Interest Rates and Commercial Real Estate – What to Expect?

On March 16th, 2022, the U.S. Federal Reserve (Fed) raised interest rates by a quarter-point, the first increase since 2018 and likely not the last increase this year. The move was widely expected and had been communicated to markets well in advance. Notwithstanding the increase, market reaction was positive, with stock prices posting strong gains. The S&P 500 rose by 2.2%, while Real Estate Investment Trust (REIT) share prices rose by 1.0%. Interest rates also climbed, with the 10-year Treasury-bond yield reaching 2.19%, a 47-basis point increase since March 1st, 2022.

The Fed also signaled that it expected to raise rates further this year. Wages and prices are growing at their most rapid rates in 40 years, impacted by the re-emergence from COVID-19 restrictions amid continued supply chain disruptions. The recent oil price spike in response to the war in Ukraine has served to heighten concerns about energy prices, which were already surging.

Interest rate increases make credit more expensive, which will likely have a disproportionate impact on capital-intensive industries, such as real estate. More expensive credit also increases investors' return requirements, which is reflected in higher capitalization (cap) rates for commercial real estate (CRE) investment. Higher cap rates have a negative impact on prices, meaning that future appreciation will need to rely more heavily on rental income growth.

The Fed's March 16th increase is not likely to have a tremendous effect on its own, but as the Fed follows through with more increases this year – and possibly beyond – investors and lenders should prepare for slower commercial real estate price growth. Real (inflation-adjusted) returns will be close to zero or minimally positive, as inflation reduces the value of higher nominal values. Even nominal (non-inflation-adjusted) growth will likely be reduced by 300 to 500 basis points when compared to the recent strong appreciation of the 2019 to 2021 period.

In this piece, Trepp looks at the relationship between interest rates, inflation, and investment returns, using a history of economic and financial data from Q3 1954 through Q4 2021.

The CRE price series Trepp used was from the Fed's Financial Accounts data series which is updated quarterly as part of its Flow of Funds reports. Interest rate, inflation, and economic data come from government sources. See sources in Appendix A.

Correlations

Interest rates, inflation and commercial real estate price growth are positively correlated with each other, although some relationships are stronger than others. The table below shows correlations for interest rates and trailing 1-year growth for inflation and commercial real estate price measures from 1954 to 2021.

- Interest rates are highly correlated across the maturity spectrum – the 10-year T-Bond yield and Fed Funds rate are very highly correlated with a correlation rate in excess of 90%.
- Interest rates are strongly correlated with inflation, with correlation rates of 65% to 75%.
- Commercial real estate prices show moderate correlation with inflation (correlation rates of 43% and 37% vs the GDP Deflator and CPI, respectively) and weaker correlation with interest rates. When general price levels rise, real estate rental income will tend to rise as well. This is what provides real estate with its reputation as an inflation hedge[1]. So, despite negative impacts on the pricing of future cash flows, real estate tends to be somewhat shielded from the impacts of higher inflation, at least in nominal terms (see "Interest Rates and CRE Price Growth" below for a discussion of inflation-adjusted price growth).

[1] For more on real estate as an inflation hedge, see for example: Case and Wachter, "Inflation and Real Estate Investments," Wharton Real Estate Center Working Paper #716. https://realestate.wharton.upenn.edu/wp-content/uploads/2017/03/716.pdf

FIGURE 1: CORRELATIONS - INTEREST RATES, INFLATION, CRE PRICE GROWTH; 1954 Q3 TO 2021 Q4

	FED FUNDS RATE	10-YEAR T-BOND YIELD	CPI (TOTAL)	GDP DEFLATOR	"CRE PRICES"
FED FUNDS RATE	1.000				
10-YEAR T-BOND YIELD	0.915	1.000			
CPI (TOTAL)	0.749	0.655	1.000		
GDP DEFLATOR	0.735	0.659	0.930	1.000	
CRE PRICES	0.269	0.108	0.370	0.427	1.000

Note: Trailing 1 Year Change for CPI, GDP Deflator and CRE Prices
Sources: Federal Reserve, Bureau of Labor Statistics, Bureau of Economic Analysis, Trepp

