

A Moderating Core *Shifts* Focus to Non-Core Options in 2019

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Our analysis leads us to the uncomfortable conclusion that core real estate returns are in the process of a significant moderation. With many investors at risk of having the majority of their real estate capital stranded at low returns, we see three compelling non-core alternatives to consider: 1) Buy core real estate through the REIT market at prices that already reflect 70bps of cap rate expansion¹; 2) take advantage of strong fundamentals to create net operating income (“NOI”) through value add real estate investment, rather than worry about how NOI is going to be priced in the future via a core allocation; and 3) seek investments in real assets that feature strong secular demand and investment tailwinds, such as infrastructure. While these alternative options may help investors solve the “proforma” return challenge, however, there also exist important risk considerations, which we explore below.

A Moderating Core

A significant moderation in core real estate returns will have tremendous consequences for institutional real estate investors, who risk having the majority of their real estate allocations stranded. In fact, the recent PREA survey of institutional investors showed expectations for annual core real estate returns to be below 5% by 2020, which we think may prove optimistic. Three factors leads us to the conclusion that core real estate cap rates are on the rise, which will likely offset much of the NOI growth and return from yield, and lead to low net returns from core real estate over the next one to two years. First, the fundamental back-drop of low cap rates, decelerating NOI growth and potentially rising interest rates suggest an environment of rising cap rates. Second, the REIT market, with trading volume that represents the equivalent of all U.S. commercial real estate transactions and has a track record of predicting the direction of private real estate values, continues to send a clear signal of cap rate expansion in 2019. Third, we find that core real estate fund flows are a reliable leading indicator of core real estate fund returns, and the direction of these flows is unambiguously down (and could turn negative)².

The starting point for real estate values is vulnerable, with core real estate fund cap rates at record lows below 5%³. Low initial cap rates are challenged by a steady build of new supply that has accelerated with the aging economic cycle. In fact, a unique feature of this cycle is that the “supply constrained” gateway markets are those with the most cranes. The punchline of the late-cycle increase in supply is that NOI growth for real estate owners has meaningfully decelerated even as the economy has accelerated. Recall that cap rates are a function of the discount rate and rental rate growth. Given expectations for the Fed to continue to increase interest rates, and moderating NOI growth, the justification for existing low cap rates is called into question. We do not believe core real estate valuations have adequately priced in these risks.

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One area where we believe the pricing of risk is more balanced is the REIT market, and in our experience the REIT market has been a useful predictor of the direction of future real estate values. In fact, we see a strong relationship between REIT implied cap rates and forward private real estate returns, and the current spread between REIT implied cap rates and private market cap rates suggests forward returns for the private market could decelerate to <5% per year. Although REIT market signals can include noise from short-term volatility, the data shows that when the REIT market delivers a consistent signal for real estate values, it is usually correct.

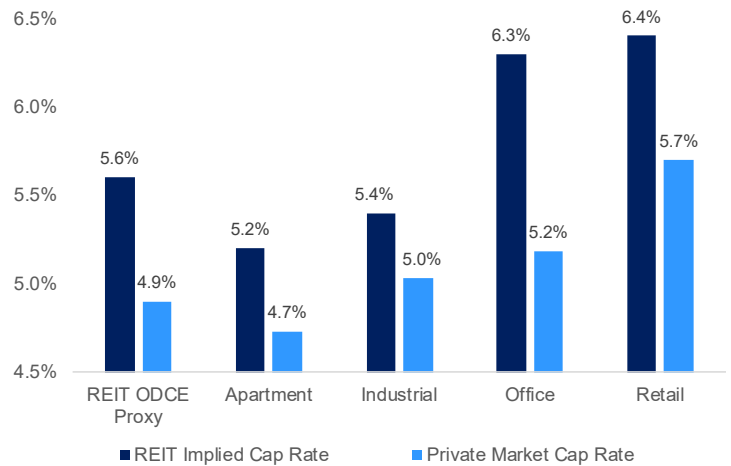
In response to moderating core real estate returns, many investors with new real estate allocations are seeking alternative ways to allocate the marginal dollar, while investors with large existing core allocations are assessing reallocation opportunities better suited for this economic and capital market environment. This situation is counter-intuitive for many investors who are used to core real estate being a safe haven, particularly later in the cycle. It also leaves investors with the challenge of mitigating late-cycle risk in these non-core options, the most significant of which is slowing economic growth.

REITs Reflect Higher Cap Rates

Current REIT market pricing offers a valuation advantage relative to private real estate, with stocks trading at a 16% discount to NAV, one of the widest discounts on record⁴, as they have already priced in significant cap rate expansion. The absence of a repricing headwind means that REITs have a much better chance than private real estate of delivering an organic return (yield plus cash flow growth) at this point in the cycle, which we estimate to be approximately 8% in 2019 (consisting of a 4.6% current dividend yield and 4% expected FFO growth)⁵. The relative valuation argument for REITs also holds true for the broader equity market. REITs have only been this deeply discounted relative to equities on a full cycle basis twice over last 20 years; the Tech Boom 1.0 (1998-2000) and the Global Financial Crisis (2008-2009).

