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Reality Check on REITs and Rising Rates | April 2015

Public perception has historically dictated that higher interest rates beget poor REIT performance. However, perception is not always reality, especially after digging deeper into the historical data. In fact, REITs (as measured by the NAREIT All Equity REITs Index) produced an average total return of +11% during the nine periods of rising rates in the past 25 years, and only produced a negative return in three of the nine periods.

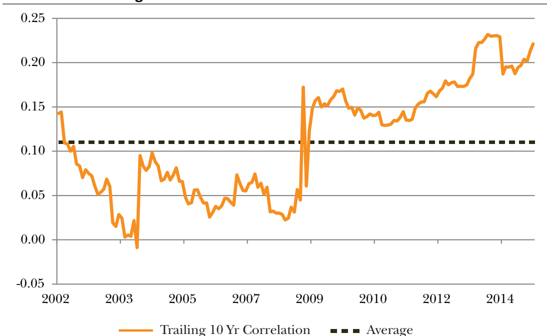
Historical Analysis

Since the Modern REIT Era began in 1992, public REITs have averaged only a 0.11 trailing ten year correlation* with fixed income (as measured by the Barclays Aggregate Bond Index). In other words, only 11% of REIT performance was explained by movement in the fixed income market. Figure 1 also shows that some periods were close to zero or even negative! Despite a noticeable increase over the past six years, a correlation below 0.25 is extremely low when considering that there are some who would like to assume it is closer to 1.00.

Contrary to public perception, REITs have actually outperformed the S&P 500 in over half of the periods of rising interest rates since 1992, as shown in Figure 2. Interestingly, when REITs underperformed the S&P 500 in times of rising interest rates, it proved to be an opportune time to invest as the asset class outperformed following periods of rising interest rates, on average.

We are now six years into the current commercial real estate and economic cycle, and we have experienced three periods of rapidly rising interest rates. Despite the periods of rising rates, REITs have generated a total cumulative return of 189% from January 2009 to February 2015. Today, REIT fundamentals remain robust as evidenced by higher rents, lower cap rates, and value-creation through development and redevelopment.

Figure 1: REIT Correlation with Fixed Income



Source: Bloomberg, Chilton Capital Management LLC. Data from January 1992-February 2015. REIT performance represented by NAREIT All Equity REITs Index. Fixed income performance represented by Barclay's Aggregate Bond Index.

The Fed is Not All-Powerful

Fed Chair Janet Yellen and the Federal Reserve have been explicit about raising rates commensurate with economic growth, which gives us confidence that GDP and job growth will be able to offset any re-pricing of real estate that could occur as a result of higher interest rates. The converse scenario should also be

Figure 2: REITs vs. S&P 500 in Times of Rising Rates

Period *As of 12/31/2014*	Period of Rising Interest Rates				Subsequent REIT Relative Performance vs. S&P 500		
	10 UST Rate Chg	REITs	S&P 500	Out/(Under) Performance	+90 D	+180 D	+1 Yr
	(bps)	*(%Chg)*	*(%Chg)*	*(bps)*	*(bps)*	*(bps)*	*(bps)*
Oct 93 - Dec 94	+258	-10.9%	2.2%	(1,310)	(517)	(1,416)	(3,015)
Feb 96 - Sep 96	+138	10.1%	3.9%	614	(613)	(711)	(2,904)
Oct 98 - Feb 00	+251	-6.5%	41.8%	(4,820)	811	1,572	5,222
Nov 01 - Apr 02	+122	15.2%	3.3%	1,188	1,949	1,487	2,450
Jun 03 - Jun 04	+176	21.5%	15.8%	574	1,924	1,534	3,241
Jun 05 - Jun 06	+136	19.7%	5.9%	1,379	824	1,034	(1,437)
Jan 09 - Jan 10	+162	50.1%	36.2%	1,092	1,602	1,912	2,403
Oct 10 - Apr 11	+118	9.0%	15.3%	(628)	508	287	748
May 13 - Dec 13	+140	-10.4%	17.4%	(2,780)	818	1055	1686
Historical Average	+167	10.9%	15.8%	(521)	812	750	933

Source: Bloomberg, Chilton Capital Management LLC. REIT performance measured by NAREIT All Equity REITs Index.

