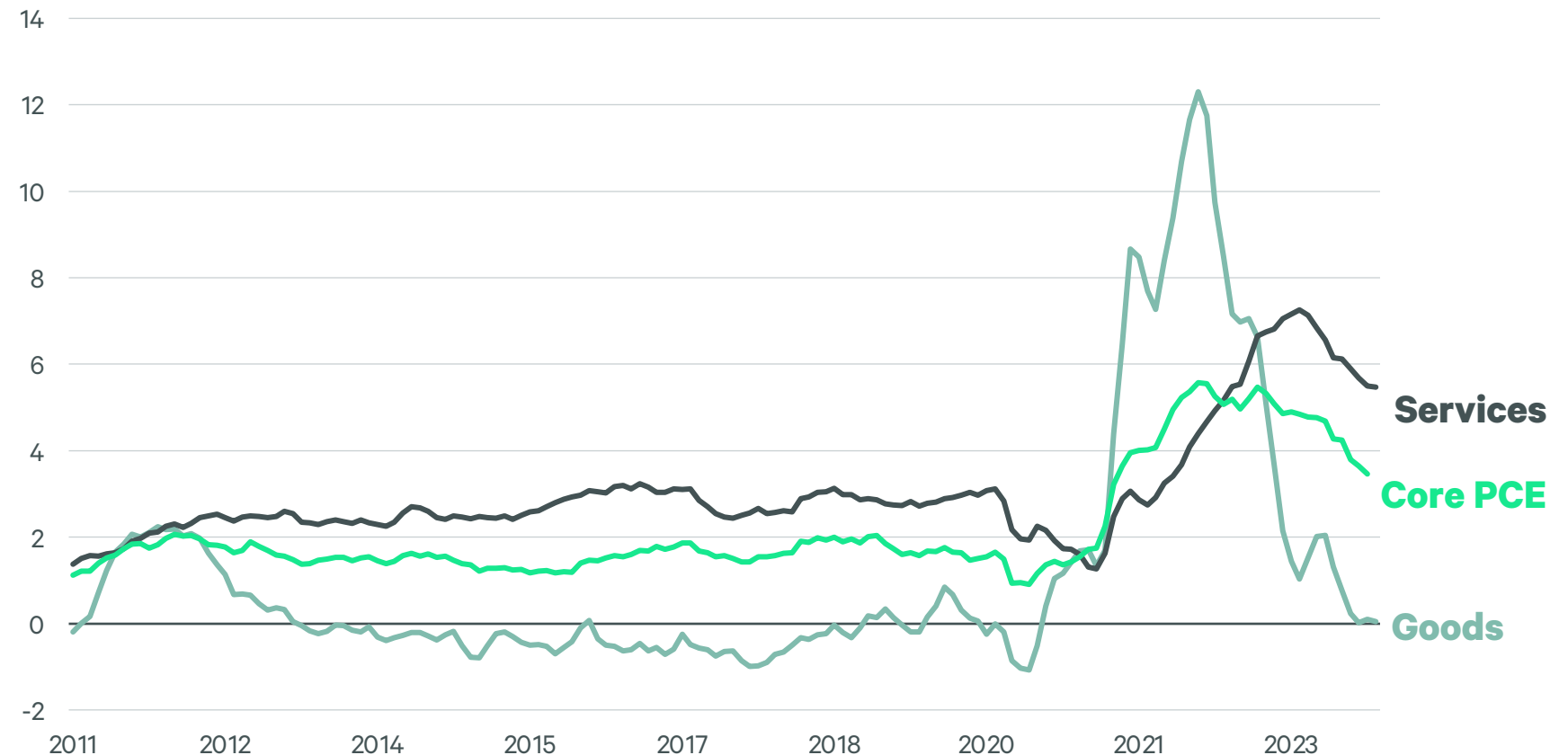
Source: National Association for Business Economics & NBER

- Many key financial and economic metrics suggest a downturn is on the horizon. During the past 50 years, tighter monetary policy has eventually led to a recession—albeit with quite variable time lags. A key exception was the ‘soft landing’ of the mid-1990s when the Fed began hiking rates well before unemployment approached the natural rate of unemployment.
- Concerns surrounding bank deposit withdrawals and unrealized asset losses are forcing banks to curtail lending activity and tighten standards. Historically, a material tightening of lending standards has coincided with a recession.
- A combination of a higher cost of capital and labor costs combined with softening revenue is dampening corporate profit margins. International revenue is also a risk for U.S. multinationals.

Wage growth will keep services inflation heightened

- Many components of the CPI index, especially goods, continue to decline at a steady pace as supply chains and production capacity normalizes. The transport component is trending down, and housing inflation is poised to soften in coming quarters.
- Meanwhile, service costs are stubbornly high, due to heightened demand and high labor costs, and this will create some friction to inflation's fall back towards 2%. We anticipate CPI to return to target by year-end 2024.

Price Index, Y-o-Y Change (%)

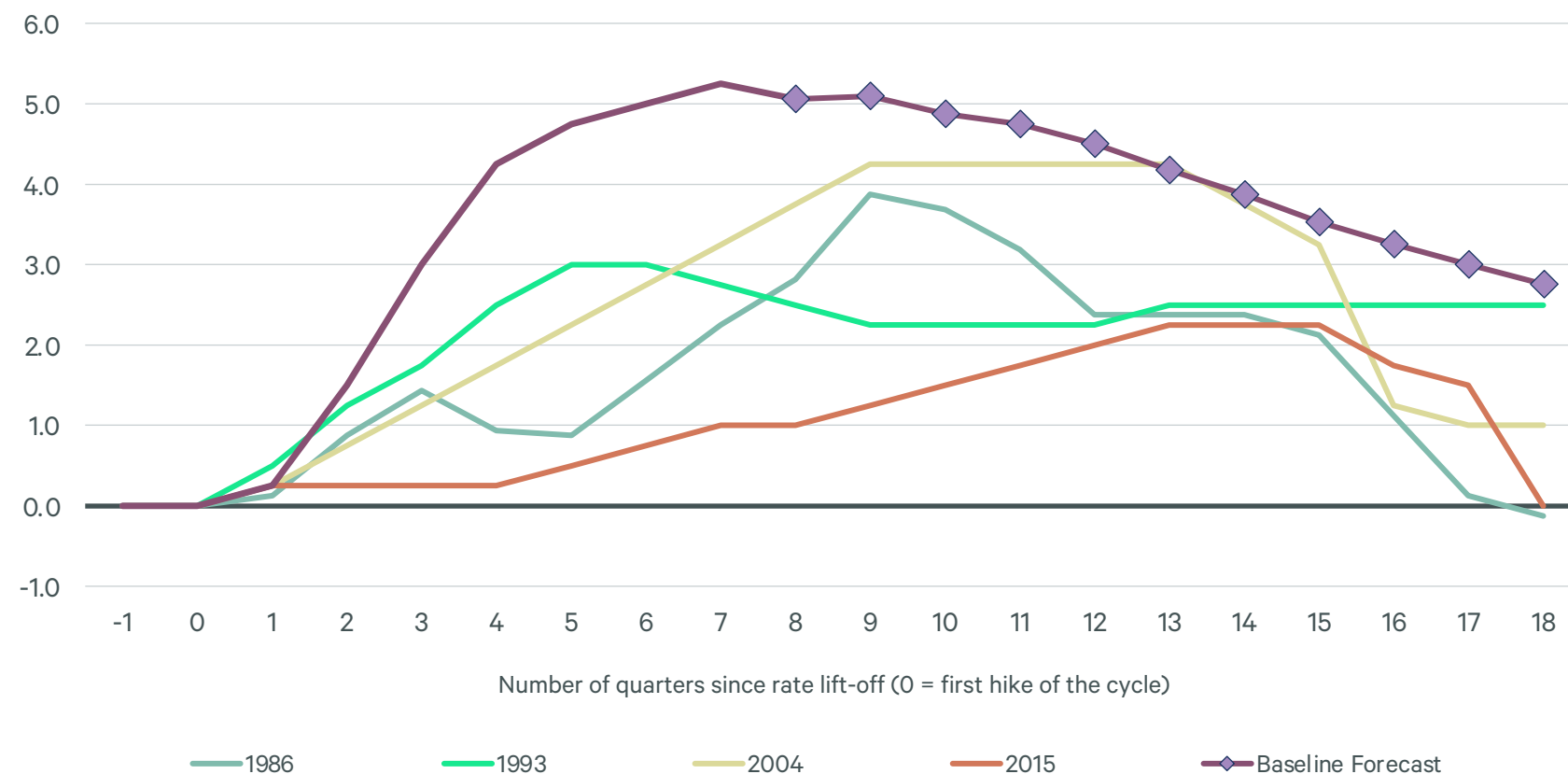


Source: The Federal Reserve, U.S. Bureau of Labor Statistics & CBRE Econometric Advisors

Rates are likely to stay higher than past cycles

- Easing inflation amid continued job growth suggests the Federal Reserve will take a pause on future hikes. Because the pace of inflation is likely to settle to 2% during the next year, we expect that the Fed will begin to cut rates in 2024. Our Baseline scenario expects the Fed Funds Rate to decline by 75 to 100 basis points during 2024. This still translates into a path wherein rates remain heightened relative to past tightening cycles.

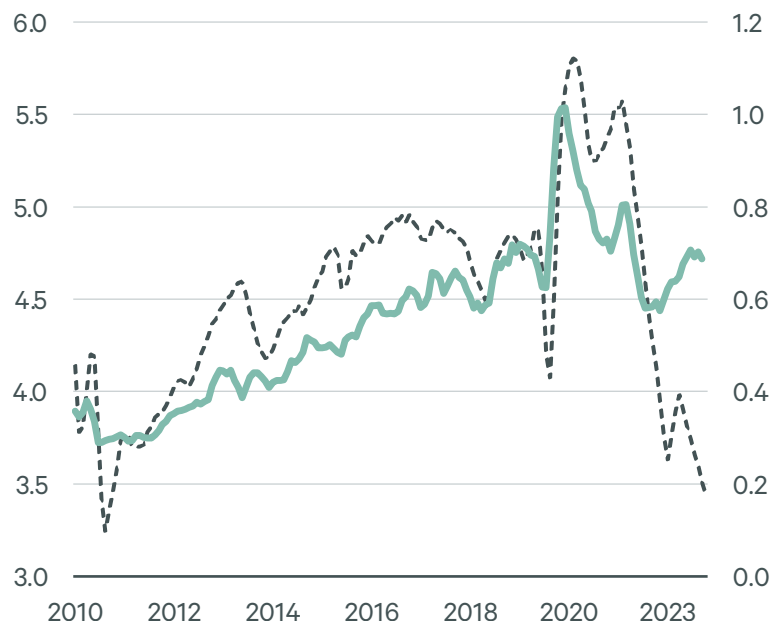
Change In Fed Funds Rate From Beginning of Each Tightening Cycle (Percentage Points)



Source: The Federal Reserve & CBRE Econometric Advisors

Housing will not contribute much to growth

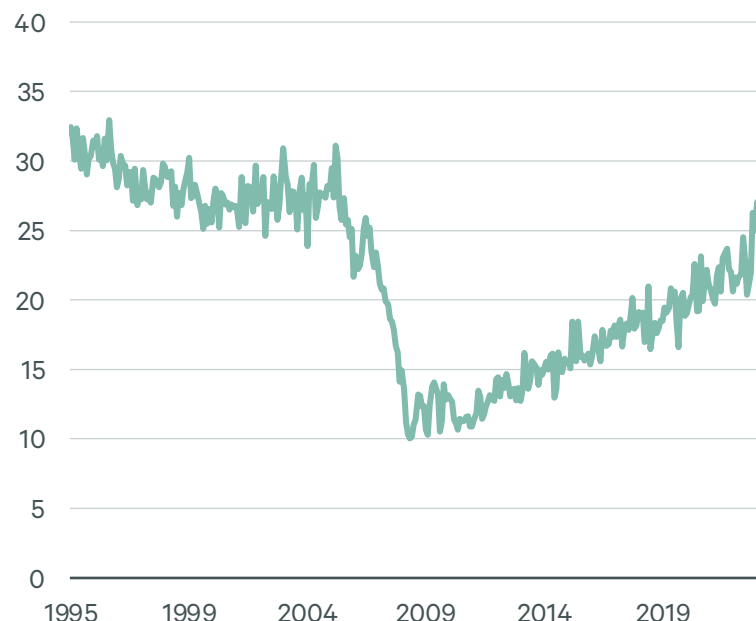
Home Sales (millions)



----- Existing Home Sales (LHA) — New Home Sales (RHA)

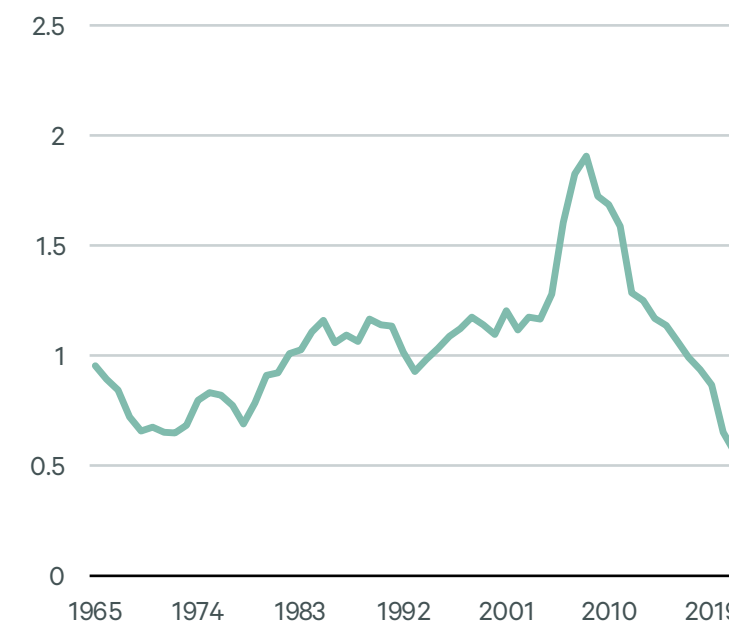
Source: U.S. Census, National Association of Realtors

Single-Family Starts / Sales, annualized (%)



Source: U.S. Census, National Association of Realtors

For-Sale Inventory / Households (%)



Source: U.S. Census

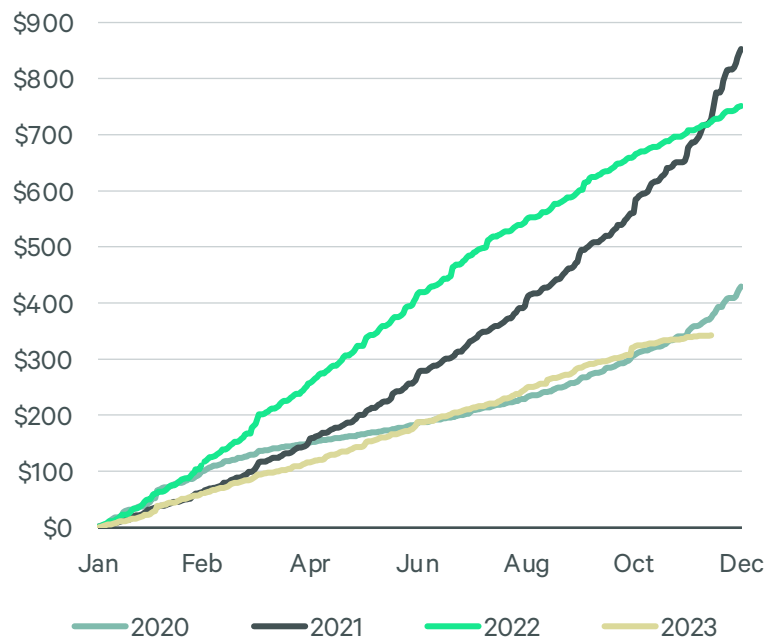
- The spike in mortgage rates means existing homeowners are reluctant to sell, resulting in limited for-sale inventory. A key driver of home sales is ground-up construction as homebuilders are incentivized to build and sell above replacement cost. Thus, the ratio of starts-to-home sales has surged above *pre-GFC* levels.
- Ultimately, for sale inventory remains very low and residential investment is not poised to contribute significantly to GDP growth in coming quarters. The prospect of falling long-term interest rates could provide some relief to very high mortgage costs.

2

Capital
Markets &
Commercial
Real Estate

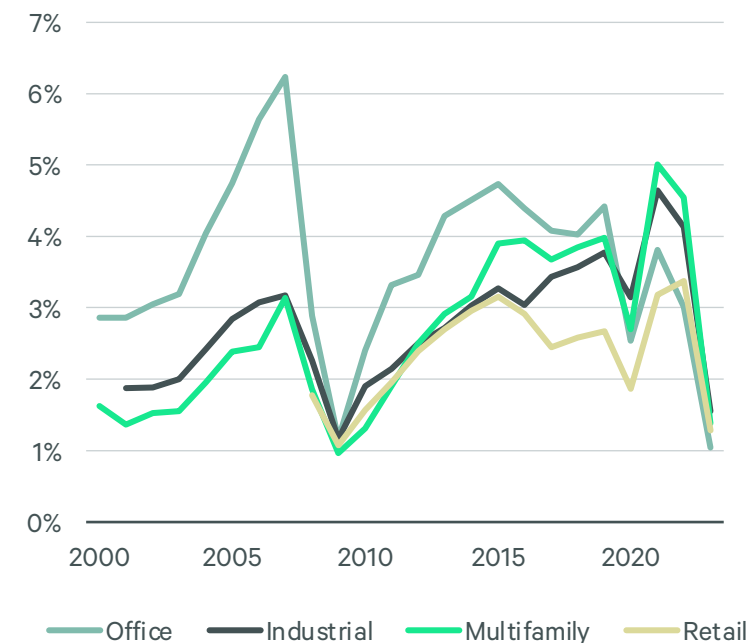
Investment activity still limited

Cumulative Daily CRE Investment Volume, Billions (USD)



Source: MSCI Real Capital Analytics

Annual Sales Volume as a Share of Total Asset Value (%)



Source: CoStar

Commercial/Multifamily Mortgage Bankers Originations Index (Re-Indexed to Q1 2021)

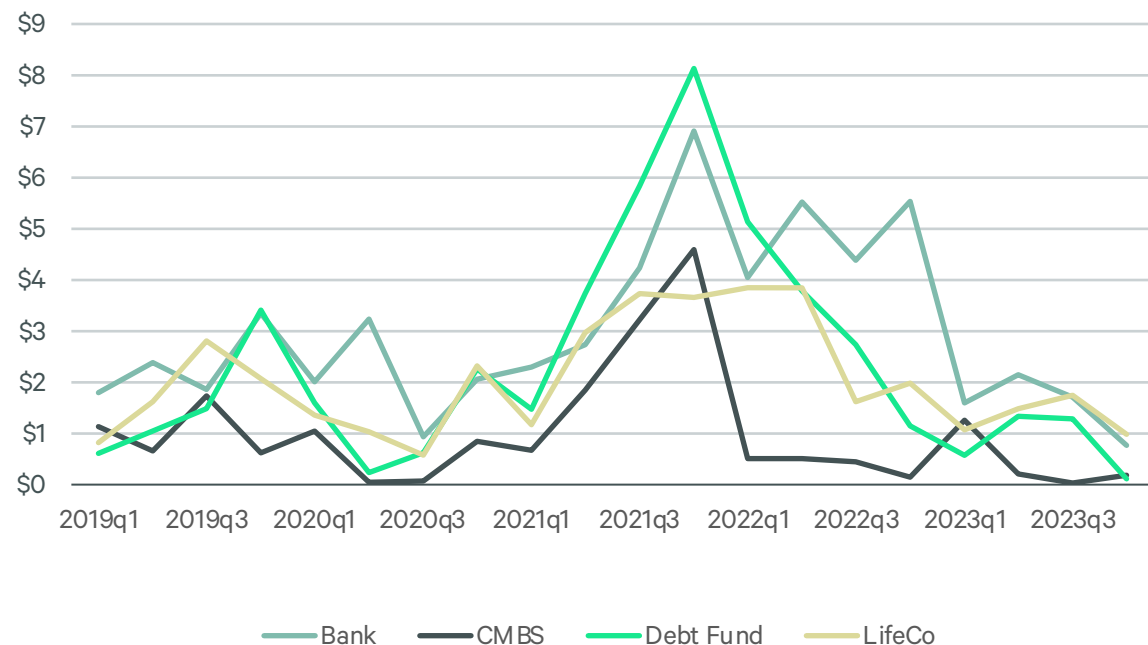


Source: Mortgage Bankers Association

- 2023 is on pace to lag the investment volume levels seen in 2020. This is a result of a combination of bid-ask spreads, interest rate levels and uncertainty, and a lack of debt availability.
- Annual sales volume as a fraction of modeled aggregate asset values are near or below the GFC trough of 2009.
- According to the Mortgage Bankers Association, commercial mortgage origination fell 49% Y-o-Y through Q3 2023, or from \$321 million to \$164 million.

Traditional lenders stepping back

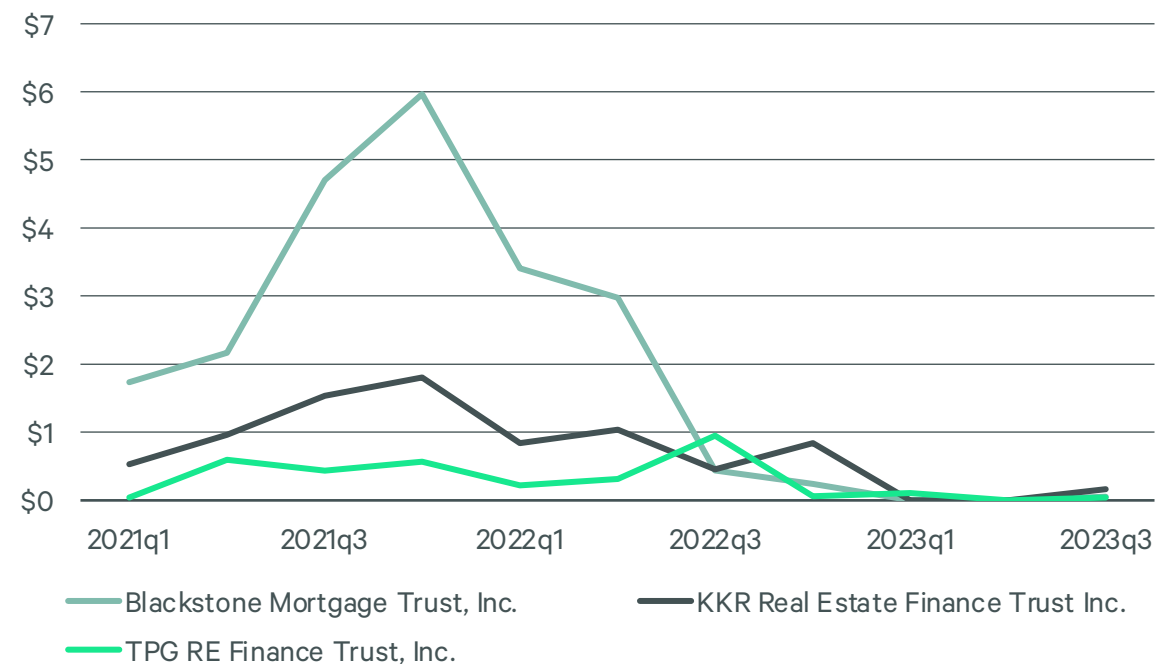
CBRE Brokered Commercial Mortgage Originations by Quarter and Lender Type, Billions (USD)



Source: CBRE Deal Slicer, CBRE Econometric Advisors

- Banks have become more cautious, offering fewer loans at less favorable terms. Using a dataset of loans brokered by CBRE, we estimate bank mortgage lending fell by 71% quarter-over-quarter in Q1 2023 and has continued to decline.
- According to the *Wall Street Journal*, Mortgage REITs in the aggregate in the United States issue an average of \$10 billion in new loans each quarter. However, many are currently prioritizing their balance sheet and liquidity rather than originating new loans. In fact, two of the largest, Blackstone Mortgage Trust and KKR Real Estate Finance Trust, issued no new loans in the first half of 2023.

