Verus

PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

JUNE 2025

Real Assets Outlook

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Verus

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Key themes

Key themes for 2025

Observations driving our outlook

What slowing economic growth could mean for real assets

Coming into the year, we had expected a slowing of U.S. economic growth. It appears that this slowing of growth is now underway, though potentially more sharply than previously assumed. Continued uncertainty around how tariffs will be used, and whether higher tariffs will largely be a short-term component of the policy toolkit or will instead be a permanent component of trade, has hurt investor sentiment. At the same time, international developed markets—particularly European markets—have seen renewed investor interest driven by government investment programs and an easing of debt restrictions. For the first time in many years, we are looking at opportunities in Europe across infrastructure and real estate. On a relative basis, infrastructure and commercial real estate are likely to hold their values better than other segments of the equity market. Natural resources, particularly oil and gas, are likely to face headwinds from falling demand, which could provide an attractive entry point down the road.

Commercial real estate is poised for a rebound, if the economy holds

After deploying significant capital into commercial real estate over the last 18 months, we are seeing the benefits of buying when others were pulling out. Real estate values are in recovery and likely headed for cap rate compression on a go forward basis. The U.S. economy is showing signs of weakness which will have an impact on lease rate growth, hurting the recovery in real estate. That said, on a relative basis, real estate is coming into 2025 having taken significant write-downs over the last 2 years. The prospect of falling interest rates is likely to offset some of the weakness in topline growth. We are also looking at opportunities outside the U.S. where currency tailwinds and improving economic growth have seen those markets look more attractive today than in prior years.

Now may be the time to manage risk in infrastructure

For several years, we have discussed the shift in strategy among infrastructure managers towards private equity-oriented industries and companies. With fewer regulated and monopolistic businesses available to purchase, what qualified as “infrastructure” became a moving target. In general, that trend meant taking more risk. The prospect of slowing economic growth in the U.S. market is likely to impact investments that were more reliant on business cycles than those that are defensive, regulated businesses that traditionally meet the definition of infrastructure. We would take this opportunity to build more defensive infrastructure portfolios and look outside the U.S. market.

After a brief recovery, activity has cooled across energy markets

Investors are reminded once again of the challenges of investing in oil/gas. After a brief recovery starting in 2022, the energy markets are facing headwinds again as oil prices have fallen ~20% over the past 12 months. We saw a flurry of M&A activity in the oil and gas markets in 2023 and early 2024 after several years of light transactions. Unfortunately, liquidity has once again left the market, leaving investors with fewer options for a return of capital. The good news is that if we experience a sustained period of low commodity prices, entry values will look enticing for investors who can stomach the illiquidity and regulatory uncertainty. For now, we are being patient as the industry is still healthy enough to weather this short-term downturn.

Outlook summary

Real estate outlook

Outlook		
Negative	Neutral	Positive
○	◑	●

Strategy	Current Environment	Outlook/Implementation	‘24	‘25
Core real estate	– Core real estate returns, as represented by the NFI-ODCE Index, have now had three quarters of positive return and two quarters of positive appreciation (4Q’24 and 1Q’25) after nine consecutive quarters of negative appreciation going back to mid-2022. – We believe that fund level write-downs due to the rate environment have bottomed. – Core real estate redemption queues remain high at $29 billion, which will pressure sales activity and hamper acquisitions as funds look to redeem investors. – The increased economic uncertainty and potential for recession driven by tariff implementations will be a key risk factor for real estate demand.	– We have shifted our view from negative back to neutral and recommend clients that have been underweight core real estate move back to target weight. – We recommend that clients use this as an opportunity to re-evaluate their core fund exposures and upgrade their rosters, considering funds with low redemption queues. – We would caution against funds or portfolios that have become overly concentrated in industrial and multifamily.	○	◑
Value-add real estate	— Transaction volumes have increased in the marketplace due to buyers and sellers coming to an agreement on price, increasing the opportunity set in value-add. — Some properties that have been on the sidelines due to pricing issues have been neglected on maintenance and had capital expenditures deferred; we see those as being in a prime position for value-add strategies (renovation, re-positioning). — Mark-to-market lease up opportunities will persist as tenants with longer term leases rolling over face higher current market rents (especially in industrial). — Capital chasing deals in multifamily and industrial has pushed cap rates lower causing negative leverage financing in some cases.	— Verus has shifted from neutral to positive in value-add as entry pricing has improved and transaction volumes have been increasing. — We favor strategies that rely less on financial leverage and more on strong asset management and internal operating capabilities to add value as cap rate compression, leverage and market growth will be less reliable sources of return.	◑	●
Opportunistic real estate	— The higher rate environment over the last two years has created some pockets of stress and distress as some asset owners have faced a gap in their capital stack as they look to refinance or have been forced to sell assets. — Banks have been less willing to sell off troubled loans, instead favoring to work out and extend loans with borrowers, making it less likely to see a deep distress cycle. — Higher interest rates and lower cap rates are reducing the positive impact of leverage. — Sectors that have been out of favor (i.e. retail, office, senior housing) look more interesting in select markets with the right product type. — Increased construction costs may pressure development strategy returns and a current oversupply in industrial and multifamily may take time for the market to absorb.	— We remain positive on opportunistic real estate as we believe there will continue to be pockets of stress caused from impaired capital stacks and asset owners who will need to refinance/sell. — We are favorable on strategies that can pivot across sectors, particularly those that are less trafficked or out of favor. — Non-core funds with vintage years during periods of economic stress tend to be some of the best performing vintages. Entry pricing is more favorable now than it was a couple years ago.	●	●
Real estate debt	– Spreads have tightened over the last 12 months as banks and other lenders reentered the real estate debt market, interest rate policy shifted, and the worst fears of commercial real estate values failed to materialize. – Declining base rates have also impacted total returns as the Fed shifted to a more accommodative monetary policy.	— Due to declining base rates and narrowing spreads, we have moved back to a neutral outlook. — We still think there are some opportunities in credit, though less compelling than in late 2023. — Construction financing is receiving a premium due to lack of competition in the market.	●	◑

