



**PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS**

MAY 2019
Real Assets Outlook

Table of Contents



VERUSINVESTMENTS.COM

SEATTLE 206-622-3700

LOS ANGELES 310-297-1777

SAN FRANCISCO 415-362-3484

Executive summary 3

U.S. economics – Inflation 5

Outlook summary 7

Current conditions and
outlooks 11

Appendix 31

Executive summary

Key themes for 2019

Observations driving our outlook

Deflation concerns weigh more on the minds of investors than inflation

Inflation fears have been subdued in the market over the past year. Both core CPI and headline CPI have been declining over the past nine months and came in at 2.0% and 1.9% respectively in March. Over the past twelve months, core CPI has ranged between 2.0 and 2.3%, near the Fed's inflation target. At this stage of the market cycle, we view the risk of deflation from an economic slowdown to be of greater concern than unanticipated inflation.

Commodity price volatility testing the patience of many investors

Commodity futures likely hold the title for the worst performing asset class over the last 5, 7 and 10-year periods. The Bloomberg Commodity Index has returned a negative 3.8% annually over the trailing 10 years. While it is tempting to conclude that commodities present an opportunity, given the significant underperformance of the asset class, it is difficult to determine whether commodities offer value in the current environment. Our inability to estimate a fair value or confidently project future price movements has led us to a bearish stance in this year's outlook. For investors who are able and willing to take on additional equity risk, we believe investing in commodity producers may be a preferred approach for gaining commodity exposure in the current environment.

We remain conservatively positioned in real estate

Real estate fundamentals have remained fairly stable with overall declining vacancies and increasing NOI. Valuations continue to climb, and cap rate spreads have returned to average levels. New supply has been moderate with some pockets of excess. Our outlook has changed to neutral as returns have continued to moderate to "normal" levels. Appreciation continues to slow with income becoming a larger portion of overall returns. We favor more conservative strategies with strong cash flows and hands-on asset management. We remain cautious with leverage, illiquidity, quality and long duration value creation strategies.

Oil/Gas industry investment conundrum

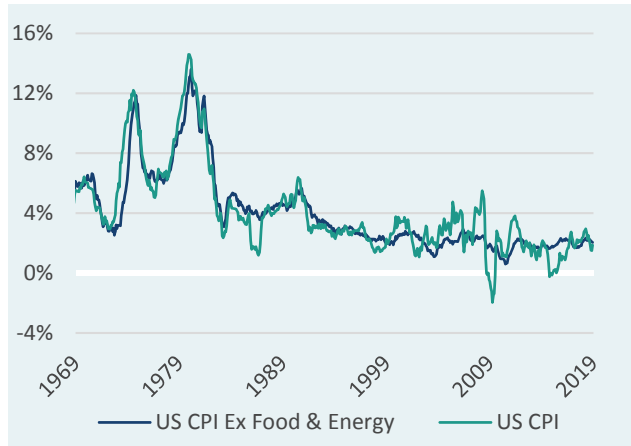
It is fair to say that the least popular industry, at the moment, is the oil/gas industry. Listed Exploration & Production (E&P) companies appear quite cheap, despite improved balance sheets, greater capital discipline and higher oil prices. Fundraising within private energy is as challenging as we've seen in many years. Many institutions from endowments to public pensions are slowing or halting new commitments to upstream energy funds. M&A activity in the upstream market has stalled. In most other industries this would create an attractive investment opportunity, but we would practice restraint.

U.S. economics – Inflation

U.S. economics – Inflation

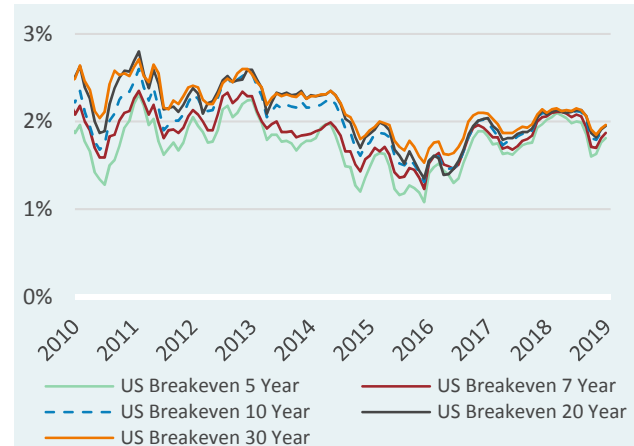
- Core CPI has remained in a tight range between 2.0% and 2.3% for each of the last 12 months, most recently coming in at 2.0% in March.
- Headline CPI moved up to between 2.5% and 2.9% in mid 2018 but has since fallen to a range of 1.5% to 2.5% since. In March, headline CPI was 1.9%, still at levels below that seen in typical late-cycle periods. The Fed appears hesitant to hike interest rates, and has indicated a willingness to let inflation drift slightly higher than the stated 2% inflation target. However, we believe weaker inflation is more likely to materialize.
- In most late-stage business cycles, real assets are often the best performing asset classes due to rising inflation. This cycle appears unique for a number of secular reasons (globalization, automation, low GDP growth, etc.) but there is always some probability that we are wrong, and history repeats itself, in which case it will be advantageous to have exposure to assets which perform well when inflation exceeds expectations.

U.S. CPI (YOY)



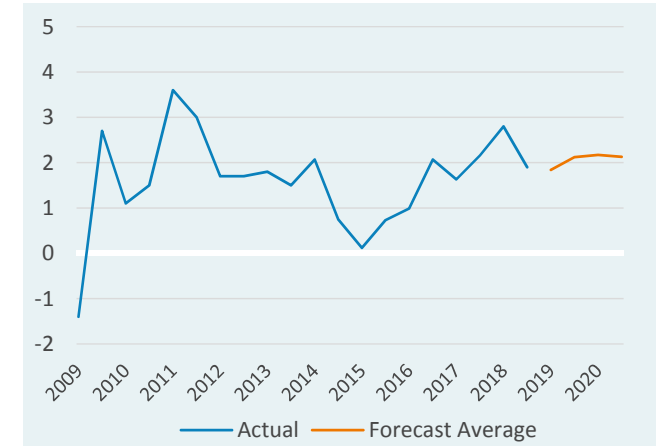
Source: FRED, as of 3/31/19

U.S. TIPS BREAKEVEN RATES



Source: FRED, as of 3/31/19

INFLATION EXPECTATIONS



Source: Wall Street Journal, 3/31/19

Outlook summary

Outlook summary

Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Private Real Estate	Real estate fundamentals have remained fairly stable with overall declining vacancies and increasing NOI. Valuations continue to climb, and cap rate spreads have returned to average levels. New supply has been moderate with some pockets of excess.	<ul style="list-style-type: none"> — A general economic slowdown may drastically impact demand for real estate. — New supply could increase ahead of current projections and outpace demand. — A sharp rise in interest rates could lead to increased cap rates, hurting values. 	Our outlook has changed to neutral as returns have continued to moderate to “normal” levels. Appreciation continues to slow and income is a larger portion of overall returns. We favor more conservative strategies with strong cash flows and hands on asset management. We remain cautious with leverage, illiquidity, quality and long duration value creation strategies.	Neutral
REITS	REITs started the year as the top performing major asset class in 1Q’19. This is following several years of underperforming the equity markets. REITs have benefitted from the overall strength of the real estate market but were depressed by concerns over rising interest rates and a rotation away from yield-oriented assets. REITs now appear to be fairly valued-to-slightly overvalued.	<ul style="list-style-type: none"> — Rising interest rates can have a negative effect on REITs and all yield-sensitive assets over short time periods. — REITs are sensitive to economic decline and general equity market volatility. 	We remain neutral on REITs given current valuations appear fair-to-slightly overvalued. REITs can provide liquid exposure to real estate with the following caveats: high sensitivity to equity market volatility over shorter holding periods, higher leverage and higher exposures to non-core sectors such as hotels, self-storage, for-rent residential, etc.	Neutral
Commodities	Commodities futures have had lackluster performance over the last decade. An upward sloping futures curve for most of the last decade has created a headwind for the asset class. In most commodities, contango continues to create a drag on performance.	<ul style="list-style-type: none"> — Supply responses surprising the market to the upside. — Global growth slowing down, reducing demand for energy and industrial metals. 	Commodity futures continue to face headwinds as futures trade in contango across most commodities. The uptick in interest rates has helped margin returns and prices have stabilized across metals and energy but we expect the asset class to generate low returns going forward.	Negative
TIPS	Low nominal interest rates combined with low to moderate inflation has led to a depressed return environment for TIPS.	<ul style="list-style-type: none"> — Decreasing inflation expectations or rising nominal interest rates would be a headwind to TIPS. Continued low rates create a high cost of carry. 	Low current yields and modest inflation expectations has led to other real assets offering higher total return potential than TIPS.	Negative

Outlook summary (continued)

Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Infrastructure	The early sell-off in listed infrastructure equities during 2018 appeared to signal a welcomed revaluation in the industry but public equities have largely recovered since. Meanwhile, valuations stayed elevated within private markets throughout the volatility. Large sums of capital continue to pour into the private infrastructure market intensifying an already competitive market.	<ul style="list-style-type: none"> — Last year we highlighted rising rates as a headwind to yield-oriented investments. That appears to have dissipated as central banks focus more on slowing economic growth — Assets that are sensitive to growth in GDP carry greater risk today. We would be cautious about deals in transportation where valuations remain rich despite heightened risk of an economic slowdown. 	The asset class offers a compelling return profile that aligns well with long duration pools of capital. We favor private infrastructure funds that have capabilities to improve operations and manage complex deal structures. We would avoid heavy exposure to GDP sensitive assets where volume and pricing risk are present.	Neutral
Oil & Gas	Oil prices have rebounded nicely in 2019, most recently trading around \$65/bbl for WTI. Gas prices have reversed course after reaching seasonal highs and are now trading around \$2.3/Mbtu. Up till now, the energy upstream industry has faced a hostile public and private market as fund flows into the sector have trended away. Whether capital returns in 2019 and company valuations re-rate higher is an open question. Until then, it is likely that private energy funds will struggle to find liquidity for their holdings.	<ul style="list-style-type: none"> — Last year we highlighted the significant volume of dry powder that was waiting to be invested. Given the challenging fundraising environment in 2018, dry powder is less of a concern. However, transactions in the industry have collapsed leading to a scarcity of exit options for private funds. — Future demand growth is a key risk that is incredibly difficult to project. The impact of shifts in oil consumption could lead to significant terminal value risk. 	Given valuations and a lack of access to capital, there will be interesting investment opportunities within the upstream energy market. Given our concerns around terminal value risk, we would look for shorter duration investment opportunities. Investments where the bulk of your capital can be returned within 3-5 years represents a more attractive risk/return.	Neutral
Mining	Despite some fits and starts in the last 3 years, mining has been a challenged sector since 2013. Excess supply in several metals has contributed to low prices, low capital expenditure and weak capital flows. A slowdown in global GDP could present a headwind to the industry but the supply/demand dynamics look favorable for several industrial metals longer term.	<ul style="list-style-type: none"> — Global GDP growth and the economy in China are the two biggest risks in the sector. China represents a disproportionately large buyer of industrial metals, so its economy has a large impact on metal prices. 	Longer-term, we think the supply picture looks favorable for several industrial metals. Investing in mining private equity is challenging, not only because the sector is especially volatile, but the pool of attractive GPs is quite small. Our primary exposure to the sector is to invest through the debt side of a mining project. Mining project finance offers an attractive mid-teen return with high income and an equity kicker.	Positive

Outlook summary (continued)

