PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

MAY 2018

Real Assets Outlook

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Verus

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Executive summary

Key theme for 2018

Observations driving our outlook

Inflation fears keeping the market on edge, so far data shows a benign inflationary environment

In February, wage inflation data emerged which appeared to signal long-awaited inflation numbers were rising which contributed to a market sell-off and spike in volatility. As markets settled and more data came through, inflation concerns subsided, though market volatility remained above recent historical levels. In April, Core CPI numbers were released which showed inflation moving higher and reaching the Feds target rate of 2.0%. While the inflation rate is now at target levels, the risk to the upside and the Fed's response to that potential outcome will likely be a factor in driving market volatility.

Higher interest rates putting pressure on income-oriented investments

In the second half of 2017, REITs, MLPs and other liquid yield-oriented investments faced selling pressure as expectations for rising interest rates were priced into select markets. The selling pressure has continued in 2018, with REITs and MLPs in particular down 7.3% and 3.9% YTD through April, respectively.

Stable prices across commodities with a tailwind coming from Capex cuts from mining and energy companies potentially driving prices higher in the next 2-3 years

For long-time commodity investors, the recent recovery in prices shouldn't be a big surprise. As the old saying goes, "the cure for low commodity prices, is low commodity prices". In practice, commodity producers are forced to curtail spending in response to low prices which will reduce future supply, that creates a potential shortage, driving prices higher until producers are once again incentivized to spend again. Not all commodities are in the same supply position but several industrial metals and oil appear to have supply/demand levels that favor higher prices going forward.

Tactical opportunities in MLPs

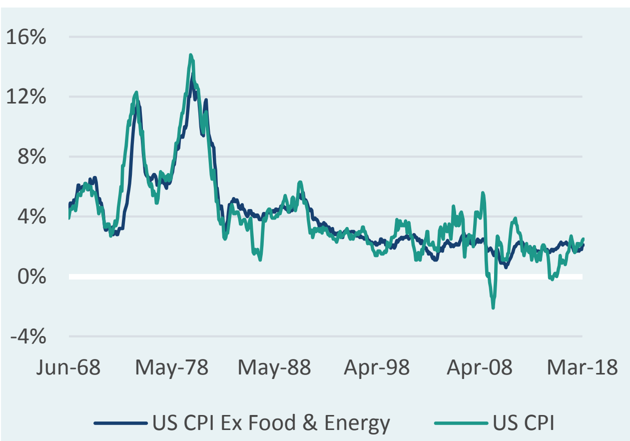
We recently became bullish on MLPs after a lengthy bearish attitude towards the asset class. We have a separate presentation on the midstream energy opportunity but we touch on a few of the reasons we believe the asset class looks attractive in this Outlook.

U.S. economics – Inflation

U.S. economics – Inflation

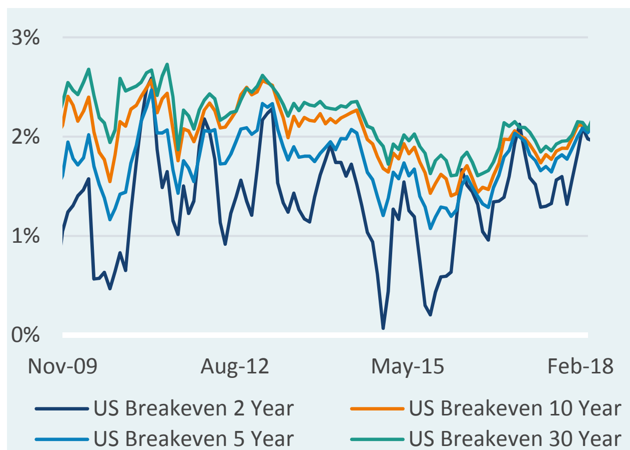
- Core CPI remained at 2.1% in April and March, up from 1.8% in February, surpassing the Fed's long-term target of 2.0%.
- Headline CPI hit 2.4% in March, moving higher in the first quarter of this year but still at levels below that seen in typical late-cycle periods. The Fed appears eager to get out in front of any inflationary pressure and thus, the risk of inflation moving higher than market expectations appears less probable than the risk of disinflation coming from the next market downturn.
- 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, etc.) but there is always some probability that we are wrong and that this cycle resembles history in which case it will be advantageous to have exposure to assets which perform well when inflation exceeds expectations.

U.S. CPI (YOY)



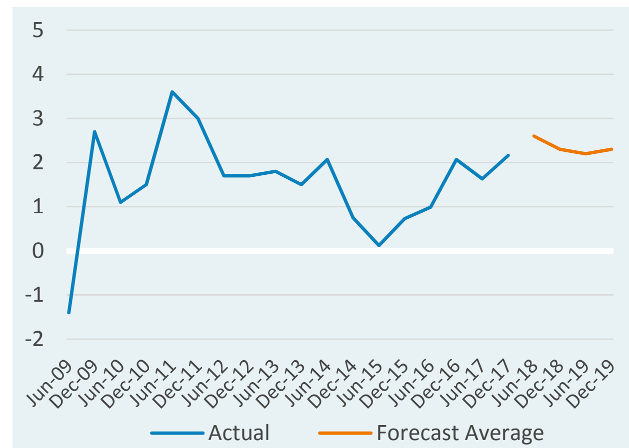
Source: FRED, as of 3/31/18

U.S. TIPS BREAKEVEN RATES



Source: FRED, as of 3/31/18

INFLATION EXPECTATIONS



Source: Wall Street Journal, 4/1/18

Outlook summary

Outlook summary

Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Private Real Estate	Fundamentals remain strong with declining vacancies, increasing NOI growth and moderate new supply. Valuations are getting expensive, especially for high quality core assets in gateway markets. Returns have moderated to normal levels and income has become a larger portion of total returns.	— 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 may drastically impact demand for real estate.	We remain broadly favorable on real estate given continued strong fundamentals, modest new supply and favorable interest rate environment. Given we are potentially late in the cycle, we would recommend remaining cautious with the use of leverage, excess illiquidity, lower quality assets or strategies with a long time horizon to execute such as complex distress or construction.	Positive
REITs	REITs have benefitted from the overall strength of the real estate market, however REITs have underperformed broader equities in recent periods. REITs have been hurt by an increase in interest rates and increased economic growth expectations led to a rotation away from yield-oriented assets.	— 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.	While we are broadly favorable on real estate, we remain neutral on REITs given current valuations appear fair. 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 headwind to commodity performance. More recently, oil prices have traded in backwardation along points in the curve though roll yields remain anemic.	— 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.	Neutral
TIPS	Low nominal interest rates combined with low to moderate inflation has led to a depressed return environment for TIPS.	— Decreasing inflation expectations or rising nominal interest rates would be a headwind to TIPS. Continued low rates create a high cost of carry.	While inflation expectations have been trending modestly upward, 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	With interest rates rising, we saw yield-oriented assets sell-off in late 2017 and continue to exhibit weakness in 2018. While we welcome the revaluation, most infrastructure markets, especially core transactions, continue to trade at high valuations. In our last outlook we highlighted the interest rate concerns and our view that better opportunities exist in value-add infrastructure and specific sectors like power. Our views have not changed.	— Rising interest rates in the U.S. market and abroad will remain a headwind to yield-oriented infrastructure. — Fund raising was strong in 2017 for global infrastructure funds, creating additional competition for managers to deploy capital.	We remain less favorable on core infrastructure given valuation concerns. We do think opportunities exist within pockets of the value-add universe. We generally like teams with a particular sector expertise and with a strong development track record and pipeline.	**Neutral**
Private Natural Resources	As expected, the market was able to work-through much of the supply overhand in the oil market. Prices have stabilized around $60/bbl which appears high enough to induce on-shore US and parts of Canada to grow production but is too low for oil majors and national oil companies to commit substantial capital to large off-shore projects. With recent tensions flaring up in the Middle East, oil prices could shock to the upside.	— A significant amount of dry powder has been raised in the private markets, creating a competitive environment for deals in prime on-shore US acreage locations. — Demand growth below expectations resulting in lower prices for longer. — Breakdown of OPEC could induce member countries to discontinue the supply cuts and flood the market with oil .	We think there are opportunities to invest in onshore US/Canada and achieve attractive returns but it's hard today to buy large tracts of prime acreage and generate healthy returns. We believe private energy funds where there are dual performance fee structures face a considerable headwind to delivering 20%+ IRRs that investors expect for taking drilling risk. Could see a healthy M&A market develop as oil majors look for production growth.	**Positive**
Midstream Energy / MLPs	MLPs have faced heavy selling pressure in 2017 and in 2018. Valuations are reaching trough levels not seen since the GFC. Cash flows within midstream energy are recovering and balance sheets are healthier today than they were going into the oil collapse. We believe there is a compelling tactical opportunity within midstream energy for investors that can be patient and manage tax issues that come with holding MLPs.	— 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 8+% dividend yield and distribution growth has recovered to a range of 4-6%. MLPs are offering a compelling entry point that we have not seen since the GFC.	**Positive**

