

2023 GLOBAL PREDICTIONS WHITEPAPER

Published January 2023



2023 Global Predictions: Table of Contents

Introduction.....3

U.S.

- U.S. Economy.....5
- U.S. Capital Markets11
- U.S. Multifamily Market18
- U.S. Office Market27
- U.S. Industrial Market34
- U.S. Retail Market41

Canada.....47

Europe

- United Kingdom.....55
- Continental Europe67

Global Hospitality.....75



Introduction

2023 will likely provide important answers to some of the most pressing questions market participants have been contending with for the past 12 (plus) months. Chiefly, in the face of supply chain disruptions, war and a boom in post-lockdown demand, measures of inflation soared to once in a multi-generational level. Aggressive monetary tightening by a broad array of central banks, led by the U.S. Federal Reserve, has produced constant debate on the probability of an ensuing economic “soft” or “hard” landing for the global economy in the year ahead. In turn, capital market volatility and tighter lending standards have contributed to a marked deceleration in CRE transaction volume. CEO confidence has waned leading to early signs of belt-tightening and reduced office demand, but the labor market, especially in the United States, has remained largely resilient. Short-term energy concerns in Europe have eased, but longer-term structural changes need to be considered by countries such as Germany. Finally, while global travel has dramatically improved as border restrictions abated, Covid-19 is not in the rearview mirror. More specifically, the reopening of China may prove quite challenging from a disease management standpoint with continued ripples felt across the world.

The satisfactory resolution of such obstacles and many others remains far from certain in the months ahead. For example, encouraging signs of an improvement in the inflationary backdrop remains promising yet not definitive. Alternatively, expectations may be incorrectly displaced to the downside and 2023 will ultimately provide market participants with a respite from the cross-currents of the past year. To assist our clients in navigating the road ahead, CoStar Group has assembled a broad cross-section of industry experts from a number of our teams to share substantive insights for the new year. In the pages ahead, we offer 77 predictions across the globe. On behalf of CoStar Group, we wish our clients a successful and prosperous 2023.

UNITED STATES



UNITED STATES

ECONOMY



Prediction 1: The U.S. Economy Will Fall Into Recession in 2023

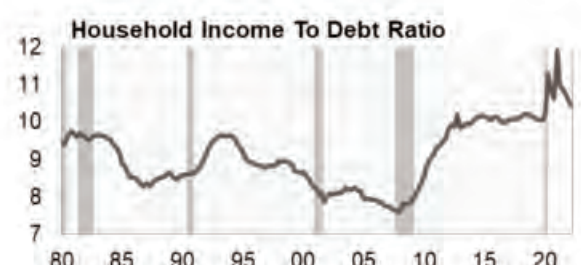
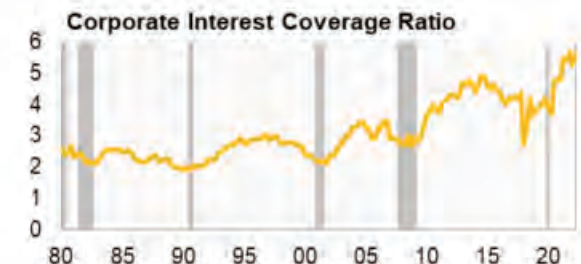
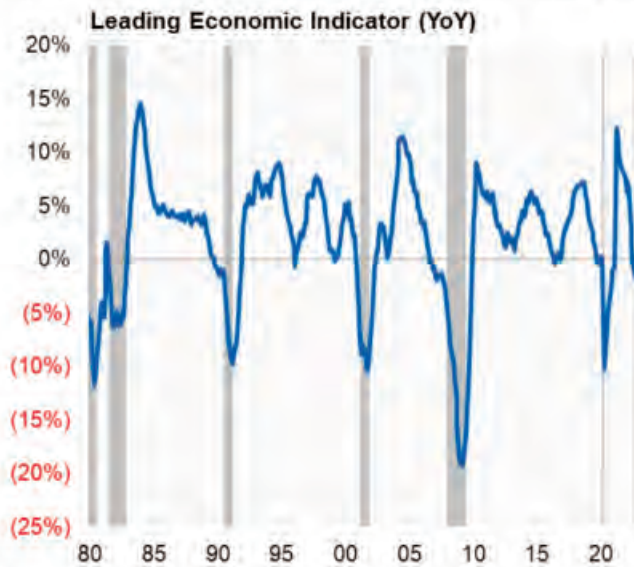
Joe Biasi, Strategic Consultant - CoStar Advisory Services

The U.S. is likely to fall into recession in 2023, as an unprecedented year of rate hikes mixed with global economic weakness and record-low consumer confidence combines to slow down U.S. economic output. The Federal Reserve is targeting the labor market, citing demand as a driver of the multi-decade high inflation the U.S. experienced in 2022. Their eye towards the labor market raises the probability of downturn, as a recession has been triggered every time the unemployment rate has increased more than 0.5%.

The good news is the base case for the likely downturn is relatively mild. Corporations have loaded up on debt but have maintained strong interest coverage ratios and households are far less leveraged today than they were in the run-up to the 2008 crisis. A rapid decline in inflation could help the U.S. avoid recession, but the Fed has stated that it would rather overshoot than undershoot with its restrictive monetary policy, adding a downside risk to a mild recession base case.

The U.S. Economy Will Fall Into Recession in 2023

The Conference Board L.E.I., Corporate Interest Coverage Ratio, and Household Debt to GDP



Prediction 2: Real Consumption Will Decline in 2023

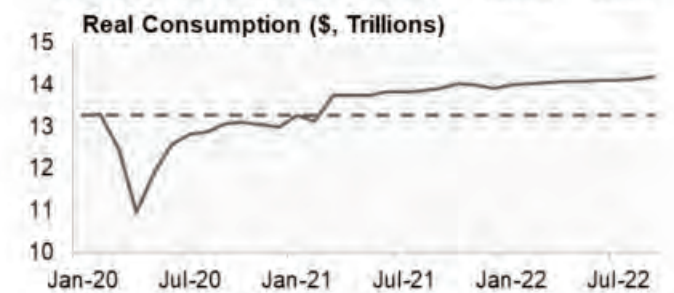
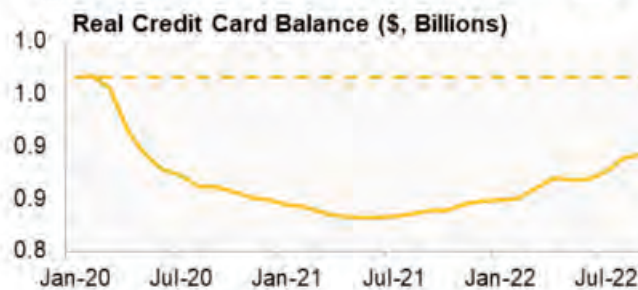
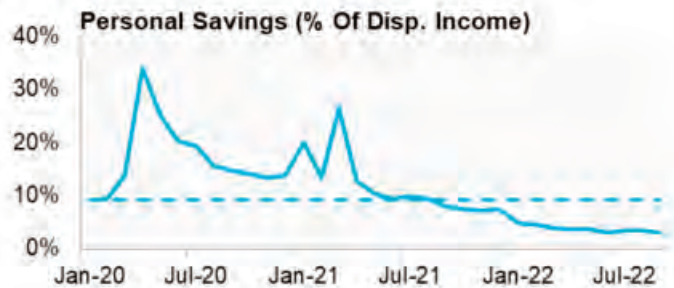
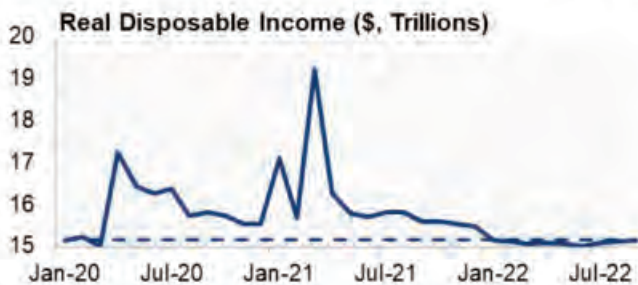
Joe Biasi, Strategic Consultant - CoStar Advisory Services

The post-pandemic economy has brought large swings to both income and the savings rate as stimulus helped to inflate household balance sheets. As the effects of the stimulus faded, inflation ate into incomes, which were at the same level in inflation adjusted terms in September 2022 as they were in January 2020. To compensate for the lack of real income growth, households dipped into the excess savings accumulated during the pandemic and began to increase their credit card borrowing, which has led to continued increases in consumption.

So far, consumers have largely shrugged off savings drawdowns, even with near record-low consumer confidence. However, if the U.S. economy begins to experience significant layoffs, households will likely switch to a more conservative financial stance, and consumption will likely take a step back.

Real Consumption Will Decline in 2023

Real Disposable Income, Credit Card Balances, Consumption, and Savings Rate



*Dashed line represents level in Jan. 2020, all dollar values inflation adjusted to 2012 \$'s



Sources: BEA, CoStar Advisory Services

As of September 2022

Prediction 3: The Divergence Between Retail Inventories and Consumer Sentiment Holds

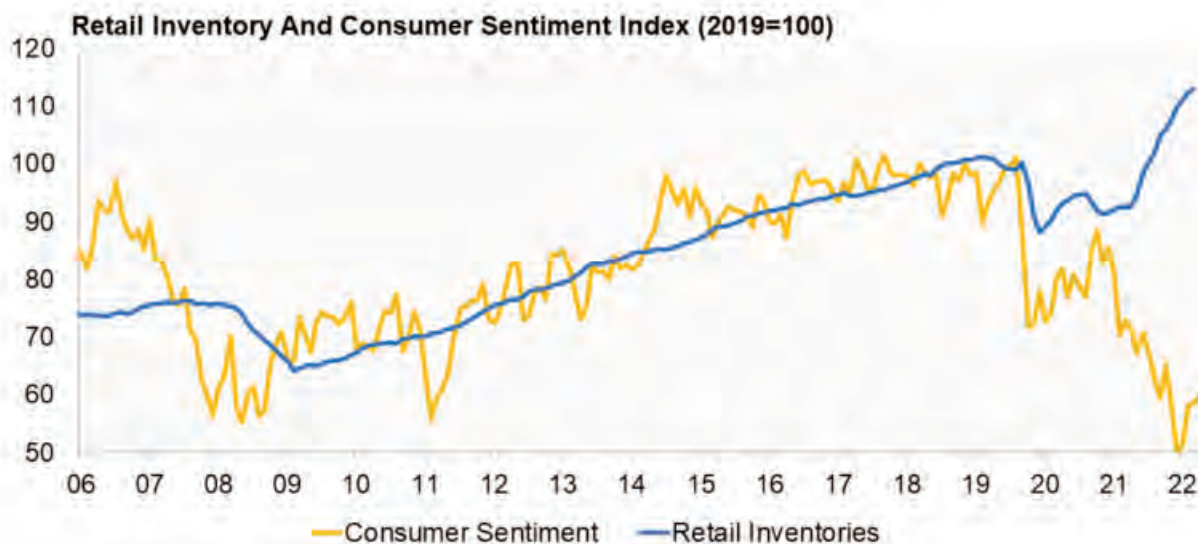
Juan Arias, Strategic Consultant - CoStar Advisory Services

The supply chain breakdown ensuing from the pandemic has forced businesses to rethink their inventory storage strategies. Since late 2021, we have seen a move from the typical “just-in-time” storage of goods to the more cautious “just-in-case” approach of stockpiling. This higher inventory carry has occurred in contrast with declining consumer sentiment, as the U.S. consumer remains concerned about inflation, specifically for gas and food prices. Additionally, the hike in interest rates by the Fed is impacting purchasing intentions for cars, homes, and major appliances.

Despite all this, consumer demand has remained so strong that retailers’ inventory-to-sales ratios have fallen below historical averages. While the inventory-to-sales ratio has risen to over 1.2 as of August 2022, it is still well below the typical pre-pandemic range of 1.3 to 1.5. With lead times for key products remaining an issue, lockdowns in China continuing to impact the supply chain, and persistent East Coast port backlogs, supply chain disruptions are far from over. We expect retailers will continue to hold elevated inventory levels through 2023, as supply chain issues persist, despite receding consumer confidence and demand.

The Divergence Between Retail Inventories and Consumer Sentiment Holds

Retail Inventory and Consumer Sentiment Index



Prediction 4: Total Job Openings Per Unemployed Worker Falls Below 1

Joe Biasi, Strategic Consultant - CoStar Advisory Services

Total job openings divided by the number of unemployed workers will fall below 1 in 2023. Job openings per unemployed worker is one of the main ways to measure labor market slack, and the September level of 1.86 is just off record levels. However, the Fed has specifically cited openings per unemployed worker as a concern for inflation. A decline would likely come from both a decrease in job openings, with many companies such as Amazon and Apple announcing hiring freezes, and an increase in the number of unemployed workers.

Every recession since the 1960s has been accompanied by at least a 1.5 percentage point increase in the unemployment rate. Even relatively mild recessions, like the one in 2001, often led to a decline in job openings. A decrease in labor market tightness would likely lead to less upward pressure on wages and help the Fed bring inflation to its 2% target. However, a labor market struggling to match qualified workers to jobs and concerns about future labor market tightness could help reduce layoffs as businesses are more willing to hang onto workers.

Job Openings Per Unemployed Worker Falls Below 1

Total Job Openings per Unemployed Worker



Prediction 5: At Least One Rate Cut In 2023

Joe Biasi, Strategic Consultant - CoStar Advisory Services

The Fed will cut rates at least once in 2023. While the Fed has spent most of 2022 shifting to a very hawkish tone, the market is expecting at least a rate cut in 2023. It appears inflation indeed did peak in mid-2022 and is beginning to decelerate. Underlying inflation dynamics have improved as well, with shipping costs and producer prices already shifting down.

However, the Fed, cognizant of previous errors in the '70s, has been wary of declaring victory too early and has said it would much rather overshoot than undershoot rates. Unless inflation falls significantly faster than expected, or the economy enters a severe recession, the Fed is unlikely to enter a true rate cutting cycle, and Fed officials have been clear about needing to maintain high rates until inflation is under control. But the central bank raised rates at a blistering pace, and some calibration after the terminal rate is achieved will likely be needed.



UNITED STATES

CAPITAL MARKETS



Prediction 6: Tier 2 Market Value Growth Slows Compared to Tier 1

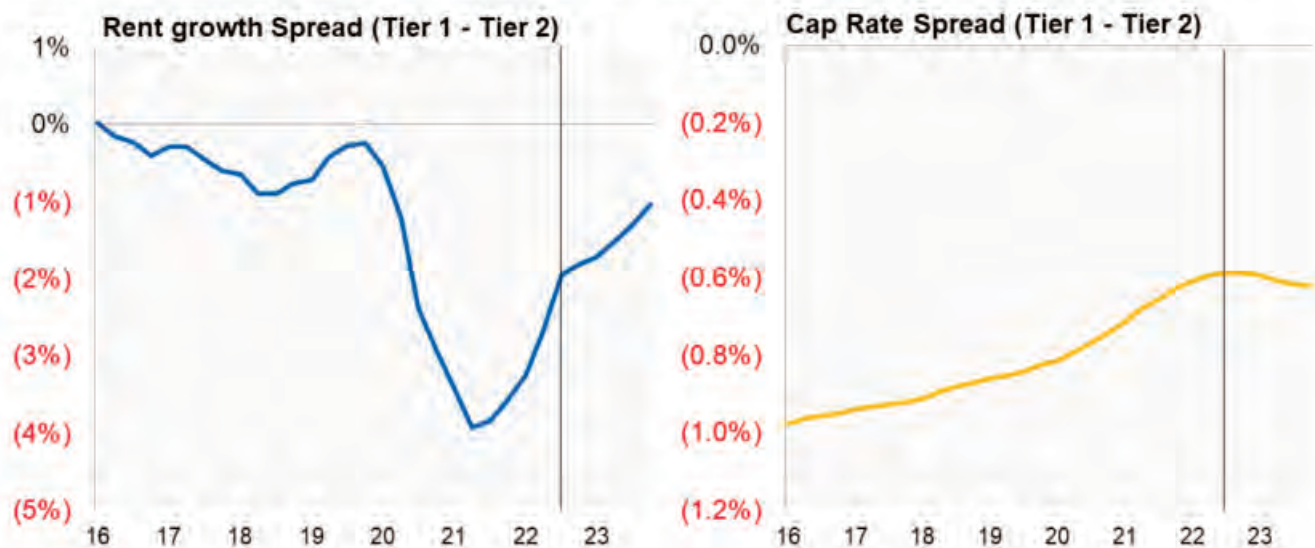
Joe Biasi, Strategic Consultant - CoStar Advisory Services

The spread between tier 1 and tier 2 market value growth will narrow. During the pandemic, tier 2 markets in the Sun Belt have dominated growth compared to coastal gateway markets, exacerbating a trend that was already occurring at the end of the past cycle. However, the strong growth has attracted development, particularly for multifamily and industrial. For example, tier 2 industrial inventory has grown 3.5 times faster than tier 1 inventory since the start of the pandemic, and multifamily inventory has grown 1.6 times faster.

Rent growth has already begun to shift, and tier 1 market rent in multifamily is faster than tier 2. Cap rate spreads between the two market groups, which had been narrowing during much of the past cycle, has already begun to reverse course. Tier 2 markets still have a lot of benefits for investors, with stronger demographic growth and lower cost of business, but it's unlikely that Sun Belt markets can continue to dominate like they did in 2021, as higher rents and higher construction begins to weigh on growth.

Tier 2 Market Value Growth Slows Compared to Tier 1

Blended Rent Growth and Cap Rate Spread Between Tier 1 and 2 Markets



*Rent growth and cap rates are blended between Industrial, Multifamily, Office, and Retail. Market Cap is used as a weight

Prediction 7: Cap Rates To Move Back Above BBBs

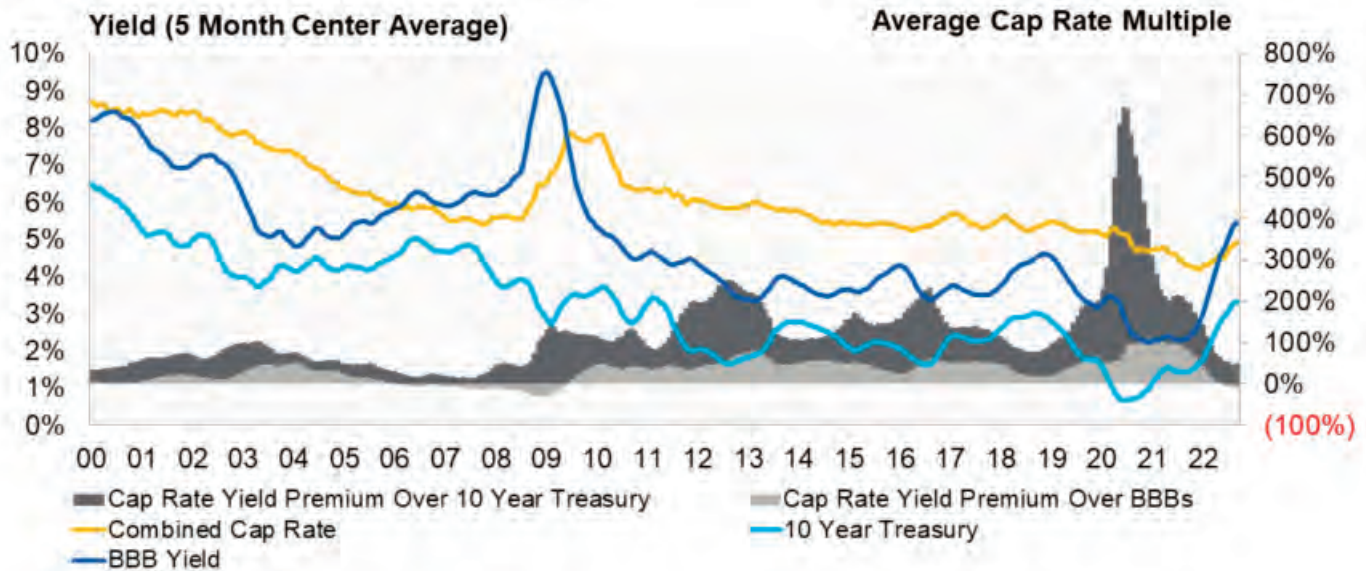
Andrew Rybczynski, Principal Consultant - CoStar Advisory Services

Although BBBs and cap rates can stay inverted for extended periods, as they did in '06-'10, 2023 is unlikely to repeat that phenomenon. Corporations are under a lot less debt pressure overall now compared to the Great Financial Crises. There is less fear of failure of those companies, and so the upward pressure on BBBs stems largely from interest rate rises by the Fed, which are acting upon cap rates as well.

Moreover, cap rates typically move much slower than BBBs. A call for cap rates to move back above BBBs is less about cap rates moving up and more about BBBs moving back down. As of the end of 2022, there is a good chance that the Fed can tame inflation in the coming year. In that instance, rate cuts would follow, and just as the market front ran rate hikes up, so too would it quickly follow them down. Cap rates, having experienced upward pressure, will stay put while BBBs dive back down and un-invert against average cap rates.

Cap Rates To Move Back Above BBBs

Average Cap Rates vs BBBs and 10 Year Treasuries



Note: Individual institutional deals only, over \$10MM contributing to cap rate series. Retail, Office, Multifamily, Industrial

Prediction 8: CRE Distressed Sales Volume Will Rise Moderately in 2023

Jun Gao, Team Lead - CoStar Risk Analytics

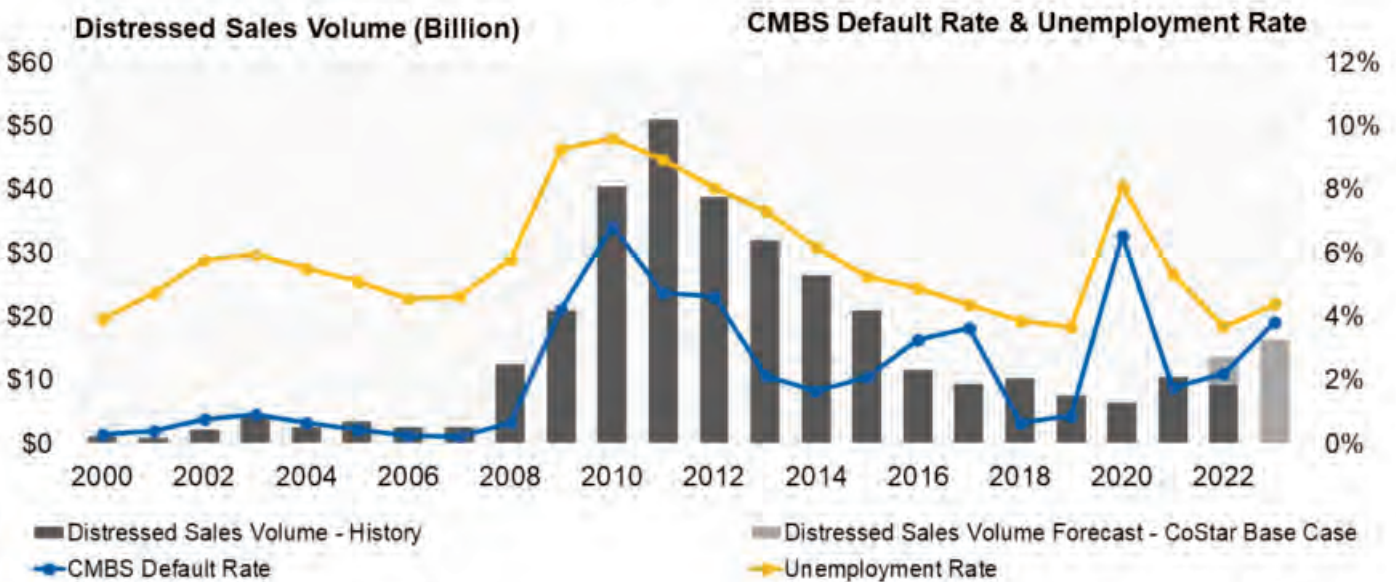
Historically, CRE distressed sales volume soared when the unemployment rate and default rate were simultaneously high. Both the U.S. job market and CRE debt market reached their bottom in 2010, while distressed sales also peaked at that time. However, during the pandemic, the high unemployment rate and high default rate did not turn into distressed assets at the scale experienced in the past recession. Multiple factors counteracted the negative impact, including abundant capital and forbearance, conservative underwriting standard, the cooperation between lenders and borrowers, as well as government stimulus.

The unemployment rate has remained within a narrow range of 3.5 percent to 3.7 percent since March 2022, suggesting the labor market is already quite tight. The jobless rate is forecast to grow from 3.7 percent in 2022 to 4.4 percent in 2023 under CoStar base case scenario likely pushing the CMBS default rate to a projected rise from 2.2 percent in 2022 to 3.8 percent in 2023.

Based on a combination of predicted CMBS default rate, unemployment rate, CRE price growth and vacancy rate, we predict that the CRE distressed sales volume will be \$16.4 billion in 2023 under CoStar base case scenario. This is purely modeled output, while factors such as fiscal support, forbearance programs, and foreclosure moratorium might significantly restrain the distress formation.

CRE Distressed Sales Volume Will Rise Moderately in 2023

Distressed Sales Volume, Default Rates, and U.S. Unemployment Rate



Prediction 9: Fed Rate Hike Will Increase Refinance Risk With CMBS Loans Coming Due

Jun Gao, Team Lead - CoStar Risk Analytics

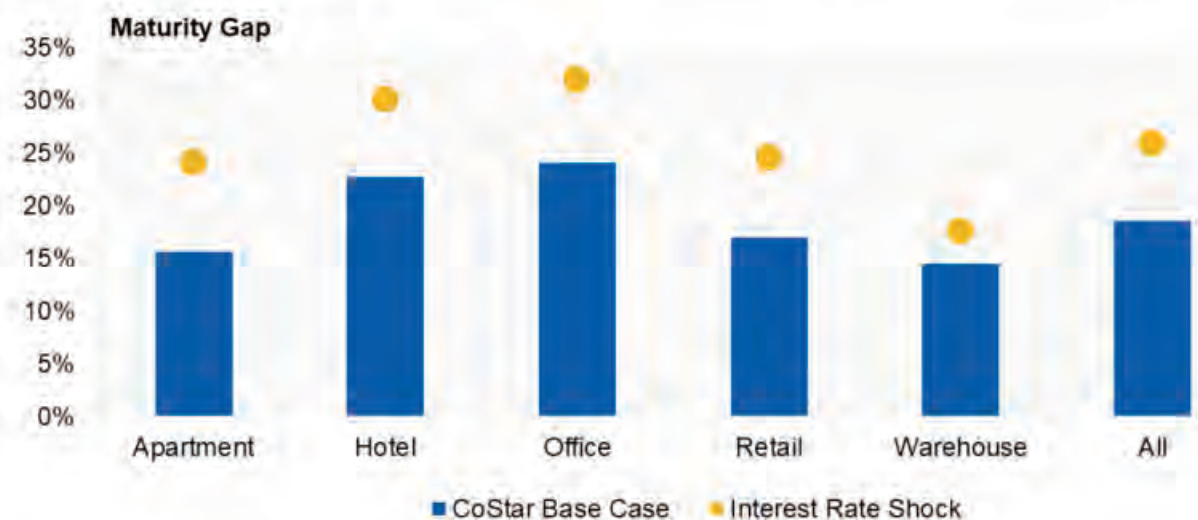
The Fed already has raised interest rates six times in 2022 to tamp down high inflation, pushing its federal funds rate to between 3.75 and 4 percent, with more rate hikes on the way. Based on the Fed’s own projections, a possible hike of 0.5 percent is expected at the next meeting in December, followed by a smaller hike in early 2023.

The rapidly raising interest rates not only impact the lending activities, but also the performance of existing loans. With first \$36.7 billion and then \$46.9 billion of CMBS loans coming due over the next two years, trouble could be ahead for CMBS lenders.

The 10-year treasury yield is on average 3.2% from now to 2023 under CoStar Base Case forecast. We predict that the gap between balloon balance and refinance proceeds of CMBS loans maturing in this period will be 19% overall. Hotel and office loans are projected to have the highest refinance risk, while industrial loans have the lowest risk at maturity. We utilized CoStar for lenders stress testing tool to shock interest rate by 300 basis points. Given the same income levels, higher interest rates would result in a decreased debt service coverage ratio. A 300-basis point rate hike will bring up the gap between balloon balance and refinance proceeds to 26%, and the relative impact is bigger for multifamily and retail loans.

Fed Rate Hike Will Increase Refinance Risk With CMBS Loans Coming Due

Maturity Gap Percentage by Property Type



Prediction 10: CMBS Office Concentrations Will Remain Strong for 2023

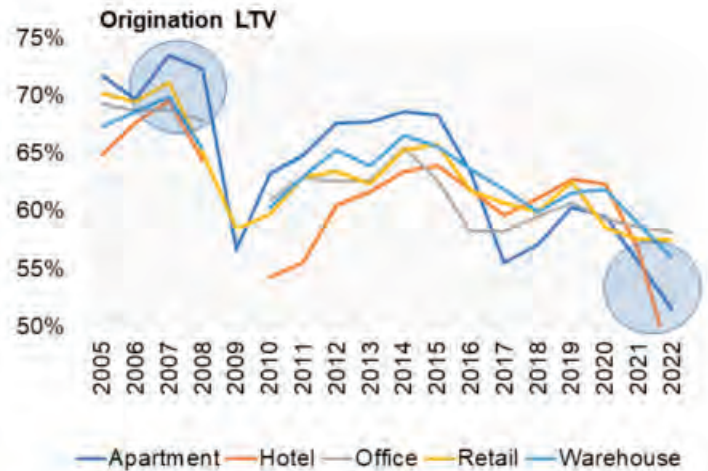
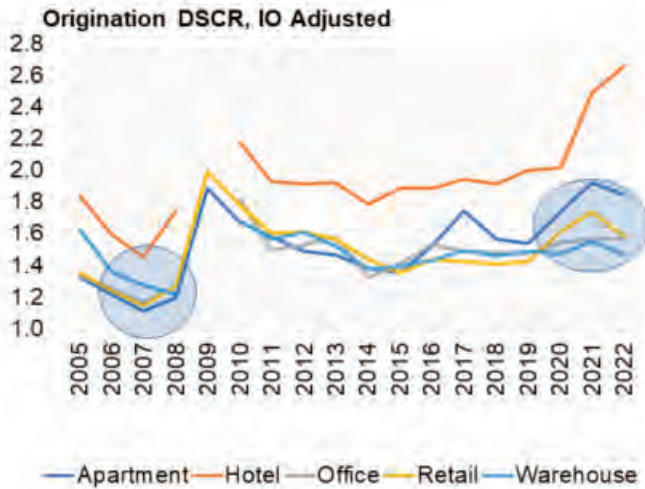
John Uhlmann, Senior Strategist - CoStar Risk Analytics

Office concentrations will remain strong for 2023, as long as underwriting standards remain high. Leveraging strong underwriting will allow for more debt holders to be comfortable with the office sector. Current underwriting standards are well above where they were prior to the Great Financial Crisis, highlighting the importance of risk management in today’s environment.

Strong underwriting continues to pave the way for office, and other property types, to find financing in 2022 and we look for that trend to continue into 2023. Of the approximately 2,600 properties that are part of CMBS conduit transactions for 2022, office represented nearly 30% of the balance, that largest by almost double the next category. Appraisal LTV also follows a similar pattern with markedly lower LTV values from today versus pre-Great Financial Crisis levels.

CMBS Office Concentrations Will Remain Strong for 2023

CMBS DSCR and LTV by Property Type



Prediction 11: Material Dispersion in Forecasts for First Time Since CECL Adoption

Seli Kaya, Director - CoStar Risk Analytics

Looking at the Wall Street Journal Economic Survey that collects market projections from over 70 economists across the country as recently as January 2022, we could see a much more confident outlook for the economy for 2023 and a higher degree of consensus between the participants.

When polled at the beginning of the year, most economists expected GDP growth around 2.5%, with relatively mild inflation and slightly higher 10 Year Treasury rate. Few expected the impact of supply chain issues to create persistent upward pressure on inflation. None of the participants projected GDP to contract in 2023.