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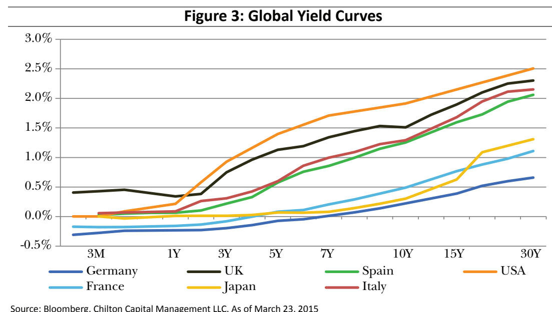
*using monthly data.

comforting to REIT investors as the Fed has been clear that interest rates will stay low if the economy worsens, thereby putting a 'floor' on REIT prices.

As a reminder, the Federal Reserve has stated that the next monetary policy move it plans to make is a hike in the 'Fed Funds Rate'. The Fed Funds Rate is the rate charged to banks for overnight deposits. Changes in the Fed Funds Rate have a measurable effect on the short end of the interest rate curve (less than 1 year), but movements at the long end of the curve are more difficult to predict and control. The long end of the curve is ultimately subject to the typical economic forces that influence bond prices and yields.

The Federal Reserve can attempt to influence the long end of the curve through 'open market purchases' of longer maturity US Treasury bonds, thereby driving prices up and yields down. Most recently, the Federal Reserve used open market Treasury bond purchases to stimulate the economy following the Great Recession. Called 'QE3', the Fed's bond-buying stimulus was successful in keeping long rates low, which helped to increase home prices and asset values through lower long term borrowing costs. However, since the Federal Reserve stopped buying US Treasury bonds in October 2014, the 10 year US Treasury yield has actually *declined* from 2.4% to 1.9% as of March 23, 2015. Similarly, the 30 year US Treasury yield declined from 3.1% to 2.5% as of March 23, 2015.

Despite the Fed's pullback in bond-buying, investors around the world continue to find US long-dated government bonds attractive in comparison to other sovereign debt available. Figure 3 shows the US interest rate curve relative to some of the other largest government bond markets as of March 23, 2015. Even when the US Federal Reserve decides to raise the Fed Funds rate, the rest of the interest rate curve may not react as much as some may think.



The Rising Long Term Rates Scenario

Despite some of the exogenous forces that could keep rates low for longer, the consensus economic forecast (according to the Philadelphia Fed's 1Q 2015 Survey of Professional Forecasters) is for the 10 year US Treasury yield to average 2.5% in 4Q 2015 and 3.1% for 2016. With the current GDP and job growth run-rate, REITs should be in excellent position to grow cash flow and dividends under the consensus scenario.

According to Citi Research, the weighted average interest rates on REIT debt maturing in 2015 and 2016 are 4.5% and 4.7%, respectively. In comparison, a basket of REIT unsecured debt compiled by Citi Research traded at a yield of 3.8% as of March 13, 2015. Assuming issuance spreads remain constant, REITs would still be issuing debt at rates accretive to cash flow through 2015, and only slightly dilutive in 2016. In other words, rates would have to rise more than 90 basis points (or bps) for REITs to experience an increase in their borrowing costs in 2016. And, if rates are rising because the economy is expanding, REITs will be happy to pay for higher borrowing costs as they will more than make up for it in the form of higher rents.

As we discussed in the February 2015 REIT Outlook, changes in borrowing costs have an effect on REITs' cost of capital. The average debt to total market capitalization for a REIT was 32% as of September 30, 2014. Assuming a 50 bp rise in long term rates, REITs' cost of debt capital would increase by 16 bps (32%*0.50%). For comparison, private companies that use a higher leverage ratio (closer to 70%) will experience a 35 bps (70%*0.50%) increase in their cost of capital for the same change in interest rates. In such a scenario, public REITs should regain a cost of capital advantage over private companies with higher leverage.

