

Debunking the Correlation: Interest Rates and Cap Rates

Although it has yet to come to fruition, the notion of an impending rising interest rate environment has been a topic of conversation for some time. It is often theorized that in a rising interest rate environment, real estate capitalization rates must also rise. We look to cast doubt on the inevitability of this assertion by analyzing historical data and the drivers of real estate value.

The capitalization rate (cap rate) is a commercial real estate metric that measures a property's unlevered return based on the income the property expects to generate in the first year, divided by the price of the property. This is the standard metric used in the commercial real estate industry to start the discussion on the value of a property.

When comparing 10-year Treasury rates to historical NCREIF (National Council of Real Estate Investment Fiduciaries) cap rates over time (see chart), we are able to evaluate commercial real estate cap rates in a number of market cycles in relation to Treasury rates. Since 1990, there has been a positive correlation between cap rates and 10-year Treasury rates (+.65); however, there have been multi-year periods of time where they have been negatively correlated. This is evidenced in the first 5-year period shown in the chart where the correlation was -0.69.

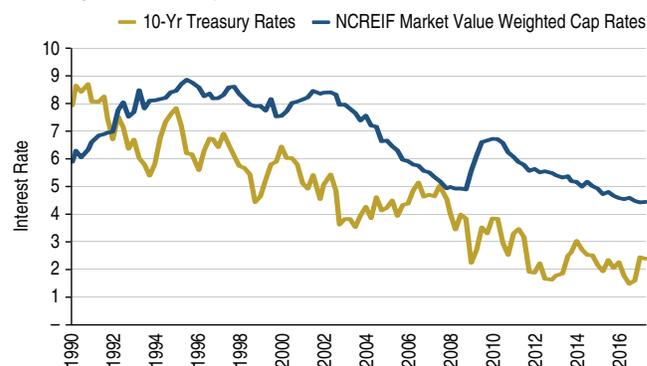
There is good reasoning for the disconnect between cap rates and Treasury rates. Although the cap rate equation may seem straightforward and perhaps over-simplified, what is often misunderstood and not well-articulated are the implicit drivers of cap rates and how different types of real estate investors will take other factors into account when calculating the value of a potential investment.

Real estate, like all other investments, is evaluated based on the individual investor's expected after-tax cash flows received during the ownership of the investment, along with the after-tax cash proceeds received from the sale of the asset discounted back to the date of the original purchase using a discount rate. What an investor is willing to pay for

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Treasury Rates vs. Cap Rates



Source: U.S. Department of the Treasury, National Council of Real Estate Investment Fiduciaries

that rate of return varies based on the following direct and indirect real estate factors:

■ **Lease(s)**

Regardless of whether the asset in question is a single-tenant or multi-tenant property, the details of the lease(s) will greatly impact the value of the property. The length of the lease, rent growth, credit of the tenant/guarantor of the lease, responsibilities of the tenant(s) and strength of the lease(s) are all factors that are evaluated separately by different real estate investors. The specifics in the lease will determine how the investors will not only underwrite the contractual future rent, but the certainty as well as the vagaries of the future cash flows, as well. In the event that a property is purchased where there is no lease, or the lease(s) are about to expire, the investor underwrites the anticipated market rents, less the anticipated future capital costs required to achieve them. As a result, cap rates can greatly fluctuate by investor depending on the lease of the property and resulting cash flow implications.

■ **Availability of Leverage**

Most commercial real estate operators employ some form of leverage, either property-specific or portfolio-based. Therefore, the availability and general pricing of leverage will directly impact cap rates of properties. This is evidenced by the fact that historical Treasury rates are correlated to cap rates. This is intuitive given that as investors either require less initial capital investment and/or get more cash distributions after debt service, a real estate investment becomes immediately more lucrative for commercial real estate investors. The commercial real estate market is competitive with many different participants; therefore, as the availability of leverage and pricing improves, cap rates will tighten among investors.