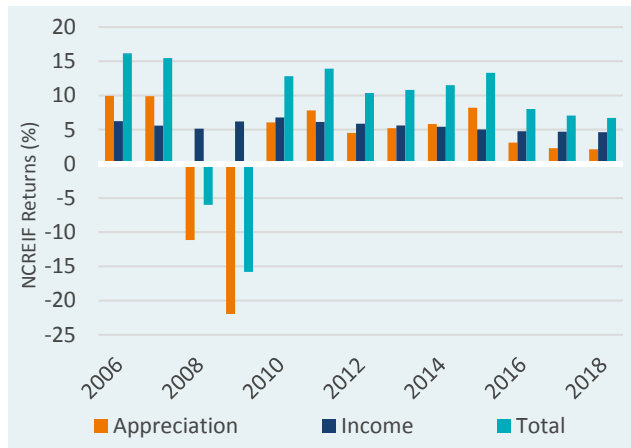
Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Midstream Energy / MLPs	We highlighted a tactical opportunity in MLPs in April of last year. The sector moved higher during the summer but sold-off again in Q418. We still believe there is a compelling opportunity within the asset class, especially relative to private midstream where transactions are priced well above public market comps.	<ul style="list-style-type: none"> — Falling oil/gas prices could curtail drilling programs and reduce production volumes which would hurt MLP cash flows. — Regulatory risk is low and though recent headlines around the Federal Energy Regulatory Commission (FERC) rules changing cost pass-throughs created selling pressure the end result was de minimis for most MLPs. 	MLPs are currently providing a healthy 7+% dividend yield and distribution growth has recovered to a range of 4-6%. In addition, nearly 90% of the MLP sector has eliminated their IDRs and simplified their ownership structure. The sector has made impressive changes in a short time period by improving financial strength, growing cash flow and creating better alignment of interests.	Positive
Timberland	Timber markets in North America continue to face challenges from excess inventory, low interest rates and unfavorable transaction market. Trade wars have impacted timber prices in regions that export trees while somewhat benefiting growers that sell into the U.S. market. Our outlook on timber has been negative for several years due to the headwinds the asset class has faced. Despite broadly negative sentiment towards the timber industry, we struggle to make a case for returns to reach higher than mid-single digits.	<ul style="list-style-type: none"> — Trade wars have both helped and hurt domestic timber markets depending on whether you export or sell into the U.S. market. Investors should be more concerned with homebuilding trends which will have a greater impact on most timber holdings in the U.S. — Timber markets outside the U.S. face varying degrees of currency and political risk which in many cases has resulted in disappointing returns for investors. With few exceptions, returns do not justify the additional risk. 	For most investors, high single-digit expected returns for timberland in the U.S. is too low for the illiquidity and risk assumed within the asset class. However, the unique return drivers and potential for higher than expected prices in softwood lumber may be attractive for some investors with sufficient liquidity and a low cost of capital.	Negative
Agriculture	Farmland prices in the Midwest leveled off after 2014 but remain too expensive for the income and return potential. We are interested in opportunities where we can control more of the value-chain associated with food production.	<ul style="list-style-type: none"> — Similar to timber markets, we have concerns around valuations and the risk/return proposition for farmland investments. — The income potential within farmland is more attractive than timber and the global growth in food is a more compelling macro trend than pulp and paper but we remain bearish on the sector, in general. 	Currently we find the asset class to be broadly expensive. Selectively looking at agriculture business investments where crop and land are a component of a broader value-add investment strategy.	Negative

Current conditions and outlooks

Real estate performance – Recent history

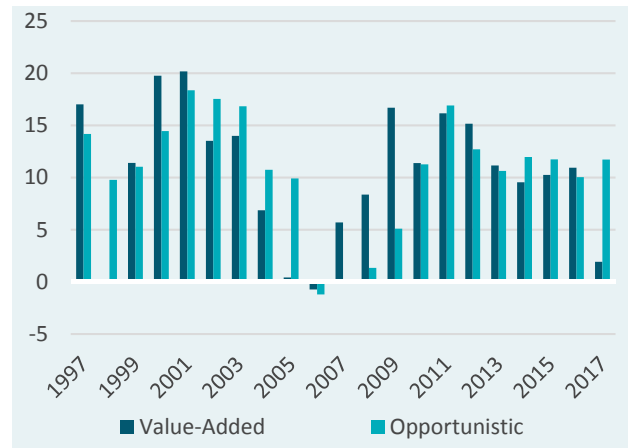
- Core real estate returns have moderated over the last three years back to “normal” levels of 6-8% total returns. Appreciation has slowed while income has remained near 5% for several years, becoming a larger component of total return.
- Correlation between GDP growth and core real estate returns has historically been very high. In the last few quarters, GDP has ticked up slightly higher while real estate returns have moderated.
- Non-core returns have been strong since the last recession with fairly consistent double digit returns for both value-add and opportunistic real estate. Some of the best non-core real estate vintage years occur during recessionary years and early recovery periods (2000-2003 and 2009-2012) as market dislocations created attractive entry valuations.
- Late stage vintage years for non-core have historically been the most challenged (1998-1999) and (2005-2007).

NCREIF RETURNS



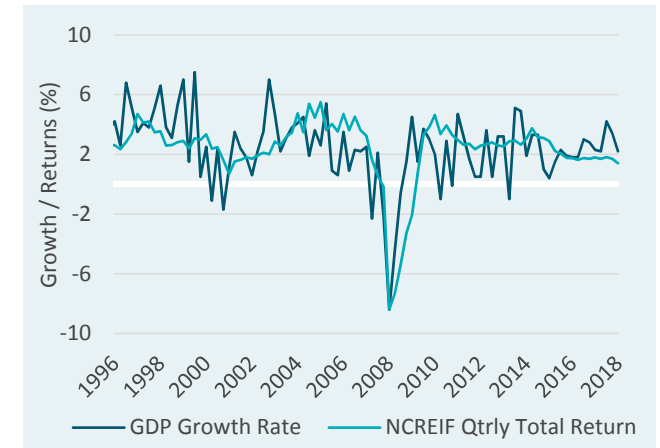
Source: NCREIF, as of 12/31/18

**VINTAGE YEAR MEDIAN RETURN (%)
NON-CORE REAL ESTATE**



Source: Thomason Reuters, as of 9/30/18

REAL ESTATE AND THE BUSINESS CYCLE

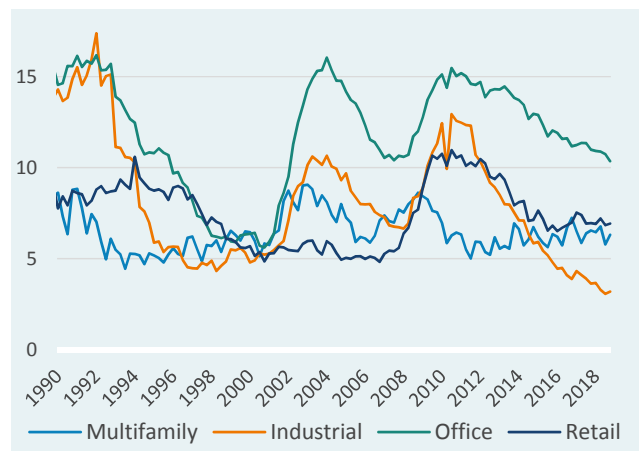


Source: NCREIF, Bloomberg, as of 12/31/18

Real estate fundamentals

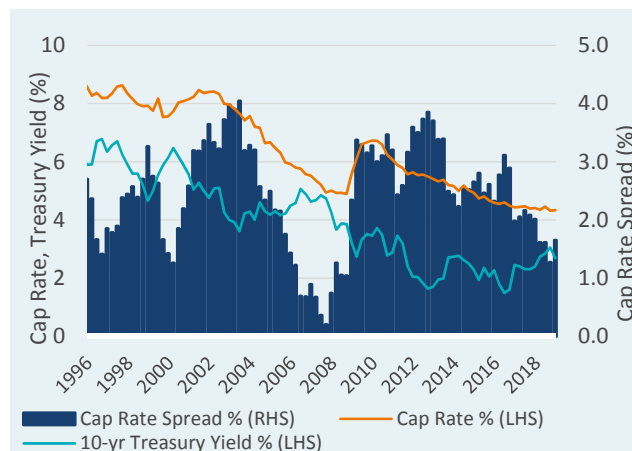
- Real estate fundamentals remain fairly healthy overall. Vacancy rates continue to either decline or remain flat for most property types. Multifamily has experienced a slight upward trend after being the first property type to recover from the prior recession. E-commerce tailwinds have driven industrial demand and net absorption, while providing a challenge to traditional brick and mortar retail. Office vacancies continue to decline with slow and steady GDP growth, but face headwinds with more efficient use of office space and technological improvements/telecommuting.
- Cap rates continue to move in a steady downward trend and sit at historic lows. The spread versus the 10-year Treasury yield has crept back to historic averages however, providing some caution in the space. A cushion to rising rates remains, but not the same level as earlier in the cycle.
- Net operating income (NOI) growth has remained moderate to strong, led by industrial demand and modest new supply. Retail has been the laggard, but NOI has still remained positive.

VACANCY BY PROPERTY TYPE



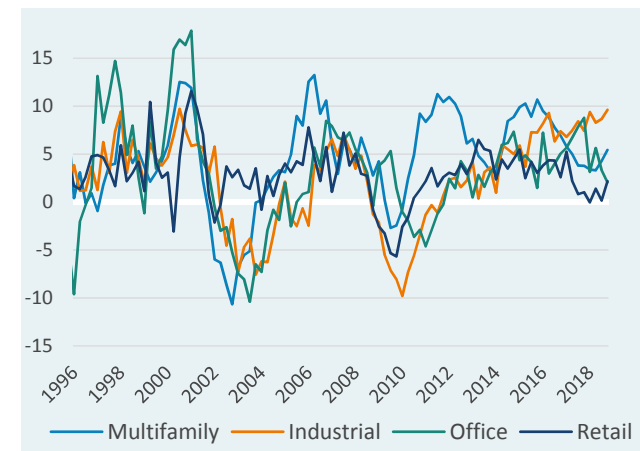
Source: NCREIF, as of 12/31/18

CAP RATE SPREADS



Source: FRED, NCREIF, as of 12/31/18

4-QTR ROLLING NOI GROWTH (%) BY PROPERTY TYPE



Source: NCREIF, as of 12/31/18

Real estate – New supply and absorption

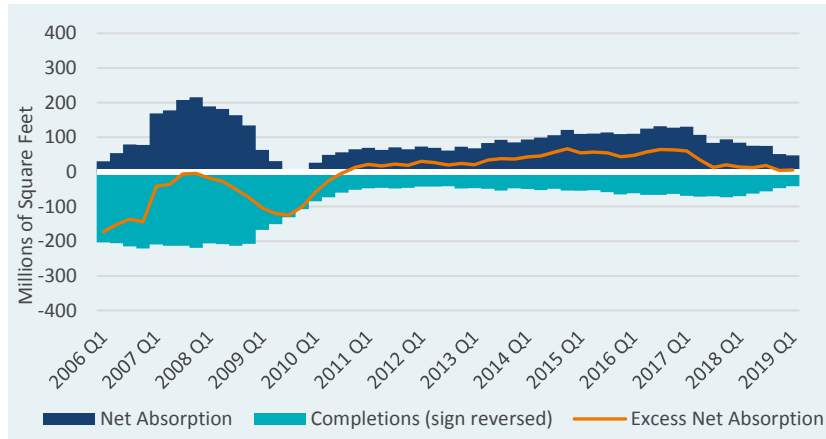
Overall, new supply/construction remains below peak levels of 2007-08

New supply has remained moderate in both office and retail, both well below prior peak levels.

