the 9:05 An excerpt from Bailard's Quarterly Review of Economic and Market Developments Q2 2022

Real Estate Requires a Deeper Dive beyond Interest Rates

Jamil Harkness, Research and Performance Associate - Real Estate, digs into the relationship between capitalization rates, interest rates, and important additional dynamics in commercial real estate.

The U.S. economy is plagued with inflationary pressures that businesses and consumers haven't experienced since the 1980s. The reasons for the surge in prices are numerous and complex. To begin with, the Federal government overstimulated the economy with big spending programs long after the economy had roared to life in the wake of the pandemic-induced recession. The Federal Reserve (the "Fed") kept interest rates too low for too long and maintained its bond buying programs much longer than necessary. Oil and gas producers, who have been whip-sawed by politicians and government regulators over the past few years, are stifled in their ability to satisfy American's thirst for oil, oil-based products, and gas for their vehicles. To round it out, supply chain disruptions further limited the supply of everything from electronics to toys to apparel, starving consumers of too many of the very things they were lining up to purchase.

That litany aside, the simplest definition of inflation is "too much money chasing too few goods," which certainly describes the U.S. economy at the moment. Consequently, the Fed is playing catch up to tame inflation without tipping the economy into recession. The first salvos in the Fed's battle are to raise interest rates, which they have done three times so far this year. Market observers expect several more rate increases to the Fed Funds Rate through the balance of the year.

The General Concern when Interest Rates Rise

Institutional and private real estate investors alike are closely watching the Fed, fearing that rising interest rates portend higher capitalization rates[1] that, in the absence of accelerating rents, could lead to declining values for real estate. There are two interrelated concerns running through investors' minds.

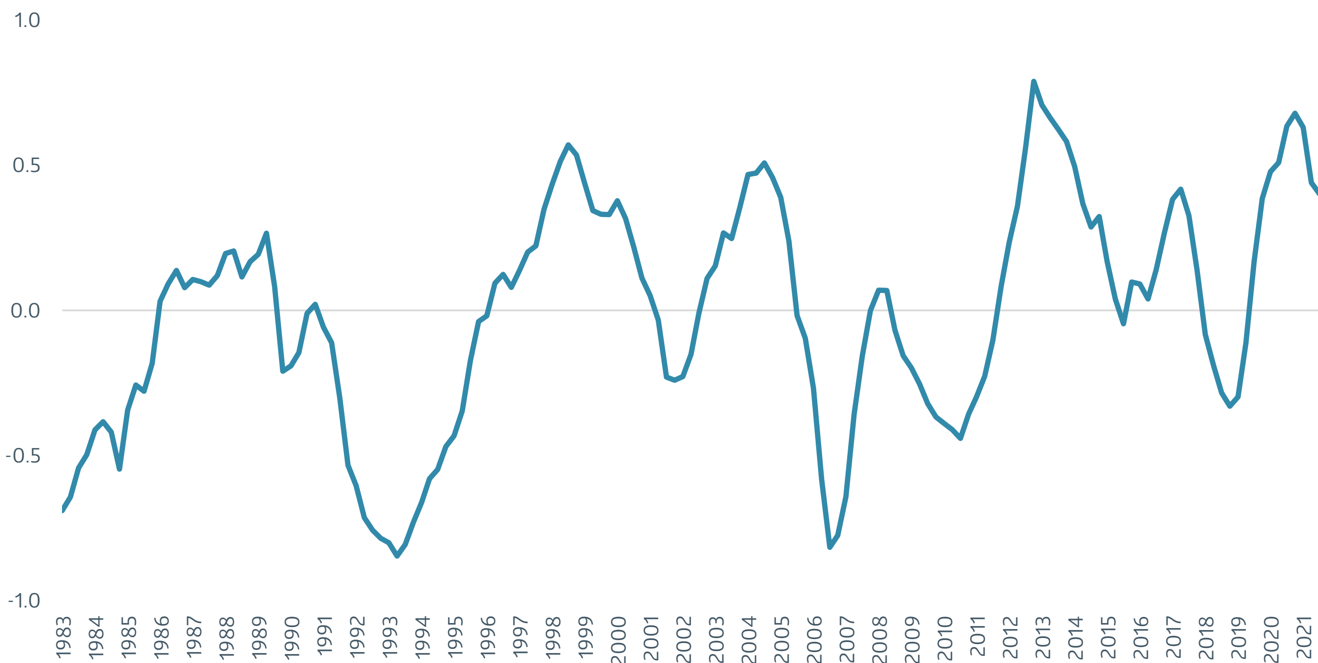
- The first is debt becoming more expensive that makes owning real estate, with leverage, more expensive overall. According to Real Capital Analytics, U.S. commercial mortgages originated in 2021 priced at 3.7% for 10-year fixed rate loans. Those same loans are now at 4.4%.[2] An ancillary consideration is that continued interest rate increases will erode the spread between cap rates and mortgage rates, creating valuation challenges if property income can't grow enough in the interim to compensate for higher debt service costs.
- The second fear is that, as interest rates rise on U.S. Treasuries, the return on those risk-free investments becomes competitive with other riskier asset classes and begins to look more attractive, potentially slowing demand for real estate assets. Such an issue could create an environment where the real estate market would have to undergo repricing to be able to continue to attract both debt and equity investors.