■ **Tax Implications**

Country, state, and local taxes all affect the value of a property differently to various types of investors. An investor's willingness to pay for an investment should always be determined based on after-tax cash flows. Certain types of investors are advantaged or disadvantaged based on a specific location where they are purchasing assets. Consequently, depending on the type of investor and the geographical location of the investment, cap rates can vary dramatically.

■ **Investor Sentiment**

There is not one source of capital that funds commercial real estate purchases. As the amount of money invested in a finite market grows like the U.S. commercial real estate market, the pricing of the finite market's assets will also grow – the basic foundation of supply and demand. Retail investors, starved for yield, have sought out REITs and institutional investors to make large allocations to real estate private equity funds in order to increase their overall portfolio's expected return. Similarly, both family offices and sovereign wealth funds have entered the domestic commercial real estate market in search for yield. This is one of the reasons why the average cap rate in the NCREIF index for the past eight quarters was 4.57% versus 5.43% in 2009.

The cap rate is a straightforward calculation that provides a standardized way to contextualize value when comparing investments. However, the factors that affect the cap rate computation are complex when further understanding the intricacies of the inputs. Although investors use the same industry standard equation, the implicit drivers discussed ultimately lead sophisticated investors to calculate the cap rate slightly differently. Ultimately, timing will be the deciding factor from one day to the next for what an investor is willing to pay for a property, influenced by the direct and indirect factors of the cap rate which lead to significant variations in correlations during specific time periods.

Summary

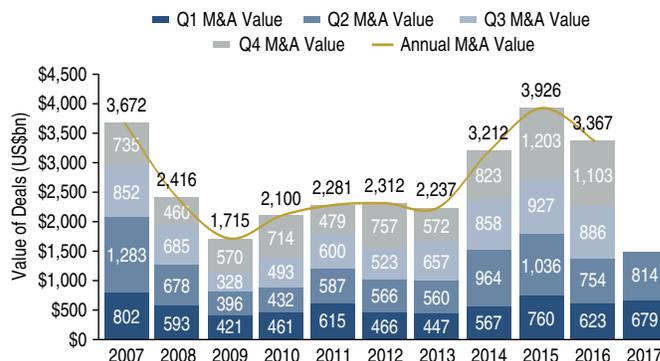
Cap rates are driven by a myriad of factors that affect the general value of the real estate market. Despite the positive correlation between the Treasury market and real estate market for the past 25 years, it is difficult, if not impossible, to draw a firm conclusion on the correlation between the two, should interest rates rise. While a prolonged rising interest rate environment is not a foregone outcome, it would be imprudent to assume with absolute certainty that cap rates will have a strong positive correlation with interest rates throughout a rising interest rate environment. Cap rates and Treasury rates are correlated, until proven otherwise.

Market Snapshot: Middle-Market Mergers & Acquisitions

Resilience in the Global M&A Market

- Global M&A values rose 8.4% in H1 2017 with 8,052 deals worth \$1.5 trillion compared to 9,169 deals worth \$1.4 trillion during H1 2016.
- U.S. M&A values grew 2.4% in H1 2017 with 2,446 deals worth \$602.6 billion compared to 2,677 deals worth \$588.5 billion during H1 2016.
- 2017 is expected to be another strong year for M&A as conditions for deal activity remain strong.

Quarterly Global M&A Comparison

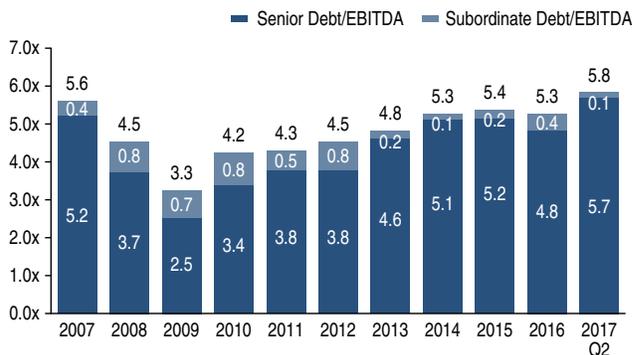


Source: MergerMarket.