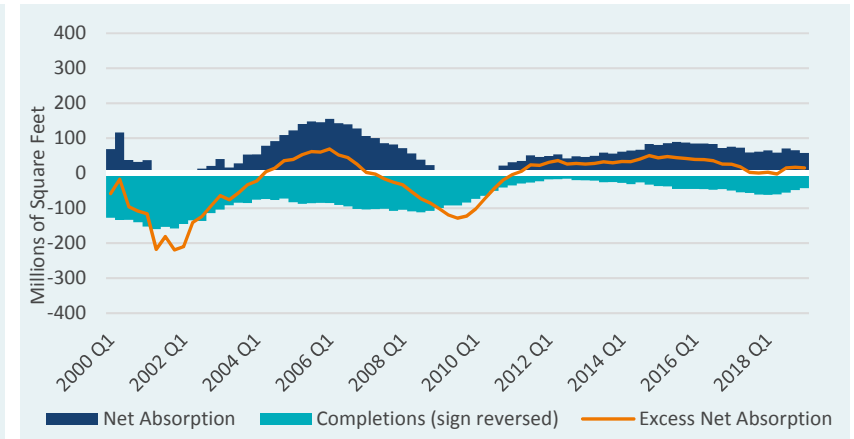
Industrial supply has been increasing to near peak levels, although just now starting to catch up to the strong demand driven by ecommerce trends.

Multifamily supply has hit record new highs the last several years, although declining home ownership and favorable demographic trends have kept demand in line with new supply.

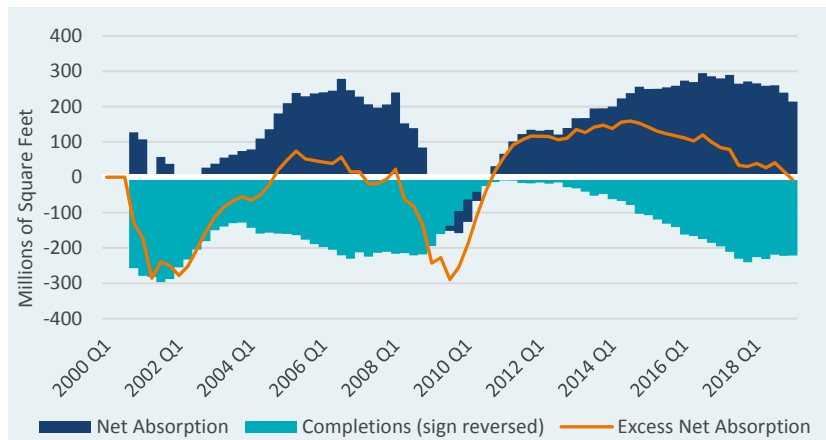
RETAIL SECTOR



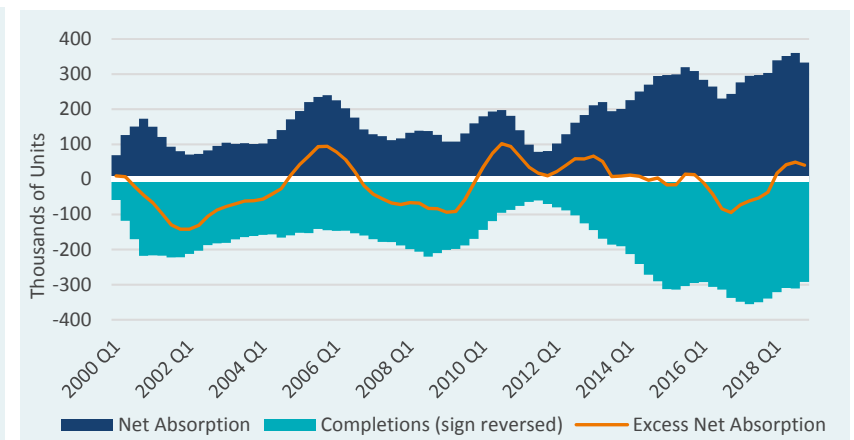
OFFICE SECTOR



INDUSTRIAL SECTOR



MULTIFAMILY SECTOR

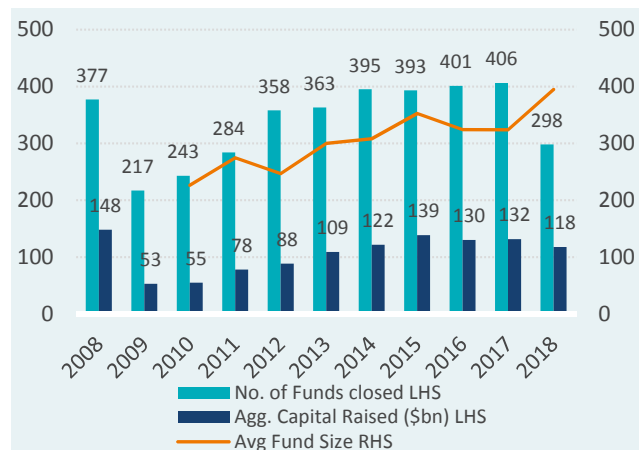


Source: American Realty, as of 3/31/19

Real estate fundraising

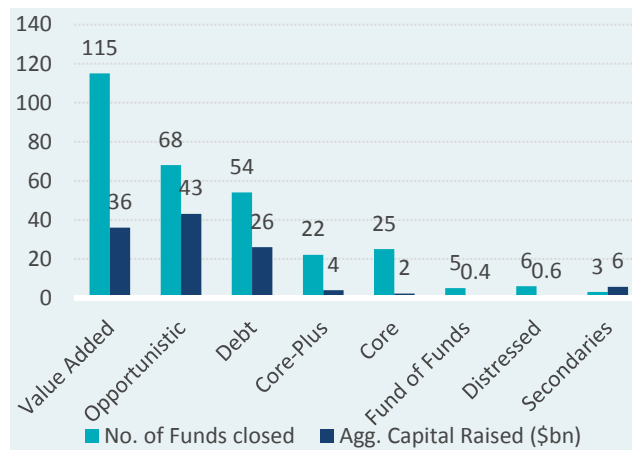
- The number of funds closed declined slightly in 2018, although the aggregate amount of capital raised remained fairly flat with a continued trend of larger fund sizes.
- Dry powder in the closed-end fund space has continued to rise to all-time highs, indicating managers are finding it challenging to put their capital to work.
- The majority of closed-end funds are targeting value-add strategies, while opportunistic funds raised the most capital and real estate debt funds saw the largest increase in interest as more competitors entered the loan market.
- Core open-end funds currently have over \$5 billion in investment queues with negligible redemption queues. The core space continues to receive strong competition from foreign buyers, especially in the gateway markets.

HISTORICAL PRIVATE REAL ESTATE CLOSED-END FUNDRAISING



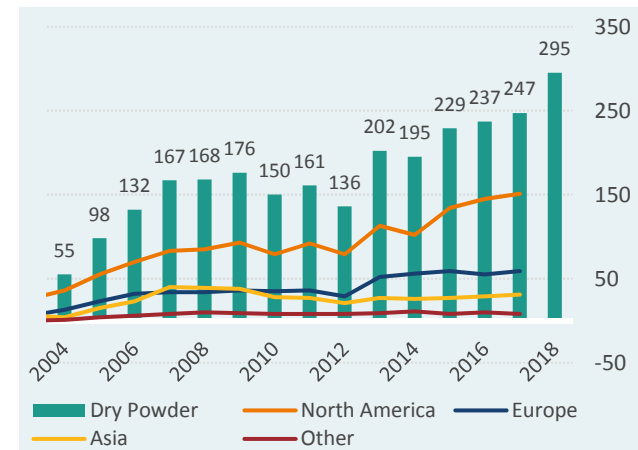
Source: Prequin, as of 1/31/19

2018 PRIVATE REAL ESTATE CLOSED-END FUNDRAISING BY STRATEGY



Source: Prequin, as of 1/31/19

DRY POWDER BY REGION – CLOSED-END FUNDS

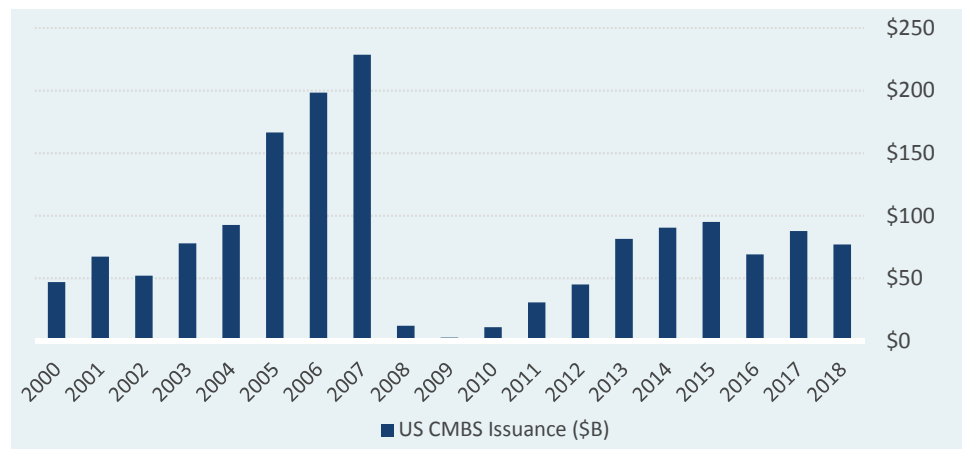


Source: Prequin, as of 1/31/19

Real estate debt

- Due to regulatory pressures for risk retention (Dodd-Frank) and increased capital requirements for “High Volatility Commercial Real Estate Loans” or HVCRE loans, traditional sources of lending from banks and insurance companies has declined, allowing private capital sources to step in and earn a premium for providing capital. CMBS Issuance in the US remains well below pre-crisis levels.
- Real estate transaction volumes have remained healthy and there will be a continued need for debt refinancing over the next several years.
- The potential returns for mezzanine loans on core-plus and light transitional assets or leveraged returns on senior whole loans on stable assets appear to offer a favorable risk versus return tradeoff and downside protection in comparison to real estate equity.
- We would be cautious about the riskier segment of the loan market (i.e. construction loans, structured equity, etc.).
- Lending spreads have been declining overall however with spread compression of 50-100 basis points across most loan types. Rising LIBOR rates have offset some of this, but increased competition in the private lending market has compressed returns.

SUMMARY OF US CMBS ISSUANCE



Source: Commercial Mortgage Alert

LENDING PREMIUMS

	Stable Asset Whole Loans	Transitional Asset Whole Loans	Lower Risk Mezzanine	Transitional Asset Mezzanine & Preferred Equity	Developmental Asset Mezzanine & Preferred Equity
Capital Stack	0 - 70% LTV	0 - 85% LTV	50-65% LTV	65-90% LTC	65 - 90% LTC
Duration	2-5 Years	2-5 Years	2-7 Years	2-4 Years	2-4 Years
Typical Lending Spreads	LIBOR + 1.0-1.5%	LIBOR + 2.75 - 3.75%	LIBOR + 3.5-4.5%	LIBOR + 5.0 - 7.0%	LIBOR + 9 - 14%
Est. Spread Compression Last 12 Months	-100 bps	-25 to 75 bps	-50 bps	-50 to 100 bps	-300 to 600 bps