FIGURE 2: RECENT PERFORMANCE - ECONOMIC AND FINANCIAL INDICATORS

		INTEREST RATES**		ECONOMIC INDICATORS		INFLATION*	
YEAR	CRE PRICE GROWTH*	FED FUNDS	10-YEAR T-BOND	GDP GROWTH*	UNEMPLOYMENT RATE**	CPI (TOTAL)	GDP DEFLATOR
2019	7.7%	2.2%	2.1%	2.3%	3.7%	2.3%	1.6%
2020	5.1%	0.4%	0.9%	-3.4%	8.1%	1.3%	1.3%
2021	12.4%	0.1%	1.4%	5.7%	5.4%	7.1%	5.9%

** Annual Change, ** Annual Average*
Sources: Federal Reserve, Bureau of Labor Statistics, Bureau of Economic Analysis, Trepp

Recent CRE Price Performance

During the last two years, commercial real estate prices have benefited from a low interest rate environment. When the COVID-19 pandemic hit in early 2020, the Fed boosted liquidity through lower interest rates as well as numerous lending programs. These actions helped support commercial real estate while the economy went through wrenching plunges in output and a surge in unemployment. CRE prices posted a positive 5.1% gain during 2020, as liquidity was propped up by sharply lower interest rates.

Commercial real estate prices have held up even better as the economy recovered. CRE prices rose 12.4% in 2021, as GDP grew, the unemployment rate retreated, and interest rates remained low. Interest rates remained low despite higher inflation, as price increases were initially seen as likely a temporary phenomenon.

Interest Rates and CRE Price Growth

The recent experience has shown that low (and falling) interest rates support strong price growth for commercial real estate. Looking over a longer time horizon from 1954 to 2021 and a variety of interest rate environments during that time frame reveals that nominal (non-inflation-adjusted) real estate returns perform well under a variety of rate environments, while real (inflation-adjusted) real estate returns are strongest during periods of stability. Figure 3 on the next page shows median subsequent 1-, 2- and 5-year increases for CRE prices following a given 12-month change in the Fed Funds rate. CRE price growth is shown in both nominal and real (inflation-adjusted) terms[2].

[2] Real returns are calculated using the GDP Deflator as the inflation measure. As shown above, the GDP Deflator and CPI are highly correlated. However, the GDP Deflator tends to be somewhat less volatile. In 2021, the nominal increase in CRE prices was 12.4%, the increase in the GDP Deflator was 5.9% and the real (inflation-adjusted) increase in CRE prices was 6.2% (calculated as: (1.124 / 1.059)-1).

When examining **nominal** returns:

- Both stable and rising rate environments are associated with higher near-term (1- and 2-year) and longer-term (5-year) returns. With moderate rate drops (0 to -100 basis points over a one-year period) or slight increases (up to 50 basis points), CRE prices have risen by annual rates of nearly 4% to as high as 8.7%.
- Large increases in rates (200 basis points or more) have been followed by strong CRE price growth, with annual growth rates ranging from 8% to 11.4%. At first, this might seem surprising, since higher interest rates mean more expensive capital and higher capitalization rates. But higher interest rates are also typically a response to higher inflation, which has a positive impact on real estate income growth and therefore prices. So, despite the negative short-term impacts on valuations from higher interest rates, CRE prices tend to adjust over longer time frames as higher rental inflation drives greater property income and eventually higher values as well.

When examining **real** returns:

- There is a "sweet spot" for real returns. Periods of interest rate stability – moderate declines or slight increases – are the best environments for real CRE price growth. Real returns over a 5-year period have been strongest when interest rates have shown slight or no declines (ranging from 0 to -50 basis points), with median annual growth of 5.2%. In periods of slightly larger rate declines (-50 to -100 basis points) or slight rate increases (0 to 50 basis points), real CRE price growth has still been solid, with median annual growth of 2.3% and 3.1%, respectively.
- Periods of greater rate instability – either large declines or large increases in interest rates – have led to weaker long-term gains for commercial real estate prices. When interest rates are cut dramatically, it is normally in response to weaker economic conditions, which weaken real estate market performance, with occupancy and rental income suffering. At the other end of the spectrum – when rates are increased rapidly to combat inflation – the surging inflation undermines real gains, by devaluing the rental income growth that is experienced in nominal terms.

