MOODY'S ANALYTICS

ANALYSIS
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Entering the Danger Zone: The Outlook for CRE and Housing

Executive Summary

» First quarter income drivers for multifamily and CRE like rents and vacancies did not deviate much from recent trends and expectations, with multifamily and industrial properties posting impressive results.

» However, there has been an upswing in risk and certainty, given tightening monetary policy and the ongoing Russia-Ukraine military conflict. This will likely manifest on the pricing side, with cap rates projected to increase for the remainder of 2022 through 2023.

» Similarly, home prices have begun to respond to higher mortgage rates, but there is little evidence of a housing bubble that is about to burst.

I. Introduction

We started the year projecting US GDP to grow at or around 3.8% - a step down from economic growth in 2021, which clocked in at 5.7%, but still relatively healthy and well above the 2.1% annual average rate operative during the last expansionary cycle that ran from June 2009 to March 2020.

Today, our US GDP growth forecast has been revised downwards to 2.8% for 2022. That 100 basis point reduction is not trivial: given how large the US economy is at this point in our history, 1% off our base is the size of the economy of Peru or Greece. Despite our baseline expectation of continued growth overall, risk factors rose, and the probability of a recession this year as well as in 2023 have correspondingly increased.

What does all this mean for multifamily, commercial real estate, and US housing in general? This paper will discuss performance metrics for various sectors through the first quarter of 2022. Our view is that given typical lags in economic dynamics, we will likely see volatility on the pricing side versus performance metrics from the real economy. That is, expect to see more volatility in transaction and capital markets before we record pronounced effects on rents and vacancies.

II. Heading into the Twilight of the Pandemic

Despite Omicron variants pushing COVID-19 cases up in recent months in the US, there appears to be little appetite for further restrictive lockdown policies. Many EU countries have similarly eased travel restrictions, starting with Denmark in early February. Travel in the US has rebounded accordingly. Although overall volumes have not quite returned to 2019 averages, we hit a recent high of 94.7% of average 2019 numbers last May 28, during Memorial Day weekend. The prior high of 91.4% was recorded last April 21, perhaps not coincidentally after a US federal judge struck down the mask mandate last April 18, quickly prompting airlines and airports to stop enforcing the wearing of masks.

Figure 1   TSA Traveler Throughput (7-Day Moving Average, vs 2019)

Source: Transportation Security Administration

While this is a positive development for economic activity, markets were rocked by the announcement from April 28 that US GDP actually shrank in the first quarter of 2022. To be fair, the biggest factors that pulled growth into negative territory were a reduction in defense spending, fixed investments, and a trade imbalance that swelled to record highs. Consumers were still spending: consumer expenditures rose by 2.7% in the same period, despite the 7.8% increase in prices during the same time frame (continued growth in consumer spending is also very much related to that bigger wedge between imports and exports that pushed the trade deficit to a record $109.8 billion in March).

At this point, the negative GDP growth figure should most likely be considered noise, versus a clear, indicative signal for where the US economy is heading. Employers are still hiring, with the latest figures from the Bureau of Labor Statistics last June 3 suggesting that the job market is still very tight.[1] With that said, the negative GDP growth figure does make the Federal Reserve's job more complicated: at a time when they've signaled a tightening of monetary policy to curb inflation, they risk tipping the US economy into more negative territory if higher interest rates curb aggregate demand 'too much.'

One effect that the pandemic wrought is how so much consumer spending shifted to *goods purchases* versus services. During the lockdown periods induced by COVID-19-related policies, we just simply weren't eating out as much or traveling, among other services that took a hit. The massive shift in goods purchased for delivery contributed to supply chain issues, boosting spikes in core CPI (net of energy and food). As the economy reopens, we are spending once again on services and less on goods. Real spending on goods declined by 2.9% from April 1, 2021 to April 1, 2022, while real spending on services rose by 5.9%.[2] This shift can be viewed in a relatively positive way, with a decline in demand for goods alleviating inflationary pressures, while spending on services keeping US economic growth in positive territory.

[1] According to the BLS report released on June 3, nonfarm employment rose by 390,000 in May, and the unemployment rate stayed very low at 3.6%.

[2] Data from the St Louis Federal Reserve's FRED platform.

It's a Strange Anticipation: Geopolitics and World Prices

The first quarter event that truly increased uncertainty in economic forecasting is the Russia-Ukraine military conflict that commenced last February 24. The conflict is ongoing, and higher energy and commodity prices are the result. These are weighing down prospects for economic growth, keeping inflation high: the Fed can raise overnight borrowing rates to curb some inflationary pressures in the US, but monetary policy can only go so far to address the effects of global geopolitical issues.

While we struck an optimistic note about services in the prior section, ongoing labor shortage issues across many industries also means that households are likely to bear elevated prices – all the way from hotel room rates to summer camps for kids that are to begin soon.

We have tried to avoid using the 'R' word in this paper, but the chances of a recession have indeed risen versus baseline. **We now expect a 33% chance of a recession occurring in 2022, and we are projecting an uncomfortable 50% probability of a recession occurring sometime in 2023.** We have accordingly ratcheted down our expectations for economic activity. What does all this mean for various property types in commercial real estate, and US housing as a whole?