If rates are rising due to economic growth, commercial real estate should benefit from higher demand due to job growth, consumer spending increases, and new household formations. Under those conditions, REITs are able to increase occupancy and raise rents for new space or on renewals as current leases expire. Furthermore, inflation from rising rates usually flows fairly quickly into land, labor, and cost of materials, thereby increasing construction costs. Coupled with the higher cost of capital mentioned above, a rise in interest rates will likely result in a decline in new construction.

The combination of higher demand and lower supply presents a hypothetically better environment for current landlords.

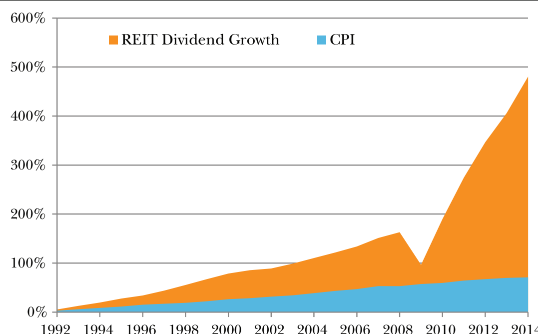
Cap Rate Movements

The presumption that REIT prices should be tied to interest rates is rooted in a perceived connection between cap rates and interest rates. A capitalization rate (or 'cap rate') is the first year yield on a property (Year 1 Net Operating Income/Purchase Price). Because the 10 year US Treasury yield acts as the 'risk-free rate', investors sometimes use spreads over the 10 year US Treasury yield to determine what will happen to cap rates, and therefore market values, if rates change. However, According to Paul Mouchakkaa at Morgan Stanley, the correlation of cap rates (using the NCREIF National Property Index cap rate) and the 10 year US Treasury yield was only 0.11 for the ten years ending September 2013. In four of the five periods of rising rates that Mr. Mouchakkaa observed since 1992, cap rates actually *declined*.

> *"The yields on U.S. property are better than fixed income and safer than equities."*
>
> - Mark Delaney, Chief Investment Officer of AustralianSuper, an $84 billion retirement plan

Similar to all other marketable assets, market values are simply based on prices that a buyer is willing to pay, which can be influenced by any number of factors. Worldwide, institutional buyers are looking for a safe, growing yield with the potential for appreciation. High quality US commercial real estate checks both of those boxes better than most of the alternative options. According to the CIO of an Australian retirement fund that is purchasing a stake in a top five US regional mall, "The yields on U.S. property are better than fixed income and safer than equities."

Figure 4: REIT Dividends Compared to Inflation



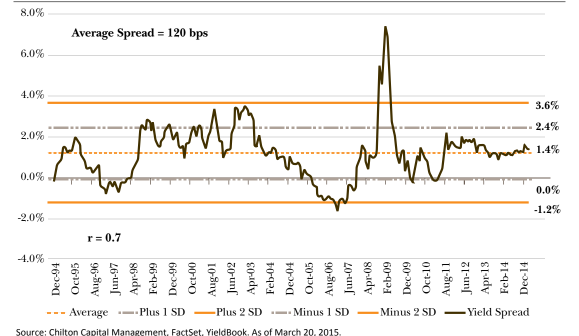
Source: NAREIT, St. Louis FRED, Chilton Capital Management LLC. CPI = Consumer Price Index. REIT Dividend Growth comprised of weighted average change in dividends for the NAREIT All REITs Index (Bloomberg: FNAR)

Current REIT Dividend Spread is not as it Seems

If and when REITs begin reporting higher rents, growing cash flow, and increasing dividends, the public is reminded that REITs are beneficiaries of inflation and can pass through these benefits to shareholders in the form of higher dividends. From 1992-2014, REITs (as measured by the NAREIT All REITs Index) have increased their dividends by a compound annual growth rate (or CAGR) of 7.9%, well above the 2.4% inflation rate over the same period (see Figure 4). Despite the recent increases, REITs are still near all time low payout ratios, indicating a clear path for future increases.