Outlook summary (continued)

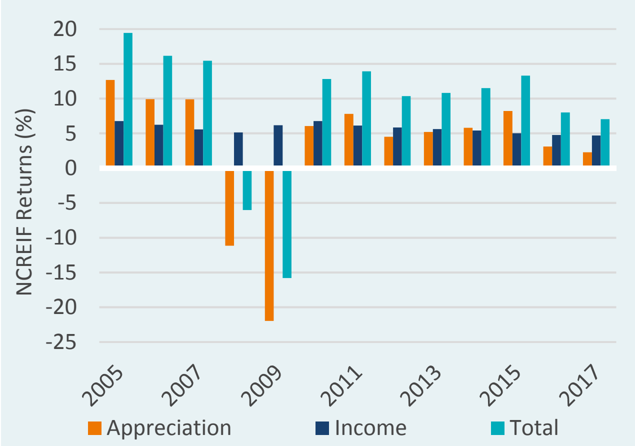
Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Timberland	Timber markets in North America continue to face challenges from a slow recovery in housing, low interest rates and unfavorable transaction market. Our outlook on timber has been negative for several years due to the headwinds the asset class has faced. More recently, our view has shifted on a strong recovery in housing starts, timber supply issues out of Canada and low levels of capital competing within the timber industry. While we still believe that returns are unlikely to achieve double digit rates seen in the late 90's/early 2000's, some investors may find high single-digit returns acceptable within the asset class.	— Despite several years of disappointing returns within timber, we don't see returns reaching beyond single-digits on a go-forward basis. Competitive timber from South America has driven prices for certain softwood products lower and favorable hardwood markets in the Pacific Northwest remain difficult to access. — Markets outside the U.S. tend to face currency and political risk which has resulted in disappointing returns for many investors.	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.	**Neutral/ Negative**
Farmland	Farmland prices in the Midwest leveled off after 2014 but remain too expensive for the income and return potential. We are selectively looking at permanent crop deals but broadly they trade well above historical valuations. Prices across most crops have fallen over the last year as record supply has outstripped demand.	— 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 viewed as expensive. Selectively looking at agriculture business investments where crop and land are a component of the return.	**Negative**

Current conditions and outlooks

Real estate performance – Recent history

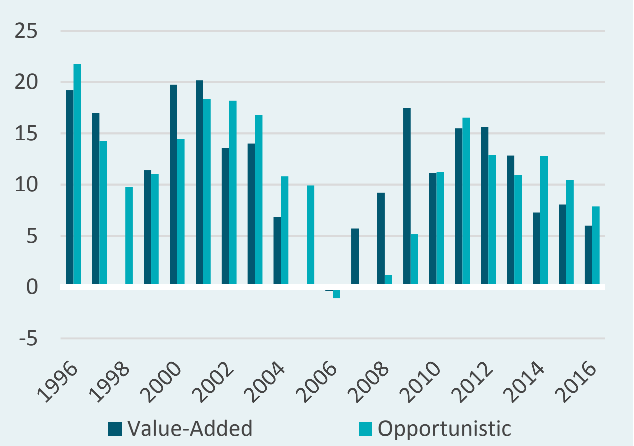
- Core real estate returns have moderated over the last two years back to "normal" levels of 7-8% total returns. Appreciation has slowed while income has remained near 5% for several years, becoming a larger component of total return.
- Correlation between GDP growth and core real estate returns has historically been very high. In the last few quarters, GDP has ticked up slightly higher while real estate returns moderated.
- Some of the best non-core real estate vintage years occur during recessionary years and early recovery periods (2001-2003 and 2009-2012) as market dislocations create attractive entry valuations.
- Late stage vintage years for non-core have historically been the most challenged (1998-1999) and (2005-2007).

NCREIF RETURNS



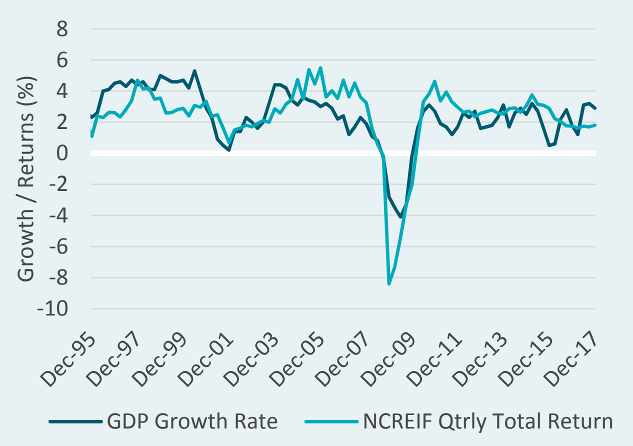
Source: NCREIF, as of 12/31/17

VINTAGE YEAR RETURN (%) – NON-CORE REAL ESTATE



Source: Cambridge Associates, as of 9/30/17

REAL ESTATE AND THE BUSINESS CYCLE

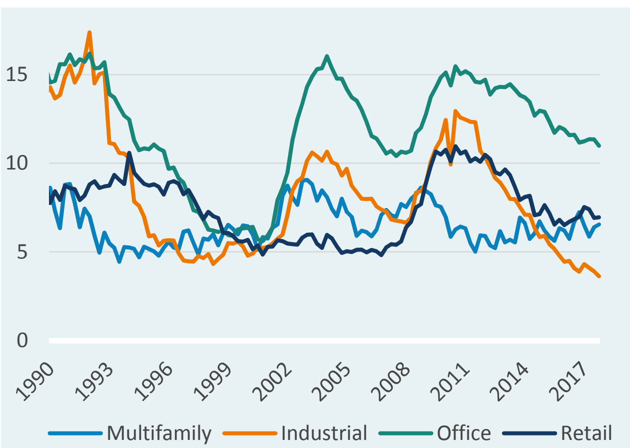


Source: NCREIF, Bloomberg, as of 12/31/17

Real estate fundamentals

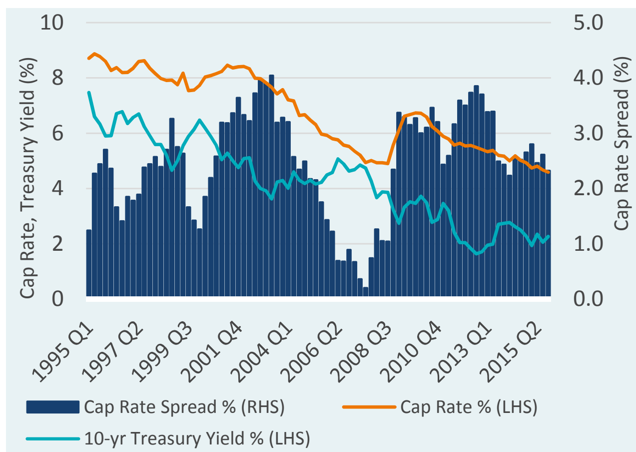
- Real estate fundamentals remain generally healthy. Vacancy rates continue to decline in most property types. Multifamily is the only exception, which has seen a slight uptick in vacancy after being the earliest sector to recover. This move has been influenced by an increase in prices and some pockets of strong new supply.
- Cap rates continue to move in a steady downward trend and sit at historic lows. The spread versus the 10-year Treasury yield remains moderate however, providing a slight cushion against rising interest rates. This was recently tested when the 10-year yield rose from 1.5% to 2.4% after the presidential election, yet cap rates remained flat. Capital continues to flow into the asset class as investors seek sources of high quality income and U.S. dollar-denominated assets.
- Net operating income (NOI) growth has remained strong - above 5% in the first quarter for all property types. Multifamily NOI has come down from above 10% growth, while industrial properties have seen the strongest improvement.