III. The Seemingly Endless Ocean of Optimism for Multifamily and Industrial

Let's start with the good news. Multifamily and industrial performance metrics continued to notch impressive figures in the first quarter of 2022, seemingly oblivious to negative GDP growth during the same time period. Multifamily asking and effective rents both rose by 2.5% in the first quarter, exceeding records set in late 2001 when national rent growth rates were at around 2.4%. The only reason why the first quarter of 2022 did not set new records is because of how truly incredible rent growth was in the third quarter of 2021 – at 7.7% for asking rents and 8.2% for effective rents, that is the new record that has yet to be eclipsed (and is likely to stand for some time).

Figure 2 Multifamily Quarterly Market Conditions

Year	Qtr	Asking Rent	Percent Change	Effective Rent	Percent Change	Vacancy Rate
2015	1	$1,205	1.0%	$1,159	1.1%	4.3%
2015	2	$1,227	1.8%	$1,179	1.8%	4.3%
2015	3	$1,249	1.8%	$1,200	1.8%	4.3%
2015	4	$1,262	1.1%	$1,213	1.1%	4.3%
2016	1	$1,274	0.9%	$1,223	0.9%	4.3%
2016	2	$1,292	1.4%	$1,240	1.4%	4.2%
2016	3	$1,308	1.3%	$1,255	1.2%	4.2%
2016	4	$1,313	0.4%	$1,260	0.4%	4.2%
2017	1	$1,325	0.9%	$1,268	0.6%	4.4%
2017	2	$1,345	1.5%	$1,285	1.3%	4.4%
2017	3	$1,364	1.4%	$1,301	1.3%	4.5%
2017	4	$1,373	0.7%	$1,310	0.6%	4.6%
2018	1	$1,390	1.2%	$1,324	1.1%	4.7%
2018	2	$1,411	1.5%	$1,344	1.5%	4.7%
2018	3	$1,431	1.4%	$1,362	1.4%	4.8%
2018	4	$1,446	1.0%	$1,375	1.0%	4.8%
2019	1	$1,455	0.6%	$1,384	0.6%	4.7%
2019	2	$1,475	1.4%	$1,403	1.4%	4.6%
2019	3	$1,489	1.0%	$1,418	1.0%	4.6%
2019	4	$1,497	0.5%	$1,425	0.5%	4.8%
2020	1	$1,503	0.4%	$1,432	0.5%	4.8%
2020	2	$1,498	-0.3%	$1,427	-0.3%	4.9%
2020	3	$1,476	-1.5%	$1,405	-1.5%	5.1%
2020	4	$1,461	-1.0%	$1,390	-1.1%	5.3%
2021	1	$1,460	-0.1%	$1,389	-0.1%	5.4%
2021	2	$1,476	1.2%	$1,406	1.2%	5.4%
2021	3	$1,591	7.7%	$1,521	8.2%	4.8%
2021	4	$1,638	3.0%	$1,567	3.0%	4.8%
2022	**1**	**$1,678**	**2.5%**	**$1,606**	**2.5%**	**4.7%**

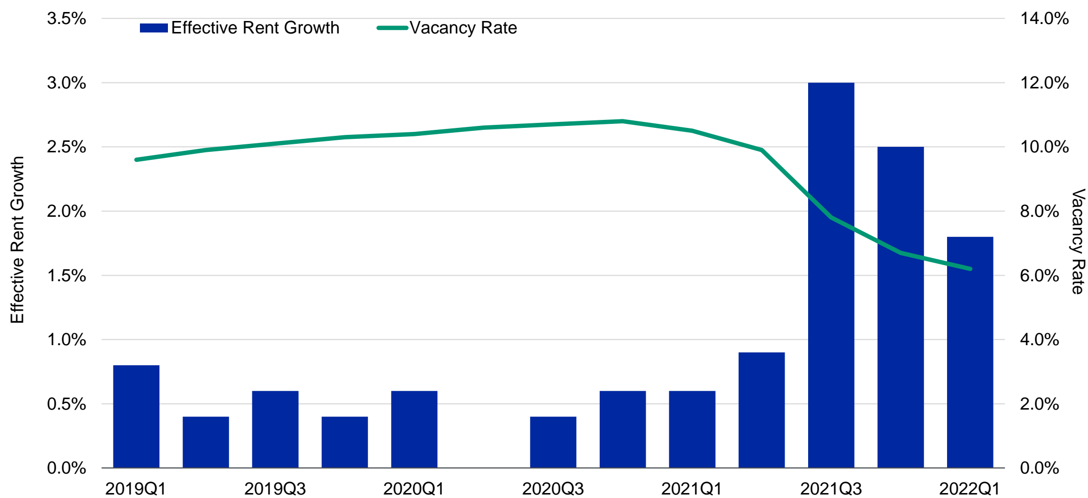
Source: Moody's Analytics

National vacancies for multifamily also trended downwards, declining by 10 basis points to end the first quarter at 4.7%. Vacancies are now below pre-COVID-19 levels from the end of 2019.

Demand indicators remain favorable for multifamily. Rapid increases in single-family home prices (and now, rising mortgage rates) are likely keeping first-time homebuyers in their apartments, explaining part of the strength of the rental market in the near term. We are expecting rent growth to slow from its record-breaking pace in 2021, but if the sector pulls off another year where rents grow between five to 6%, that will be a good year indeed – considering all the uncertainties that now weigh down our general economic expectations for 2022.

