



Rising rates unlikely to be the death knell for commercial real estate growth

- Despite a steadily growing economy, commercial real estate (“CRE”) investors cannot ignore rising interest rates and their effect on CRE
- Higher interest rates not only increase borrowing costs and return hurdles, but could potentially also reduce property values
- Historically however, rising rate environments have coincided with higher economic growth and less restrictive lending conditions and therefore higher CRE prices
- In addition, capitalization rate (“cap-rate”) spreads have room to compress in some markets, and net-operating income (“NOI”) growth can offset the effects of rising cap-rates on CRE prices
- Long-term leased, stabilized property valuations are most exposed to rising rates, particularly in expensive regions
- Rising rates may also slow equity returns, but we believe senior debt should be protected as long as steady growth continues concurrently. In particular, senior debt backed by transitional properties may hold up better in a rising rent and rate environment
- While higher rates may slow returns, particularly for CRE equity investors, a change in underlying market fundamentals would be a greater concern for the overall market



RISING RATES HAVE MULTIPLE EFFECTS ON CRE:

CRE has benefited during the current economic expansion that has occurred since 2010 with the help of uncharacteristically low interest rates. However, as the Federal Reserve has begun to raise the Federal Funds Rate, there are signs that the low interest rate environment may change.

As Figure 1 highlights, the 10-Year Treasury bond has sold off about 150bps since July

2016 and was yielding above 3.1% only last week, the highest level in the past seven years. Additionally, with the Federal Reserve withdrawing from QE by tapering its mortgage-backed securities (“MBS”) and Treasury holdings, and the economy growing, there is concern that interest rates could rise further.

What does that mean for CRE?

FIGURE 1. INTEREST RATES BEGIN TO SHOW SIGNS OF RISING AFTER YEARS OF TRENDING DOWNWARD
(Q4 2000 – Q4 2016)



Source: Bloomberg as of May 29, 2018

HIGHER INTEREST RATES CAN AFFECT CRE IN MANY WAYS:

- **Higher rates raise borrowing costs:** CRE loans are generally priced as either a spread to Treasuries or swap rates for fixed rate loans, or as a spread to the one-month LIBOR curve for floating rate loans. Higher Treasury, swap, and LIBOR rates increase the coupon payments for new and refinancing borrowers (or immediately in the case of floating rate loans). The increased coupon payments make purchasing or refinancing a property more expensive, thus reducing equity returns.
- **Higher rates raise expected returns:** CRE equity investors often have levered return targets of 10-20% depending on the property and its level of stabilization. However, when credit risk-free assets, such as Treasuries, have higher yields, investors will likely demand higher returns for assets with the same or greater amount of risk.
- **Higher rates increase the costs of holding land:** Higher interest rates increase the expense of holding assets which do not produce income, such as raw land, and reduce the recovery value of assets which do not generate sufficient income, such as distressed properties.
- **Higher rates may also reduce the value of long-term leases:** Higher interest rates, particularly combined with inflation, may reduce the value of properties with long-term leases whose contracted rent steps lag rising inflation and interest rates.



While the effects of rising interest rates are primarily negative for CRE returns, rising interest rates do not occur in a vacuum. Rising rates frequently coincide with both real economic growth and inflation, both of which can push rental incomes higher. We detail the expected effects of rising rates on the CRE market, and why this leads us still to favor transitional CRE debt as potentially the best investment in the CRE space.

RISING RATES ARE POORLY CORRELATED WITH CAP-RATES...

Many market participants compare CRE to interest rates via the cap-rate, which measures the property's NOI divided by the property's transaction price or appraised value. The cap-rate provides a rough estimate of the estimated return of the property. The cap-rate is frequently viewed as a spread to the 10-year Treasury to compare returns for CRE to that of long-term risk-free bonds. One would expect cap-rates to be correlated with Treasuries over the long term, but in recent history, this has not been the case. Looking at quarterly cap-rates changes versus changes in 10-Year Treasuries shows that the two are nearly uncorrelated, with no obvious positive or

negative correlation (Figures 2 and 3).