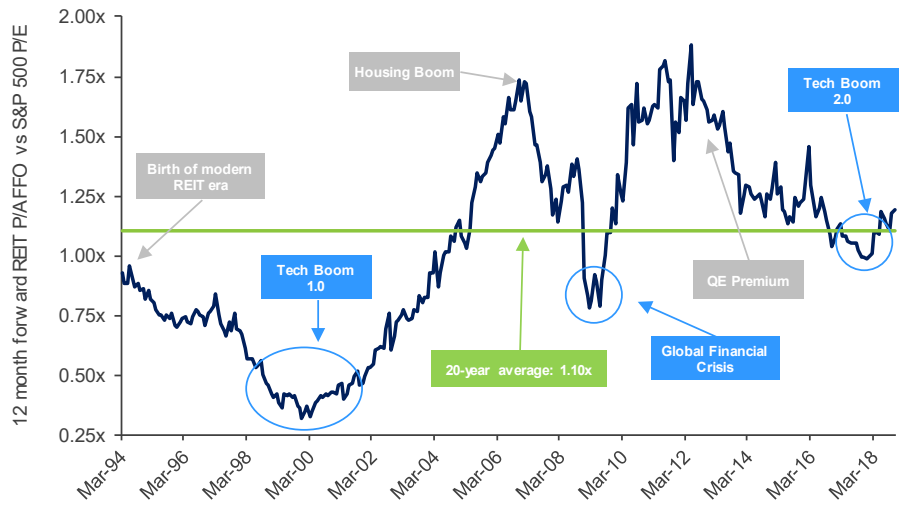
Of course, access to core real estate via the REIT market comes with higher measured volatility relative to private real estate given daily pricing. This should not matter for long-term investors, however, particularly as the benefit of the more transparent pricing for REITs is that the REIT market already reflects the downside risk to private real estate values from higher cap rates. In fact, over the last 3 years REITs have underperformed ODCE by 19% on a cumulative basis, in spite of having a similar underlying real estate exposure and leverage structure⁶.

Figure 1: Private vs. REIT Implied Cap Rates



Source: CenterSquare implied cap rate research, as of December 31, 2018. REIT Implied cap rates are generated by a proprietary calculation that divides a company's reported net operating income ("NOI") adjusted for non-recurring items by the value of its equity and debt less the value of non-income producing assets. See the full CenterSquare REIT Cap Rate Perspective report at www.centersquare.com for more information.

Figure 2: Historical Relative Valuations (REITs & Equities)



Equities based on S&P 500, REITs based on the FTSE Nareit Equity REITs Index. Source: Bloomberg, as of November 30, 2018. Average covers 20 years ending November 30, 2018.

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Creating NOI Through Value Add Real Estate

Value add investing is a proactive way to generate returns by taking advantage of solid fundamentals and creating NOI, rather than worrying about the future pricing of NOI (i.e. if cap rate expansion will impair returns in a core allocation). In addition, we believe that value add investing is at the start of a long-term secular bull market. This is driven by the need for real estate assets to “catch up” with the dramatic changes that we have seen in the economy and society, but where there is also a lack of debt capital available for redevelopment.

An important driver of value add opportunities is the adaptive re-use of existing assets, whereby a well located and constructed asset may have become obsolete relative to the needs of the market, but has the opportunity to be transformed to become not only relevant to prospective tenants, but unique. In every aspect of our economy, advancing technology and evolving demographics are fueling significant changes in demand patterns. By its very nature, our physical infrastructure lags changes in underlying demand and today there is a potentially decade-long need for much of our existing real estate to be transformed to meet the demands of the new economy, creating a very favorable demand back drop for value-add investing.

Examples of these opportunities are prevalent across real estate sectors. Office space is increasingly used as a tool for companies in the new economy to attract the best talent, and these companies are seeking open, aesthetically pleasing, amenity-heavy space that maximizes convenience, community culture and efficiency. The composition of housing has shifted in the new economy with a decrease in ownership and corresponding increase in renters. As a result, apartment product needs to appeal to a deeper and broader tenant pool that is renting longer and transitioning through life phases. In retail, consumers prefer experiential or necessity-based shopping over traditional, commodity retail that can be supplanted with the convenience and price transparency of e-commerce. To support this, obsolete retail real estate needs to be transformed, and industrial infrastructure adapted to efficiently manage inventory, transport and delivery of e-commerce goods.