VACANCY BY PROPERTY TYPE



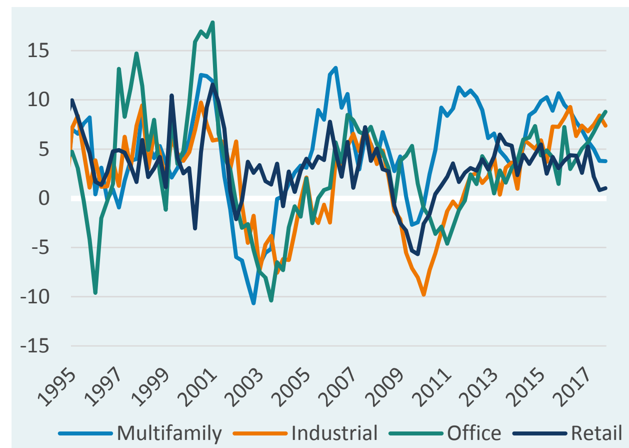
Source: NCREIF, as of 12/31/17

CAP RATE SPREADS



Source: FRED, NCREIF, as of 12/31/17

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

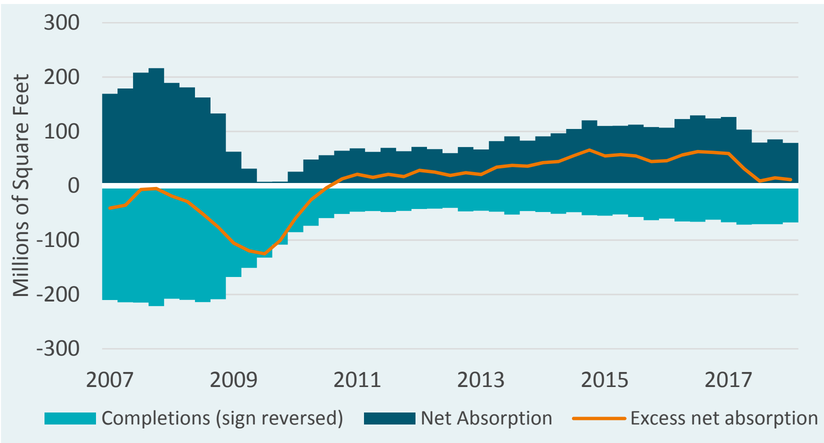


Source: NCREIF, as of 12/31/17

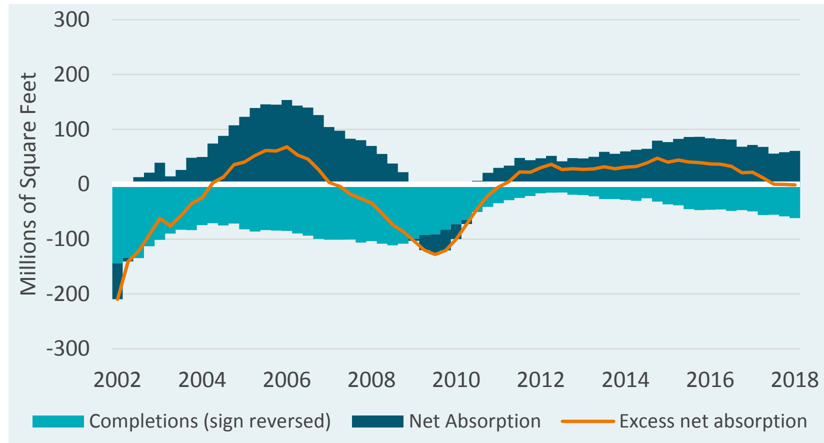
Real estate – New supply and absorption

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

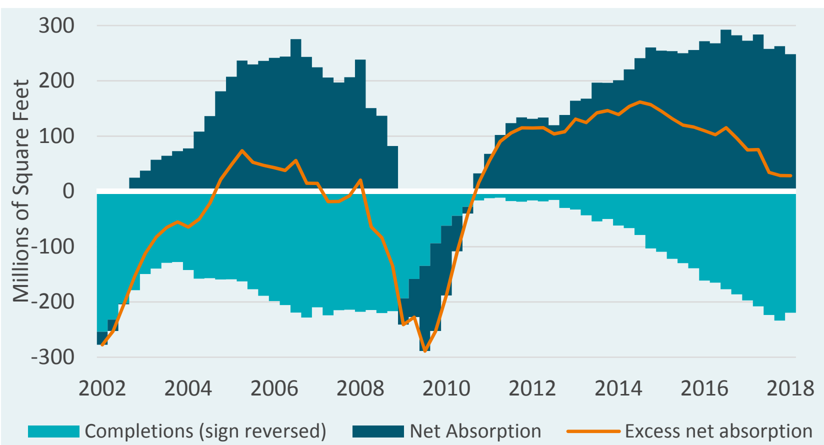
RETAIL SECTOR



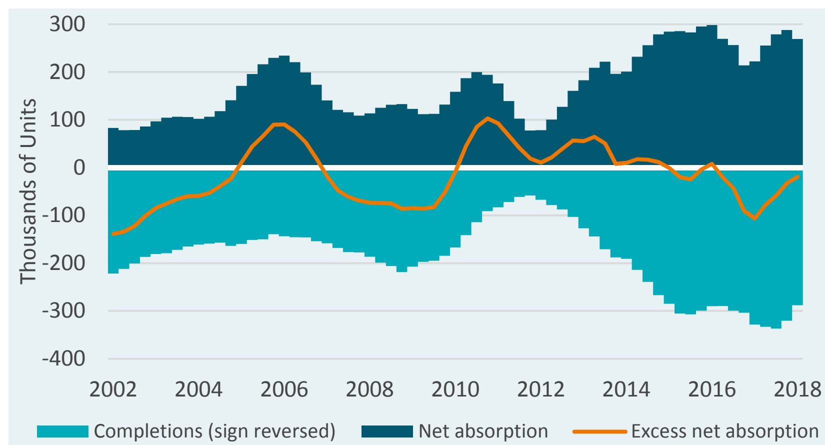
OFFICE SECTOR



INDUSTRIAL SECTOR



MULTIFAMILY SECTOR



Multifamily exceeding peak levels, starting to see net absorptions decline, NOI growth slow

New supply in industrial nearing peak levels, but demand from ecommerce keeping warehouse net absorptions positive

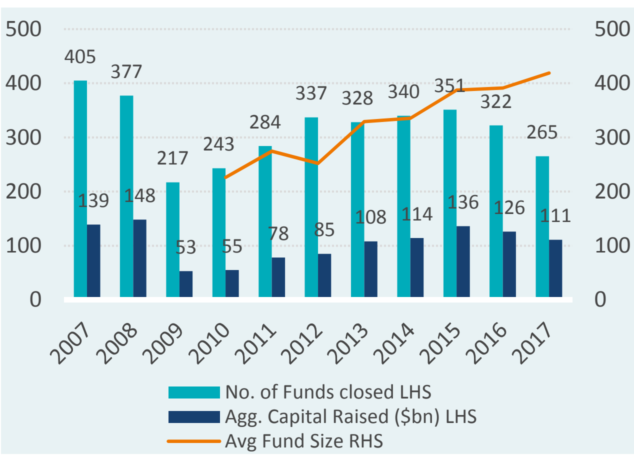
Retail lagging, slowdown in brick and mortar demand