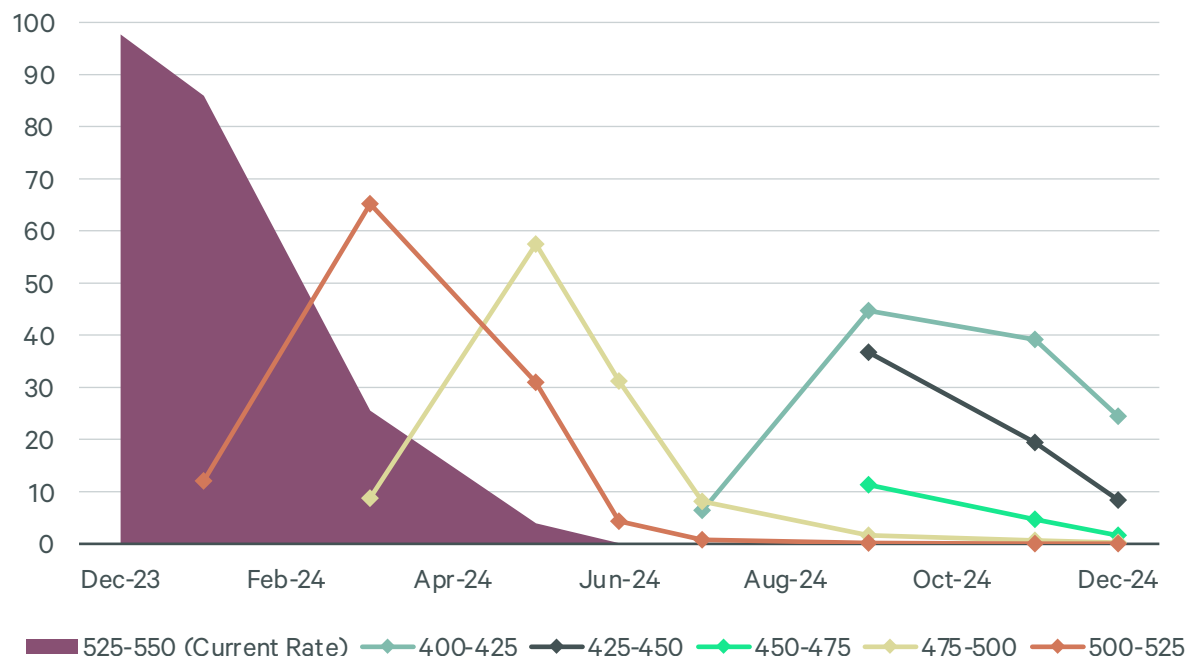
Quarterly Commercial Mortgage Origination by Mortgage REIT, Billions (USD)



Source: EDGAR

Higher rates are the culprit, but times are changing

Implied Probability of Federal Reserve Target Rate by Meeting Date (%)



Source: CME Group

Overnight and 10-Year Treasury Yields (%)

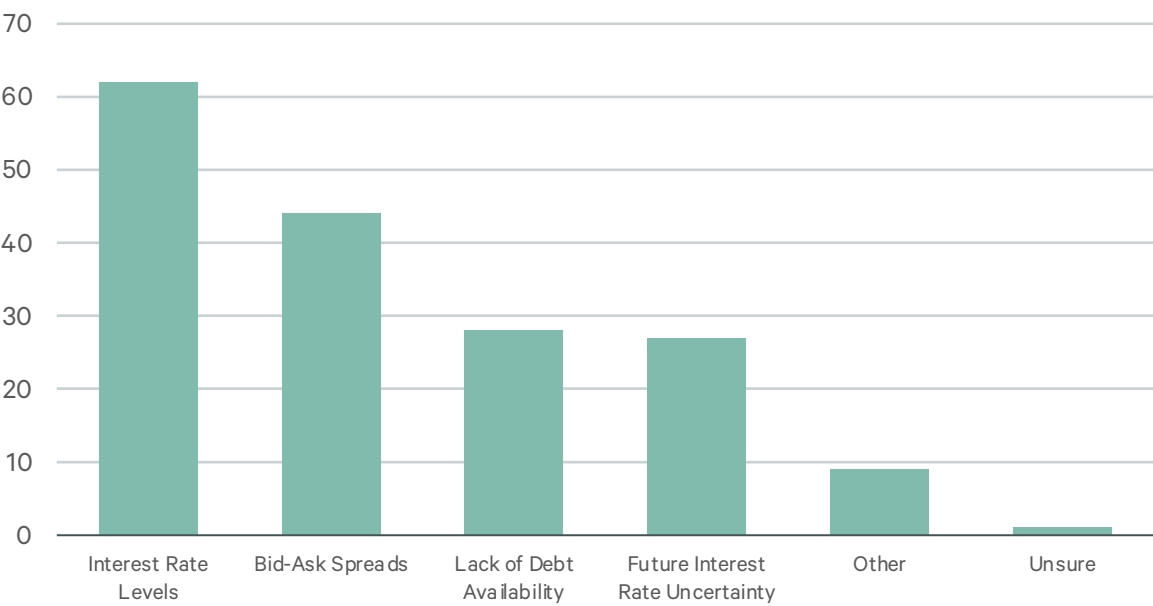


Source: Macrobond

- While expectations for the 2023 terminal FFR have whipsawed throughout the year, markets have coalesced around the Fed no longer raising the FFR. Futures markets are pricing in an implied 0.0% chance of the Fed maintaining its current target rate through the end of 2024. Markets are suggesting rate cuts are most likely to begin on or after March 2024. The Fed dot plot has most officials penciling in three rate cuts next year as of December 13, 2023.
- Due to expectations the Fed is finished with rate hikes as well as more clarity from the Treasury on future borrowing plans, Treasury yields declined rapidly following its massive run-up. Short-term rates have also fallen recently, although by much less. Thus, loans tied to SOFR will remain heightened during the immediate future.

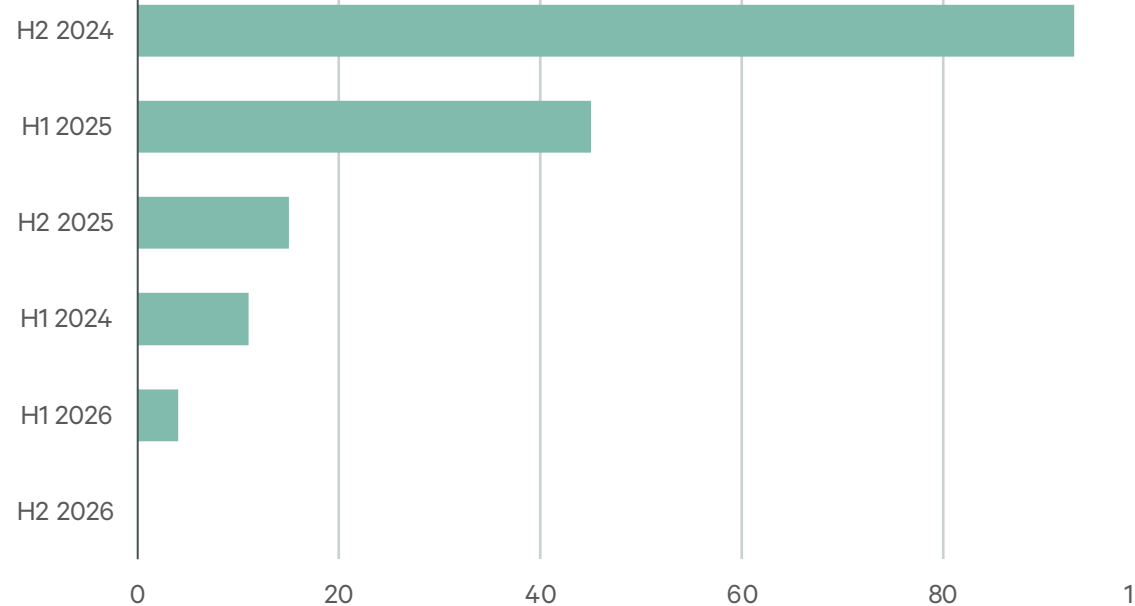
CBRE market participants expect a revival by mid-2024

What is the most important factor for the diminished sale activity we have seen over the past year? (Total Number of Responses)



Source: CBRE Econometric Advisors

When do you believe transactions will begin to come back in a serious way? (Total Number of Responses)

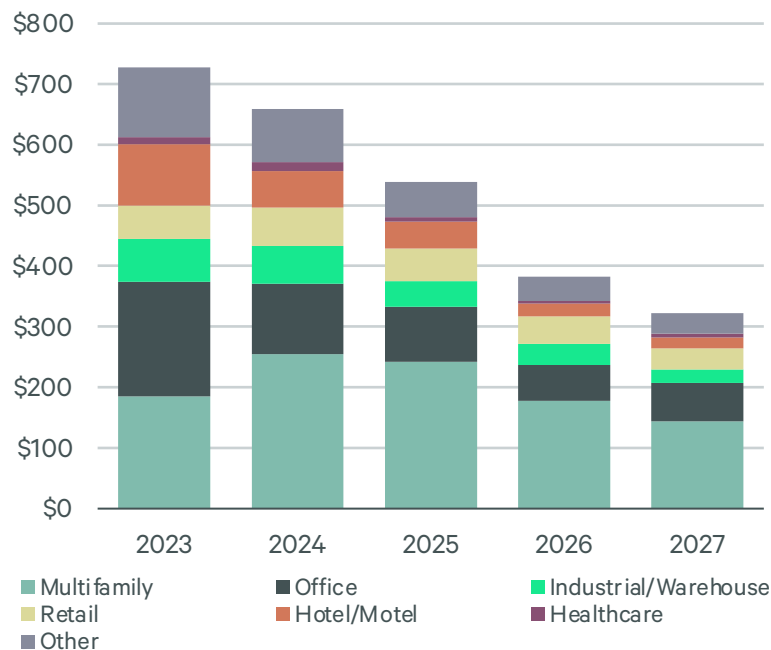


Source: CBRE Econometric Advisors

- When asked what has limited volume the most this year, CBRE professionals viewed interest rate levels as the most important factor. Should yields continue to decline or stabilize, this may help get properties trading again.
- When asked when they expect volume to get back to substantial levels, most experts within CBRE said the second half of 2024 or the first half of 2025.

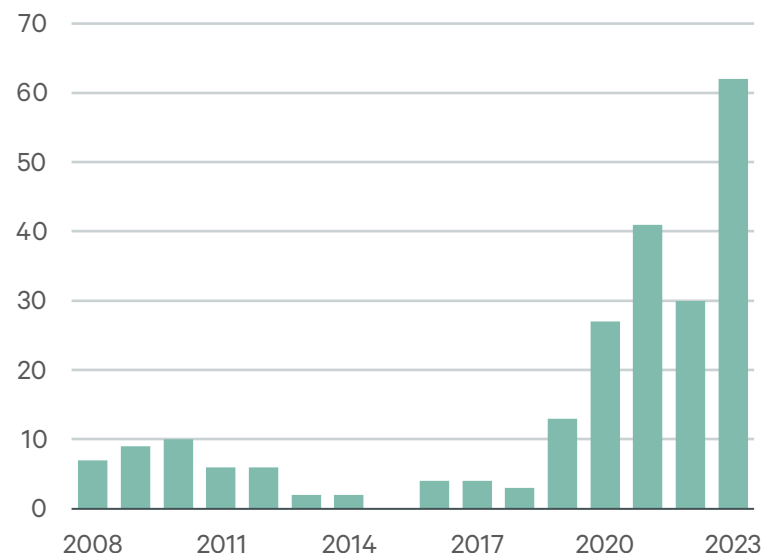
In the meantime, debt distress continues to build

CRE Debt Maturities by Year, Billions (\$)



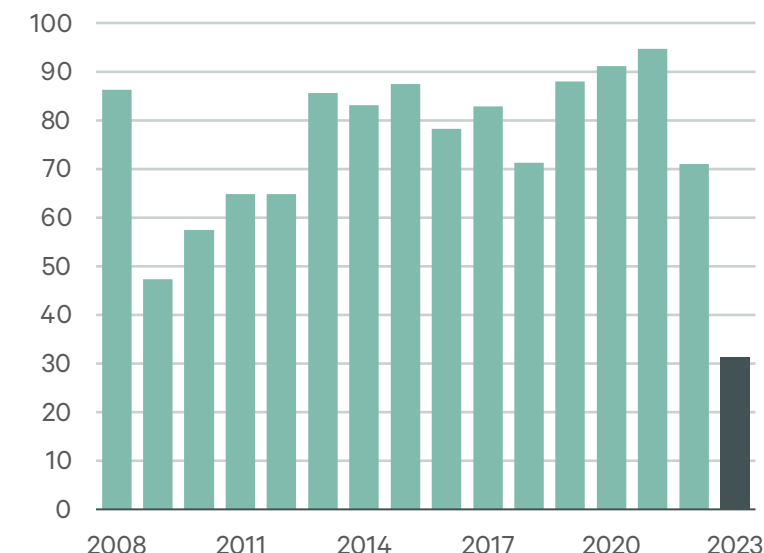
Source: Mortgage Bankers Association

Mezzanine Foreclosures (Uniform Commercial Code Filings)



Source: Wall Street Journal

Share of Maturing Office CMBS Loans Paid off by September of Each Year (%)



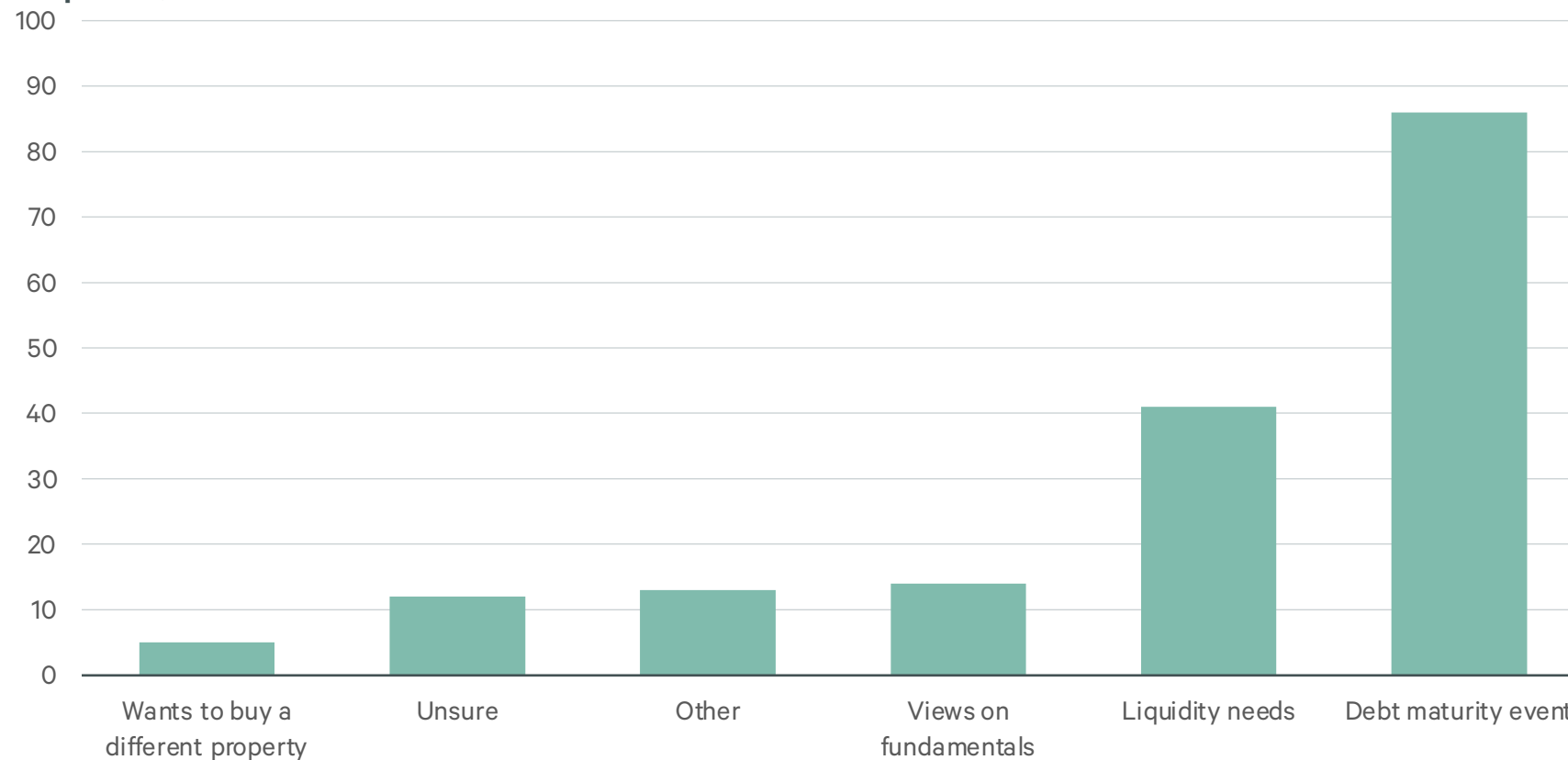
Source: Wall Street Journal, Moody's Analytics

- The typical triggers for mortgage defaults include: 1) Underwater equity; and 2) Lack of sufficient cashflow from the property. Value declines have caused the first condition for many properties while increasing vacancy and higher interest rates are contributing to the second, especially in the office sector.
- Another sign of distress is that mezzanine loan foreclosure filings are at a 15-year high according to an analysis from the Wall Street Journal.
- Many owners with loans maturing, especially office owners, are having trouble getting new loans. According to Moody's, roughly half the maturing office CMBS loans not getting paid off are going into default with the other half getting extensions and/or modifications.

Debt maturities are encouraging some to sell

- When asked what has motivated sellers during the second half of the year, CBRE professionals overwhelmingly stated debt maturity events and liquidity needs were the primary reasons.
- Strong redemption demand from LPs in non-traded REITs and open-ended funds is also driving liquidity needs for some property owners.
- This may create opportunities for patient, well-capitalized buyers.
- This is especially true in the office sector. When asked what is most important for sellers of office properties, CBRE professionals stated surety of closure was more important than price.

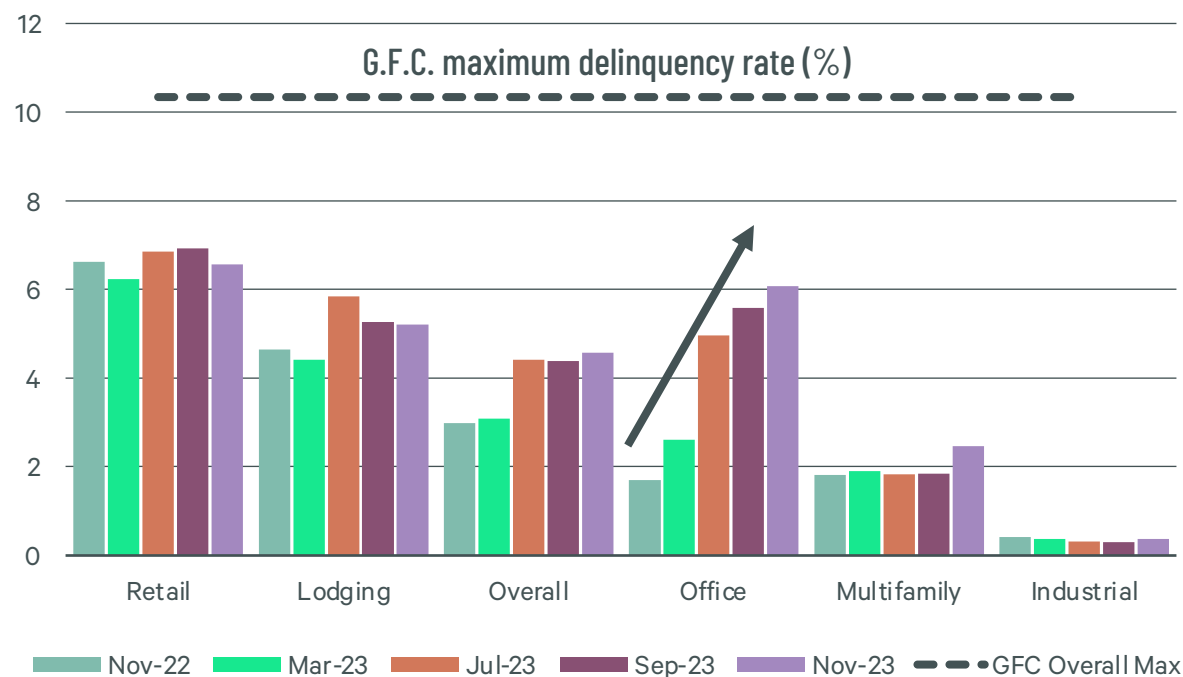
What is the most common motivation sellers have for wanting to sell their property? (Total Number of Responses)



Source: CBRE Econometric Advisors

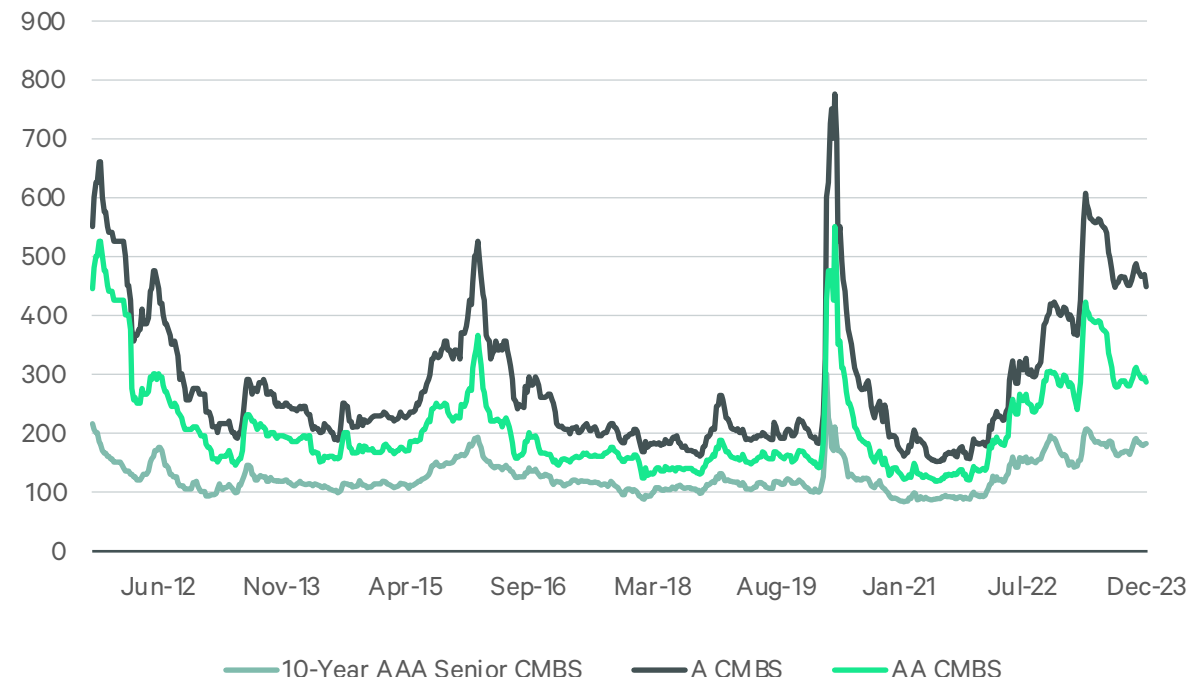
Concern is building in the CMBS space

CMBS Delinquency Rate by Time Period (%)



Source: Trepp

Spread to SOFR Swaps on New Issue CMBS (basis points)



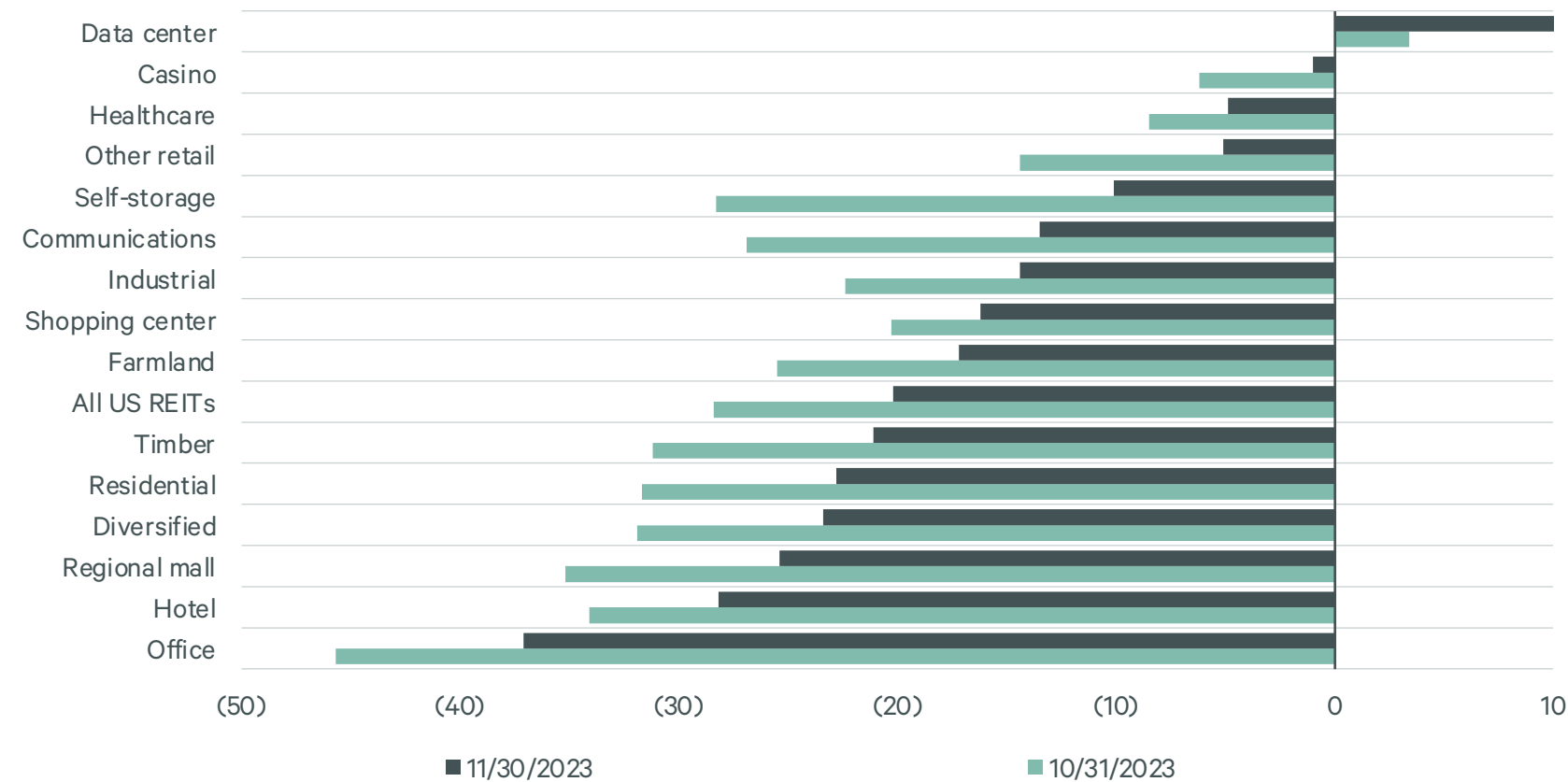
Source: Bloomberg

- The overall CMBS delinquency rate has risen to 4.6% from 3% in November 2022 while the office rate has ballooned to 6.1% from 1.7%. Industrial delinquency shot up in October, although mostly due to one large delinquency and has since fallen. Still the overall CMBS delinquency rate is below the GFC peak of 10.3% but is expected to continue climbing in the near-term.
- Uncertainty surrounding real estate fundamentals and valuations is causing CMBS spreads to widen considerably between AAA and lower rated bonds.