Liquid real assets outlook

Outlook		
Negative	Neutral	Positive
○	◑	●

Strategy	Current Environment	Outlook/Implementation	'24	'25
REITs	— REITs outperformed broader equities in 1Q'25, reversing a trend where the S&P 500 outperformed REITs in the calendar years, 2022, 2023 and 2024. Valuations adjusted to higher interest rates much faster than the private market real estate appraisal process. — REITs appear to have a more favorable valuation profile when viewed from an implied cap rate perspective. — Given the uncertainty ahead with trade policy and the resulting economic impact, REITs are likely to face heightened volatility alongside the broader market.	– Verus believes 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. Active management is preferred. REIT valuations are currently at a discount; however, this has been volatile and difficult to time.	◑	◑
Commodities	— Commodities were up modestly in 2024, after being down almost 8% in 2023. Through April, the asset class is up almost 4%, benefiting from the rise in precious metals. — Over the past two years, we have maintained a bearish view on commodities, based on the belief that we did not want to fight the Fed, as central banks have signaled their primary goal is to keep inflation contained, a continued headwind for commodities. — The value of commodities is mainly influenced by supply and demand, affected by external factors like weather, geopolitical events, and technology. While external shocks can benefit commodity prices in the short run, the asset class has not experienced a performance benefit despite the increased regularity of events.	– While commodities can serve as an inflation hedge in early inflationary environments, we find ourselves in a more deflationary environment today with a lot of uncertainty around the future direction. – Commodities performance tends to follow GDP expectations, and with softening GDP domestically, we would expect another disappointing year for commodities.	○	○
TIPS	– TIPS were up modestly in 2024, outperforming nominal treasuries as inflation remained stickier than the market anticipated. – Inflation has continued moderating in 2025, but Tariff-induced inflation concerns have emerged. In our base case scenario, we do not expect an inflation surprise and are not constructive on duration. Given that duration tends to overwhelm the inflation hedge benefit of TIPS and given the low carry they offer, we see little value in holding treasury securities in real asset portfolios.	– Low absolute current yields and uncertain inflation expectations has led to low total return expectations for TIPS, especially relative to other real asset investment opportunities. – Continued low rates creates a high cost of carry. – We believe there are better ways to hedge inflation, diversify a portfolio and/or increase total portfolio return than using TIPS. – If inflation were to surprise to the upside in a material way, TIPS would likely outperform nominal treasuries.	◑	◑

Infrastructure outlook

Outlook		
Negative	Neutral	Positive
○	◐	●

Strategy	Current Environment	Outlook/Implementation	'24	'25
Core Infrastructure	– Market uncertainty, particularly in the U.S., is likely to benefit core infrastructure relative to other sectors more exposed to slowing economic growth. – Core infrastructure often benefits from revenues and expenses that are almost entirely tied to the country in which they are domiciled. Tariffs, protectionism, and onshoring are, in most cases, either tailwinds or neutral to the operations of the businesses. – The asset class remains fully valued by historical standards, leaving the spread between equity returns and debt yields uncomfortably tight.	– We have been less enthusiastic about core infrastructure since the interest rate environment changed but are seeing value today in the asset classes stability. – We prefer global core funds with light exposure to assets reliant on global trade/transportation volumes.	◐	◐
Non-Core Infrastructure	– In recent years, we have become increasingly concerned about the asset class moving up the risk spectrum. Several factors have driven this shift, including a wave of core capital acquiring assets and the rise of new subsectors within energy transition and digital. – There remains a significant need for investment in modern infrastructure to support the digital economy and electrification, which presents an investable opportunity. However, it's important for investors to remain objective regarding the risk being taken in their current infrastructure investments. – We expect transactions to increase in 2025, as GPs look to return capital to investors and buyers feel confident in the asset class's ability to hold up to its inflation-protected reputation. This should also help thaw the slower fundraising environment of late. – We have cautioned about GDP sensitivity in the past, which by default many think of as transportation exposure. In the non-core space, many assets rely on growth/expansion to create value, and any slowdown to the economy could pose a headwind.	– We moved non-core infrastructure back to neutral as the space has broadly drifted away from traditional infrastructure characteristics. As a result, investors should anticipate a broader range of outcomes and place greater importance on manager selection. – We still like the middle market for its relative valuation advantage, compared to that of large-cap assets, but have found it increasingly difficult to find value-added risk. – There are attractive opportunistic strategies that are further out on the risk spectrum; we suggest pairing them with a strong core/core + position in a broadly diversified portfolio.	●	◐
Energy Transition	– Energy transition infrastructure has grown beyond renewable energy production to include a host of related industries that are increasingly supported by the broader infrastructure asset class. – Tailwinds to the theme persist in the form of policy support and growing demand for energy from transitioning sectors like transportation and power generation. Still, uncertainty around adoption and continued policy support remain challenges. – Capital flows have declined in the last couple of years as investor appetite for ESG/Energy Transition specific strategies has waned in the U.S. Non-U.S. investors, on the other hand, continue to provide robust support for the sector.	– We prefer specialist GPs who invest thematically in the space, or within a niche, as opposed to generalists, although it is increasingly difficult to avoid energy transition investments when investing in infrastructure broadly.	◐	◐