Source: Brookfield

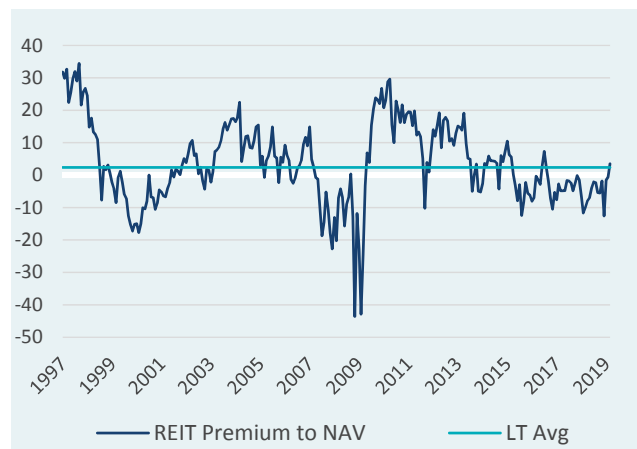
Private real estate summary

Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Core	Fundamentals have remained relatively stable to strong, however valuations are getting expensive and return expectations have moderated, especially in core assets. Cap rate spreads have returned to historical average levels. New supply, while increasing, continues to be absorbed.	<ul style="list-style-type: none"> — New supply could increase ahead of current projections and outpace demand. — A sharp rise in interest rates could lead to increased cap rates, hurting values. — A general economic slowdown would drastically impact demand for real estate. 	Appreciation has slowed, the majority of return is now coming from income. We recommend stable cash flowing assets with moderate leverage for downside protection and strong asset management capabilities.	Neutral
Value-Add	Competition has increased with growing dry powder and larger fund sizes. Many value added funds have lowered return expectations given the current environment. Demand for high quality core real estate assets has continued to be a tailwind for the space, however.	<ul style="list-style-type: none"> — Slowing demand for core real estate could lead to fewer buyers of value-add assets. — Any decline in demand due to an economic slowdown would likely impact renovation and lease-up strategies. — Capital flows moving up the risk spectrum could lead to increased competition. 	A flat to positive environment for core real estate should be a good environment for value-add. Increased capital raising in the space has led to additional competition however, squeezing returns. Given tighter return expectations, managers with strong asset management capabilities should be considered.	Neutral
Opportunistic	There continues to be fewer distressed opportunities available for opportunistic funds, especially in the U.S. Lending standards remain tight and construction are increasing, pressuring returns and limiting opportunity.	<ul style="list-style-type: none"> — A turn in the market might dramatically affect the performance of investments with a long time horizon, such as construction or complex distressed situations. — Increased capital moving up the risk spectrum could lead to increased competition. 	Fewer distressed opportunities should continue to put downward pressure on returns. We would caution against broad development strategies at this point in the cycle, especially speculative or long duration projects. We would recommend managers that have the ability to deploy capital cautiously until there is a market dislocation.	Negative
Debt	Traditional lenders, such as banks and insurance companies have reduced lending to commercial real estate, creating a need for capital. Lending spreads have tightened through increased competition, although LIBOR has risen offsetting some of this impact on total returns.	<ul style="list-style-type: none"> — Changes in regulations, such as the elimination or loosening of Dodd-Frank, could possibly lead to a re-emergence of banks and insurance companies in lending, increasing competition and reducing potential returns. — A further decline in spreads due to increased competition could pressure returns further. 	The risk-return profile for conservative commercial real estate loan origination, both senior loans and mezzanine loans, appears to be favorable compared to core real estate with some additional downside protection. These strategies can be implemented in both open-end and closed-end fund structures. Verus is not recommending higher risk construction loans at this point in the cycle.	Neutral

REITs

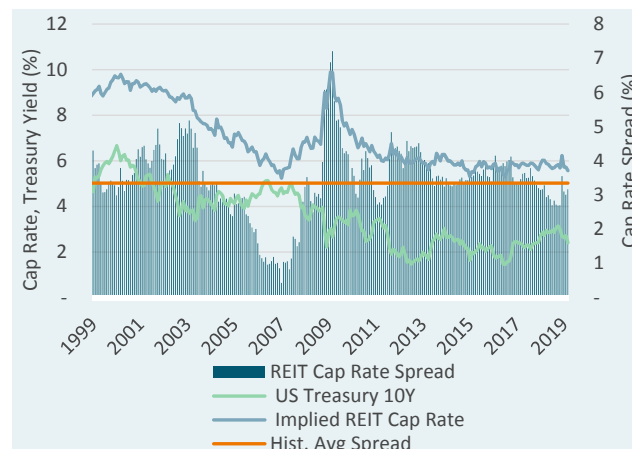
- REITs have bounced back early in 2019 as the strongest performing asset class in the first quarter with return of just over 19%. REITs had underperformed broader equities in 2017 and 2018 over concerns on rising interest rates.
- The 1st quarter has brought valuations back in line. The REIT premium to NAV was trading at a discount of nearly 13% at the end of December 2018 and now estimated to be at a premium of 3.5%, which has historically averaged around 2%.
- REITs also appear slightly rich based on implied cap rate spreads relative to Treasuries compared to history with a spread of 3.2% in March, relative to historic average of 3.4%. REITs also appear slightly rich relative to equities as measured by the adjusted funds from operations (AFFO) multiple in comparison to the S&P 500 forward P/E.
- REITs can provide liquid exposure to real estate with the following caveats: high sensitivity to equity market volatility over shorter holding periods, higher leverage and higher exposures to non-core sectors such as hotels, self-storage, for-rent residential, etc.
- Verus recommends utilizing active management in REITs with managers that have significant private real estate expertise.

REIT PREMIUM TO NAV



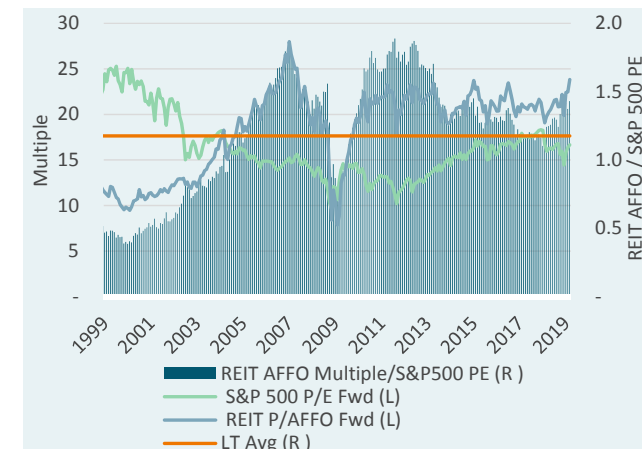
Source: JPMorgan, as of 4/15/19

YIELDS (VS. TREASURIES)



Source: JPMorgan, as of 4/15/19

VALUATION (VS. EQUITIES)

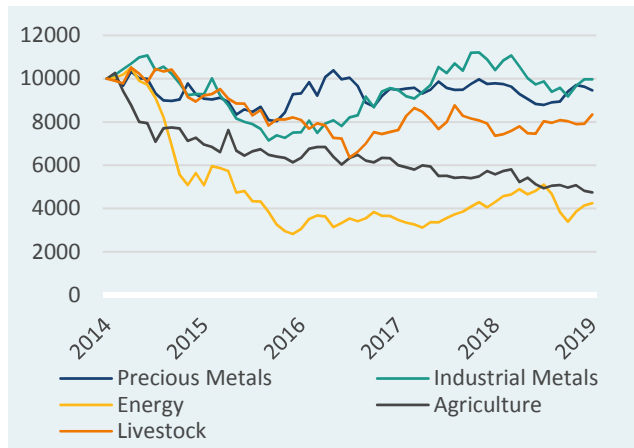


Source: JPMorgan, as of 4/15/19

Commodities

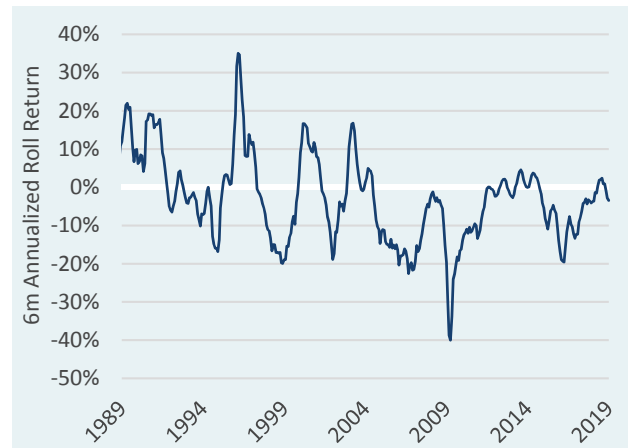
- Commodities have continued to have lackluster performance over the past decade, delivering negative returns through the global financial crisis and the recent oil crisis. Trailing 10-year returns for the Bloomberg Commodity Index through March 2019 was -2.6%. Much of this performance has been caused not by price movement, but by the shape of commodity futures curves. An upward sloping curve creates a drag for investors as a higher price is paid to enter each futures contract, and a downward sloping curve creates positive carry for investors as prices paid for futures contracts are lower. This premium/discount is a major determinant of commodity performance and is known as “roll yield”. Roll yield can be negatively affected by commodity crises as current contract prices drop further than distant prices and the curve becomes steeper.
- As commodity prices moderate, futures curves have flattened and negative roll yield has begun to dissipate, even turning positive briefly in late 2018. Oil in particular significantly impacts overall roll yield due to its large weight in commodities indices. Oil has exhibited a backward-dated curve shape over the past year. We are continuing to monitor these effects since a neutral or positive roll return would improve commodity returns.

SECTOR PERFORMANCE



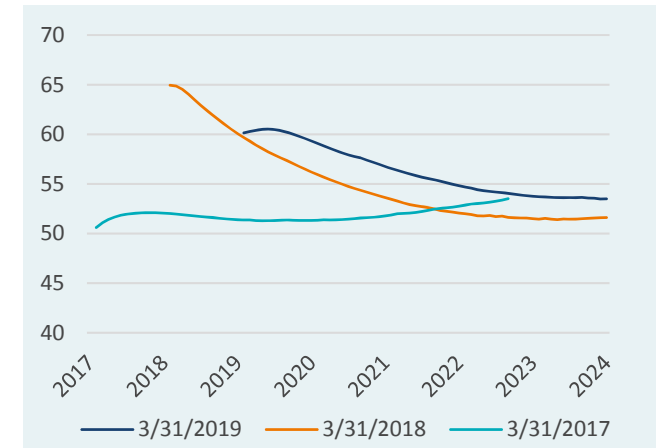
Source: Bloomberg, as of 3/31/19

ROLL RETURN



Source: Bloomberg, as of 4/12/19

CURVE SHAPE (WTI)

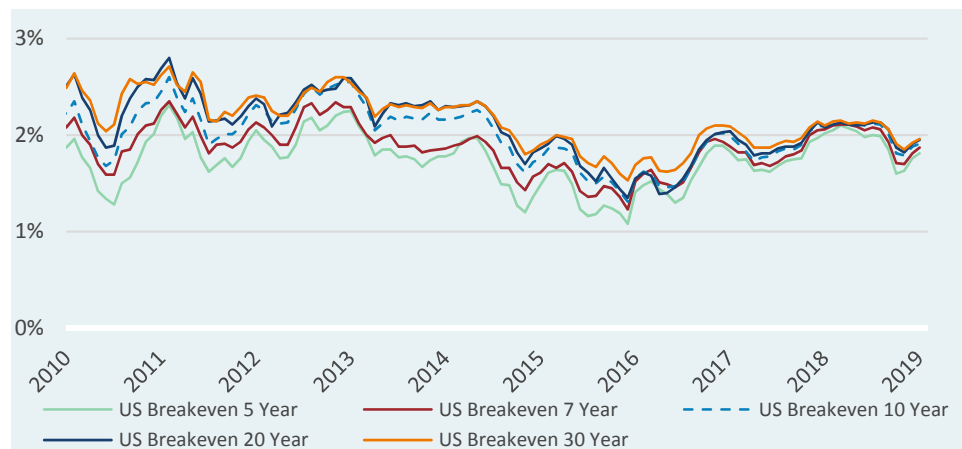


Source: Bloomberg, as of 3/31/19

TIPS

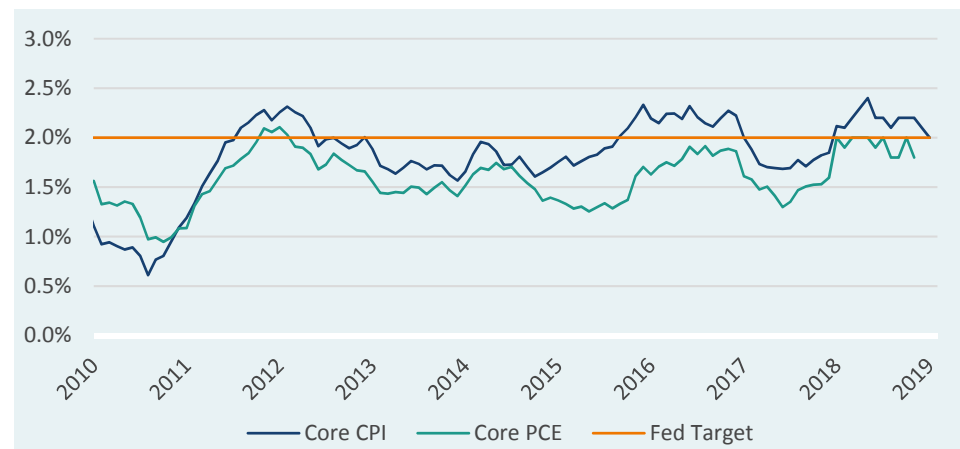
- Any inflationary concerns that were starting to bubble up early 2018 have dissipated as inflation has been trending downward over the last 12 months and now sit at or below the Fed inflation target of 2%, and remain below historical averages.
- TIPS 10-year breakevens have risen from 1.7% at the end of 2018 to 1.9% at the end of March, while the 30-year breakevens are right at 2%.
- Due to low inflation and nominal rates, TIPS returns have been very lackluster. The Barclays U.S. TIPS Index has returned 2.7%, 1.7% and 1.9% over the last 1-, 3- and 5-years respectively. Over the past 10 years the return for the index was 3.4%.
- Over the intermediate-term, we believe TIPS appear less attractive relative to other real assets from a total return perspective because of low carry. Other real assets will likely do better in a stable growth environment, such as private real estate and natural resources.
- TIPS may retain a place in long-term strategic allocations to inflation protecting assets within fixed income and should help hedge against unexpected inflation shocks.