Listed real estate has logged notable markdowns

— Many REIT sectors are trading at steep discounts to the net asset value of properties owned. The discount to NAV is most pronounced within the office space. Whilst public equity offers an early signal of distress it is also quick to harness the recovery.

Median Premium or Discount to NAV (%)

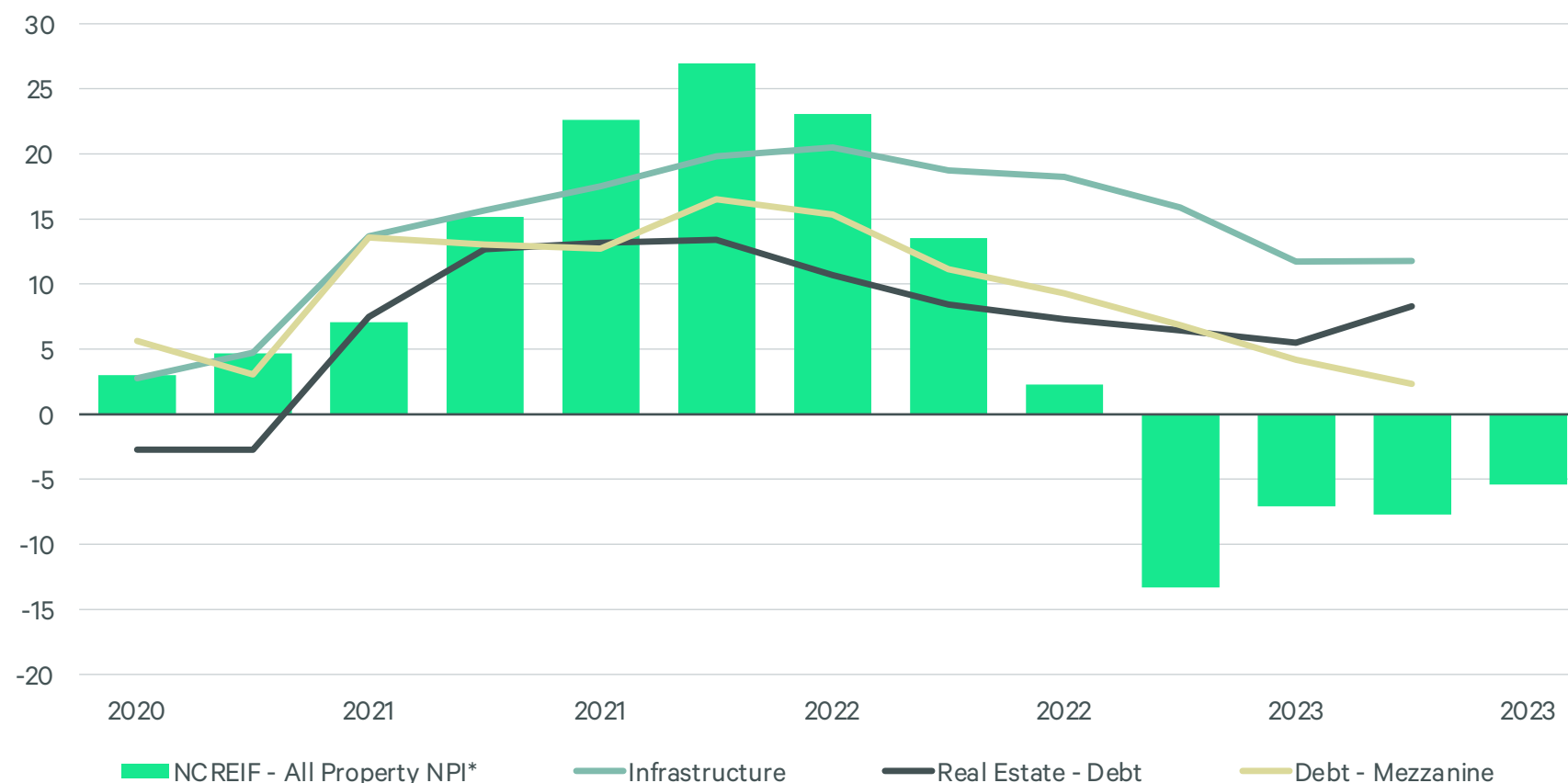


Source: S&P Global

Private equity CRE is under stress, CRE debt is strengthening

- Whilst direct real estate investments are seeing a material decline in performance, newly issued real estate credit is inching toward double-digit returns.
- Current interest rates should translate to stellar returns on recently issued debt. Meanwhile, uncertainty around fundamentals and valuations are eroding mezzanine returns.
- Income from infrastructure assets tend to be resilient to inflation, which aided investment performance in recent quarters and years.

Private Equity/Debt Quarterly Returns by Asset Class (%)



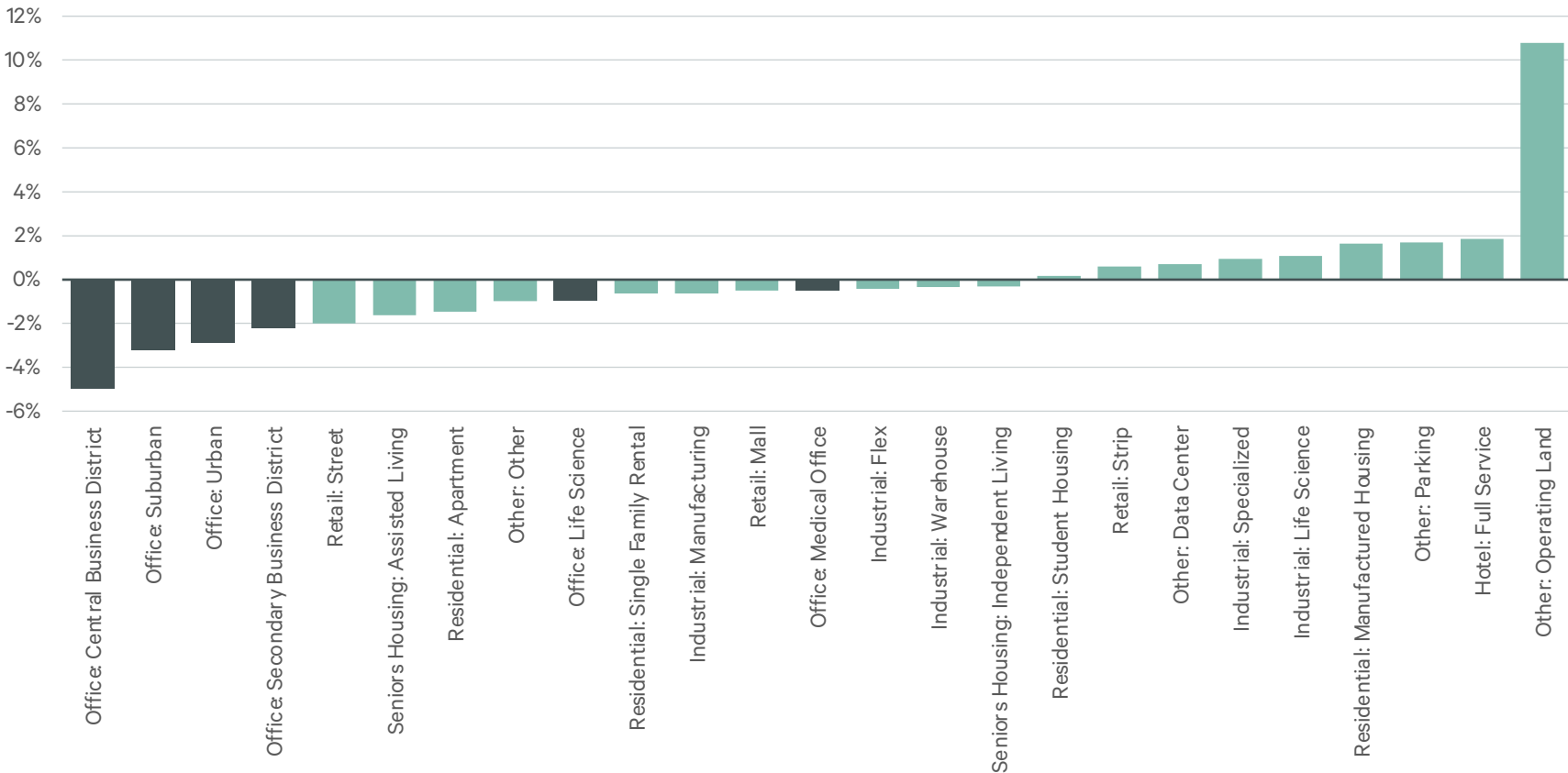
Source: PREQIN, NCREIF

*The NCREIF data is based upon annualized quarterly returns.

Alternatives outperforming traditional CRE sectors

- NCREIF’s NPI-Plus offers more insight into how sub-sectors are driving CRE returns. In Q3 2023, this dataset reported an aggregate quarterly return of -1.3%.
- While the traditional office sub-types were the worst performers, alternatives such as data centers, parking, and operating land offered positive returns.

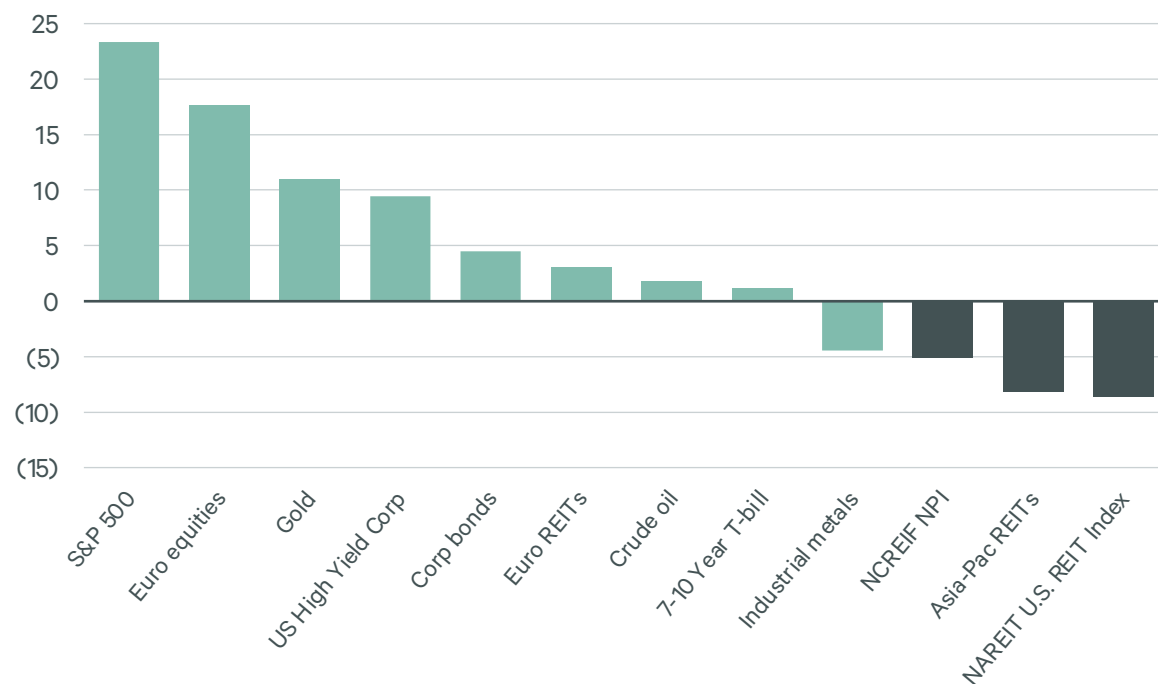
NCREIF NPI-Plus Total Return by Sub-Type, Q-o-Q (%)



Source: NCREIF

Real estate performance is weak relative to other assets and itself

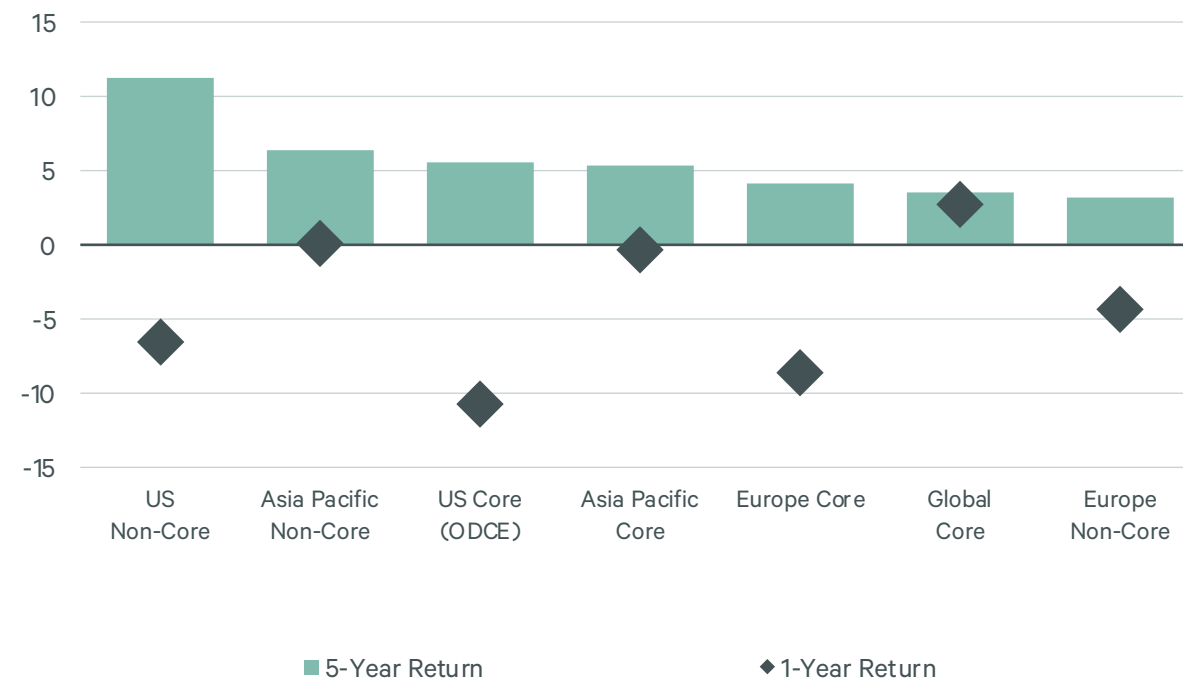
Year-to-Date Asset Returns Through Q3 2023 (%)



Source: Macrobond *NCREIF reflects the performance of the NPI from Q4 2022 to Q3 2023

*NAREIT U.S. REIT performance reflects change in the total return index from January 2023 to October 2023

Returns In Local Currency (%)



Source: NCREIF / GREFI

*Reflects data up to 2023 Q2

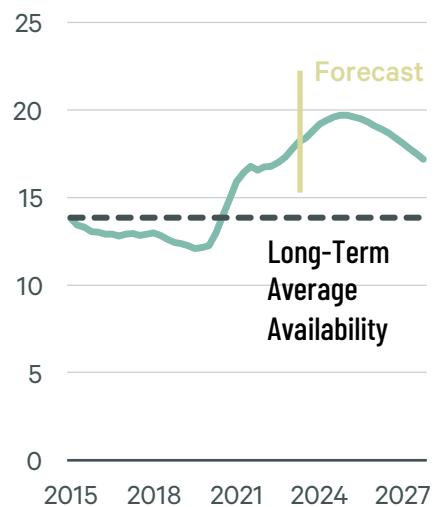
- Private real estate investment performance has lagged other asset classes so far in 2023 (-5.10%), dragged down by value write-downs driven by rising interest rates. Meanwhile, U.S. equities have rallied throughout 2023, up around 23% through November 1, 2023.
- Listed equities have delivered negative performance as well in 2023 with share prices below net asset values on average.

3

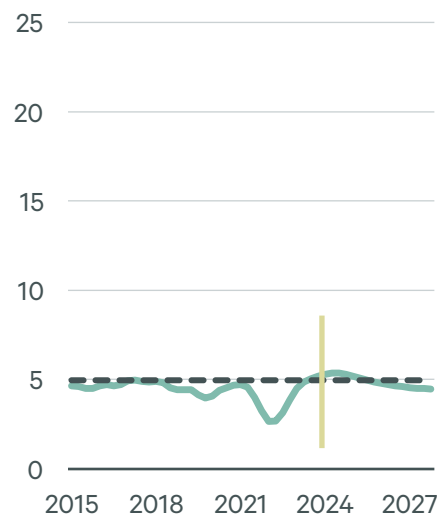
Bird's Eye
View

Fundamentals matter for investment performance

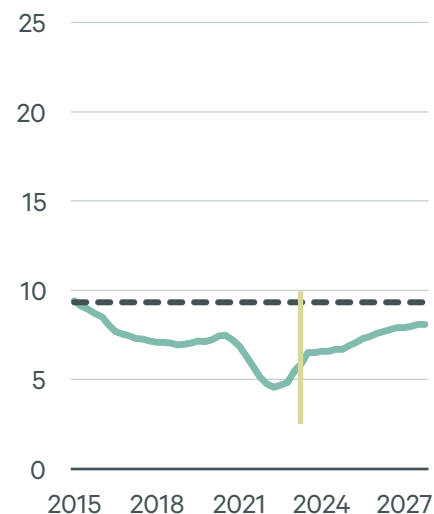
Office Availability (%)



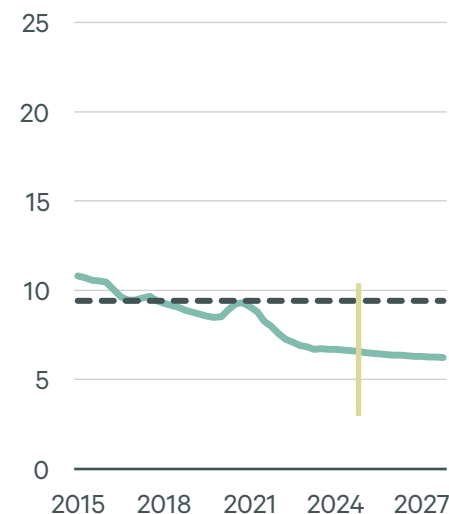
***Multifamily Vacancy (%)**



Industrial Availability (%)



Retail Availability (%)



Source: CBRE Econometric Advisors

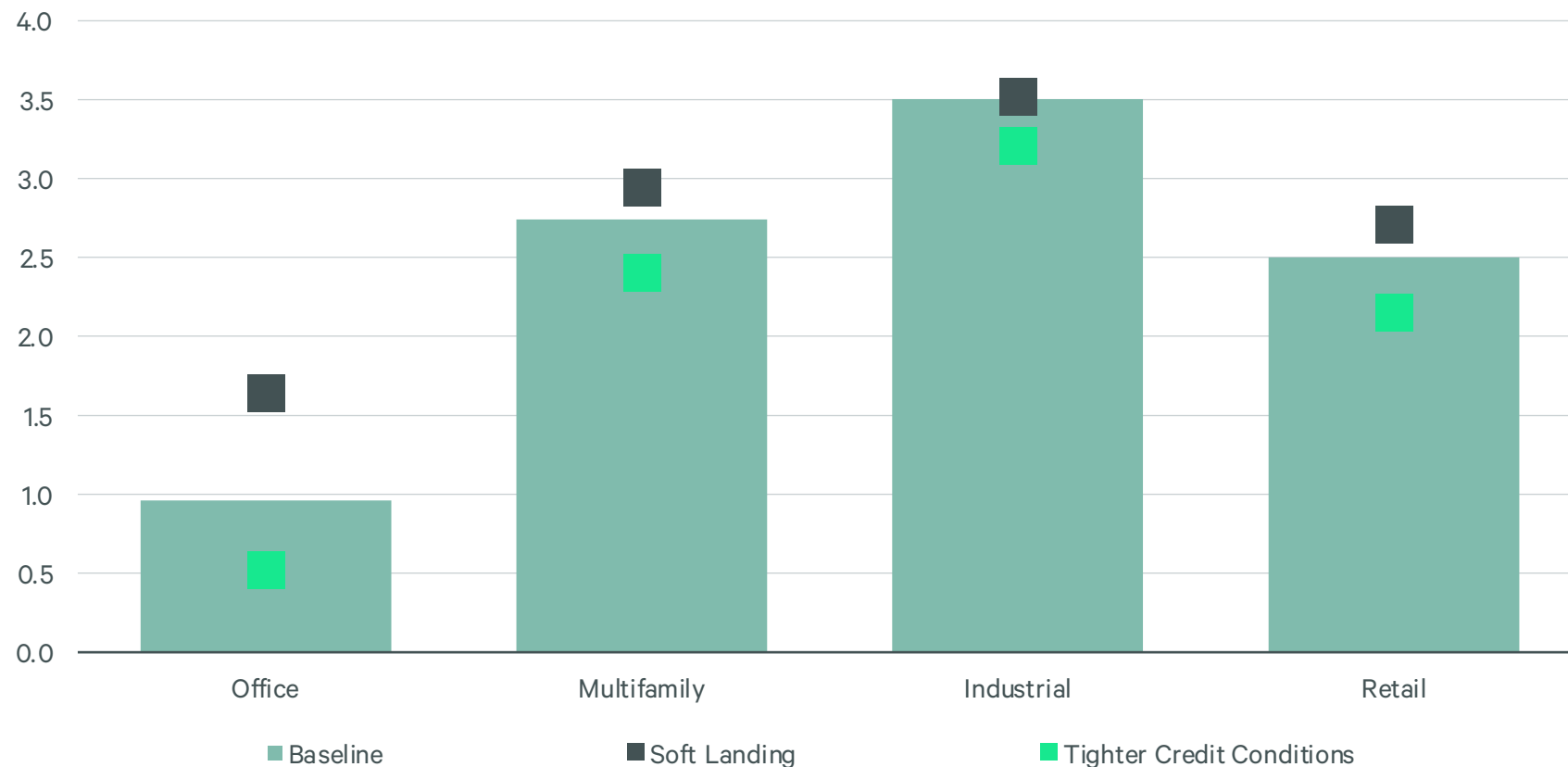
*Multifamily vacancy is based upon a three-quarter moving average.

- Market availability rates are on the rise for most property types with the retail sector being a key exception. Expectedly, fundamentals are deteriorating most dramatically within the office market, where the availability rate is five points above their long-term average. The multifamily market is seeing conditions soften, especially within Sun Belt markets, and vacancy levels are now aligned with their historic average.
- Meanwhile, industrial and retail markets fundamentals are expected to remain tight relative to historical trends. This backdrop is limiting the severity of devaluations across these sectors.

Fundamentals drive rents, which drive valuations

- Most asset classes will see real rent growth in upcoming years as market fundamentals should generally improve during the medium term.
- Rent growth will be subdued within the office space. Further, the distance between the upside ‘Soft Landing’ and downside ‘Tighter Credit Conditions’ scenarios highlights the degree of uncertainty in this space.