Natural resources outlook

Outlook		
Negative	Neutral	Positive
○	◑	●

Strategy	Current Environment	Outlook/Implementation	'24	'25
Upstream Energy	– The global oil and gas market is more capital constrained than it was a decade ago before oil prices crashed. The sector has experienced reduced capital investment, materially less interest from investors, and a wave of consolidation limiting the number of operators in the field. – On a relative basis, the upstream sector looks more attractive than in past years with low entry multiples, recent double-digit yields, and minimal leverage. If the asset class can maintain capital discipline, sending cashflow back to investors, the sector could re-price more closely with other asset classes. – While there is a consensus that hydrocarbons will be needed well into the next three decades, oil is projected to peak in 2030, while cleaner natural gas demand will continue growing into the next decade, and yet, liquidity and hydrocarbons' role in the energy transition remains an existential threat. – Supply outlook and demand uncertainty from expected global growth slowdown have impacted near-term pricing. Still, longer-term pricing points towards ~$60 a barrel (middle cycle) and what might be a structurally higher $4.0 /MMBtu for natural gas.	– We believe the best way to invest in this space is through managers with strong capital discipline and a proven track record of successfully navigating cycles while maintaining yield with a well-hedged, minimally leveraged strategy. – We favor strategies that diversify investments in natural gas and oil to insure against uncertain pricing. We prefer experienced teams in primary markets that tend to be lower-cost. – Commodity pricing poses significant risks due to potential demand headwinds from a weakening global GDP and supply challenges from increased production by OPEC. – Sustained commodity price pressure may make way for attractive entry later down the road.	◑	◑
Midstream Energy	– Public midstream stocks had another year of impressive performance in 2024, up more than 26%, according to the Alerian MLP index. – The trailing 5-year returns are on par with large cap US stocks, one of the best performing asset classes in the investment industry. – The dramatic turnaround in the public midstream market, after a lengthy string of poor returns comes from the growth in production volumes and the re-rating higher of public midstream valuations. – The private midstream market has seen a small uptick in deal activity and returns are improving but liquidity and new deal opportunities remain a concern. There is less competition among midstream sponsors (good for buying) as fundraising remains a challenge, but it comes with fewer exit opportunities. – While hard to predict, demand appears strong for hydrocarbons well into the future. Volumes could come down in oil over time as production peaks, but natural gas likely has room to grow.	– Our outlook has improved in private midstream as the public midstream stocks are trading at higher valuations which should incentivize buying in the private markets where multiples are materially lower. – The potential for improved liquidity solves one challenge but finding new investment opportunities remains a concern. To the extent that investors can gain comfort with slower fund deployment, there could be some interesting deals in midstream. – We would recommend clients invest in midstream through private fund structures rather than weather the volatility of public markets.	○	◑

Natural resources outlook

Outlook		
Negative	Neutral	Positive
○	◐	●

Strategy	Current Environment	Outlook/Implementation	'24	'25
Mining	– The mining industry is relatively healthy with strong balance sheets and an active M&A market last year. We expect that the industry will look to consolidate further though nationalist policies globally have hampered activity. – While gold and copper prices have moved higher in the last year, many other base metals have yet to find a bottom since peaking in 2022, notably nickel, lithium and aluminum. The slowing Chinese economy and excess supply are key reasons that prices for some metals have been weak. – Commodity investing is challenging and fickle, but mining is even more so than others. Many commodities (rare earth minerals like lithium, silicon, and cobalt) are relatively young by historical standards, creating less-understood commodity cycles. – Trade wars and any slowdown in global growth is likely to result in weaker prices for most industrial/base metals. Gold and precious metals could benefit from a weaker dollar and a decline in the U.S. being seen as a safe-haven. – Fundraising in mining is likely to remain challenging as fewer investors have appetite for the asset classes risk, cyclical returns, low return of capital and frontier geography.	– While the long-term demand for energy transition metals is a compelling thesis, the reality of investing in mining is that many risks must be overcome including, operational, political, and environmental. Even when executed, returns can be hampered by weak commodity prices. – Mining ranks towards the bottom in being an institutional quality asset class, despite being around for decades. If investors want access to metals and mining, we favor implementing through mining finance strategies over private equity mining funds. – Mining finance, which has its own set of challenges, has the benefit of greater certainty of liquidity, less risk of capital loss and decent risk-adjusted returns. – Our general policy with commodities it to buy when prices are weak and sell when they are strong.	◐	◐
Timberland	– The 20-year NCREIF Property Index has produced a 7.0% annualized return, split between income and appreciation. Recent performance favors appreciation, as shown in the 1-year trailing return of 11.1%, 70% + driven from appreciation. – Demand in the short term looks poised to weaken with home sales down, housing stock up due to higher mortgage rates, and multifamily starts declining. The structural undersupply of homes should be a demand driver in the medium to long-term but depends greatly on the health of the economy. – Timber availability may be challenged, pushing prices up, due to reliance on Canadian imports, with roughly 25% of US lumber coming from Canada. Pre-set harvest schedules make it difficult for supply to change dynamically, but other importers, like Brazil, may provide relief if needed.	– Timberland has several unattractive characteristics: low return potential, low transaction activity, and structural oversupply in the largest timber market (Southeast Pine). – We remain skeptical of carbon offsets within timber due to weak carbon pricing and the limitations it places on asset management.	○	○