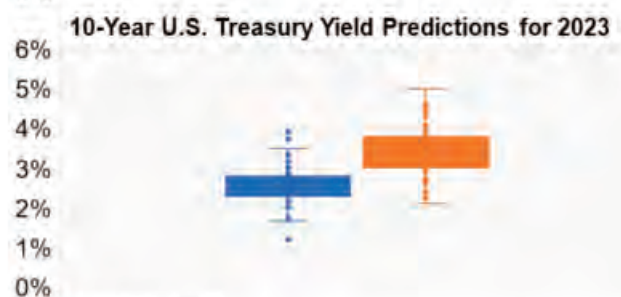
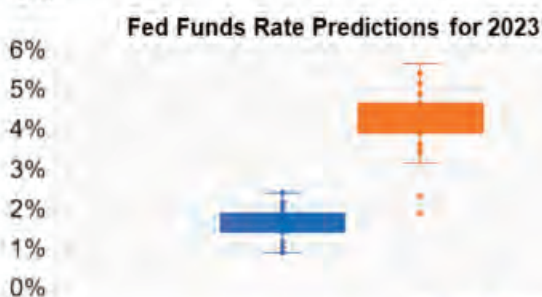
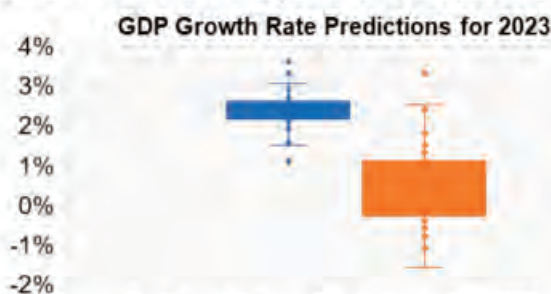
Just nine months later, the economic outlook is much different. Expectations for GDP growth are much lower, and many expect to see inflationary pressure to linger and continue to push rates up. There is also a clear divergence in forecasts.

We expect this divergence in expectations to be reflected in CECL models and loan loss provisions across the banking industry. Many banks will accelerate building their reserves, some are likely to stay the course, few might even continue to release reserves.

We expect this environment to bring more regulatory scrutiny over CECL methodologies, model performance, overlays, and governance routines.

A Material Dispersion in Forecasts for First Time Since Adoption of CECL

GDP Growth & Inflation Expectations, WSJ Survey



■ January 2022

■ October 2022



UNITED STATES

MULTIFAMILY



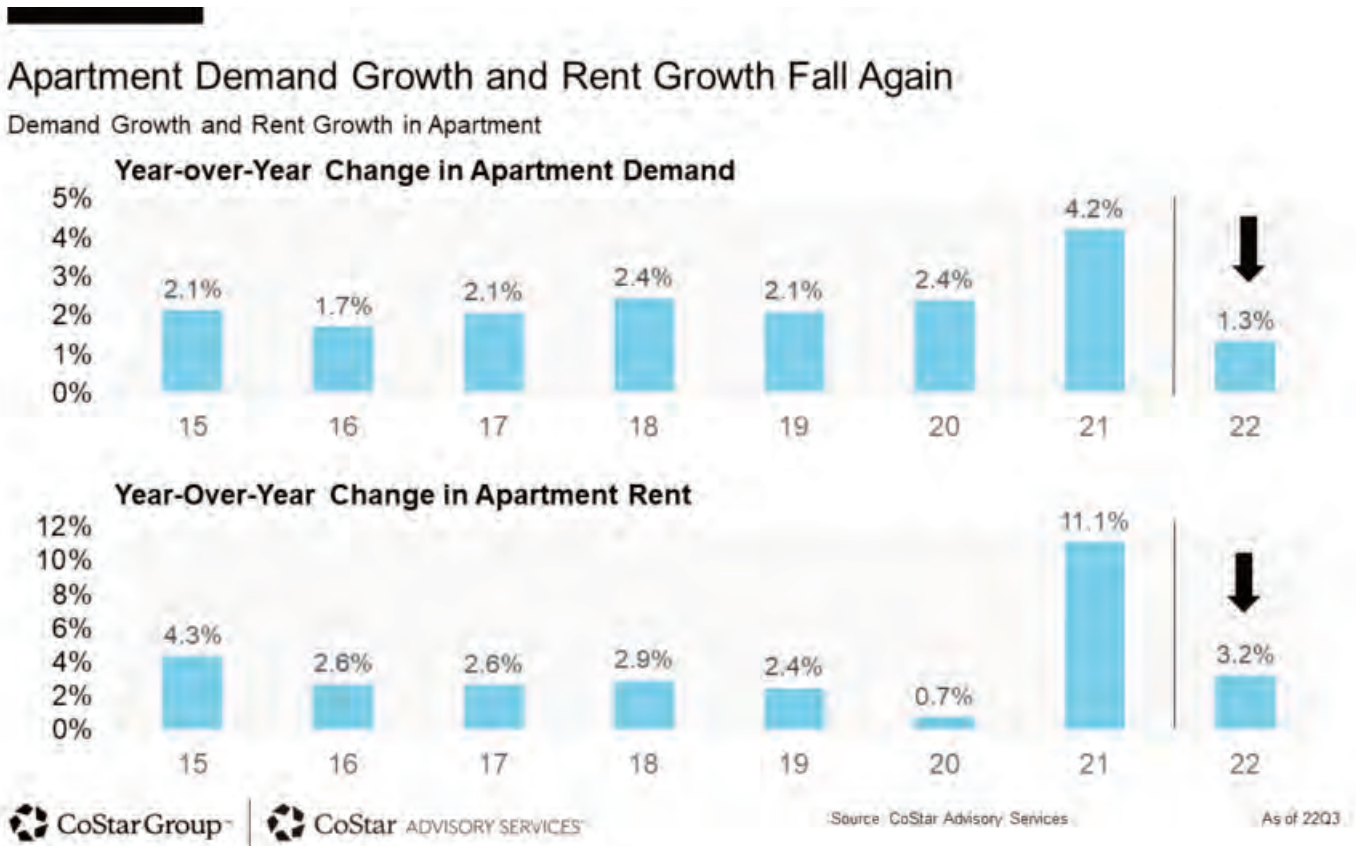
Prediction 12: Apartment Demand Growth and Rent Growth Fall Again

Andrew Rybczynski, Principal Consultant - CoStar Advisory Services

Last year we predicted that demand growth and rent growth in 2022 would each get cut by at least 50% compared to 2021. Boy did we nail that one. That prediction was easy, coming off all-time highs for both demand growth and rent growth, and removing several one-off economic factors that helped drive multi-family for 2021.

2023's prediction is for both demand growth and rent growth to fall again, albeit not by the same magnitude. A recession is more likely than not in 2023, and employment is almost by definition affected by recessions. Since employment growth and multifamily demand correlate so strongly, the result should be even weaker demand growth, and even weaker rent growth.

In a sense, the rent growth call is an easy one this year as well. Despite an anemic second half of 2022 for rents, the first half was strong. Other than 2021, rent growth for 2022 is projected to be the strongest since 2015. Even without recession, a reversion to the norm would be likely.



Prediction 13: New Apartments in 2023 To Remain at Least 5% Smaller Than 2017–19 Average

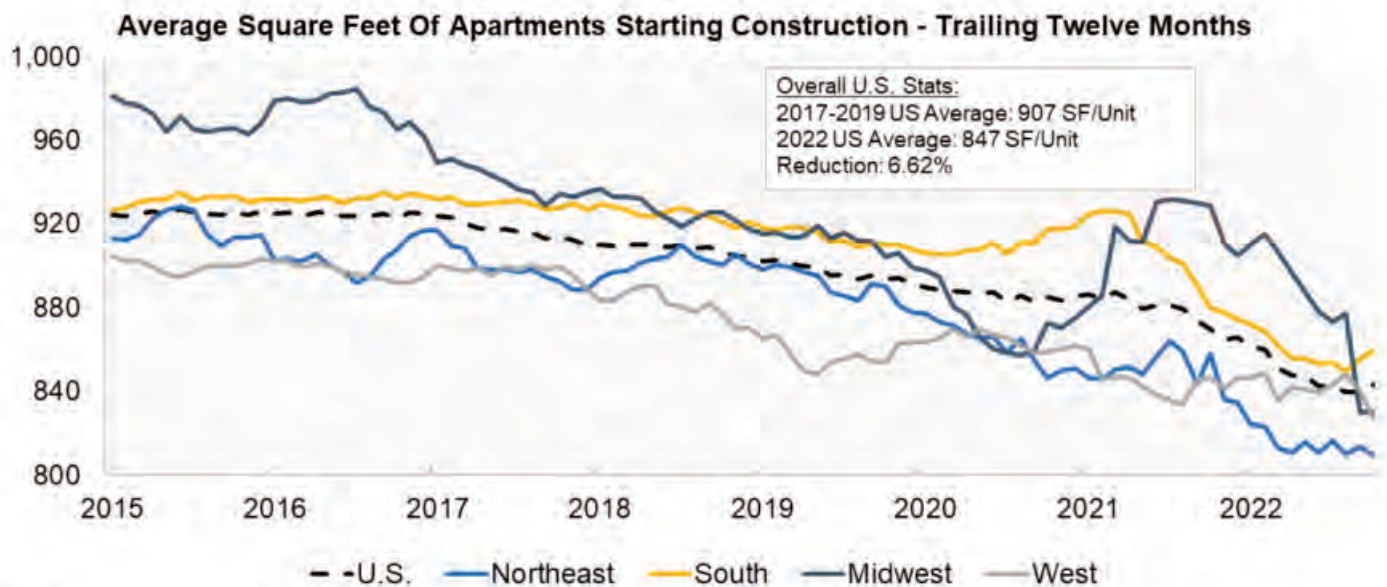
Peter Ferramosca, Senior Consultant - CoStar Advisory Services

Recent demographic trends led to outperformance in Sun Belt markets, with renters moving out of dense, Northeastern and Midwestern cities and into Southern and Western markets, where they find larger living spaces for lower rents. Developers followed this demand growth, and new supply from 2020 Q1 through 2022 Q3 averaged 70,272 net new units in Southern and Western markets per quarter, a 30% increase from the 2015-2019 quarterly average of 54,040. However, supply chain backlogs, inflation, and rising land costs created headwinds for new developments. Projects became harder to pencil out, driving developers to seek density. In 2022, the average size of new units was 857 square feet per unit, 6.62% lower than the average from 2017 to 2019.

Throughout 2023, the average size of new units will continue to be at least 5% smaller than the 2017-2019 average of 907 square feet per unit. While some of this reduction can be attributed to a slight increase in the percentage of new units that are studios or one-bedrooms, it is mainly driven by the shrinking size of each type of unit. One-bedroom and two-bedroom apartments built in 2022 are 4% and 8.2% smaller, respectively, than those built in 2017. With economic uncertainty and high construction costs, developers have little incentive to build larger units. In fact, three-bedroom units have the largest vacancy rates among apartment models at 6.36% vacant as of 2022 Q3. Studios, one-bedrooms, and two-bedrooms have vacancy rates of 6.06%, 5.89%, and 5.63%, respectively. Since the decreasing unit size has not had a negative impact on occupancy, developers and landlords will be able to capture greater returns by continuing their densification strategies.

New Apartments in 2023 To Remain at Least 5% Smaller Than 2017–19 Average

Average Size of Under Construction Apartments



Prediction 14: Office-to-Multifamily Conversions Limited to Specific Markets

Andrew Rybczynski, Principal Consultant - CoStar Advisory Services

Nancy Muscatello, Principal Consultant - CoStar Advisory Services

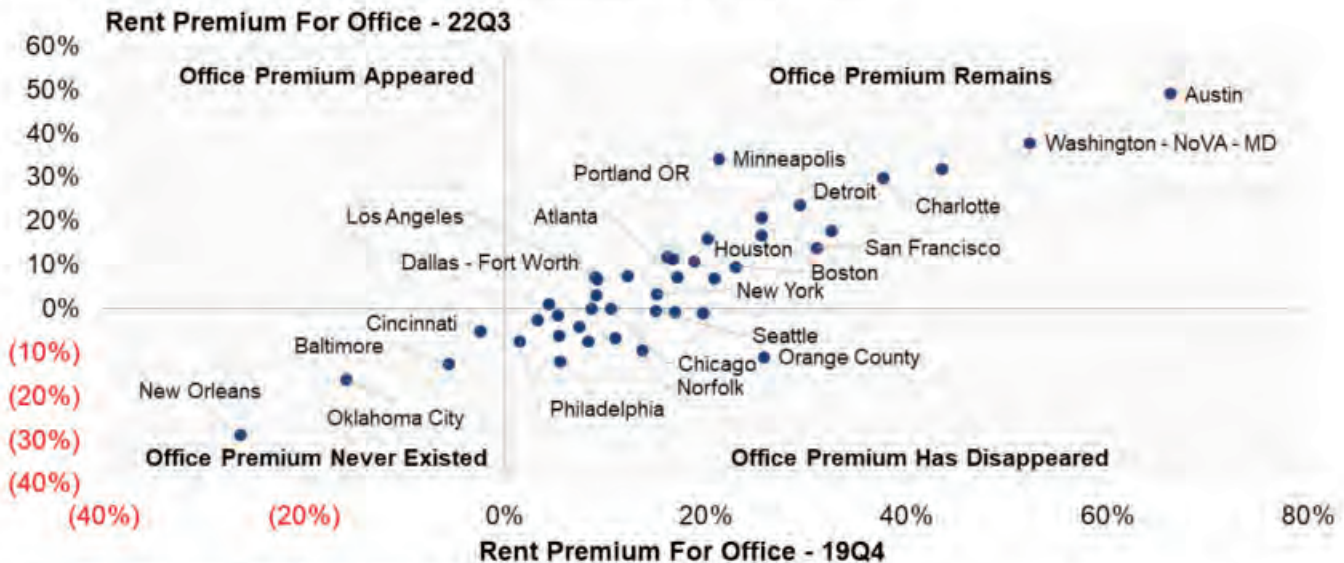
With office vacancies rising and rents stagnating, investors and developers are revisiting plans for office to multifamily conversions. The strategy got attention in the last downturn, when rents on downtown, high-rise apartments and offices became very close. Normally, office rents per square foot are higher, but on average, they converged in 2010.

The gap between office and multifamily rents in urban high-rises has tightened again at a national level, although office rents are still about 10% higher. However, the spread is much more meaningful in some markets than others. In places like Orange County, California, and Philadelphia, downtown, high-rise apartments now garner a higher rent per square foot than office, while the office premium has effectively been erased in Chicago and Seattle. Historically, the disappearance of office rent premiums suggests that there are properties in those markets ripe for conversion. As office rents slide further in reaction to elevated vacancies in 2023, it's probable that conversions will look more palatable in more markets.

The great caveat here is the older, larger floor-plate office product that is struggling most with high vacancy is not always ideal for conversion. Four markets, Cincinnati, Baltimore, Oklahoma City, and New Orleans had an apartment rent-per-square-foot premium over office prior to the pandemic, and while conversions have certainly happened there, these numbers suggest that conversions should be more prevalent. However, many older, vacancy challenged office buildings are simply not suitable for conversion, given their poor location or large floor plates, or the associated costs and challenges necessary to obtain zoning changes. Nevertheless, a case can be made for conversions, particularly in markets where the rent premium for office is at or below 0.

Office-to-Multifamily Conversions Limited to Specific Markets

Rent Premium of Office 2019 vs 2022, Limited to Downtown High-Rise Properties



Note: Limited to Urban Business Districts, buildings 10 stories and higher

Prediction 15: Supply Heavy Markets Will Come Under the Most Cap Rate Pressure

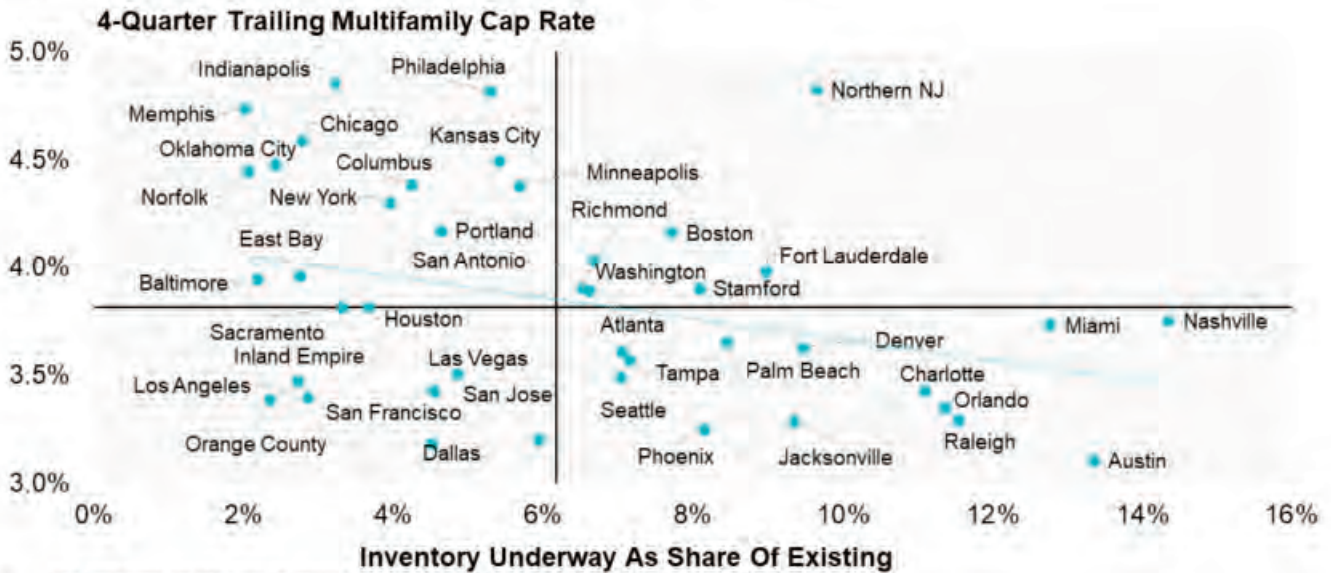
Andrew Rybczynski, Principal Consultant - CoStar Advisory Services

Many markets that experienced great demographic growth over the past cycle now have above-average amounts of supply underway. This is to be expected, as developers responded to strong demand and solid rent growth. Markets like Austin, Nashville, Raleigh, and Charlotte became darlings of both the development and investment classes over the past 10 years, especially the past five years. Cap rates have compressed a lot in some of these areas and with a slowdown looming, and rent growth expected to dip, these markets will seem overvalued quickly. In many cases, they are already deeply inverted against BBBs, and in some cases even against the 10-year.

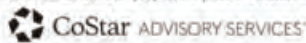
These markets are in bad position to maintain caps at their current levels, and so much of the upward movement that we expect in cap rates in the coming year will come at the expense of supply heavy markets.

Supply Heavy Markets Will Come Under the Most Cap Rate Pressure

Multi-Family Cap Rates vs Amount Underway



Note: Institutional cap rate series for individual properties priced \$10MM or higher



Source: CoStar Advisory Services

As of 22Q3

Prediction 16: New Supply Overwhelms 4 & 5 Star Properties in 2023

Jay Lybik, National Director of Multifamily Analytics - CoStar Market Analytics

The multifamily market in the United States today is the most bifurcated it has ever been. Over the past 20 years, the majority of new units delivered were in mid- and high-rise buildings that created a true luxury segment in multifamily rentals. Today, almost 25 percent of all multifamily units are classified as 4 & 5 Star properties; that’s 4.5 million units.

4 & 5 Star properties benefited the most during 2021’s record-breaking year, with vacancy at the top end of the market declining by 400 basis points over the first three quarters of the year to 6.5%. However, with demand in significant retreat, 4 & 5 star vacancy rate began rising as new supply deliveries began outstripping demand. By the end of 2023 4 & 5 star properties will see their vacancy rate rise by 320 basis points from the 2021 3Q low to 9.7%. More-moderately priced properties in the 3 star plus 1 & 2 Star range will see vacancy rising in 2023 but at a much slower pace. Furthermore, most new supply remains concentrated in the 4 & 5 Star price point. This insulates lower-priced product somewhat as more affordable properties don’t have to contend with oversupply in their price points.

New Supply Overwhelms 4&5 Star Properties in 2023

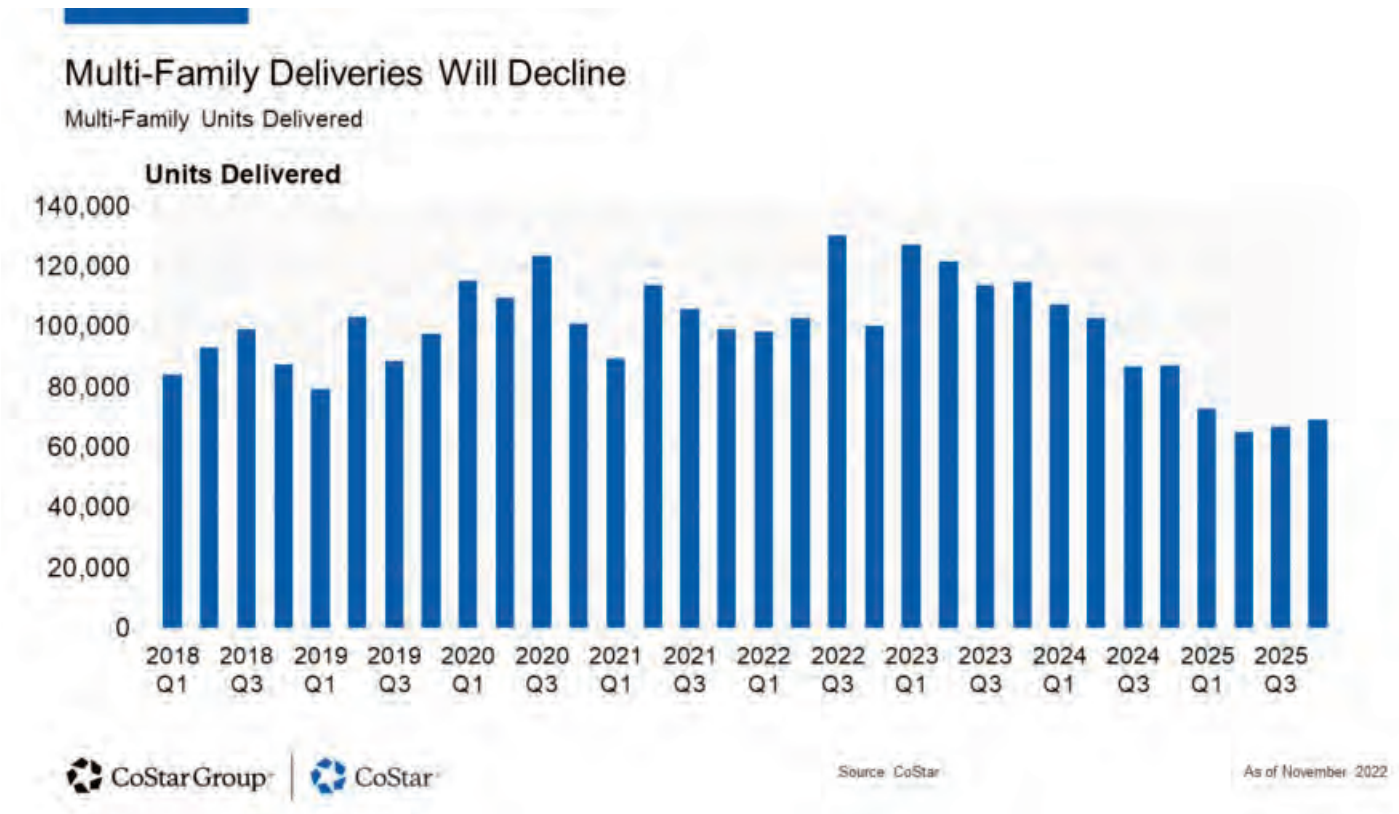
Average Vacancy Rate By Star Rating



Prediction 17: Multi-Family Deliveries Decline

Jay Lybik, National Director of Multifamily Analytics - CoStar Market Analytics

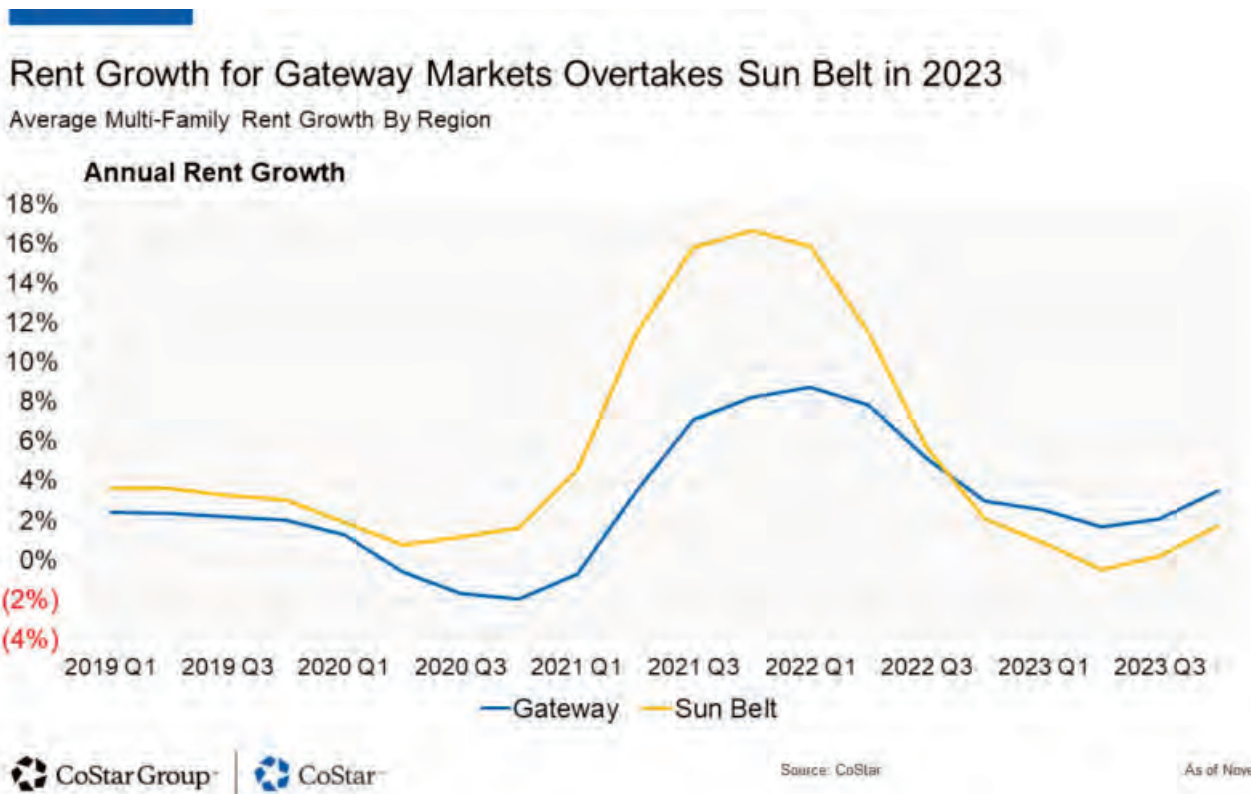
With the most multifamily units under construction since the early 1990's, supply deliveries will remain elevated above the five year quarterly average through the second quarter of 2024. However, the market will then see a significant decline in deliveries due to the inability of developers today to access construction loans. Due to the current uncertainty of valuations, many banks have suspended issuing construction loans for new projects to break ground. Because the majority of developments today are either mid or high rise projects and it take at least 2 to 3 years to deliver a new property a slowdown in ground breaking now will begin impacting the market in 18 to 24 months. Thus, new unit deliveries will drop below 400,000 in 2024 and then below 300,000 in 2025. The current 2025 forecast of 273,000 units would be 38% lower or 158,000 fewer units than delivered in 2022. If demand has sufficiently rebounded by 2024, rent growth for by the end of 2024 and into 2025 could see much stronger upside potential given that demand will once again be outpacing supply additions.



Prediction 18: Rent Growth for Gateway Markets Overtakes Sun Belt in 2023

Jay Lybik, National Director of Multifamily Analytics - CoStar Market Analytics

Sun Belt markets have been outperforming their Gateway competition for several years pre-pandemic and then dramatically outperformed the coasts in 2020 and 2021. But how the tide has changed heading into 2023. With many Sun Belt markets experiencing record forecasted deliveries with demand stuck in neutral, the more-balanced Gateways are poised to flip the script and take the rent growth lead. By the end of 2023, the major Sun Belt markets are projected to be sitting at 9.9% vacancy compared to just 4.4% in the Gateways. The lower vacancy rates in Gateway markets, have them prepared to see rent growth in 2023 at double the pace in the Sun Belt markets, 3.5% compared to 1.7%.



Prediction 19: Rentals Will Account for a Growing Share of Single-Family Housing Starts

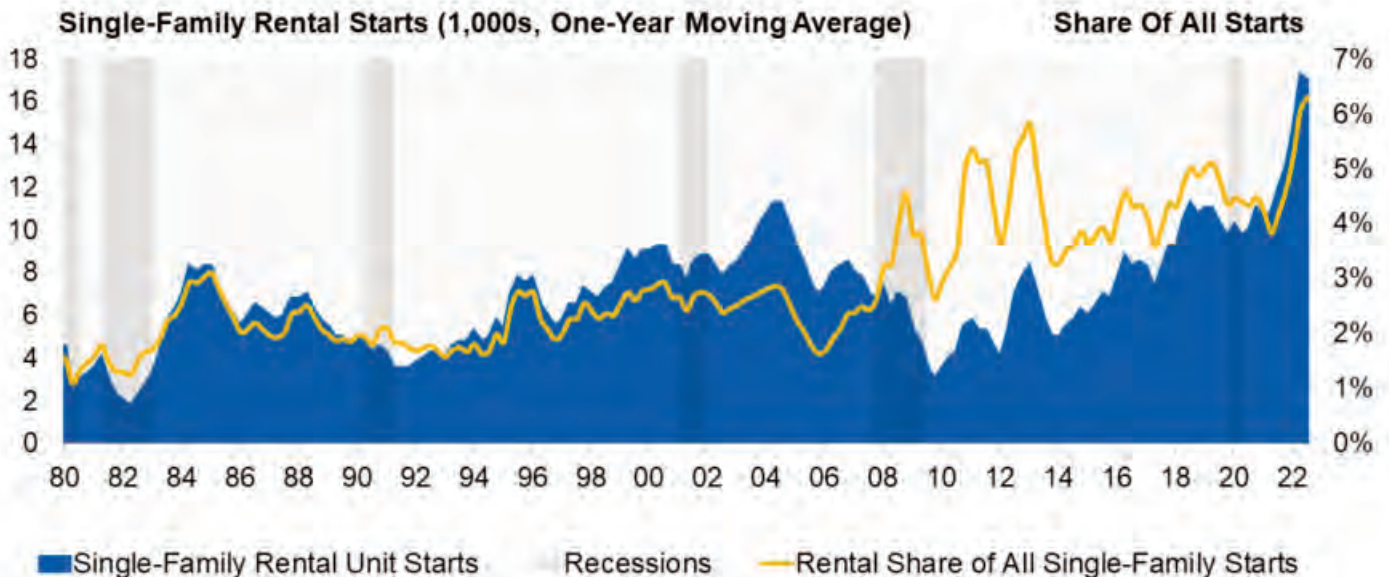
Marco van Gemeren, Real Estate Analyst - CoStar Advisory Services

In keeping with trends from past recessions, the share of single-family rental starts will increase in 2023, as mortgage rates reach multi-decade highs. During most recessions since 1980, the share of single-family starts built for rent has increased relative to other types of single-family residences. Developers delivering into a weak home-buying market will seek alternatives for their product, as purchase demand evaporates.

Furthermore, single-family rentals have grown in popularity over the last cycle, rising from 2.6% of all single-family starts in 2009 Q4 to 6.3% today. Single-family rental growth has been driven by heightened interest from institutional investors, particularly in the past few years as their performance excelled. Between sky-high home prices and a sudden shock to mortgage rates, households face the most difficult home-buying dynamics in decades. An expected drop in pricing in response to high mortgage rates only worsens the outlook for developers who are currently mid-project. Prospective buyers are now seeking out alternatives, creating single-family rental demand that for-sale home builders will be forced to chase.