Significant Opportunities Exist to Capitalize on the Favorable Financing Environment

- Borrowers continue to capitalize on the favorable financing environment.
 - Loan terms continue to be covenant-lite.
 - Interest rates remain near historic lows.
- Total leverage in Q2 2017 for middle-market issues with less than \$50 million of EBITDA averaged 5.8x, which is up from the 2016 average leverage of 5.3x.
- Volume of middle-market deals in Q2 2017 reached \$9.18 billion, the highest level since Q2 2015.
- Senior stretch loans (hybrid asset-based and cash flow loans) are prevalent given current market dynamics.
 - Conditions exist for debtors to cover all leverage needs with senior debt at senior debt pricing (versus higher mezzanine debt pricing).

Average Debt Multiples of Middle-Market LBO Loans (Issuers with Less than \$50M of EBITDA)



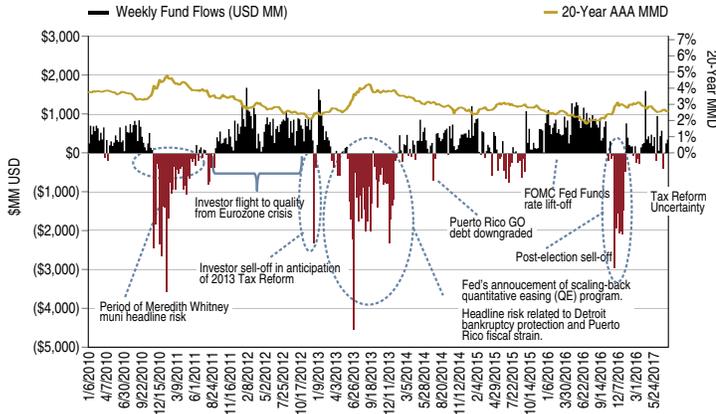
Source: S&P Capital IQ LCD.

Market Snapshot: Municipal Bonds

Municipal Bond Fund Flows and Municipal Market Data (MMD)

Over the past few months, volatility in municipal fund markets has declined from the turbulent market conditions that arose from the presidential election late last year. In the past three months, municipal funds have seen average inflows of more than \$225 million. The 20-year MMD continues to remain attractive on a historical basis and is currently near its lowest level for the year thus far. Tax reform uncertainty and gridlock in Washington has recently caused a slight amount of volatility in tax-exempt markets, and could pose a serious threat to municipals if tax rates are significantly lowered in the future. Additionally, we expect future Federal Reserve rate increases and federal government legislative decisions to have an impact on weekly fund flows going forward into the later part of this year.

Municipal Bond Fund Flows and 20-Year MMD



As of the weekly reporting date of 7/31/2017
Data Source: EPFR Global Fund Flows and Allocations Data – All Muni Funds (Retail and Institutional Funds).

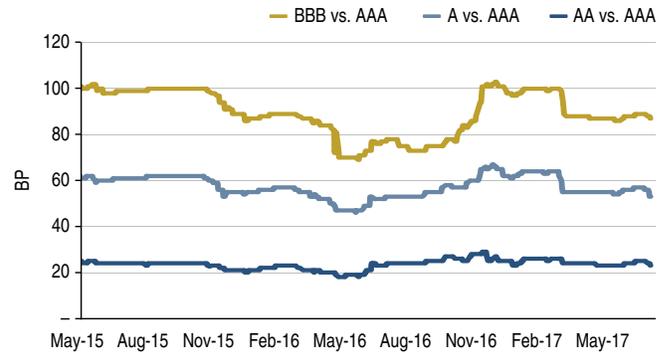
Trailing 16-Week Data

Muni Fund Reporting Date	Weekly Fund Flow (\$MM USD)	20-Yr AAA MMD (%)
4/12/2017	1,595.54	2.82
4/19/2017	350.58	2.72
4/26/2017	428.45	2.87
5/3/2017	251.88	2.87
5/10/2017	471.60	2.88
5/17/2017	176.89	2.74
5/24/2017	409.58	2.68
5/31/2017	(204.31)	2.59
6/7/2017	949.94	2.52
6/14/2017	58.58	2.55
6/21/2017	433.98	2.56
6/28/2017	572.29	2.60
7/5/2017	(386.01)	2.67
7/12/2017	10.04	2.68
7/19/2017	247.68	2.58
7/26/2017	343.43	2.57