Source: CoStar, Nareit, as of 3/31/18

Real estate fundraising

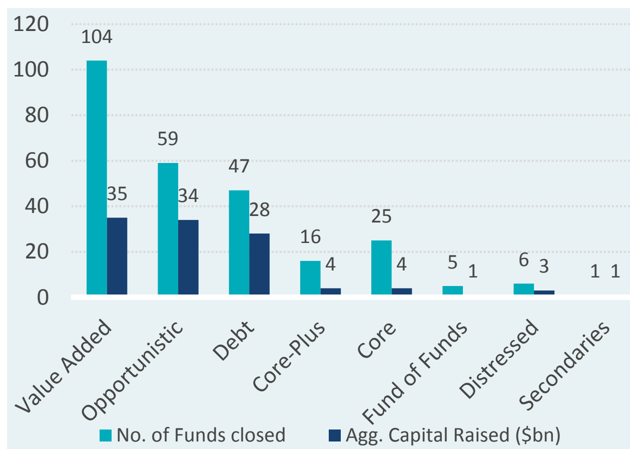
- The number of funds closed and aggregate capital raised have slightly declined the last two years, although still remain at high levels. The average fund size has continued to grow.
- Dry powder in the closed-end fund space has continued to rise to all time highs with two-thirds of that capital going to North American focused opportunities.
- The majority of closed end funds are targeting value added strategies, while debt funds saw the largest increase in interest
- 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



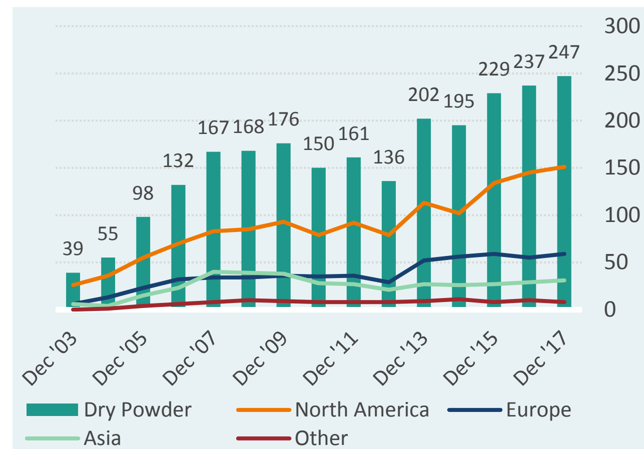
Source: Preqin, as of 2/28/18

2017 PRIVATE REAL ESTATE CLOSED-END FUNDRAISING BY STRATEGY



Source: Preqin, as of 1/31/18

DRY POWDER BY REGION – CLOSED-END FUNDS

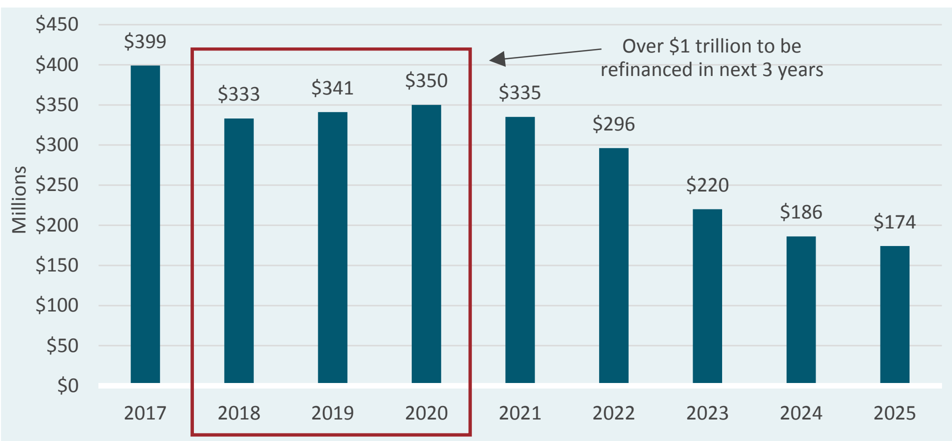


Source: Preqin, as of 1/31/18

Real estate debt

- Over the last several years, 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.
- 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 providing 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 in comparison to real estate equity.
- These loans are typically floating rate and tied to a premium over LIBOR, which provides some protection against rising interest rates.
- Lending spreads have come down over the last 12 months, however rising LIBOR has offset this from a total return perspective

CURRENT COMMERCIAL DEBT MATURITIES



Source: Trepp, Ares, 12/31/17

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 + 2.0-2.5%	LIBOR + 3.0 - 4.5%	LIBOR + 4.0-5.0%	LIBOR + 6.0 - 7.5%	LIBOR + 9 - 14%

Source: PGIM

REITs

— REITs have broadly benefitted from the overall strength of the real estate market, however REITs have underperformed broader equities over the last year. A rise in interest rates and increased economic growth expectations led to a rotation away from yield-oriented assets.

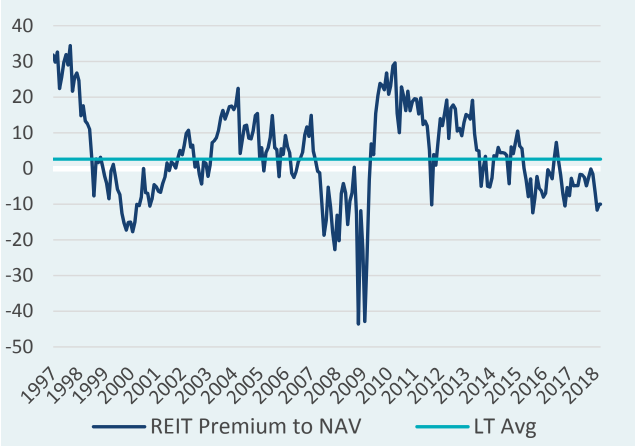
— Valuations currently appear fair on a number of metrics. Implied cap rate spreads relative to Treasuries look fairly valued compared to history. REITs are currently trading at a discount to NAV of around 10%, while historically trading at an average premium of 2%.

— REITs also appear fairly valued 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.

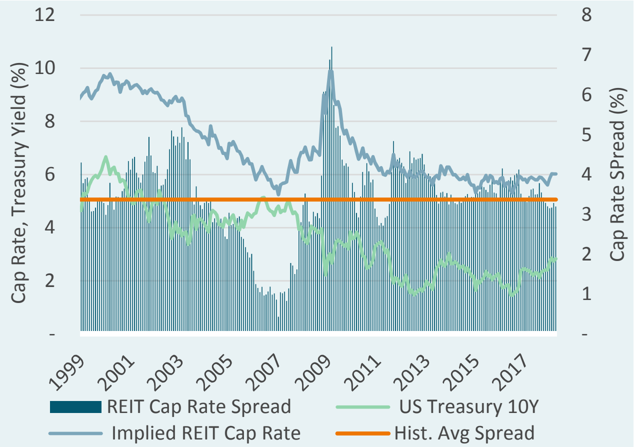
— Verus recommends utilizing active management in REITs with managers that have significant private real estate expertise.

REIT PREMIUM TO NAV



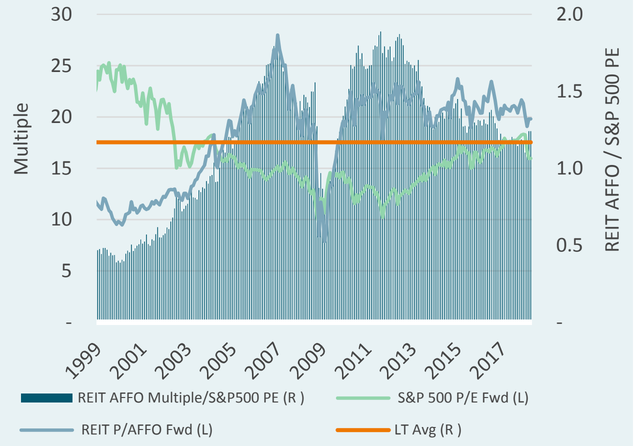
Source: JPMorgan, as of 4/16/18

YIELDS (VS. TREASURIES)



Source: JPMorgan, as of 4/16/18

VALUATION (VS. EQUITIES)