Part of the issue with the comparison between cap-rates and the 10-Year Treasury is that the cap-rate is a real return measure, where the rate reflects the expected growth in NOI in addition to current returns, while the 10-Year Treasury is a nominal return measure. Additionally, cap-rates are sensitive to credit availability. For example, between 2004-2007 cap-rates compressed even as interest rates rose partly because credit availability soared, with CMBS conduit issuance increasing from \$54 billion ("bn") in 2003 to \$193bn in 2007 (Source: JP Morgan, Trepp as of April 2018).

FIGURE 2. CAP-RATES SHOW LITTLE TREND WITH RISING RATES (Q1 2002 - Q4 2016)¹

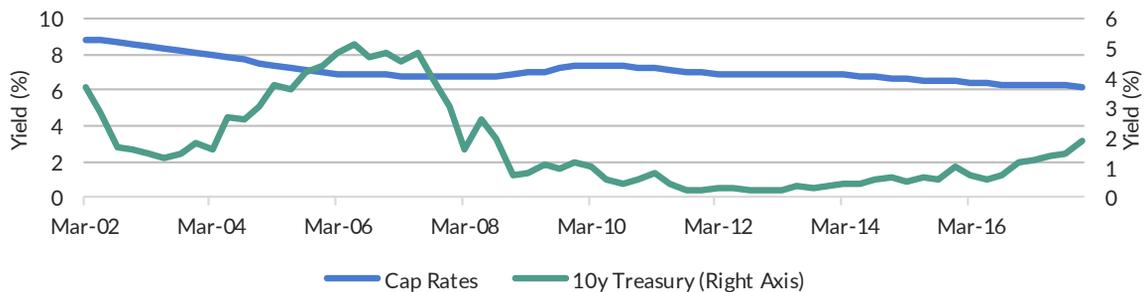
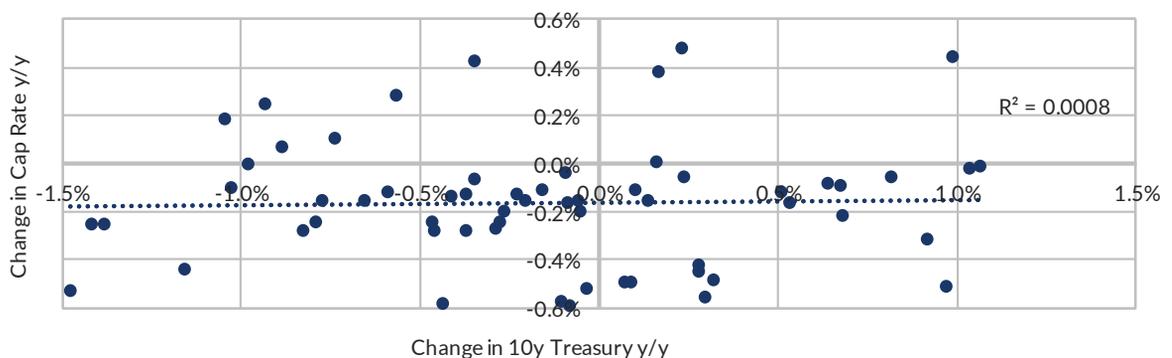


FIGURE 3. CAP-RATE CORRELATIONS WITH TREASURIES ARE MINIMAL¹



(1) Bloomberg, Morgan Stanley, RCA as of May 2018



...BUT SURPRISINGLY, RISING INTEREST RATES HAVE HISTORICALLY COINCIDED WITH CRE PRICE INCREASES

To get a better sense of how CRE will perform during a rising rate environment, it is often more useful to look at property prices directly rather than cap-rates. While cap-rates are somewhat uncorrelated to interest rates, there is a surprising positive historical correlation between changes in interest rates and property prices. This correlation appears to be particularly true in rising rate environments (as seen in Figures 4 and 5) because historically the negative

effects of rising rates were counteracted frequently by rent growth and easing credit conditions. Most of the last long-term rise in rates occurred between 2004-2007, when the economy, as measured by GDP, grew an average of 3.3% per year (Source: Bloomberg, Bureau of Economic Analysis as of May 2018) credit conditions were easing as Moody's stressed LTVs rose from 94.3% in Q2 2004 to 117.5% in Q3 2007 (Moody's as of February 2018).