Rentals Will Account for a Growing Share of Single-Family Housing Starts

Single-Family Rental Starts and Share of All Single-Family Units



Note: Calculated by subtracting built for sale, contractor-built, and owner-built units from total number of single-family unit starts



Sources: U.S. Census Bureau; U.S. Department of Housing & Urban Development; Macrobond; CoStar Advisory Services

As of 22Q3



UNITED STATES

OFFICE



Prediction 20: Vacancy Spread Between Newer and Older Space Will Widen

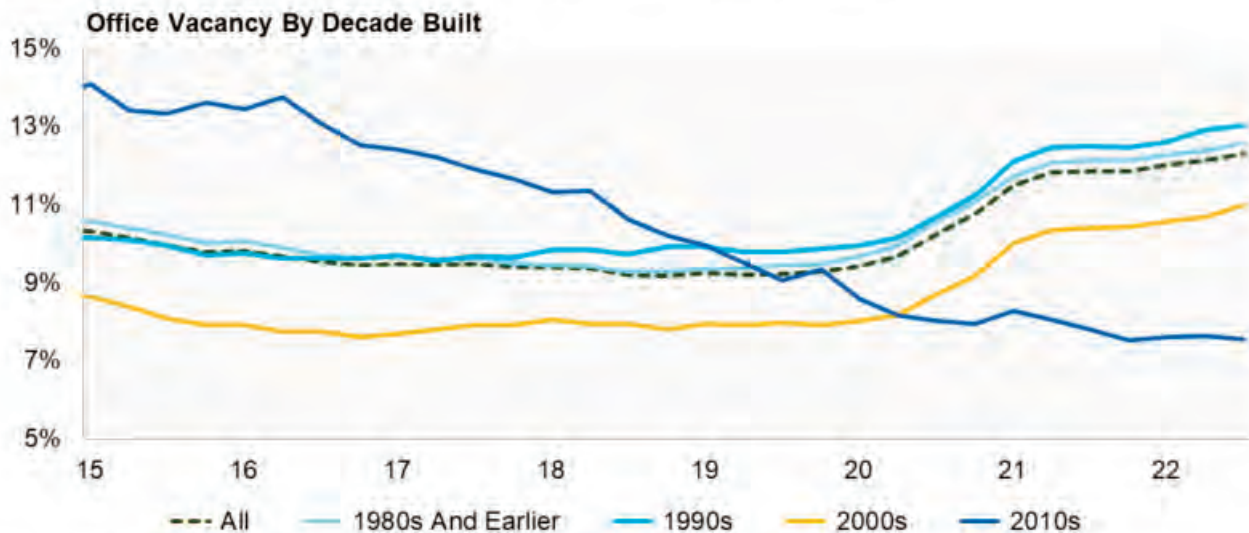
Nancy Muscatello, Principal Consultant - CoStar Advisory Services

In an environment of slower demand growth for the office market, given the headwinds of both remote/hybrid work and a weaker macroeconomic environment, newer, modern high-quality properties are expected to outperform in 2023. As tenants think about consolidating their footprints or rethink their space needs, they are more likely to consolidate into their most-strategic locations, which tend to be the high-quality, centrally located offices.

Indeed, newer stabilized properties have remained well occupied compared with older vintage buildings throughout the pandemic and subsequent recovery. Vacancies for office space built in the 2010s continued to fall over the past decade to a low of roughly 7% in the third quarter of 2022, while vacancies in older building vintages have continued to rise. Space built in the 1990s and earlier have vacancies above the national average and above their levels from 10 years ago. The older inventory that lacks the amenities, along with health and safety features that tenants are seeking in the current environment, are at heightened risk of obsolescence.

Vacancy Spread Between Newer and Older Space Will Widen

National Index Office Vacancy by Decade Built



Note: Exclusive to 54 of the largest U.S. markets



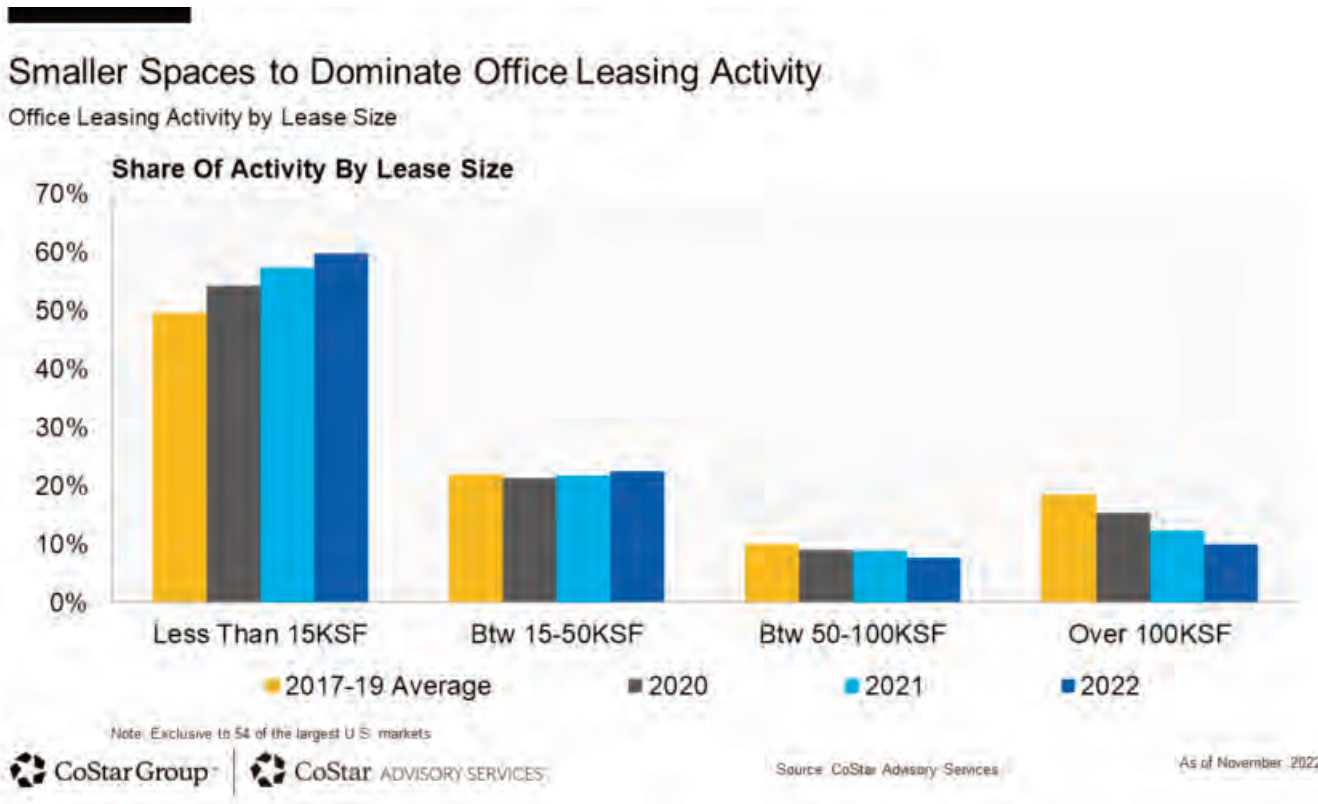
Source: CoStar Advisory Services

As of 22Q3

Prediction 21: Smaller Spaces to Dominate Leasing Activity

Nancy Muscatello, Principal Consultant - CoStar Advisory Services

While office demand growth remains well below its pre-pandemic pace, we expect that the trend toward smaller leases will prevail in 2023. Though economic uncertainty is impacting decisions around space needs, leasing activity has been increasingly dominated by smaller commitments since the pandemic. About 60% of leases signed in 2022 were for less than 15,000 SF, a share that has increased from 49% prior to the pandemic. On the other end of the size spectrum, the share of commitments in large leases has declined considerably. Just 10% of leases signed in 2022 were for 100,000 SF or more, down from nearly 19% on average in 2017-19. CoStar expects that smaller leases will prevail in 2023 as companies continue to reassess space needs, which augers for slower demand growth.



Prediction 22: Pace of Leasing in New Construction Will Lag in 2023 but Outperform in Medium Term

Nancy Muscatello, Principal Consultant - CoStar Advisory Services

The amount of office space underway nationally has moderated from a cyclical peak of 186 million square feet across 54 major U.S. markets reached just prior to the pandemic, to roughly 156 million square feet as of the third quarter of 2022. But an increasing share of new construction is speculative. The preleasing rate of projects underway has declined to about 64% in the third quarter of 2022, well below the 85-87% rates achieved prior to the pandemic and lower than the historical average preleasing rate of 76% for in process construction.

Given the decline in preleasing, as well as the sluggish demand environment following the pandemic, lease-up rates have also fallen for newly completed office projects. Vacancy rates at delivery, and in the quarters immediately following, remain elevated for projects completed in the last two years relative to the pre-pandemic average. However, looking out at a longer-time horizon, leasing for newer properties has continued at a steady rate. After eight quarters from completion, new properties have achieved lease-up rates on par with those in prior years. New supply will not remain completely insulated from near-term weakness in net absorption, but the secular shift of tenant demand toward modern high-quality buildings and the overall dearth of that space in many markets suggests newer product should still outperform.

Pace of Leasing in New Construction Will Lag in 2023 but Outperform in Medium Term

Vacancy Rates at Delivery and in Subsequent Quarters for Newly Built Office Properties



Note: Exclusive to 54 of the largest U.S. markets. 2021 limited to deliveries existing for six quarters; 2022 limited to 22Q1 deliveries.



Source: CoStar Advisory Services

As of 2/23

Prediction 23: Lab Rent Growth Will Decelerate

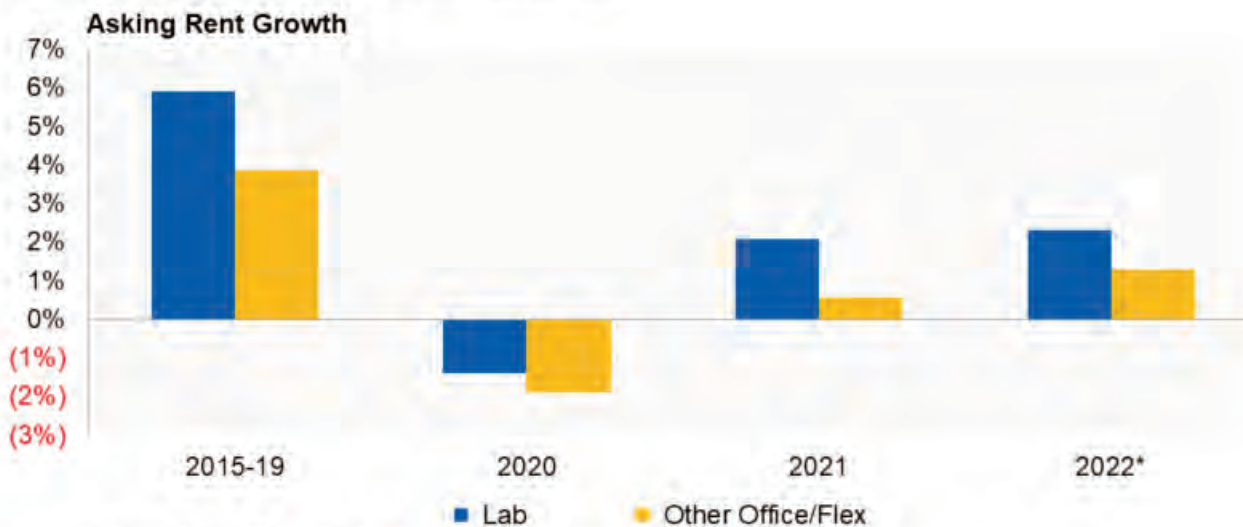
Nancy Muscatello, Principal Consultant - CoStar Advisory Services

The exceptional growth in the lab market over the past few years has begun to decelerate, setting the stage for more modest improvements in fundamentals in 2023. Fundamentals in the sector remain healthier than in the broader traditional office market, but a slowdown in biotech VC funding since the peak in 2021 amid a global decelerating in venture funding, and increased layoffs in the sector, will dampen demand growth.

At the same time, development activity has ramped up, with nearly 14% of lab inventory underway across 12 major lab hubs tracked by CoStar. By comparison, less than 2% of traditional office inventory is underway in the same markets. The biotech sector continues to benefit from the tailwinds of an aging population that will require more healthcare and the need for new medicines even in a slower macroeconomic environment. However, the near-term outlook is for slower lab rent growth in 2023 compared to 2022. Importantly, while the lab market is not immune to global economic headwinds, the sector is still expected to outpace traditional office fundamentals going forward.

Lab Rent Growth Will Decelerate

Annual Rent Growth for Lab Space and Other Office Space



Notes: Exclusive to Boston, SF Bay Area, San Diego, New York/New Jersey, Philadelphia, Washington/Baltimore, Raleigh/Durham, Seattle, Los Angeles, Denver, Chicago, and Houston. Lab properties limited to those that are larger than 50,000 SF that are office or flex (industrial properties excluded). *2022 full-year data is forecast.



Source: CoStar Advisory Services

As of 22Q3

Prediction 24: Oversupply of Medical Office Will Weaken Fundamentals in Certain Markets

Kevin Cody, Strategic Consultant - CoStar Advisory Services

The medical office sector has been gaining investor attention in recent years due in large part to its favorable supply and demand trends. Two compelling examples of these trends are the aging U.S. population requiring more healthcare and the low share of inventory under construction. Nationally, these trends suggest a strong demand outlook and limited supply risk, but at a market-level, demographics and construction activity vary widely.

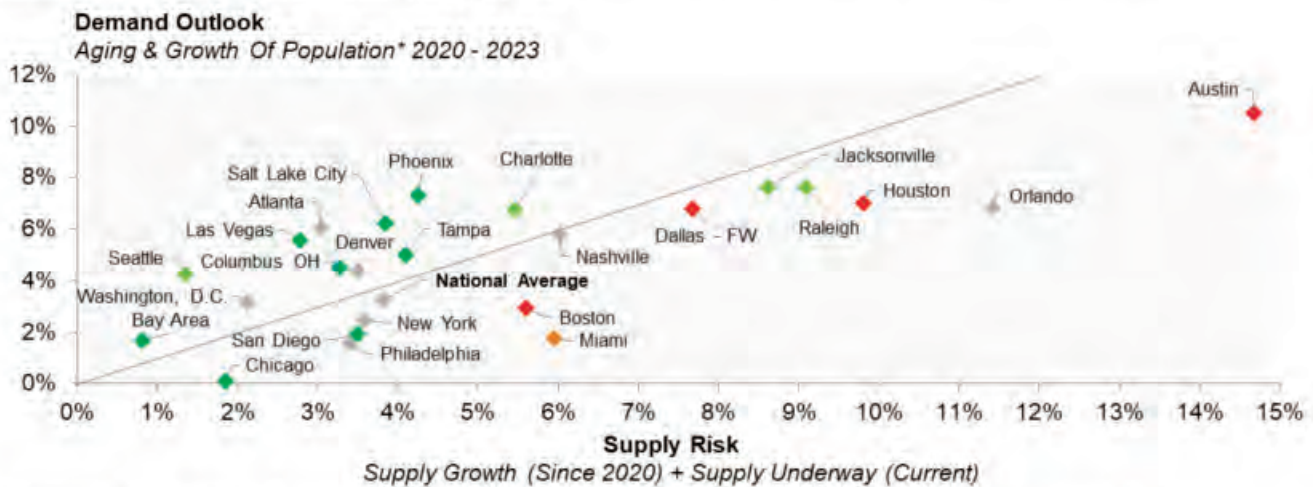
Markets like Salt Lake City, Phoenix, Las Vegas, and Tampa all have healthy demographic outlooks relative to the level of construction each market is experiencing. These markets have also seen very strong lease up for new and under construction buildings. As such, they are well positioned to see their fundamentals strengthen in 2023.

Conversely, fundamentals in markets such as Boston, Miami, Dallas, Houston, and Austin will likely face pressure in 2023. While many of these markets have favorable demographics, particularly the Texas markets, recent and under construction supply has become a concern. All these markets have an availability rate for new and under construction space above 25%.

Healthcare employment has been resilient in previous recessions, making the medical office sector particularly attractive at this time. However, a temporary slowdown in leasing in 2023 would not be surprising, and some markets may find it more difficult to lease up new space. Longer term, the aging of the U.S. population will produce attractive medical office opportunities across the country, but in the coming year, elevated supply will put pressure on fundamentals in certain markets.

Oversupply of Medical Office Will Weaken Fundamentals in Certain Markets

Medical Office – Demographic Growth vs. Supply Risk



Availability Rate of New & Under Construction Space: ◆ <15% ◆ 15% - 20% ◆ 20% - 25% ◆ 25% - 30% ◆ >30%

Note: "New space" is defined as having been built in 2018 or later
 *Calculated using Oxford Economics' population forecast, adjusted for age-based office visits (NCHS) and healthcare spending (CMS.gov)

Prediction 25: Mixed-Use Demand Will Continue to Outperform

Peter Ferramosca, Senior Consultant - CoStar Advisory Services

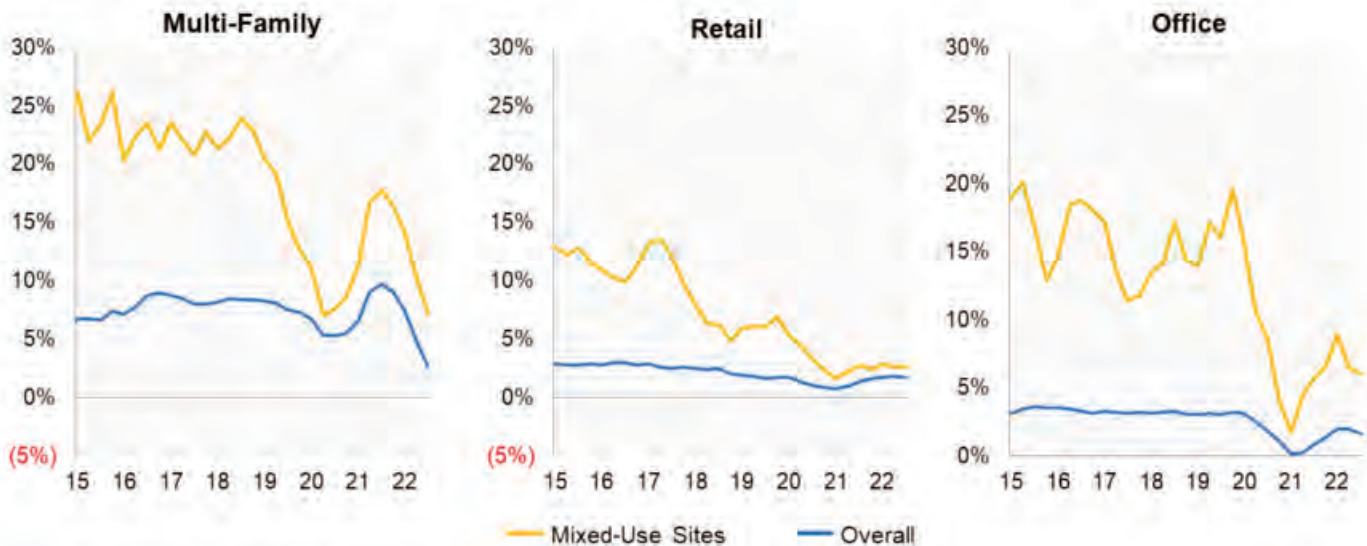
Mixed-use developments have attracted the attention of both landlords and tenants alike over the past decade, with over 225 million square feet of new mixed-use space being built over that period. These developments consist mainly of apartments, office, retail, and hotel uses. The combined property types create a synergistic effect where the presence of each bolsters demand for the others. Retail serves as an amenity for the office component, while multifamily, hotel and office provide foot traffic for retail. Despite an active supply pipeline, demand for mixed-use has kept pace. Office properties in mixed-use sites in particular have outperformed similar properties outside of mixed-use development. Office demand increased by 6% year over year as of 2022 Q3 in mixed-use properties nationally, compared to 1.7% in similar office properties located outside of mixed-use sites. Despite fairly active construction and headwinds presented by the pandemic, mixed-use demand has been strong enough to keep vacancies at a healthy level.

Additionally, the fact that different components make each property type within mixed-use developments more desirable for tenants also drives a high rent premium for retail, multifamily, and office over comparable non-mixed-use assets. Asking rent levels in retail, multifamily, and office space in mixed-use sites command premiums of 18%, 13%, and 11.4%, respectively, as of 2022 Q3.

Heightened demand for space in mixed-use sites and the high rent premiums that come with it will continue to make mixed-use sites an attractive investment in 2023.

Mixed-Use Demand Will Continue to Outperform

Annual Demand Growth – Mixed-Use vs. Overall Property Sector



Note: Exclusive to 54 of the largest U.S. markets.



Source: CoStar Advisory Services

As of 22Q3

UNITED STATES

INDUSTRIAL



Prediction 26: Transaction Volume of Low FAR Properties To Outpace General Industrial Volume

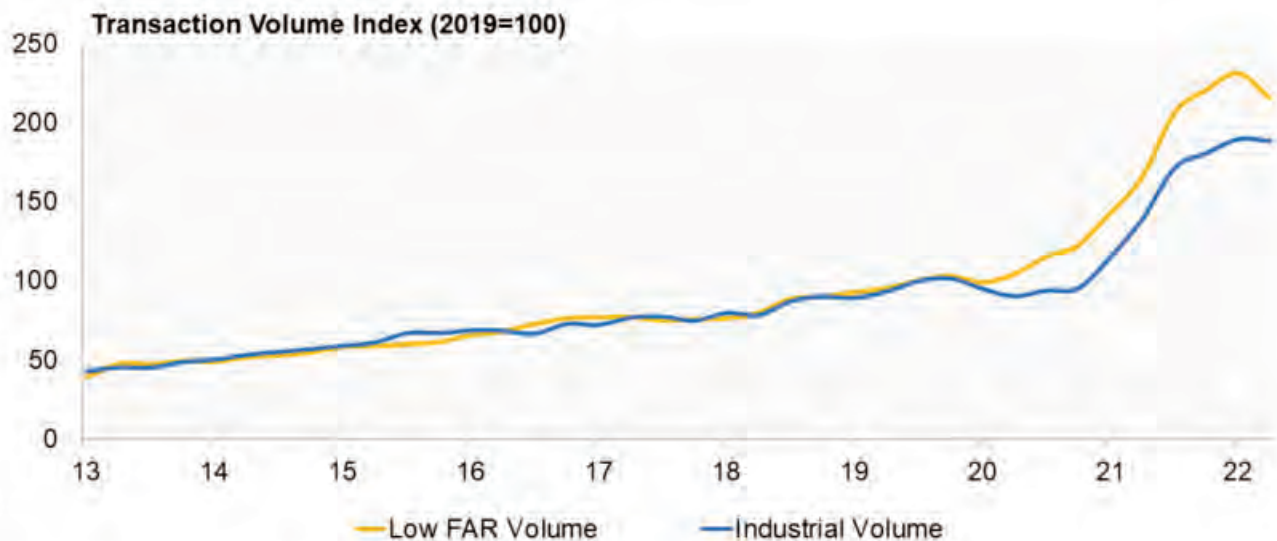
Juan Arias, Strategic Consultant - CoStar Advisory Services

Demand for industrial space has grown at a fast clip in the past few years with e-commerce growth accelerating the need for different types of facilities from last mile to large bulk distribution centers. With the explosion of imports and consumer demand during the pandemic, a new type of facility has come into focus -- properties with low floor to area ratios (FAR).

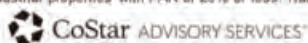
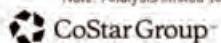
As e-commerce sales continue to grow, so will the need for parking space for trucks and delivery vans across the country. Growth in goods imports has also increased the need for container storage, and continued construction spending has increased the need for equipment storage space. The combination of these factors have resulted in an acceleration in transactions involving low FAR properties since 2020. We expect transactions for these properties will outpace broader industrial transactions into 2023, as investor interest in these types of properties continues to rise.

Transaction Volume of Low FAR Properties To Outpace General Industrial Volume

Low FAR and Industrial Transaction Volume Index



Note: Analysis limited to industrial properties with FAR of 25% or less. Transaction volume excludes portfolio deals



Source: CoStar Advisory Services

As of 22Q3

Prediction 27: Frozen Imports and Exports Top 2022 Levels

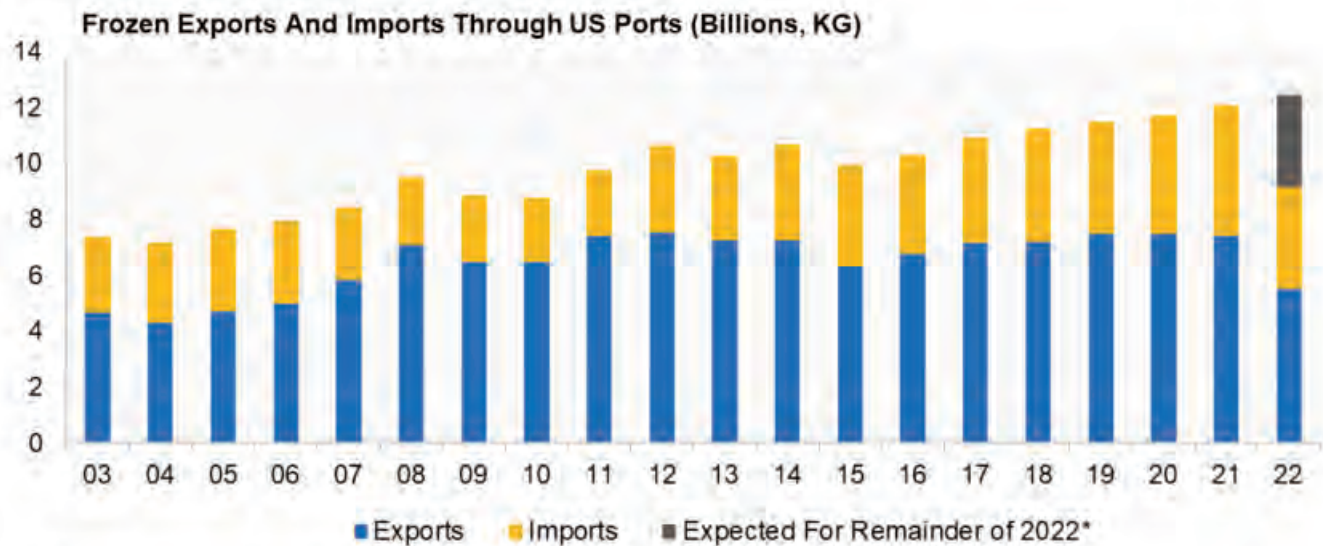
Juan Arias, Strategic Consultant - CoStar Advisory Services

Growth in the cold storage market is aided by a rise in food imports and exports flowing through U.S. ports, which we expect will continue to rise in 2023. We believe the lack of usable cold storage space, or actual freezer space, which has been evident since 2009, when many smaller providers closed shop under the financial strain after the last recession, coupled with the increased demand for exports and groceries, will provide a strong tailwind for cold storage space demand in the coming years.

The high costs and complexity of building out this kind of space will continue to place constraints on supply, but savvy real estate investors who can figure out a cold storage investment strategy or developers who can execute projects in the coming years stand to benefit.

Frozen Imports and Exports Top 2022 Levels

Frozen Exports and Imports Through US Ports



Based on frozen import and export growth relative to GDP growth



Sources: USTA, CoStar Advisory Services

As of Sept. 2022

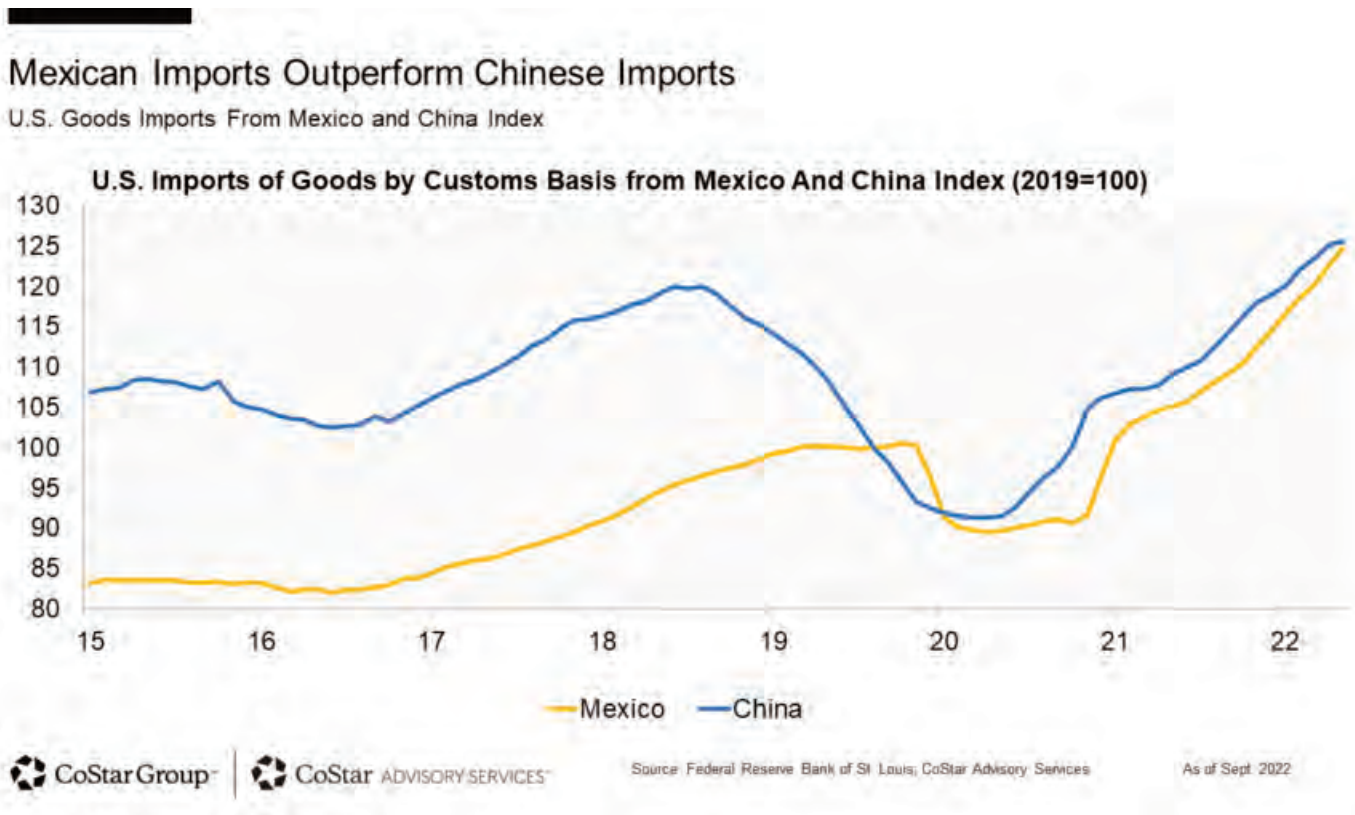
Prediction 28: Mexican Imports Outperform Chinese Imports

Juan Arias, Strategic Consultant - CoStar Advisory Services

Trade route traffic has continued to shift, as higher shipping costs, tariffs, and pandemic disruptions roil overseas supply chains. Meanwhile, trade clarity provided by the United States–Mexico–Canada Agreement (USMCA) is driving import growth with trade partners closer to home, specifically Mexico.

After the implementation of USMCA, shifts in consumer spending significantly expanded global trade in goods. But the logistical pressure from this surge in demand has upended global supply chains as well, driving shipping costs higher. In this environment, Mexico appears to benefit due to its proximity and competitive import costs compared to China.

We expect an outperformance in imports relative to China, a rebounding maquiladora export economy, rising employment and consumption, coupled with a healthy labor supply, will paint an attractive picture for industrial investment in multinational cities on the U.S.-Mexico border over the coming year.