Natural resources outlook

Outlook		
Negative	Neutral	Positive
○	◐	●

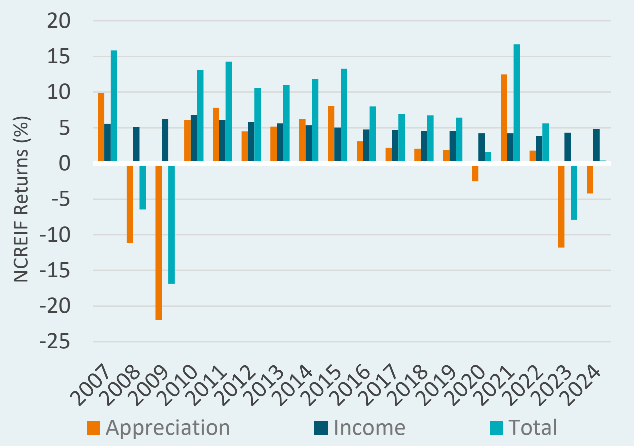
Strategy	Current Environment	Outlook/Implementation	‘24	‘25
Agriculture	– For the first time since 1991, the NCREIF Total Farmland Index (TFI) recorded a negative annual total return of -1.0% for the year ending December 31, 2024. The income return stood at 2.5% while the capital return was -3.5%. Most of the underperformance was driven by permanent crop land values falling, as values were finally viewed by the market to be detached from the income they were producing, catalyzed by an oversupply in several nut commodities. – Fundraising in 2024 was anemic, marking the lowest amount raised by the strategy in the last decade. – We have been skeptical of appreciation increases unsupported by income in recent years. The sector has faced many challenges, including higher operating costs that seem to be subsiding and being replaced by others: lower commodity prices, elevated inflation, higher interest rates and uncertainty around policy/tariff implementation. – Structural drivers should make agriculture more attractive as global demand rises and the amount of arable land remains relatively stable, but we have yet to see this effect on investors’ returns.	– Land values on row crops have held steady, despite falling crop prices in the last couple years. In a new lower commodity price environment, tenant farmers will be less willing to pay higher cash rents, causing cropland appreciation to slow or cease in the coming years. – Permanent crop values have fallen but issues around water access, excess crop supply and export restrictions have yet to be resolved. – We view agriculture investments where crop and land are a component of a broader value-add investment strategy, like vertical integration or resource optimization, as more attractive than core farmland funds. Still, operational complexity brings its own set of challenges.	○	○

Current conditions and outlooks

Real estate performance – Recent history

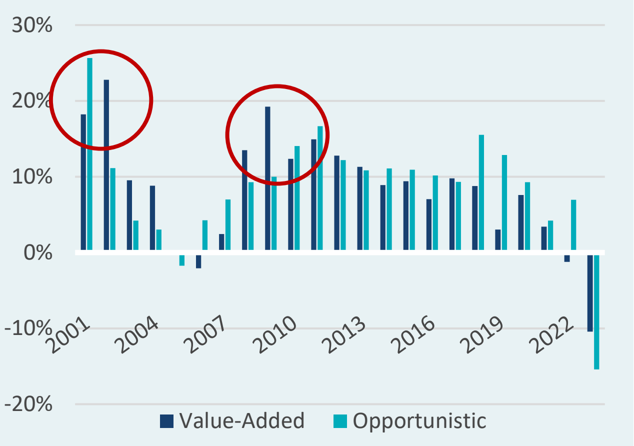
- Core real estate returns, as represented by the NFI-ODCE Index, have now had three quarters of positive return and two quarters of positive appreciation (4Q'24 and 1Q'25) after nine consecutive quarters of negative appreciation going back to mid-2022.
- In 2024, multifamily, industrial, and retail sectors turned positive, while office continued to have negative performance (-7.7% unlevered). Retail was the highest performing sector at +5.3% (unlevered).
- Non-core real estate vintage funds have historically outperformed during recessionary years and early recovery periods (e.g., 2000-2003 and 2009-2011) as market dislocations created attractive entry valuations. Given the recent stress in the market, current non-core vintages could be attractive.

NCREIF PROPERTY INDEX RETURNS (CORE)



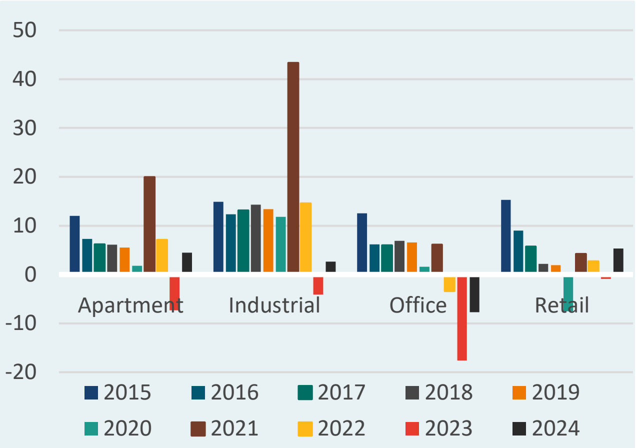
Source: NCREIF, as of 12/31/24

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



Source: FTSE, as of 9/30/24

CORE SECTOR ANNUAL RETURNS (%)