U.S. TREASURY BOND RATES



Source: FRED, as of 3/31/19

CURRENT INFLATION VS. FED TARGET

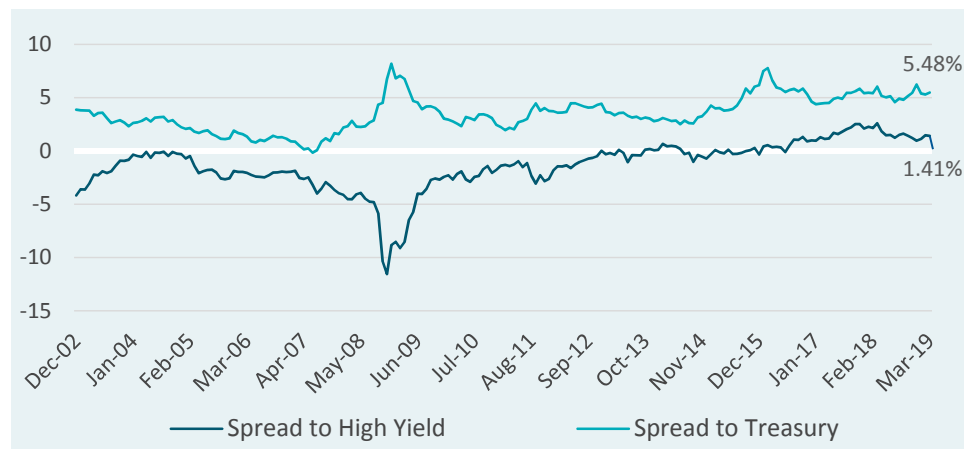


Source: FRED, as of 3/31/19

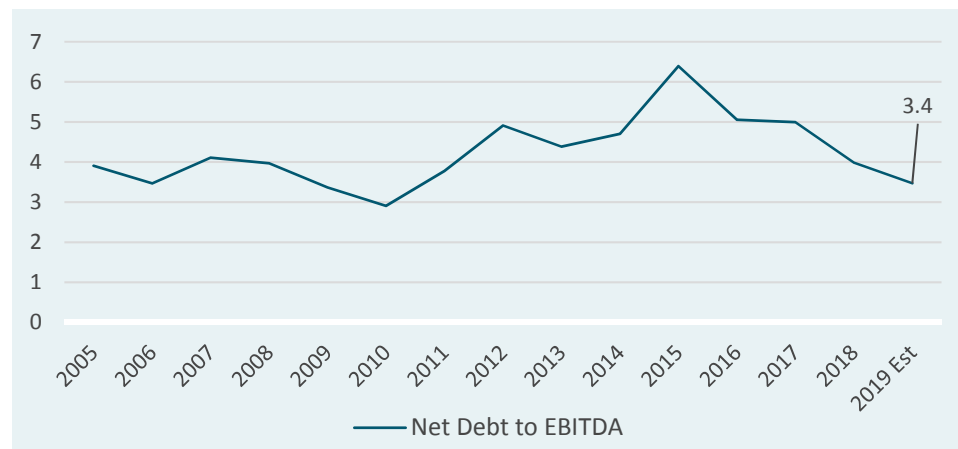
Midstream energy/MLPs

- After a difficult 2nd half of 2018, midstream equities have staged an impressive rally going into 2019. The midstream energy industry made great strides in addressing much of the criticism the industry has faced by investors. Roughly, 90% of the MLP universe has eliminated the use of IDRs and simplified their corporate structures. Most of the large cap midstream companies have distribution coverage ratios above 1.0 and have largely eliminated equity issuance as a method of funding capex or distributions.
- Valuations within the sector remain attractive even as the sector has rallied 16.8% YTD through March. The sector is growing cash flow (EBITDA) 8-9%/year on average and still yields 1.4% above high yield bonds. Leverage multiples continue to fall from their peak in 2015, driven mostly by higher earnings but also midstream companies reducing their outstanding debt.
- Relative to where midstream assets are trading in the private sector, valuations within midstream public equities trade at a substantial discount. Based on a sample set of private midstream transactions completed recently, the average acquisition multiple was 22.0x vs. a 10.4x multiple for the Alerian MLP index.

MLP SPREADS VS HIGH YIELD & TREASURIES



MLP DEBT TO CASH FLOW RATIO

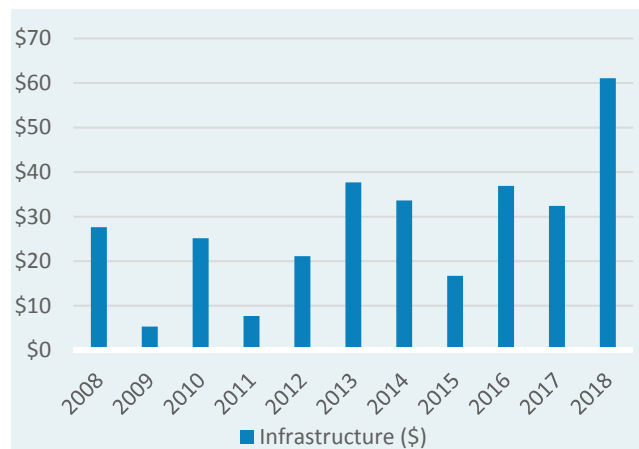


Source: Bloomberg, as of 3/27/19

Infrastructure

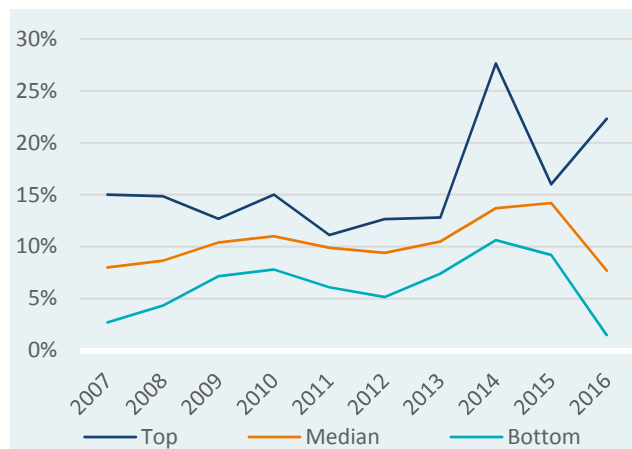
- Fundraising within Infrastructure reached a record high of \$60 billion in 2018, according to Pitchbook. As large as that number may seem, it does not include all of the co-investment and direct infrastructure capital from investors seeking deals in the sector. Fundraising does not appear to be slowing in 2019 as both Brookfield and GIP return to market seeking to raise nearly \$20 billion each.
- As in prior years, we favor strategies and managers that look for operationally complex or difficult assets that more passive capital will overlook. With full valuations across the infrastructure market, achieving double digit returns will require drivers beyond yield compression or multiple expansion. According to Preqin, the median infrastructure fund has returned 10-11% (net). Investors should expect that number to be lower going forward given valuations and competition in the asset class.
- Renewable energy deals comprise about half of all reported infrastructure transactions. Given relatively low capital costs and high market demand for non-thermal sources of power, we would expect that to continue. For most institutional investors, the low returns provided by most renewable energy assets in developed countries is insufficient for their cost of capital. Once you layer-on management fees and expenses, investors are left with a low levered single-digit return.

FUNDRAISING IN INFRASTRUCTURE



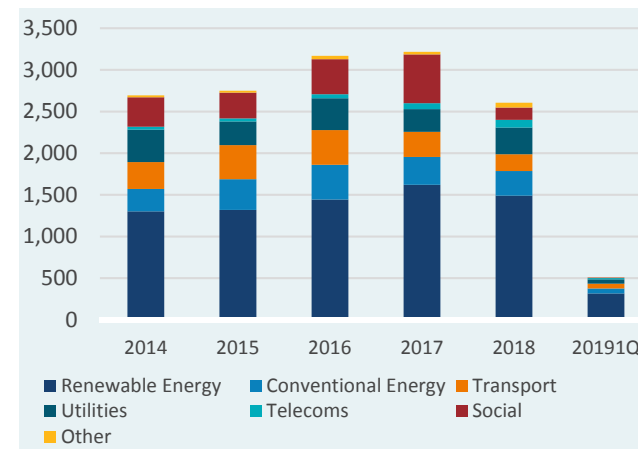
Source: Pitchbook

INFRASTRUCTURE PERFORMANCE BY QUARTILE



Source: Preqin

INFRASTRUCTURE DEALS BY SECTOR

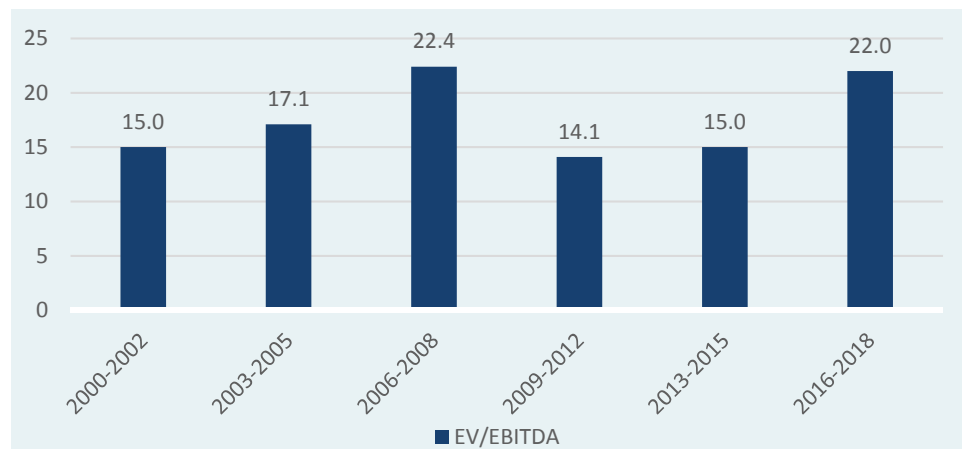


Source: Preqin

Infrastructure (cont.)