The industrial sector is similarly resilient, particularly the warehouse/distribution sector. National vacancies for the warehouse/distribution sector are now at 6.1% (a record low), after dropping 50 basis points in the first quarter of 2022. Quarterly effective rent growth came in at 1.8%, slightly slower than the 2.4% figure posted in the prior quarter, but as Figure 3 below shows, the latter half of 2021 really was exceptionally strong for this property type.

Figure 3 Warehouse/Distribution Vacancy and Effective Rent Growth



Source: Moody's Analytics

Our outlook remains not just positive, but robust for the industrial sector in the near-term. In fact, the prospects are so strong that industrial lease terms have begun to decline markedly. In a paper published in late March, we show how lease terms began to decline starting around 2018, matching the spectacular growth of rents and occupancies in the sector.[3] After all, why would landlords want to lock themselves into a 10- or 20-year lease with 2 to 3% annual escalation clauses when rents are rising by about that much in a single quarter or two?

To be fair, there are some headwinds: Amazon's recent announcement that they are not just pulling back significantly on building new space – but that they are expecting to put 10 million square feet of warehouse space up for sublet – casts some gloom over an otherwise very tight sector. But 10 million square feet is a drop in the bucket for a sector that's shown the ability to absorb anywhere from 150 million square feet or more of new supply growth in any given year over the last five years. There are likely to be some local disruptions from Amazon's announcement, but it is doubtful that third party logistics providers and other players will all scale back significantly, and simultaneously. As such, we expect demand for this property type to remain strong in the near term; accordingly, compared to all other core sectors in commercial real estate, our rent growth forecasts for industrial are also the most robust.

[3] "Warehouse and Distribution Lease Terms: As the Sector Improves, Lease Terms Fall" by Ricardo Rosas and Dr Ermengarde Jabir. Moody's Analytics CRE, March 29, 2022. Paper available upon request.

Turning and Returning to Prior Occupancies: Hotel

The pandemic-driven pendulum continued to swing hotel performance metrics wildly. Even as occupancies declined from 64% down to 51.9% throughout late 2021, because of the Delta and Omicron variants, occupancies roared back to 61.6% by the end of the first quarter of 2022. Results were not uniformly positive: Omicron woes dragged average daily rates (ADRs) down by 2.6%. Overall revenues per available room (RevPar) therefore fell by 0.9%.

Figure 4 Hotel Quarterly Performance Metrics

Year	Qtr	ADR	Percent Change	Occupancy Rate	PCT PT Change	RevPAR	Percent Change
2017	2	$123	0.9%	65.3%	-0.7%	$80	-0.1%
2017	3	$124	0.7%	66.7%	1.4%	$82	2.8%
2017	4	$125	1.4%	65.4%	-1.3%	$82	-0.6%
2018	1	$127	1.0%	65.6%	0.2%	$83	1.3%
2018	2	$127	0.2%	65.7%	0.1%	$83	0.3%
2018	3	$127	0.3%	64.0%	-1.7%	$81	-2.3%
2018	4	$127	-0.4%	65.5%	1.5%	$83	2.0%
2019	1	$127	0.6%	65.2%	-0.3%	$83	0.2%
2019	2	$128	0.1%	65.3%	0.1%	$83	0.3%
2019	3	$127	-0.4%	65.1%	-0.2%	$83	-0.7%
2019	4	$128	0.8%	66.0%	0.9%	$85	2.2%
2020	1	$106	-17.3%	36.7%	-29.3%	$39	-54.0%
2020	2	$88	-16.9%	38.4%	1.7%	$34	-13.1%
2020	3	$93	5.9%	45.4%	7.0%	$42	25.2%
2020	4	$86	-7.5%	34.6%	-10.8%	$30	-29.5%
2021	1	$100	16.4%	52.1%	17.5%	$52	75.2%
2021	2	$123	22.1%	64.0%	11.9%	$78	50.0%
2021	3	$126	2.9%	59.8%	-4.2%	$75	-3.9%
2021	4	$128	1.7%	51.9%	-7.9%	$67	-11.7%
2022	1	$140	9.4%	61.6%	9.7%	$87	29.9%
2022	**2**	**$137**	**-2.6%**	**62.7%**	**1.1%**	**$86**	**-0.9%**
2022	**3**	**$137**	**-0.1%**	**63.3%**	**0.6%**	**$87**	**0.9%**
2022	**4**	**$134**	**-2.1%**	**64.0%**	**0.7%**	**$86**	**-1.0%**
2023	**1**	**$129**	**-3.9%**	**62.4%**	**-1.6%**	**$80**	**-6.3%**

Source: Moody's Analytics

Still, with travel ramping back up, hotel performance metrics may well catch a much needed break for the rest of the year – assuming GDP growth remains positive. In fact, there are some locations like **Miami** that are posting record highs for ADRs: demand is obviously strong, but why would **Miami** ADRs achieve record high levels when national ADRs fell in the first quarter? Here's one possible driver, gleaned during conversations from the April meetings of the American Hotel and Lodging Association: negotiated corporate rates have not quite returned en masse just yet, given how companies are tiptoeing back into business travel. As such, business travelers to **Miami** and other places may well be paying close to rack rates versus the (usually) lower rates achieved from corporate block arrangements.