Source: JPMorgan, as of 4/16/18

Private real estate summary

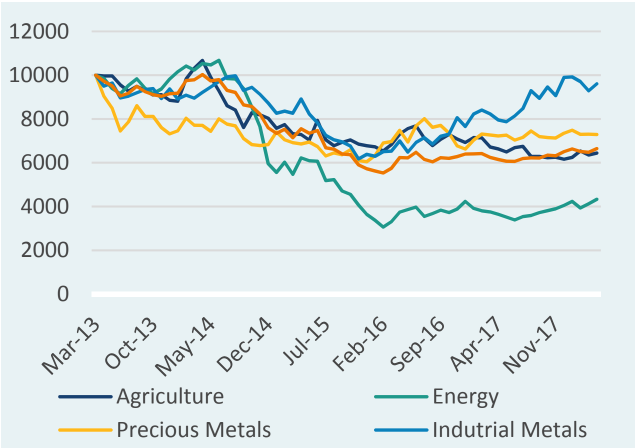
Strategy	Current Environment	Potential Risks	Outlook/Implementation	View
Core	Fundamentals remain strong, however valuations are getting expensive, especially for high quality assets in gateway markets.	— New supply could increase ahead of current projections and outpace demand. — A sharp rise in interest rates could lead to increased cap rates, hurting values. — A general economic slowdown would drastically impact demand for real estate.	Steady, but slow growth could lead to a longer than normal cycle, as we have not seen the level of overheating and new construction that typically occurs near the end of a cycle.	**Neutral/ Positive**
Value-Add	Heavy demand for high quality core real estate assets has been a tailwind for value-add strategies, as the completed project are often core real estate buyers.	— 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. — Increased capital 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 will lead to additional competition however, squeezing returns.	**Neutral**
Opportunistic	The strong recovery in the commercial real estate market has led to fewer distressed opportunities available for opportunistic funds, especially in the U.S. Lending standards remain tight for new construction opportunities, pressuring returns.	— 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.	**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 a bit, although LIBOR has risen, offsetting the impact on total returns.	— 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.	The risk-return profile for commercial real estate loan origination, both senior loans and mezzanine loans, appears to be favorable compared to core real estate. These strategies can be implemented in both open end and closed end fund structures.	**Positive**

Commodities

— Commodity performance has been lackluster over the past decade, delivering negative returns through the global financial crisis and the recent oil crisis. 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.

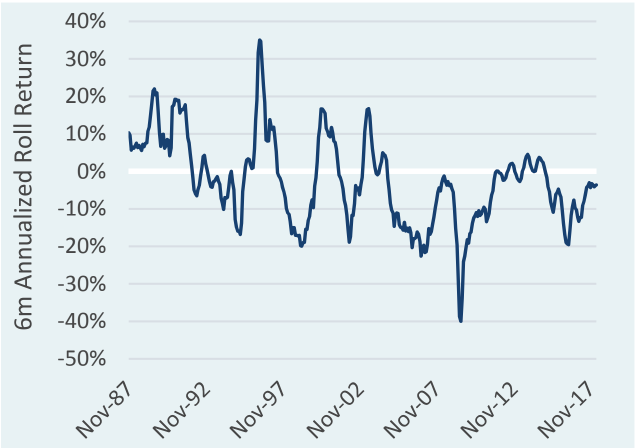
— As commodity prices moderate, futures curves have flattened and negative roll yield has begun to dissipate. Oil in particular significantly impacts overall roll yield due to its large weight in commodities indices. Oil has exhibited a backward-dated curve shape recently. We are continuing to monitor these effects since a neutral or positive roll return would improve commodity returns.

SECTOR PERFORMANCE



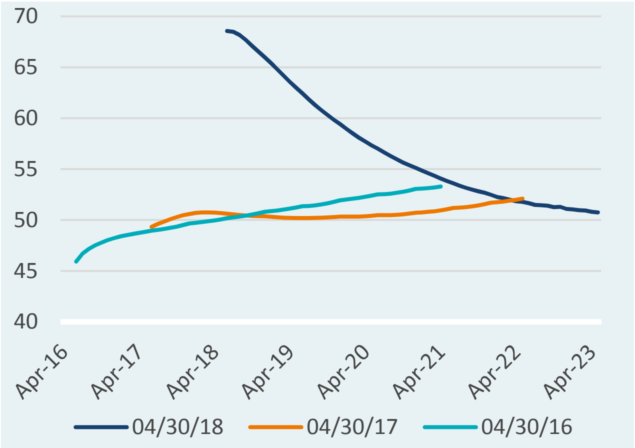
Source: Bloomberg, as of 3/31/18

ROLL RETURN



Source: Bloomberg, as of 4/19/18

CURVE SHAPE (WTI)



Source: Bloomberg, as of 5/8/18

TIPS

— Inflation has been trending upward over recent periods and is now hovering around the Fed inflation target of 2%, but still remains below historical averages.

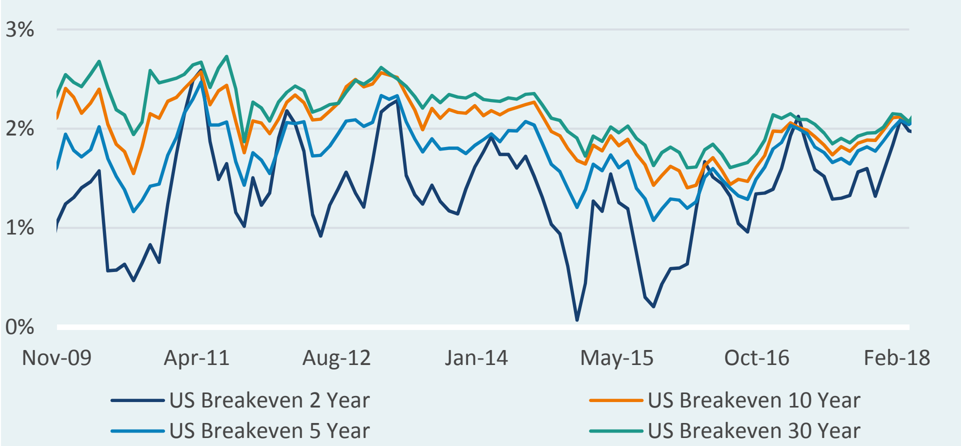
— TIPS 10-year breakevens came down slightly in April to 1.9%, while the 30-year breakevens are just slightly above 2%.

— Due to low inflation and nominal rates, TIPS returns have been very lackluster. The Barclays U.S. TIPS Index has returned 1.5%, 2.0% and 1.0% over the last 1-, 3- and 5-years respectively. Over the past 10 years the return for the index was 4.2%.

— 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.

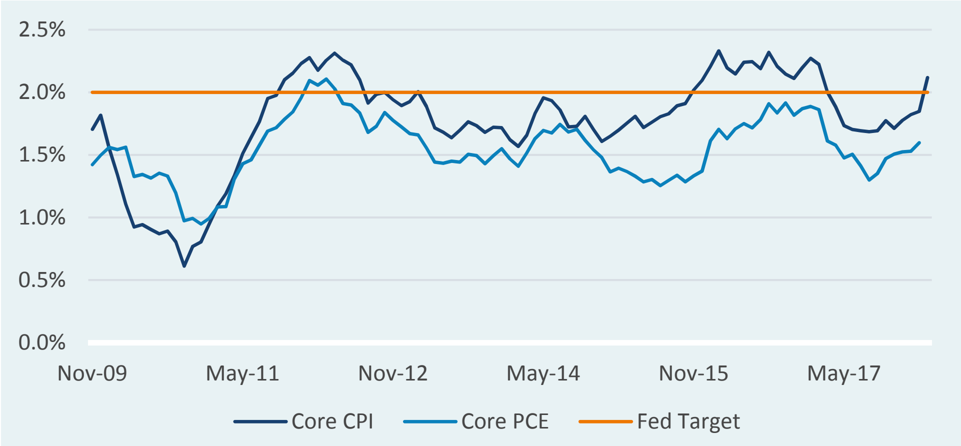
— TIPS may retain a place in long-term strategic allocations to inflation protecting assets within fixed income, and should help hedge against unexpected inflation shocks.