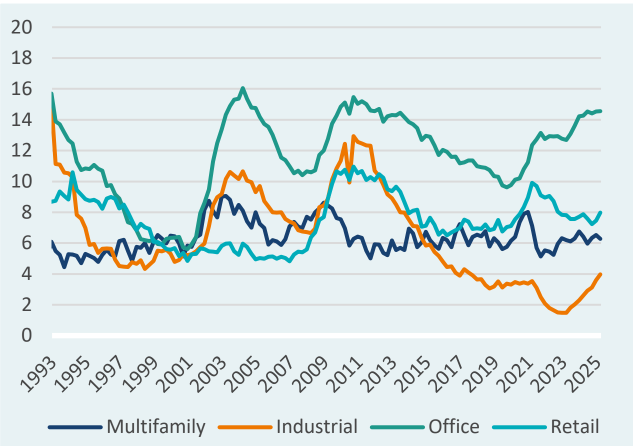


Source: NCREIF, as of 12/31/24

Real estate fundamentals

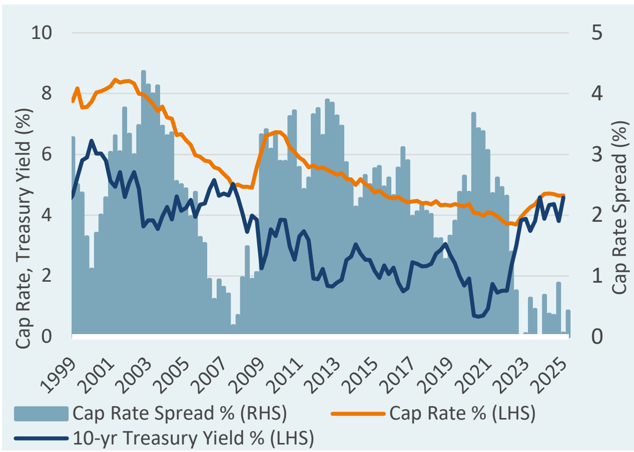
- Cap rate spreads to Treasuries remain tight by historical standards. The average spread since 2009 has been 2.3%, while the average spread over the last 3-years has averaged 0.4%. If interest rates remain at elevated levels, there may be upward pressure on cap rates.
- Vacancy rates among core properties have held flat over the last year, apart from industrial, which has seen a sharp rise off historical lows driven from new supply in the market.
- Net operating income (NOI) growth has been trending lower over the last several years after the post-covid rebound. Industrial, multifamily and retail have managed to retain positive NOI growth, while office rents have turned sharply negative.
- Tariffs have created a degree of uncertainty in the market, particularly among industrial and retail properties. Banks and lenders in general pulled back from the market in April but that may be a temporary pause as clarity of policy improves.
- Over the last two decades, U.S. real estate has meaningfully outperformed European real estate. Recently, however, higher GDP growth expectations, paired with favorable currency tailwinds has created more interesting European opportunities to consider.

VACANCY BY PROPERTY TYPE



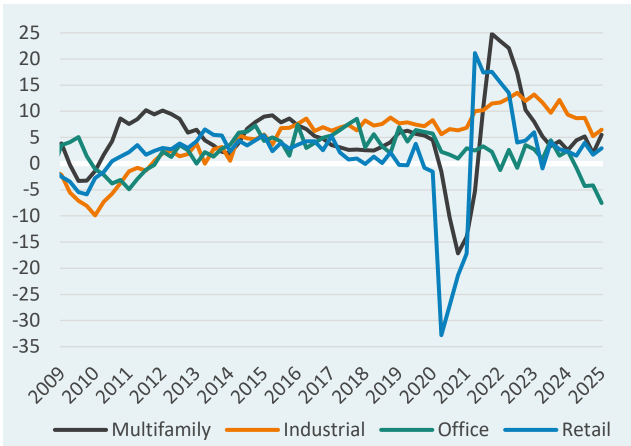
Source: NCREIF, as of 3/31/25

CAP RATE SPREADS



Source: FRED, NCREIF, as of 3/31/25

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

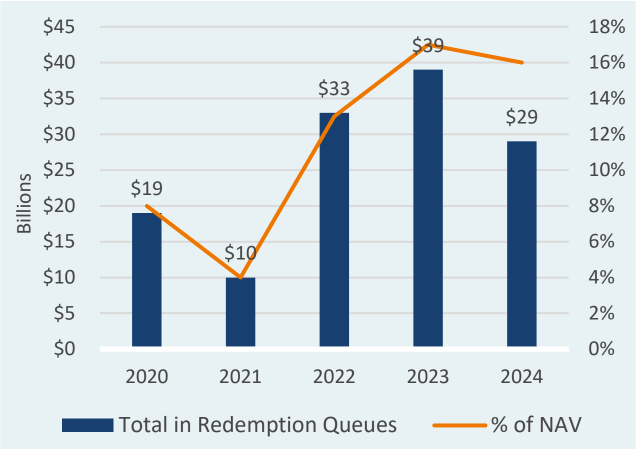


Source: NCREIF, as of 3/31/25

Status of core ODCE fund universe

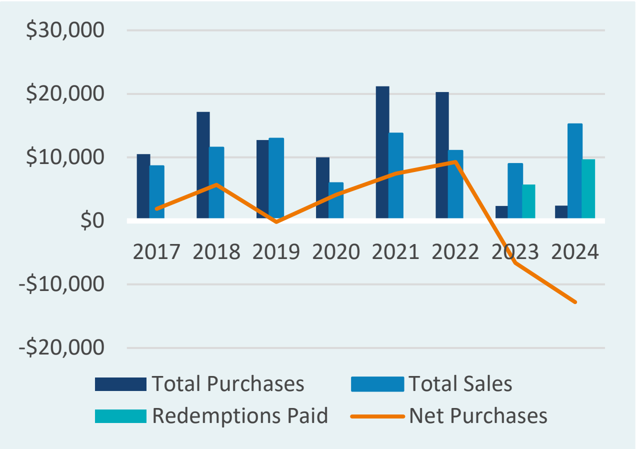
- Core real estate funds face large redemption queues for a third consecutive year. Aggregate levels have come down to $29 billion from $39 billion but remain elevated at 16% of total fund net asset values (NAVs).
- New acquisition activity has been muted over the last two years as funds have been forced to be net sellers of assets. In 2024, core ODCE funds sold an aggregate $15 billion of properties, while acquisition levels were only $2 billion, for a net sales proceeds of $13 billion.
- Of the $13 billion in net sales activity, only $9 billion was utilized for redemption payments. Funds have had to utilize sales proceeds and cash income for other purposes, including reducing debt levels and increasing costs for insurance, debt payments, and higher material/labor costs.
- Over the last several years, the denominator effect of reduced valuations has increased the average leverage level across the ODCE fund complex. Average loan-to-values (LTV) has climbed to 28% since 2022, while the average during the prior decade was at a lower range between 22-24%.
- On a go-forward basis, funds with smaller redemption queues will have more flexibility to play offense than those with large queues.