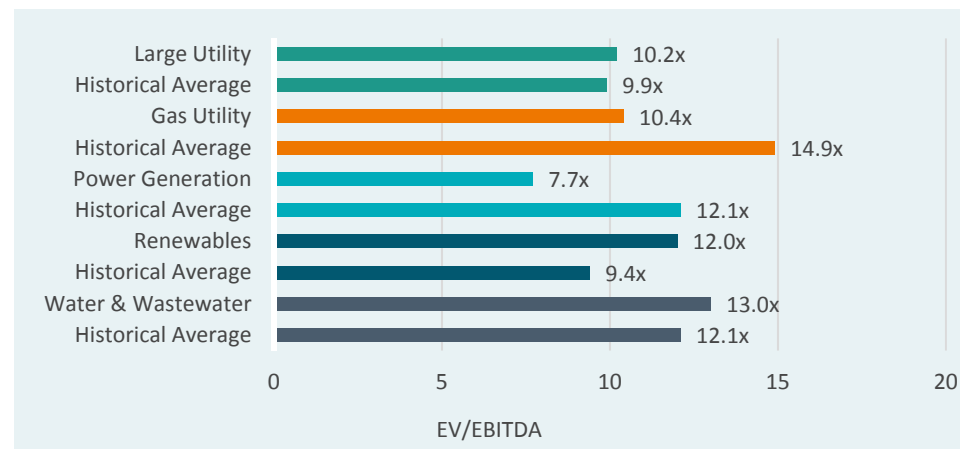
- Transportation infrastructure (i.e. ports, toll roads, airports) continues to trade at rich valuations. Airports are now trading at or above levels reached pre-GFC. Beyond the valuations within this sector, the exposure to GDP risk is high and appears underpriced at this stage of the economic cycle.
- Relative to recent averages, much of the public utility sector is trading at fair-to-rich valuations. Regulated and/or long-term contracted assets command a lofty premium as investors search for bond-like investment returns. As seen in the chart at the bottom right, companies that tend to have a greater share of merchant power exposure (Power Generation) trade at a discount. The shift in power generation from thermal to renewable energy is creating a whole assortment of issues for the power industry. Opportunities will emerge in energy storage, off-grid power, coal/nuclear retirements and other changes coming to the sector.
- One strategy within infrastructure that has yielded attractive results is in building platform companies across data/telecom, transport/logistics and utilities. By aggregating fragmented assets in an industry or expanding operations by industry vertical/geography, managers are able to drive value to a company and exit at an attractive multiple. While more common in private equity buyout funds, we are seeing similar operational skillsets being utilized by some infrastructure managers.

AVERAGE TRANSACTION MULTIPLES FOR AIRPORTS



Source: PWC

FY2 EV/EBITDA VS HISTORICAL WITHIN THE UTILITY SECTORS

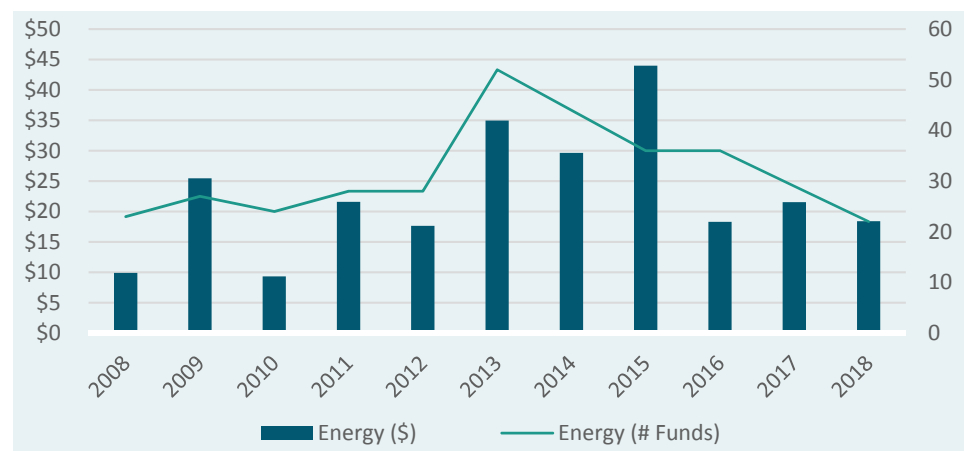


Source: E&Y; FY2 = Fiscal Year Ahead EBITDA; historical average (2013-2018)

Energy – Oil/Gas

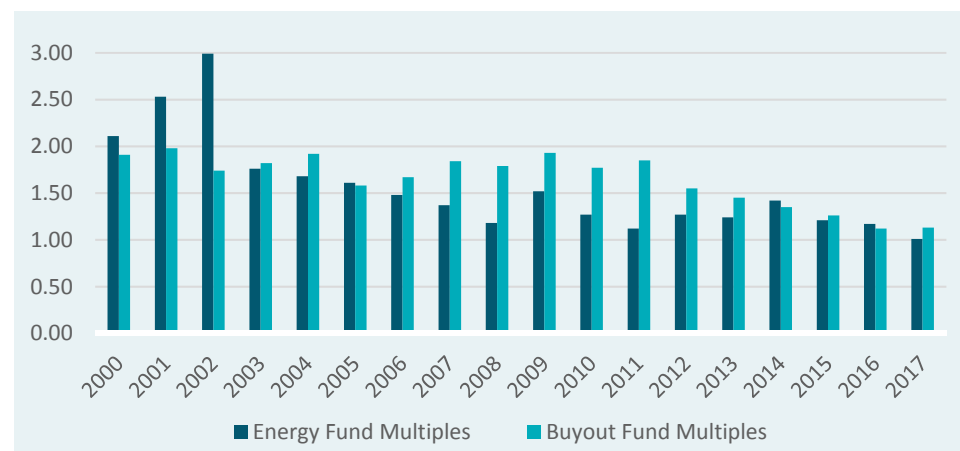
- Among other issues, the oil/gas industry has a serious public relations problem. Institutional investors, public equity markets and traditional lenders have all pulled capital from the sector. Fundraising in 2018 was abysmal for most GPs in the upstream energy market and we would expect 2019 to be similarly challenging. Some of the capital market issues are self-inflicted by an industry that spent wildly in the boom times and subsequently lost billions for investors in the last 3-4 years. There is also a more serious movement among various stakeholders that view climate change as a critical problem and believe that funding oil/gas extraction projects poses a public health risk. We take these issues seriously and are evaluating how we will participate in the energy value-chain going forward.
- Energy funds have only recently begun outperforming buyout funds, reflecting the improvement in commodity prices following the lows reached in 2016. Many of the 2014/15 vintage funds will likely have exceptional returns as they were able to deploy capital into a depressed market and achieve fairly quick liquidity events once markets stabilized. Funds raised in 2016/17 are finding a more challenging market for transactions which has led to slower capital deployment and expectations for a longer investment hold.

FUNDRAISING IN OIL/GAS



Source: Pitchbook

ENERGY FUND PERFORMANCE VS PE BUYOUT

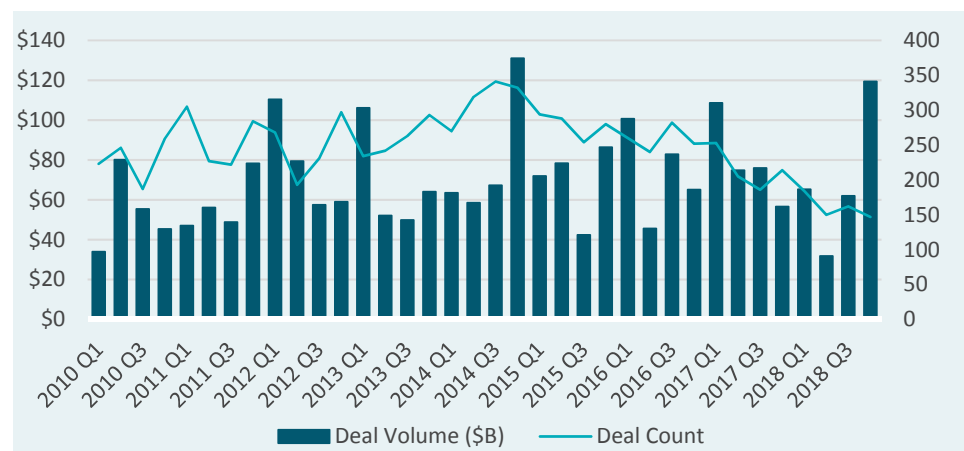


Source: Pitchbook

Energy – Oil/Gas (cont.)

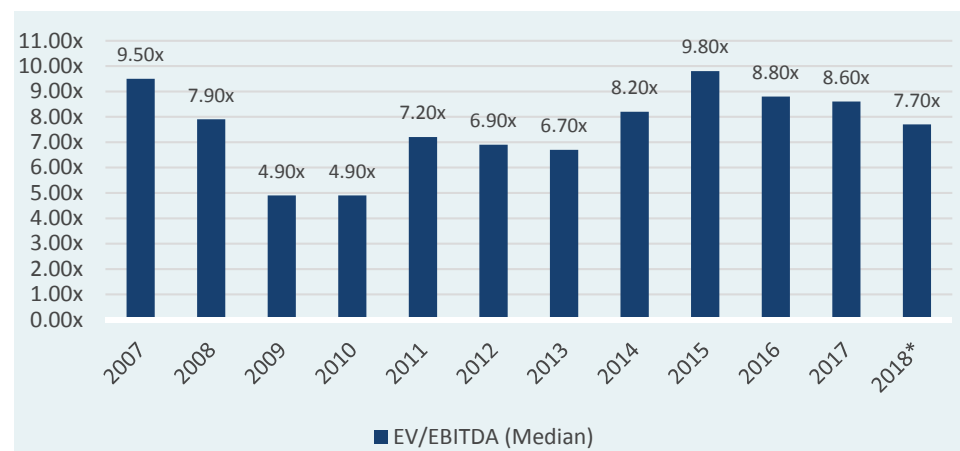
- In most circumstances, a scarcity of capital, cheap valuations and poor investor sentiment are a recipe for attractive investment opportunities. The oil/gas industry finds itself there today and even more, most other asset classes are trading at peak values. While we believe there are attractive deals in energy there are set of known unknowns which make pricing risk incredibly difficult.
- As mentioned earlier, the M&A market has fallen dramatically, indicated skittishness both in the public and private markets. Transactions multiples are off their peaks averaging around 7x on an EV/EBITDA basis. Based on the large size of the transactions and low deal count, it is likely deals on smaller assets, if they trade, will be below 7x. The lack of clarity around an exit is another risk that investors should consider as they weigh investing in longer duration upstream assets.
- Of note, the recently announced acquisition of Anadarko by Occidental has some investors speculating about a long overdue consolidation in the energy market. A series of acquisitions by the oil majors would go a long way towards breathing some life back into the E&P market.

M&A TRANSACTIONS IN ENERGY MARKET



Source: Preqin

M&A EV/EBITDA TRANSACTION MULTIPLES

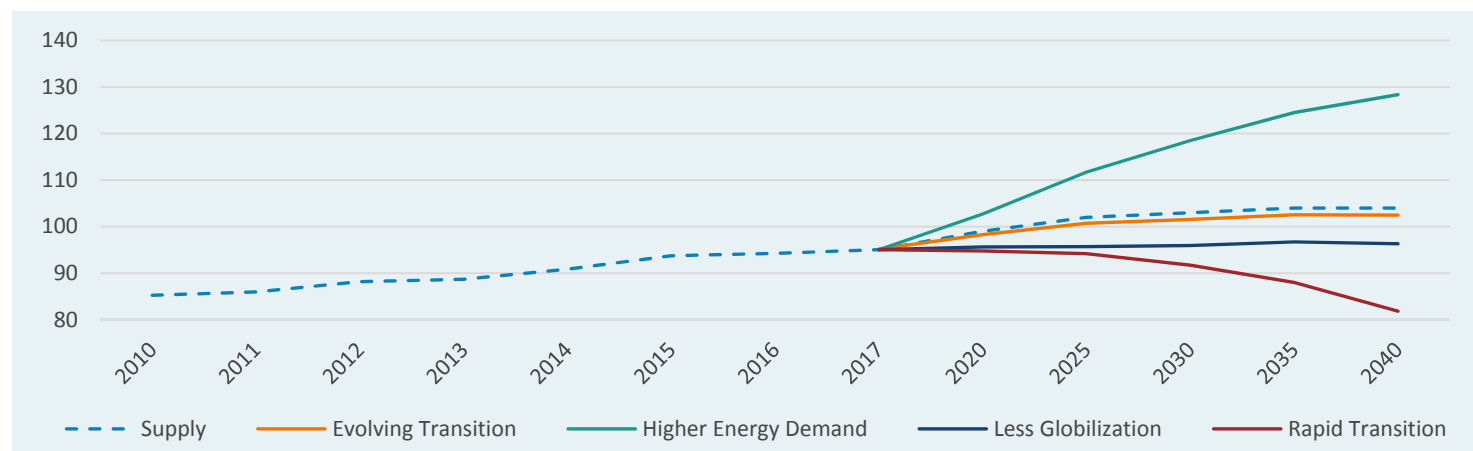


Source: Pitchbook (*as of 9/30/18)

Energy – Oil/Gas (cont.)