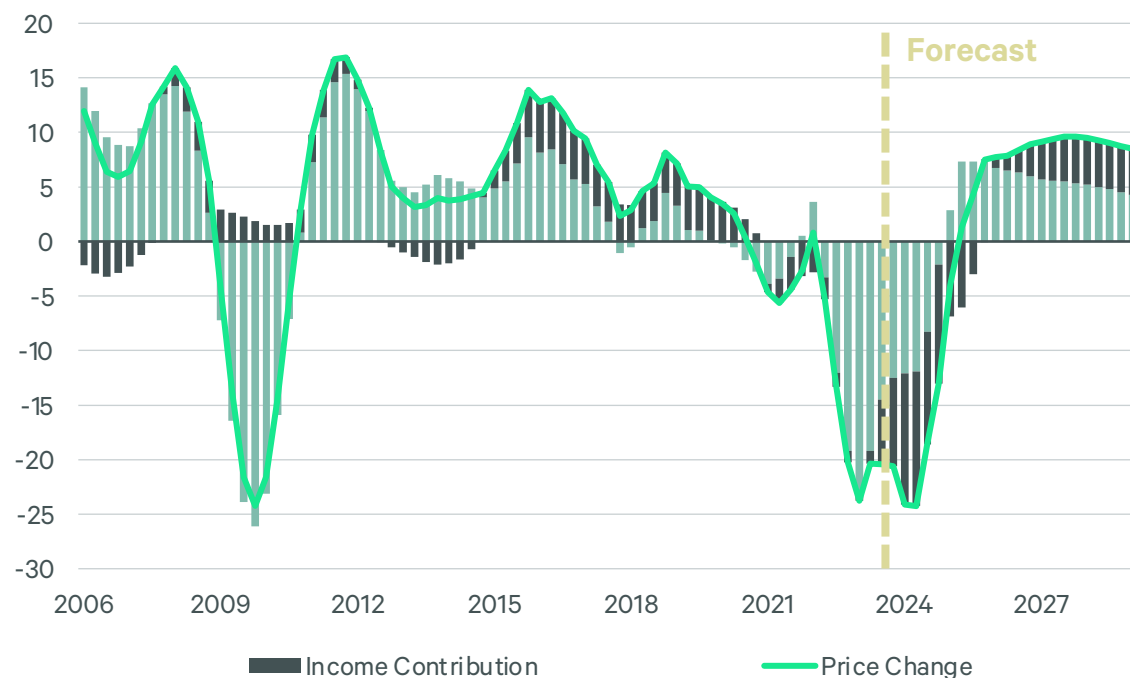
Average Annual Rent Growth, Q4 2023 - 27 (%)



Source: CBRE Econometric Advisors

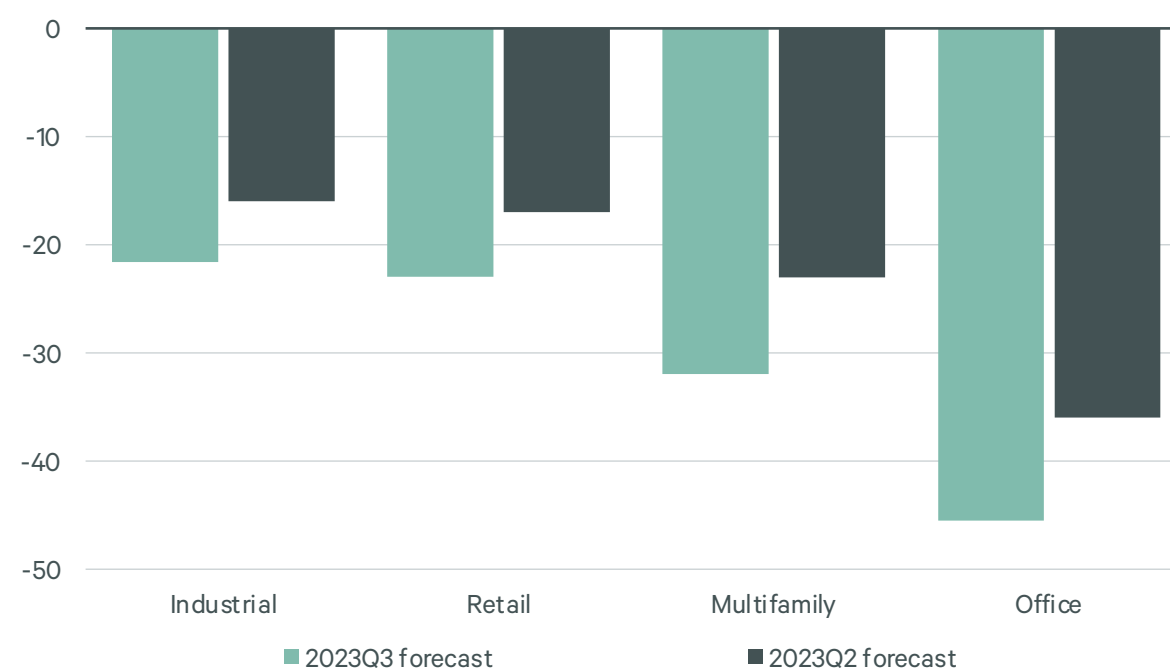
The outlook for valuations

Percentage Point Contribution to Y-o-Y Office Value Changes (%)



Source: CBRE Econometric Advisors

Peak-to-Trough Capital Value Changes (%)



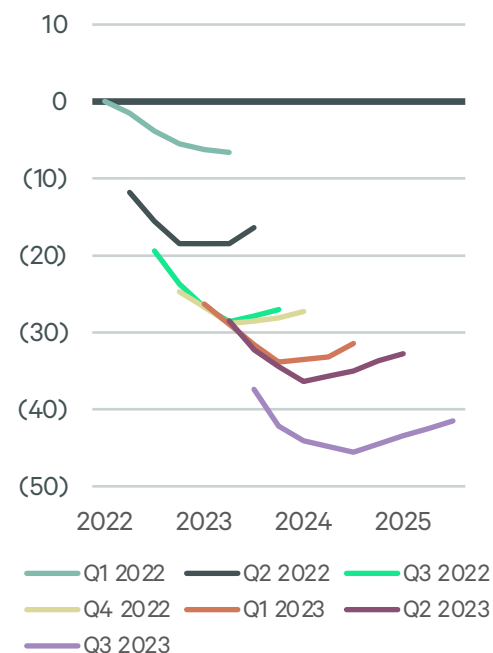
Source: CBRE Econometric Advisors

- Both rising cap rates and softening income growth should trigger further office devaluations in coming quarters. This cycle is different from the GFC when income had a positive impact on values; today NOIs are rolling downward.
- An increase in long-term bond yields during September and October changed our estimation for both market cap rates and how much further valuations have to fall this cycle. CBRE EA expects capital values to stabilize by mid-2024. Valuations within the office sector should stabilize a few quarters later.

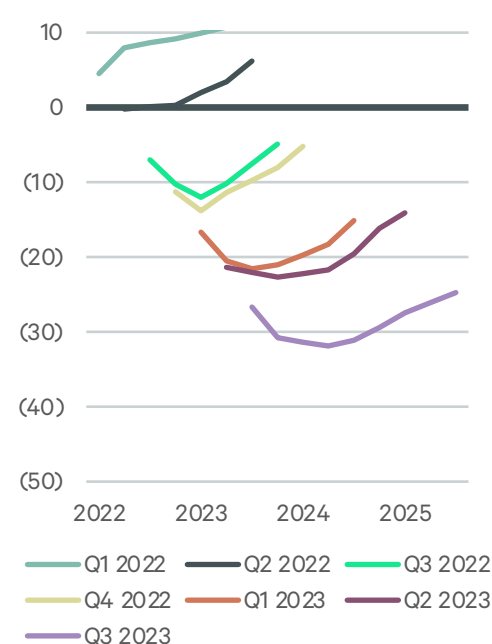
How our capital value forecast has evolved

Change In Value From Q1 2022 by Forecast Vintage (%)

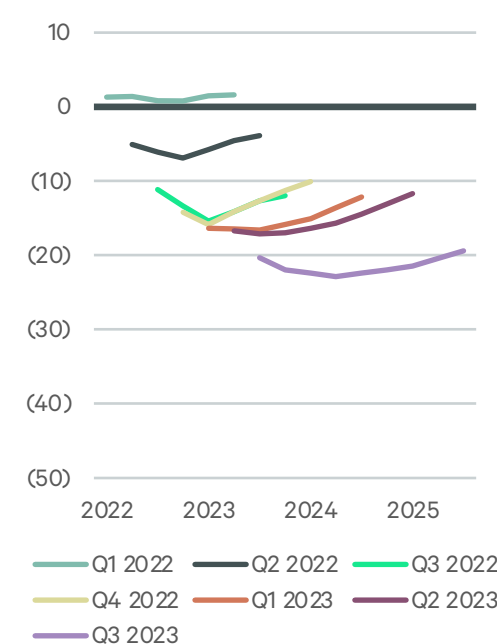
Office



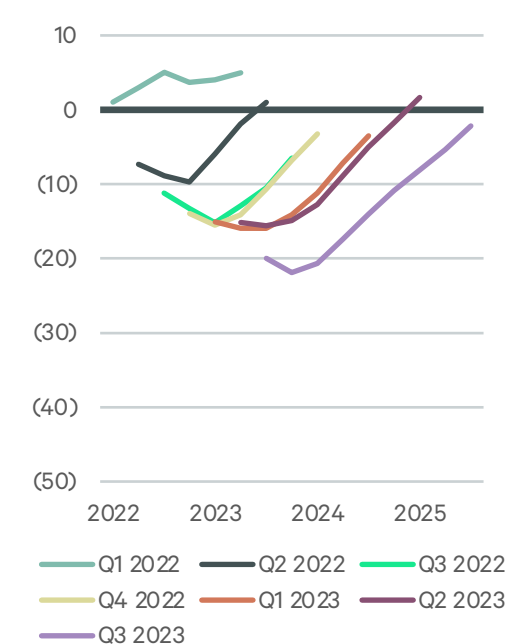
Multifamily



Retail



Industrial

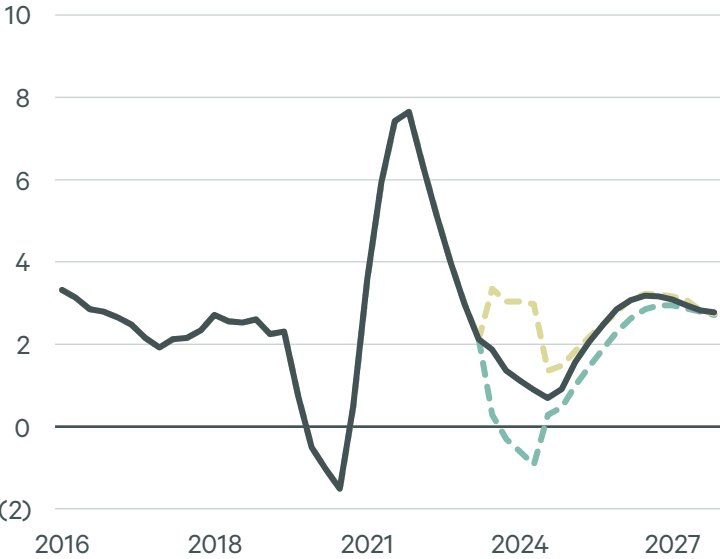


Source: CBRE Econometric Advisors

- The upward trajectory of interest rates from Q1 2022 onward forced a steady deterioration in our outlook for capital values. Subsequent forecast vintages for valuations were consistently revised downward.
- Whilst there was limited change between vintages during the first half of 2023, Q3 2023 saw a notable downside revision, due to a jump in long-term bond yields.

A moderate recession will change our rent growth expectations

Rent Growth, Y-o-Y (%)

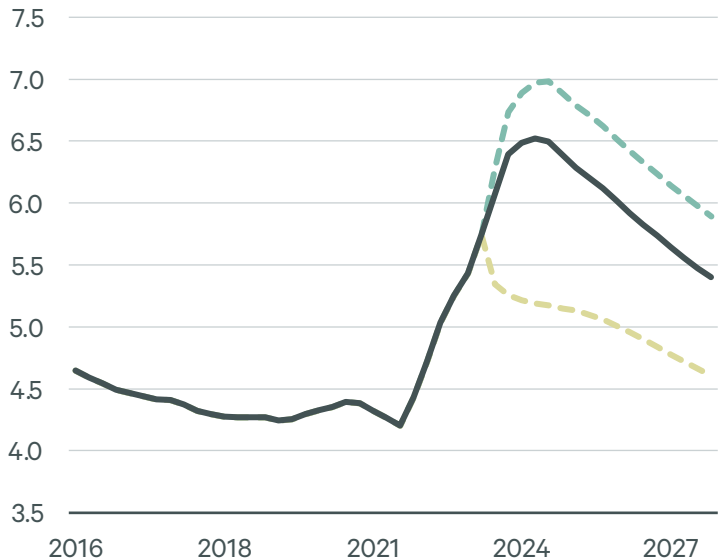


--- Tighter Credit Conditions --- Soft Landing — Baseline

Source: NCREIF, CBRE Econometric Advisors

Our Baseline view expects economic growth to stall in early 2024 and this will slow the pace of rent growth through H1 2024. Should consumers exceed expectations and growth persist we believe rent growth could accelerate. Conversely, a more constrained credit environment would drive biting rent declines.

Cap Rate (%)

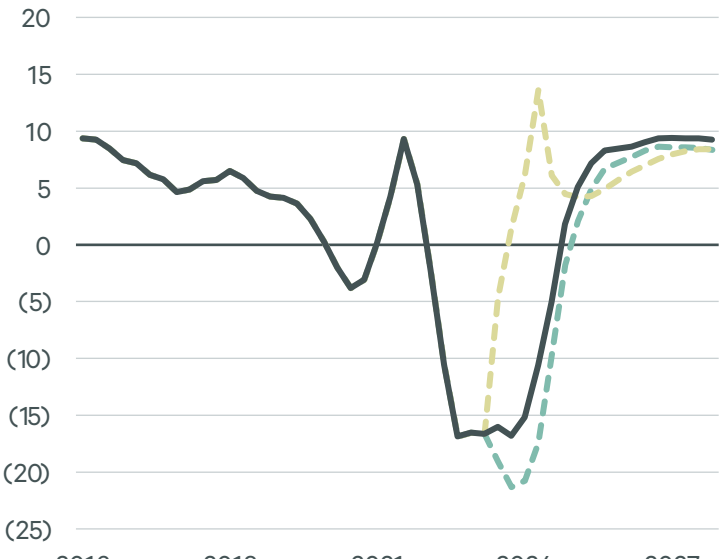


--- Tighter Credit Conditions --- Soft Landing — Baseline

Source: NCREIF, CBRE Econometric Advisors

Our Baseline view is predicated upon the Fed's tightening cycle being complete. Should credit conditions tighten more, we believe cap rates would increase by an extra 50 basis points through early 2024. Greater macro growth with limited inflation would usher in cap rate compression in coming months and quarters.

Capital Value Return, Y-o-Y (%)



--- Tighter Credit Conditions --- Soft Landing — Baseline

Source: NCREIF, CBRE Econometric Advisors

Overall, CRE valuations should decline nearly one-third. Values should begin to stabilize by mid-2024, with the office markets stabilizing later in the year. Our Tighter Credit Conditions Scenario would both exaggerate value losses and delay the recovery.

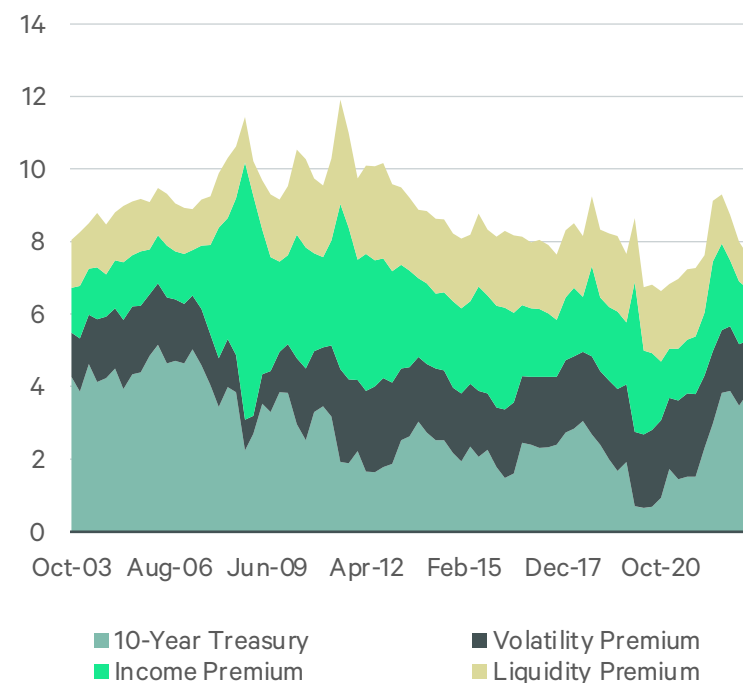
CBRE EA's 'Hurdle Rate' framework

Hurdle Rate Model



Source: CBRE Econometric Advisors

Average CRE Hurdle Rate by Component



Source: CBRE Econometric Advisors

How We Calculate the Risk Premium:

— VOLATILITY PREMIUM

Historic market investment performance compared to the broader CRE investable universe

— LIQUIDITY PREMIUM

Investment volume

— INCOME PREMIUM

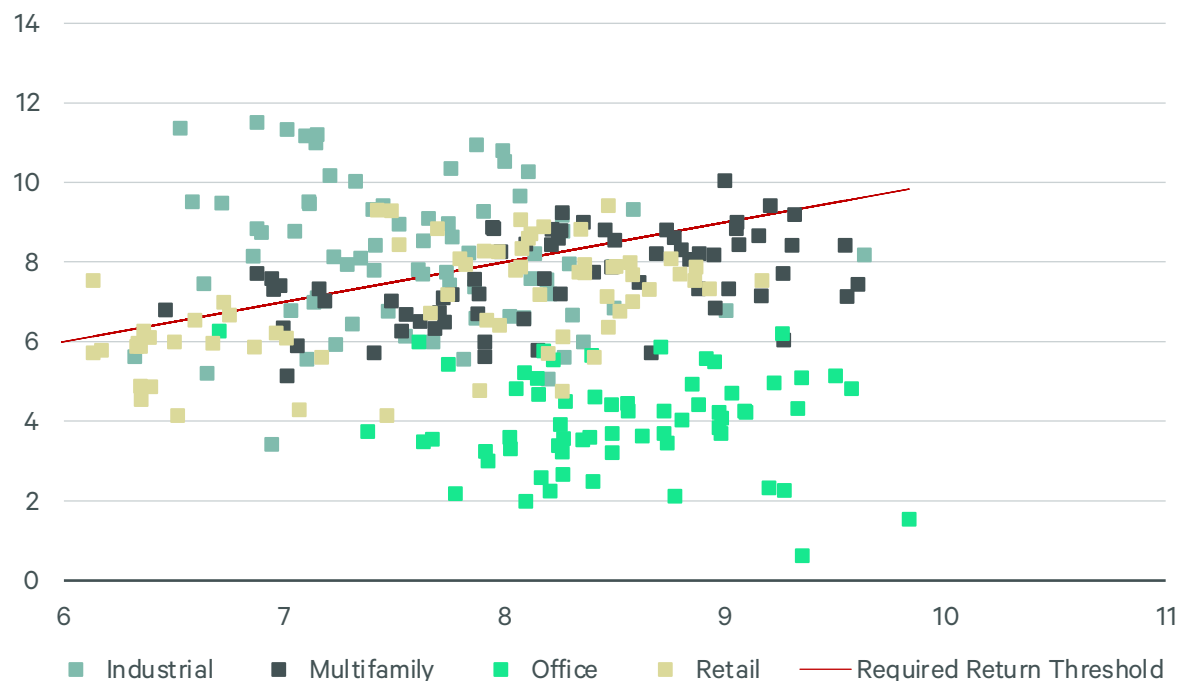
BBB Spreads, and;
Current and historic vacancy rates

Source: CBRE Econometric Advisors

- CBRE EA is developing a hurdle rate model meant to inform investors on the best risk-adjusted returns. The framework compares our 10-year expected return forecast against an objective risk-premium, or hurdle rate.
- The hurdle rate—or the expected return required to justify investment—is the sum of a risk-free rate, and the real estate risk premium (described above).

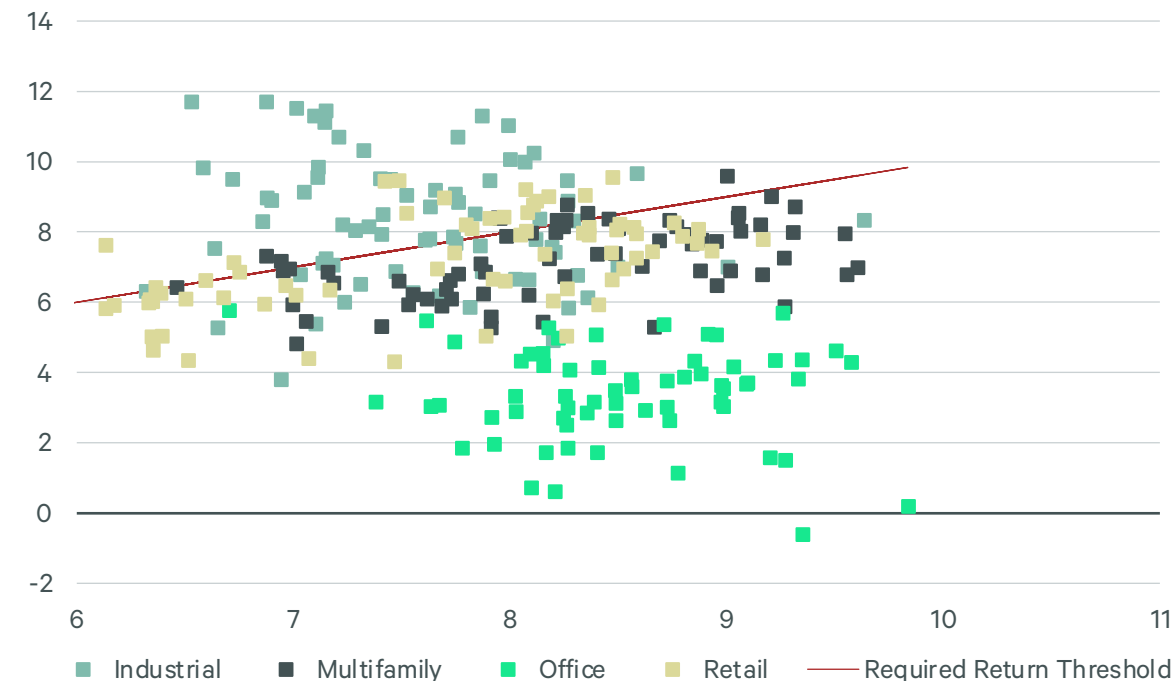
Putting our hurdle rate analysis into practice

10-Year Expected Return and Required Rate of Return, Baseline Scenario



Source: CBRE Econometric Advisors

10-Year Expected Return and Required Rate of Return, Downside Scenario



Source: CBRE Econometric Advisors

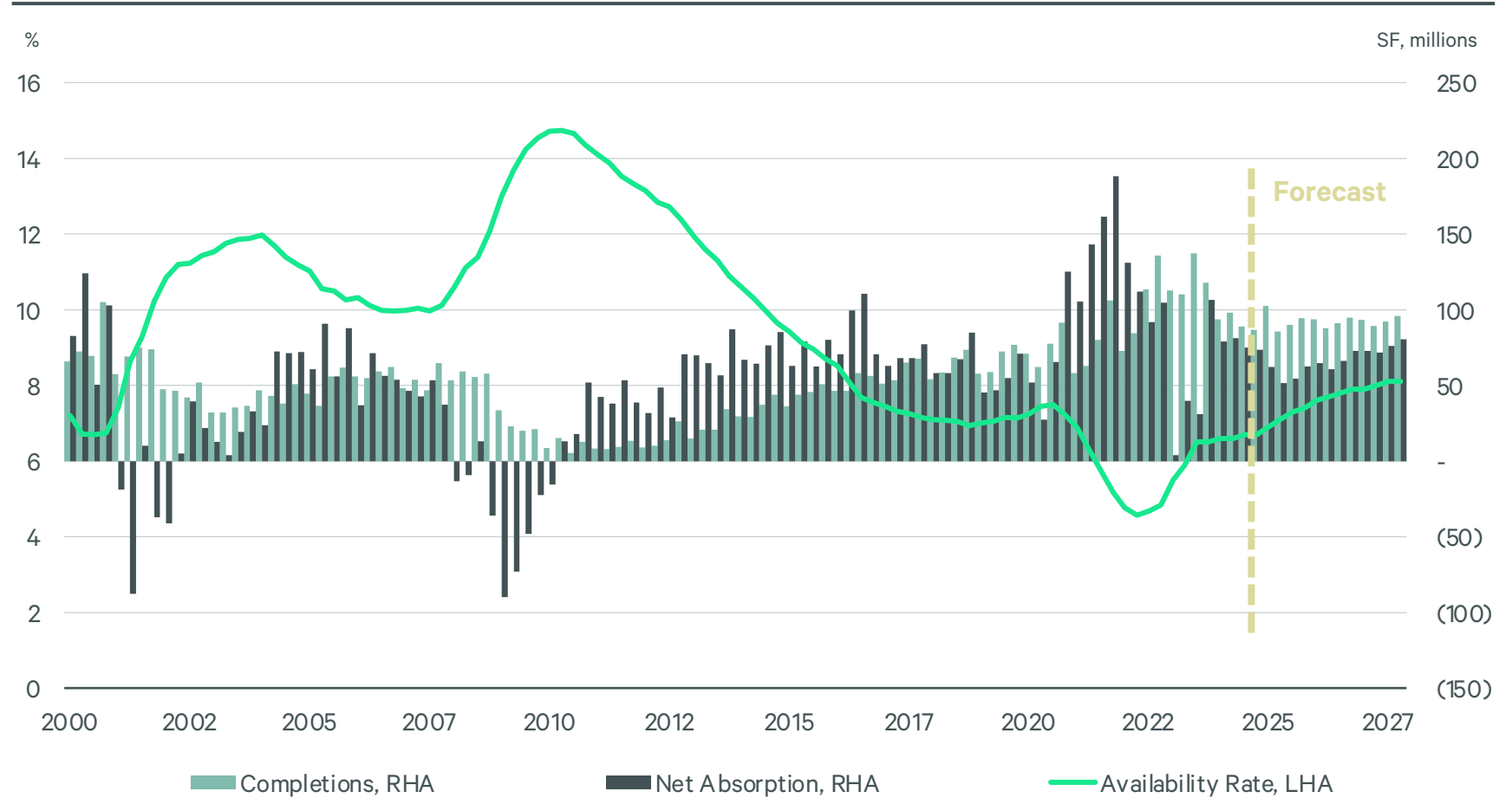
- The figures above illustrate how modeled market-level hurdle rates might be used in conjunction with expected return forecasts. The markets above the required rate of return are investable.
- The practical interpretation of this analysis is that the office sector is not yet investable given where cap rates are. We view relative value as being strongest in the industrial sector with many attractive retail and multifamily markets.

4

Industrial

Industrial availability is beginning to trend upward

- Availability continues its upward trend, increasing 55 basis points (bps) from the prior quarter. All but 10 of the 75 markets EA tracks saw a year-over-year-increase in their availability rate.
- Despite headwinds, the sector still garners strong occupier demand. The 36 million sq. ft. of net absorption in Q3 is a slight drop from the prior quarter, but a sizable increase from Q1 of this year.