FIGURE 3: FED FUNDS RATE CHANGE AND CRE PRICES; TRAILING 1 YEAR CHANGE IN FED FUNDS AND MEDIAN ANNUAL CRE PRICE GROWTH; Q3 1954 TO Q4 2021

			NOMINAL			REAL (INFLATION-ADJUSTED)		
	FED FUNDS CHANGE	COUNT	NEXT YEAR	NEXT 2 YEARS	NEXT 5 YEARS	NEXT YEAR	NEXT 2 YEARS	NEXT 5 YEARS
Decreases	< 300 bp	19	3.6%	3.1%	10.1%	-1.4%	0.1%	0.8%
	-200 to -300 bp	16	-2.8%	-1.9%	1.7%	-6.1%	-4.9%	-1.3%
	-100 to -200 bp	30	1.6%	2.7%	2.1%	0.1%	-0.2%	0.0%
	-50 to -100 bp	21	4.8%	7.5%	7.9%	0.9%	2.8%	2.3%
	0 to -50 bp	36	7.0%	8.7%	8.6%	2.6%	5.2%	5.2%
Increases	0 to 50 bp	46	3.8%	3.9%	5.5%	1.7%	1.9%	3.1%
	50 to 100 bp	33	2.9%	3.5%	3.0%	1.0%	1.1%	0.7%
	100 to 200 bp	32	5.2%	2.8%	2.9%	1.4%	0.0%	0.1%
	200 to 300 bp	21	8.3%	9.2%	8.0%	2.3%	2.1%	-0.1%
	> 300 bp	12	11.0%	11.4%	9.3%	1.8%	2.6%	0.9%

Sources: Federal Reserve, BEA, Trepp, Inc.

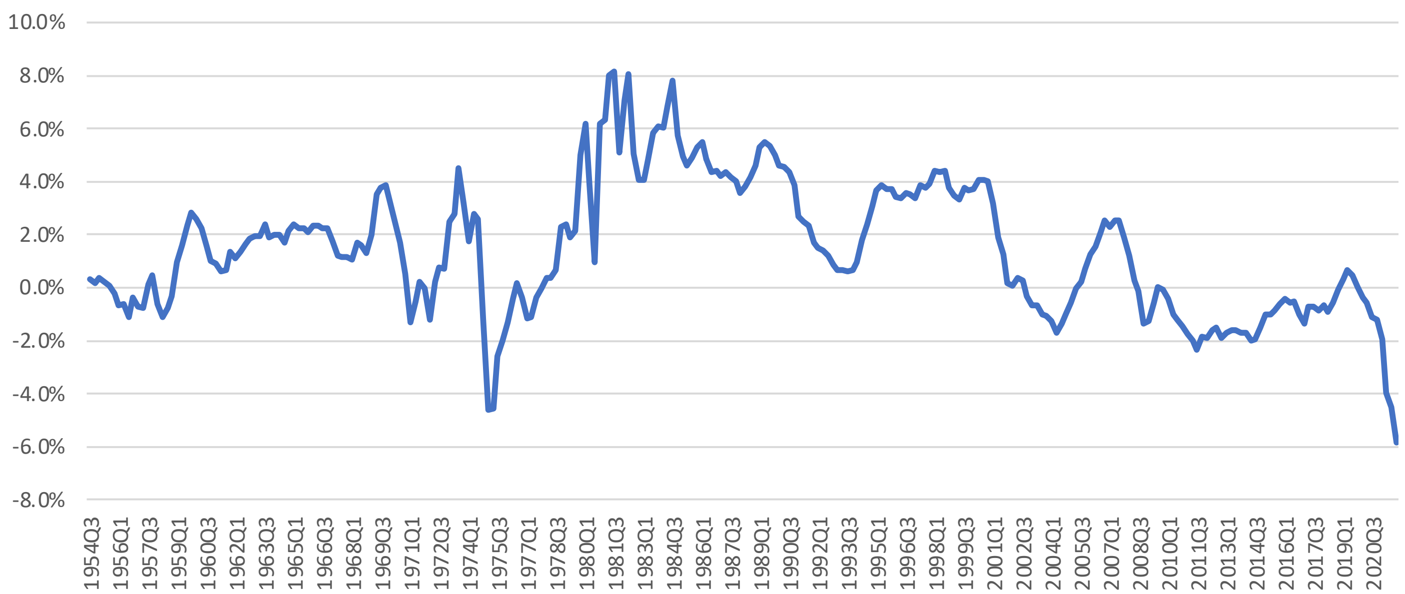
How High Will Rates Go?