- One of the chief concerns we have with oil/gas investments is the outlook for demand beyond the next 10 years. Commodities are priced at the margin which means small movements in demand or supply can have a big impact on prices. If government regulation and/or consumer behavior around the use of fossil fuels rapidly changes in the next 10 years, it will have serious consequences for investments with longer duration hold periods.
- The chart below is taken from data provided by BP and the IEA (International Energy Agency) which looks at future demand for oil under different scenarios. If we assume that consensus supply/demand projections hold, growth in oil demand will plateau around 2035. The Evolving Transition scenario (orange) assumes energy grows over time but by less than it has historically, relative to GDP growth. The Less Globalization scenario (light blue) assumes that instead of a doubling in GDP growth by 2040, we get slower growth in GDP and less energy demand as a percentage of GDP growth. Rapid Transition assumes a higher rate of growth in EV cars and a large increase in renewable energy that will greatly reduce our CO2 output. Depending on the scenario, the impact on demand could be significant though its difficult to put a probability on how likely those changes are to materialize. This is important if you invest in strategies with 7-10 year holds, exit valuations could reflect a future that looks very different than the one we see today.

SUPPLY VS DEMAND GROWTH FOR OIL

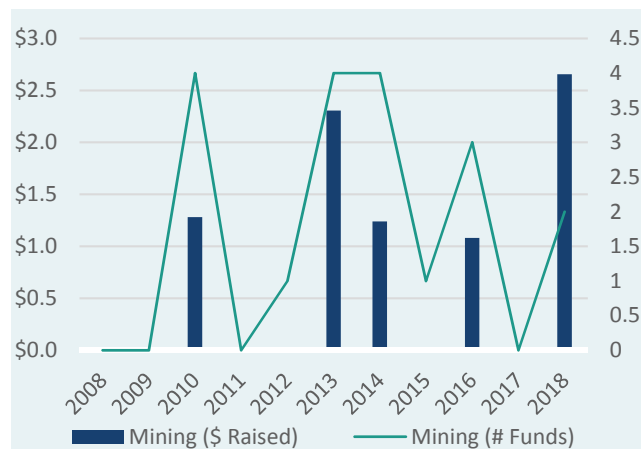


Source: BP, IEA

Metals and mining

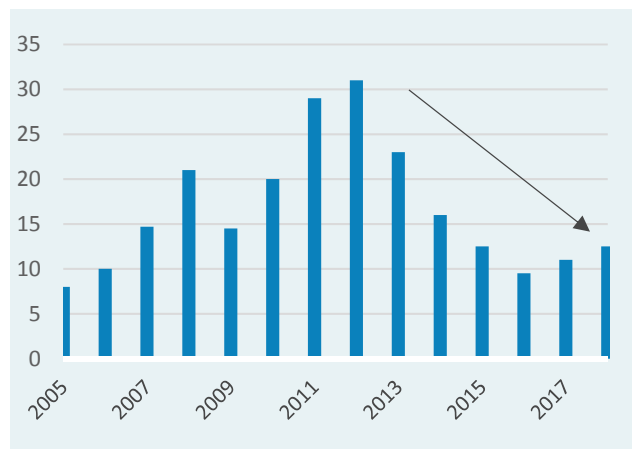
- Fundraising in the private equity mining segment has been lumpy and quite modest since the GFC. A notable uptick in fundraising in 2018 being driven by a single fund that raised over \$1.5B. The landscape for fundraising in mining will be one to watch as more institutions implement strong ESG programs that will undoubtedly impact mining GPs. We could see a scenario where fundraising improves if investors see the benefit of funding the extraction of materials that contribute to our shift away from fossil fuels.
- Mining has experienced a recovery from a cyclical low in early 2016. While asset prices have seen some recovery, capital expenditures across the industry have lagged for several years which may lead to a supply shortfall in some industrial metals. Our overall outlook within mining is positive with a notable challenge in finding enough investment opportunities that meet our underwriting criteria.
- On the investment side, we have participated in the mining sector by backing teams with expertise in financing mining projects which delivers a high income return with some upside associated with a structured equity security. We are more bullish on base/industrial metals which longer-term will benefit from a shift away from fossil fuels. We are less bullish on bulk and energy-related commodities.

FUNDRAISING IN MINING



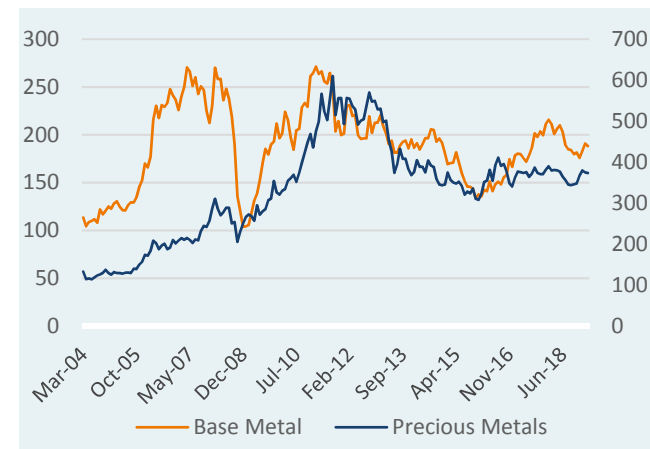
Source: Pitchbook

CAPITAL EXPENDITURE IN MINING (\$B)



Source: Bloomberg

METAL PRICES

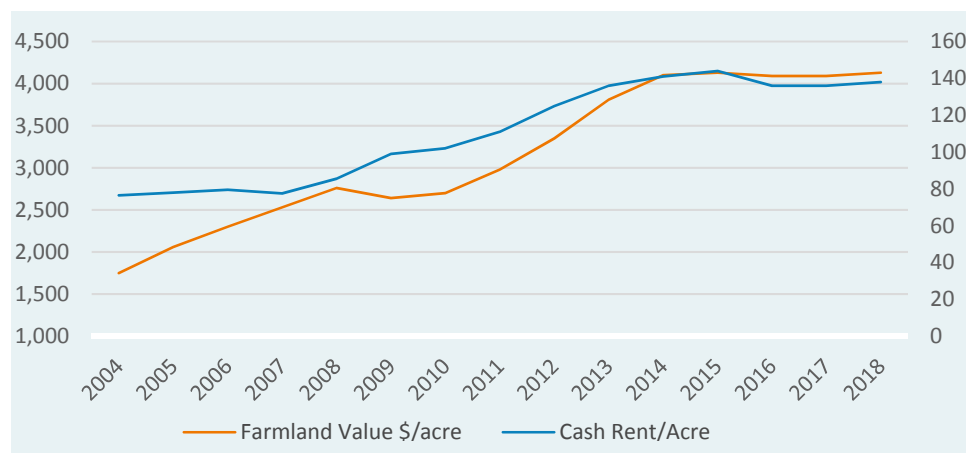


Source: Bloomberg

Agriculture

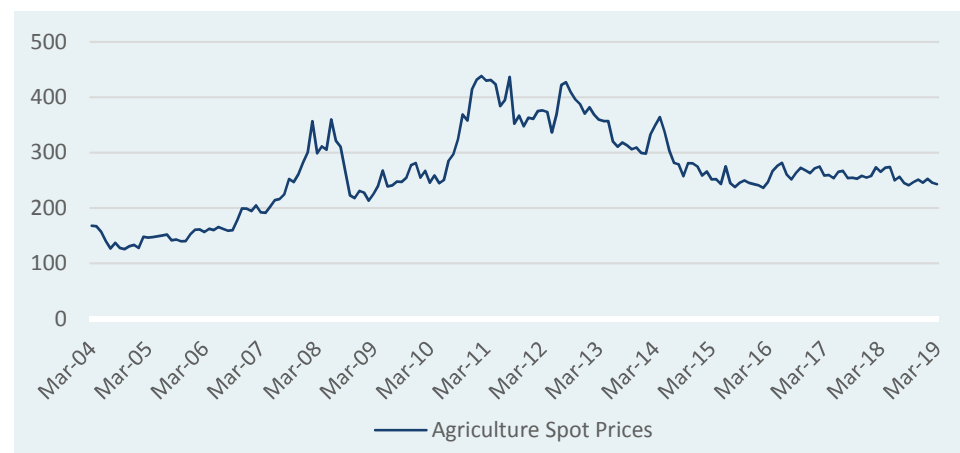
- Farmland values have held remained largely flat since 2014, despite a challenging commodity price environment over the last 5 years. That has put pressure on investment returns as income yields have fallen and capital appreciation has not materialized. It also frustrates new entrants into the market that are not able to buy land at a discount to previous peak values despite a lower commodity price.
- Today, farmland in the row crop space yields about 3-4%, on average. Permanent crops offer the potential of higher income yields but also carry greater risk and operational expertise. There are additional ways to add value through crop selection, improving crop yields and selling land for higher-and-better-use cases. In addition, managers can control a greater share of the food production value-chain which carries higher returns but also higher operational risk.
- We tend to favor agriculture strategies that both own land for crop production and control the operating verticals that bring food to the consumer. Strategies that can capture more value through processing, storage and marketing, offer the potential of higher returns.