The Real Correlation Between Interest Rates and Cap Rates

These concerns certainly ring true when holding all other factors constant. But the reality is, the correlation between cap rates and interest rates (using the 10-year U.S. Treasury yield) have fluctuated frequently in the last 40 years with some 5- and 10-year periods having an inverse correlation. This variability in the correlation is supported by observing the 10-year yield and cap rate movements. Over the last 40 years, there

1 *A property's capitalization rate, or cap rate, is a measure of its Net Operating Income relative to its market value*
2 *Real Capital Analytics, https://app.rcanalytics.com/#/trends/insights/20390*

5-Year Rolling Correlation of the 10-Year Treasury and Cap Rates (1980 Q1 – 2022 Q1)



Source: Real Capital Analytics, Federal Reserve, as of 3/31/2022.

have been 13 times when the 10-year yield increased more than 100 basis points[3] (from quarter-end trough-to-peak for periods with a minimum of three quarters). In eight cases, cap rates compressed, while in the other five cases, cap rates increased. These inconsistent patterns support the fluctuation in the correlation coefficient. Further, it indicates that while the 10-year Treasury does play a part in cap rate movement, many other factors should also be considered. Just looking to interest rate movement alone as a gauge for cap rate movement does not provide the full picture.

Rising Interest Rates Are Not the Sole Determining Factor

Building out the analysis beyond cap rates alone, five additional considerations factor into the equation. The first is traditional commercial ***real estate fundamentals***. Triggered by a fall in demand from users and/or an oversupply by real estate developers, an imbalance in supply and demand that causes higher vacancies can lead to lower rents, impacting net operating income (NOI) and hitting investors' confidence. This could lead to investors requiring higher returns, which drives cap rate expansion and lower values. Over the last 20 years, real estate vacancy and cap rates have generally declined together due to strong demand, facilitating strong rent growth and higher property income. If the latter can be sustained, the increase in property income can offset the impact of rising interest rates.

Secondly, ***growth expectations*** play a role. Higher growth occurs when the economy is on an expansionary trajectory, as it has been for most of the past two years despite slowing of late due to interest rate hikes. Investors use expected growth to justify paying more for commercial properties on a price per square foot basis, which is up 23.0% year-over-year as of Q2 2022, as per RCA.

Market liquidity, or capital availability/appetite, serves as a measure of the supply of, and demand for, real estate opportunities by the providers of equity and debt capital. On the equity side, for example, if there aren't enough opportunities for investors to put money to work, pricing will go up and yields will compress. The overall amount of commercial debt also has an important impact. The percentage of commercial mortgage

3 *A basis point is 0.01%.*

debt to gross domestic product (GDP) has a strong negative correlation to cap rates. A recent publication by Dr. Peter Linneman concluded that an increase in the commercial mortgage debt as a percentage of GDP puts downward pressure on cap rates.[4] Furthermore, the ability to refinance plays a crucial role in real estate pricing, and there is nearly $2.3 trillion in loans set to mature over the next five years.[5] That said, debt cycles are important to cap rates and real estate pricing because conditions depend on supply and demand. It also depends on or whether (or not) there will be an adequate number of buyers and sellers ready, willing, and able to trade.

Another contributing factor is ***capital flows*** into the U.S. In general, domestic cap rates relative to foreign cap rates have made U.S. assets more attractive for some time now (leading to $45.0 billion in cross-border sales during Q2 2022, up 101% year-over-year, according to Real Capital Analytics). The sustained inflows of capital over the last 25 years, especially during periods of growth, have been another tailwind putting downward pressure on yields and sending pricing spiraling upwards.

And finally, ***investor confidence*** stands as an important consideration for any asset type, and particularly for real estate, which cannot offer the liquidity of stocks and bonds. There are two views of investor confidence. First, there is a tangible way to gauge confidence in commercial real estate, as real estate "houses the economy." During times of economic expansion, there has always been a need/demand for additional space in all property types. Second, the credit spread (or yield spread between the 10-year Treasury and cap rates) serves as a good representation of investor confidence. As of Q2 2022, the credit spread was the lowest it has been since Q3 2018. However, in the absence of a recession, investors have shown to be willing to accept narrower spreads, much like they did during 2018, due to stability and confidence in the trajectory of the economy.

Conclusion

Traditionally, a simplified narrative presumes that rising interest rates are correlated with higher capitalization rates. Cap rates are a function of many variables, not just interest rates. Real estate supply and demand fundamentals, the health of the U.S. economy, growth expectations, market liquidity, capital inflows, and investor confidence are interrelated, constantly changing, and meaningfully determinant of cap rates and cap rate movements. The collective impact of these factors can—and often does—offset or completely nullify the effect of interest rate movements. As we move through 2022 and into next year with a somewhat cloudy crystal ball, it is far from assured that rising interest rates will trigger cap rate expansion and a decline in property values.

Cap rates are a function of many variables, not just interest rates.

As of right now, cap rates in Q2 2022 continued to compress. According to RCA, commercial cap rates were down four bps quarter-over-quarter and 16 bps year-over-year due to ongoing stability regarding the impact of the broader factors listed above. However, shifts in one aspect (if not all) could result in a modest uptick in cap rates in the future, while a further positive shift could result in the exact opposite. While we don't exactly know what will happen, we do know what to look for to obtain the necessary additional insight for guidance in a rising interest rate environment.

4 *The Determinants of Capitalization Rates: Evidence from the US Real Estate Markets by Peter Linneman & Matt Larriva, 2021*

5 *https://www.trepp.com/trepptalk/cre-loan-growth-outstanding-debt-reaches-5-trillion-in-q3-2021*

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Since 1978, we've held a weekly company-wide meeting during which we talk about the prior week's activities and those anticipated in the week to come. We refer to this meeting, which begins just after nine each Monday morning, as "the 9:05." Just as the 9:05 enables us to share our knowledge and insights with each other, this newsletter provides us with a valuable means of communicating with our clients. Hence its title: *the 9:05*.

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