Watching, Waiting, Still Anticipating the Next Stage: Office and Retail

The outlook isn't quite as sanguine for the office and retail sectors, given the long-term evolutionary processes in which both property types are embroiled. A lot of companies now have explicit 'return to office' measures in full swing, with Elon Musk's strongly worded announcement last June 2 being one of the latest management edicts. "Anyone who wishes to do remote work must be in the office for a minimum (and I mean 'minimum') of 40 hours per week or depart Tesla," Musk reportedly wrote.[4]

[4] https://www.cnn.com/2022/06/01/tech/elon-musk-tesla-ends-work-from-home/index.html

Physical occupancy, however, remains mired at 42.9% as of late May. Pre-pandemic levels hovered at around 65%. While some metros like **Austin** broke 60% several weeks ago, **San Francisco** hovers in the low 30s and **New York** – the largest office market in the country – remains below 40%.[5] It is therefore no surprise that national office vacancies remained flat in the first quarter, stuck at 18.1%. Asking and effective rents both rose by 0.4% in the first quarter, representing some positive movement.

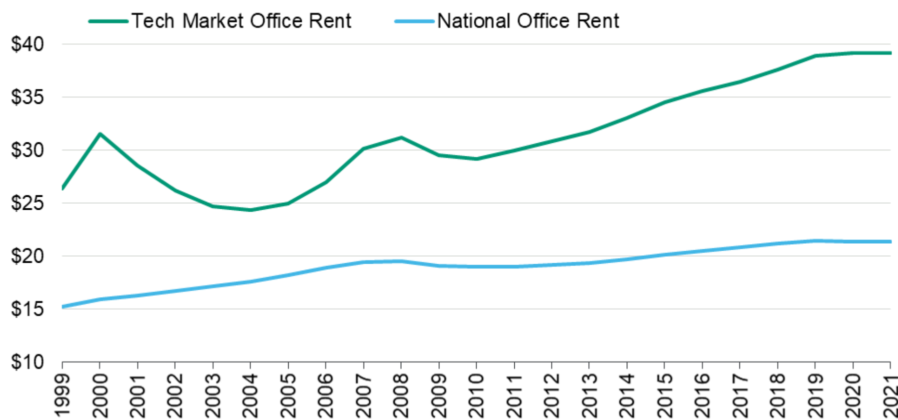
Figure 5 Quarterly Office Performance Metrics

Year	Qtr	Net Absorption	Asking Rent	Percent Change	Effective Rent	Percent Change	Vacancy Rate
2015	1	4.9	$30.54	1.0%	$24.70	1.0%	16.8%
2015	2	8.3	$30.78	0.8%	$24.90	0.8%	16.7%
2015	3	12.2	$31.02	0.8%	$25.10	0.8%	16.6%
2015	4	12.7	$31.28	0.8%	$25.32	0.9%	16.5%
2016	1	8.2	$31.57	0.9%	$25.58	1.0%	16.4%
2016	2	5.1	$31.76	0.6%	$25.74	0.6%	16.4%
2016	3	2.9	$31.89	0.4%	$25.85	0.4%	16.4%
2016	4	12.9	$32.00	0.3%	$25.95	0.4%	16.3%
2017	1	5.7	$32.16	0.5%	$26.08	0.5%	16.3%
2017	2	4.9	$32.26	0.3%	$26.16	0.3%	16.4%
2017	3	5.6	$32.38	0.4%	$26.26	0.4%	16.4%
2017	4	7.3	$32.57	0.6%	$26.42	0.6%	16.4%
2018	1	6.2	$32.85	0.9%	$26.65	0.9%	16.5%
2018	2	3.0	$33.09	0.7%	$26.84	0.7%	16.6%
2018	3	5.2	$33.22	0.4%	$26.96	0.4%	16.7%
2018	4	9.7	$33.46	0.7%	$27.14	0.7%	16.7%
2019	1	8.5	$33.59	0.4%	$27.27	0.5%	16.7%
2019	2	5.3	$33.88	0.9%	$27.50	0.8%	16.8%
2019	3	10.3	$34.15	0.8%	$27.73	0.8%	16.8%
2019	4	15.4	$34.35	0.6%	$27.90	0.6%	16.8%
2020	1	0.8	$34.50	0.4%	$28.02	0.4%	17.0%
2020	2	3.4	$34.49	0.0%	$27.93	-0.3%	17.1%
2020	3	-4.3	$34.56	0.2%	$27.89	-0.1%	17.4%
2020	4	-6.4	$34.53	-0.1%	$27.75	-0.5%	17.8%
2021	1	-14.4	$34.44	-0.3%	$27.54	-0.8%	18.2%
2021	2	-3.8	$34.46	0.1%	$27.47	-0.3%	18.5%
2021	3	21.7	$34.48	0.1%	$27.53	0.2%	18.2%
2021	4	11.2	$34.51	0.1%	$27.56	0.1%	18.1%
2022	**1**	**5.7**	**$34.59**	**0.2%**	**$27.64**	**0.3%**	**18.1%**

Source: Moody's Analytics

Still, real estate is about local markets. **Geographic markets with tech sectors are growing markedly faster than the rest, with rents rising more than five times faster than US averages over the the last five years.**

Figure 6 Tech Markets vs National Trends



Source: Moody's Analytics

5 https://www.kastle.com/safety-wellness/getting-america-back-to-work/#workplace-barometer – data as of the week of May 25.

