THINK US

The impact of rising interest rates on commercial real estate

TH Real Estate
a nuveen company

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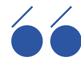
Data generating art

The image is an abstract representation of Fig.3, illustrating transaction capitalisation rate spreads for the NCREIF Property Index.

Introduction

The rising interest rate environment raises concern about the potential impact on US commercial real estate property values and investment performance. This is causing real estate investors to fear that rising interest rates will cause capitalisation rates to rise and property values to fall, resulting in weaker total returns. Historical data show that higher interest rates do not necessarily result in lower property values and total returns. A number of factors may help to protect overall real estate performance, including capitalisation rate spreads over the US 10-year Treasury yield, and the outlook for economic growth and real estate market fundamentals.



Interest rates and capitalisation rates are believed to move in lockstep, with higher interest rates quickly translating into higher capitalisation rates and lower property values. However, that is not necessarily the case. If interest rates are rising because of stronger economic growth, as is currently the case, real estate demand will also likely be growing. If interest rates are increasing gradually, and are likely to remain at, or below, long-term averages, as is currently expected, real estate would likely be well positioned to benefit in such an environment.

Melissa Reagen
Head of Research, Americas

Will higher interest rates spoil real estate returns?

The rising interest rate environment is generating concern about the potential impact on investment returns across asset classes. Real estate investors fear that higher rates could undermine property values and operating income by raising discount rates and slowing the economy. In particular, their concerns are rooted in the assumption that rising rates mean higher capitalisation rates, or cap rates,[1] which in turn can weaken property values and commercial real estate (CRE) investment performance.

Driving investor anxiety is the fundamental shift in Federal Reserve monetary policy to tightening, which began slowly in late 2015 and accelerated in 2017. The Fed raised rates by 0.25% again in June 2018, it's seventh increase in the past three years, to a new Fed funds target range of 1.75% to 2%. The Fed is expected to continue raising rates at a moderate pace in 2018 and 2019. Supporting higher rates is stronger economic growth and higher inflation under the Trump Administration's pro-business policies. The combination of lower taxes, higher spending and reduced regulation caused the 10-year Treasury yield to climb steadily from about 1.80% prior to the November 2016 election, to a high of 3.11% in May 2018, before settling at 2.83% on 31 May 2018.

Rising rates do not necessarily mean lower CRE returns

For a variety of reasons, historical returns show that rising interest rates have not automatically resulted in lower real estate values or total returns. The relationship between rates and CRE returns is more complicated and depends on a range of factors, such as the economic environment. For example, Fig.1 (see page 4) shows the weak relationship between interest rates and key real estate indicators during eight periods since 1987 when the 10-year Treasury yield increased by 100 basis points or more. Cap rates for the NCREIF Property Index (NPI)[2] actually declined in five periods and increased by smaller margins in three others, compared to interest rates. (Cap rates and other indicators, except net operating income (NOI) growth, are measured one year after the period of rising rates to account for reappraisal delays.) NOI growth and property values increased in the majority of periods. Importantly, real estate total returns increased in every period, ranging from 1% to nearly 86%.[3]

[1]The real estate capitalisation rate is the ratio of a property's net operating income (NOI) to its current market value. The ratio represents the expected rate of return on a real estate investment, based on NOI. Capitalisation rate = NOI / current market value.

[2]The NCREIF Property Index (NPI) is a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only.

[3]It is not possible to invest in an index. Performance for indices does not reflect investment fees or transactions costs.

It is instructive to examine periods similar to the current environment when rates increased gradually in response to stronger economic growth. For example, between December 1995 and April 1997, when the 10-year yield increased 118 basis points, the one-year forward cap rate declined 63 basis points, while current NOI growth rose 3.5%. In addition, property values and total returns increased 10% and 36%, respectively, one year forward.

Overall, the data show that rising rates don't necessarily hurt real estate, but often coincide with improving economic conditions that tend to benefit real estate performance.

Rising rates do not necessarily mean lower CRE returns (continued)

Fig.1: Real estate performance indicators during periods of rising interest rates

Periods when US 10-year Treasury yield increased 100 bps or more	Change in US 10-year Treasury Yield	Change in NPI cap rate (bps)	Change in NPI Cap Rate 1 year forward (bps)	Change in NOI growth (%)	Change in property values (%)	Change in property values 1 year forward (%)	Change in total return (%)	Change in total return 1-year forward (%)
January 1987 to October 1987	244	-14	-18	-1.4%	-0.3%	1.7%	3.3%	12.8%
November 1989 to September 1990	105	14	66	1.1%	-1.0%	-9.0%	3.8%	2.0%
October 1993 to December 1994	263	15	63	4.6%	-4.5%	-5.9%	6.1%	14.1%
December 1995 to April 1997	118	-46	-63	3.5%	2.1%	10.2%	16.1%	36.3%
October 1998 to January 2000	213	-20	-17	5.6%	3.2%	6.6%	14.0%	28.0%
March 2003 to June 2006	130	-205	-249	-1.2%	27.0%	40.8%	58.5%	85.8%
December 2008 to April 2010	143	126	72	-2.0%	-21.4%	-13.7%	-13.4%	1.0%
July 2012 to December 2013	128	-19	-43	4.6%	6.4%	13.0%	13.8%	27.3%