Credit Spreads

- Municipal market technicals continued to be very strong this month, with July negative net supply at -\$38.69 billion and positive mutual fund flows for the month.¹
- Municipal bonds are trading on the rich side of their range relative to treasuries (10 years at 85%; 30 years at 96%). Credit spreads continued to grind tighter in most sectors, with the exception of tobacco bonds, which widened due to regulatory fears. Hospital bonds shook off concerns about repeal or reform of the ACA and/or potential Medicaid reforms and continued to trade tight to historical averages.²
- As a whole, the technically tight municipal market offers very little relative value for fixed income investors as of month end July 2017.

30-Year Credit Spreads



Source: The Municipal Market Monitor (TM3).

1 Bloomberg, EPFR Global
2 MMA (Municipal Market Analytics, Inc.)

Market Snapshot: Corporate Debt

Corporate Debt Spreads – Finance Market Summary

- Many economists and others have predicted a rising interest rate environment in 2017. In fact, the 30-year treasury UST has declined 22 basis points thus far in 2017, while the 10 year treasury UST declined 18 basis points year to date (as of August 8, 2017). Credit spreads have been stable to “tightening across rating categories” during the year. These results indicate that despite the skewed perception, interest rates have remained stable thus far in 2017.
- The demand for taxable fixed income products continues to be robust across the credit spectrum. U.S. corporate issuances have also experienced a slight uptick as the total dollar volume has increased 6.4% from July last year. The investment grade volume has increased slightly by 3.9%; however, high yield issuances have been the main driver this year, surging in dollar volume by 20.5%.¹

Historical Corporate Bond Yields – 10-Year Maturity



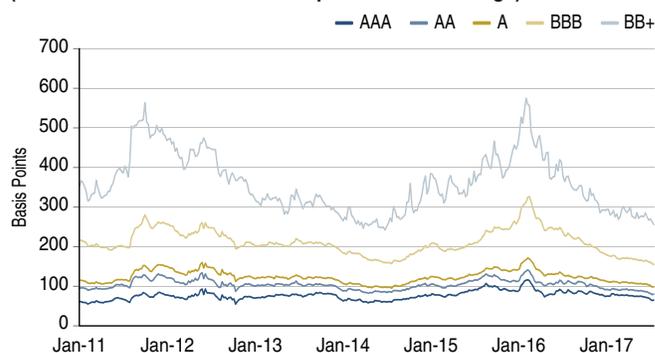
Data as of January 27, 2017.
Source: S&P Global Fixed Income Research.

Strategic Opportunities Involving Real Estate Are Worthy of Consideration Given Favorable Market Conditions

Opportunity continues to knock:

- Structuring subordinate debt tranches on a zero amortizing or partially amortizing basis continues to enable borrowers to realize greater proceeds from those generated historically. This has increased transaction volume over the past few years, with the trend continuing, given stable to increasing real estate valuations. In fact, “lower rated categories have contracted more rapidly as investor risk aversion has waned.”
- Many corporations are considering sale-leaseback opportunities due to favorable real estate valuations, leasing terms, and strong demand for all financing capital tranches.
- Lending to foreign domiciled companies and loans involving foreign jurisdictions continues to be active.
- Capital availability on favorable terms for acquisitions and refinancing of strategic properties remains robust for involved borrowers. Furthermore, mezzanine and bridge capital loan access is playing an increasing part in the capital stack.

Corporate Bond Spreads to 10-Year UST (Based on Standard & Poor’s Corporate Credit Ratings)



Data as of January 27, 2017.
Source: S&P Global Fixed Income Research.