U.S. TREASURY BOND RATES



Source: FRED, as of 3/31/18

CURRENT INFLATION VS. FED TARGET



Source: BLS, as of 3/31/18

Opportunity in midstream energy

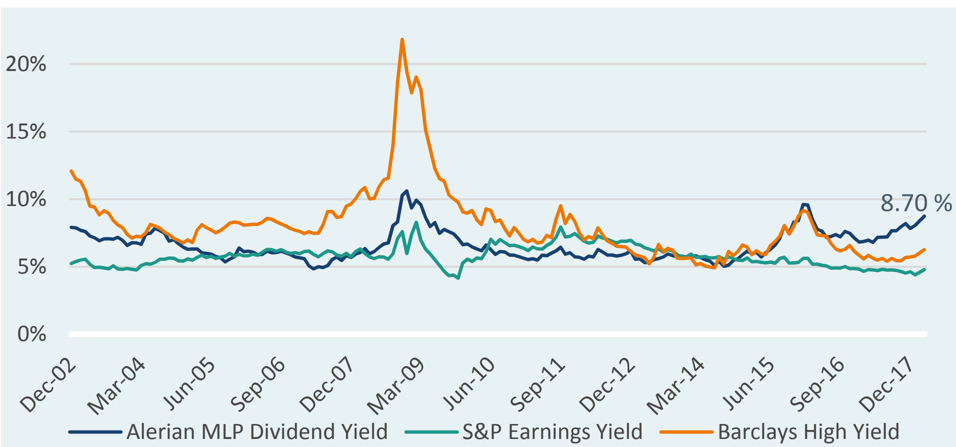
— MLP yields have steadily climbed since mid-2016 on the back of a sell-off in the sector and recovery in distributions following the energy price collapse.

— Balance sheets across the industry are in better shape today than before the oil crisis. Debt-to-cash flow has improved since peaking at 6.4x in 2015.

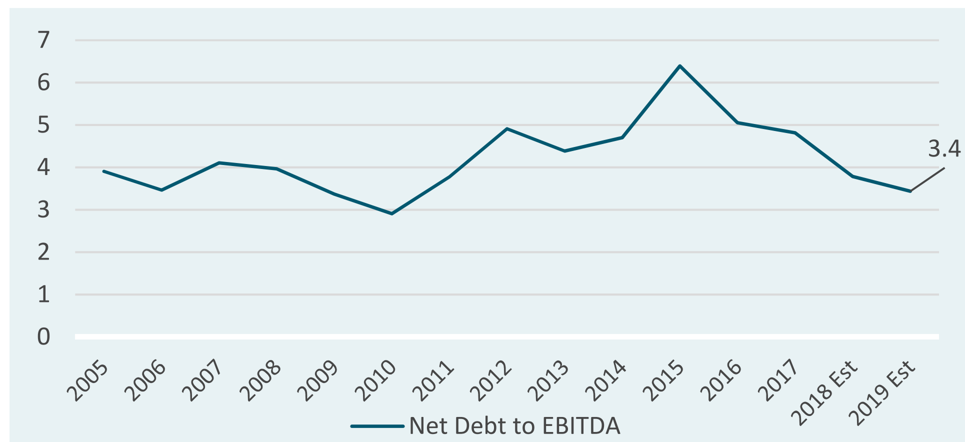
— The U.S. is expected to surpass Russia in 2018 to be the largest oil producer in the world. Midstream companies grow through oil/gas volume increases, not commodity price appreciation.

— Distribution growth rates are expected to reach 4-6% by 2019. Reduced capex spending needs going forward could lead to more earnings being converted into free cash flow and even greater distribution growth.

MLP YIELDS



MLP DEBT TO CASH FLOW RATIO

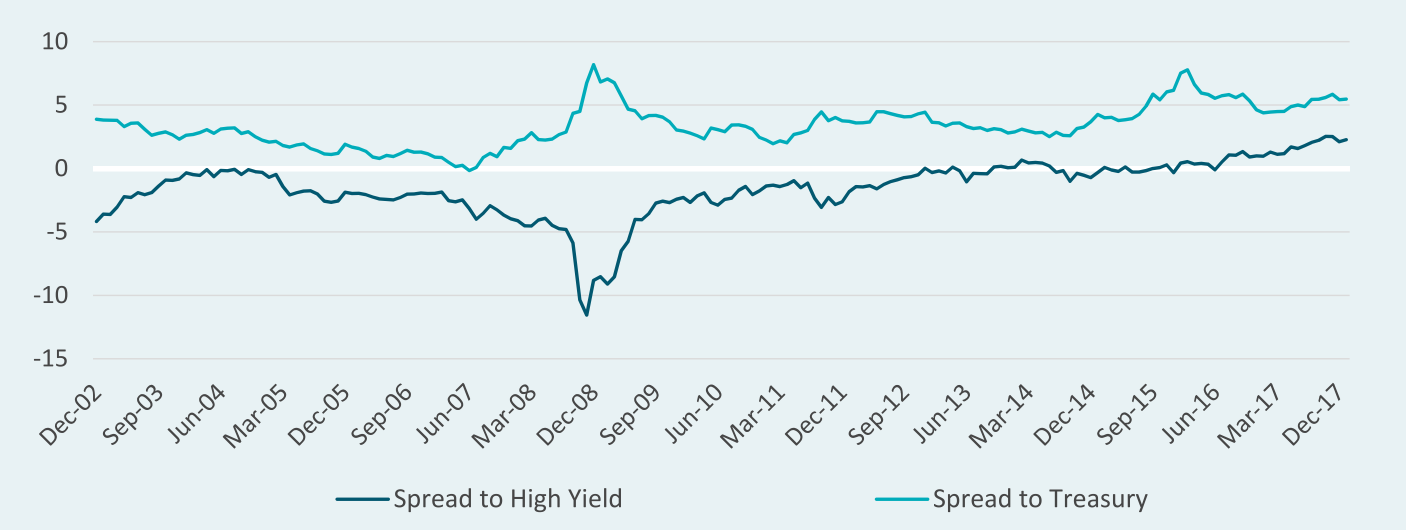


Source: Bloomberg, as of 12/31/17

Opportunity in midstream energy (cont'd.)

- For most clients, we recommend a tactical position in MLPs with a short-medium term hold period (2-4 years).
- The current spread on MLPs above the 10-year Treasury is around 580bps; closer to 300bps historically.
- The current spread on MLPs above the Barclays High Yield index is around 250bps.
- **We recognize that 20+% annualized returns in any environment are rare. If we handicap the returns with a lower probability of fully achieving those results, even a 50% probability would still provide an attractive return target to investors in today's environment.**

MLP SPREADS VS HIGH YIELD AND TREASURY RATES



3-Year Expected Return:

Current Yield - 8%

+

Distribution Growth - 4-6%

+

Return to FMV - 10-13%

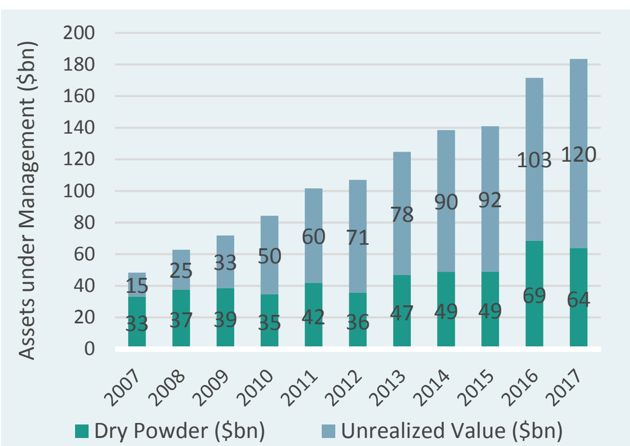
= 22-27%/year

Source: Bloomberg, as of 12/31/17

Infrastructure

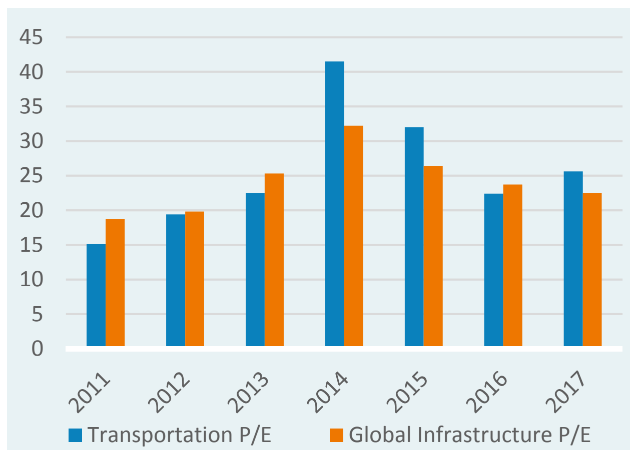
- Dry powder within private infrastructure appears to have declined slightly in 2017 from a peak in 2016, according to Preqin. That said, there remains a highly competitive market for assets with contracted cash flows.
- Within infrastructure, we remain positive on value-add opportunities relative to core strategies. Interest rate sensitivity is generally lower in value-add infrastructure and pricing levels, though elevated, are below comparable core valuations. Within value-add we focus on sector specialists or teams with a track record of successful project development and/or operational expertise.
- Transportation infrastructure (i.e. ports, toll roads, airports) continues to trade at extremely rich valuations. We believe these assets carry a high level of interest rate risk and will face performance headwinds as discount rates adjust to a normalized interest rate environment.
- Returns for the median infrastructure fund have been disappointing relative to their illiquidity and fund economics. Relative to private equity buyouts, returns for infrastructure investments should exhibit lower IRRs but comparable net multiples. Returns have lagged in nearly all vintages for infrastructure which confirms our own observations that investors need to be highly selective within the asset class and look for managers with a specialized sector focus and fund economics that reward the manager for performance and not assets under management.