Data represent eight time periods between 01 Jan 1987 and 31 March 2018 when the US 10-year Treasury yield increased by 100 basis points or more. It is not possible to invest in an index. Performance for indices does not reflect investment fees or transactions costs.

Sources: US Board of Governors of the Federal Reserve System (FRB), Moody's Analytics, NCREIF.

Do real estate cap rates move in lockstep with interest rates?

As the US 10-year Treasury yield crested at 3% in May 2018, investors worried that property values would ultimately weaken as rates continued rising to normal levels. Specifically, they were concerned that rising rates would mean higher capitalisation rates. The cap rate is the ratio of a property's NOI to market value, similar to an inverse price-earnings ratio, and is the most sensitive gauge of CRE pricing. This commonly used formula assumes that rising interest rates result in rising cap rates and, all else equal, declining property values. The assumption is flawed because the relationship is more complex and, just as importantly, all else is typically not equal.

The relationship between interest rates and cap rates is somewhat stronger when comparing longer time periods, rather than only periods with large rate increases. Figure 2 shows a positive relationship for the 18-year period between 1 January 2000 and 31 March 2018, although they do not move in lockstep. The correlation between NPI transaction cap rates and US 10-year Treasury yields is a moderate 0.58 (not a perfect 1.0). Instead, cap rates are influenced by a wider range of variables, including real estate fundamentals, capital flows, and investor risk appetites. As a result, the impact of rising rates on real estate performance is difficult to predict, depending largely on the outlook for economic and property market conditions.

Historically, changes in Treasury yields do not necessarily result in immediate changes in cap rates.

Fig.2: NPI transaction cap rate and US 10-year Treasury yields

Note: The correlation between NPI transaction cap rates and the US 10-year Treasury yield is 0.58, represented by the upwardly sloping teal line.

Data as of 31 March 2018.

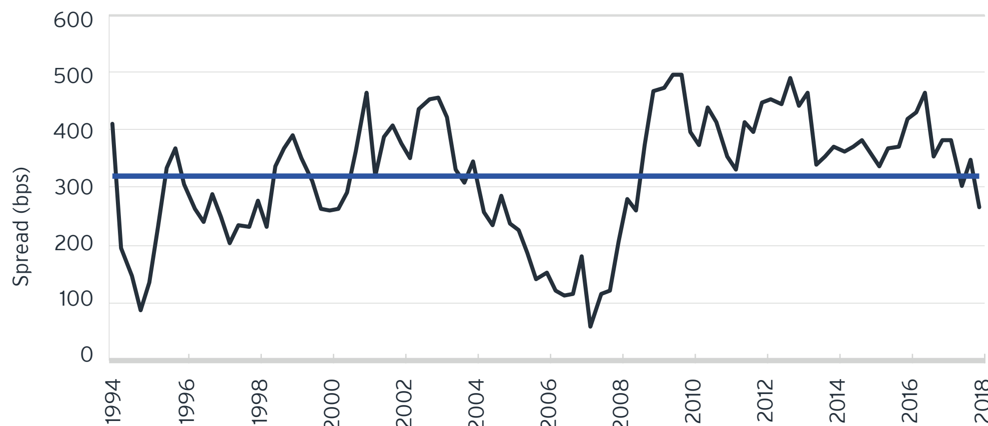
Sources: US Board of Governors of the Federal Reserve System (FRB), Moody's Analytics, NCREIF.

Factors that may provide protection in a rising interest rate environment

Cap rate spreads

The cap rate formula is an oversimplification that does not account for factors with potential to offset value declines and even protect overall property performance in a rising interest rate environment. One important factor is cap rate spreads – the difference between cap rates and 10-year Treasury yields. Cap rate spreads have the potential to act as a buffer that can absorb increases in the Treasury yield, without generating expected cap rate increases. Fig.3 shows spreads between NPI transaction cap rates and 10-year Treasury yields since 1994. Recently, as the 10-year yield moved up, the spread declined from a high of 383 basis points in 2017 to 265 basis points as of 31 March 2018 – below its 320 basis-point long-term average. The narrowing spread has helped to prevent cap rates from rising. Another important factor is a decline in mortgage spreads as lenders chose not to raise mortgage rates. As 10-year yields continue to rise, however, there will be diminishing capacity to absorb rate increases without a rise in cap rates and mortgage rates. A slight reduction in real estate values would be expected when the 10-year yield reaches a threshold of 3.5% – a level not expected until 2019.