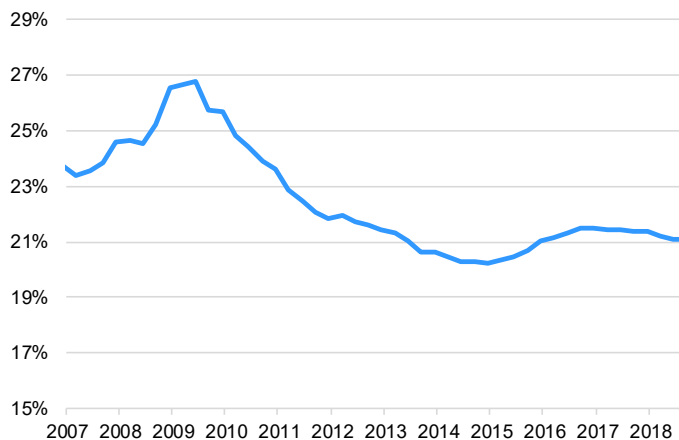
Successful value add investing involves identifying existing, underutilized real estate and targeting capital expenditures to realize the full potential value of the asset. The ability to gain access to these opportunities at an attractive basis has been enhanced this cycle by the lack of debt capital available for redevelopment from traditional financial intermediaries, especially outside of gateway markets. Value add capital has helped fill this void. Equity can be employed to finance the initial riskier acquisition and redevelopment phases of a project, overcoming the lack of competitive debt capital available for these projects. When the project is de-risked and the leasing phase commences, debt financing becomes much more plentiful and competitive, which can then be used to leverage the transaction and boost returns.

The ability of value add capital to bridge the gap between an existing vacant or obsolete asset to the creation of a repositioned, cash flow generating investment is a key competitive advantage of value add capital, that if done well can create very attractive risk-adjusted returns. That being said, a short-term risk to value add allocations at this point in the cycle is ensuring enough runway to implement business plans and realize gains ahead of the next economic downturn. We believe a way to mitigate this risk is making sure a fund's size is appropriate to allow quick deployment of capital and execution of business plans within a 2-3 year window.

Investing in America's Infrastructure at a Discount

Another way for investors to address moderating core returns with a real asset alternative is via infrastructure. Infrastructure benefits from a number of secular investment tailwinds and less sensitivity to economic variability given inelastic demand structures. Infrastructure investments can include utilities, transportation (roads, bridges, rail), energy (pipelines) and communication (data centers, cell towers). The secular trends of global population growth, increasing prevalence of urbanization, and the need to modernize our infrastructure and develop new assets provide a strong fundamental backdrop, while portfolio optimization models and diversification studies illustrate the benefits to investors of infrastructure allocations. These characteristics have not been lost on the institutional investment community and in recent years,

Figure 3: Real Estate Loans, All Commercial Banks, Seasonally Adjusted as % of GDP



Source: The Fed as of 9/30/2018.

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interest in private equity infrastructure has skyrocketed, leading to a backlog of approximately \$150 billion in dry powder committed to but not yet invested in private equity infrastructure funds⁷. CenterSquare has addressed this issue by accessing the opportunity in infrastructure via listed infrastructure equities, which not only avoid the private fund queues but also provide up to a 30% discount to private market values⁸. Listed infrastructure is also ripe for active management, with the application of specialized institutional knowledge to an under-covered space allowing the exploitation of pricing inefficiencies.

Today is a challenging time for real estate allocators. As the economic cycle ages, the traditional “safe haven” of core real estate may represent the biggest medium-term risk to the performance of a real estate allocation. We believe that 2019 could be a difficult vintage year for core real estate investments if not balanced in a dynamic way with more well-positioned options like REITs, value add strategies and alternative real assets.

Figure 4: Asset Class Performance Across Inflation Regimes

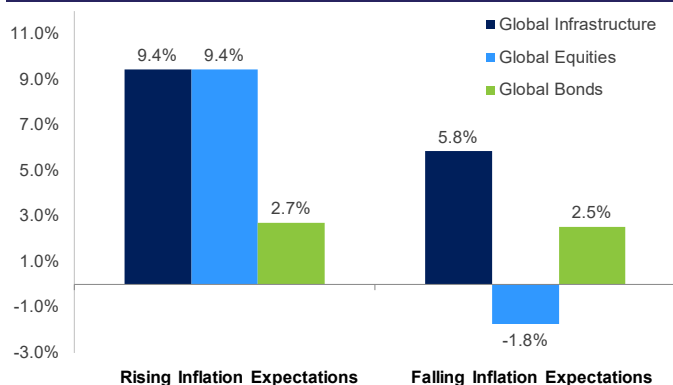
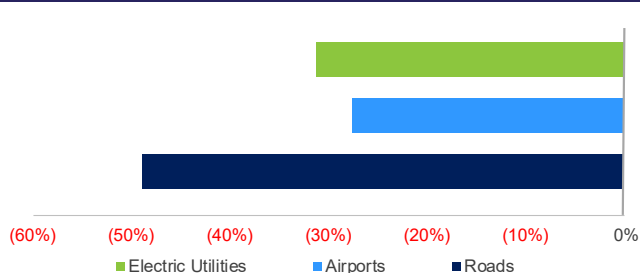


Figure 5: Listed Infrastructure Valuations vs. Private Shows Large Discounts



Source: CenterSquare, company reports, as of December 31, 2018. Discounts to Private Market Values are based on EV/EBITDA multiple in listed market relative to recent private market acquisition multiples.