CORE REAL ESTATE REDEMPTION QUEUES



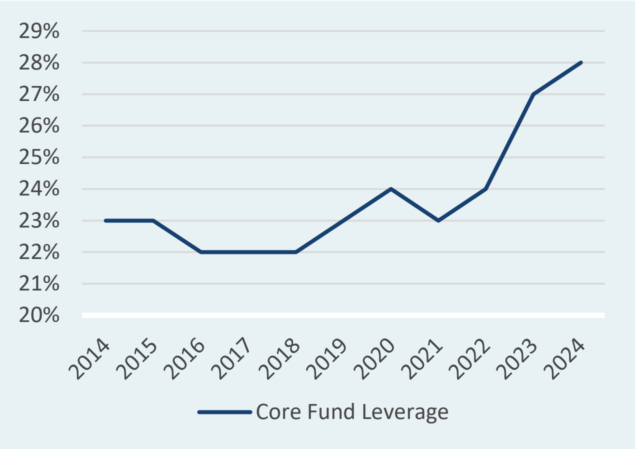
Source: Verus Core Real Estate Survey

PURCHASE, SALES & REDEMPTIONS



Source: Verus Core Real Estate Survey

HISTORICAL LOAN-TO-VALUE (LTV)



Source: Verus Core Real Estate Survey

Office – challenges persist

— Physical occupancy remains at 53% of pre-covid levels (nationally) and has only seen slight improvements in the last 24 months. Structural shifts remain with most companies embracing a hybrid work environment and only 21% of Fortune 100 Companies returning to full office requirements.

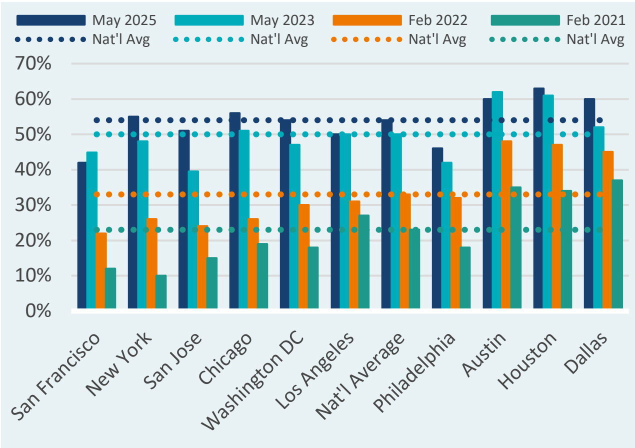
— Peak office usage on a given week is modestly higher. Tuesdays are the highest occupancy days in the office with a national average of 63%.

— Class A+ office buildings (3% of total stock) have meaningfully higher occupancy levels relative to the national average.

— Office new leasing activity is up 4.5% in the last year. Although it remains 15% below pre-pandemic levels over the last rolling four quarters, it continues to trend upward.

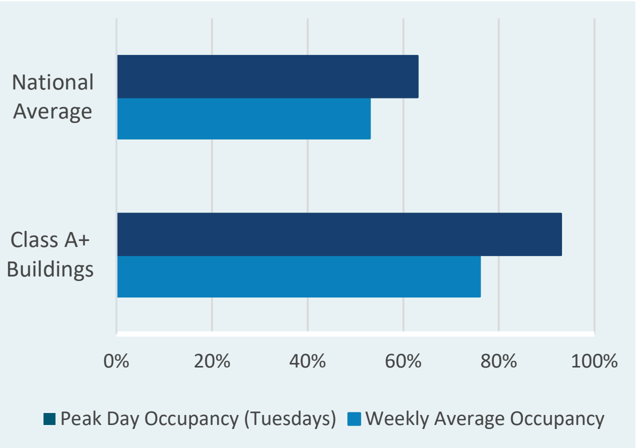
— We have seen an uptick in transactions activity in certain office markets in the last couple quarters. While we are cautious about lower quality office assets, we anticipate opportunistic buying of high-quality office assets to be a lucrative trade over a long hold period.

