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TIAA GLOBAL ASSET MANAGEMENT

Real estate: The impact of rising interest rates

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Overview

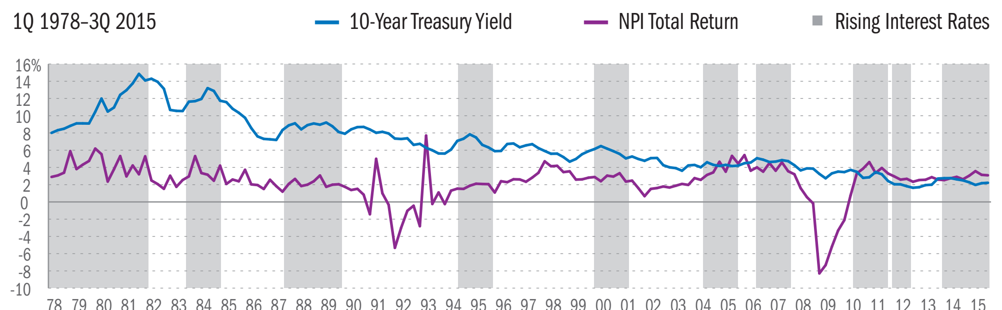
- Rising interest rates raise concerns about the potential impact on U.S. commercial real estate property values and investment performance.
- Real estate investors fear that rising interest rates will cause property values to fall and total returns to weaken.
- Historical data show that higher interest rates have not necessarily derailed real estate total return performance. In fact, property performance has often remained resilient in the face of rising rates.
- Furthermore, there are a number of factors that may provide protection to overall property performance in a rising interest rate environment.

Will higher interest rates spoil real estate returns?

Despite the Fed's initial hike in December 2015, U.S. interest rates remain quite low and have been for seven years. The Fed is expected to continue raising interest rates in the near term and real estate investors are worried. Their fears are rooted in the perception that rising interest rates will weaken property values and commercial real estate (CRE) investment performance. But, historical data show that higher interest rates have not necessarily derailed CRE total returns.

The trend is evident in Exhibit 1, which shows CRE total returns, 10-year Treasury yields, and periods of rising interest rates since 1978. The NCREIF Property Index (NPI)—a widely used performance benchmark of U.S. institutional-quality commercial real estate—shows the cyclicality of real estate returns over time and strong performance since the Great Recession.

Exhibit 1: NPI quarterly total returns and periods of rising interest rates



Sources: Moody's Analytics; NCREIF, as of 3rd Quarter 2015; TIAA Global Real Assets.

The current recovery started in 2nd Quarter 2010 and is now in its 25th quarter. Examining the overlay of periods of rising 10-year Treasury yields shows that property performance has often remained resilient in the face of rising interest rates.

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

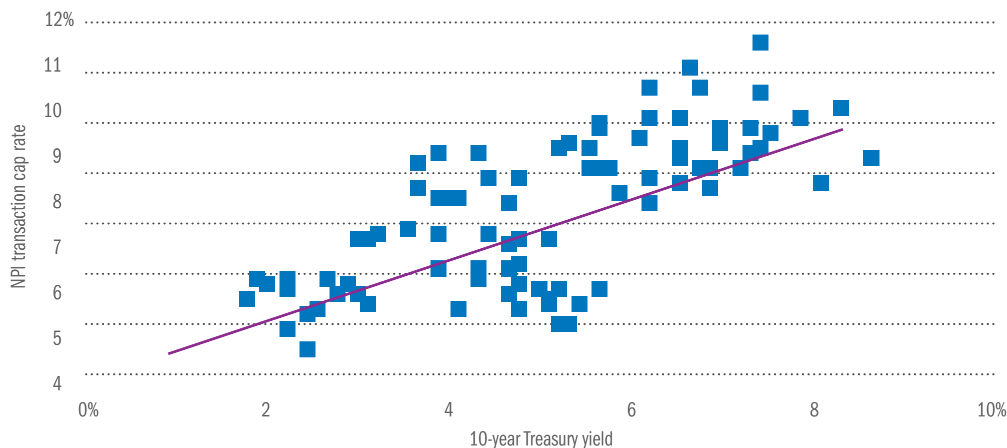
The outlook for rising interest rates has provoked considerable discussion among real estate professionals. Specifically, investors worry about the impact of rising interest rates on property capitalization (cap) rates and valuations. A cap rate is the ratio of a property's net operating income (NOI) to market value, akin to an inverse price-to-earnings (P/E) ratio. Cap rates are perhaps the most sensitive gauge of the CRE pricing environment. Investors' fears tend to focus on the arithmetic showing that rising interest rates result in increasing cap rates and, all else equal, declining property values. The problem is that the relationship between interest rates and cap rates is more complex and typically, all else is not equal.