Market expectations have been volatile since the Fed's rate increase, but they have ranged between an increase of 125 to 150 basis points in the coming year and a similar increase the following year. That is up substantially from even a few weeks ago. As recently as March 1st, market pricing indicated expectations of 80 basis point increases in each of the next two years.

The Fed is aiming to engineer a "soft landing" by bringing down inflation, while maintaining a strong economy. But the Fed's primary concern seems to be shifting to taming inflation, rather than concerns about sustaining the economy. In comments at the end of March 2022,[3] Fed Chairman Powell described the economy as "very strong" and positioned to handle tighter monetary policy. He also said the Fed was prepared to respond more aggressively to inflation, with moves of more than 25 basis points, if needed.

It is possible that the Fed will need to tighten further still, beyond the 250 to 300 basis points that are currently priced into financial markets. Real rates (the Fed Funds rate minus trailing inflation) – at nearly -6% – are the most negative they have been in the last 60 years, as shown in the chart below. Inflation pressures have worsened with war in Ukraine – oil prices surged to as high as $137 per barrel in early March – and it is hard to see how those pressures will be reduced in the near term. Trade disruptions, including trade restrictions on Russia, reduce supply and have already led to higher commodities prices. There will eventually be a massive amount of rebuilding needed in Ukraine – rough estimates are already in the hundreds of billions of dollars – which will spur further global demand for construction materials for years to come.

FIGURE 4: REAL FED FUNDS RATE



Sources: Federal Reserve, BEA, Trepp, Inc.

[3] https://www.federalreserve.gov/newsevents/speech/powell20220321a.htm

The Bottom Line

Interest rates will be rising for the next 1-2 years, by as much as 300 basis points and possibly more. As noted above, financial markets are already pricing in significant increases in the next two years, and the Fed has outlined its intention to move aggressively against inflation.

For investors, the strong appreciation of the last several years will be interrupted. Real (inflation-adjusted) returns will be flat, likely in the 0% to 1% range, compared to the recent real growth rates of 5% to 6%. Nominal returns will fare somewhat better, driven by rental income growth, which will at least partially offset higher capitalization rates. Nominal returns will likely be in the 3% to 5% range, down from the recent 8.4% average from 2019 to 2021.

For debt markets, higher interest rates will mean higher costs for borrowers, especially floating-rate borrowers. Debt service coverage ratios on existing floating rate loans will fall, making these loans riskier. New debt will become more expensive, which will have a near-term depressing effect on demand for debt. Over a somewhat longer time frame – beyond the 1-year outlook – higher rental income will boost property net operating income and nominal price growth (discussed above) will improve DSCR and LTV ratios on existing fixed-rate loans. So, while floating-rate loans will become riskier with higher interest rates, fixed-rate loans will become less risky.

Overall, real estate capital flows should remain positive with both equity investors and lenders contributing capital. There may be some near-term volatility in 2022, but higher rates will attract capital later in the year and beyond. For equity investors, the still-positive nominal returns of commercial real estate will attract fresh investment when fixed-income investments (like bonds) are falling in value. For lenders, higher interest rates mean increased income and with the prospect of longer-term income and appreciation, loans made today will seem less risky in the years ahead.

Appendix A – Data Sources

Interest Rates

- Federal Funds Rate – Federal Reserve, Selected Interest Rates - H.15
- 10-Year T-Bond Yield (constant maturity) – Federal Reserve, Selected Interest Rates - H.15

Inflation

- CPI (Total) – Bureau of Labor Statistics
- GDP Deflator – Bureau of Economic Analysis, National Income and Product Accounts

CRE Prices

- CRE Price Index – Federal Reserve, Financial Accounts of the United States - Z.1, Underlying Data

Economic Indicators

- GDP Growth - Bureau of Economic Analysis, National Income and Product Accounts
- Unemployment Rate - Bureau of Labor Statistics

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