Prediction 29: Amazon Will Revert Back to Pre-Pandemic Absorption Levels

Juan Arias, Strategic Consultant - CoStar Advisory Services

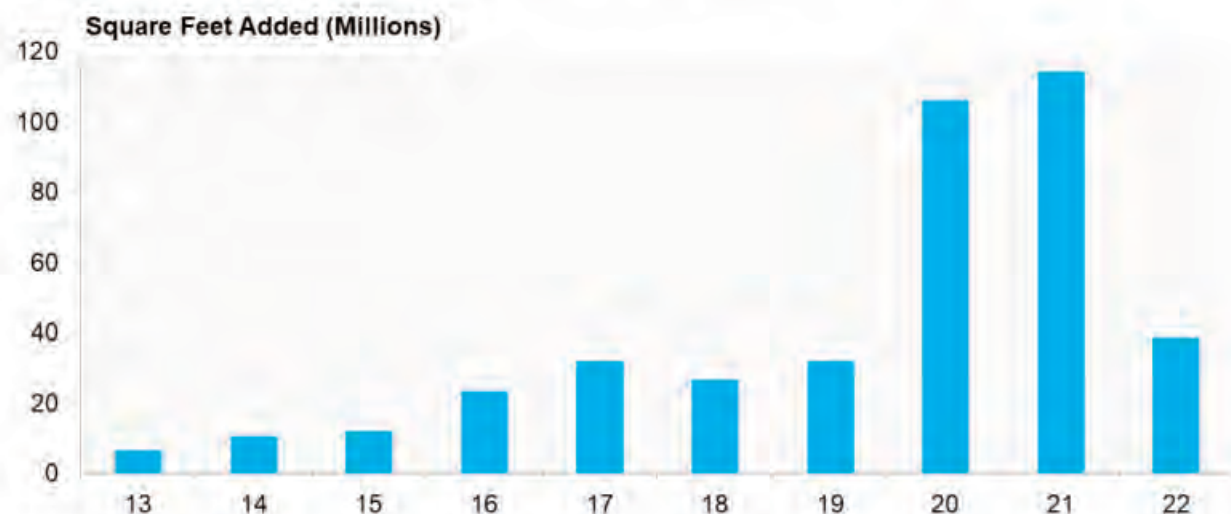
The explosion in e-commerce sales growth during the pandemic in 2020 and 2021 saw growth rates of 36.4% and 17.8% respectively according to eMarketer estimates. These are even higher according to the Census at 42% and 18% respectively. Now, post pandemic, eMarketer expects a slowdown in the growth rate of e-commerce sales to around 9.4% annual growth in 2022, before returning to a more normal growth rate of around 12% in 2023, which is similar to pre-pandemic growth rates.

This means there is a near term slowdown in logistics space demand from e-commerce players like Amazon, which is now readjusting its footprint by pulling back on expansion plans. According to Amazon, excess capacity, and less productive facilities in the past several months have resulted in billions of dollars in added costs for the company, therefore Amazon is slowing down its network expansion through 2023 “to better align with expected customer demand.”

Over 20 million square feet is impacted by this slowdown, but Amazon still has around 100 million square feet in its pipeline. The company is still opening a significant amount of space in 2022 and 2023, they will just open less space than originally planned, likely reverting to pre-pandemic absorption levels.

Amazon Will Revert Back to Pre-Pandemic Absorption Levels

Annual Logistics Square Feet Added by Amazon



Prediction 30: Industrial Will Lead Major Property Types in U.S. Rent Growth

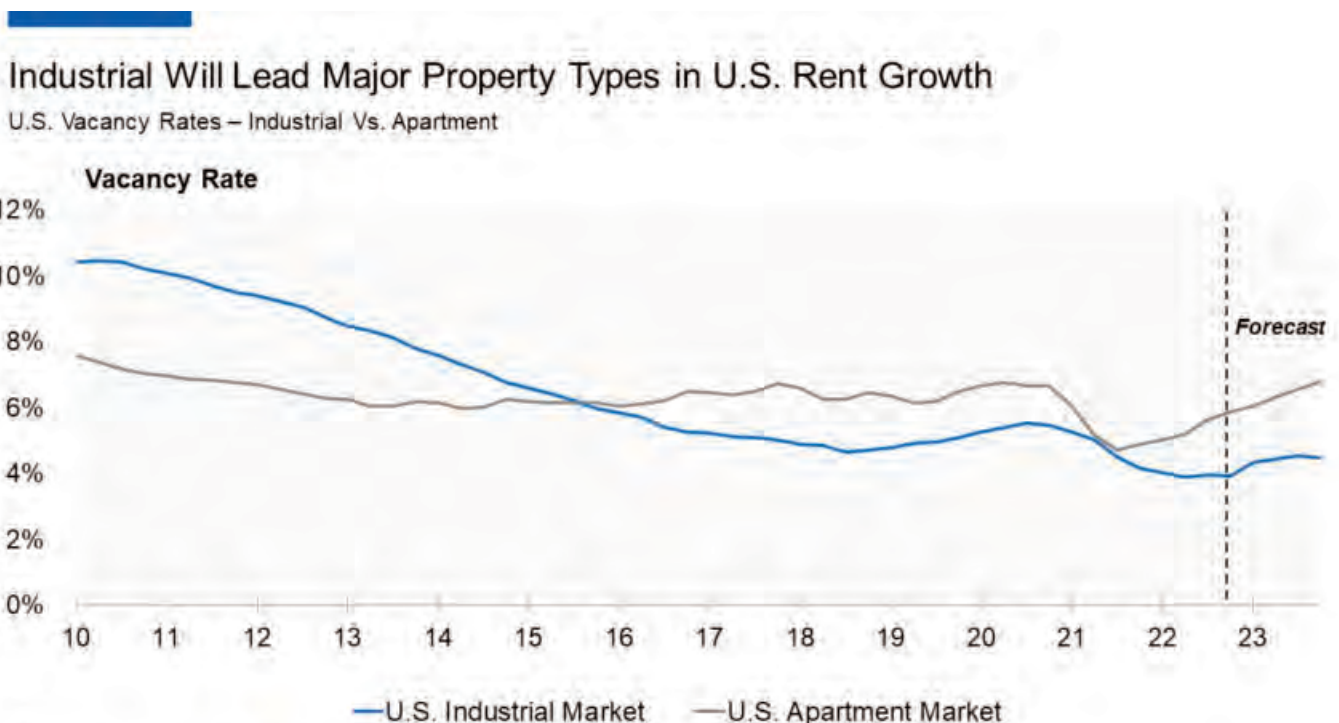
Adrian Ponsen, Director of U.S. Industrial Analytics - CoStar Market Analytics

The U.S. industrial market won't be immune to headwinds in 2023, but the sector enters the year with the lowest vacancy rate, strongest absorption of the major property types, and the potential to continue leading in rent growth. This comes in part because the apartment sector, typically a close competitor in terms of its ability to generate outsized rent gains, has shown clear signs of weakness.

Elevated mortgage rates, inflation, and worries over a potential recession drove a slowdown in U.S. household formation during the second half of 2022 with third quarter apartment absorption at less than half of typical seasonal levels recorded during the three years prior to the pandemic. Combined with apartment development at a multi-decade high, this demand slowdown has caused the U.S. apartment vacancy rate to rise by a full percentage point since late 2021.

In contrast, the U.S. industrial vacancy rate has held within 20 basis points of all-time lows in the face of record new completions. While Americans have pulled back on home purchases and relocations to new apartments, they continue to lean into online and in-store retail therapy, spending liberally on physical goods stored in distribution centers across the U.S.

Heading into 2023, U.S. industrial absorption is still running more than 25% above typical pre-pandemic levels, and Amazon has resumed signing large leases, making major commitments for new space in the Bronx, Pennsylvania's I-81 Corridor, and the San Francisco Bay Area.



Prediction 31: I-95 Logistics Corridor Will Outperform I-5

Peter Ferramosca, Senior Consultant - CoStar Advisory Services

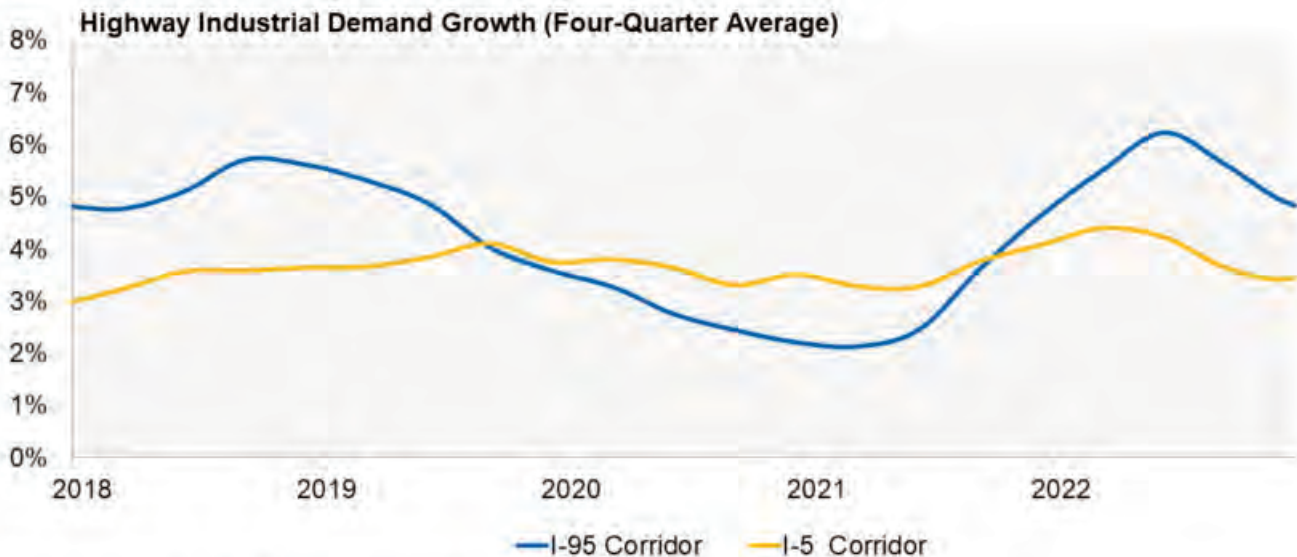
Marco van Gemeren, Real Estate Analyst - CoStar Advisory Services

Competitive shipping costs and increased container traffic will yield an advantage for logistics space along the Interstate 95 corridor over the Interstate 5 corridor. Year-over-year container volumes have largely risen along the East Coast, especially at the Port of New York and New Jersey and the Port of Savannah, while West Coast container volumes have decreased since last year. From 2021 to 2022, average monthly port volume in TEUs has grown by only 2.3% in Long Beach and has decreased by 4%, 2.5%, and 5.2% in Los Angeles, Oakland, and Seattle, respectively. Conversely, monthly port volume has grown by 29% from 2021 to 2022 at the Port of New York and New Jersey and by 6.6% at the Port of Savannah. Rail transport delays and other congestion issues have also disrupted West Coast port traffic and steered demand toward the East Coast.

Additionally, migration trends towards the Southeast have increased the need for logistics space along I-95, as this highway serves many southern growth markets. Increased shipping traffic along the East Coast and growing population centers with high buying power along the I-95 corridor have translated to increased demand for logistics space near I-95. As of 2022 Q3, demand growth has averaged 5.6% over the prior four quarters for logistics properties greater than 150,000 square feet within two miles of I-95, compared to 3.6% for those within two miles of I-5. The Interstate 95 logistics network should outperform Interstate 5 logistics through 2023, as east coast port traffic continues to take a growing share of overall U.S. port traffic and migration trends continue to favor the southeast over West Coast markets.

I-95 Logistics Corridor Will Outperform I-5

Annual Demand Growth for Highway Industrial



Note: Properties included are 150K+ SF logistics properties located within 2 miles of each highway

UNITED STATES

RETAIL



Prediction 32: Announced Store Closures Remain Low Due to a Healthier Retail Market

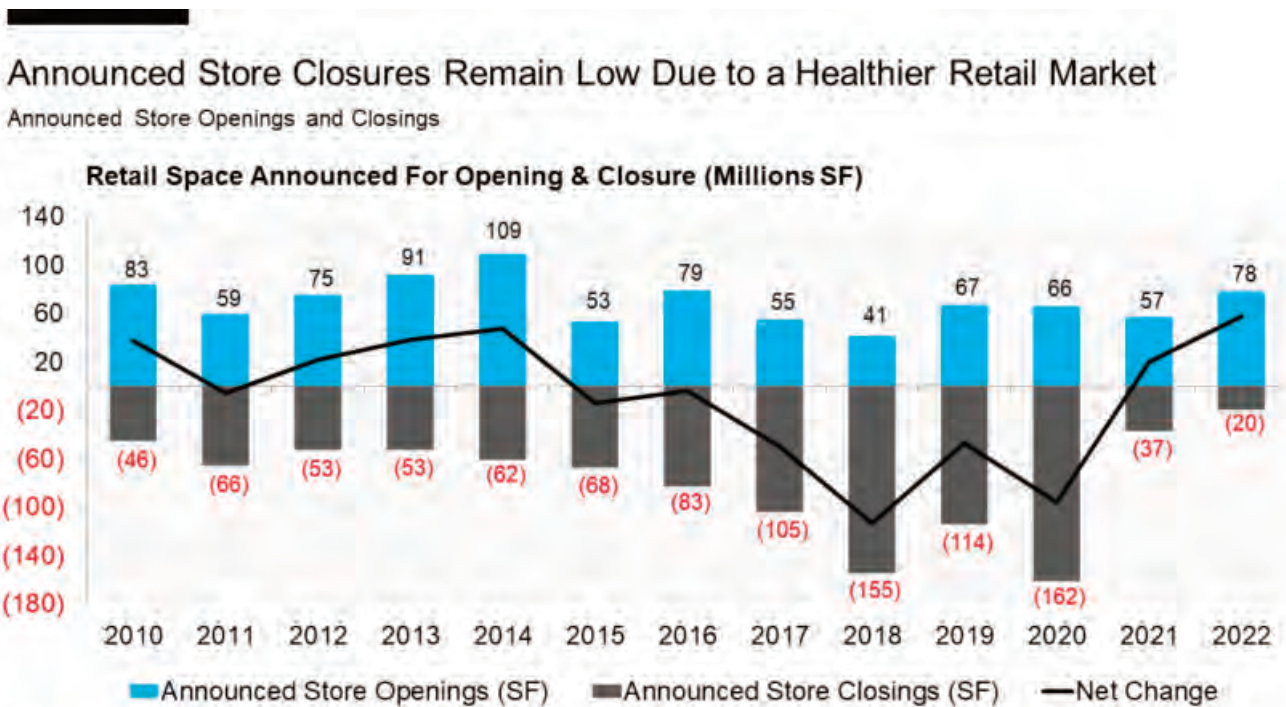
Kevin Cody, Strategic Consultant - CoStar Advisory Services

Brandon Svec, National Director of Retail Analytics - CoStar Market Analytics

Following a record-high amount of space announced for closure in 2020, new lows have been reached in each of the past two years. In 2021 and 2022 combined, just 57 million square feet have been announced for closure, while at the same time, retailers have announced store openings of over 130 million square feet. Despite economic stress that is likely coming for the consumer in 2023, we do not expect announced store closures to return to pre-pandemic levels. This is largely because the retail market is, in many ways, healthier now than it was before the pandemic.

The spike in announced store closures in 2020 removed a significant amount of unproductive space from the market. At the same time, dozens of retailers filed for bankruptcy and either ceased operations or successfully shed unprofitable locations and excess debt in the process. Those retailers that remained saw sales and profitability skyrocket in 2021 as consumption grew at double-digit rates, further boosting their financial resiliency and pushing many to accelerate expansion plans.

While headwinds from slowing consumption and higher operating costs will likely drive a slower year for growth in 2023, most national retailers enter the year with healthy balance sheets and rightsized store fleets, with only a handful of retailers on credit watchlists. As such, the pace of closures should remain muted relative to the peak closure years of 2018 through 2020.



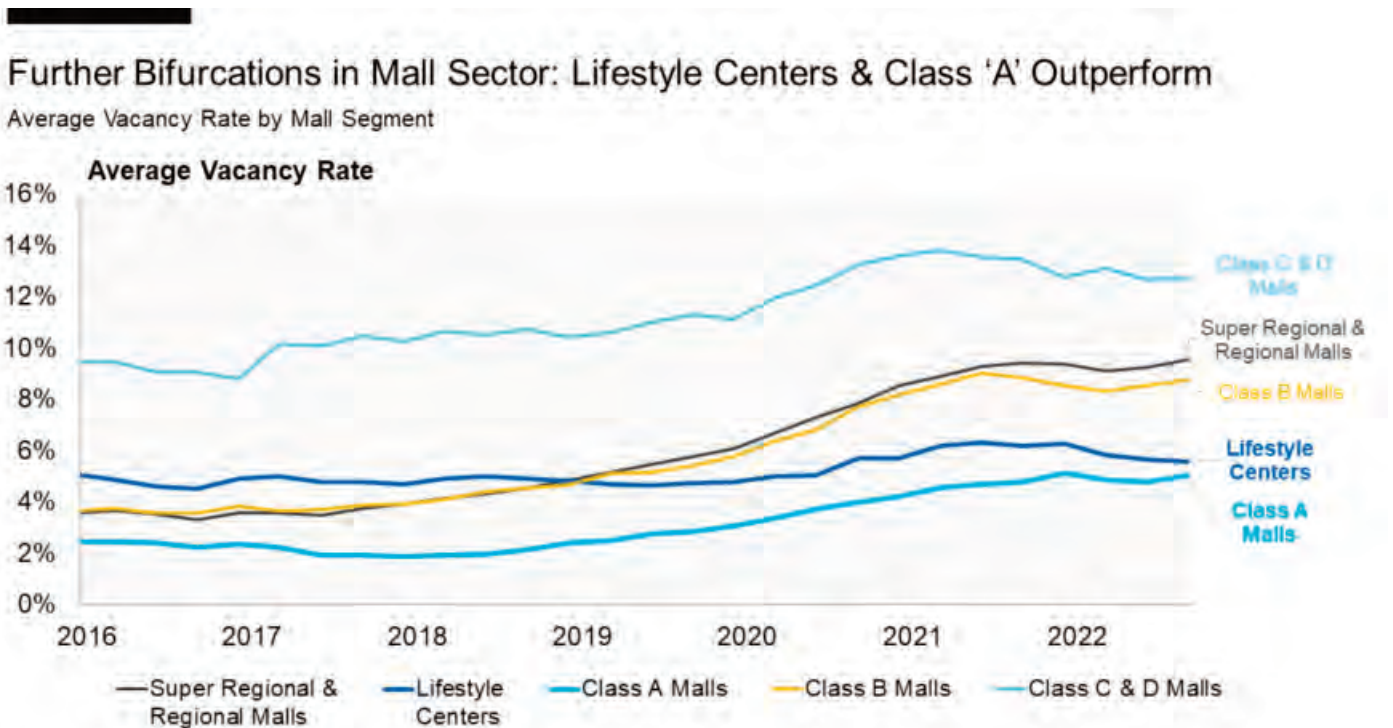
Prediction 33: Further Bifurcations in Mall Sector: Lifestyle Centers & Class 'A' Outperform

Kevin Cody, Strategic Consultant - CoStar Advisory Services

Vacancies for the overall mall sector have been rising since 2016, but high-quality malls and lifestyle centers have begun to pull away from the pack. Both near-term, pandemic related trends, and long-term trends suggest this divergence should continue to grow in 2023.

In terms of quality, vacancies in class A malls have expanded since the pandemic, but they remain quite healthy at about 5%. Class A mall vacancies are 370 basis points lower than Class B malls, and 770 basis points lower than class C & D malls. Class A malls are larger, more up-to-date, and typically better located than lower-quality malls, making them more attractive for new and existing tenants. The unfortunate reality for Class C & D malls is that many of them should, and will, be demolished or repurposed.

As for the type of mall that is performing the best, open-air malls, known as lifestyle centers, have held up significantly better than enclosed malls, known as super-regional and regional malls. Lifestyle centers have a greater share of space leased to experiential tenants and grocers and less space occupied by apparel tenants, making them more resistant to e-commerce competition. At 9.5%, the average vacancy rate for super-regional and regional malls currently sits at a 10-year high, while vacancies in lifestyle centers of 5.5%, are just slightly above their 10-year average. Through the first 10 months of 2022, leasing in lifestyle centers was 23% above normal levels, while enclosed mall leasing was 36% below normal levels.



Prediction 34: Grocery-Anchored Shopping Centers Will Outperform Non-Grocery-Anchored Centers

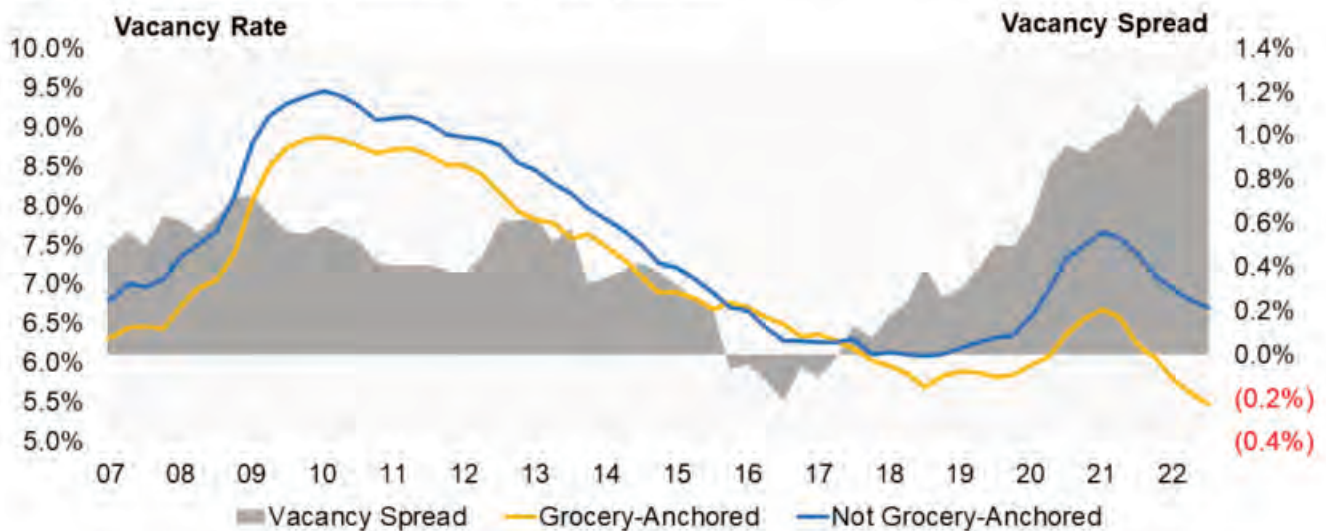
Marco van Gemeren, Real Estate Analyst - CoStar Advisory Services

Continuing their strong performance during 2022, grocery-anchored shopping centers are positioned to maintain lower vacancies than non-grocery-anchored centers in 2023. Grocery stores and other forms of essential retail are among the most resilient retailers during recessions. During the pandemic, grocery stores and pharmacies recovered and sustained foot traffic at a faster rate than that of other retail locations. Since then, the vacancy spread between grocery-anchored and non-grocery anchored centers has only increased. Today, the vacancy rate of grocery-anchored centers is 124 basis points lower than that of non-grocery-anchored centers.

Macroeconomic conditions are poised to benefit grocery-anchored centers. Given inflation pressures and recent sharp increases in credit card debt, consumers are expected to cut back on discretionary spending next year as wages struggle to keep up with rising prices. These spending patterns will steer demand toward grocery-anchored centers. This will especially benefit low-cost and discount grocers occupying space in these properties. Further, grocery-anchored shopping centers are less exposed to competition from e-commerce than other types of retail, making its brick-and-mortar space more essential to its tenant’s sales performance.

Grocery-Anchored Centers Will Outperform Non-Grocery-Anchored Centers

Retail Vacancy Rate – Grocery-Anchored Vs. Not Grocery-Anchored



Note: Exclusive to 54 of the largest U.S. markets. Grocery-anchored centers have space leased by one of the top 100 largest grocers in the country

Prediction 35: Retail in Specific Live-Work-Play Neighborhoods Will Outperform

Peter Ferramosca, Senior Consultant - CoStar Advisory Services

CoStar Advisory Services conducted an analysis of over 300 walkable urban neighborhoods in the United States to determine their investment potential through a Live-Work-Play (LWP) Investment Score. Scoring accounts for structural characteristics, performance trends, and demographics within the neighborhood. Neighborhoods like the fast-growing Capitol Riverfront in Washington, D.C., Boston’s vibrant Seaport district, and downtown Nashville top the list. Highly rated Live-Work-Play neighborhoods include the top 25% analyzed, and low-rated Live-Work-Play Neighborhoods include the bottom 35% analyzed.

Retail property in highly rated LWP neighborhoods have outperformed low-rated neighborhoods and will continue to do so through 2023. Work from home trends have amplified the need for retail near residences during the week, and consumers have shown preference to living in areas with an abundance of entertainment and restaurants on the weekends. While the urban retail sector has been struggling the past few years, neighborhoods with a high LWP Investment Score offer brighter spots. Demand in high-rated LWP neighborhoods held up much better at the beginning of the pandemic and recovered much faster. Vacancies have also remained tight in high-rated neighborhoods at 3.7%, 230 basis points below low rated neighborhoods with vacancies of 6%. Structural shifts in consumer living and spending habits, bolstered by now-ingrained work-from-home policies, should continue to drive retail outperformance in areas with high LWP Investment Scores through 2023.

Retail in Specific Live-Work-Play Neighborhoods Will Outperform

Demand and Vacancy for Live-Work-Play By Score



Prediction 36: Sunbelt Markets Will Continue to Lead the Way for Rent Growth

Brandon Svec, National Director Retail Analytics - CoStar Market Analytics

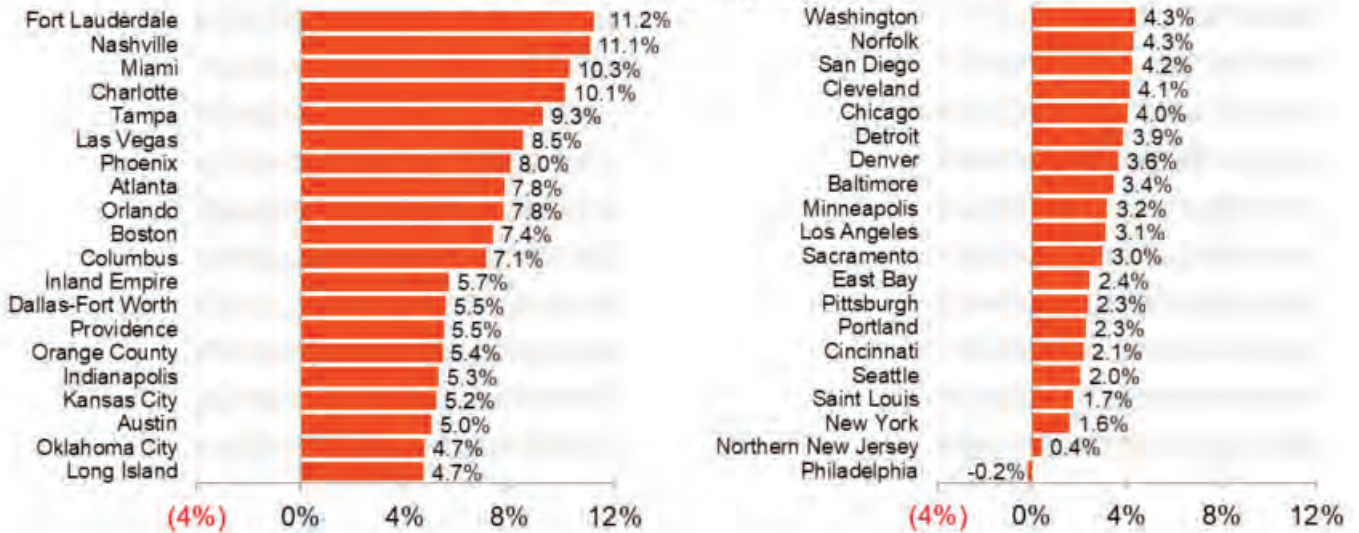
Sun Belt markets that captured an outsized portion of employment and population gains led the way for rent growth over the past year, with each of the top nine markets for retail rent growth being in the Sun Belt. With consumption rapidly rising, these markets have enjoyed consistently strong demand from local, regional, and national tenants and do not suffer from excess legacy inventory that weighs on fundamentals in many Northeastern and Midwestern markets.

Positive demand trends should continue in 2023 as demand for space continues to outstrip anemic levels of new supply and available space in institutional-quality assets grows tighter, giving landlords greater pricing power. While outperforming the national average, retailers and restaurants in Sun Belt markets will not be immune to an expected slowdown in consumption gains and continued margin pressure for tenants, capping the potential gains and resulting in a slower pace of growth across most markets throughout the U.S.

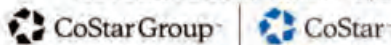
Sunbelt Markets Will Continue to Lead the Way for Rent Growth

Annual Retail Rent Growth

Rent Change from Previous Year



Note: Includes markets with 100 Million+ Square Feet inventory



Source: CoStar

As of 22Q3

CANADA



Prediction 37: Canadian Economy Slips Into Recession

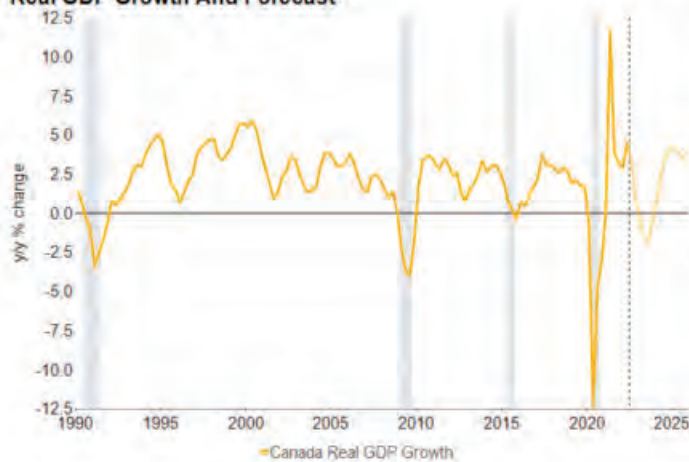
Carl Gomez, Chief Economist and Head of Market Analytics - CoStar Market Analytics

The base case scenario for Canada’s economic outlook in 2023 is for a recession, owing to a moderate contraction of real GDP growth. The downturn will largely be driven by the household sector, as higher interest rates and inflation continue to erode the purchasing power of consumers. However, an even longer and deeper recession is a growing risk, if aggressive interest rate hikes by the central bank ultimately break the back of highly indebted consumers and worsen a housing correction that is already underway.

Canadian Economy Slips Into Recession

Real GDP Growth & Household Debt as a Percent of GDP

Real GDP Growth And Forecast



Household Debt As A Percent of GDP



Oxford Economics, Bank of International Settlements As of Q2 2022

Prediction 38: Monetary Policy Will Pivot

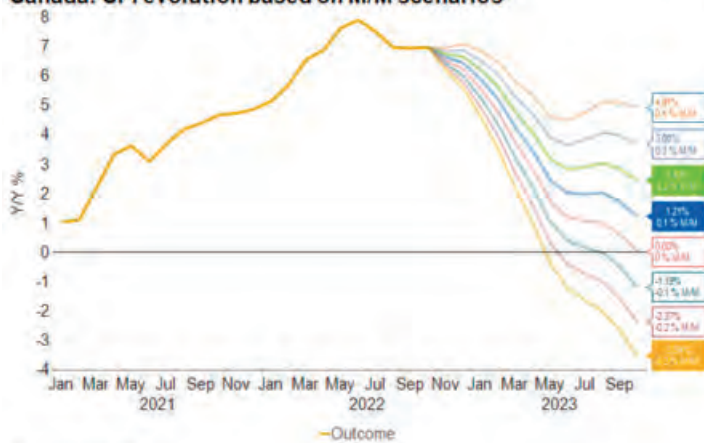
Carl Gomez, Chief Economist and Head of Market Analytics - CoStar Market Analytics

Due mostly to a let up in global supply chain pressures and the limited threat of a wage price spiral, inflation has likely peaked and could return to the target level of 2% as early as spring 2023. With the economy facing a potentially deeper and longer recession, a door will open for the Bank of Canada to pivot to a less restrictive monetary policy, which could include interest rates cuts over the second half of the year.