Historically, changes in Treasury yields do not necessarily result in changes in cap rates. In fact, analysis found no statistically significant relationship between the two variables.

Exhibit 2 focuses on the relationship between interest rates and cap rates, with a display of NPI transaction cap rates and 10-year Treasury yields since 1993. A rough positive relationship—represented by the purple line on the scatter plot—does not mean that cap rates move in lockstep with Treasury yields. The correlation between the two variables is not a perfect 1.0, but rather a more moderate 0.7.

Exhibit 2: NPI transaction cap rate and U.S. 10-year Treasury yields

4Q 1992–3Q 2015



Sources: Moody's Analytics; NCREIF, as of 3rd Quarter 2015; TIAA Global Real Assets.

More importantly, historical data show that changes in Treasury yields do not necessarily result in changes in cap rates. Even assuming lags between interest rate and cap rate changes, analysis found no statistically significant relationship between the two variables.[1]

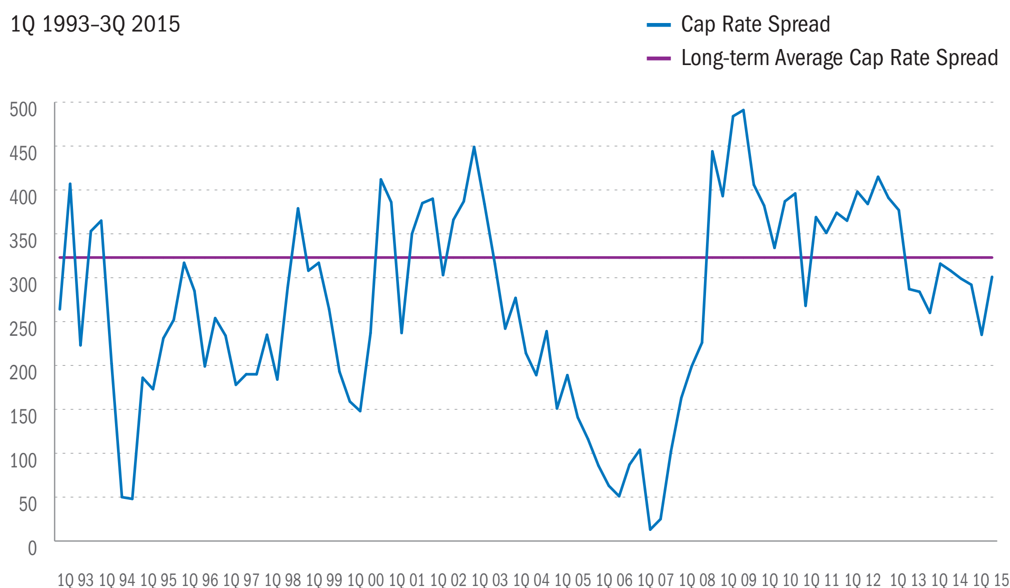
These findings confirm that cap rates are influenced by a wider network of variables beyond interest rates, including real estate fundamentals, capital flows and investor risk appetite.[2] Thus, the impact of rising interest rates on real estate performance is difficult to predict. Indeed, the outlook for real estate in a rising rate environment depends on a variety of factors specific to the current and expected economic and property market environments.

Factors that may provide protection in a rising interest rate environment

Fears that rising interest rates will result in higher cap rates and declining property values seem reasonable, but oversimplify and ignore variables that have the potential to offset value declines. In fact, a number of factors may provide protection to overall property performance in a rising interest rate environment.