FIGURE 4. RISING RATES HAVE OFTEN COINCIDED WITH HIGHER PRICES (Q4 2001 - Q1 2018) ¹

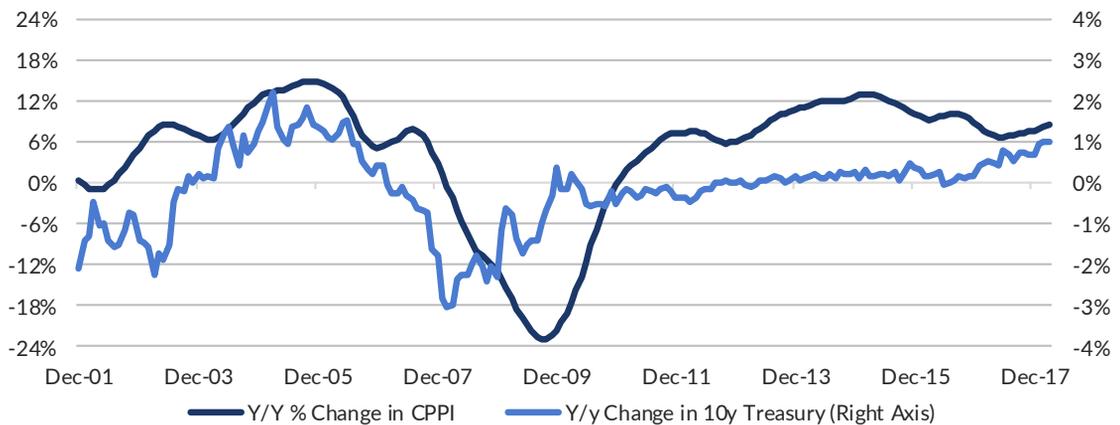


FIGURE 5. CORRELATIONS ARE POSITIVE, PARTICULARLY IN RISING RATE SCENARIOS (Q4 2001 - Q1 2018) ¹



Source: (1) RCA, Bloomberg as of May 2018



LARGE CAP-RATE SPREADS TO TREASURIES ALLOW CAP-RATES TO RISE SLOWER THAN TREASURIES

Looking to the current environment, the ability of cap-rates to withstand rising rates will be helped by the fact that while cap-rates are historically low, cap-rate spreads to Treasuries remain above 2007 highs, near 300bps in major markets and over 400bps in non-major markets according to RCA, Bloomberg (Figure 6). This ability for cap-rate spreads to compress (as we saw in 2004-2006), along with NOI growth, can allow prices to continue to grow even as rates rise. We have already seen signs of this in the first quarter of 2018 as cap-rates

have tightened despite rates widening. Further cap-rate spread compression will likely depend on weakening credit standards to maintain the current level of cap-rates. Even there, we have already seen signs of this in the commercial mortgage-backed securities (“CMBS”) market, where underwritten metrics have begun to show signs of weakening according to Kroll, where Kroll’s LTV has risen from 93% to 99% from Sept 2017 to March 2018 (Kroll Bond Rating Agency as of April 2018).

FIGURE 6. CAP-RATE SPREADS REMAIN RELATIVELY WIDE TO TREASURIES (Q1 2002 – Q4 2017)