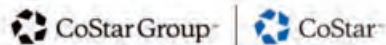
Monetary Policy Will Pivot

CPI Evolution & Interest Rates

Canada: CPI evolution based on M/M scenarios



Canadian Interest Rates



Source: Bank of Canada

As of October 2022

Prediction 39: Industrial Cap Rates Will Hold Firm

Carl Gomez, Chief Economist and Head of Market Analytics - CoStar Market Analytics

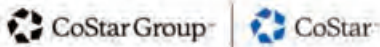
Strong investment demand for industrial has pushed cap rates for this property type to historical lows in 2022. Although interest rates have moved significantly higher over the past year, and yield spreads with risk-free bonds are razor thin, the expectation for strong income growth through better-than-inflation net rental growth is likely to keep investor demand strong for this product amidst limited supply coming to market. As a result, cap rates should hold steady through the course of the year and could even compress further should there be a material easing of interest rates.

Industrial Cap Rates Will Hold Firm

Toronto Industrial Cap Rates And Spread Vs. Bonds



Industrial Yield Spread with Bonds (Basis Points)



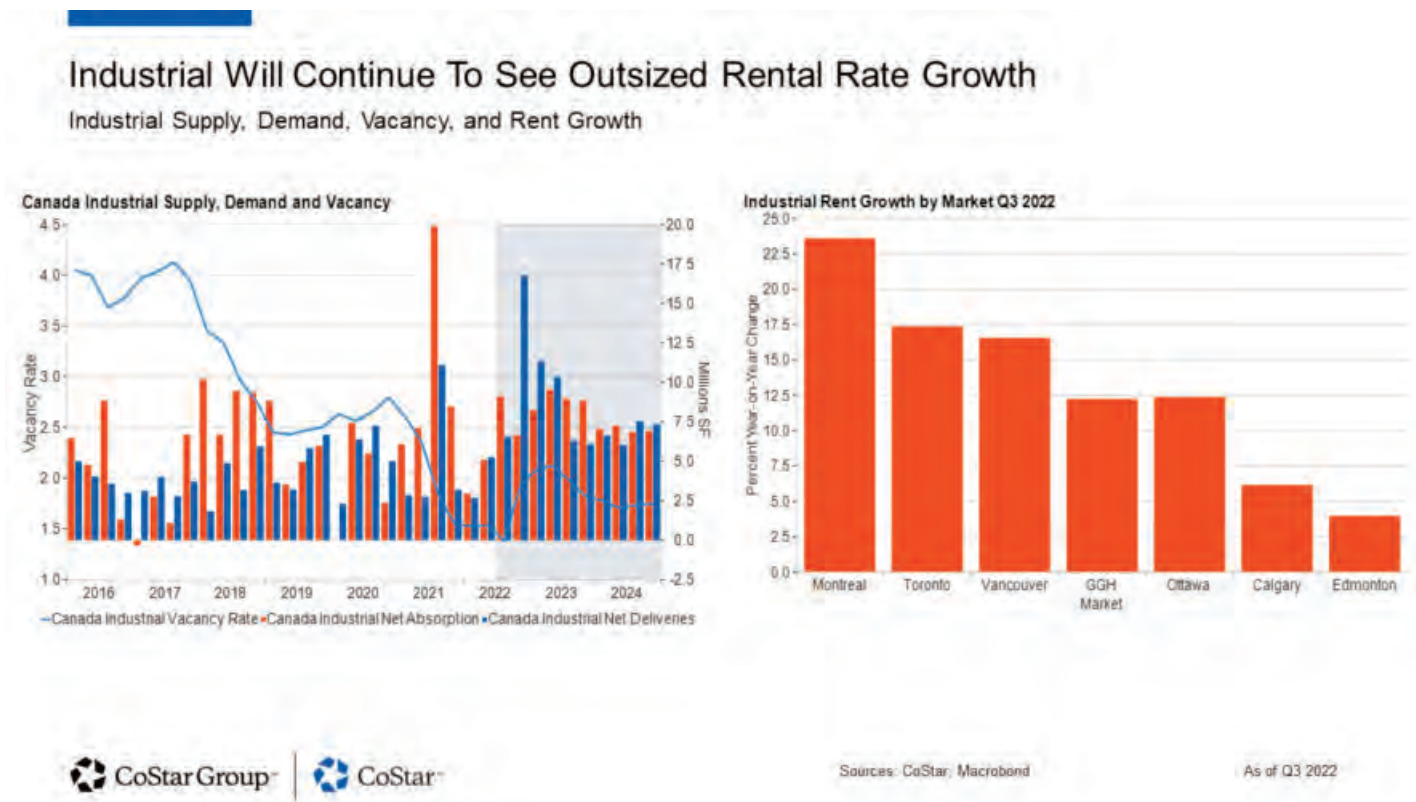
Sources: CoStar, Bank of Canada

As of Q3 2022

Prediction 40: Industrial Will Continue to See Outsized Rental Rate Growth

Carl Gomez, Chief Economist and Head of Market Analytics - CoStar Market Analytics

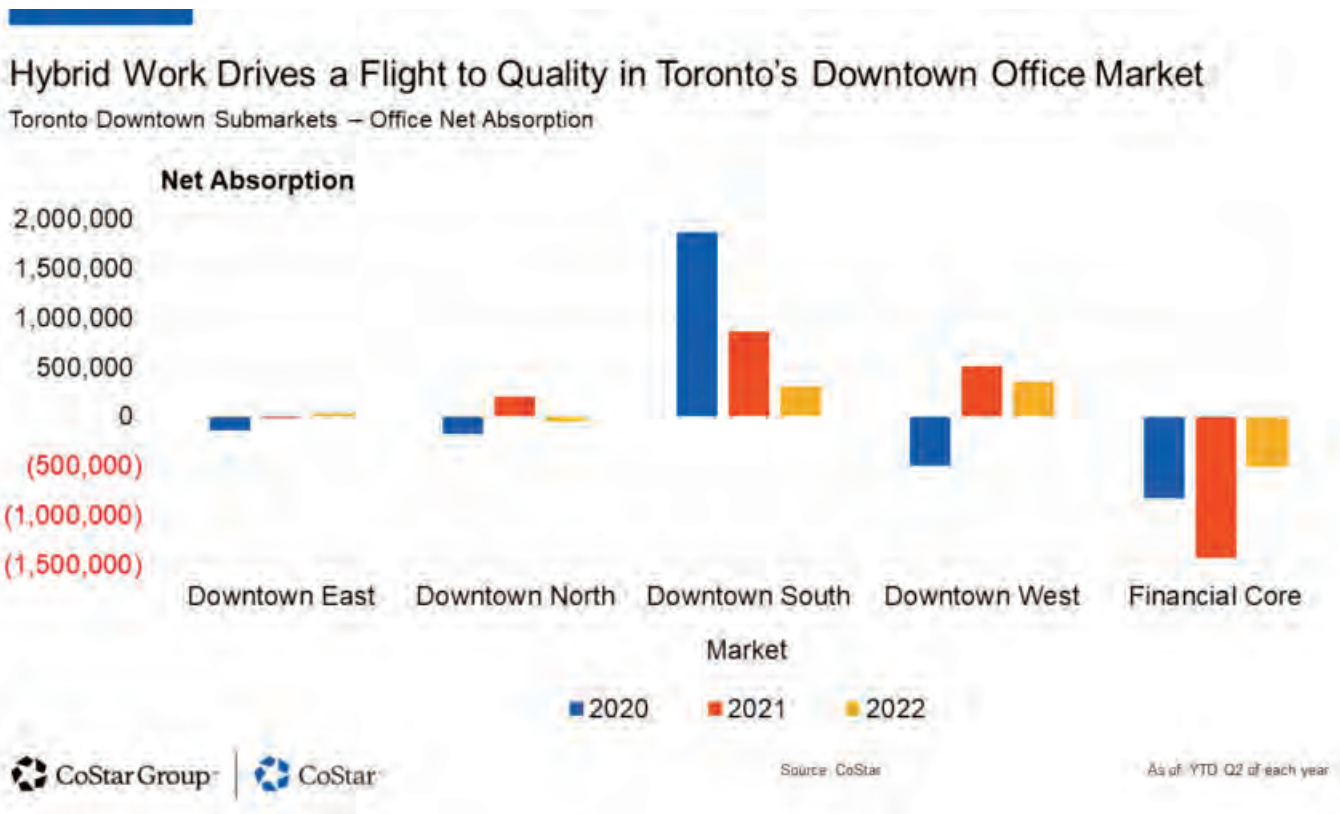
Continued strong demand from logistics, e-commerce, and retail tenants looking for space to facilitate their just-in-time inventories in tandem with lagging new supply will continue to drive better-than-inflation net rent growth. This will be especially true in markets such as the Greater Toronto Area (GTA), where persistent development hurdles exist and in Montreal, where average net rents still appear to be under market. Industrial demand is also likely to continue spilling over into previously non-traditional distribution markets in the Greater Golden Horseshoe.



Prediction 41: Hybrid Work Drives a Flight to Quality in Toronto's Downtown Office Market

Carl Gomez, Chief Economist and Head of Market Analytics - CoStar Market Analytics

The growing adoption of hybrid work will continue to increase demand for modern office buildings with flexible workspaces and attractive amenities. As a result, office nodes with newer product, such as the Downtown South Core in Toronto, will continue to poach demand from traditional office nodes such as the Financial Core, where older buildings and floorplates are not conducive to attracting talent when workers do come to the office. As demand migrates and the recession deepens, some tenants will also take the opportunity to reduce their office footprints thereby accelerating an increase in overall office availability.



Prediction 42: Retail Resilience Will Be Tested

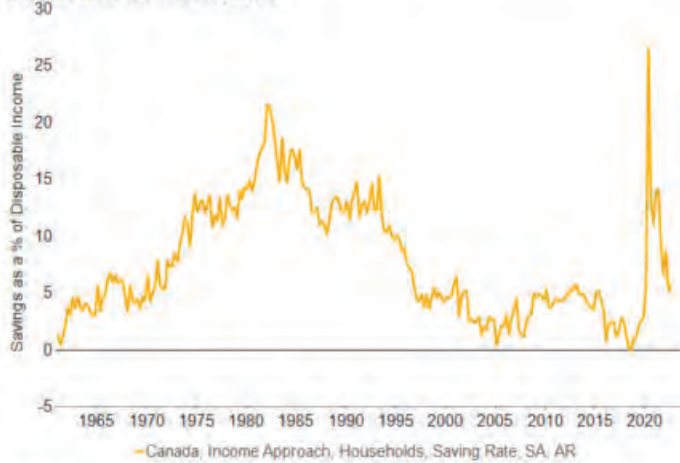
Carl Gomez, Chief Economist and Head of Market Analytics - CoStar Market Analytics

As consumers draw down the stockpile of savings they accumulated during the pandemic, and simultaneously see their purchasing power weaken from higher interest rates and inflation, a sharp pullback in retail spending is expected to occur in 2023. The pullback will come just as the retail sector was regaining leasing momentum following the impact of pandemic-related restrictions and lockdowns. As a result, some retail centres, particularly enclosed malls, could face another round of challenges to keep tenants in place.

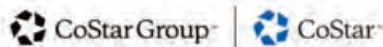
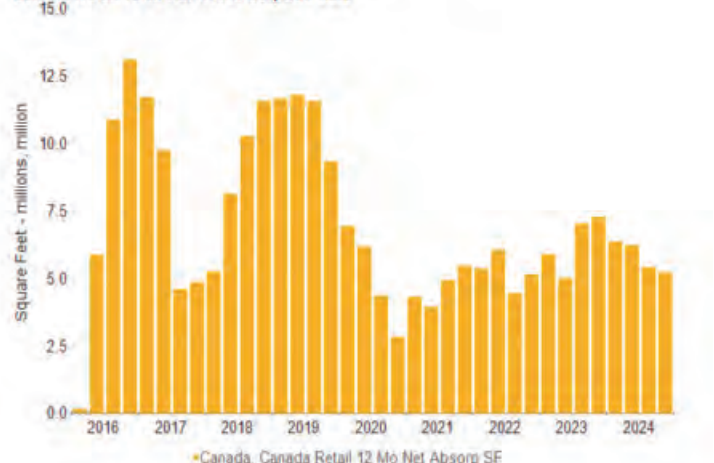
Retail Resilience Will Be Tested

Household Savings Rate & Retail Net Absorption

Canada's Household Savings Rate



Canada Retail 12 Month Net Absorption Rate



Source: Statistics Canada; Bank of Canada; CoStar As of Q3 2022

EUROPE



EUROPE

UNITED KINGDOM



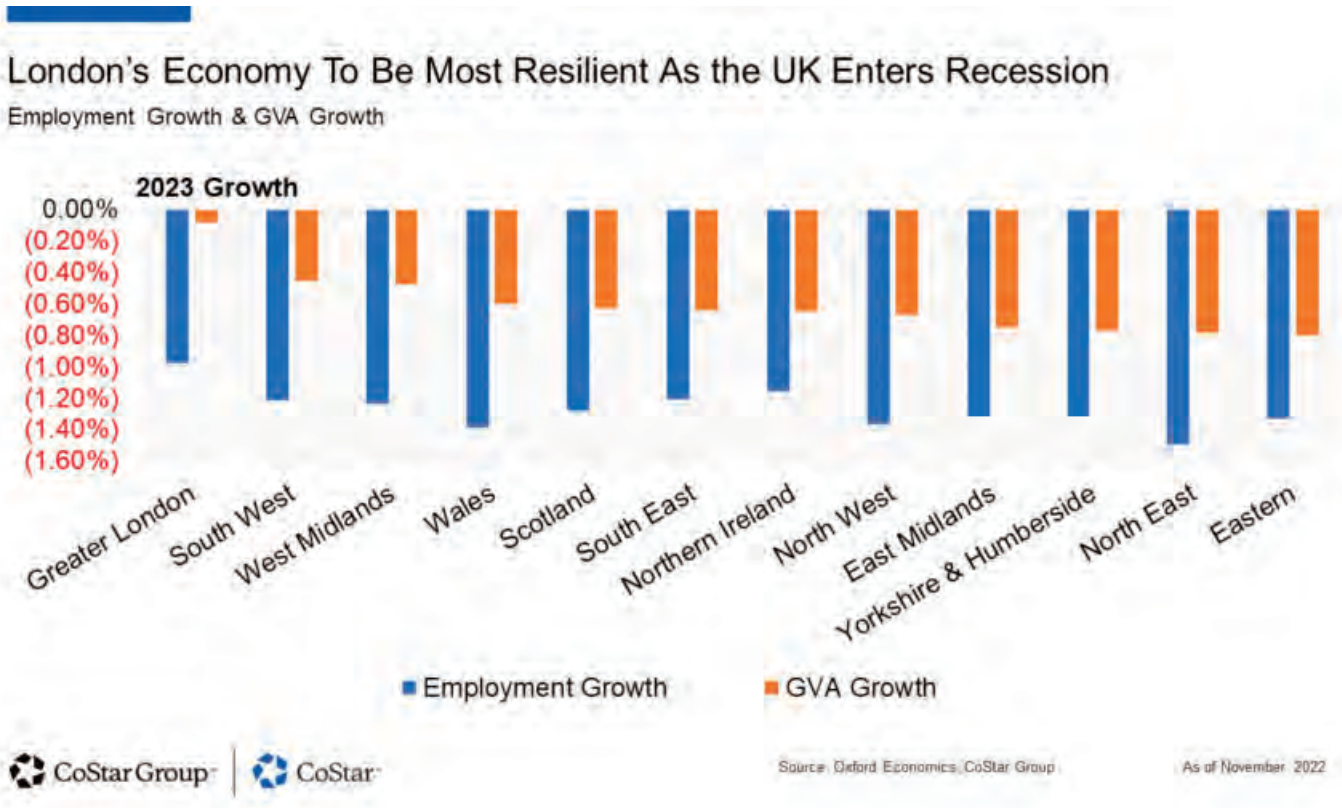
Prediction 43: London’s Economy To Be Most Resilient As the UK Enters Recession

Mark Stansfield, Senior Director of Market Analytics - CoStar Market Analytics

The UK economy is expected to enter recession in 2023 as rising interest rates and high inflation curb household spending and business investment. All regions of the UK will be affected, but London’s economy should prove the most resilient.

London’s large and diverse tech and business services sectors should offer support to the economy as consumer-driven sectors struggle amid squeezed disposable incomes. While London's GVA is set to fall in 2023, it should weather the storm better than other regions that are more reliant on consumer spending and manufacturing.

The East Midlands and Yorkshire & the Humber regions look most vulnerable, as around a third of their economic activity is associated with sectors heavily reliant on consumer spending, compared with less than a quarter in London.



Prediction 44: UK Fiscal and Monetary Policies Stabilise the Markets

Mark Stansfield, Senior Director of Market Analytics - CoStar Market Analytics

The UK had three prime ministers within the space of a few months during 2022, with the middle one – Liz Truss – lasting only 45 days as her “mini” budget unleashed turmoil in the financial markets during the autumn.

The latest incumbent, Rishi Sunak, has since reassured the markets and, with an election unlikely, he should be in power throughout 2023. Together with his chancellor, Jeremy Hunt, Sunak has announced a series of tax rises and spending cuts to help plug the fiscal hole that so spooked the markets under Truss.

This should keep government borrowing costs under control and should allow the Bank of England to lower the ceiling at which interest rates go, offering support to household spending and providing some fiscal wiggle room for the chancellor to increase government spending again later in the year.

UK Fiscal and Monetary Policies Stabilise the Markets

10-Year Government Bond Yield



Prediction 45: Inflation To Come Down Gradually During 2023 but Remain Above 2% Target Throughout

Mark Stansfield, Senior Director of Market Analytics - CoStar Market Analytics

If 2022 was the year where inflation raised its ugly head, 2023 should be the year where the inflationary monster begins to sink back into its pit.

Consumer price inflation reached levels not seen in more than 40 years in 2022, as supply shortages exacerbated by Russia’s invasion of Ukraine combined with a rebound in demand following the pandemic. Measured inflation hit 11.1% in October.

While the outlook is uncertain, inflation should recede gradually during 2023. Higher prices, rising interest rates and the growing prospect of recession are already curbing consumer demand, while government support for energy bills and declining shipping and commodity costs should bear down on prices, too. Negative base effects should also come into play, whereby food and energy prices do not necessarily fall but do not rise at the levels seen in 2022.

Inflation is expected to remain comfortably above the Bank of England’s 2% target throughout the year, however.

Inflation To Come Down Gradually During 2023 but Remain Above 2% Target Throughout

Consumer Price Inflation



Prediction 46: Sales Volume in H2 To Outpace H1 As Bid-Ask Spreads Narrow and Distress Picks Up

Mark Stansfield, Senior Director of Market Analytics - CoStar Market Analytics

UK commercial property investment was on course for its strongest year ever in the first four months of 2022, but activity slowed to a crawl in the latter part of the year amid rising interest rates, a looming recession and uncertainty over pricing.

Trading is likely to remain subdued in the early part of 2023 amid an ongoing standoff between buyers seeking a significant discount and sellers holding as close as possible to earlier valuations.

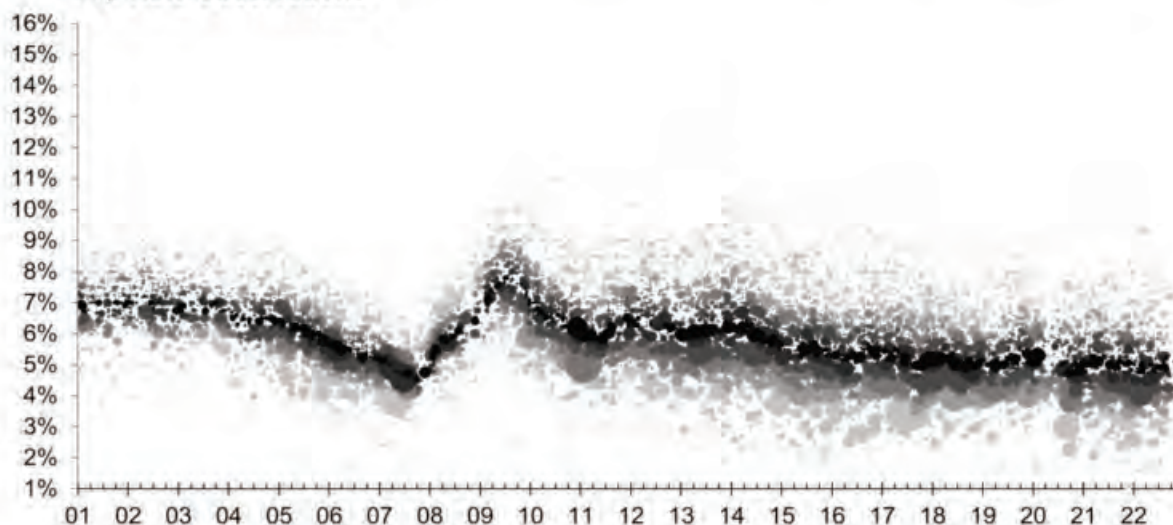
The first half of 2023 will largely be about price discovery. Transactional activity should start to pick up some momentum as the fog around the path of interest rates and inflation begins to clear. This should give buyers and sellers a clearer idea of where pricing for good-quality properties has settled, which should lead more of the billions of global capital destined for real estate assets with strong structural tailwinds to be spent.

Distressed sales are also likely to rise steadily during the year as property owners needing to refinance struggle to cope with the rising cost of debt, while business failures are also likely to mount as recession bites. Bargain-hunting investors are likely to pounce on these opportunities in increasing numbers in the second half of the year.

Sales Volume in H2 To Outpace H1 As Bid-Ask Spreads Narrow and Distress Picks Up

Transactions-Based Yield; Bubbles Sized According to Deal Price and Shaded Based on Distance From the Mean

Cap Rate Observations



Prediction 47: Increased Polarisation in Offices as National Vacancy Rates Hits 10-Year High

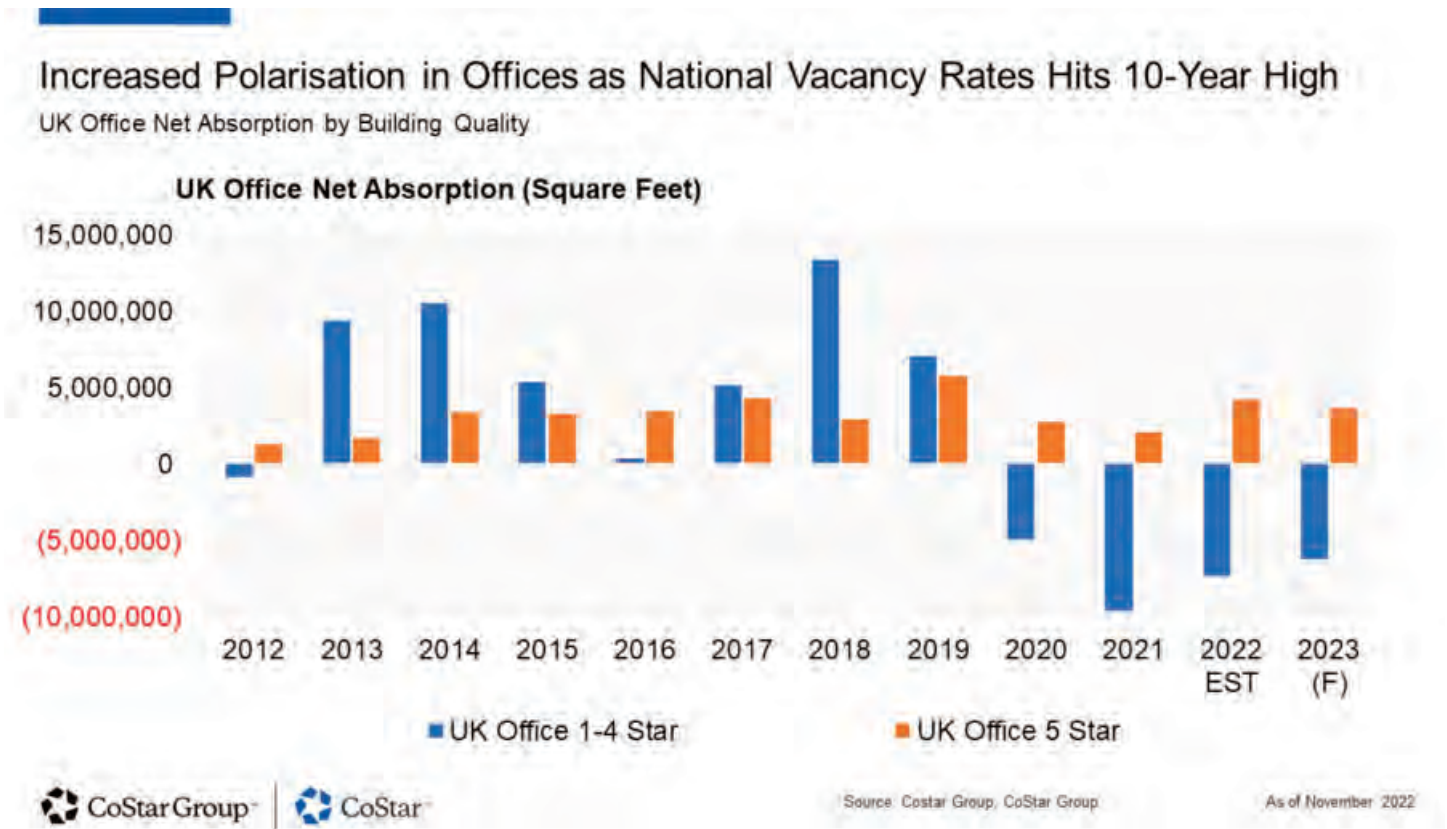
Mark Stansfield, Senior Director of Market Analytics - CoStar Market Analytics

Rising take-up failed to keep the UK office vacancy rate in check during 2022 and vacancies are likely to rise further as a glut of new supply delivers in 2023.

But high-quality, highly sustainable offices are likely to maintain their outperformance as many firms continue to downsize footprints amid an ongoing pivot to hybrid working.

CoStar’s data and forecasts support this call. Net absorption in 5 Star buildings has been strongly positive throughout the past three years, which stands in contrast to the circa 20 million square feet of demand losses in buildings rated 4 Star or below. Firms will continue to seek such space to attract staff, welcome clients and meet environmental commitments that have soared up the agenda in recent years. This divergence will be given extra impetus by regulation that will make millions of square feet of offices unoccupiable in the coming years.

Strong demand for the very best space has pushed prime rents to record levels in many cities even as average rents have fallen. The gap between prime and average rents is likely to widen further in 2023 to reflect these ongoing demand dynamics. The yield premium between the best and the rest in UK offices is likely to widen, too.



Prediction 48: New Energy Performance Regulations Support Repositioning and Redevelopment

Mark Stansfield, Senior Director of Market Analytics - CoStar Market Analytics

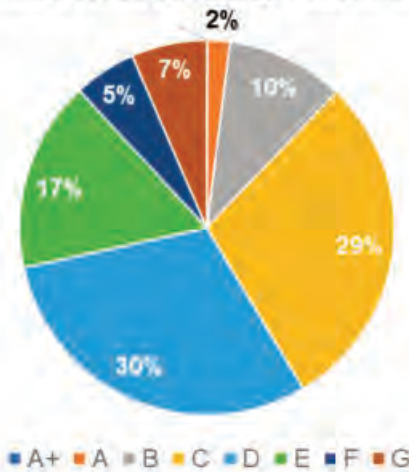
New government regulations come into place in 2023, whereby any building that fails to meet a minimum energy standard cannot be leased. This will force many building owners into action and should lead to more repositioning and redevelopment opportunities as the year unfolds.

Beginning in April 2023, it will not be possible for landlords to lease any building or space with an energy performance certificate rated E or below. More than a quarter of all commercial spaces – 28% - fall into this bracket, according to the Energy Performance Certificates for Buildings Register for England and Wales, based on data for all lodgements from 2009 to 2022. This minimum requirement rises to C in 2027, bringing the share of spaces requiring improvement to lease up to 88%. Regulations apply to all existing leases from 2028.

Existing owners unwilling or unable to provide the capital expenditure needed to upgrade buildings will likely have to accept significant discounts to sell them, opening the door to deep-pocketed investors with expertise in redeveloping or repurposing assets to snap them up at bargain prices. This type of deal should gather pace during 2023, in the better locations at least, especially as inflation starts to retreat and economic conditions start to brighten again.

New Energy Performance Regulations Support Repositioning and Redevelopment

Non-Domestic Energy Performance Certificates lodged on the Register in England & Wales by Energy Performance Asset Rating



Prediction 49: Regional Office Development To Remain Subdued Following Ten-Year Cycle

Giles Tebbitts, Director of Market Analytics, Manchester - CoStar Market Analytics

Office development across the Big Six city centres is expected to remain subdued next year after starts reached their lowest level in ten years.

The 460,000 square feet that has broken ground across Birmingham, Bristol, Edinburgh, Glasgow, Leeds, and Manchester in 2022 is the lowest figure since 2012. This brings an end to a long cycle of development activity that started in 2013 and peaked in 2020, when 2.5 million SF of offices broke ground. Annual construction starts averaged 1.6 million square feet per year during this period.

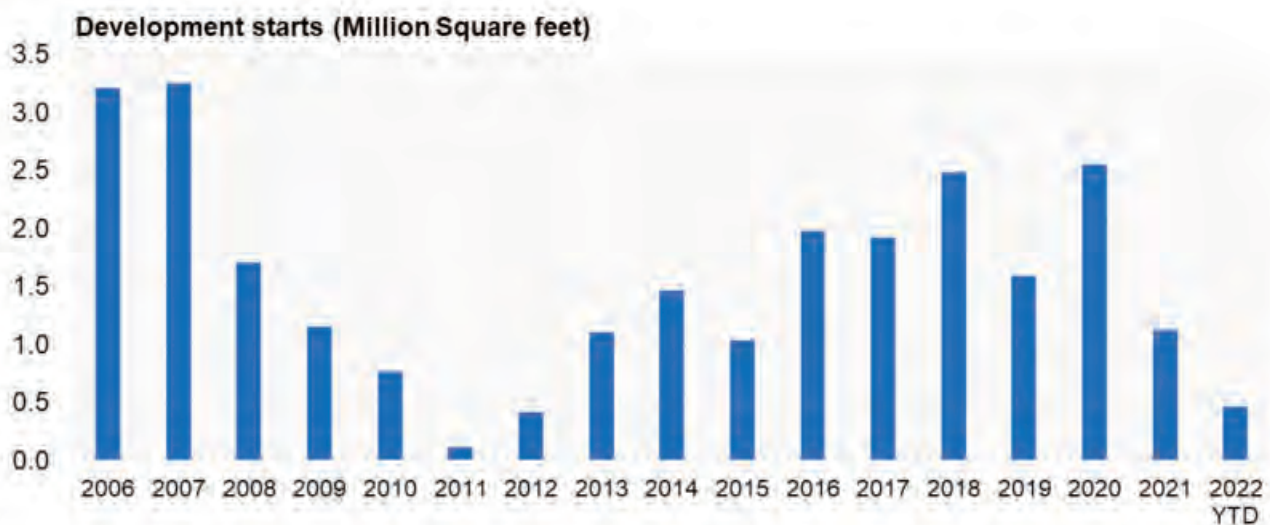
Although ESG commitments and a shift to hybrid working are encouraging occupiers to take less but better space, weakening market fundamentals and rising finance costs are expected to put increasing pressure on development viability next year. However, this will increase opportunities for cost and carbon efficient refurbishments.

While development starts have slowed, there is still 1.5 million square feet of speculative space set to complete over the next six months. When combined with subdued net absorption across the six cities, the vacancy rate is expected to continue its current trajectory from a low of 7.5% in 2020 to around 12.5% by the end of next year.

As such, rental growth is expected slow, and although prime rents will hold up better than average rents, development appraisals will be further challenged by falling capital values and a steep rise in finance costs.

Regional Office Development To Remain Subdued Following Ten-Year Cycle

Office Development Starts Across 'Big Six' City Centres



Note: 'Big Six' city centers include Birmingham, Bristol, Edinburgh, Glasgow, Leeds, and Manchester

Prediction 50: More Bankruptcies Among Warehousing-Using Businesses as Cost Pressures Mount

Grant Lonsdale, Director of Market Analytics - CoStar Market Analytics

Bankruptcies jumped to a 13-year high in 2022, as rampant inflation and rising borrowing costs forced firms out of business after government support kept them afloat a year earlier.