What constitutes a 'tech market'? If we define a tech market as a metropolitan area where computer and math employment make up 5% or more of total employment – *or* if the metro has over 100,000 jobs in these occupations – some of the markets that make the cut might surprise you. **San Francisco** and **San Jose** obviously fall into this category, but in our set of office markets places like **Washington DC**, **Baltimore**, **Austin**, and **Colorado Springs** also make the cut. As for the dynamics on what's driving office performance in these tech markets – see footnote 6 for details from our recent research paper.[6]

Retail is in a similar boat to office – steady in the first quarter, but still weak. Neighborhood and community shopping center vacancies stand at 10.3% at the national level, just 10 basis points above its pre-COVID levels in 2019. But asking and effective rents both grew by a paltry 0.1%. Regional mall vacancies are declining slowly, down to 11% as of the first quarter – but that still represents a relatively elevated level. Asking rents actually fell by 0.1% in the same period.

Figure 7 Mall Performance Metrics

Year	Quarter	Asking Rent	Percent Change	Vacancy Rate
2012	Y	$39.31	1.0%	8.6%
2013	Y	$39.95	1.6%	7.9%
2014	Y	$40.66	1.8%	8.0%
2015	Y	$41.54	2.2%	7.8%
2016	Y	$42.38	2.0%	7.8%
2017	Y	$43.00	1.5%	8.3%
2018	Y	$43.35	0.8%	9.0%
2019	Y	$43.84	1.1%	9.7%
2020	Y	$43.05	-1.8%	10.5%
2021	Y	$43.26	0.5%	11.2%
2022	**Q1**	**$43.22**	**-0.1%**	**11.0%**

Source: Moody's Analytics

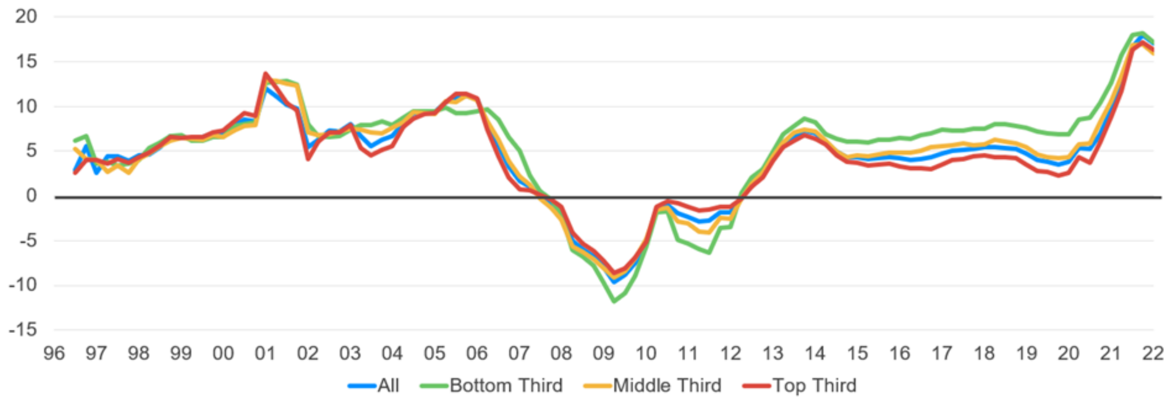
Clearly, the travails of retail are nowhere near over, and declining consumer sentiment given all the uncertainties only weigh down retail's prospects further.

IV. Shoving into Overdrive: The US Housing Market

House price appreciation continues to grow to new highs. The pandemic caused large increases across the United States and across house price tiers. While all housing has grown more expensive, entry level housing the bottom third of prices has grown the fastest. The lowest tier of the market has been growing at an average annual growth rate of 8% over the last decade, and appreciated 17.2% in the last year. This price growth in the low tier is especially burdensome on first time home buyers.

[6] "Tech Markets to Watch and Why The Field is Getting Competitive" by David Caputo and Thomas LaSalvia. Moody's Analytics CRE, April 12, 2022. https://cre.moodysanalytics.com/insights/cre-trends/tech-markets-to-watch-and-why/