¹ S&P Global Fixed Income Research, “US Corporate Issues: Lending Surges amid a Decline in Credit Risk in 1Q17, April 2017”

Featured Mesirow Financial Deals

\$53,000,000
Acquisition Financing
Multiple Tranche Structure



Regional Headquarters
(Tenant)

Acquisition Financing for Home Depot's Regional Headquarters

Mesirow Financial successfully structured and arranged for a permanent acquisition credit tenant lease (CTL) and structured debt package for Home Depot's newly constructed corporate regional headquarters located in Austin, Texas. The project is part of a strategic initiative to serve as 100% office support for Home Depot's program developers and IT engineers, as well as house a security team that monitors approximately 200,000 employees for theft and monitors SKU numbers. Parmer Business Park, the site of the facility, is a 371 acre mixed-use master planned development located in the center of Austin's technology and life science district consisting of eight sectors totaling over four million square feet of developed/planned office, flex industrial, retail and multifamily space. Home Depot selected Parmer as the site for its beneficial location, as well as a single-tenant opportunity with the ability to accommodate density, generous parking and ability to allow for future growth. The financing structure consisted of three tranches of debt: two pari passu senior CTL notes as well as a subordinated capital appreciate note. The structure was created to satisfy a request for high-leverage and tax efficiency.



a portfolio company of



AMERICAN SECURITIES

has acquired



— Buy-side Advisor —

M&A Buy-side Advisor to SeaStar Solutions Incorporated

Mesirow Financial acted as the exclusive financial advisor to SeaStar Solutions Incorporated, a portfolio company of American Securities LLC, on its acquisition of Moeller Marine Products, Inc. Headquartered in Litchfield, IL, SeaStar Solutions is a leading supplier of marine steering and control systems, fuel systems, engine parts and related products, as well as a leading global provider of OEM and aftermarket products and accessories for the recreational marine and related markets. Sold worldwide under the SeaStar, Sierra, BayStar, Shields, Inca, Mallory, Prime Line and ProHeat brands, the company's products are recognized for their quality, reliability and technical innovation. The transaction represents another successful assignment completed by Mesirow Financial's Investment Banking group.

\$22,040,000
General Obligation Limited Tax
Refunding Debt Certificates
Series 2017

\$1,420,000
General Obligation Refunding
Limited Tax Bonds
Series 2017



— Placement and Repurchase Agent —

Placement and Repurchase Agent for the Village of Matteson

Mesirow Financial served as both placement and repurchase agent for the \$22,040,000 General Obligation Limited Tax Refunding Debt Certificates, Series 2017 and \$1,420,000 General Obligation Refunding Limited Tax Bonds, Series 2017 on behalf of the Village of Matteson (the "Village"). The 2017 certificates and bonds were issued to refinance the debt that was originally issued in 2010, that was used to construct a community recreational center, as well as various other Village projects. Prior to the Great Recession, the Village projected significant growth in its tax base. Similar to many other Chicagoland suburbs, the Village suffered a significant loss of assessed valuation during the Great Recession and was grappling to stabilize its finances. Mesirow Financial worked with the Village's finance team in order to assemble a restructured security package that would ultimately be presented to the 2010 bondholders. After months of negotiation, Mesirow Financial successfully negotiated a restructured security package and a repurchase price on the outstanding bonds that was amenable to all parties. Mesirow Financial was able to place the entire financing with a single qualified institutional investor through its vast network of high yield investors. This refinancing kept the Village's operating expenditures from ballooning and set a path for the Village to restore its access to the capital markets.

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- Fixed Income Sales and Trading
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- Sale-Leaseback Capital
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- Board of Directors Advisory
- Fairness and Solvency Opinions
- Restructuring and Special Situations
- Private Capital

About Mesirow Financial

Mesirow Financial is an independent, employee-owned firm founded in 1937. As specialists in investment, risk management and advisory services, we are committed to helping our institutional, corporate and individual clients achieve their objectives. Our professionals are inspired by an entrepreneurial desire to develop tailored solutions designed to deliver measurable results. To learn more, please visit mesirowfinancial.com.

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