OFFICE PHYSICAL USAGE TRENDS



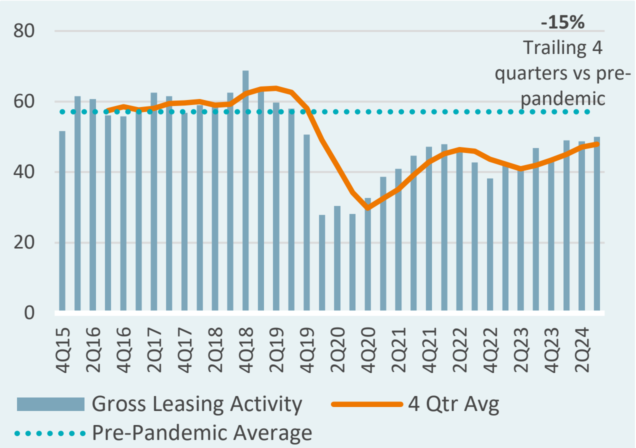
Source: Kastle, May 2025

PEAK OFFICE USAGE



Source: Kastle, May 2025

NEW OFFICE LEASING ACTIVITY

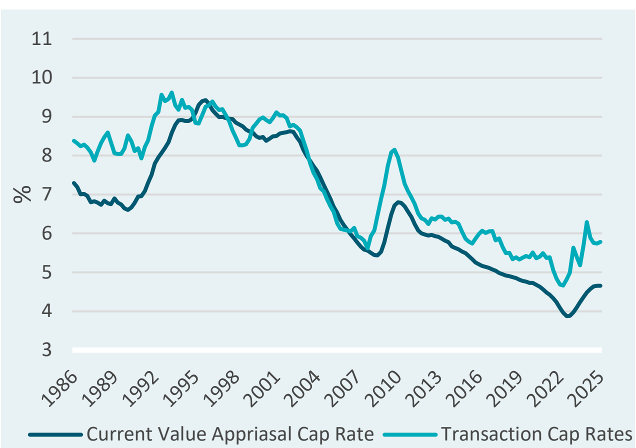


Source: JLL, January 2025

Cap rates

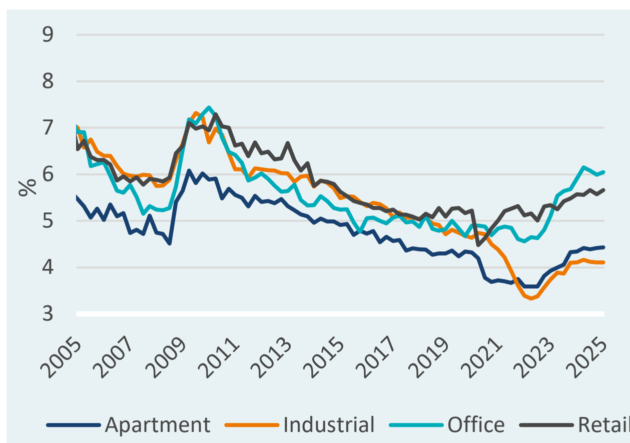
- Cap rates have adjusted upwards since mid-2022 although in recent quarters they have started to level off and have started to see modest cap rate compression in some sectors.
- There is a continued widening gap in cap rates between assets that are transacting vs appraised values, indicating there may be more downside pressure to come in private valuations as they adjust to “market”.
- The widening gap we have seen created over the last several years between property types has continued as industrial and multifamily have been in favor with investors, versus office and retail.
- Implied cap rates in the REIT market moved up more quickly and there continues to be a delta between private and public markets on valuations.

PRIVATE CAP RATES (4-QTR MOVING AVERAGES)



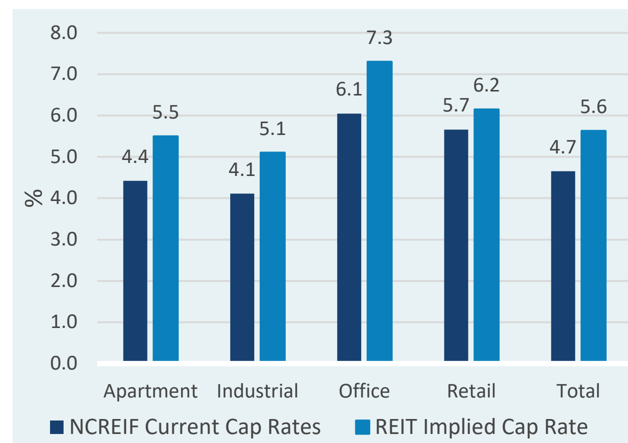
Source: NCREIF, 3/31/2025

CURRENT VALUE CAP RATES BY PROPERTY TYPE



Source: NCREIF, 3/31/2025

PRIVATE CAP RATES VS REIT IMPLIED CAP RATES



Source: NCREIF, NAREIT, 3/31/25

Real estate – New supply and absorption

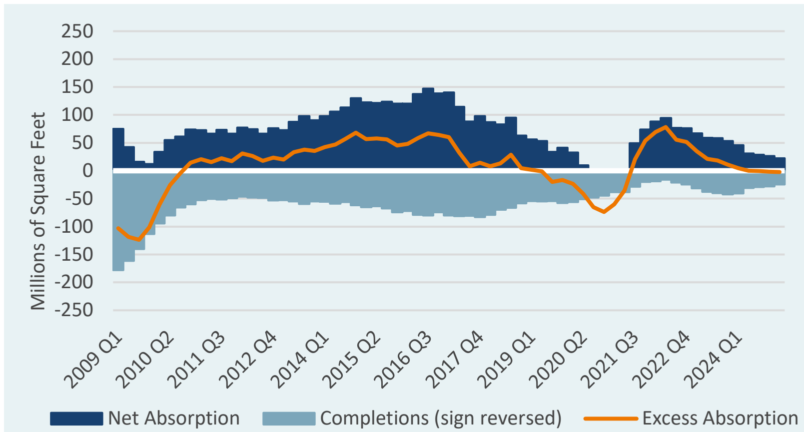
Demand increased in recent quarters, however new supply continues to exceed

Demand increased across most property types in recent quarters, although new supply has still exceeded demand.

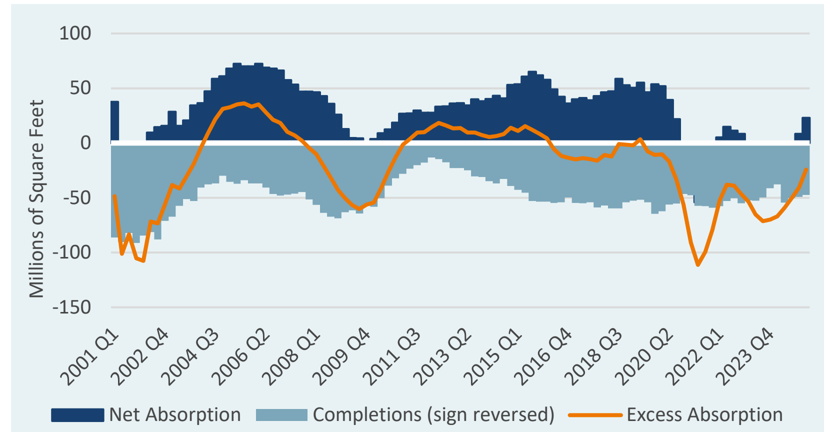
Excess net absorption has continued to be negative, with the exception of retail, which has been relatively neutral over the last several years.

Starting in 2022, higher construction costs, higher interest rates and tightening construction debt standards slowed new construction starts and we may start to see deliveries decline.