Figure 8 Moody's Analytics House Price Index and Price Tiers, % Year Ago



Source: Moody's Analytics

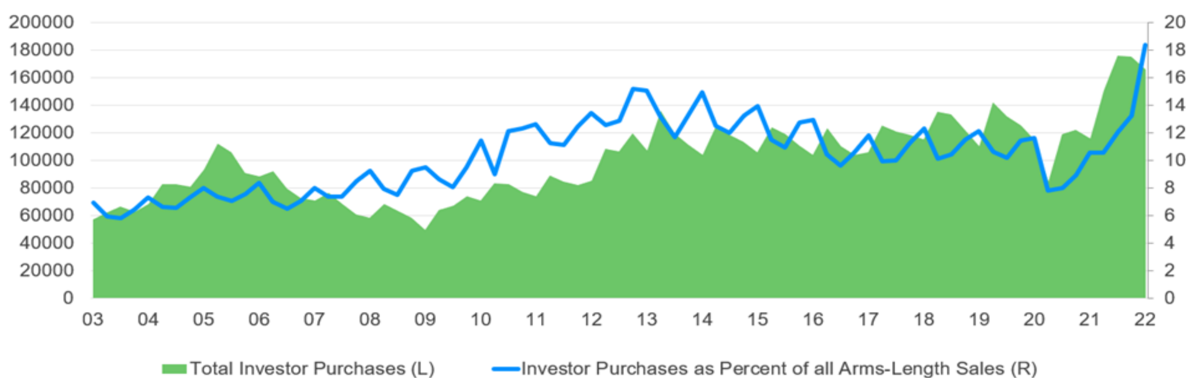
Further, with the Federal Reserve tightening to control inflation, mortgage rates have moved up sharply due to these rate hikes and quantitative tightening. The 30-year rate broke 5.5% in May. The good news is that much of the anticipated increase in mortgage rates is behind us; in historic terms, mortgage rates are still relatively low. The bad news is that this marked increase is now more than 2.5% higher than recent record low rates below 3%.

These increases further erode affordability and will put a dent in demand. A mortgage on a house with a median home value cost of $389,630 (based on March 2022) and a 20% down payment will be over $450 a month more with a 5.5% mortgage rate compared to a 3% rate. Climbing mortgage rates, coupled with already unaffordable housing, especially for first time buyers, will finally crack housing demand.

The extreme price gains observed over the last year have led to U.S. house prices that were 21% overvalued at the end of 2021. At the peak of the housing bubble, homes were 24% overvalued. However, lower demand and increasing supply will lead to moderating house prices. While investor purchases have taken off, we still have not seen the extreme speculation and overbuilding that inflated the housing bubble in the mid-2000s.

Investors are becoming an increasingly larger part of the housing market. In the first quarter of 2022, corporate purchases made up over 18% of all arms-length transactions the highest it has ever been. Recently, investor purchases have been driven by historic rental price appreciation and investor behavior is different today.

Figure 9 Total Number of Investor Purchases (L), % of Sales (R)



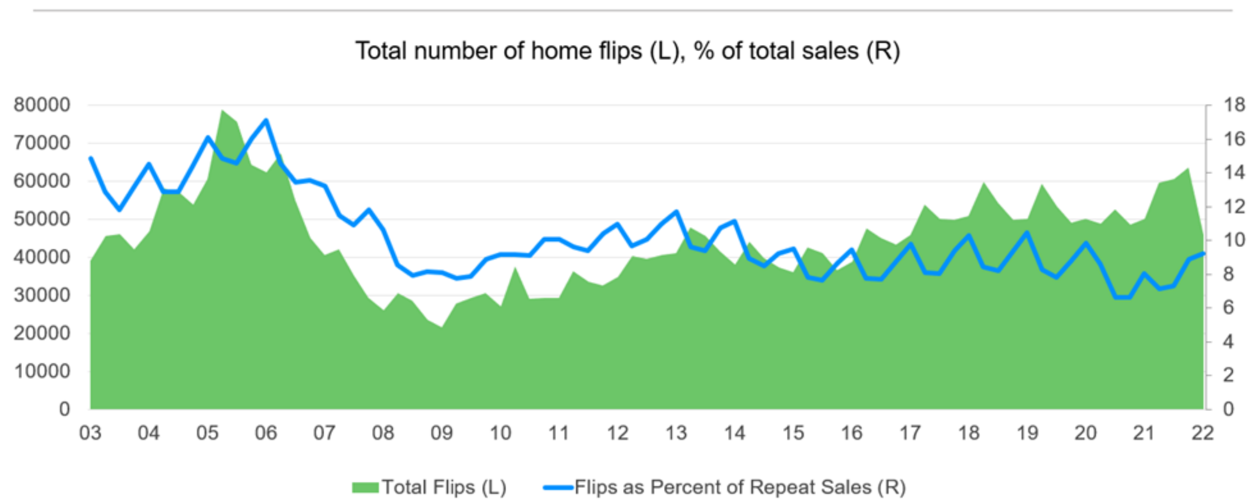
Source: Moody's Analytics

There has been a general shift in investor behavior to buy and hold single family housing. Following the Great Recession, hordes of homes were bought out of foreclosure by investors, and the total number of corporate purchases continues ticking up. Many investors are purchasing homes to rent. While there are risks associated with additional investor activity, they are lower than risks from house flipping. Profiting off of the intrinsic value of the house drives rental property investment and discourages drastically over bidding on the property.

During the housing bubble in the early 2000s, many homes were snatched up for the sole purpose of selling them later at a higher price. When a home is bought and sold again within a year it is considered a housing flip, and it is a good sign of speculation. House flips as a percent of repeat sales today stands about 9%. This rate is both lower than its historical average of 10%, and well below the 17% peak seen in 2006.

House flipping is driven by home price appreciation and not the intrinsic value of the house. If the house is bought on leverage then house flippers can quickly owe more on the house than what it is worth. When that occurs they try to quickly sell the house to recoup at least some of their costs. If a bubble has inflated, this leads to it popping. So far, as Figure 10 below shows, there appears to be little evidence of a 'home price bubble' given how flippers remain at bay.