The difference, or spread, between cap rates and 10-year Treasury yields has the potential to act as a buffer that can absorb increases in the Treasury yield without corresponding cap rate increases. Exhibit 3 displays spreads between NPI transaction cap rates and 10-year Treasury yields since 1993.

Exhibit 3: NPI transaction cap rate spreads



Sources: Moody's Analytics; NCREIF, as of 3rd Quarter 2015; TIAA Global Real Assets.

The cap rate spread as of March 31, 2016 is 436 basis points, or 113 basis points higher than the long-term historical average of 323 basis points. The extra spread can absorb a small an increase in 10-year Treasury yields and/or a further reduction in cap rates before property values are affected. The spread margin can be viewed as a protective buffer from the expected rise in interest rates.

The most important protective factor is that rate hikes in the current environment would reflect expected strengthening of economic and employment conditions.

Exhibit 4: Consensus expectations (%)

	2013	2014	2015	2016F*
Real GDP	1.5	2.4	2.4	1.8
Unemployment rate	7.4	6.2	5.3	4.8
10-year Treasury yield	2.4	2.5	2.2	2.0
Consumer Price Index	1.5	1.6	0.1	1.2

* F indicates forecast.

Source: Blue Chip Economic Indicators,® as of May 2016.

Economic and job strength are positive for occupancies, rent growth, and NOI growth—factors that can partially offset the potential impact of rising cap rates.

Since the beginning of economic recovery in 2010, the pace of GDP growth has remained tepid with another year of malaise expected for 2016. The May edition of the Blue Chip Economic Indicators® reports a 1.8% consensus forecast for this year. In the face of anemic growth, the Federal Reserve is moving slowly with only one 0.25% increase from the zero bound in the Federal Funds rate in 2015. Forecasters expect one or two further increases in 2016. At the same time, the 10-year Treasury is expected to move little this year as shown in Exhibit 4. Strong global demand for US Treasuries is keeping a lid on yields despite tightening on the short end of the yield curve.

Despite anemic growth, the unemployment rate has dropped to 5.0% and further decline is expected in 2016. Wage gains are just beginning to pick-up and may boost GDP growth above current expectations. Even with modest wage growth and tepid GDP growth, commercial property performance has benefited from job growth and constrained construction activity. Occupancies, rent and NOI growth have been solid and are expected to continue thriving in the quarters ahead.

Common underwriting practices should also mitigate investor worries. Property valuations usually assume a holding period increase of 50 to 100 basis points in the cap rate over the initial acquisition rate. This practice typically reflects the aging (finite life) of the property. As a result, cap rate increases are typically accounted for in return expectations, eliminating some of the potential surprise associated with them. So, investors should not fear cap rate increases that they expect, only the ones that they do not anticipate.

Lastly, the timing of cap rate changes matters. In the near term, cap rate increases can have a dramatic impact on property performance. But, real estate performance is less sensitive to cap rate changes as the investment horizon lengthens. Time has the potential to heal most, but likely not all, wounds from rising cap rates through the magic of compounding annual NOI growth rates. NOI growth can have a powerful impact on property values; the stronger the growth, the greater the protection against adverse movements in cap rates. This last point has important implications for property and market selection, and suggests a strong preference for investments with solid NOI growth.[3]