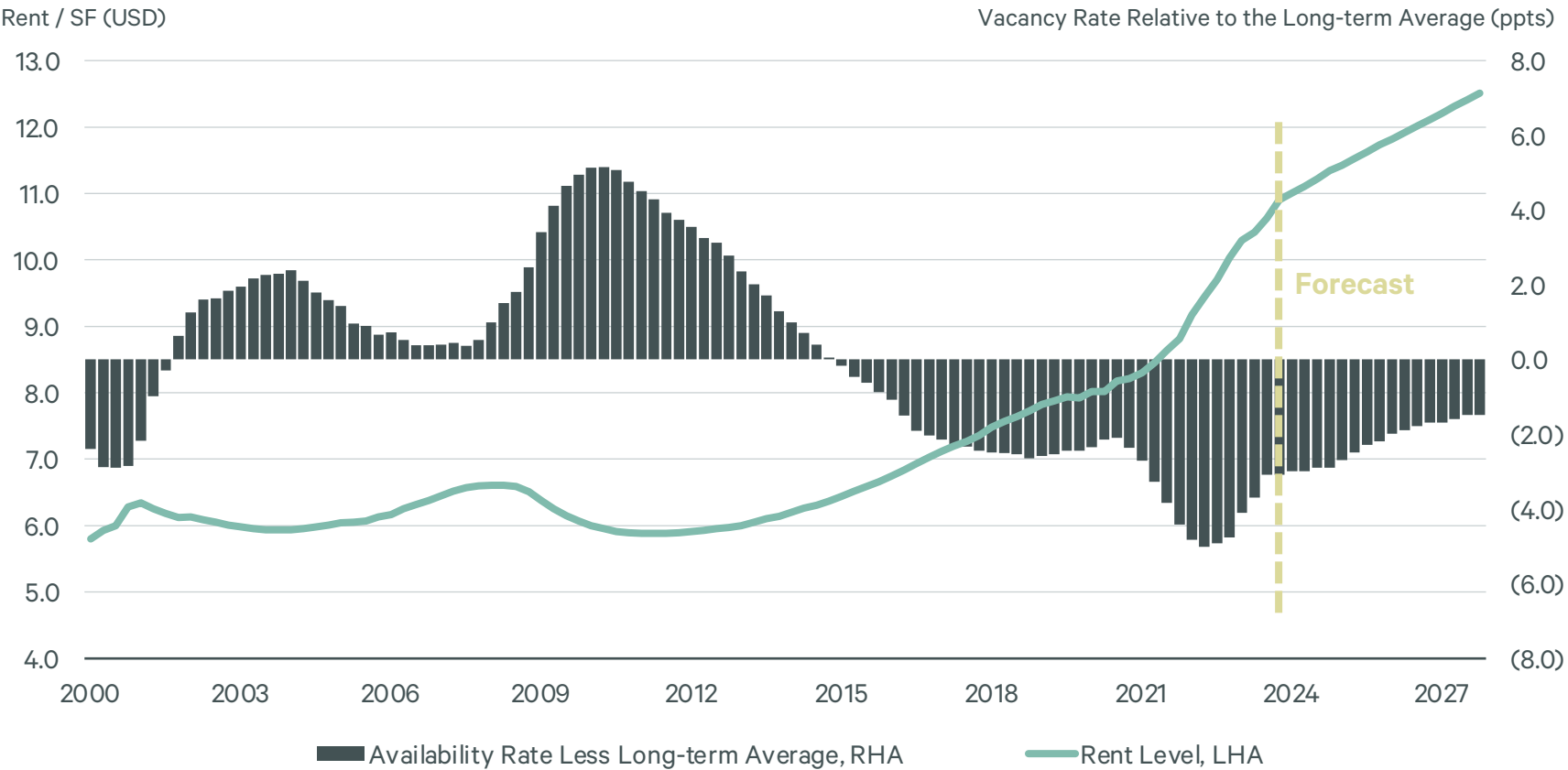


Source: CBRE Econometric Advisors

Low availability will support rent growth

- Although vacancies will trend upward in the near-term available space remains scarce. This backdrop underlies expectations for continued rent roll-ups and NOI growth for the sector.
- Year-over-year rent growth has moderated to single-digit levels, dropping to 9.6% in Q3 - a first in nearly two years.

Rent Levels Relative to Space Scarcity

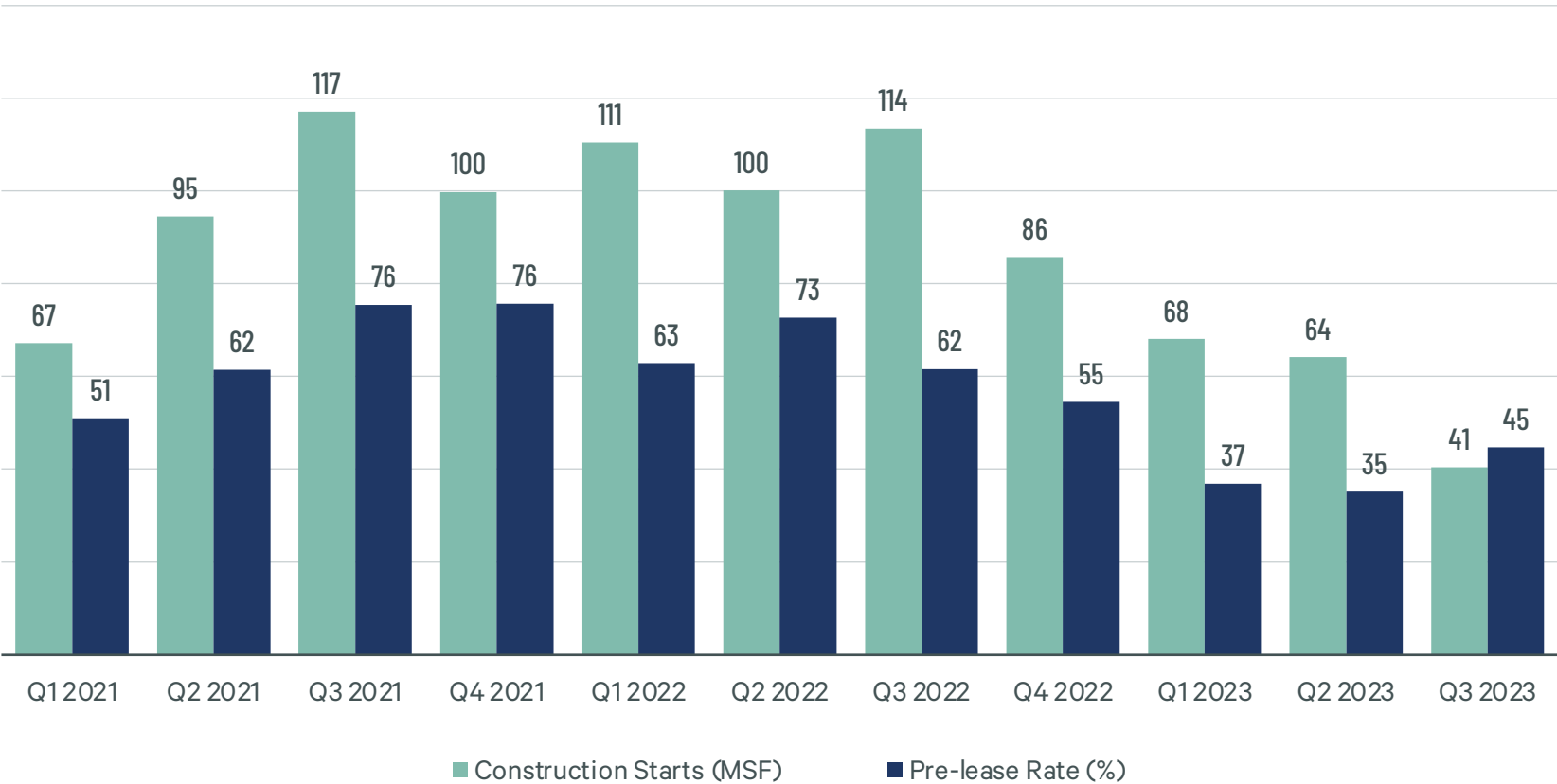


Source: CBRE Econometric Advisors

Pre-leasing up, construction slows for fourth consecutive quarter

- Pre-leasing on completed industrial buildings increased to its highest level since Q4 2022, a trend that will help alleviate some of the pressures of new supply.
- Construction starts have declined for four consecutive quarters and are now less than half of what the sector saw in Q4 2022. Consequently, it is possible that the market may soon face supply shortages again.

Industrial Pre-Leasing Rate (%) Relative to Construction Starts, Millions SF

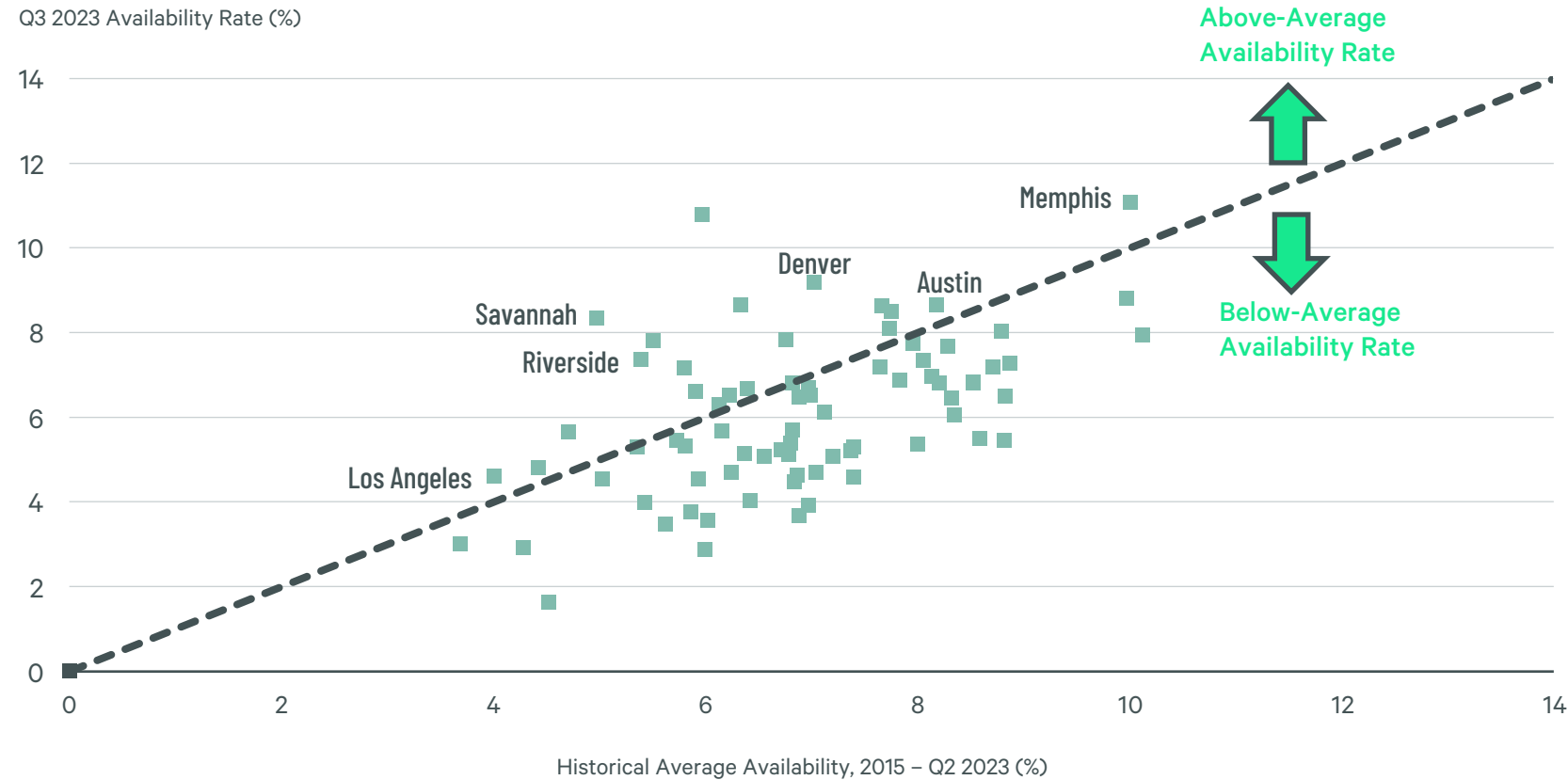


Source: CBRE Econometric Advisors

Industrial markets will mostly enjoy availability rates below historic levels

– Most markets continue to see availability rates below their long-term averages. However, in Q3 2023, 14 markets exceeded their historical average availability, a notable increase from only six in the previous quarter.

Expectations for Vacancy Rates Relative to Their Pre-COVID Average

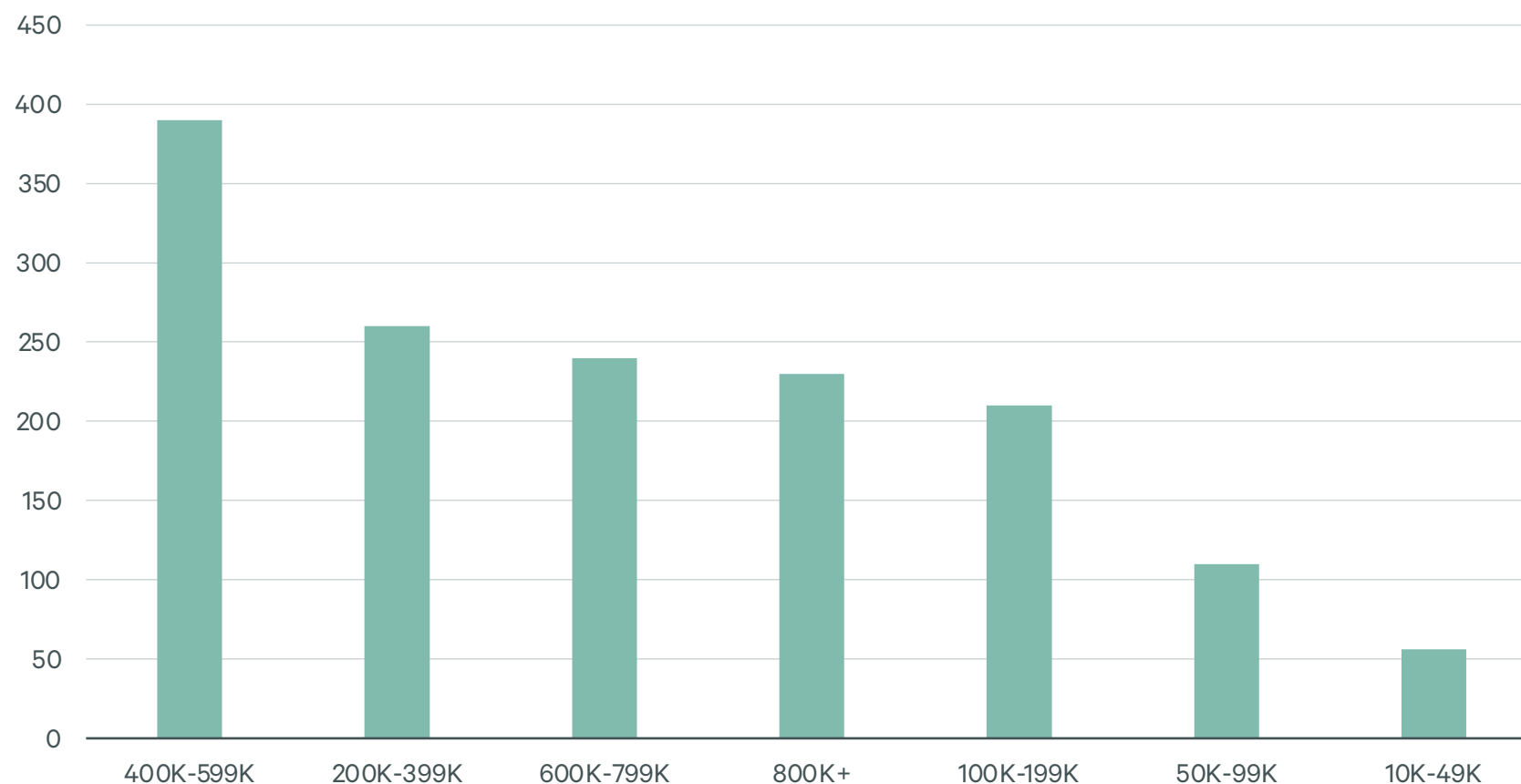


Source: CBRE Econometric Advisors

Larger assets are driving the rise in industrial availability

- Larger bulk assets, particularly the 400,000-599,000 sq. ft. cohort, have seen the greatest increases in availability over the past year.
- While smaller asset cohorts have comparatively outperformed, they haven't been immune to softening sector fundamentals.

Basis Point Change in Availability Rate by Size Cohort Q3 2022 – Q3 2023



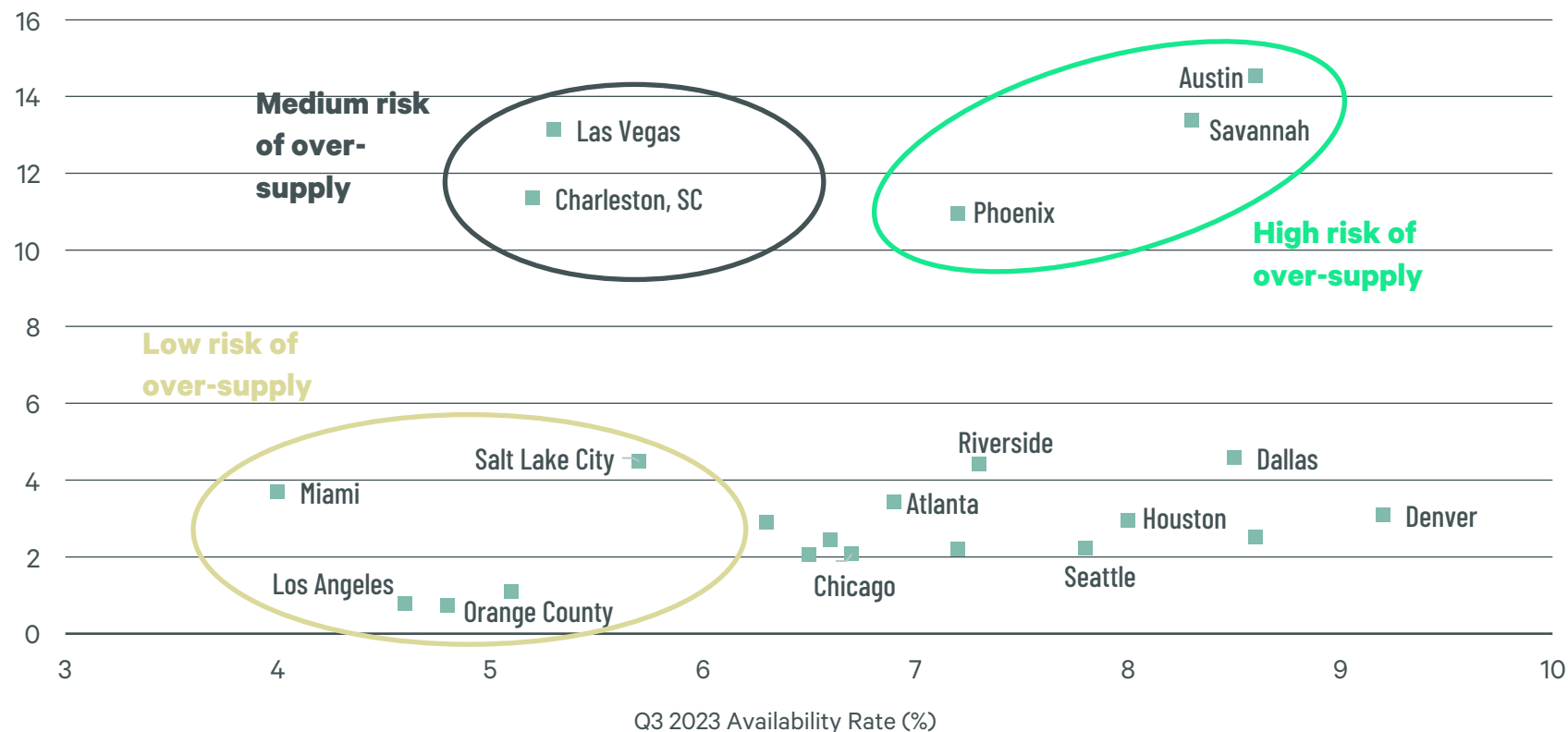
Source: CBRE Econometric Advisors

Where new development is and is not a risk

- The markets most at risk are those facing both new product and relatively high availability rates. This is most acute in emergent logistics hubs, such as Savannah and Phoenix, where speculative builders tend to focus.
- The places best positioned include Miami and Southern California. And even though Riverside has seen a notable increase in availability during the past year, especially as some price-sensitive tenants are pulling back from the market, it is unlikely that supply risk will accelerate from here.

Stock Underway Relative to Current Availability Rates (%)

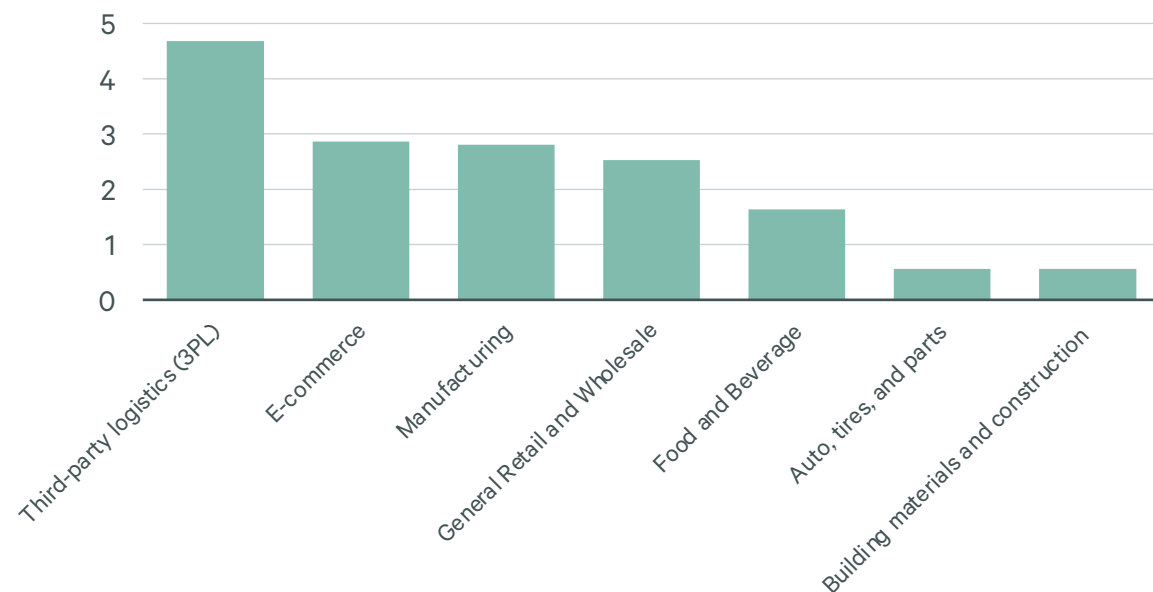
Underway As A % of Total Stock



Source: CBRE Econometric Advisors

CBRE professionals see momentum from logistics and e-commerce

Which type of industrial tenant are you seeing the greatest leasing momentum from? (Chart shows average rank; Higher Number = Top Choice)



Source: CBRE Econometric Advisors

Note: Highest average rank has greatest leasing momentum

What is the most significant factor causing cap rates variation between industrial properties with identical quality and location? (Total Number of Responses)



Source: CBRE Econometric Advisors

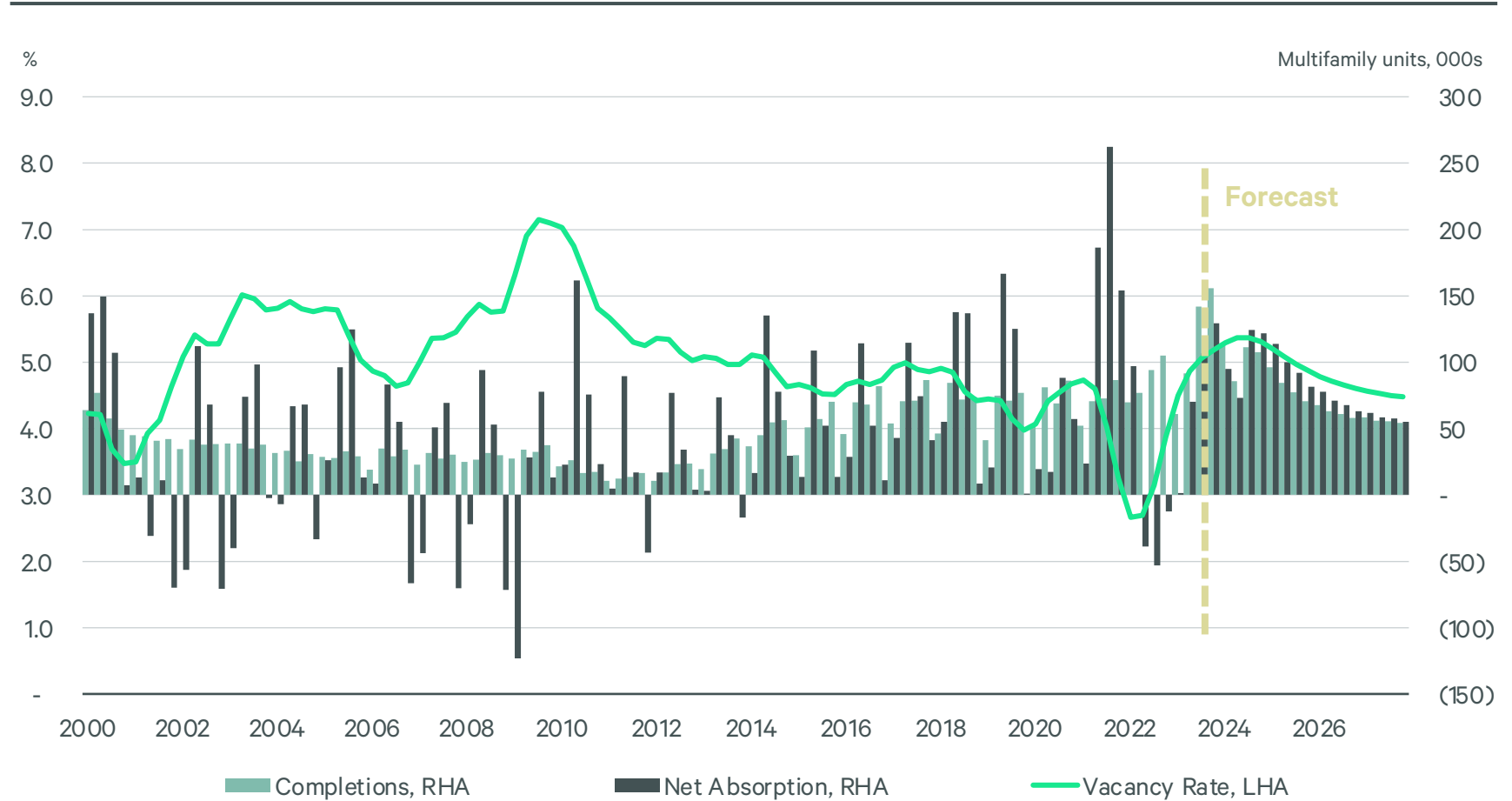
- CBRE industrial experts are seeing the greatest leasing momentum from third-party logistics and e-commerce firms with the least momentum from automobile and building material storage.
- Given the rapid growth in industrial rents, many in-place leases are well-below market rents. These income growth opportunities will be reflected in lower cap rates.