Fig.3: NPI transaction capitalisation rate spreads



Key

Long-term average capitalisation rate spread (320 basis points)

Data as of 31 March 2018.

Source: US Board of Governors of the Federal Reserve System (FRB), Moody's Analytics, NCREIF.

Strengthening economic conditions

Stronger economic growth implied by Fed rate hikes and driven by Trump Administration policies may also provide a measure of protection. In particular, expected improvements in real estate fundamentals, such as solid NOI growth, could partially buffer property values from rising interest rates. Long-term government bond yield premiums have increased with expectations for faster growth, rising budget deficits, and higher inflation due to tight labour markets. Fig.4 shows real GDP growth forecasts of 2.8% in 2018 and 2.6% in 2019 – faster than the 2.1% average since the Great Recession.

At the same time, Treasury yields remain low by historical standards and inflation is expected to rise moderately above the Fed's 2% target. The potential combination of stronger growth and moderate inflation could provide a favourable environment for commercial real estate.

Fig.4: Consensus expectations (%)

	2015	2016	2017	2018F*	2019F*
Real GDP	2.9	1.5	2.3	2.8	2.6
Unemployment rate	5.3	4.9	4.4	3.9	3.6
US 10-year treasury yield	2.2	1.8	2.4	3.0	3.4
Consumer price index	0.1	1.3	2.1	2.5	2.2

F* indicates forecast.

Source: Blue Chip Economic Indicators, as of May 2018.

Factors that may provide protection in a rising interest rate environment (continued)

Underwriting practices

Common underwriting practices should also help to mitigate investor concerns. Property cash flow valuations commonly assume cap rate increases of 50 to 100 bps during the expected holding period. This practice reflects the ageing (finite life) of the property and uncertainty about future economic and real estate market conditions. As a result, cap rate increases are typically accounted for in return expectations, thereby eliminating some of the potential surprise associated with them.

The timing of cap rate changes also matters. In the near term, cap rate increases can have a measurable impact on property performance as appraisers incorporate new assumptions into their valuation models. However, real estate performance is less sensitive to cap rate changes as the investment horizon lengthens. Time has the potential to heal most, but not all wounds from rising cap rates through compounding annual NOI growth; the stronger the growth, the greater the protection.

NOI growth expected to drive competitive total returns in 2018

Although NOI growth is slowing, it is expected to exceed its long-term average in 2018 and 2019 for several reasons. Firstly, real estate market conditions are healthy and expected to generate moderate rental growth across most property types and metropolitan markets. Secondly, many of the leases maturing in 2018 and 2019 are priced below market and should provide opportunities to re-lease at higher rents. Even without rollover, leases contain annual contractual increases that generate rental income growth. Tenants are also required to pay a proportionate share of building operating expenses, therefore limiting landlords' exposure to rising costs.

NOI growth is a key consideration for investors seeking the potential for property appreciation. Fig.5 shows annual NOI growth for NPI properties averaged 3.38% as of 31 March 2018, compared to a 3.21% average for the past 20 years. Although substantially below the 5.38% average for 2017, NOI growth forecasts of 3.70% for 2018 and 3.90% for 2019 exceed the long-term average by nearly 50 to 70 basis points. Steady NOI growth over time can partially offset the potential impact of rising interest rates. Mathematically, 5% growth in NOI will offset a 25 bps increase in cap rates, all else equal.[4] However, slowing NOI growth would likely offset only part of the impact of rising interest rates when the 10-year yield reaches a 3.5% threshold, as expected in 2019.

Fig.5: NOI growth

Data as of 31 March 2018.