NOI growth expected to drive competitive total returns in 2016

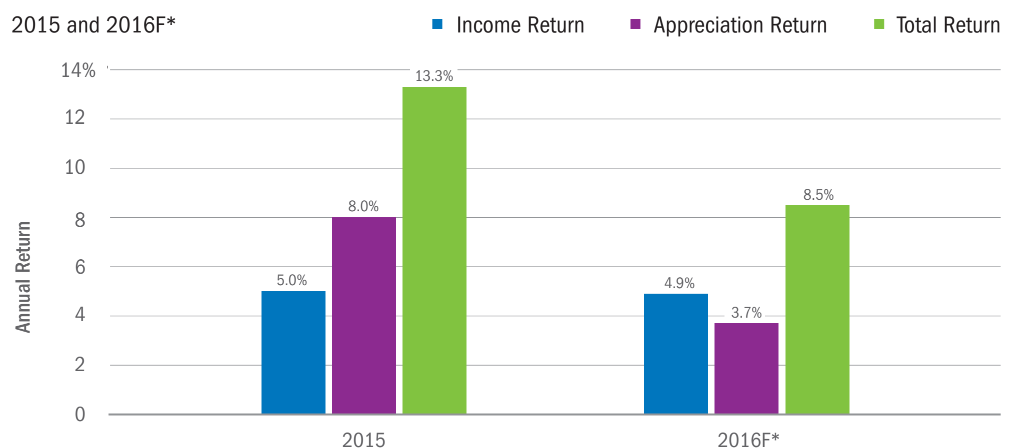
Analysis of leading indicators suggests a continued positive foundation for real estate operational performance in 2016. Interest rates remain historically low and widening high-yield bond spreads reflect somewhat diminished investor risk appetites. Commercial mortgage financing remains readily available and borrowing conditions have become increasingly favorable during the current recovery. Strong domestic and foreign investor demand for U.S. properties is likely to continue, supported by favorable economic and job conditions. Forecasts of moderate new supply and solid demand are anticipated to result in attractive fundamentals and solid operational performance (NOI growth).

While the prospects for U.S. CRE still look bright, it is important to recognize that economic and financial markets are still roiled by increased financial market volatility. This may prove to be problematic since real estate cycles typically turn either due to accumulating negative imbalances affecting demand and/or supply drivers or macro-economic shocks. Over-building, over-lending, over-buying, and over-leasing are imbalances that have characterized past downturns—all appear unlikely under current conditions. Increased volatility also indicates heightened sensitivities to shocks, but CRE markets are generally well-balanced nationally and any shock would likely be well-tolerated.

With the run of strong total returns since the beginning of the recovery to date, shadowed by ongoing financial market volatility, prospects for further cap rate compression are likely limited. This is especially so for higher-quality properties in the most desirable locations, which are priced at the tightest spreads. As a result, NOI growth is expected to be the primary driver of total returns going forward. In this environment, new construction is likely to be a key determinant of future NOI growth and a fundamental differentiator of market performance in the next phase of the CRE cycle.

Forecasters are not losing sight of performance constraints. They are reflected in declining 2016 total return expectations from the Pension Real Estate Association (PREA) Consensus Forecast Survey of the NPI, as of First Quarter 2016 (Exhibit 5).

Exhibit 5: Average NPI income, appreciation, and total return expectations



* F indicates forecast. Total returns differ slightly from the sum of the income returns and appreciation returns shown.

Sources: PREA Consensus Forecast Survey of the NPI, as of 1st Quarter 2016; TIAA Global Real Assets.

The latest PREA consensus survey shows NPI total return expectations of 13.3% and 8.5% for 2015 and 2016, respectively—a nearly five percentage point drop reflecting a decline in the contribution from expected property appreciation returns. Although real estate total returns are anticipated to weaken in 2016, they will likely remain attractive compared to other asset classes. Furthermore, real estate remains an important part of a multi-asset class portfolio as a source of diversification, strong cash flows and attractive risk-adjusted total returns, and a potential hedge against unexpected inflation or deflation; it is also a significant component of the overall investment universe.

1. See Martha Peyton and Edward F. Pierzak, "Cap rates rising: Fear and loathing in real estate," TIAA-CREF Global Real Estate, April 2013.
2. As evidenced by our own cap rate model, forecasting cap rates is a complex process that incorporates a variety of variables. Furthermore, it is difficult to forecast beyond a short time horizon with consistent accuracy. See Martha S. Peyton, "Capital Markets Impact on Commercial Real Estate Cap Rates: A Practitioner's View," Journal of Portfolio Management, Special Real Estate Issue 2009.
3. See Martha Peyton and Edward F. Pierzak, "Winning Markets: Persistence in Target Market Portfolio Performance," TIAA-CREF Global Real Estate, February 2013.

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