5

Multifamily

Fundamentals will remain tight amid a construction deluge

- Market fundamentals are softening quickly as a deluge of new supply comes to market. The vacancy rate ticked up in Q3 to 5.2%, slightly above its average during 2010-2019 of 4.9%.
- We expect vacancy to peak in mid-2024 at 5.4%, which is far below the peak achieved during the *Global Financial Crisis*, at 7.1%.



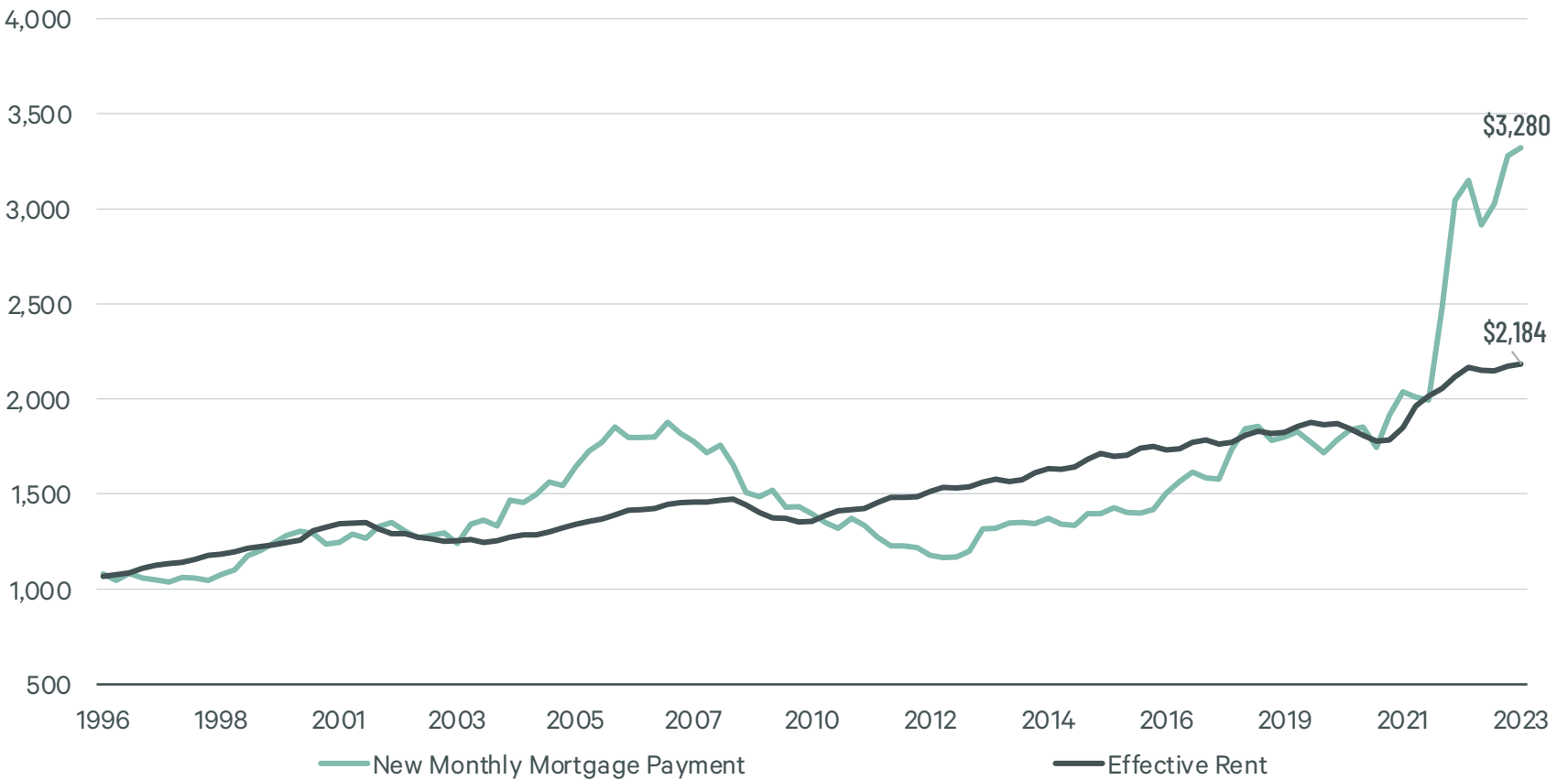
Source: CBRE Econometric Advisors

*Vacancy rate is expressed as a 3-quarter moving average.

The cost of mortgages is making renting more attractive

– A key tailwind for rental housing is severe dislocation within the for-sale market. Limited for-sale inventory and high mortgage costs are increasing the number of households who are renting by necessity. Further, many ‘well-heeled’ renters are simply waiting to see how valuations and/or mortgages costs change in coming quarters.

U.S. Average Rent Versus New Mortgage Payment (USD)

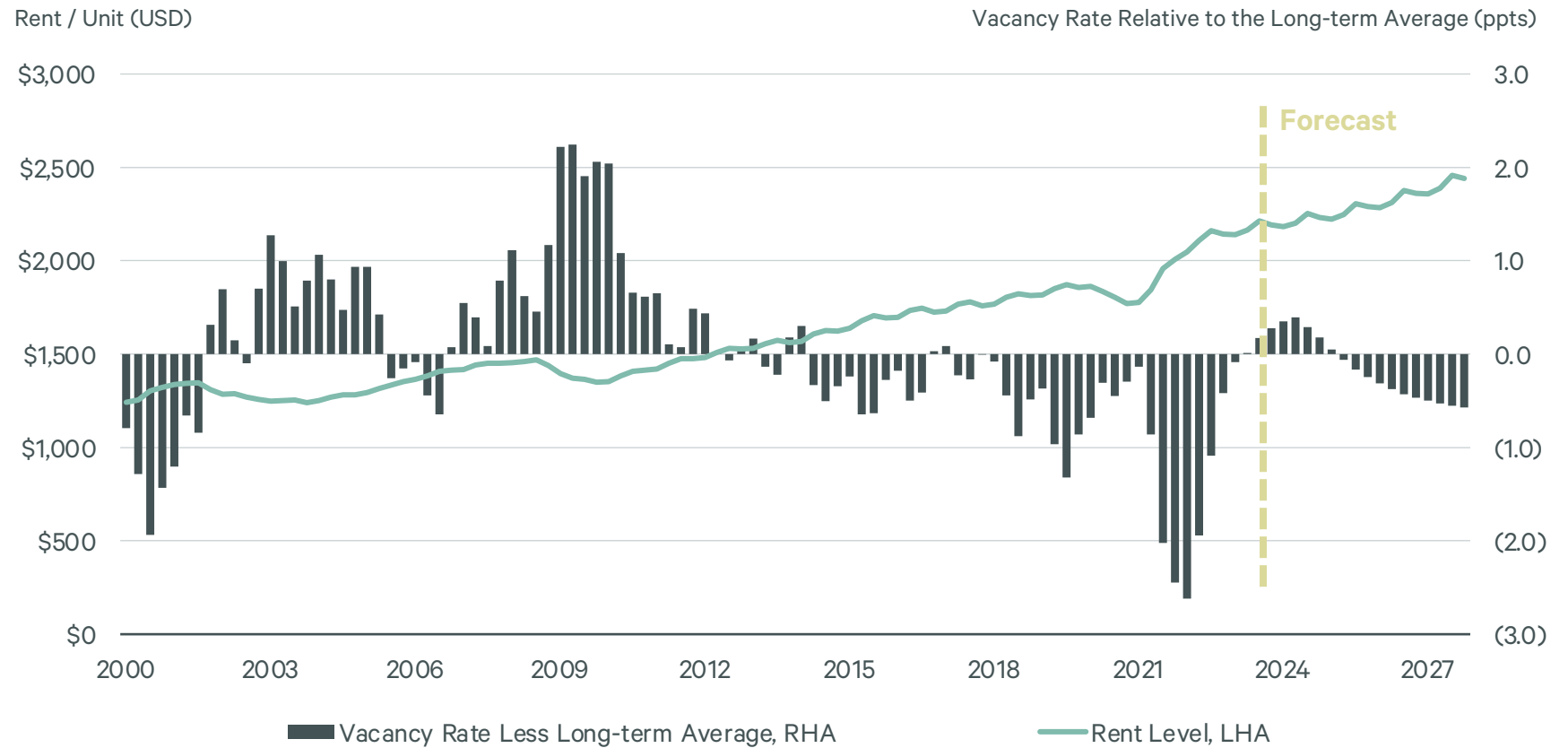


Source: CBRE Research, CBRE Econometric Advisors, Freddie Mac, U.S. Census Bureau, Realtor.com®, FHFA, Q3 2023.

Tight fundamentals caused rapid rent growth but is now likely to slow

- As the vacancy rate ticked up above its average during 2010-'19 the pace of annual rent growth has stalled to 0.7%. This is well below the 3.2% CAGR enjoyed during 2010-'19.
- On a positive note, we expect this period of softer market conditions to only be brief. Market vacancy rates should fall below trend again by 2025.

Rent Levels Relative to Space Scarcity

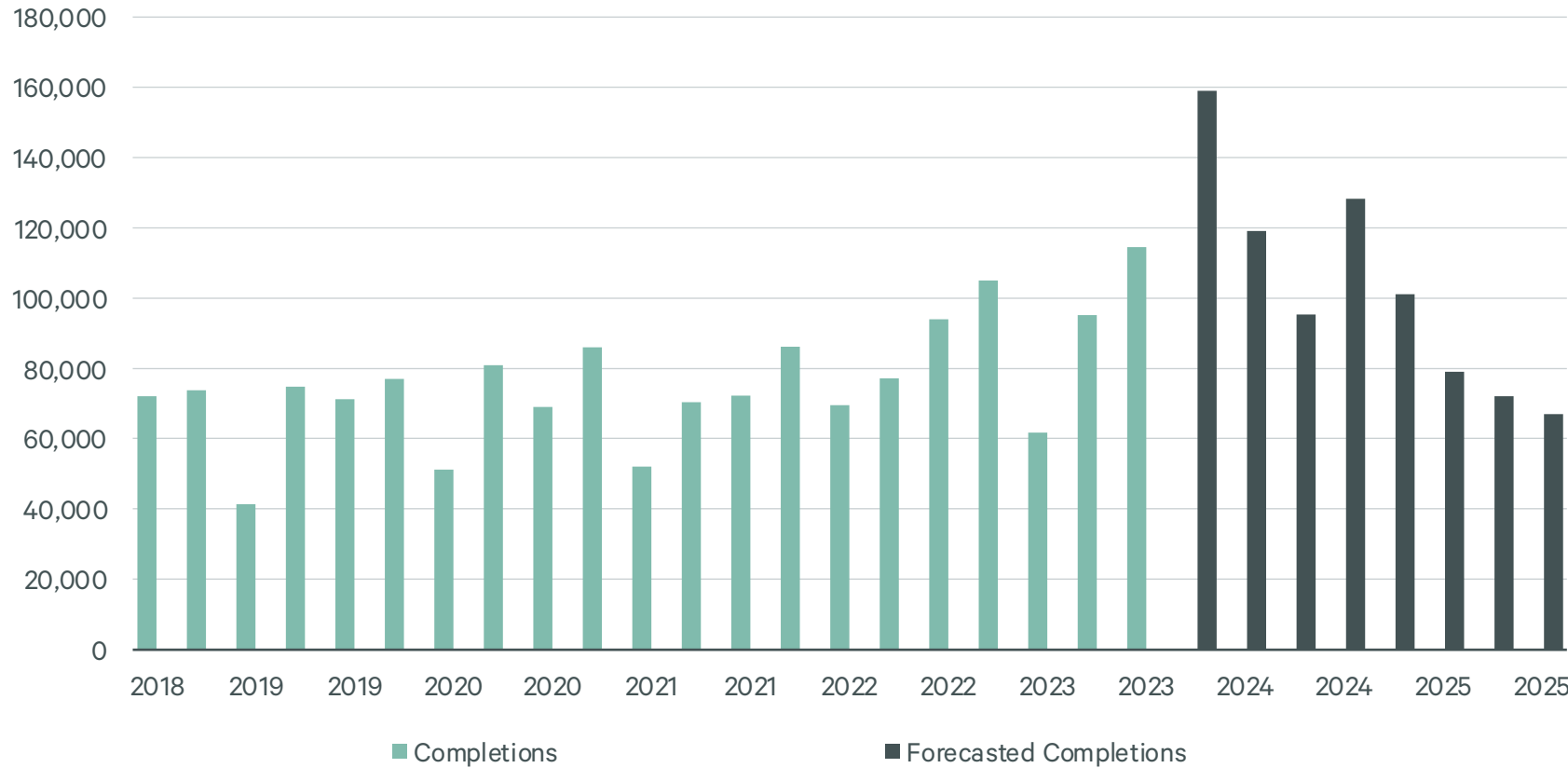


Source: CBRE Econometric Advisors

The wave of supply is expected to continue in the near term

- The multifamily sector witnessed a record level of completions in Q3 2023. We anticipate even more completions to flood the market in the fourth quarter. By 2025, we forecast the wave of the supply to ebb, and return to longer-term trends.
- Completions were highest in Sun Belt markets. The bulk of peak supply in these markets is expected in the next two quarters.

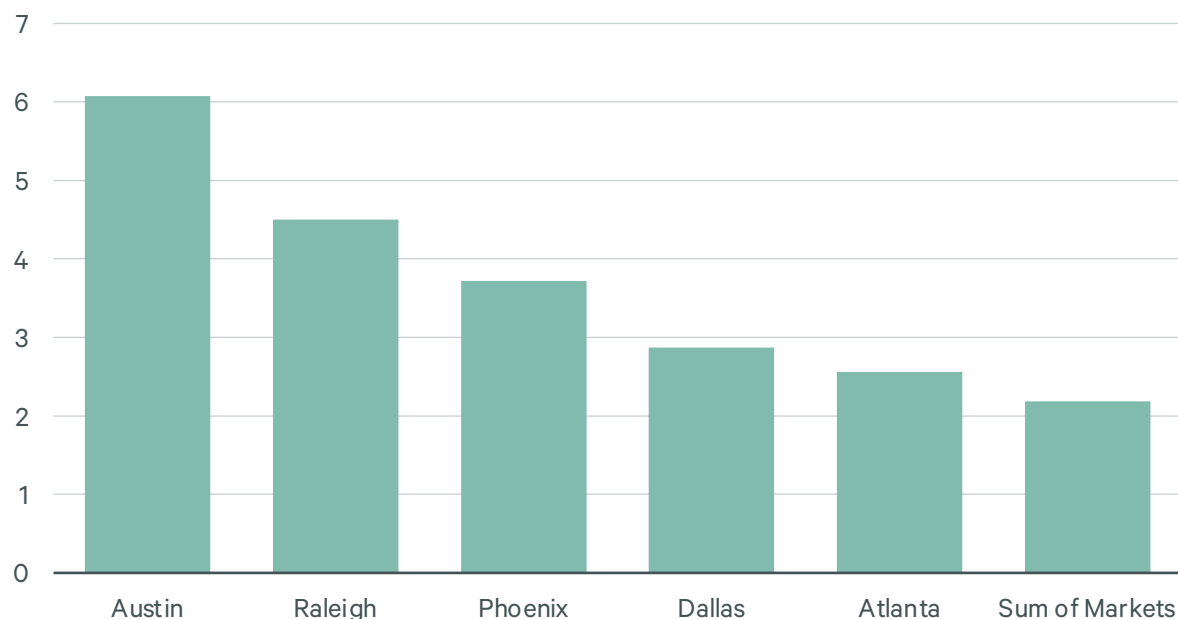
Quarterly Completions, Multifamily Units



Source: CBRE Econometric Advisors, Dodge Data & Analytics

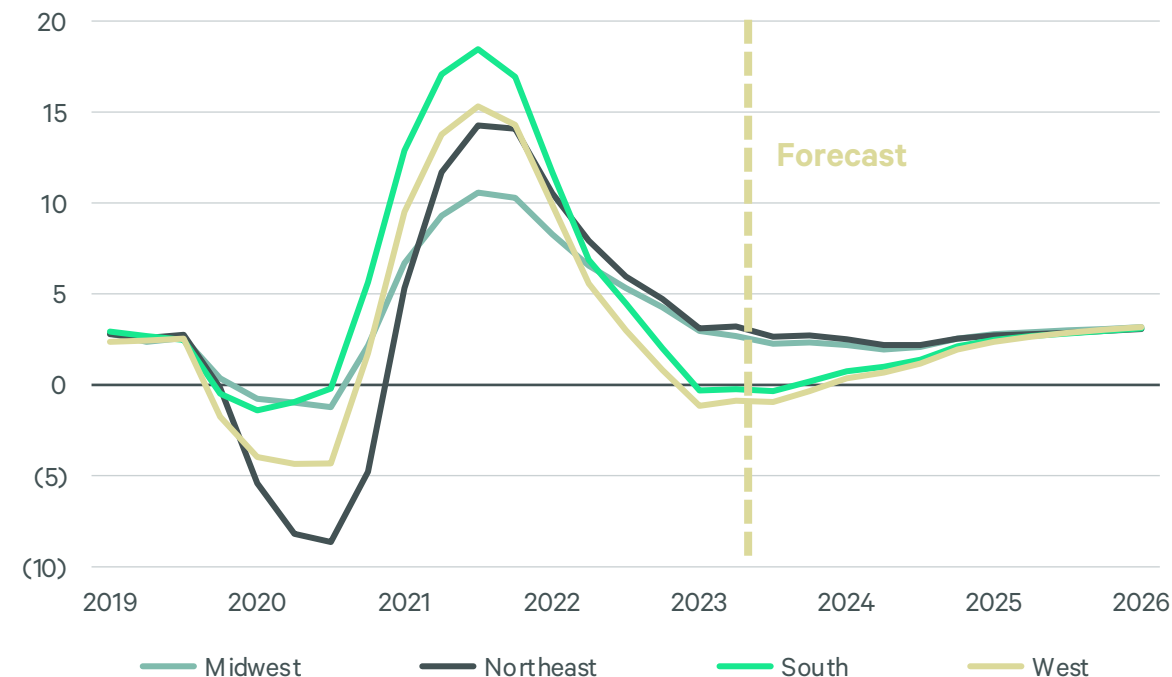
Supply concerns are concentrated across the Sun Belt

Completions Rate During the Past Year by Selected Sun Belt Market (%)



Source: CBRE Econometric Advisors, Dodge Data & Analytics

Rent Growth by Region, Y-o-Y (%)

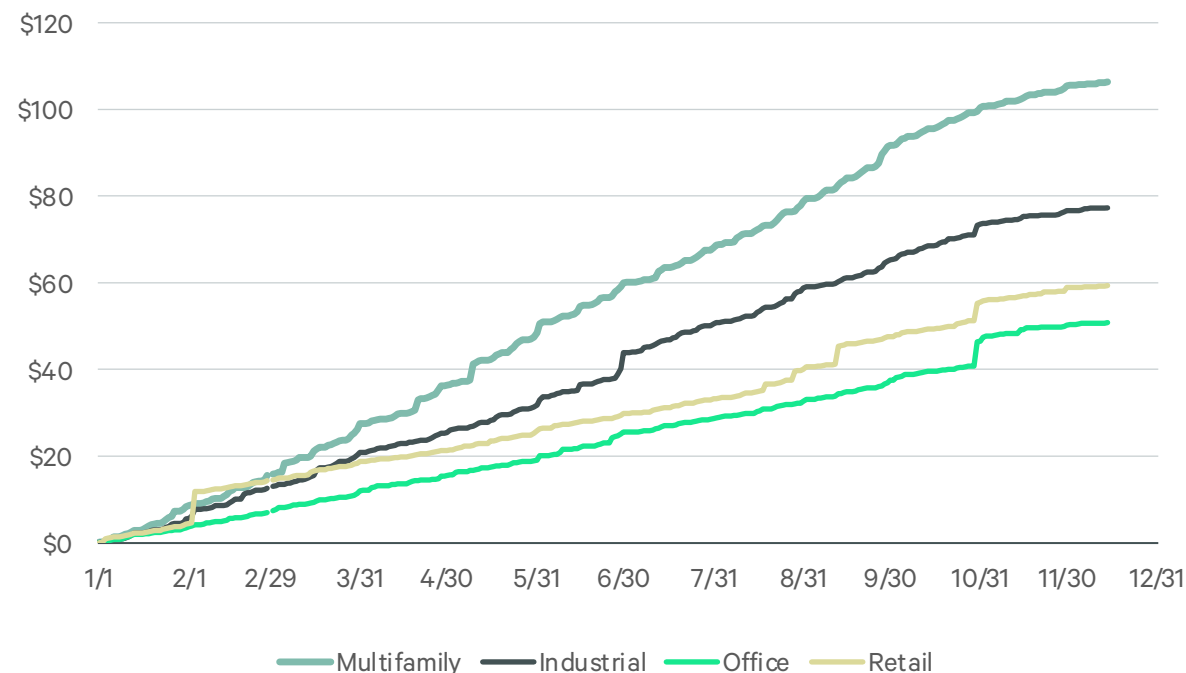


Source: CBRE Econometric Advisors, RealPage Inc

- Sun Belt markets magnify the national trend, leading the way in terms of supply and its effect on rent growth. Perennial rent growth outperformers since 2019, these markets have lost ground relative to the national average in rent growth in 2023. We expect negative Y-o-Y rent growth for Sun Belt markets in 2024, and a longer-term moderation of their strength relative to the rest of the country.
- Markets in the West and South are expected to turn slightly negative in 2024. Meanwhile, the Midwest and Northeast will benefit from a more modest supply pipeline that will keep rent growth in the black.