Equities Data presented is as of December 31, 2018. Returns are for periods of rising/falling inflation expectations since 2004 as measured by the University of Michigan Mean Expected Change in Prices Index. Asset class returns and risk were calculated using established indices as proxies. A full list of these indices and their definitions is provided at the end of this document.

¹ Source: CenterSquare Investment Management, as of December 31, 2018. See Figure 1 for more information and calculation methodology. Private Market Cap Rates represent the cap rate achievable in the private market for the property portfolio owned by each company, and are based on estimates produced by CenterSquare’s investment team informed by various market sources including broker estimates. REIT Implied Cap Rates are based on a proprietary calculation that divides a company’s reporting net operating income (“NOI”) adjusted for non-recurring items by the value of its equity and debt less the value of non-income producing assets.

² Source: CenterSquare, NCREIF, based on net flows experienced by the NCREIF Open End Diversified Core Equity Index, as of September 2018.

³ Source: CenterSquare Investment Management, as of December 31, 2018. See Figure 1 for more information and calculation methodology.

⁴ Source: FTSE Nareit Equity REITs Index, as of December 2018

⁵ Source: FTSE Nareit Equity REITs Index, ISI projections, CenterSquare estimates, as of December 2018

⁶ Source: FTSE Nareit Equity REITs Index, NCREIF Open End Diversified Core Equity Index, as of September 2018.

⁷ Source: Preqin, as of March 2018

⁸ Source: CenterSquare, company reports, as of April 2018. Discounts to Private Market Values are based on EV/EBITDA multiple in listed market relative to recent private market acquisition multiples.

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Definition of Indices

Global Equities: MSCI World Index

Global Infrastructure: For periods after 12/31/2005, FTSE Developed Core Infrastructure 50/50 Index. For periods prior to 12/31/2005, Dow Jones Brookfield Global Infrastructure Index.

Global Bonds: JP Morgan Global Aggregate Bond Index

FTSE Nareit Equity REITs Index

The FTSE Nareit U.S. Real Estate Index includes all tax-qualified real estate investment trusts ("REITs") that are listed on the New York Stock Exchange, the American Stock Exchange and the NASDAQ National Market List. The index constituents span the commercial real estate space across the US economy and provides investors with exposure to all investment and property sectors.

NCREIF ODCE

(short for NCREIF Fund Index - Open End Diversified Core Equity)

The ODCE, short for NCREIF Fund Index - Open End Diversified Core Equity, is the first of the NCREIF Fund Database products and is an index of investment returns reporting on both a historical and current basis the results of 36 open-end commingled funds pursuing a core investment strategy, some of which have performance histories dating back to the 1970s.

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About the Author



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Mr. Scott Crowe is the Chief Investment Strategist at CenterSquare Investment Management and joined the firm in 2015. Scott is a member of CenterSquare's listed real estate, listed infrastructure and private real estate investment committees. In his capacity as Chief Investment Strategist, Scott works with each team's portfolio managers and investment professionals in the leadership of the investment process, with a particular focus on thought leadership by synthesizing our real asset views across the business. Scott is the portfolio manager of the Global Concentrated real estate securities strategy. Scott also works directly with CenterSquare's clients, providing education and guidance on the market and helping them execute their investment goals. Prior to joining

CenterSquare, Scott was CIO of Liquid Alternatives at Resource Real Estate where he built and led a global investment and distribution platform. Prior thereto, Scott was the lead Global Portfolio Manager for Cohen & Steers, where he was responsible for \$10B in assets under management and led the investment and research team of over 20 portfolio managers and analysts. Prior to this, Mr. Crowe held the position of Head of Global Real Estate for UBS Equities Research, where he built and managed the U.S. REIT division while leading a global team of more than 40 analysts. Scott began his career at Paladin Property Securities and holds an Honors Finance Degree from the University of Technology Sydney and a Bachelor of Commerce from the University of NSW / National University of Singapore.

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CenterSquare Investment Management is headquartered in suburban Philadelphia, with offices in Los Angeles, Denver, London and Singapore. CenterSquare is proud to manage investments on behalf of some of the world's most well-known institutional and private investors.

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