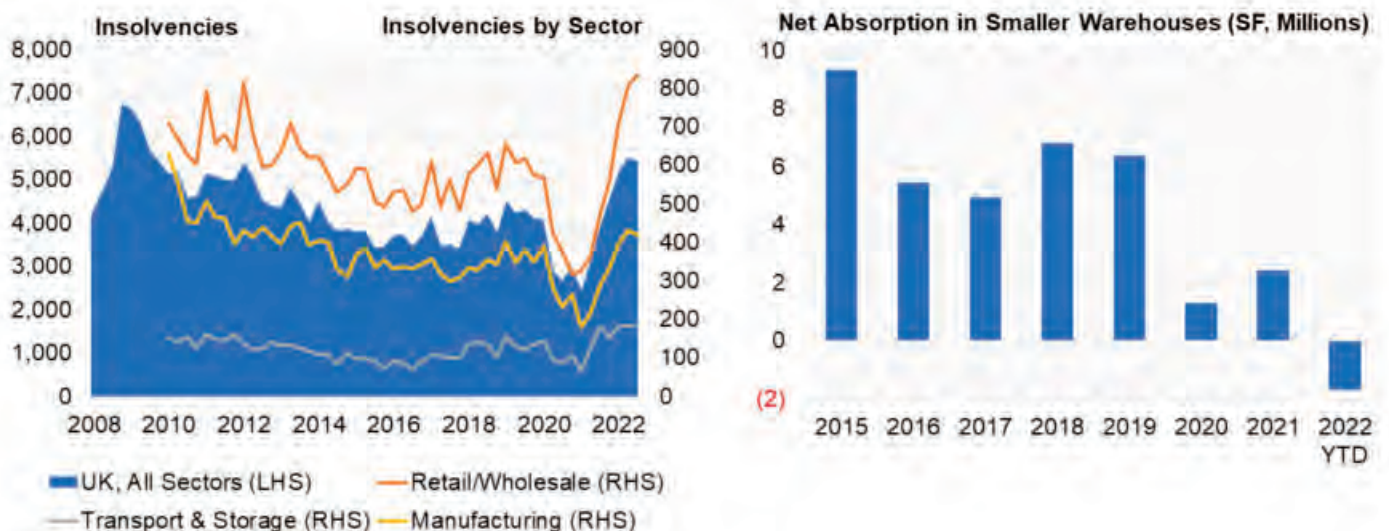
Industrial occupiers are exposed to a multitude of cost pressures from soaring fuel and energy costs, elevated materials and shipping prices, and rising wage bills as staff shortages persist. A hike in business rates following multiple years of exceptionally strong rent growth will add another cost burden in 2023.

With retailers, manufacturers and logistics operators running on slim margins in a recessionary environment, further business failures among warehouse-using businesses are inevitable.

Tenant insolvency risk may be a particular concern for smaller warehouse owners, given bankruptcies occur more often in small and medium-sized firms. Net absorption in industrial buildings smaller than 20,000 square feet turned negative in 2022 and demand losses could extend into another year as more companies go bust.

More Bankruptcies Among Warehousing-Using Businesses As Cost Pressures Mount

Insolvencies by Sector & Warehouse Net Absorption in Warehouses Sized Up to 20,000 Square Feet



Prediction 51: Rent Grow To Slow as Vacancies Rise but New, Green Warehouses To Outperform

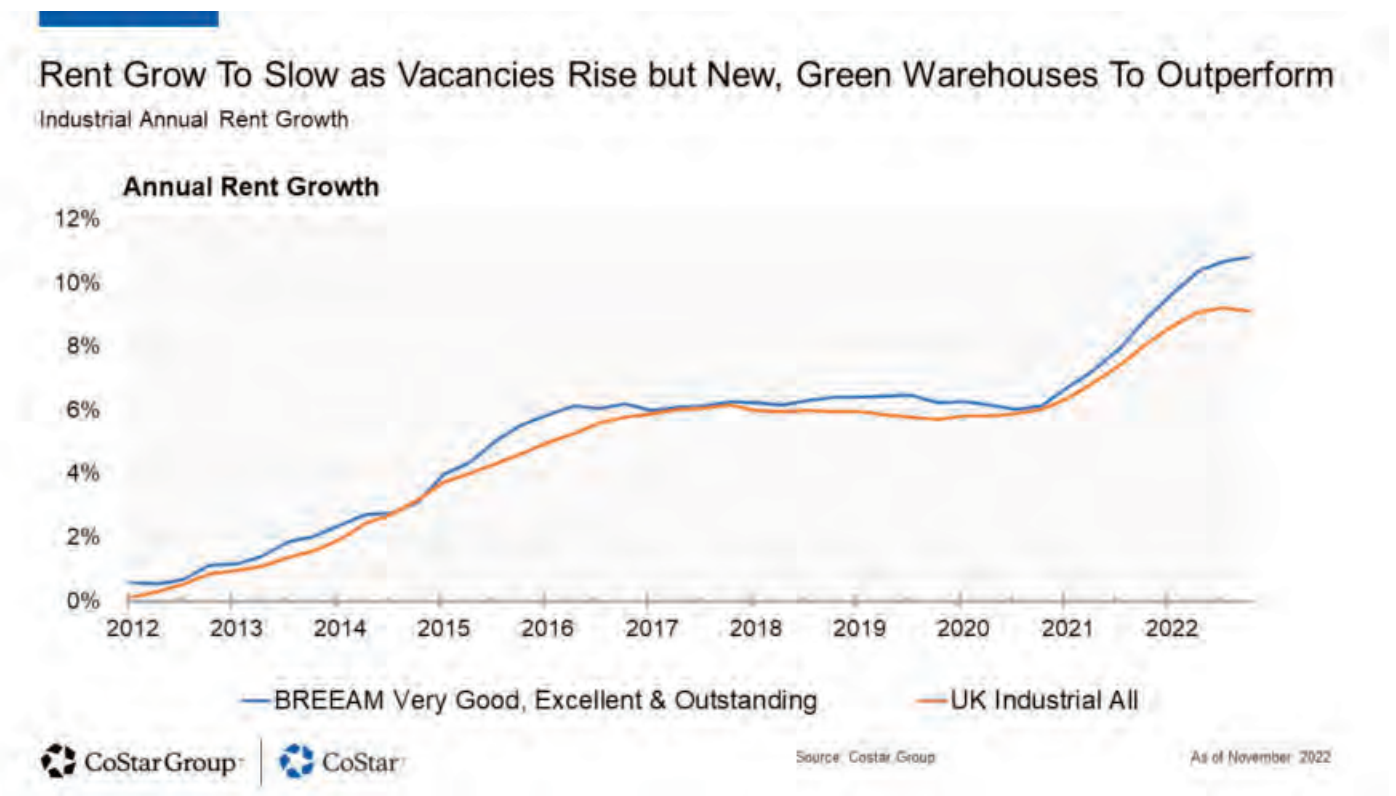
Grant Lonsdale, Director of Market Analytics - CoStar Market Analytics

Industrial rent growth has begun to decelerate from record highs, as moderating occupier demand and rising supply has pushed vacancies upwards. Greener warehouses remain well-positioned to outperform, however, thanks to their relative scarcity and occupiers becoming increasingly mindful of ESG issues.

While warehouses with a BREEAM rating of Very Good or better have long generated stronger rent gains than the wider UK industrial sector, the rent growth spread between the most energy-efficient properties and the sector at large has widened in recent quarters.

Many third-party logistics companies now position their services as a way of enabling clients to optimise their ESG efforts and, by extension, are taking on more sustainable warehouses, which command higher rents. DHL Supply Chain, for example, is committed to achieving 100% net zero-carbon warehousing by 2025.

There is also an argument that greener facilities in the right locations reduce transport costs as well as emissions, meaning some occupiers may be inclined to pay higher rents to make efficiency gains or cost savings elsewhere.



Prediction 52: Significant Drop in Value for Retail Centres Without Grocery Anchor

Mark Stansfield, Senior Director of Market Analytics - CoStar Market Analytics

Supermarket-anchored retail centres have proved most resilient to pandemic headwinds over the past couple of years and should fare best as the cost-of-living squeeze persists during 2023.

The value of having a food-based anchor store on a shopping centre or retail park has increased sharply since the pandemic struck. Shopping centres and retail parks without the key footfall driver provided by a large supermarket have suffered disproportionately, with heavier demand losses, high vacancy and outsized rent losses when compared with centres with a food anchor.

Yield spreads between the two types of centres have widened, too, with investors willing to pay a premium for the added security of a centre with that food-based footfall driver.

With consumers likely to continue to pare back discretionary spending over the next year and focus on the essentials, food retailers and food-anchored retail centres should offer the most resilience from a pricing perspective as many investors continue to reduce the retail weighting in their portfolios.

Significant Drop in Value For Retail Centres Without Grocery Anchor

Retail Vacancies and Net Absorption

Vacant SF (Millions)



Net Absorption SF (Millions)



Prediction 53: Redundant Retail Space To Pivot to Other Uses To Add Value

Lisa Dean, Senior Market Analyst - CoStar Market Analytics

The repurposing of retail space will continue in 2023 due to the retail environment in the UK being compounded by the cost-of-living crisis and consumer squeeze putting added pressure on retailers and retail landlords. In 2022, with retail space staying vacant due to company voluntary agreements, many landlords and investors have had to be creative to repurpose vacant or redundant retail space.

As a result of the pandemic, many retail projects have been delayed, cancelled, or amended across the UK. The 6.1 million square feet of retail space under construction nationally represents the lowest figure in more than a decade. Plans are in place to convert many shopping centres and department stores into other uses to add value.

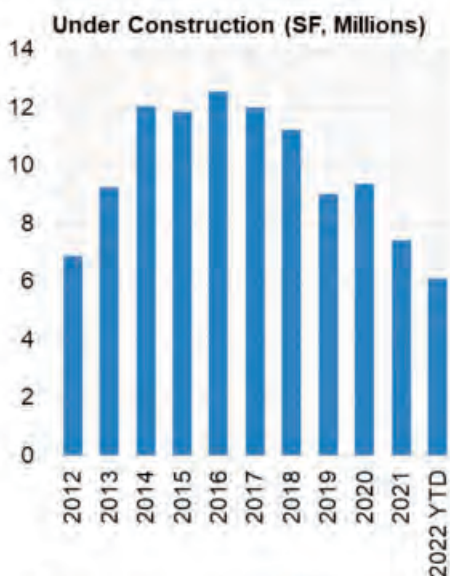
Department store repositioning will remain a key theme in 2023. Several department stores on London’s Oxford Street are being partly converted into co-working space, with the former House of Fraser department store in Leamington Spa set for conversion to Grade A office space. Mixed-use redevelopments are planned for the former Debenhams in Manchester and the former John Lewis in Birmingham’s Grand Central.

Regeneration will be another key theme going forward. Abu Dhabi Investment Authority and British Land have received outline permission for their plans to develop Slough town centre and high street featuring a major housing and offices led scheme which will see parts of the city centre demolished and rebuilt in two phases. Redundant retail formats will be pivoted towards fulfilling supply gaps in the local market. For example, in Cambridge, plans for the redevelopment of Grafton Centre were submitted by Trinity Investment to pivot redundant space towards the burgeoning life sciences ecosystem.

In addition, as ESG credentials and sustainable building practices take hold across all sectors, retail is no exception. Landlords and retailers will be seeking operational efficiency through, BREEAM and EPC A credentials and reducing environmental impact through green leases in 2023.

Redundant Retail Space To Pivot to Other Uses To Add Value

UK Retail Under Construction & Major Retail Projects Set To Commence



Shopping Centre or Retail Scheme	Town/City	Owner/Developer	Plans
Marks & Spencer, Oxford Street	London	Marks & Spencer Pibrow & Partners	Demolish current flagship store for 10-storey office and shopping redevelopment
John Lewis, Oxford Street	London	John Lewis/TBA	Repurpose top floors to offices
Debenhams, High Street	Manchester	Debenhams/ AM Alph	Converting the upper floors into office space and creating a shopping arcade on the ground floor to BREEAM Excellent standard
Former John Lewis, Grand Central	Birmingham	Hammerson	Plans for an offices and leisure-led redevelopment of one of the UK's largest department stores
Slough Town Centre and High Street	Slough	Abu Dhabi Investment Authority/ British Land	Outline consent for phased demolition of all buildings and phased redevelopment for 3.8 million SF of housing and offices-led scheme. To be built over 14 years
The Grafton Centre	Cambridge	Trinity Investment Management/ Angelo Gordon	A focus on repurposing for life sciences and research space. Will retain some retail, leisure, cinema and gym
Princes Mead Shopping Centre	Farnborough	Sovereign Housing Association/ KFIM & LPPI	Planning proposing 350 homes

EUROPE

CONTINENTAL EUROPE



Prediction 54: Recession Unavoidable In Europe, But Real Estate Will Do Relatively Well in 2023

Robert Stassen, Head of Analytics, Europe - CoStar Market Analytics

Most economists agree that a recession in Europe is almost a done deal. In the UK, Bank of England governor Andrew Bailey announced that the UK would face its longest recession in 100 years, while Oxford Economics sees the eurozone economy contracting by around 1% from peak to trough, with some countries, such as Germany, showing larger declines.

Oxford Economics is among the more optimistic forecasters, expecting only a shallow recession, while others like Professor Roubini expect a much deeper recession. The future will tell us who will win the argument, but for real estate investors, what they had to say about asset allocation is more important: Both identify real estate as a preferred asset class.

If there is persistent inflation, equity and bond portfolios will be hit. Historically real estate has been a good inflation hedge as rents can be increased on limited supply and compared with 2008, there is less speculative supply and less leverage in the system.

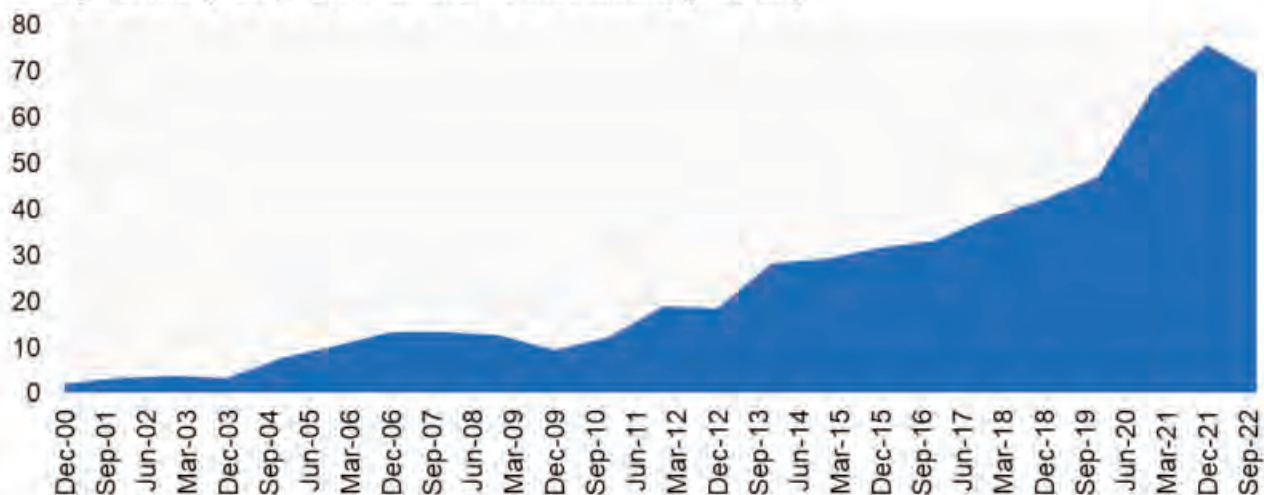
A recession would hurt risky assets and some froth would be taken out of real estate markets, but this would not be enough to derail markets, unless nominal rates rise to extreme levels.

Instead, buyers of bank-enforced assets are more likely to be industry buyers this time. Whereas in 2009-10 liquidity was concentrated in large pools of opportunistic private equity capital, the same funds now have large pools of core real estate capital often managed on a permanent capital basis. This capital is likely to pounce on deals at levels above full distress to not miss a deal.

Recession Unavoidable In Europe, But Real Estate Will Do Relatively Well in 2023

Large Pool of Real Estate Core Strategy Capital

Dry Powder (Core, Core-Plus and Co-Investment) (USD bn)



Prediction 55: Spain Among Best Performers in 2023, Germany Among Worst

Robert Stassen, Head of Analytics, Europe - CoStar Market Analytics

Spain has several factors going for it in 2023: it is the furthest removed from Kyiv, it is not that dependent on Russian gas and its tourist sector is benefitting from the move away from long-haul to short-haul holidaying. These relatively benign factors are reflected in Spain’s economic forecasts.

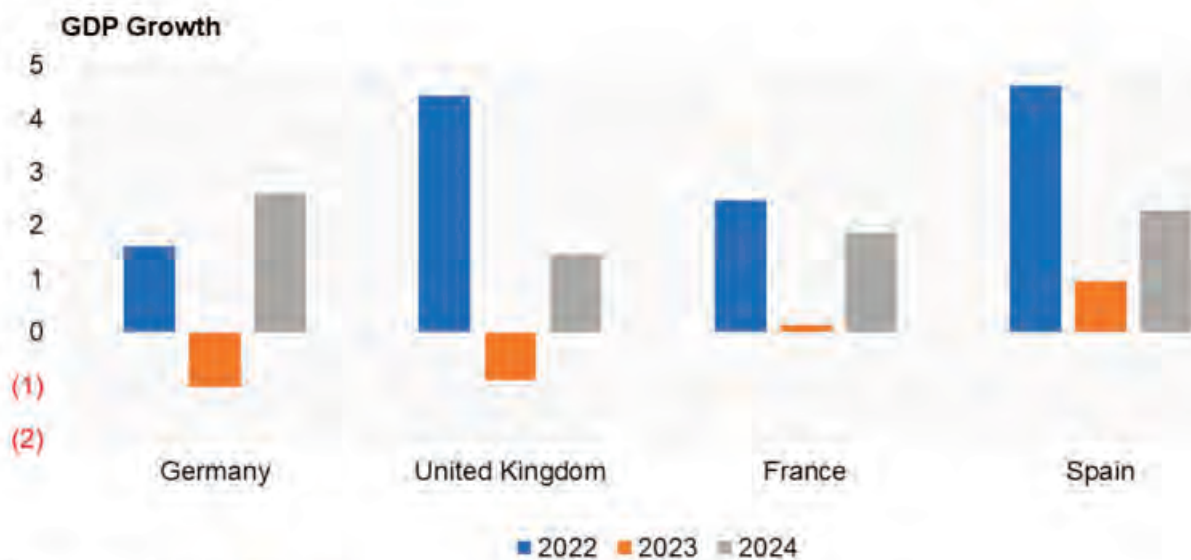
Oxford Economics still thinks the economy will suffer a mild recession early in 2023, as inflation, tighter financial conditions, and an adverse external environment pose headwinds to growth, but sees Spanish GDP expanding 0.8% in 2023.

The reverse holds for Germany which has been very dependent on Russian gas, is much closer to Ukraine and has been hit by the Covid lockdowns in China, which is an important trading partner. Despite these setbacks, the economy was more resilient than expected, growing 0.3% quarter on quarter in 22Q3, while gas prices fell from recent highs providing hope that Germany can avoid a deep recession. Nevertheless, Oxford Economics sees negative GDP growth for Germany in 2023 at -1.1%, placing it at the bottom of the European 2023 league table.

We expect this to be reflected in real estate investment in 2023, where we see Spain outperforming Germany on a relative basis.

Spain Among Best Performers in 2023, Germany Among Worst

GDP Growth By Country



Prediction 56: German Residential Market To Stabilise After Annus Horribilis 2022

Robert Stassen, Head of Analytics, Europe - CoStar Market Analytics

With valuations of the German residential sector now at levels last seen during the GFC, and an apparent appetite of bond investors for bond issues at admittedly much higher yields, we expect markets to calm in 2023 as most of the pain seems to have been priced in during 2022.

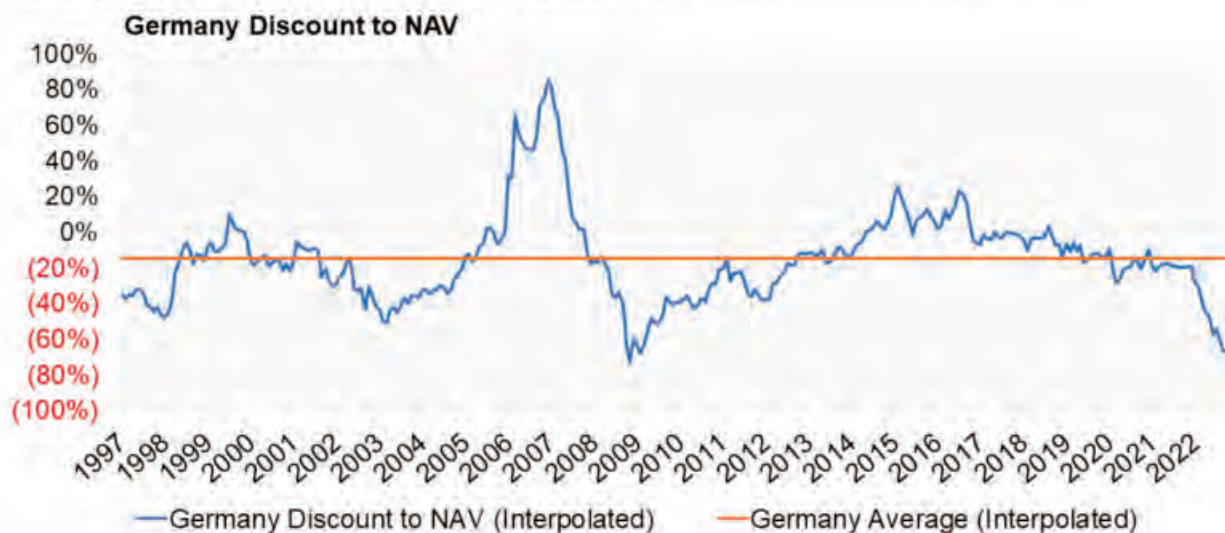
German residential stocks have been one of the most visible victims of the ECB’s rate hikes in 2022 with market leader Vonovia’s shares dropping over 40% in 2022, which implies a staggering 35% write-off of its EUR 99bn multifamily portfolio.

For years, German multifamily real estate was one of the safest sectors within Europe. Market fundamentals are still favourable, despite higher energy costs and squeezed disposable incomes, while higher mortgage costs should further boost the rented sector. In Germany, rents can only be increased in line with an annual index set by the local government resulting in low rental levels, strong reversionary potential, and a brake on new construction. Vacancies are low, while demand remains strong with around half of Germans living in rented accommodations.

What we have witnessed in 2022 is a brutal re-adjustment to the higher cost of debt triggered by refinancing needs. In the end, Vonovia raised capital with a mix of new equity via stock dividends and the issue of two bonds in November. The coupon on these EUR 750 million bonds: 4.75% and 5.00% respectively, compares with a reported average cost of debt of 1.3% on Sept. 30th.

German Residential Market To Stabilise After Annus Horribilis 2022

FTSE EPRA NAREIT Germany Index Discount to Published NAV



Note: As of January 2012, the historical NAVs and Discount to NAVs are also being calculated using interpolated company NAV data. Previously the imbalance between reporting dates (annually, biannually or quarterly) and share prices (monthly for this report) led to more volatile NAV performance graphs.

Prediction 57: Paris Centre Ouest Office Supply Will Stabilise in 2023

Clément Quatrain, Chef des Etudes Commercial Real Estate (CRE) & OIE Database - Grecom, a CoStar Company

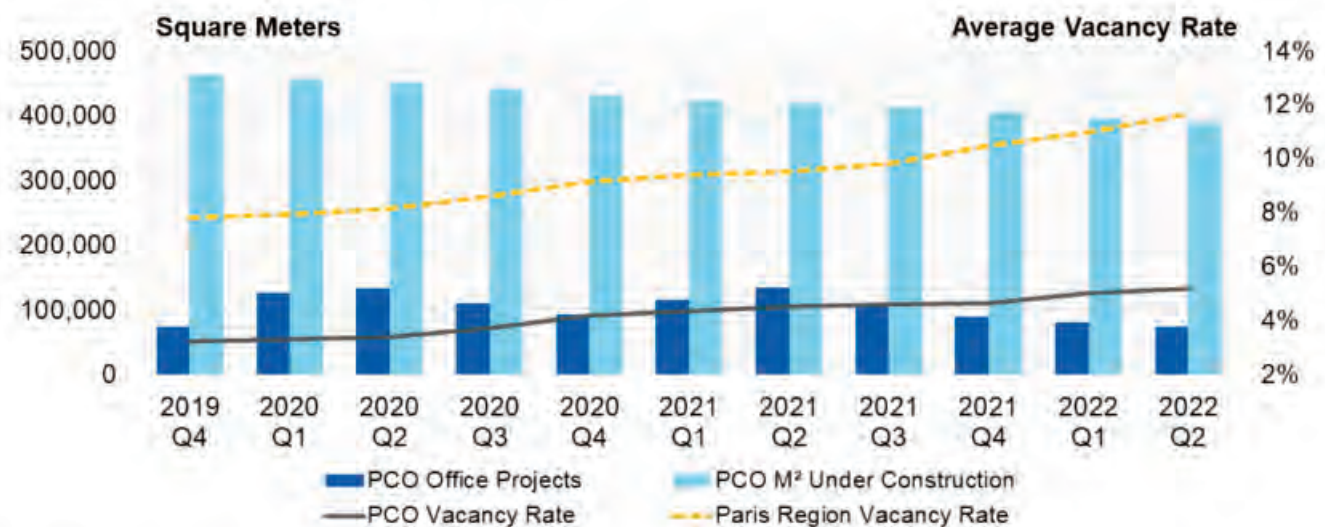
While the overall Greater Paris Region office market is facing a 12% vacancy rate, the Paris Centre West office market, which includes the prime Paris CBD submarket, is showing real resilience: The vacancy rate only increased by 1.8 points since the pandemic and now stands at 5.2%.

By the end of 2022, and for the whole of 2023, this “prime” market should be supported by a strong recovery of lease transactions. This year, Paris Centre West should represent 25% of absorption in the Paris Region, a strong market share. Indeed, major companies are considering concentrating in the city centre of Paris, to attract talent and provide a better work environment. One of the best examples is EY, which has recently announced its intention to return to central Paris by 2025. Currently, the accounting firm is based in La Défense.

Moreover, although the level of construction in Greater Paris remains high (close to 400,000 m²), it is slowly decreasing in Paris Centre West. At the same time, the projected floor space from projects, which have acquired their building permit, is shrinking to approximately 70,000 m². This benign market environment will support the prime Paris Centre West market in 2023 and help avoid any oversupply.

Paris Centre Ouest Office Supply Will Stabilise in 2023

Supply Trends In Paris Centre Ouest



Prediction 58: Over Supply Markets, like La Défense, See Office Rent Fall, and Yields Rise

Clément Quatrain, Chef des Etudes Commercial Real Estate (CRE) & OIE Database - Grecom, a CoStar Company

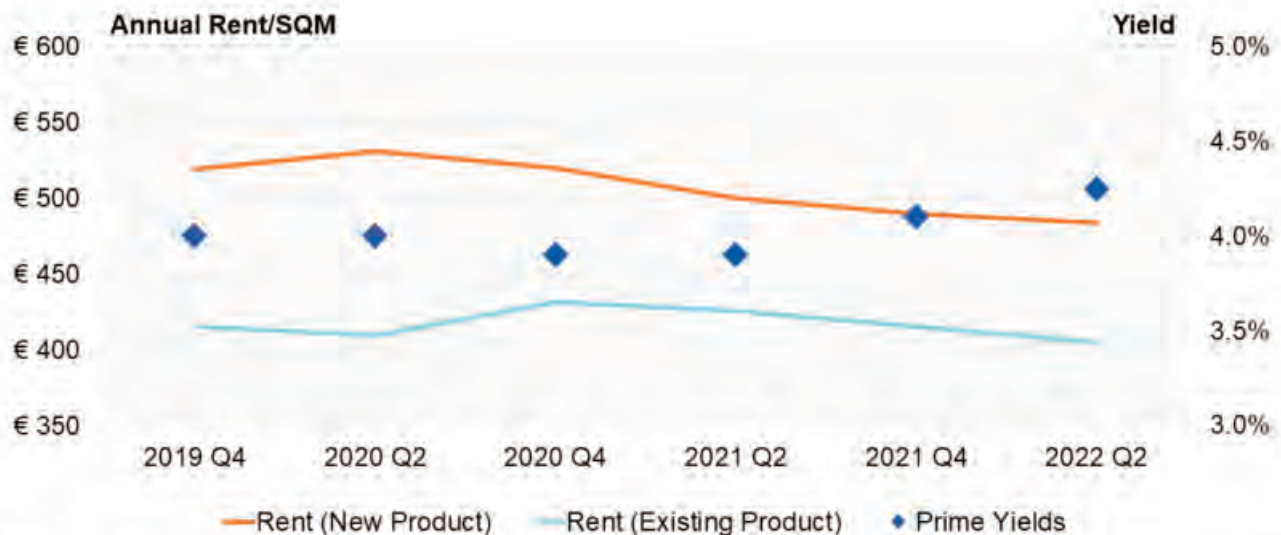
Due to a significant addition of speculative buildings over the past few years, the La Défense office market suffered more strongly than others from the pandemic. Despite significant absorption in 2021 and 2022, the elevated level of deliveries could not be fully absorbed, and the vacancy rate has now reached 16%.

In fact, rents for new product started to decrease quickly after the pandemic, while rents for existing product followed a bit later. Since mid-2021, prime yields have been rising from 3.9% by late 2020 to 4.25% by mid-2022. This increase shows that the adjustment of asset values has already started in La Défense. Transactions above €13,000/m², as was the case for the Majunga Tower in 2019, are long gone.

We can expect prime yields to move out further in 2023, and could end up between 4.5% and 4.8%, to maintain an attractive risk premium compared to the other Hauts-de-Seine submarkets of Neuilly-Levallois and the Southern River Bend (Boulogne-Billancourt, Issy-les -Moulineaux, Meudon, Sèvres, and St-Cloud). In La Défense, buyers are waiting for significant discounts to wake them from their slumber.

Over Supply Markets, like La Défense, See Office Rent Fall, and Yields Rise

Office Rent & Prime Yields



Prediction 59: Spain Build-To-Rent Development Will Not Slow Down

Elsa Galindo, Director of Market Analytics - CoStar Market Analytics

The strong growth potential of the rental housing market in Spain is attracting international investors and is encouraging development of built-to-rent projects.

Fundamentally, the proportion of households living in rented accommodations at market rent is steadily increasing, jumping by over 7 percentage points for the under-29 age group over the past decade, while rising financing costs should deliver additional demand to the rental market.

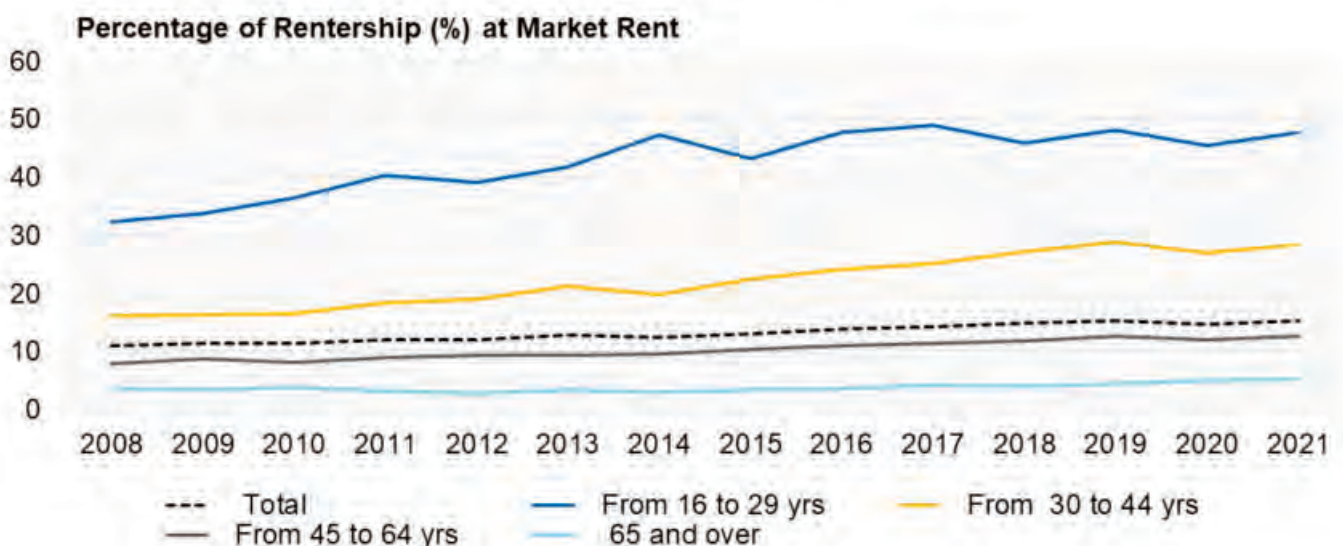
Ultra-tight rental accommodation markets in both Barcelona and Madrid are pushing up rents, with many of the available rental properties owned by smaller capital-constrained operators. Hence, this growing demand and lack of supply is attracting institutional investors with experience in other European countries where institutional multifamily markets are further advanced.