INFRASTRUCTURE DRY POWDER



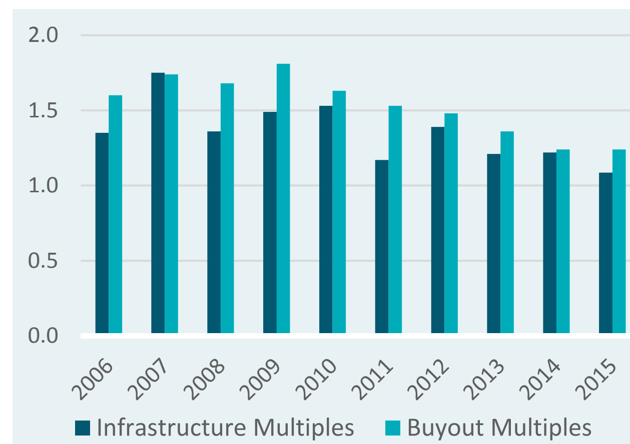
Source: Preqin

VALUATIONS IN TRANSPORTATION INFRASTRUCTURE



Source: Bloomberg

MEDIAN MULTIPLES FOR INFRASTRUCTURE BY VINTAGE YEAR (NET)

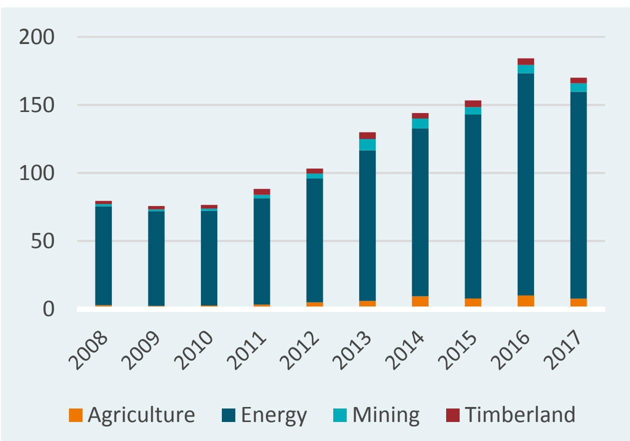


Source: Preqin

Private natural resources

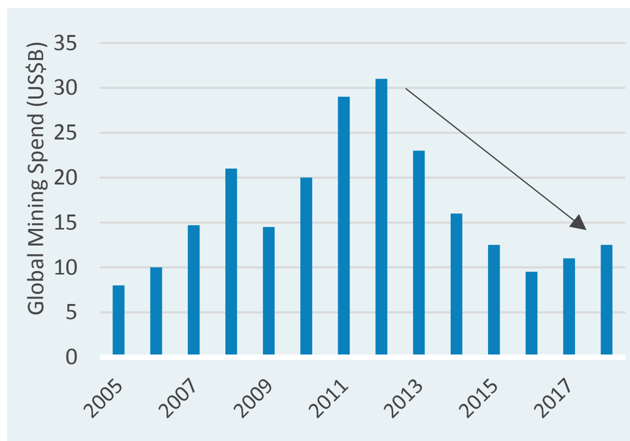
- Energy remains the most liquid and scalable segment of the natural resource universe. Dry powder within energy appears to have declined in 2017 from a peak in 2016, according to Preqin. North America remains the largest market for energy funds to raise and deploy capital, more than double the size of the next largest market, Europe.
- 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 industrial metals. Our overall outlook within mining is positive with a notable challenge in finding enough investment opportunities that meet our underwriting criteria.
- Within a diversified real asset portfolio, we believe agriculture investments can play an interesting diversification role and reduce our clients exposure to more volatile energy/mining markets. The most promising investments within agriculture continue to be with funds that buy or build vertically-integrated business utilizing permanent crops. Unfortunately, returns within the sector have faced headwinds in recent years as row crop prices and tree nut prices have declined on excess supply issues. We remain negative within agriculture due to a challenging operating environment and lack of attractive investment opportunities.

FUND DRY POWDER BY STRATEGY



Source: Preqin

CAPITAL EXPENDITURE IN MINING



Source: Bloomberg

CROP PRICES – BLOOMBERG AGRICULTURE

Source: Bloomberg

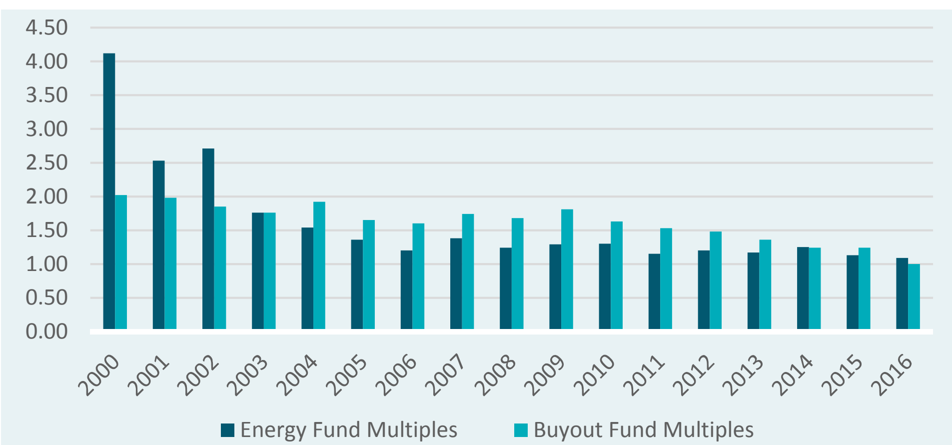
Private energy

— Energy prices and asset values have recovered quickly after reaching a low point in Q1 2016. Now that the dust has settled on one of the worst periods for the energy industry since the 1980's, one interesting takeaway is how much the private markets aided in the sector's recovery. Billions of dollars were raised in quick order by private credit and equity investors to take advantage of a frozen high yield and public equity market in 2015/16. While still early, those investments appear to have paid-off as oil and gas prices stabilized at much higher levels.

— The experience for many investors in private equity energy has not been without heartache as exceptional early vintages in the industry brought new capital to the asset class. Returns have lagged since, no doubt driven by the commodity downturn but also as competition fueled a more efficient market. We believe investors will need to consider the traditional double performance fee structure (a.k.a. double promote) on energy funds and find ways to reduce the fee overhang in a lower return environment.

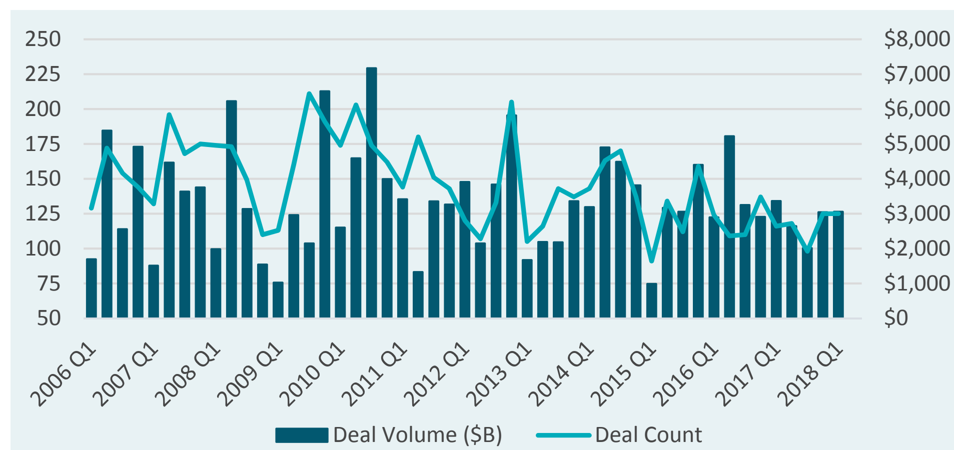
— The M&A market within upstream energy saw a recovery in 2016 but slowed again in 2017 as E&P shareholders began demanding more spending restraint and an increase in shareholder-friendly actions (i.e. dividends and buybacks). Activity from Oil Majors (i.e. Exxon, BP, etc.) could pick-up as declining reserves draw them back into the acquisition market.