In the past 20 years, the spread between the REIT dividend yield and the 10 year US Treasury yield has averaged 120 bps. As of March 20, 2015, the spread was 140 bps, indicating REITs are on the 'inexpensive' side of the fair value range. However, we need to make several adjustments. First, the historical spread was based upon a payout ratio of 81%, which compares to the 73% ratio as of today. Second, REITs are expected to increase dividends by 10% this year. If we pro-rate the increase for the rest of the year and adjust for the higher payout ratio, the 'comparable' dividend yield would be 70 bps higher by the end of the year. Thus, current REIT pricing should support a positive total return in the short term using consensus interest rate assumptions under this popular valuation metric.

Figure 5: Historical Spread Between REIT Dividend Yield & 10 Yr Treasury Yield



Source: Chilton Capital Management, FactSet, YieldBook. As of March 20, 2015.

Property Type Performance

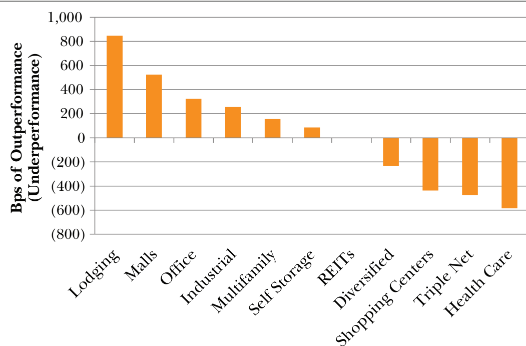
Though we believe REIT fundamentals will remain robust in a rising rate environment, property types will behave differently. Historically, property types with slower growth profiles underperform, while those with the most growth in cash flow and dividends outperform the benchmark.

As shown in Figure 6, the health care and triple net sectors have historically underperformed

the faster growing property types during times of rising interest rates. The health care and triple net property types are the most sensitive to interest rates because their tenants are locked into long term leases (up to 20 years, with potential for renewals). In general, it is difficult for long lease sectors grow cash flow more than 2% or 3% (excluding acquisitions) during strong economic times when interest rates (and market rents) are rising.

In contrast, the shorter lease sectors tend to have higher growth when rents are rising as they can renew tenants much more quickly. The best examples of short lease property types are apartments, self storage, and lodging.

Figure 6: Relative Property Type Performance in Periods of Rising Rates



Source: Chilton Research, 1993-2014.

Chilton REIT Portfolio and Rising Rates

The Chilton target price methodology is influenced by many factors, both top-down and bottom-up, but it generally favors companies with high cash flow growth, low payout ratios, and flexible balance sheets, especially when the economy is growing. Consequently, as of December 31, 2014, the Chilton REIT portfolio owned only one health care REIT and zero triple net REITs, resulting in a nearly 2,000 bp underweight to the two property types combined. The one health care REIT owned is Healthcare Realty (NYSE: HR), a medical office building (or MOB) REIT with a weighted average lease maturity of 5.1 years as of December 31, 2014. HR has above average growth potential in an environment of low new construction of MOBs and higher demand as a result of increased outpatient visits.

In an environment of low interest rates worldwide, we believe there is too much emphasis on potential interest rate hikes. Our investment approach takes a longer term view. We believe active management of the portfolio with adherence to our buy and sell prices will allow our clients to benefit from any short term volatility. Even when assuming the consensus rise in long term interest rates, our sensitivity analysis incorporating cash flow and dividend growth supports our positive long term outlook for REITs. Importantly, we maintain confidence in the methodology that has generated more than 350 bps of annualized alpha (gross of fees) over a 10+ year period that has witnessed four periods of rising interest rates.

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RMS: 1791 (3.31.2015) vs. 1710 (12.31.2014) vs. 346 (3.6.2009) and 1330 (2.7.2007)

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