Built-to-Rent activity is expected to remain concentrated in the cities of Madrid and Barcelona and their metropolitan areas as well as in locations with significant economic activity and strong real estate fundamentals such as Valencia, Seville, Pamplona and Málaga.

New types of rented accommodation such as co-living, serviced apartments or senior living are set to increasingly raise interest from investors as social needs and household structure evolve. The country is witnessing a growing number of people living alone: according to the National Statistical Institute, one-person households are the household group that will experience the biggest growth increasing by 27.3% by 2037, representing 29% of total households. As a result, we do not expect the built-to-rent sector to slow down in 2023, despite economic headwinds.

Spain Build-To-Rent Development Will Not Slow Down in 2023

Propensity to Rent Increases Especially Among Young People in Spain Over the Last Decade



Prediction 60: Spain Data Centre Market To Keep Catching Up With the Rest of Europe

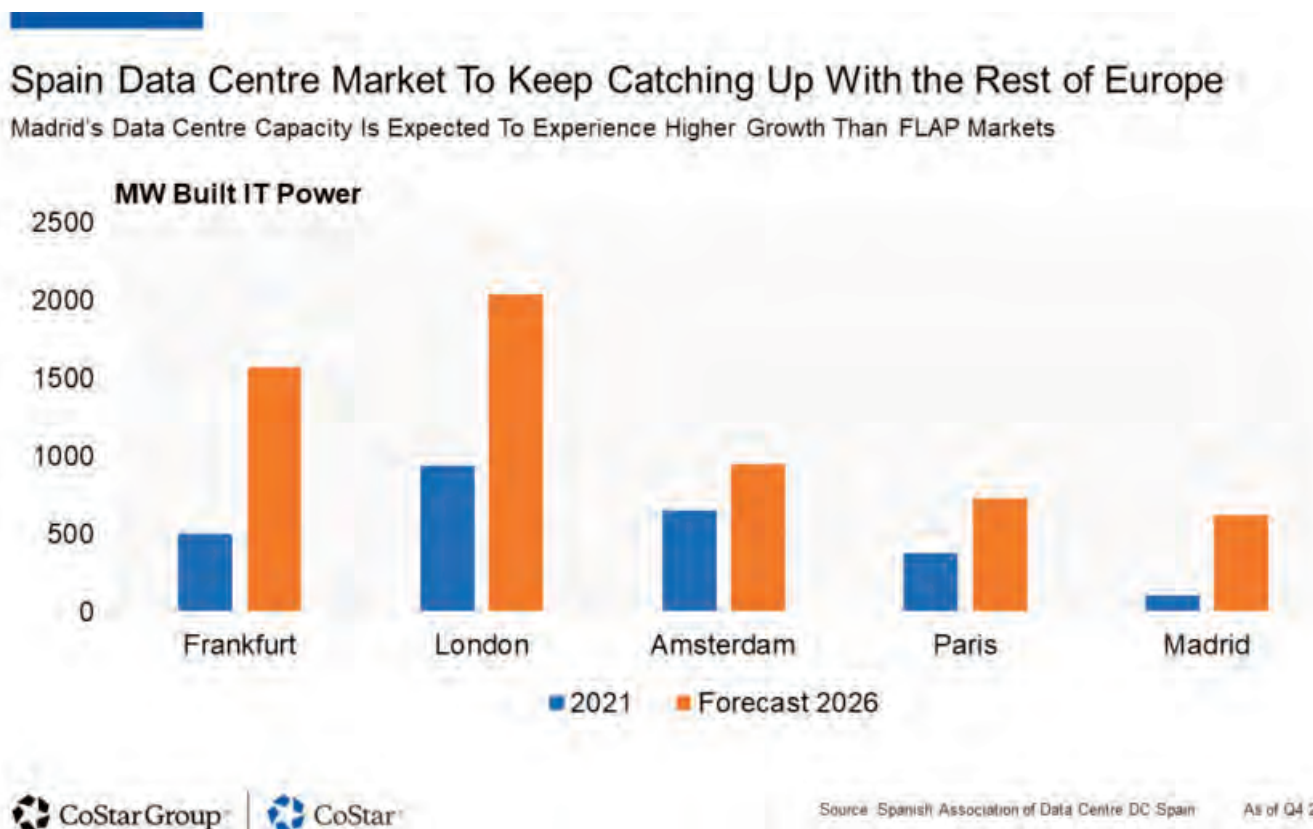
Elsa Galindo, Director of Market Analytics - CoStar Market Analytics

The main data center hubs in Europe are in London, Amsterdam, Frankfurt, Paris, and Dublin which are all financial centers with dense technological infrastructure. First-movers London, Amsterdam, and Dublin have benefitted from the Trans-Atlantic cable landing spaces, while Frankfurt and Paris are catching up, as cloud infrastructure is being rolled out throughout Continental Europe.

However, the biggest upside can be found in Spain, where Madrid is the central hub. Data center capacity in Madrid is expected to see exponential growth with an average annual increase of 43% through 2026. By comparison, that's 27 percentage points above the average increase of the bigger "FLAP" markets of Frankfurt, London, Amsterdam, and Paris.

This has not gone unnoticed by investors. Strong demand for data traffic combined with scarce supply of data centers have already resulted in several transactions by international investors being closed over the past months.

Investors' strong interest in Spanish data centers is likely to continue, and with a liquid market like Madrid as its center, Spain should be catching up further with the rest of Europe in 2023.



GLOBAL HOSPITALITY



Prediction 61: U.S. Hotel Pipeline Will Not Pick Up Materially

Jan Freitag, National Director of Hospitality Analytics - CoStar Market Analytics

Higher interest rates and higher development costs will continue to curtail development activity until 2024. With further uncertainty in debt markets and a recession likely in the beginning quarters of 2023, construction lending for the asset type with the shortest lease length will be available only to the most-secure sponsors. Subsequently, growth in hotel industry fundamentals will slow in 2023, and lender sentiment will likely take a while to turn back. On the plus side, the severe lending slowdown during the Great Financial Crisis was an outlier and will likely not be repeated.



Prediction 62: CMBS Maturities Will Force Some Owners' Hands

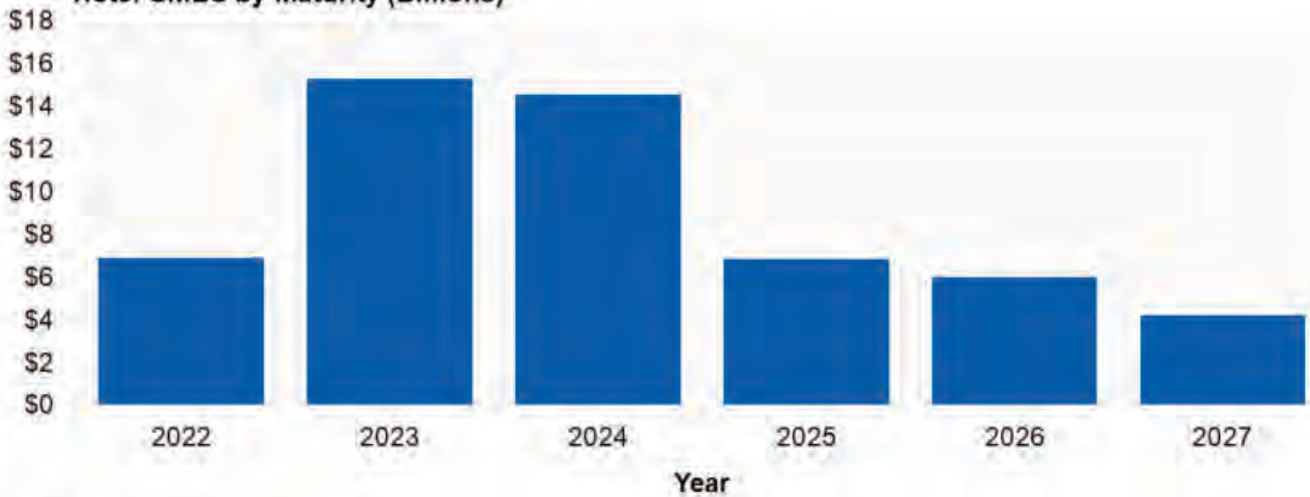
Jan Freitag, National Director of Hospitality Analytics - Market Analytics

While “extend and pretend” with regards to loan repayments and extensions was alive and well in 2020 and 2021, lender sentiment seems to have shifted a bit and owners now may need to find capital sources to refinance their maturing CMBS loans. Around \$15 billion in hotel CMBS loans are coming due in the next two years. Owners may find that short-term bridge financing is available but for a higher price than in the previous decade. Where that is not an option, owners may find the need to shed non-core assets to save the rest of their portfolio. This in turn could lead to transactions, but because debt and equity sources for acquisitions are plentiful, severe price discounts may still not materialize.

CMBS Maturities Will Force Some Owners' Hands

Hotel CMBS by Year of Maturity

Hotel CMBS by Maturity (Billions)



Source: CoStar

As of October 2022

Prediction 63: Hotel Food and Beverage Profit Margins Will Shrink as Group Demand Returns

Alison Hoyt, Senior Director Consulting - STR

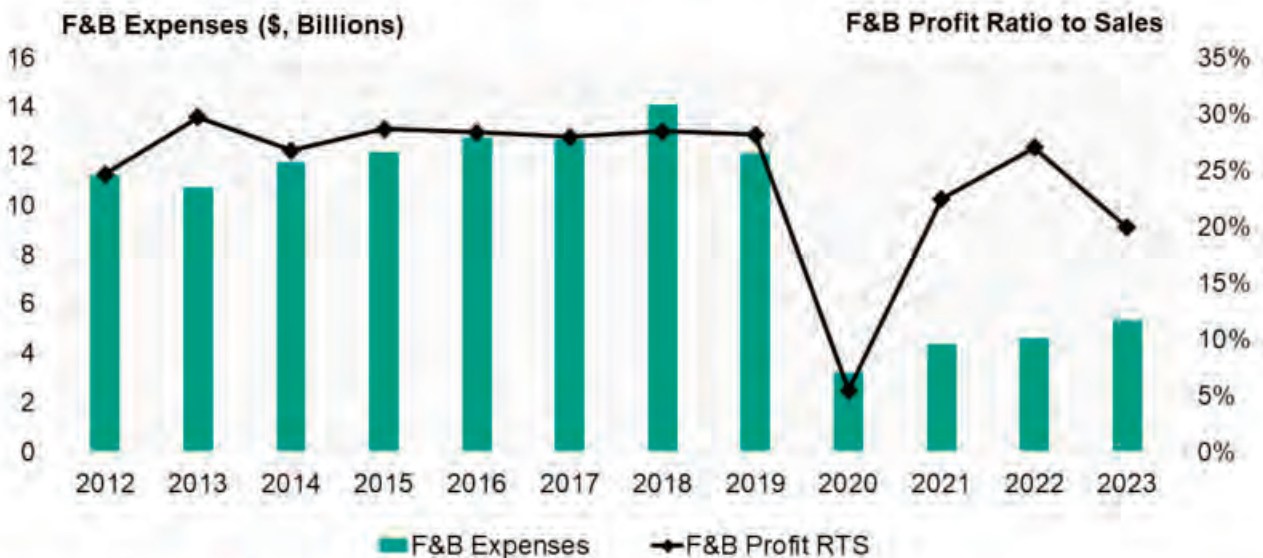
While U.S. hotels have seen a rapid recovery in most operational areas, food and beverage (F&B) revenues and profits remain below pre-pandemic levels. The return of group business has been slow, which has minimized the revenue and profit contribution from catering and banquets.

Group demand recovery will be more robust in 2023. Hotels will enjoy increasing F&B revenues as a result, but the growth in revenue will not fully offset the increase in expenses for the department. Labor remains the largest expense, representing nearly 50% as a percentage of F&B revenues. Hospitality wages are at an all-time high, as hoteliers continue to compete to fill open positions and retain employees. High inflation and rising food costs will also contribute to shrinking profit margins.

In 2023, F&B profit margins are forecast to drop below 20%. This represents the lowest profitability level of the past decade, excluding 2020. Hoteliers will be forced to be creative with operations and staffing to meet guest expectations and combat rising costs.

Hotel F&B Profit Margins Will Shrink As Group Demand Returns

F&B Expenses and Profit Ratio to Sales, 2012 – 2023 (Forecast)



Source: STR

As of September 2022

Prediction 64: Luxury Hotel ADR Will Fall Back Down to Earth

Carter Wilson, SVP Consulting - STR

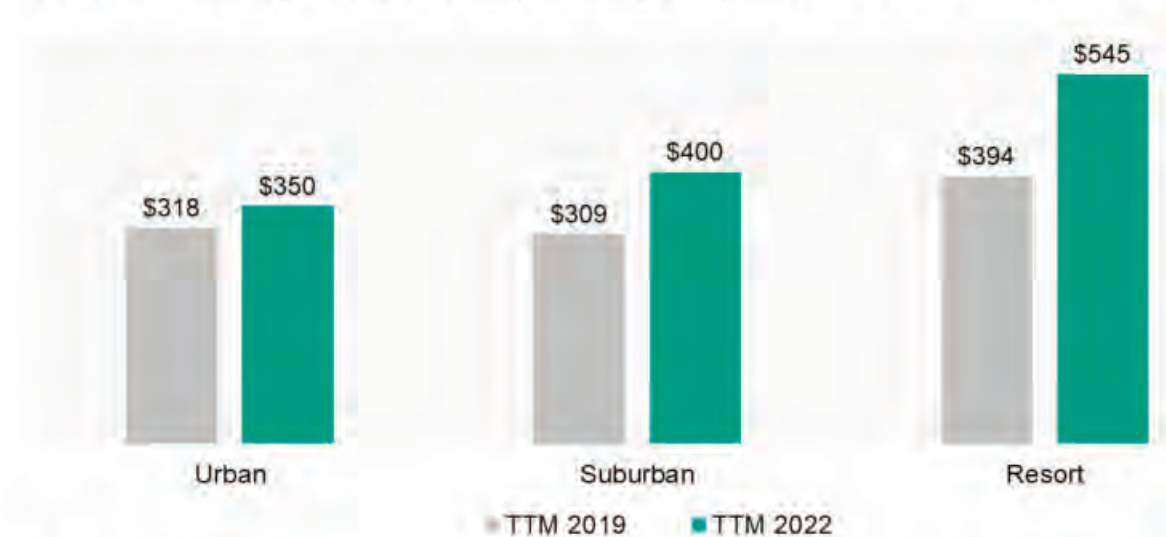
The big hospitality story of the pandemic was the resiliency in hotel pricing. In prior downturns, operators were quick to slash rates, which did little except extend the length of the recovery period. But in 2020, those operators held firm, and once the travel boom exploded in 2021 hotels were well positioned to establish serious pricing power.

Nowhere is this more evident than in the luxury segment, where average daily room rate (ADR) currently sit nearly 30% above pre-pandemic levels. Fueled primarily by leisure demand, rates for luxury hotels have been on an upward trajectory for nearly two years. But with a (mild) recession looming and leisure demand likely to be partially displaced by increasing amounts of corporate and group travel, luxury ADRs are expected to soften.

Yet this softening will vary based on location. Urban luxury properties are only 10% above their 2019 levels and have been the slowest to recover, and could benefit as business travel continues to strengthen. On the other end of the spectrum, however, luxury resorts, with rates nearly 40% above their 2019 levels, are vulnerable to recessionary influences and the dissipation of the revenge traveler. All in all, luxury hotel rates will experience a mild decline in 2023, with luxury resorts most likely to take the brunt of the blow.

Luxury Hotel Rates Will Fall Back Down to Earth

Luxury Chain Scale Average Daily Rate (ADR) by Location Type, September TTM 2022 vs. September TTM 2019



Prediction 65: 2023 Recession Will Have Less of an Impact on Hotel Demand Than in the Past

Isaac Collazo, VP Analytics - STR

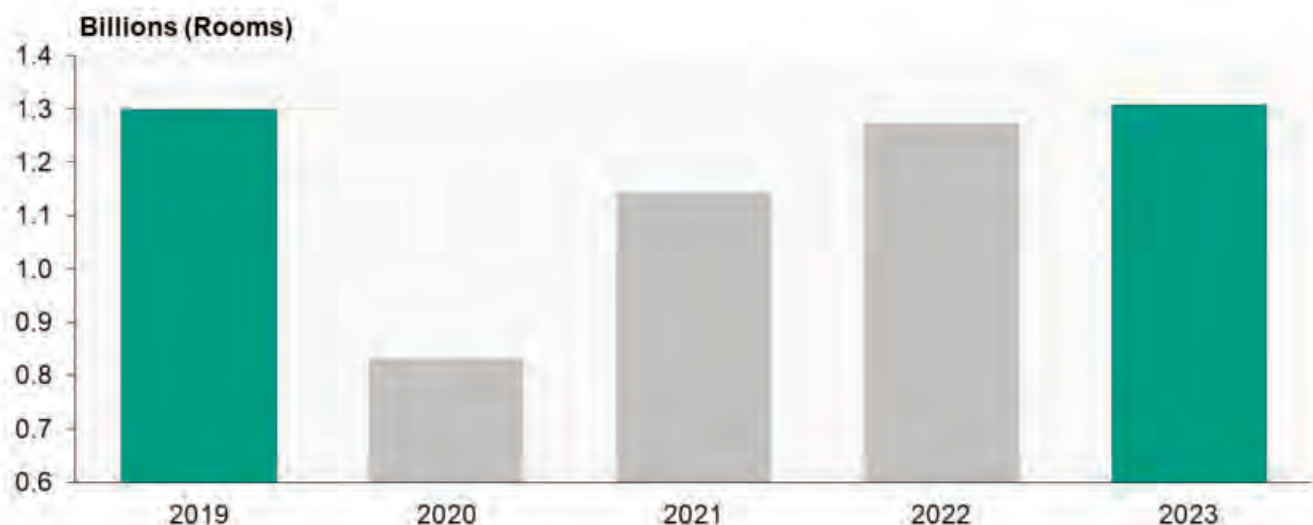
Most economists are predicting a shallow U.S. recession in 2023. In the most recent shallow recession of 2001, seasonally adjusted hotel room demand declined by 5.6% from March 2001 to January 2002. This time, room demand will continue to grow thanks to strong household finances, high employment, solid corporate profits, and increasing business investment.

Leisure travel recovered the fastest post Covid lockdowns and has remained strong ever since with little impact from rising interest rates and inflation. Households remain strong with household debt service well below levels seen since 2005. Household net worth also remains near record highs. A sharp drain on household finances is not anticipated as employment levels are forecast to remain above 2019 with the growth seen in the employment of professionals, those most likely to travel, virtually untouched by the recession.

Group room demand increased substantially in Fall 2022. Meeting planners continue to see strong bookings into 2023, driven in part by work-from-home policies, which makes travel for on-boarding and cultural assimilation necessary. While group demand is nearing recovery, transient business demand remains well below 2019. Corporate profits are expected to drop year over year, but its absolute level is expected to be resilient and above 2019. Thus, the recovery in business travel may slow, but it will not reverse as it has in past recessions. Additionally, solid business investment will spur additional travel in terms of site visits, deliveries, and training.

2023 Recession Will Have Less of an Impact on Hotel Demand Than in the Past

U.S. Hotel Room Demand



Prediction 66: The Number of Proposed Hotels in the Final Planning Stage in Canada Will Increase

Laura Baxter, Director of Hospitality Analytics, Canada - CoStar Market Analytics

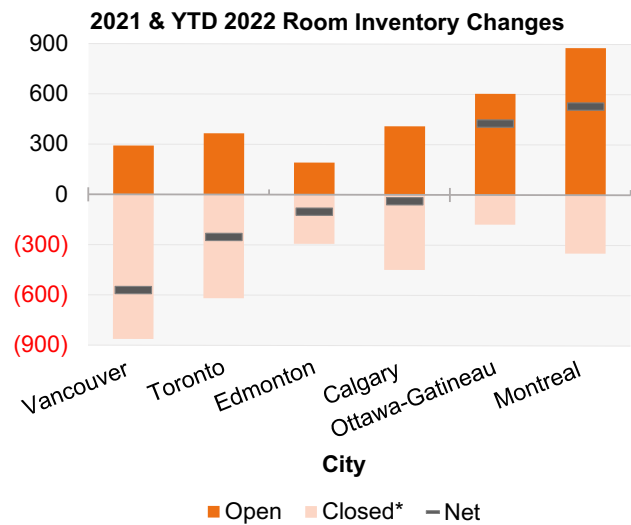
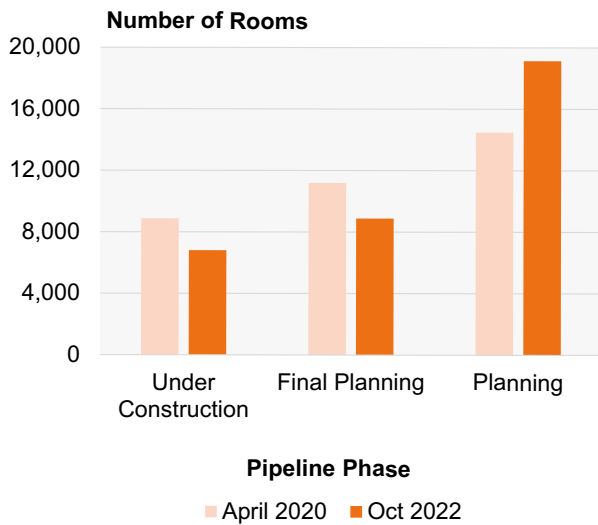
The most impactful change to Canada’s hotel development pipeline in 2023 will be the increase in the number of rooms in the final planning stages. With some elements of the supply chain normalizing, combined with the hotel industry achieving record-breaking key operating metrics in the latter half of 2023, the feasibility of proposed projects shelved during the early days of the pandemic is being re-evaluated.

During the recession in 2023, expect growth in operating performance, compared to the 2019 benchmark, to be lower than in 2022. However, the reduction in hotel room inventory in Canada’s largest urban centres over the past couple of years, and limited supply-side pressure, will sustain the recovery of key metrics.

As construction costs come down throughout 2023, the lending community will take note of the sustained strong hotel fundamentals and have an increasing appetite for originating development financing for well-capitalized borrowers. Diminishing inventory will also assist hotel developers in securing sites when competing against other property types, especially when proposing mixed-use developments where risk can be spread against property types.

Number of Proposed Hotels in the Final Planning Stage in Canada Will Increase

Evolution of Development Pipeline Throughout Pandemic



*Number of closed rooms is approximate



Source: CoStar

November 2022

Prediction 67: UK Resorts Will Outperform Spanish Resorts Occupancy

Cristina Balekjian, Director of Hospitality Analytics, UK - CoStar Market Analytics

Coastal and rural destinations across the UK have been some of the best performers since the pandemic began and domestic holiday destinations are set to benefit once again in 2023. With a recession forecast, cost-of-living crisis putting pressures on discretionary spend, and a weaker pound, consumers are likely to revise their travel plans and potentially trade trips abroad to locations closer to home.

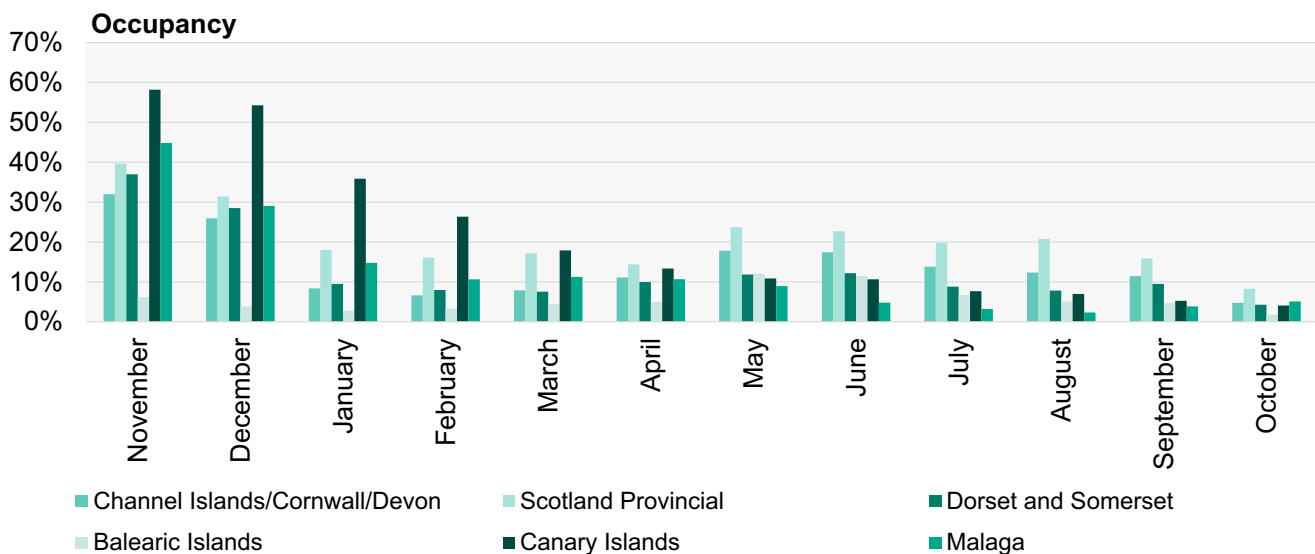
As of Nov. 7, business on the books for UK holiday destinations was trending significantly ahead of Spanish resorts such as the Balearic and Canary Islands, signalling the strength of the domestic leisure market, as many people start planning their holidays for the year ahead.

Despite seeing softer performance metrics year over year in 2022, UK resorts still outperformed 2019 levels and are likely to continue to do so as we head into 2023. Occupancy levels are expected to improve further heading into next year for both UK and Spanish resorts, though the UK is likely to benefit from higher occupancies due to increased domestic demand shifting away from overseas destinations, with a recent travel sentiment survey by VisitBritain citing that most respondents would take a UK trip in the next 12 months.

Meanwhile consumers are also likely to trade down on their accommodation options to save money on the overall trip, which is likely to benefit hotels in the low- to mid-tier with operators such as Travelodge and Premier Inn likely to be winners.

UK Resorts To Outperform Spanish Resorts Summer Occupancy

Occupancy on the Books As of 7th November 2022



Source: STR

As of 7th November, 2022

Prediction 68: A Weak Pound Is Set To Drive International Demand Into the UK

Cristina Balekjian, Director of Hospitality Analytics, UK - CoStar Market Analytics

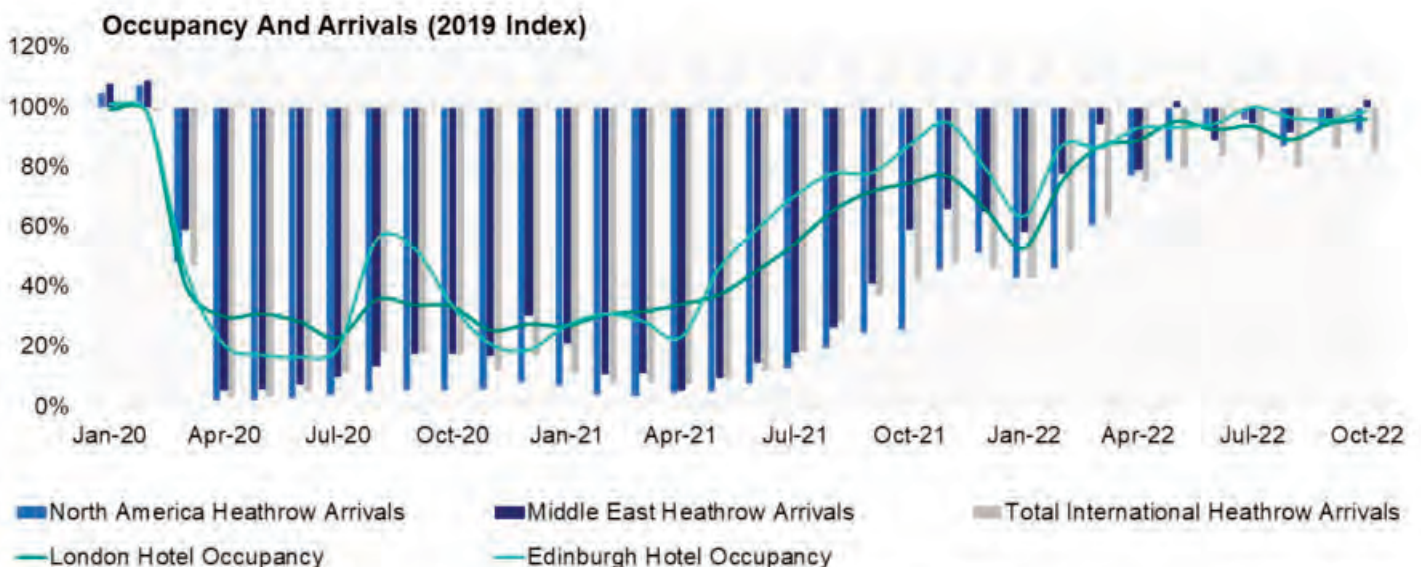
A weak pound is set to drive international demand into the UK in 2023. International travel returned in 2022 at a quicker pace than initially anticipated, with the final months of the year being especially busy. The fall of sterling against the dollar, especially following the announcement of the mini budget coupled with Queen Elizabeth’s mourning period and funeral in September, accelerated in-bound visitation as tourists from North America and the Middle East flocked to the UK. Arrivals from those source markets at London Heathrow neared or surpassed 2019 levels in October.

International cities, such as London and Edinburgh, benefit most from increased overseas visitation given their global positioning, with a recent survey by Allianz Partners USA citing London and Edinburgh as top European destinations by American tourists this holiday season. Occupancies in both destinations have seen clear improvements to date, while forward-looking data also points to a strong end of the year, as Christmas and New Year’s holidays draw great numbers of tourists.

This trend is expected to continue into the new year given the dollar is forecast to remain strong in the coming months. More specifically, the Luxury sector in both markets is set to profit from the influx of wealthy visitors from feeder markets, such as the U.S. and the Middle East, since this segment is less affected by cost-of-living pressures and those looking for such experiences will still be willing to pay a price. Events in and around both destinations will also continue to attract visitors from abroad, with the coronation of King Charles III in May set to draw thousands of tourists and media to the country to witness the event, boosting hotel performance in major cities.

A Weak Pound Is Set To Drive International Demand Into the UK

Hotel Occupancy and Airport Arrivals Indexed to 2019



Prediction 69: Distressed Sales Will Rise in 2023 Given Rising Cost Pressures

Cristina Balekjian, Director of Hospitality Analytics, UK - CoStar Market Analytics

Rising operational and debt costs will put pressures on hotel profitability leading to potential increased distress. Inflation reached some of the highest levels in the past 40 years during 2022 with October peaking at 11%, while interest rates have also risen to their highest levels over the past decade, following years of low debt costs.