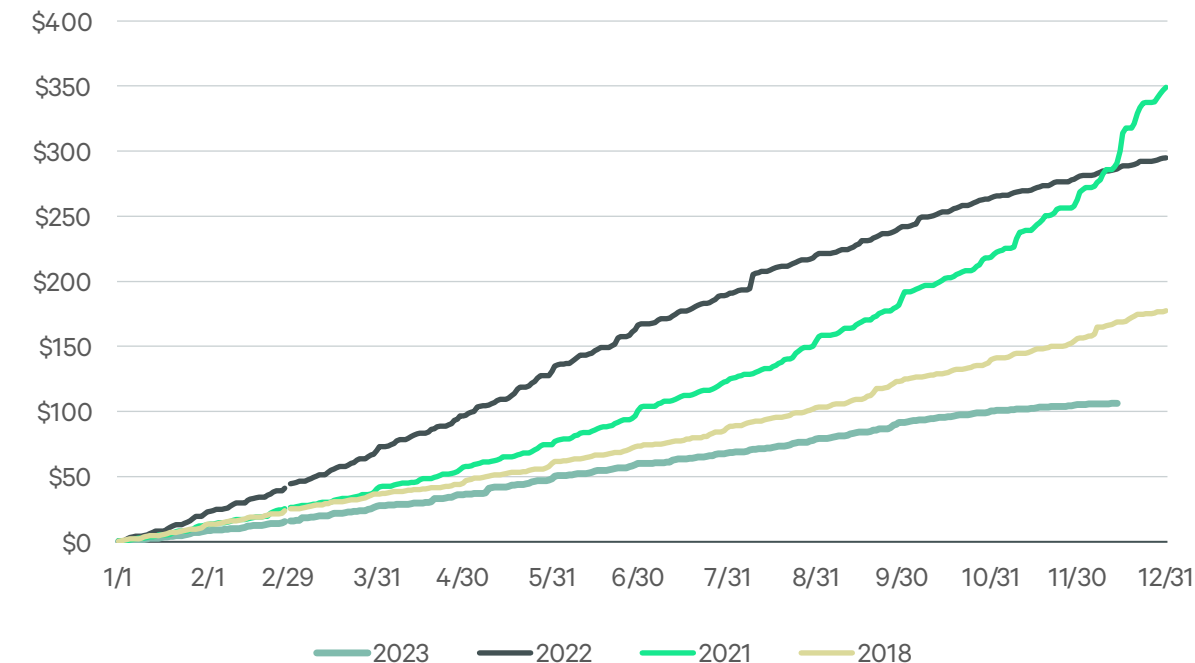
Multifamily investment volume leads...but that is not saying much

Cumulative Daily Investment Volume, Billions (USD)



Source: MCSI Real Assets, CBRE Econometric Advisors

Cumulative Daily Multifamily Investment Volume, Billions (USD)

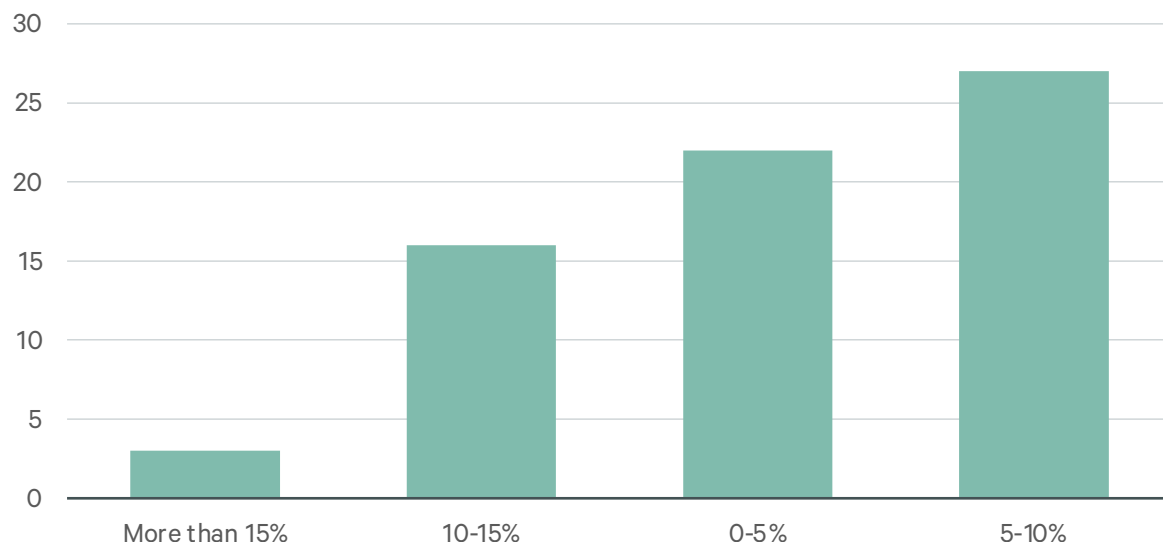


Source: MCSI Real Assets, CBRE Econometric Advisors

- Multifamily investment activity is facilitated by smaller lot sizes that often require less leverage and agency financing. Consequently, investment volume in this space has held up better than other sectors, such as retail and office.
- Despite multifamily's unique advantages, higher financing costs are derailing buying activity relative to previous years. Specifically, some markets with very low cap rates render it very vulnerable to rising borrowing costs—especially as NOI growth is slowing.

CBRE experts think multifamily properties will face further devaluations

How much further do values need to fall before we see substantial investment activity again? (Total Number of Responses)



Source: CBRE Econometric Advisors

Which of the following best reflects your view on the market fundamentals? (Total Number of Responses)



Source: CBRE Econometric Advisors

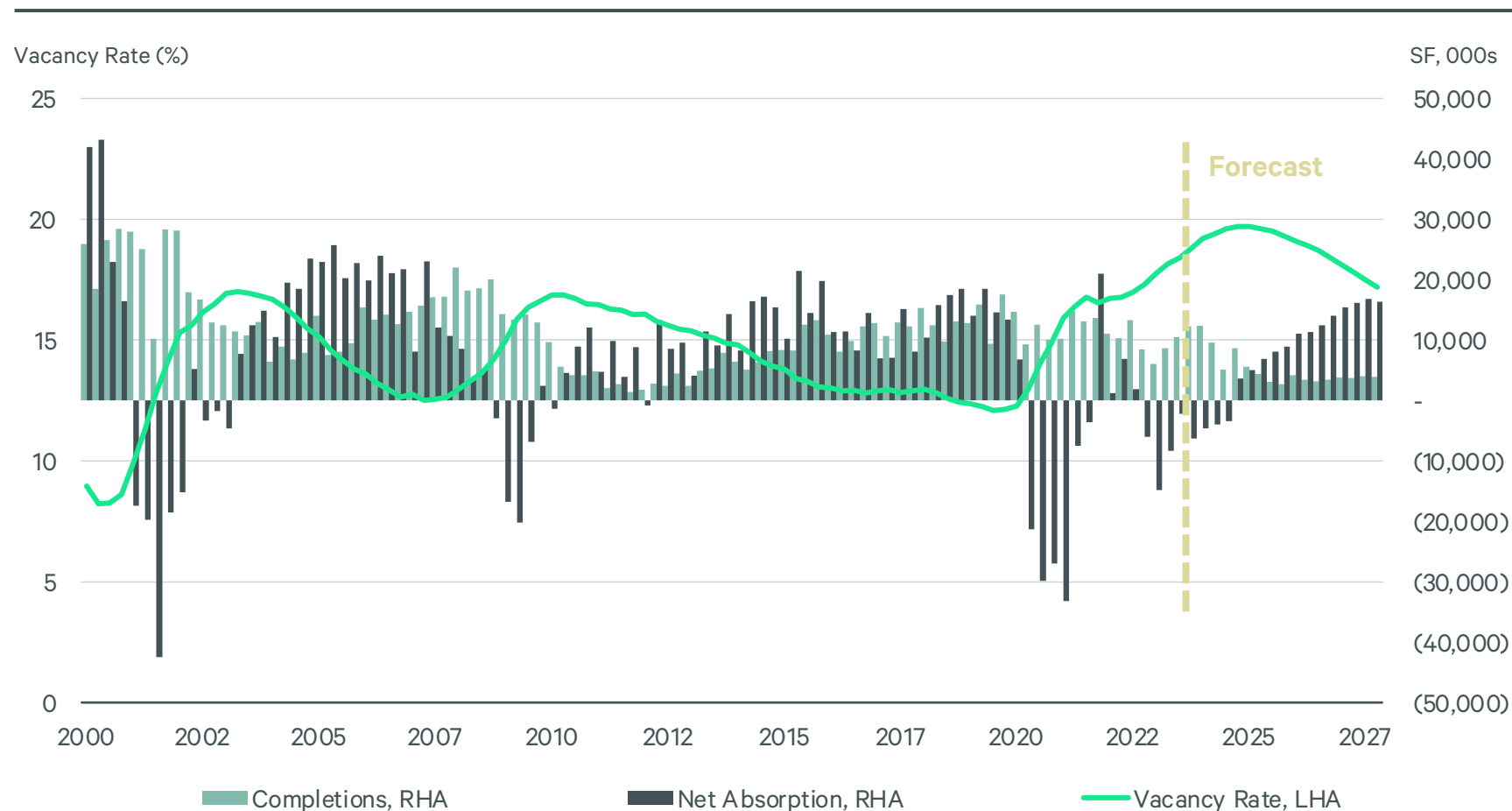
- Most CBRE multifamily professionals believe values need to fall at least 5% to restore substantial investment volume.
- While a plurality believe conditions are stable, over half of respondents see weakening conditions and/or slower leasing activity.

6

Office

Vacancies will remain on an upward trajectory through 2024

- The overall office Sum of Markets recorded -3.3 million sq. ft. (MSF) of negative net absorption in Q3 2023, improved from last quarter's -9.4 MSF.
- Construction levels increased slightly, with 9.5 MSF delivered in Q3 and another 57.5 MSF still underway and expected to deliver in the next two years.
- Vacancy is expected to climb further due to uncertainty in the overall economy and the continued shift toward hybrid work.

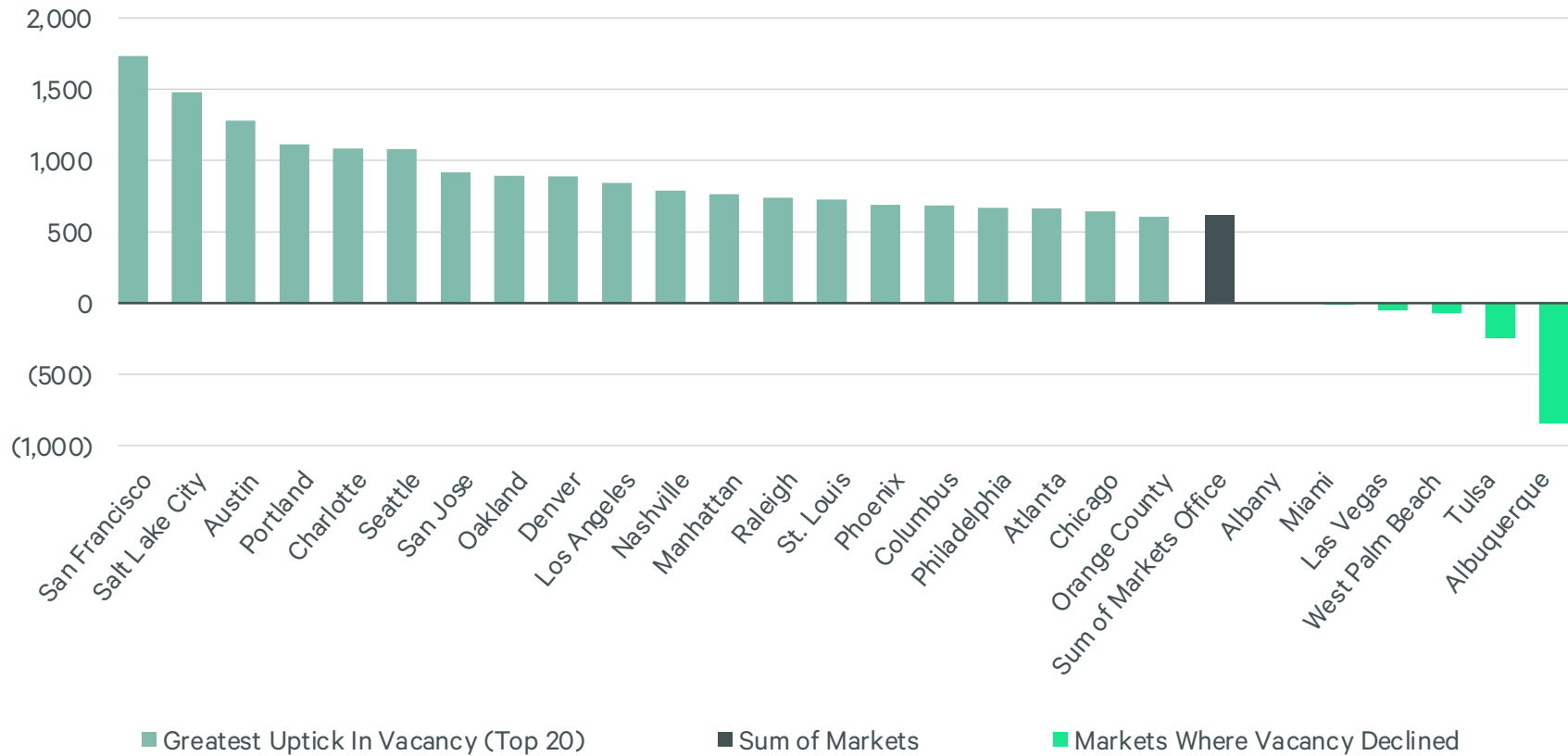


Source: CBRE Econometric Advisors

Most markets have seen an uptick in vacancy

— Of all the markets CBRE EA tracks only six have lower vacancy today than in 2020. South Florida appears prominently as its economy and office market have been in a different orbit. Other places to make the list include smaller markets dominated by the public sector, such as Albany. Also, smaller office markets, such as Las Vegas and Albuquerque, generally service smaller, local tenants that may favor an in-person culture.

Market Vacancy Change Since Q1 2020 (Basis Points)

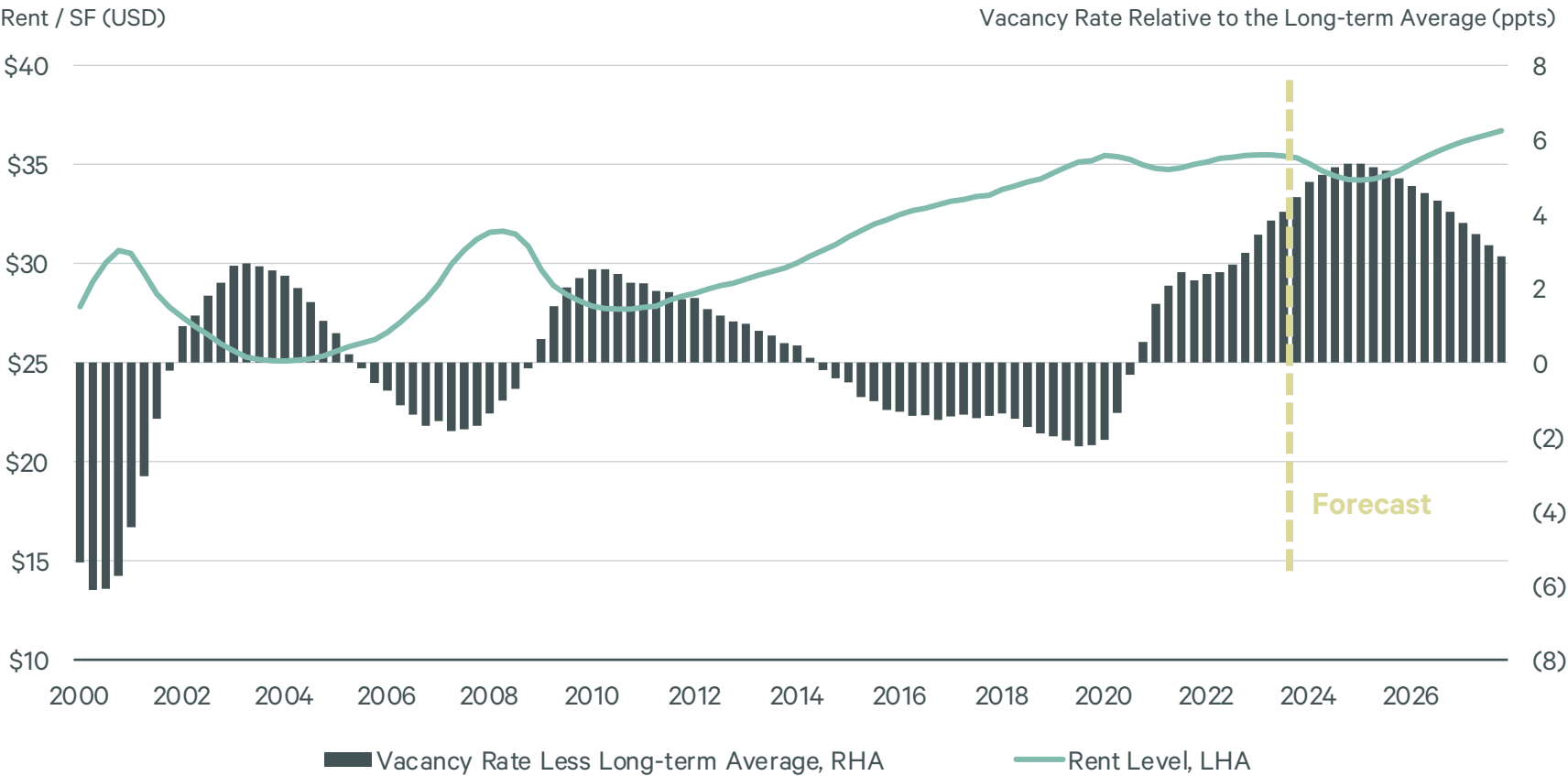


Source: CBRE Econometric Advisors

Soft fundamentals mean office rents will struggle

- The erosion of market fundamentals means landlords have very little leverage in lease negotiations. Nominal rent has barely changed compared with Q1 2020 but on a real basis asking rents are down 15% since the start of the pandemic.
- The rent recovery timeline remains at 6.5 years with cumulative nominal rent decline revised to 3.8%.
- Effective rents will likely be further tempered by rising tenant improvement allowances and rent-free periods.

Rent Levels Relative to Scarcity in the Space Market



Source: CBRE Econometric Advisors

Commodity office buildings are being left behind

- The hardest-hit buildings are those that contributed most (top 10% of buildings) to vacancy increases from Q1 2020 to present. More than 65% of these buildings were built between 1980 to 2010. The building boom of the 1980s created a new class of commodity stock – one that is exclusively feeling the pain of the new hybrid work normal.
- More than half of buildings seeing stinging occupancy losses are Class A. This again indicates that current classification systems are missing the nuance between prime assets--which are performing--and A-minus buildings, which are experiencing the bulk of post-pandemic sector pain.

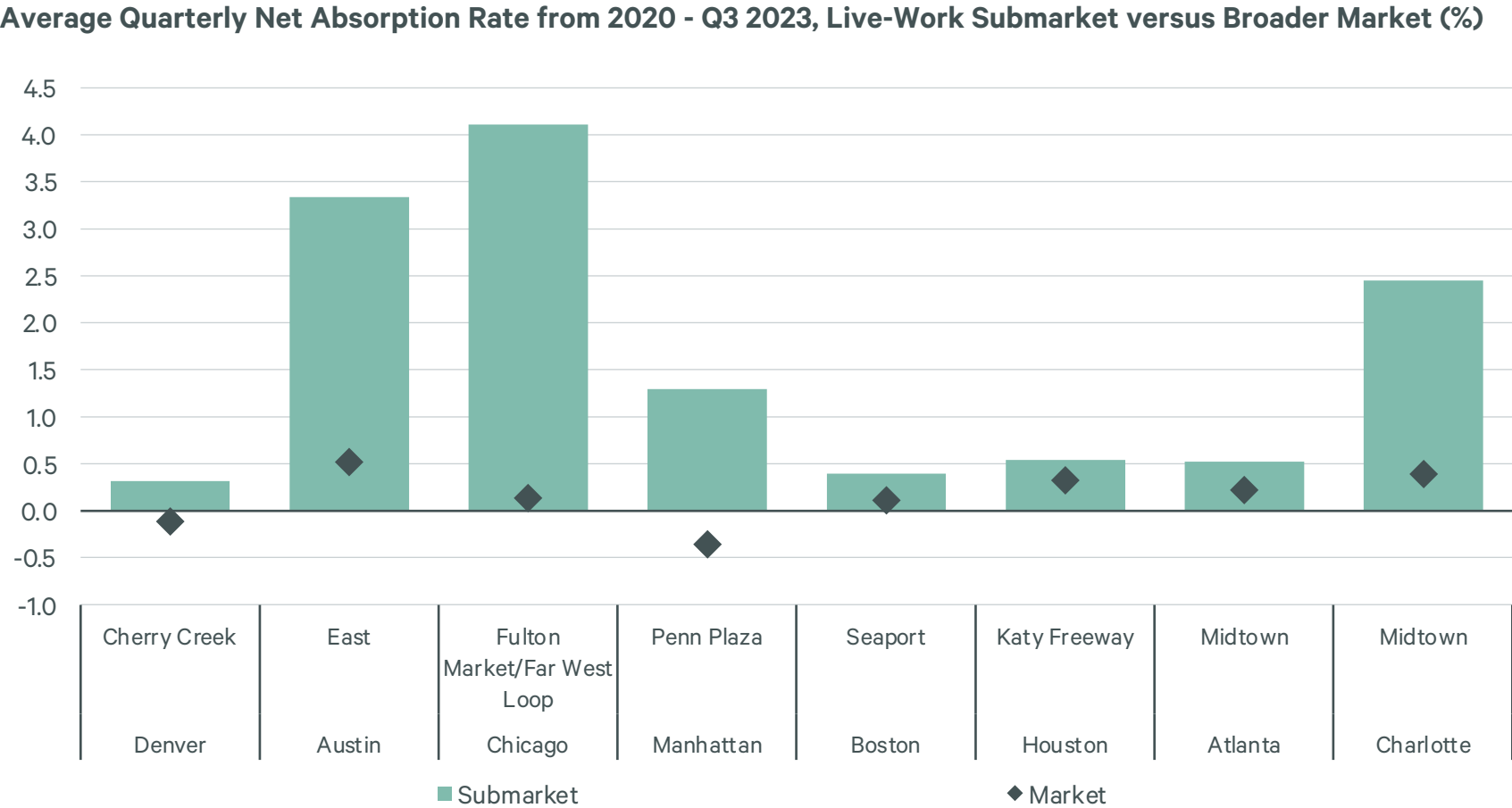


Source: CBRE Econometric Advisors

The flight to Live-Work-Shop submarkets

In the current office environment, being in a quality building might not be enough. Employers are trying to offer the best environment not just inside the building but also OUTSIDE the building.

- The diamonds in this chart represent the average quarterly net absorption rate since Q1 2020 for the broader market.
- Live-Work-Shop submarkets have significantly higher net absorption rates than their respective markets (especially Austin and Chicago), indicating strong demand from occupiers and clear bifurcation within the market.



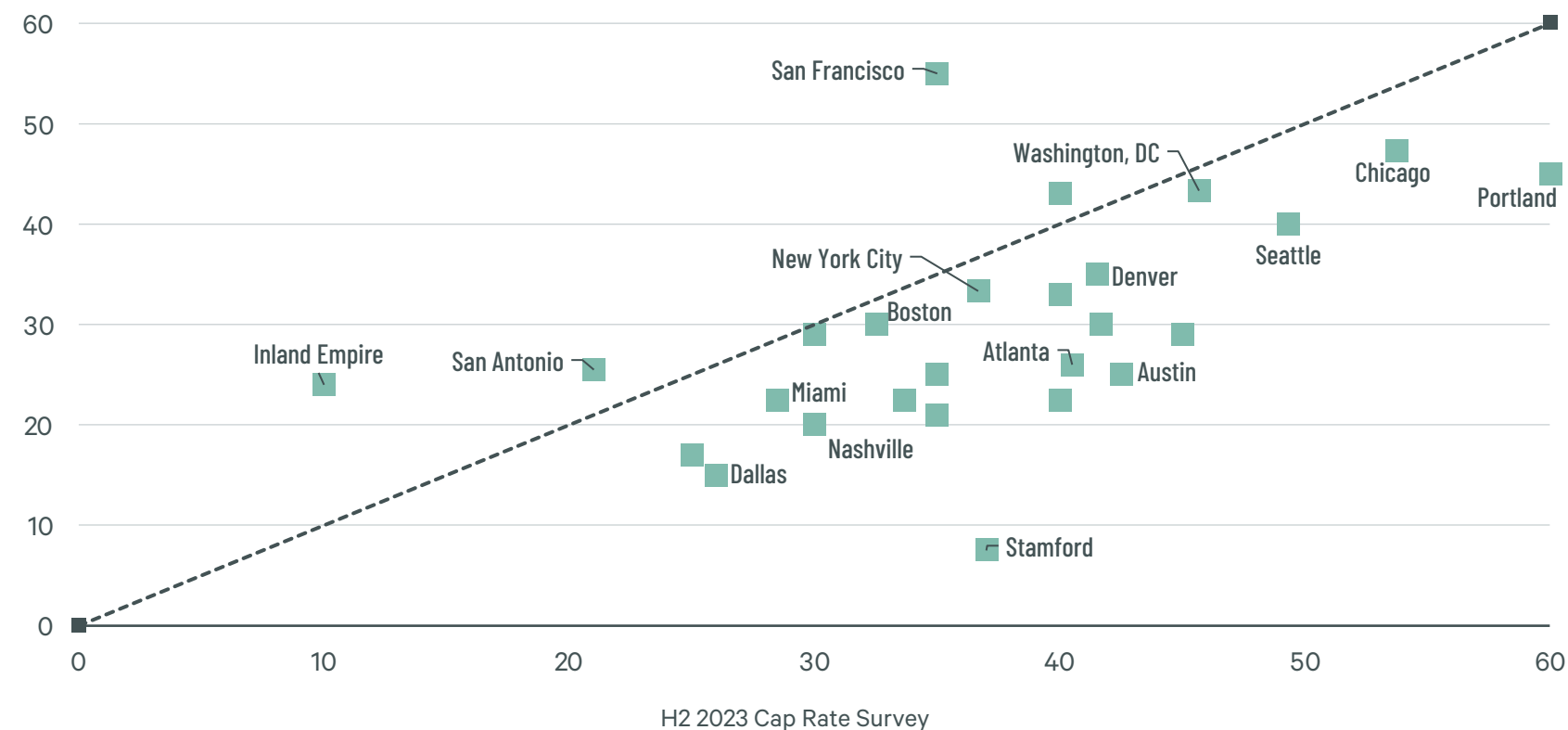
Source: CBRE Econometric Advisors, Q2 2023

CBRE ‘Cap Rate Survey’ hints at deep value cuts

- Twice a year CBRE Econometric Advisors surveys our capital markets and valuations colleagues to get a gauge on sentiment and what practitioners are seeing on the ground. For both the first half (H1) and second half (H2) of 2023 we asked CBRE office professionals what they believe the peak-to-trough average value decline will be in their market. The chart to the right compares answers across both surveys.
- A key upshot is that since the first half of 2023 market sentiment has become bleaker across most markets. However, the Cap Rate Survey was conducted before the Fed’s recent ‘dovish’ language, and it is possible that sentiment could become more positive in coming months and quarters.