Figure 10 Total Number of Home Flips (L), % of Total Sales (R)



Source: Moody's Analytics

The type of investor activity today is not the only reason why there is less concern of another housing market crash. Demographics are stronger today than they were 15 years ago. There are now more people in their prime homebuying age in the Millennial generation than there were in Generation X in the mid-2000s.

So while demand will moderate—assuming there is not a recession—it will not completely collapse. There is currently a severe housing shortage of approximately 1.5 million units.[7] Further, additional supply will not flood the market as it did before the Great Recession. Supply chain disruptions, labor supply, and high commodity prices have all slowed new home construction.

These forces will lead to a more moderate decline in house prices in the next few years. Prices will continue to rise through the end of 2022, but at a much-slower rate than in 2021. There will be modest price declines in 2023, and then prices will mostly move sideways for the next few years.

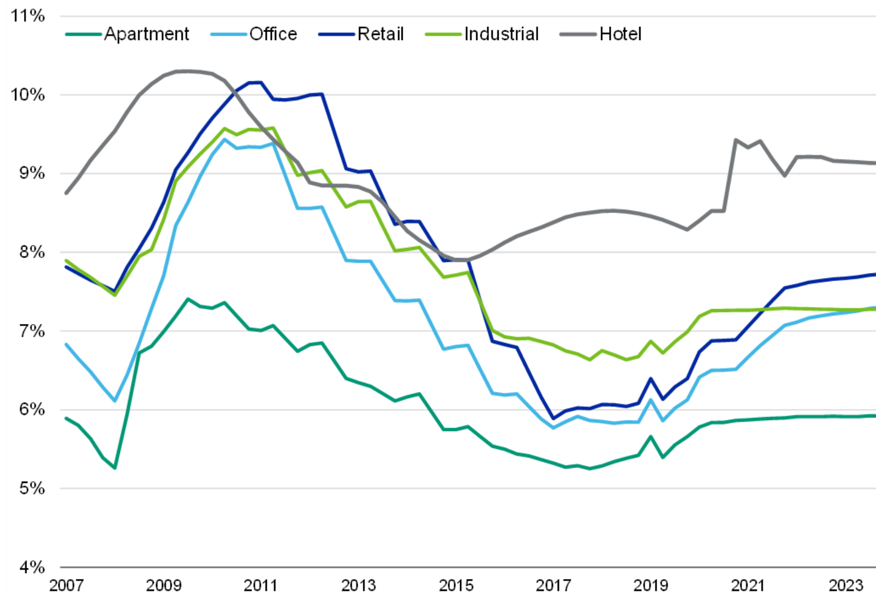
[7] https://www.economy.com/economicview/analysis/388559/This-Week-in-the-Economy

At the regional level, some markets will see more dramatic decreases as the pandemic abates. Areas that experienced significant in-migration before and during the pandemic will likely fare better than those that saw only in-migration as a result of the pandemic.

V. Further on the Edge: CRE Capital Markets

The most significant shift in our forecast series this quarter was driven by expectations of higher interest rates, leading us to project cap rates that will rise this year – possibly through next year.

Figure 11 Cap Rate Forecasts



Source: Moody's Analytics

With the Fed tightening monetary policy to head off inflation, the 10-year Treasury (the traditional benchmark risk free rate for CRE pricing) has been on the rise. It broke through the 3% threshold we last saw in 2018, and reached 3.1% in early May – although it has hovered at just below 3% as of the beginning of June.

Our macroeconomic forecasts has the 10-year Treasury normalizing to about 3.5% by 2024 in the May baseline scenario, but the question remains: How fast will rates rise? The question then becomes how cap rates will react to moves in the baseline risk-free rate.

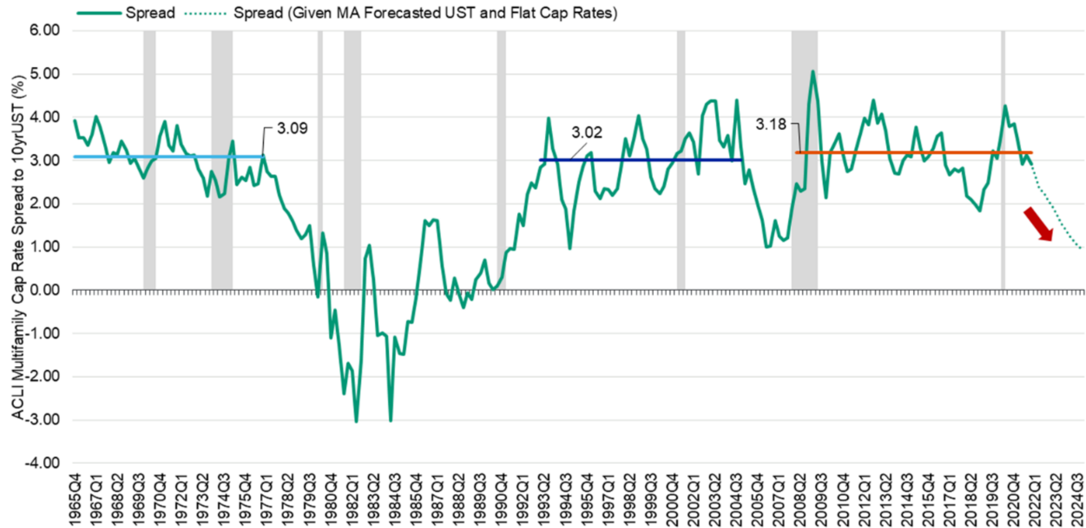
There have already been some signs that cap rates are reacting – but mostly in some creep up by roughly 50 basis points in the lesser performing sectors of office, retail and hotel, Multifamily and industrial have largely head steady. However, we do expect some moderate bump in cap rates across property types in the near term.