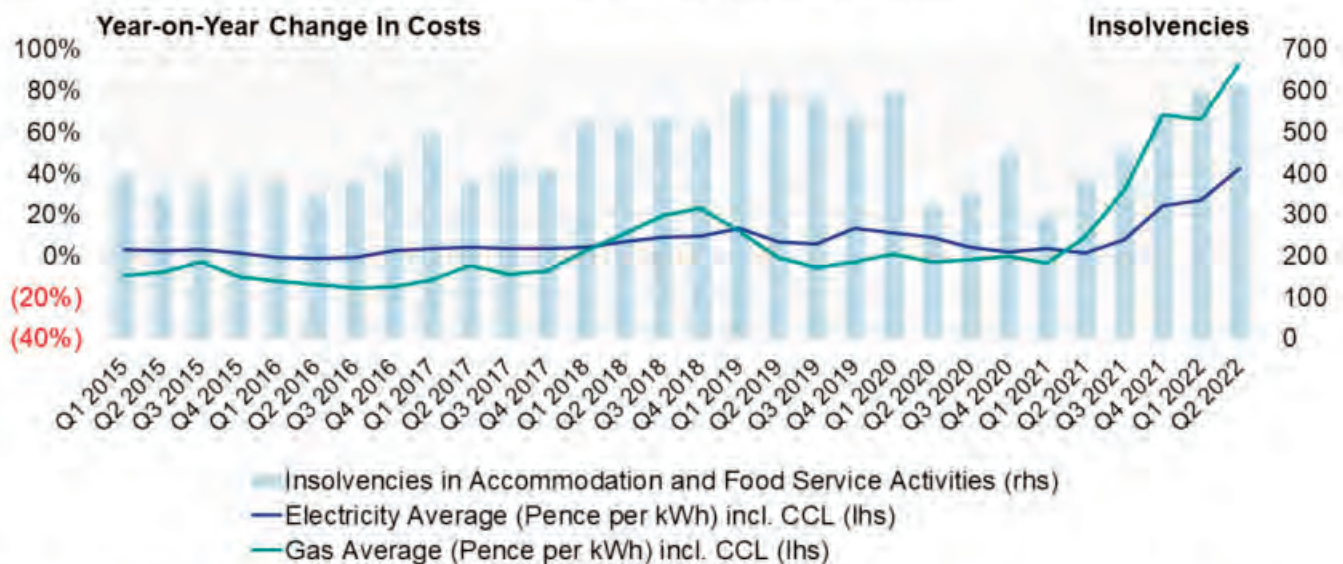
Food and labour costs have increased ahead of inflation, straining profitability for many, despite strong revenue streams. And while the full impact of rising energy may not have been felt yet by all, due to contracts signed prior to increases, most will feel the impact in 2023 once fixed contracts come to an end and adjust to reflect the higher rates.

While the sector has been able to withstand distress over the past two years, given lenders lenience and understanding towards owners and operators coming out of the pandemic, the next 12 to 18 months may be different. With debt costs rising, many lenders have started to demand loans be repaid, while debt that was deployed pre-pandemic will also be maturing over the coming months, putting many in a difficult position to refinance.

Such pressures will be most felt by cash-strapped owners and operators, namely those independent, underinvested and those struggling to service debt payments and recoup losses accumulated during the pandemic. UK Hospitality and other industry bodies recently surveyed the sector and reported that about a third of hospitality businesses are at risk of bankruptcy over the coming months leading to more distressed sales that opportunistic buyers will be keen to snap up.

Distressed Sales To Rise in 2023 Given Rising Cost Pressures

Change in Operational Costs & Insolvencies in Accommodation and Food Services Activities



Prediction 70: 2023 European Occupancy to Continue to Lag Behind 2019 Levels

Thomas Emanuel, Senior Director - STR

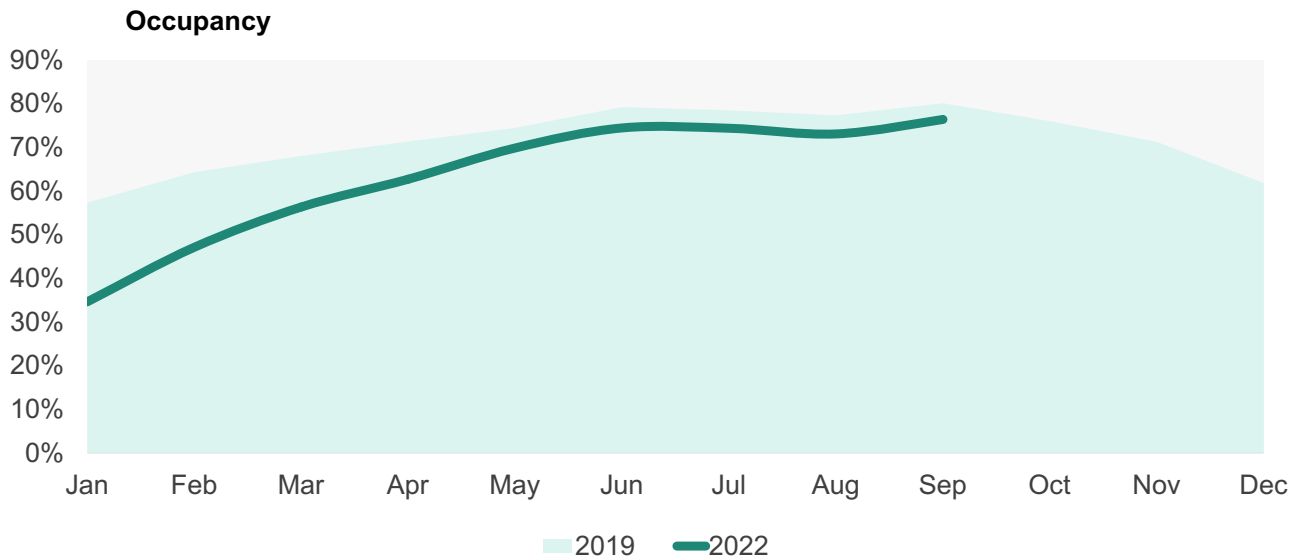
Whilst hotel occupancy has continued to build throughout 2022, as restrictions have been lifted and demand has returned, the metric has yet to eclipse 2019 on a monthly basis. Occupancy sits 3 to 4 percentage points behind 2019, and this has been the case since travel returned to more normalised levels in May.

The European economic outlook is challenging for 2023, and domestic and intra-regional travel will be impacted as businesses and consumers feel the squeeze financially. As a result of this, we predict that occupancy will not increase sufficiently to surpass the levels enjoyed prior to the pandemic.



2023 European Occupancy to Continue to Lag Behind 2019 Levels

Europe – Monthly Occupancy (Std), Jan – Dec 2019 & Jan – Sep 2022



Source: STR

As of September 2022

Prediction 71: Markets With a High Proportion of U.S. Travelers to Outperform Competing Destinations

Thomas Emanuel, Senior Director - STR

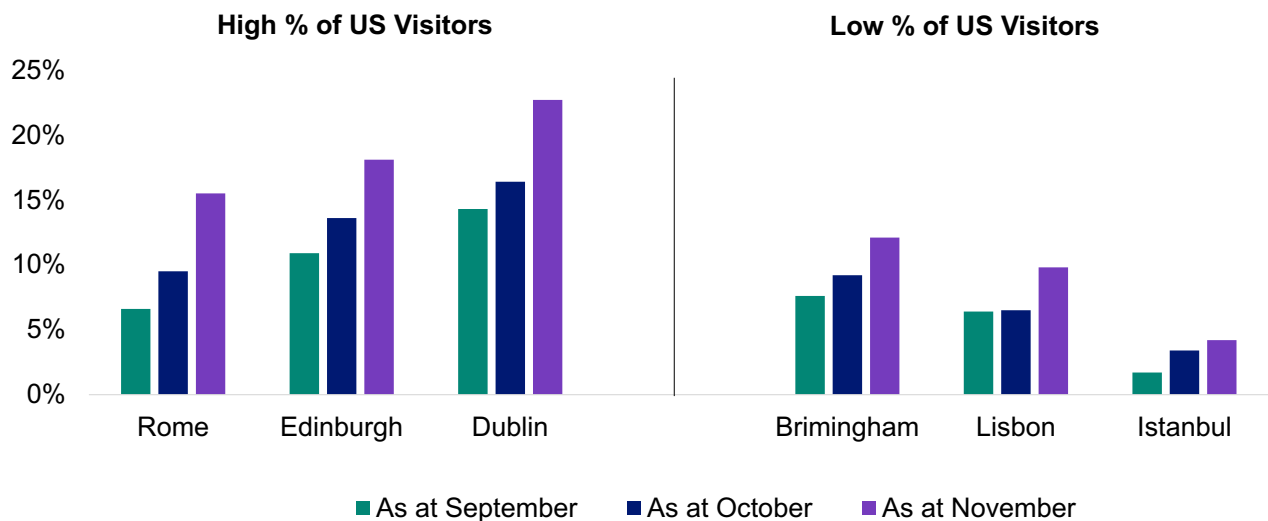
As the U.S. Dollar has strengthened against the Euro and Pound Sterling, Europe has become far better value for Americans to visit over recent months. As a result of this, we predict cities that enjoy a higher percentage of U.S. visitors will see stronger performance.

Looking at business on the books occupancy data,¹ we can already see that coming to fruition. Three markets which enjoy a high percentage of U.S. visitors; Rome and Edinburgh (19%), and Dublin (14%) have business on the books for the first half of 2022 above 15% already. This compares to sub 10% for markets with lower U.S. visitation such as Birmingham, Lisbon, and Istanbul. Whilst the U.S. Dollar remains strong, these favourite destinations for American travellers will continue to benefit.



Markets With a High Proportion of U.S. Travelers to Outperform Competing Destinations

Averaged Occupancy on the Books for Jan – Jun 2023 As at 5th September, 3rd October, 7th November 2022



Prediction 72: Japan Central Business District ADR to Exceed Pre-Pandemic Level by Year-End

Kelsey Fenerty, Analyst II - STR

After a later start to recovery, Central Business Districts in Tokyo and Osaka will look to improve the pace of ADR recovery substantially in 2023, with CBD rates expected to outpace pre-pandemic level by year-end. Over much of the past two and a half years, a series of lockdowns and restrictions, combined with strict border controls, significantly limited Japanese CBD demand. Domestic leisure demand remained mostly outside of cities, and international business travel was difficult if not impossible. Historically low demand levels left ADR at roughly 60% of pre-pandemic level over most of that period.

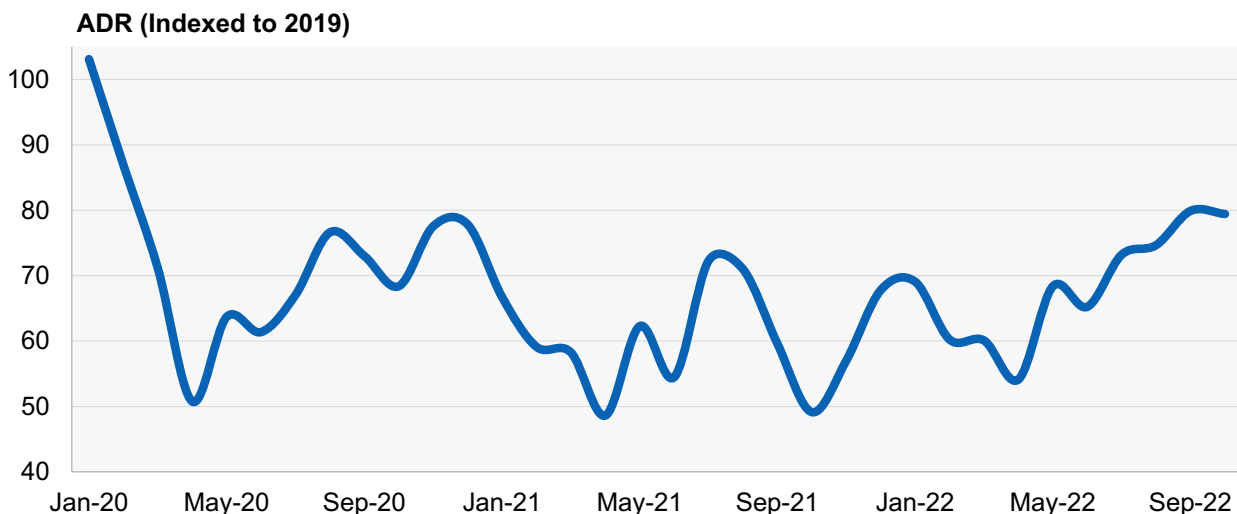
Higher demand growth is closely correlated to higher ADR growth, meaning that CBD ADR growth will outpace outer lying markets next year as the city centers look to push rates back to pre-pandemic level. 2023 demand is expected to arrive in the form of both business and leisure travelers: Japan fully reopened borders in October 2022 and simultaneously launched a National Travel Discount program intended to promote domestic travel. These developments will help stimulate both domestic and international inbound demand into cities, increasing confidence to raise rates.

For leisure travelers, relaxed Covid restrictions make CBD travel an attractive holiday option. The depreciating yen should further bolster Japan’s popularity among long-haul travelers, particularly from the U.S. and other western source markets. From a short-haul perspective, gradual easing to China’s Covid-zero policy could also bolster demand into Japanese CBDs. The end to border closures and resetting of corporate budgets acts as a stimulus for business demand back into CBDs, and the influx of demand across multiple traveler segments further promotes ADR growth.



Japan Central Business District ADR to Exceed Pre-Pandemic Level by Year-End

Tokyo & Osaka CBDs, ADR (JPY) Indexed to 2019, Jan 2020 – Oct 2022



Prediction 73: Super-charged MICE Growth Will Boost Singapore Demand in 2023

Kelsey Fenerty, Analyst II - STR

For most markets worldwide, group demand has been the clear laggard in demand recovery, as major events and conferences were cancelled, postponed, or virtually hosted throughout the pandemic. Singapore was a key exception to this rule, as robust government assistance schemes, quarantine programs, and corporate bookings for long-stay employees more than doubled group demand during 2020-2021.

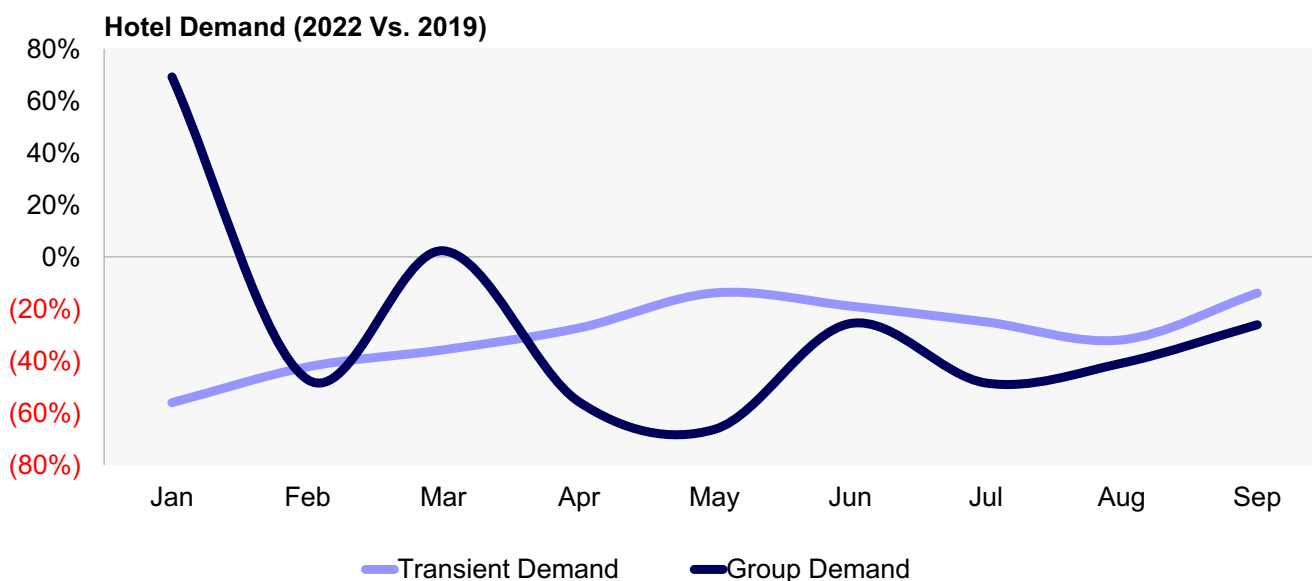
As the need for quarantine rooms ended, group demand plummeted. However, a rapid rise in meetings and events during 2022 Q3 helped push group demand recovery to 2019 levels nearly in line with transient demand recovery. That super-charged Meetings, Incentives, Conferences and Exhibitions (MICE) demand is expected to carry the nation-state through the next 12 months, as the regular slate of events competes with postponed or rescheduled Covid-era events for space on the 2023 calendar.

The 2023 events calendar is pacing just slightly ahead of pre-pandemic level, with twenty market-moving events set to take place next year, compared to the 17 tracked in 2019, and it's likely that as the year progresses, additional events will be announced for the second half of the year. Most events are trade fairs, although the leisure-driven concert calendar is picking up. The Singapore Grand Prix will return in mid-September as well.

The strong post-pandemic calendar will help drive demand on multiple fronts. From a segmentation perspective, both business and leisure events have a positive impact on group room nights. Events also tend to increase transient demand, as travelers associated with the event but not booked into a group room block seek out rooms. The MICE demand in combination with non-event-related 'normal' demand, should help Singapore hotels to push demand near to 2019 level by year-end 2023.

Super-charged MICE Growth Will Boost Singapore Demand in 2023

Singapore, Luxury & Upper Upscale Class Hotels, Demand % Change to 2019, Jan – Sep 2022



Prediction 74: India Expecting Near-Record RevPAR Across Most Markets

Kelsey Fenerty, Analyst II - STR

India has been a standout country for hospitality performance recovery in 2022, as occupancy, ADR, and RevPAR outpaced pre-pandemic levels from April and show no signs of slowing. The rapid recovery in 2022 sets the country up for record-breaking performance in 2023, with ADR and RevPAR expected to reach new heights.

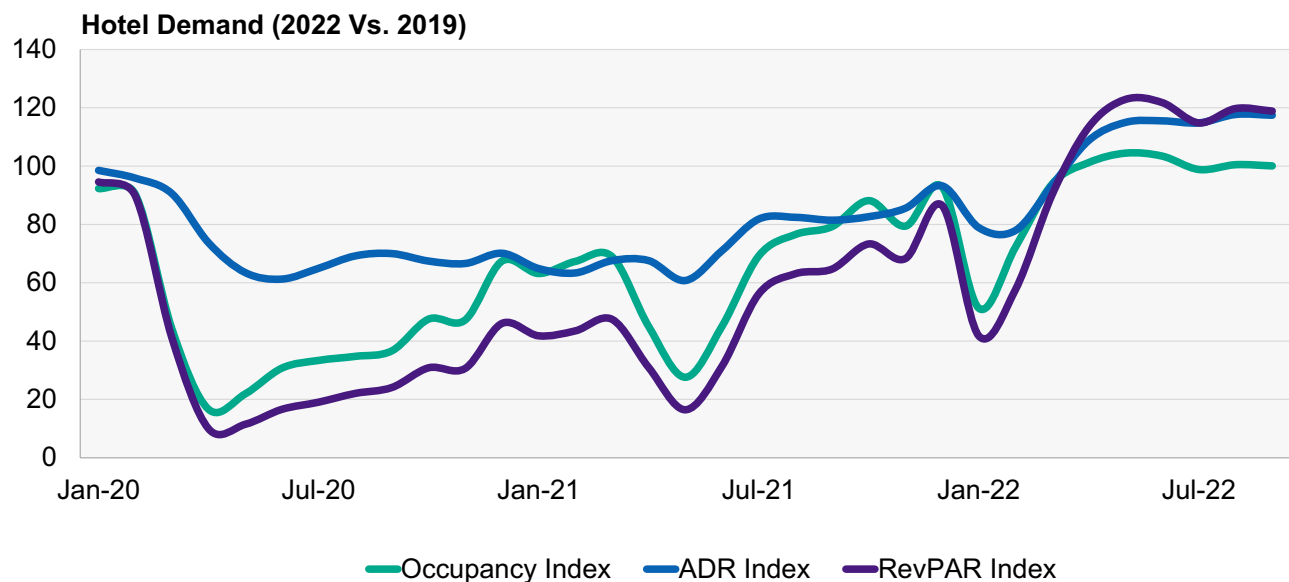
With domestic airlift basically normal, a stable political environment, no remaining Covid restrictions, and GDP growth expected for 2023, India is well placed to continue growing demand and ADR in 2023. In combination with the country’s reliance on domestic demand, the aforementioned factors suggest that domestic demand will continue to increase over the next 12 months.

Leisure travel is expected to continue improving, as the depreciating rupee will favor domestic and international inbound holidays in popular leisure destinations like Goa. Corporate demand in major business centers like Mumbai and Bangalore is expected to continue to flourish in 2023 as well, as postponed and rescheduled Covid-era events fill calendars. Strong demand growth and high occupancy levels support rate growth, and ADR is expected to continue increasing in 2023 due to both strong industry fundamentals and pressure from rising inflation.

While many countries have pushed ADR ahead of pre-pandemic levels amid rising prices and increased demand, India stands out as having achieved occupancy recovery in 2022. Global recessionary pressures may lead to modest headwinds in the outlook next year, but occupancy recovery alongside ADR recovery had led to a robust RevPAR recovery. The stability engendered by the double recoveries should help push both occupancy and ADR to record-breaking and sustainable new heights.

India Expecting Near-Record RevPAR Across Most Markets

India, KPIs (in INR) indexed to 2019, Jan 2020 – Sep 2022



Prediction 75: High Supply Growth Will Limit Occupancy Gains Across Gulf Countries in 2023

Kelsey Fenerty, Analyst II - STR

Between EXPO 2020, the 2022 FIFA World Cup, and Saudi Arabia’s ambitious Vision2030 strategy, the GCC’s hospitality sector remains a pipeline hot spot, even as recessionary fears are slowing hotel development globally. With more than 170,000 rooms in the active pipeline, pipeline development is roughly 40% of existing supply, compared to only 11% worldwide.

While the hospitality sector’s growth highlights the region’s increasing popularity on the global stage, the new supply comes at a cost. Mega-events, shifting source markets, and a regional push to shift GDP growth into tourism will help drive demand growth over the coming years, but markets will still require time to absorb new supply.

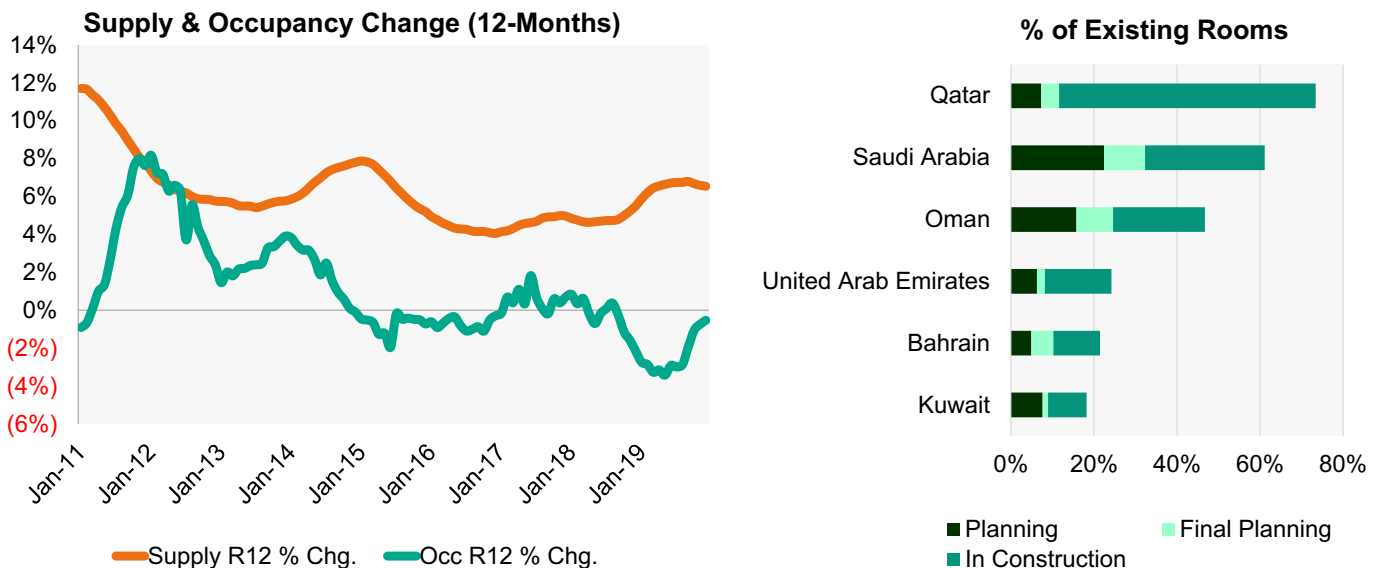
The United Arab Emirates is no stranger to high supply growth, and historic occupancy performance provides a blueprint of what the region can expect as new rooms enter the market. Rooms supply increased by more than 70,000 rooms between 2010 and 2019, a staggering 68% increase in supply or about 6% average annual growth. While occupancy initially continued to increase year-over-year as the country shook off the impacts of the Global Financial Crisis, supply growth eventually outpaced demand growth and occupancy declined in four of the five years leading up to the pandemic.

Rooms in construction presently represent between 9% and 60% of existing supply for the six Gulf countries, significantly above the average growth rate recorded in the UAE post-Global Financial Crisis. While the overall development and travel-focused initiatives highlight the region’s growing popularity, even with substantial demand growth, significant occupancy gains will be extremely challenging next year.



High Supply Growth Will Limit Occupancy Gains Across Gulf Countries in 2023

UAE 12-Month Supply And Occupancy Change & Active Pipeline As A Percent of Existing Rooms



Prediction 76: Beach Destinations Will Continue to Exceed 2019 Levels

Patricia Boo, Senior Director, Latin America - STR

Leisure demand has led hotels recovery globally and we expect it to attract more regional and international demand to Latin America. The two biggest economies in Latin America, Mexico and Brazil, are seeing strong performance and also host some of the most outstanding beaches in the world.

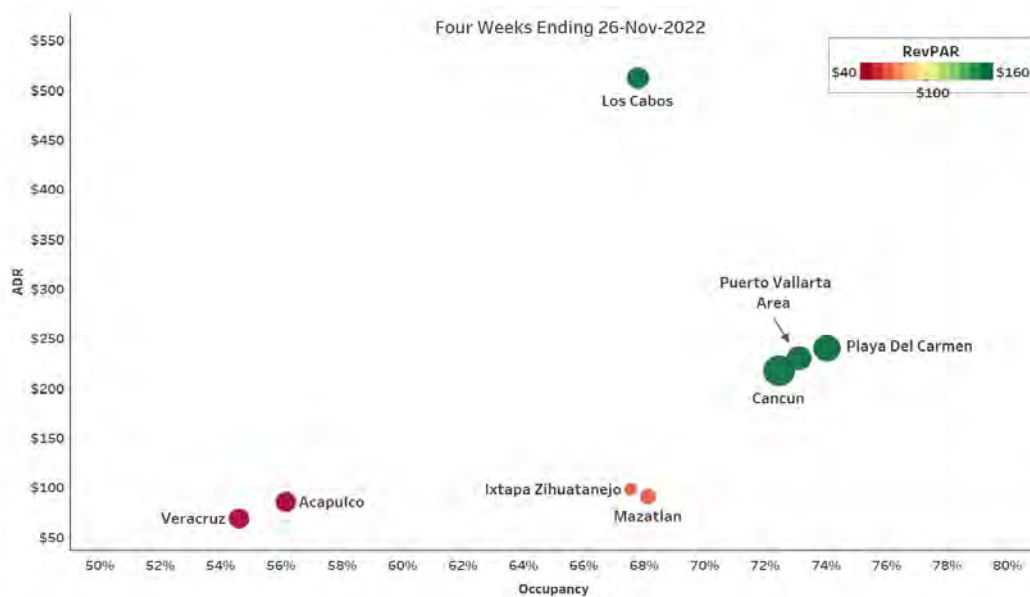
Mexico has benefited from a mix of domestic and international demand, with international tourism having a great impact on occupancy and ADR. With over 70% of tourists coming from North America, and surpassing pre-pandemic levels, we expect that Mexican beaches will remain in high demand in 2023. New supply, inflation and labor shortages pose risks to some destinations but if the U.S. dollar remains strong, it should be reflected in those international destinations.

Brazil on the hand, has shown the importance of domestic demand during the pandemic. 98% of hotel demand comes from within Brazil, and rising inflation and a strong dollar makes travelling within Brazil a more viable option. Hotel occupancy is 20% ahead of 2019, as Brazilians are choosing beach holidays, especially within the all-inclusive segment. Resorts revenues are 50% above pre-pandemic levels and Brazilians are spending more per room. Also benefiting resorts, corporate events are returning, and we expect them to keep pushing weekday occupancies.



Beach Destinations Will Continue To Exceed 2019 Levels

Beach Destinations, RevPAR Matrix



Source: STR

As of November 2022

Prediction 77: Leisure Events Will Compensate for Corporate Demand Losses in Business Destinations

Patricia Boo, Senior Director, Latin America - STR

Several high-profile musicians toured South America in the second half of 2022, and the upcoming summer concert calendar is stacked with both individual tours and major festivals. Major festival “Rock in Rio” returned to Rio de Janeiro, Brazil for the first time since 2019 and drove positive performance for hotels.

Generally, compression nights on events with over 100,000 people impact not only ADR, but occupancy for those periods. The number of festivalgoers this year has outpaced 2021 and we expect next year to hit record numbers with over 600,000 festival goers.

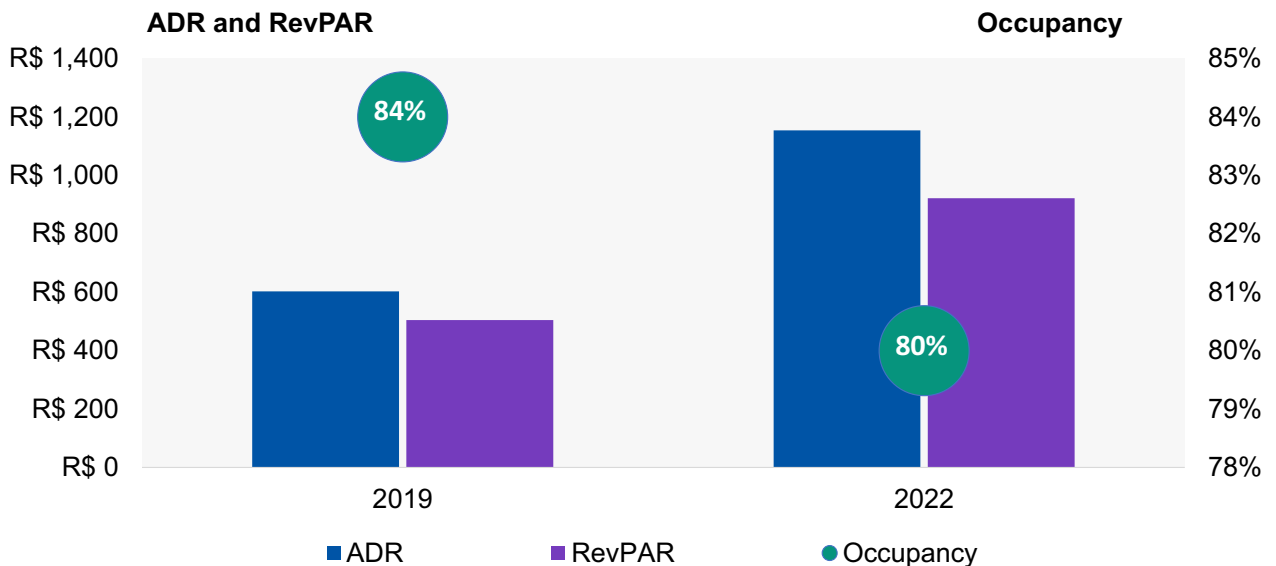
Bogota is another South American capital to get artists like Dua Lipa, Coldplay and Guns N Roses, which drove strong occupancies for those nights, reaching 90% for a corporate city that on average before the pandemic were running at 55% occupancy.

Music shows will continue to boost demand for the rest of the year with on the books business slowing down during the slow season around Christmas. The booking window shortened with the pandemic, but we are expecting it to lengthen as we move into 2023. In fact, bookings for annual music festival, Estereo Picnic, in Bogota is already at 10% occupancy – almost 4 months in advance. This precedent will continue into 2023 compensating for the not yet recovered corporate demand in these cities.



Leisure Events Will Compensate for Corporate Demand Losses in Business Destinations

Rio de Janeiro, Occupancy and ADR During Rock in Rio, 2019 and 2022



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