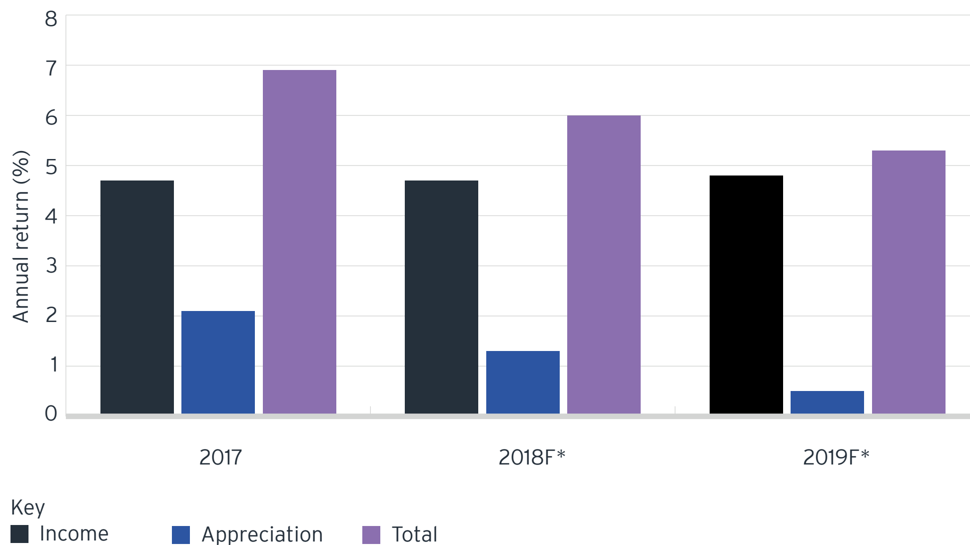
Source: NCREIF.

[4]For example, a property generating $1.0 million in NOI would have a value of $18.2 million based on a cap rate of 5.5%. If NOI were to grow 5%, the implied value would still be $18.2 million based on a cap rate of 5.75%.

2018 commercial real estate outlook

Leading real estate indicators suggest a positive foundation for real estate performance in 2018, based on stronger economic growth forecasts and balanced real estate fundamentals. Real estate remains attractive relative to other asset classes, although the cycle's late stage suggests that property appreciation and total return potential will be lower than in recent years (Fig.6).

Fig.6: Average NPI income, appreciation, and total return expectations



Key
Income
Appreciation
Total

F* indicates forecast.

Property returns forecasts do not reflect investment management fees and expenses.

Data as of 31 March 2018.

Source: Pension Real Estate Association (PREA) Consensus Forecast Survey of the NCREIF Property Index, TH Real Estate.

Moderating returns

US core property returns declined in 2017, reflecting slower capital appreciation that is typical in late stages of the real estate cycle. NCREIF Property Index (NPI) total returns were 6.9% – down from the double-digit total returns between 2010 and 2015. The decline reflected slowing NOI growth and lower expectations for property values. The Pension Real Estate Association (PREA) Consensus Forecast Survey predicts US core property total returns will average about 6% in 2018 and 5.3% in 2019, consistent with late-cycle expectations. Part of the forecasted decline can be attributed to moderating NOI growth projections. In addition, however, it could reflect a higher cap-rate environment if the 10-year Treasury yield moves well above 3%. Nonetheless, real estate's record of stable income has provided institutional investors with higher current income, compared with traditional fixed-income investments.

Slowing sales activity

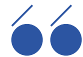
Real estate transaction volumes fell 10% and 5%, respectively, in 2016 and 2017 as investors became cautious in what appeared to be the late stage of the US real estate cycle. When Congress passed tax cuts and fiscal stimulus in late 2017, investors grew more bullish about the economic outlook and US real estate. As a result, transaction volumes rose in the first two months of 2018 from a year earlier. These gains quickly reversed in March and April 2018 as the 10-year Treasury yield hit 3% for the first time since 2014. Transaction volumes could slow further in 2018 if the 10-year yield continues to rise.

Potential for market volatility

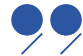
Although a short-lived financial shock would likely be well tolerated, a period of severe or extended volatility could be problematic for real estate and other asset classes. Real estate cycles have typically turned due to accumulating negative supply and demand imbalances. While imbalances are not currently evident, global financial volatility could impact CRE prospects by slowing hiring and business spending.

Conclusion

A variety of factors are likely to mitigate the potential impact of rising interest rates on commercial real estate values and total returns. The relationship between interest rates and property values is complex and likely to depend more on prospects for economic growth and real estate fundamentals, such as NOI growth. Real estate total returns are expected to moderate in 2018 and 2019 as the real estate cycle matures and NOI growth slows. With forecasts for stronger economic growth and rising inflation, real estate should remain attractive as a source of portfolio diversification, stable cash flows, higher risk-adjusted returns relative to other asset classes, and inflation hedging.



Political uncertainty, rising interest rates, and elevated valuations are just some of the headwinds facing the real estate industry in 2018. Hopefully, interest rates will continue to increase gradually, providing the market with time to adapt. Real estate's sensitivity to interest rate movements will be tempered by NOI growth from stronger tenant demand and favourable supply/demand fundamentals.



Chris McGibbon
Head of Americas

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Contact us

Alice Breheny
Global Head of Research
T: +442037278122
E: alice.breheny@threalestate.com

Melissa Reagen
Head of Research, Americas
T: +12129166643
E: melissa.reagen@threalestate.com

threalestate.com
contact@threalestate.com
@THRealEstate14

To learn more about Nuveen, visit Nuveen.com or call 800-752-8700