Peak-to-Trough Value Decline, Estimates Based Upon the CBRE Cap Rate Survey

H1 2023 Cap Rate Survey



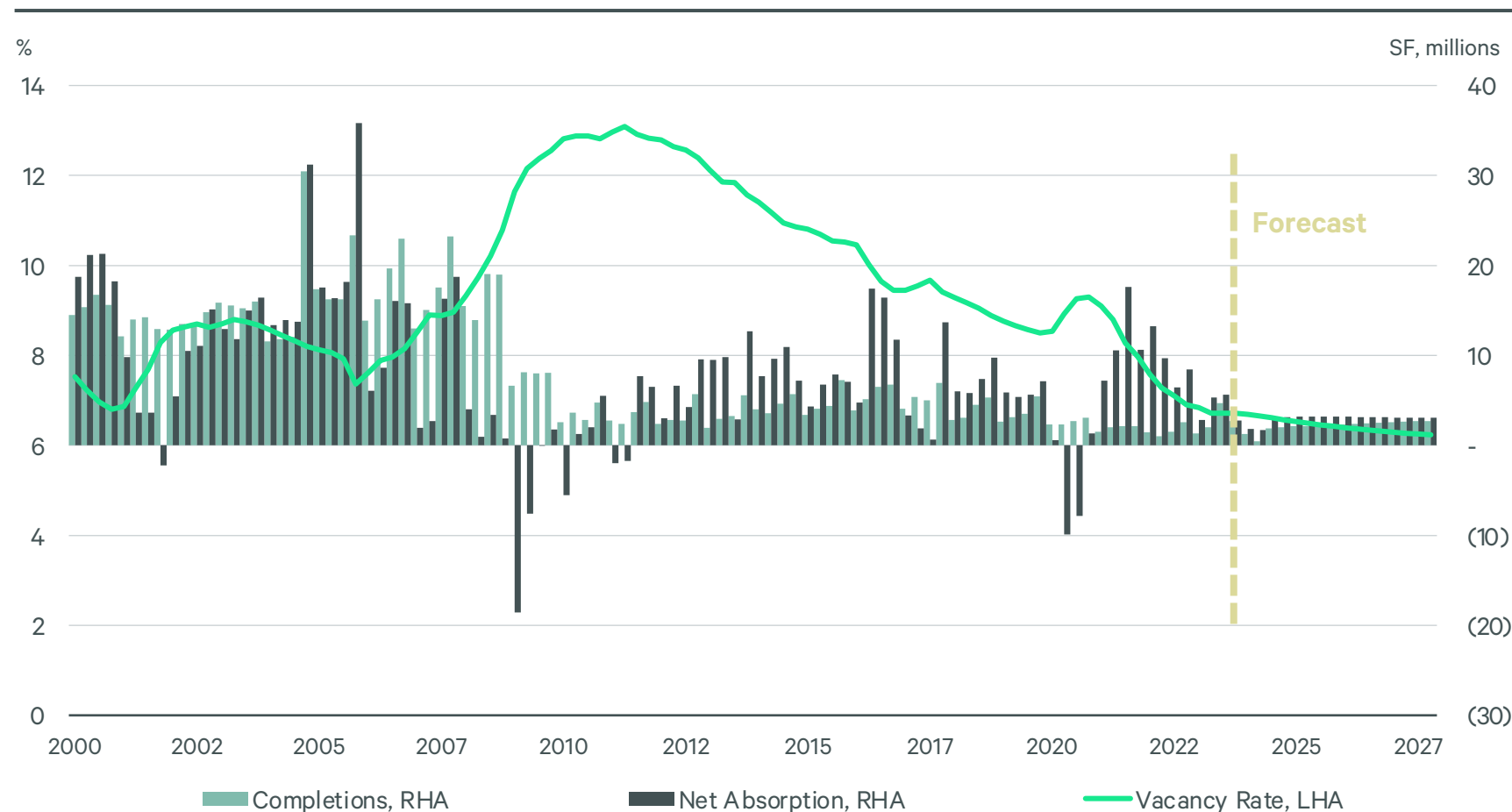
Source: CBRE Econometric Advisors

7

Retail

Limited development will support fundamentals

- Record low completions drives strong and stable fundamentals across the retail sector, as tenants cannot and do not want to give up desired spaces.
- Moving forward, we expect the relationship between supply and demand to be more closely aligned as the pace of retail spending slows. However, the market is currently well positioned to absorb a weaker consumer relative to previous cycles.

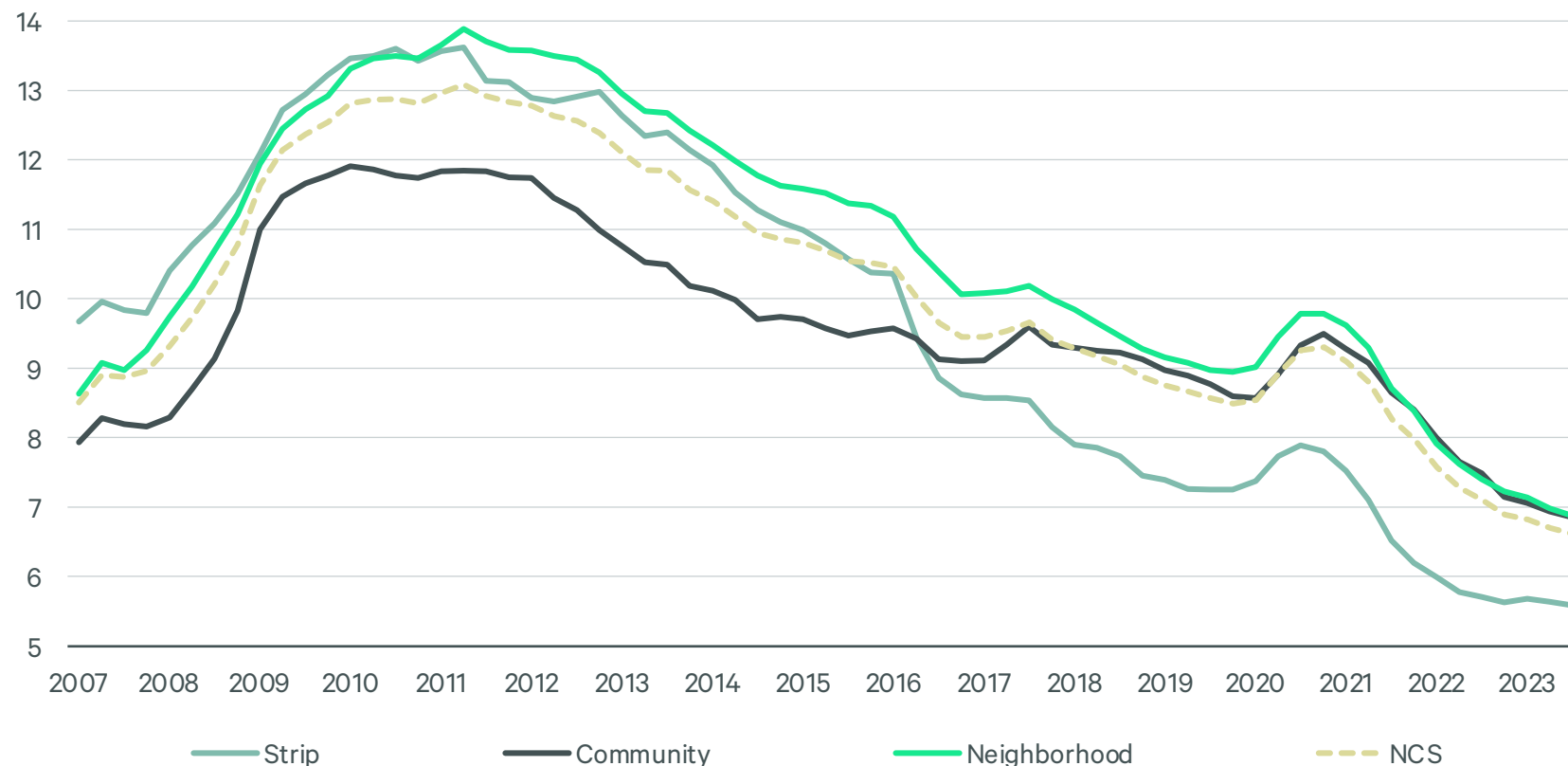


Source: CBRE Econometric Advisors

Are strip centers the new retail royalty?

- Though recent consumer trends have shown more spending closer to home, strip centers started to show increased interest from occupiers way back in 2016.
- Strip center rents have grown 22% since 2016 compared to the 18% growth for all NC&S centers. Despite outpacing other open-air centers in rent growth, they remain the most affordable option (rents 5-15% lower than other open-air centers). The affordability of these smaller strip centers continues to drive demand for occupiers looking to experiment or enter the market.

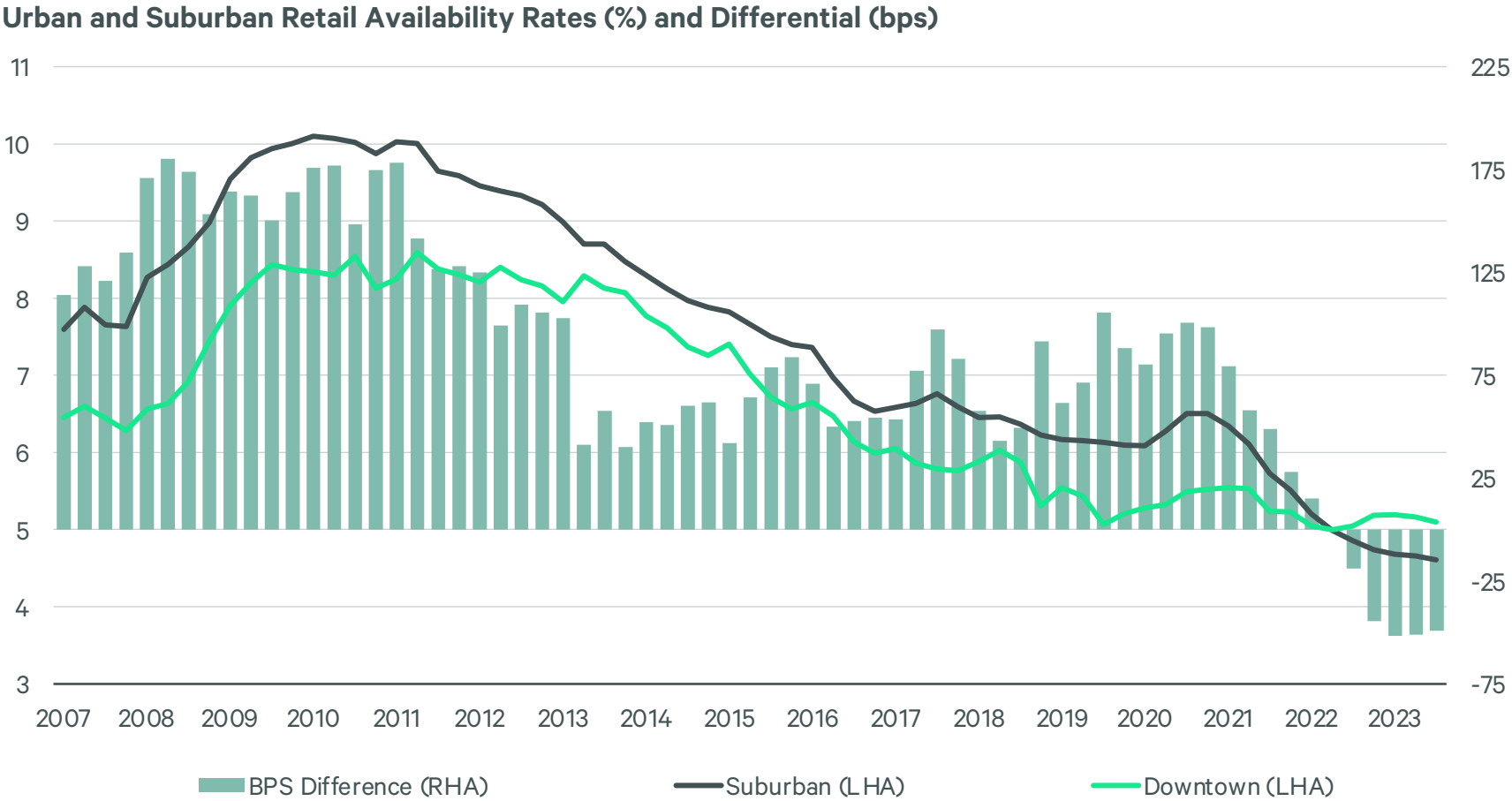
Availability by NC&S Type (%)



Source: CBRE Econometric Advisors Q3 2023

Urban availability is now higher than in the ‘burbs

- For the first time in more than 15 years availability in downtown CBDs has surpassed that of suburban retail.
- With the rise of remote work, workers began spending more money closer to home, forging new and lasting shopping habits. Retailers took notice.
- It’s too soon to count downtowns out just yet as consumers are starting to shift their weekend excursions to the haunts they used to frequent for after work happy hours and socializing.

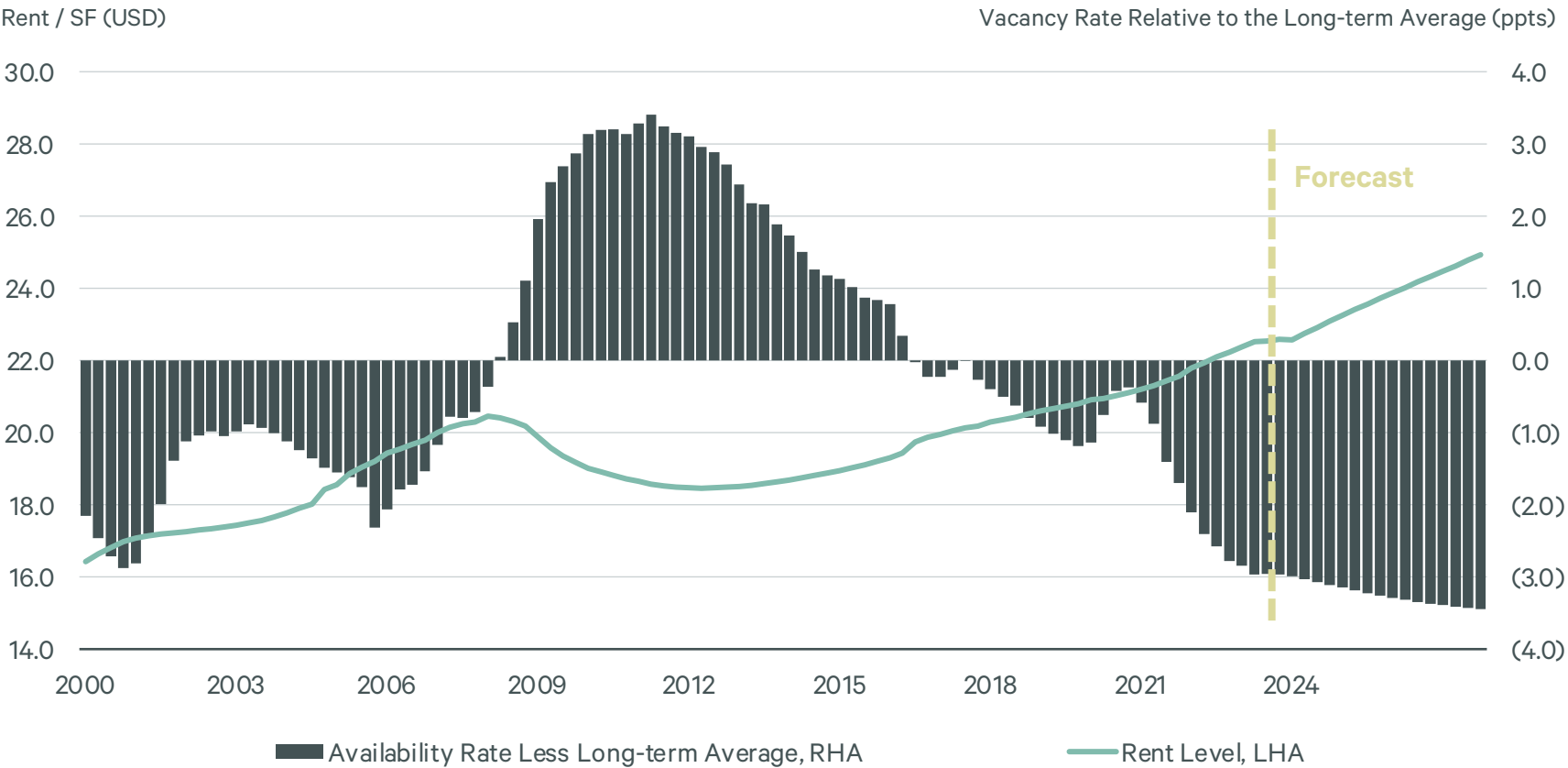


Source: CBRE Econometric Advisors

Low vacancy levels will keep rents on an upward trajectory

- The continuing dearth of retail development, exacerbated by the pandemic, has translated into the ability of retail landlords to more efficiently convert greater consumer spending in rental growth.

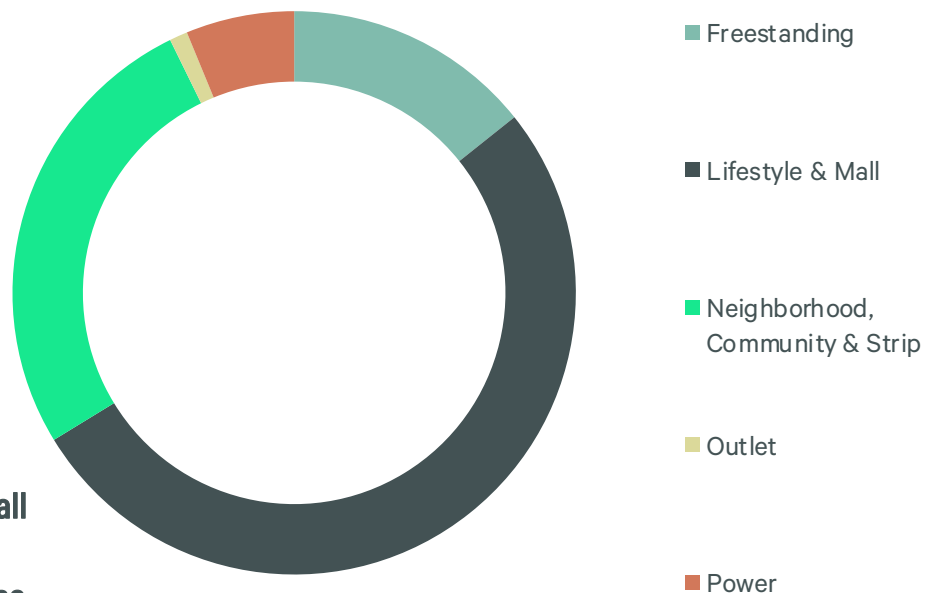
Rent Levels Relative to Space Scarcity



Source: CBRE Econometric Advisors

A lot of vacant mall space is not available

Share of Retail Space That Is Vacant but NOT Available

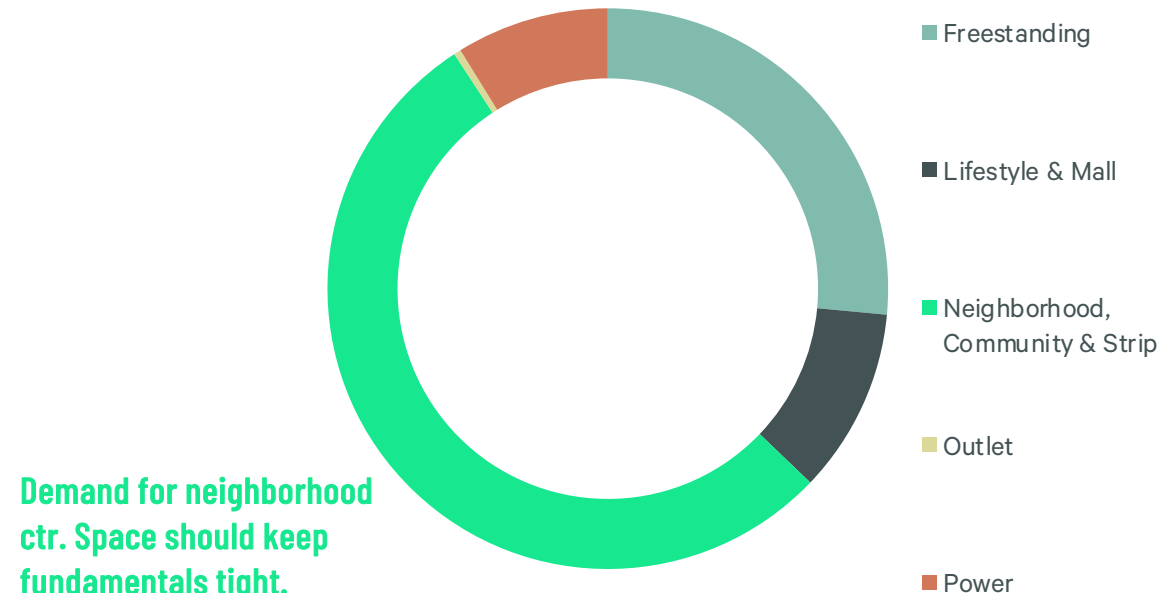


A lot of empty mall space is NOT available for lease.

Source: CBRE Econometric Advisors

- A lot of vacant mall space does not appear to be eroding broader market fundamentals because it is not even available for lease. In fact, roughly half of vacant lifestyle and mall space is not available as some of these properties are completely defunct and no longer part of the competitive inventory. The upshot is that healthy malls will not face competition from weaker centers.
- Conversely, the bulk of vacancies within Neighborhood, Community, and Strip Centers are available for lease. However, steady demand for this product type combined with a very thin supply pipeline suggests fundamentals will remain in tact.

Share of Retail Space That Is Vacant and Available

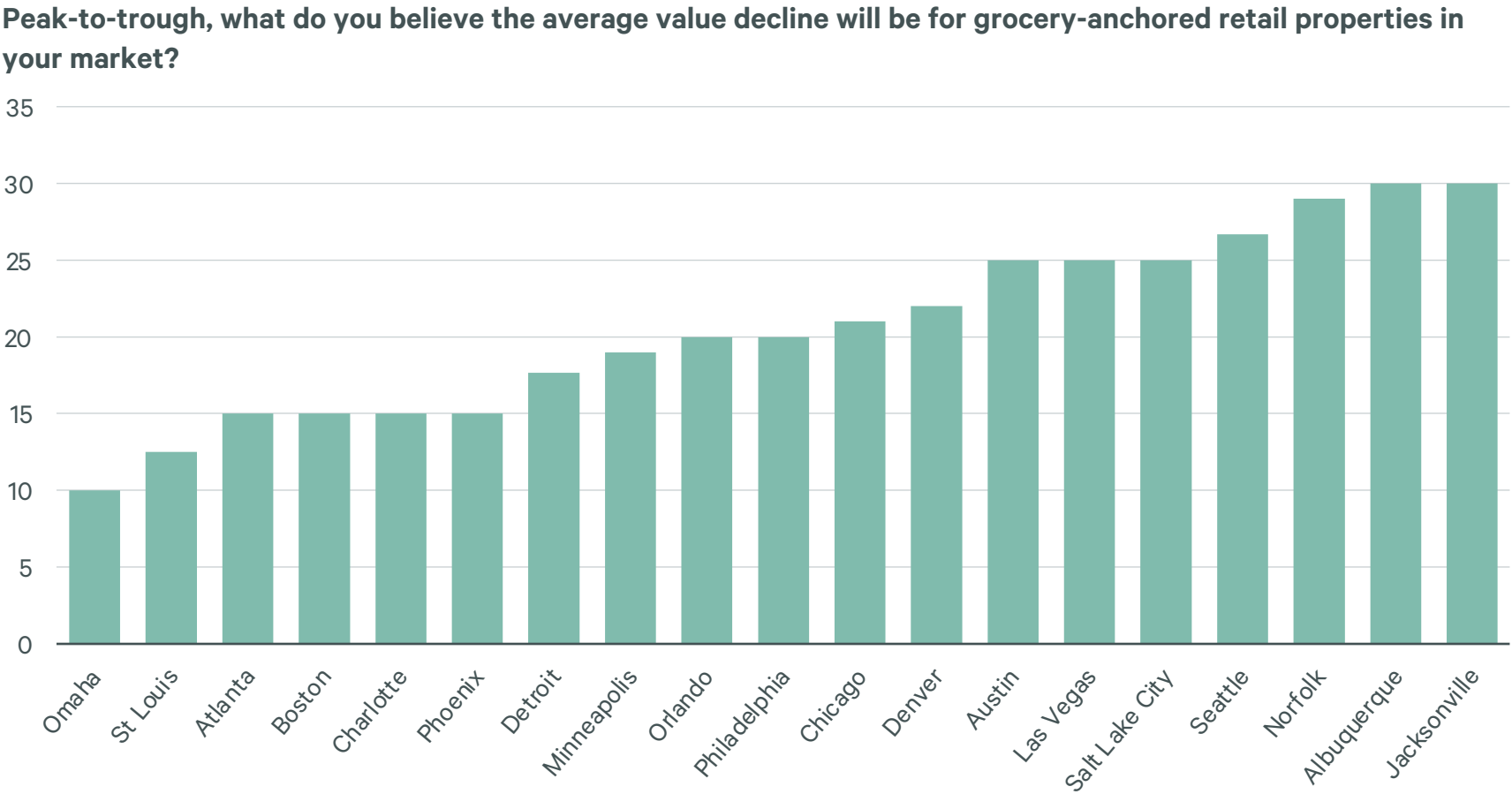


Demand for neighborhood ctr. Space should keep fundamentals tight.

Source: CBRE Econometric Advisors

But retail is not immune from value declines

The CBRE Cap Rate Survey asked retail capital markets professionals how much they expect values to decline peak-to-trough in their market. Responses varied considerably by geography. On average, retail assets are expected to decline by a fifth.



Source: CBRE Econometric Advisors

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