Source: Bloomberg, RCA as of May 2018



EVEN THOUGH RENT GROWTH IS SLOWING, IT SHOULD HELP OFFSET THE EFFECTS OF RISING RATES ON PRICES

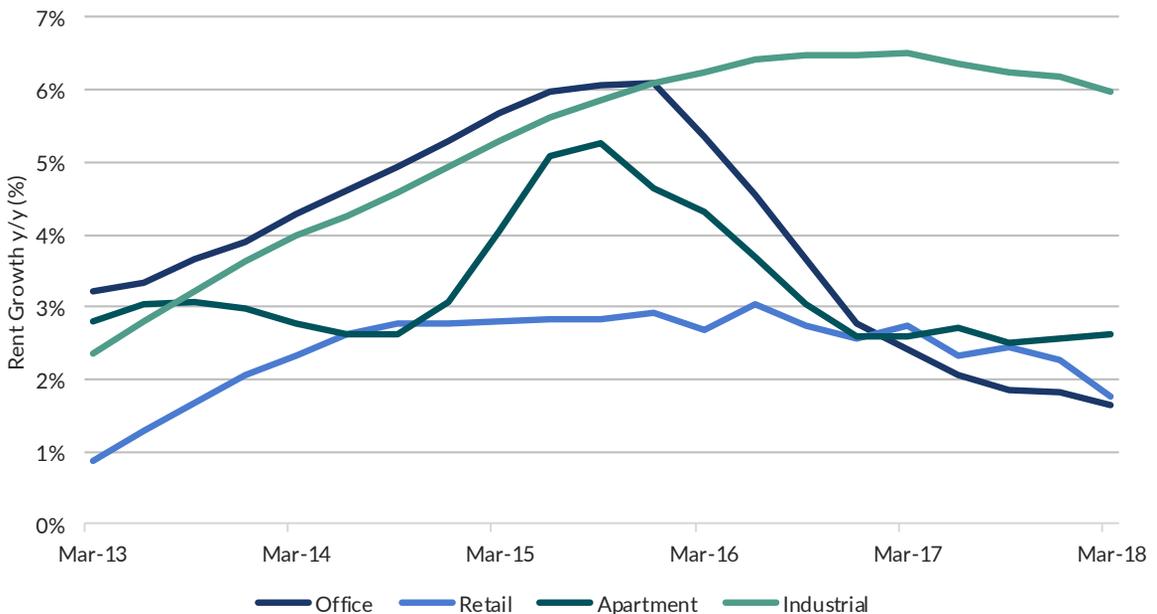
Rising rents (in addition to tight cap-rates) have helped propel CRE during the current business cycle and growth remains steadily positive despite slowing over the past two years (Figure 7). Maintaining steady rent growth will be crucial to support CRE prices and performance as interest rates rise.

Additionally, rent growth may start to pick up if inflation and growth coincide with rising rates. For example, office rents have recently shown signs of picking up after slowing in 2016, and industrial rents remain extremely strong as supported by e-commerce demand. In contrast, apartment rent growth has slowed as supply has picked up and retail continues to face e-commerce

headwinds. In terms of the sector's overall health, we would be relatively more concerned if rents began to fall or underlying occupancies decline compared to moderately rising rates.

This decrease in performance would indicate broader issues in the underlying fundamentals of CRE (outside of known issues in retail). However, in our opinion, a scenario with broadly falling rents is more likely to be driven by a broader economic slowdown, rather than rising rates themselves.

FIGURE 7. RENT GROWTH IS STILL POSITIVE, HELPING THE MARKET WITHSTAND HIGHER INTEREST RATES
(Q1 2013 - Q1 2018)