"There are strong opinions in the market both ways, that cap rates will go up significantly with rising rates, and others saying that cap rates will go down, and demand and expectations of rent growth will compress risk premiums," said Kevin Fagan, head of CRE Economic Analysis for Moody's Analytics. "We have taken a measured approach in our forecasting, trying to find a balance between demand for the sector with upward pressure from rates."

One reason why our cap rate forecasts have only a moderate rise to flat trajectory is that risk premiums in this business cycle have slightly above average cushion over the 10-year Treasury. What you see below in Figure 12 is the very long-term history of cap rates on properties that back insurance company CRE loans. In normal times, like through the 1960s and 70s, and through the 90s

and early 2000s, cap rate spreads over Treasury bounce around quite a bit because there isn't an immediate reaction in cap rates to moves in the Treasury. But, there is generally on average about a 3% risk premium.

Figure 12 ACLI Multifamily Cap Rates Spread to 10-Year US Treasury

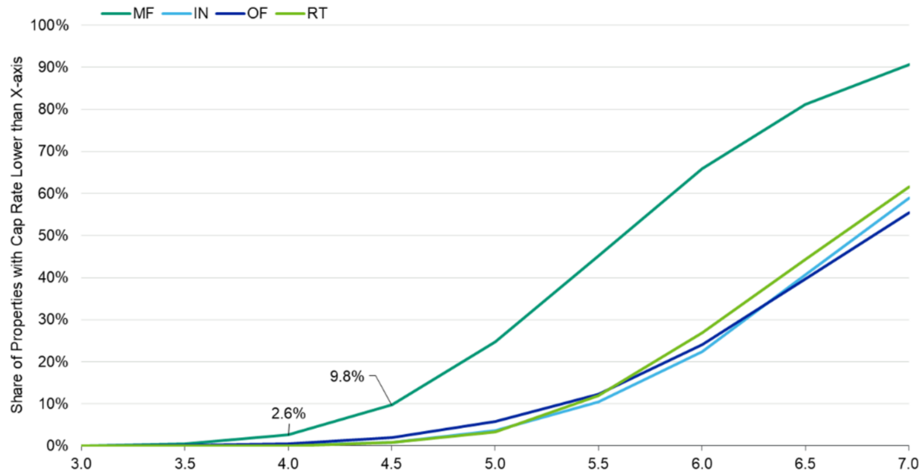


Source: American Council of Life Insurers, US Federal Reserve, Moody's Analytics

To be precise, the averages are 3.09% for the 60s-70s, and 3.02% for the 90s and early 2000s. However since the 2008 Global Financial Crisis, more cushion and generally been built in to cap rates, perhaps with investors continuing to price in a "normalized" Treasury rate that never really came to fruition. The average spread over this period is only 3.18%, but it does reflect some moderate level of additional cushion in today's cap rates. There is therefore some room for the risk-free rate to rise and eat into spreads before pressuring cap rates to increase.

If and when cap rates do rise, which property types are at greater risk for repricing? Many CRE assets have been priced very aggressively - with very low cap rates. Multifamily in particularly tends to skew low. Figure 13 below shows the distribution of cap rates derived from CMBS, through March 15, 2022. The green line, multifamily, shows that about 10% of CMBS properties had cap rates at 4.5% or lower, and 2.6% of them had a 3 handle. This is significantly higher than the other property types. While these low cap rate multifamily properties may be some of the better performing assets on the income side, they are also the most likely to see rates rise because they lack cushion over the risk free benchmark Treasury. **Essentially, sectors that have been transacting at very low cap rates have little place to go but up.**

Figure 13 Multifamily Cap Rates Skew Low



Source: Moody's Analytics CRE and Structured Finance (through March 15, 2022).

VI. Watching Every Motion: The Outlook for the Balance of 2022

Risk factors have certainly increased for the balance of 2022 – higher energy and commodity prices from the Russia-Ukraine military conflict, as well as tightening monetary policy, have prompted JPMorgan Chase CEO Jamie Dimon to tell analysts and investors to 'brace themselves for an 'economic hurricane' on June 1.[8] Perhaps in an eerie coincidence, the US hurricane season is also approaching – combined with ongoing supply chain issues and labor negotiations at West Coast ports, the summer is off to a rough start, and the rest of 2022 is looking equally uncertain.

So far, performance metrics on the *income* side for CRE have held steady and not deviated from recent trends. But, like single-family home prices responding to higher mortgage rates, we expect that the effect of higher uncertainty will manifest in volatility in CRE prices in the near-term. We will continue to monitor trends as they come in and update our forecasts accordingly.

[8] https://www.cnbc.com/2022/06/01/jamie-dimon-says-brace-yourself-for-an-economic-hurricane-caused-by-the-fed-and-ukraine-war.html

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