U.S. NATIONAL FARMLAND VALUES VS CASH RENTS



Source: USDA

BLOOMBERG AGRICULTURE PRICES

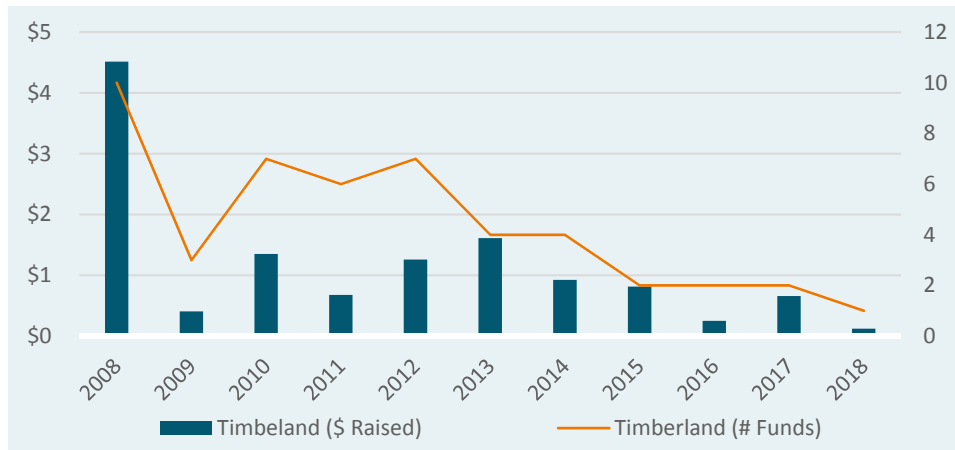


Source: Bloomberg, as of 2/28/18

Timberland

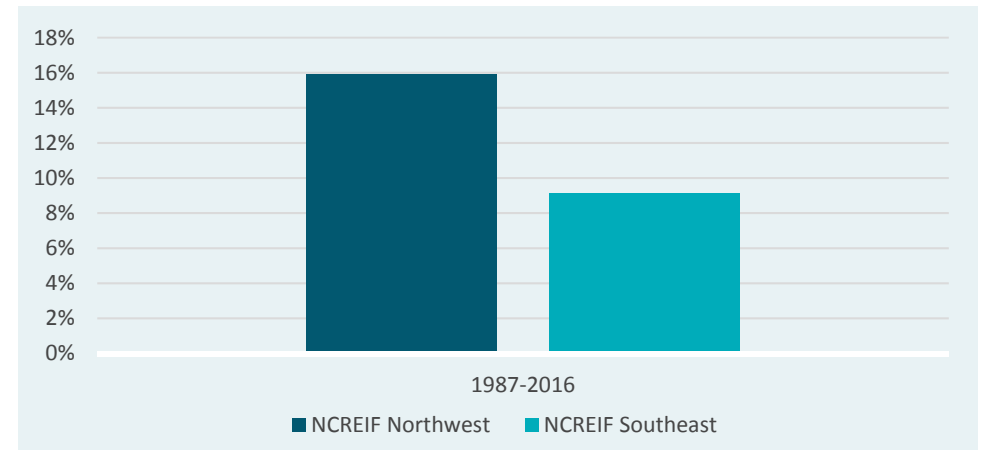
- Fundraising has continued to be a challenge within the timber industry, peaking in 2008, according to Pitchbook. Much like energy, when investor sentiment is low and capital flows appears strained, we tend to become interested.
- The past 10 years have been lackluster for timber investors, achieving a trailing average return of 3.8%, according to the NCREIF Timberland Index. Many TIMO funds have fared worse than the index due to leverage and/or less favorable geographic exposures within their portfolio. The 10-year returns prior to the GFC were more than double the returns experienced after so investors may ask, which returns we are likely to see in the decade ahead. We believe the asset class was undergoing a unique shift in the 90s and early 2000s that drove high double-digit returns that aren't repeatable in today's market.
- One of the challenges for newer investors in Timberland is gaining access to the most lucrative timber, the Pacific Northwest (PNW), where lumber is in high demand by Asian buyers. Most of the available timberland for investors is located in Southwest/Southeast where southern pine species dominate. Since the trees grown in the Southeast are meant for a mostly domestic market and heavily tied to home building, prices in this region have not kept pace with those in the PNW.

FUNDRAISING IN TIMBERLAND



Source: Pitchbook

HISTORICAL PERFORMANCE BY REGION

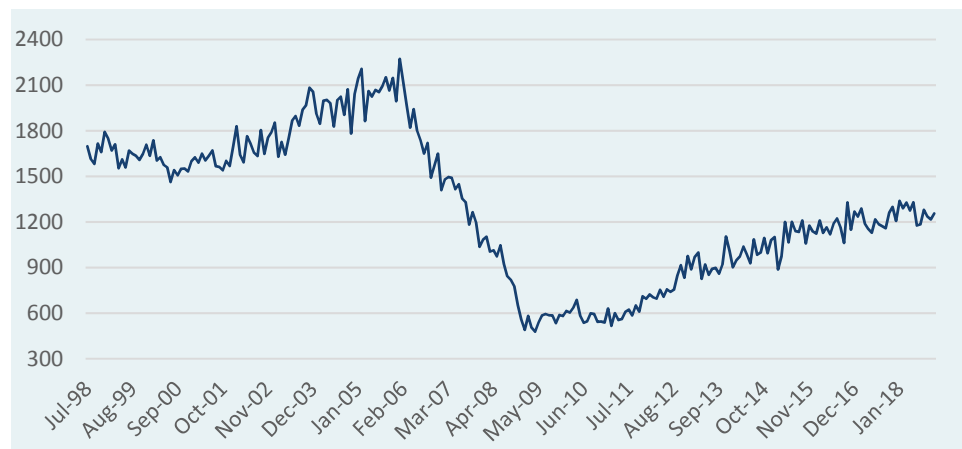


Source: Campbell Global

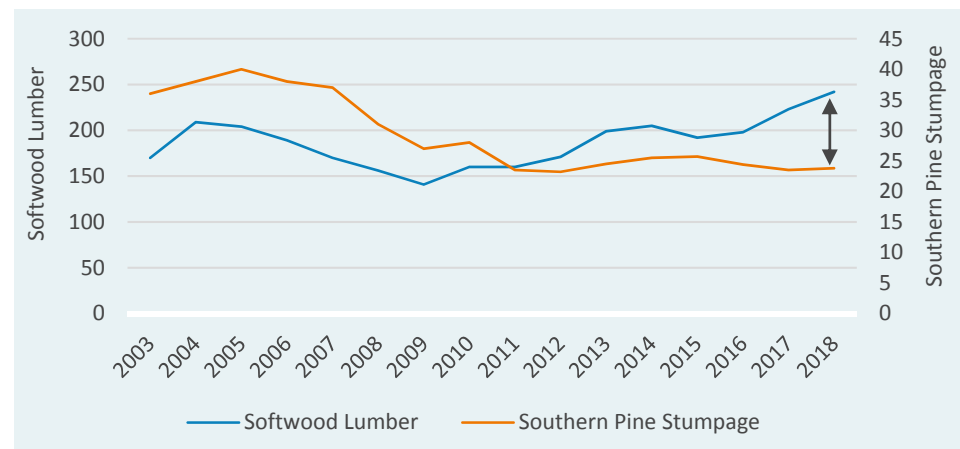
Timberland (continued)

- Housing starts have experienced a slow rebound since the GFC as millennials delayed buying and urban living trends reduced demand for single family homes. There has been a noticeable uptick in home building in the last few years which has contributed to higher prices for lumber, among other building material costs.
- As the chart on the bottom right indicates, one of the challenges that timber investors have faced is that the price they received for their trees (southern pine stumpage) began to decline during the GFC and largely never recovered. With housing construction turning around in 2015/16, lumber prices began to respond but the prices that timberland owners received did not. Two critical issues have kept stumpage prices depressed, excess supply of trees in the region and a lack of mill density that has created bottle necks in lumber production.
- There appears some tailwinds to the timberland story but when we look at returns in the asset class, we struggle to reach a return target that merits investing in an asset class which is highly illiquid, offers little income and appears dependent on selling land to other TIMO investors. For most clients, we think there are better opportunities within real assets to deploy capital. For investors with a low cost of capital and an interest in renewable resources, there may be merit to an allocation in timber.

U.S. HOUSING STARTS



SOUTHERN PINE STUMPAGE VS SOFTWOOD LUMBER PRICES



Source: St. Louis Fed, as of 3/31/18

Appendix

Glossary of terms

Adjusted Funds From Operations (AFFO): A measurement which is helpful in analyzing real estate investment trusts (REITs). The AFFO typically equals the trust's funds from operations (FFO) but is adjusted for ongoing capital expenditures which are necessary for upkeep of the REIT's assets.

Backwardation: Also, sometimes called normal backwardation, is the market condition where the price of a commodities forward or futures contract is trading below the expected spot price at maturity.

Capitalization Rates: The rate of return of a real estate investment, which is calculated by dividing the property's net operating income by the property's purchase price.

Core Real Estate: This category of real estate will include a preponderance of stabilized properties. Core real estate should achieve relatively high income returns and exhibit relatively low volatility. Core real estate funds tend to use less leverage.

Consumer Price Index (CPI): A measure of purchasing power and inflation that takes the average prices of a basket of consumer goods and services, such as food, medical care, and transportation, and compares the same basket of goods in terms of prices to the same period in a previous year. Changes in CPI are used to assess price changes associated with the cost of living.

Contango: When the futures price of a commodity is above the expected future spot price. A futures or forward curve is upward sloping when the market is in contango.

Double Promote: A joint venture private equity structure is considered to have a "double promote" if the sponsor of a project is in fact comprised of two separate parties who each have a profit waterfall agreement or cash flow disbursements.

Dry Powder: Investment reserves raised by investment funds to cover future obligations or to purchase assets in the future.

GDP: The total value of all services and goods produced within a country's borders, for a given time period. This calculation includes both private and public consumption, government expenditures, investments, along with total exports net of total imports.

Internal Rate of Return (IRR): the IRR is the discount rate that equates the present value of cash outflows (investment) with the present value of cash inflows (return of capital). IRR is often referred to as a dollar-weighted rate of return that accounts for the timing of cash inflows and outflows.

LIBOR: Is a benchmark rate that some of the world's largest banks charge each other for short-term loans. It stands for London Interbank Offered Rate and serves as the first step in calculating interest rates on various loans throughout the world.

Master Limited Partnerships (MLPs): A limited partnership structure which is publicly traded on an exchange. MLPs combine the tax benefits of a limited partnership with the liquidity of publicly traded securities. To qualify as an MLP, the entity must generate 90% of its income from the production, processing and transportation of oil, natural gas and coal.

Net Operating Income (NOI): A calculation which is used to analyze real estate investments that generate income. NOI is the property's annual income generated by operations after deducting all expenses incurred from those operations. The growth rate in NOI is a common metric used in determining the health of a property.

OPEC: The Organization of Petroleum Exporting Countries (OPEC) is a group consisting of 12 of the world's major oil-exporting nations. OPEC is a cartel that aims to manage the supply of oil in an effort to influence the price of oil on the world market.

Opportunistic Real Estate: An opportunistic fund is one that includes preponderantly non-core assets. The fund as a whole is expected to derive most of its return from property appreciation which may result in significantly volatile returns. These funds may employ a variety of tools such as development, significant leasing risk and potentially high leverage.

Real Estate Investment Trusts (REITs): A REIT is a company that owns and operates commercial real estate properties. REITs can be publicly traded or privately held. There are two main type of REITs: Equity REITs which generate income from the operation of properties, and Mortgage REITs, which invest in mortgages or mortgage securities.

Glossary of terms (continued)

Timber Investment Management Organizations (TIMOs): A management group that invests in timberland assets for institutional investors. TIMOs will purchase, manage and sell various timberland properties on behalf of investors.

Treasury Inflation Protected Securities (TIPS): A treasury bond that is adjusted to eliminate the effects of inflation on interest and principal payments, as measured by the Consumer Price Index (CPI). TIPS are issued in terms of five, ten and twenty years and are auctioned twice per year.

Value-Added Real Estate: A value-added real estate fund often holds a combination of core assets and other assets characterized by less dependable cash flows. These strategies are likely to have moderate lease exposure and employ moderate leverage. Consequentially, these strategies seek significant returns from property appreciation and typically exhibit moderate volatility.

Vacancy Rates: The vacancy rate is calculated as the total number of unoccupied units of a property divided by the total units of the property, at a particular point in time.

Vintage Year: Represents the year the first capital call or portfolio company investment was made. .

Notices & disclosures

Past performance is no guarantee of future results. This report or presentation is provided for informational purposes only and is directed to institutional clients and eligible institutional counterparties only and should not be relied upon by retail investors. Nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security or pursue a particular investment vehicle or any trading strategy. The opinions and information expressed are current as of the date provided or cited only and are subject to change without notice. This information is obtained from sources deemed reliable, but there is no representation or warranty as to its accuracy, completeness or reliability. This report or presentation cannot be used by the recipient for advertising or sales promotion purposes.

The material may include estimates, outlooks, projections and other “forward-looking statements.” Such statements can be identified by the use of terminology such as “believes,” “expects,” “may,” “will,” “should,” “anticipates,” or the negative of any of the foregoing or comparable terminology, or by discussion of strategy, or assumptions such as economic conditions underlying other statements. No assurance can be given that future results described or implied by any forward looking information will be achieved. Actual events may differ significantly from those presented. Investing entails risks, including possible loss of principal. Risk controls and models do not promise any level of performance or guarantee against loss of principal.

“VERUS ADVISORY™” and any associated designs are the respective trademarks of Verus Advisory, Inc. Additional information is available upon request.