MEDIAN GLOBAL ENERGY FUND RETURN MULTIPLES BY VINTAGE YEAR (NET)



Source: Preqin

M&A TRANSACTIONS IN THE UPSTREAM OIL& GAS MARKET



Source: Bloomberg; (excludes Royal Dutch Shell/BG Group in 2015)

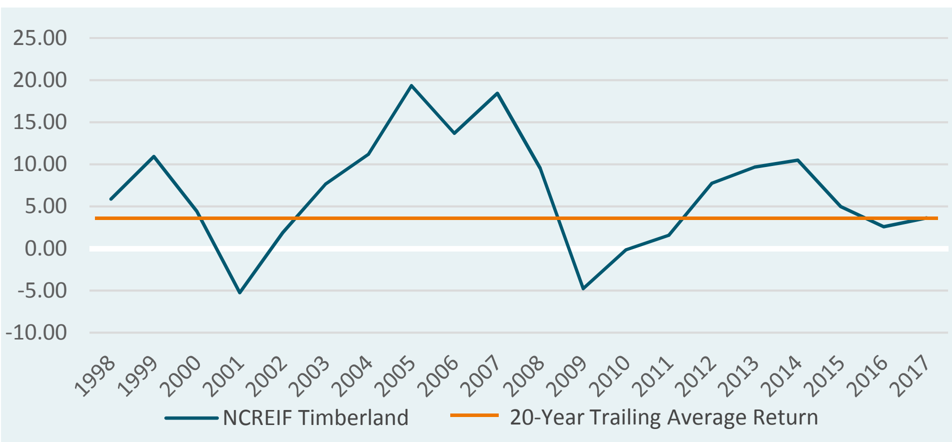
Timberland

— We are highlighting timberland in this year's outlook given our bearish attitude on the asset class for many years. Fundraising within timber-focused funds peaked in 2008, according to Preqin. With less dry powder and fewer funds being raised, we wanted to see if there was an attractive opportunity in an overlooked industry.

— The past 10 years have been lackluster for timber investors, achieving a trailing average return of 4.4%, according to the NCREIF Timberland Index. Many TIMO funds have faired 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 which raises the question will the next 10 years look more like those experienced in the 90s and early 2000s or the most recent 10 years.

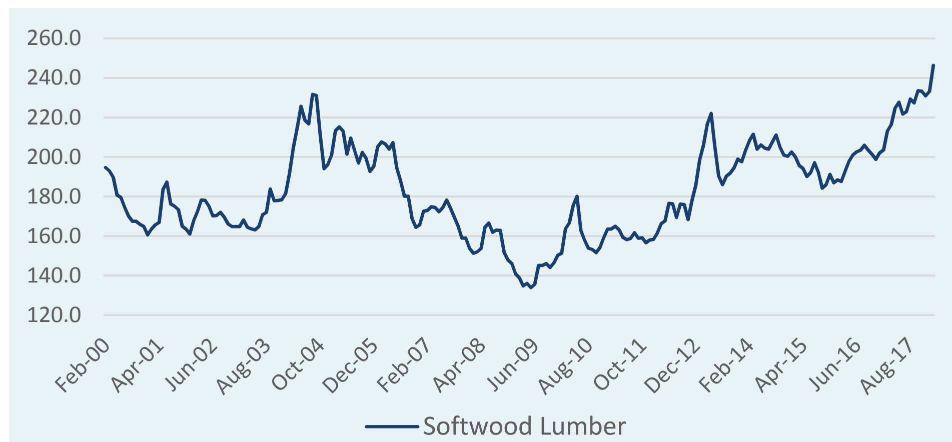
— One of the challenges for newer investors in Timberland is gaining access to the most lucrative timber, the pacific northwest, where hardwood species are in high demand by Asia. Most transactions in timber occur in the Southwest/Southeast where softwood pine species dominate. Softwood is less valuable and faces intense competition from growers in South America. Prices have seen a recovery of late as housing starts improve and competition from Canadian imports have declined.

NCREIF TIMBERLAND CALENDAR YEAR RETURNS



Source: NCREIF, as of 12/31/17

SOFTWOOD LUMBER PRICES



Source: Bloomberg, as of 2/28/18

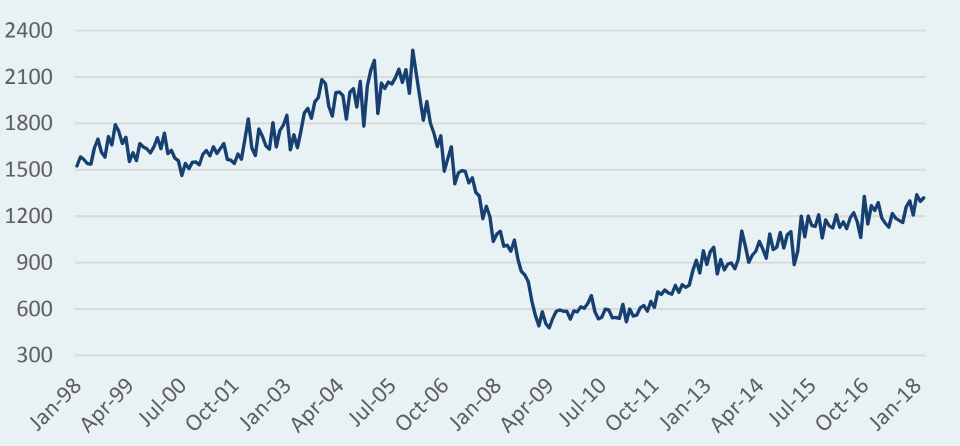
Timberland (continued)

— 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 are some signs that the trends are reversing as millennials begin settling down and look to own vs. rent. A key driver of lumber demand comes from housing construction which is why this is an important metric to watch.

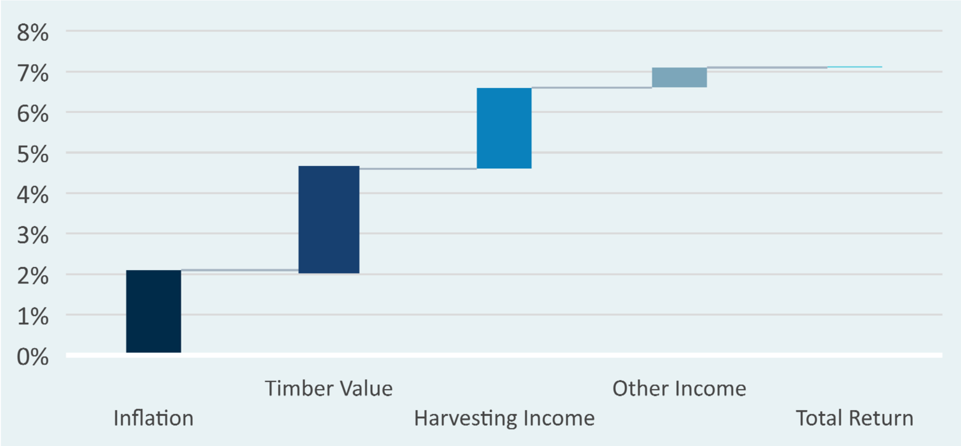
— Return drivers within timber come from the appreciation of the land (inflation + timber value) and income from both harvesting timber and non-timber income sources (i.e. hunting leases, oil/gas royalty income, etc.). Without factoring in rising discount rates that create a meaningful headwind for future terminal values, we derive expected returns within timberland of 7-9% (gross).

— 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 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



TIMBERLAND RETURN BRIDGE



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. .

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