Source: Costar, Amherst Capital Management as of May 2018



BUT ALL CRE IS NOT EQUAL – STABILIZED PROPERTIES IN LOWER CAP-RATE AREAS ARE MOST AT RISK

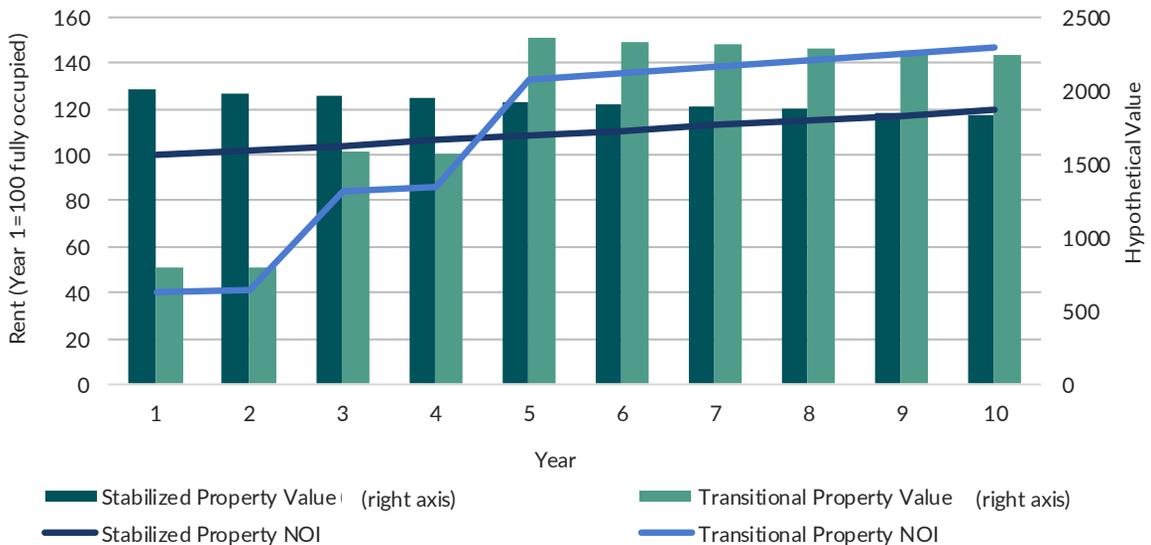
Rising rates will not impact all CRE equally, and stabilized CRE property values in expensive areas may be more exposed than other properties. As we noted in Figure 6, major market cap-rates are currently trading at tighter cap-rates relative to non-major markets, and therefore these cap-rates have less room to compress versus Treasury rates going forward.

Additionally, equity in stabilized properties with locked-in tenants may be negatively impacted as the rent steps for locked-in tenants may not keep up with rent growth in

an environment where rents are growing alongside rates. For example, in an environment where cap-rates and rents are rising 3% per year, a 2% built-in annual rent increase might not be enough.

In contrast, a transitional property may still be able to reach a higher value once it is stabilized (Figure 8). Transitional CRE generally benefits, since a new tenant expects to provide higher rents in a rising rent environment, which helps offset the effects of potentially rising rates.

FIGURE 8. TRANSITIONAL PROPERTIES CAN SEE MORE UPSIDE IF RENT GROWTH KEEPS UP WITH RATES



Source: Amherst Capital Management

Note: Assumes indexed NOI of 100 for a stabilized property in year 1 and a transitional property which fills 33% every two years. (from years 1-6) Contractual rents grow by 2% per year while market rents and cap rates increase by 3% per year.



However, if rent growth fails to keep up with rising rates, equity investments for both stabilized and transitional assets may see lower than expected returns. Debt investments should provide more protection from credit losses to potential investors even in those scenarios, and this is one reason why Amherst Capital prefers CRE debt investments in the current economic environment.

Additionally, transitional debt has the added advantage for the lender of being floating rate, which helps mitigate the risk of rising rates leading to mark-to-market losses. While rising payments on floating rate debt increase borrower default risk in a rising rate scenario, this risk is typically offset in transitional loans by the borrower purchasing interest rate caps. The interest rate caps help mitigate the risk that rising rates will imperil a borrower's ability to pay debt service payments by preventing the loan's debt service from rising beyond a preset limit determined at origination.

Ultimately, Amherst Capital prefers debt rather than equity in the CRE market in this late cycle stage environment, and we also have a preference floating rate transitional debt as we believe it provides the best opportunity to earn risk-adjusted excess returns.



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(1) As of December 31, 2017. This amount includes \$4.3 billion assets pertaining to certain discretionary multi-sector fixed income clients of our affiliate BNY Mellon Asset Management North America Corporation (AMNA), for which certain Amherst Capital employees provide advice acting as dual officers of AMNA. In addition, discretionary portfolios with approximately \$371 million are managed by certain of our employees in their capacity as dual officers of The Dreyfus Corporation. AUM includes gross assets managed in the single-family equity and commercial real estate strategies, which includes \$242 million and \$65 million of leverage, respectively.

(2) Seed capital Investor. It is not known whether the listed client approves or disapproves of the adviser or the advisory services provided.