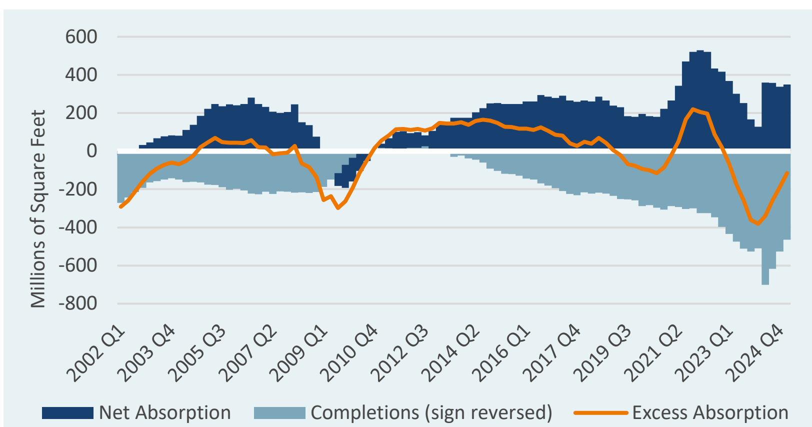
RETAIL



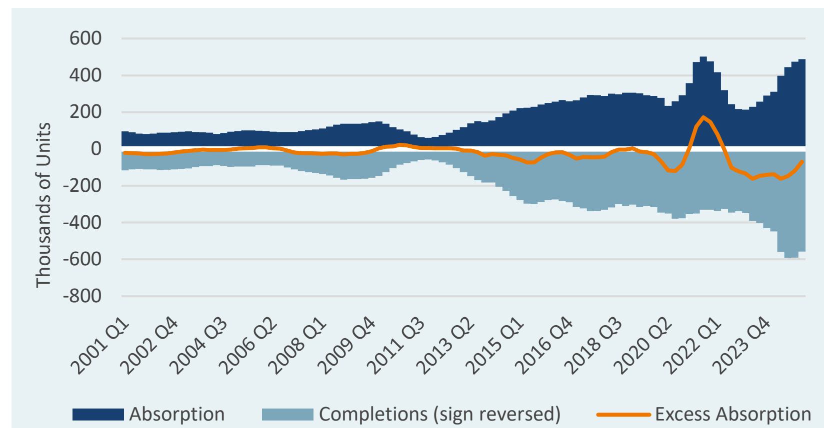
OFFICE



INDUSTRIAL



MULTIFAMILY

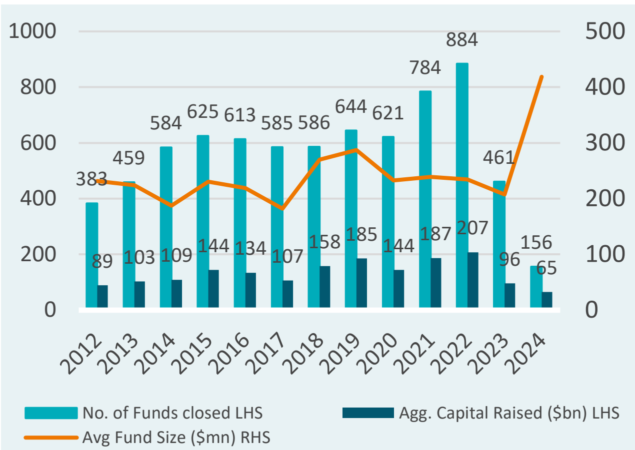


Source: American Realty Advisors utilizing CoStar data as of May 2025

Real estate fundraising

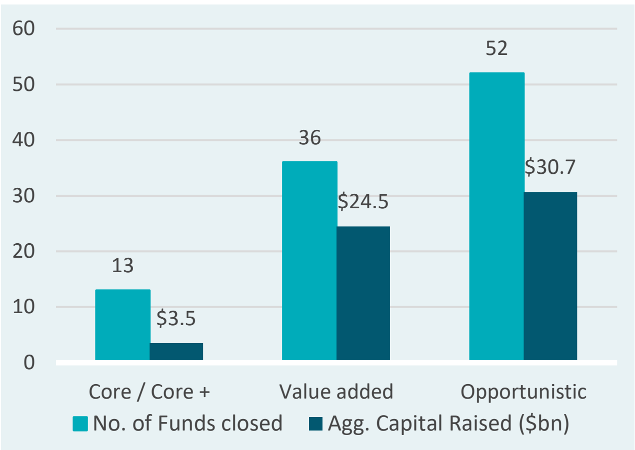
- The number of funds closed declined substantially over the last year with the total amount of capital raised coming down as well. The average fund size was higher overall. Many funds are staying in market much longer, extending final closes into 2025.
- Dry powder in the closed-end fund space has decreased slightly, off record highs over the last two years. Transaction volumes have continued to be depressed in 2023 and 2024.
- Total capital raised has been more balanced between value-add and opportunistic in the last year, a shift from the previous several years when opportunistic capital dominated fundraising.
- Current core real estate open-end fund redemption queues, slightly down from the end of 2023, remained elevated by historical standards at $29 billion. Fundraising for core has been slow, although now that returns have shifted positive, we may see an uptick in core demand in the market.

HISTORICAL PRIVATE REAL ESTATE CLOSED-END FUNDRAISING ($B)



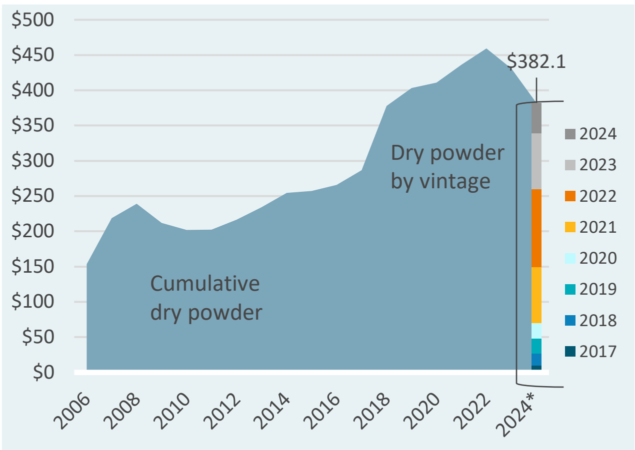
Source: Pitchbook, as of 12/31/24

2024 PRIVATE REAL ESTATE CLOSED-END FUNDRAISING ($B) BY STRATEGY



Source: Pitchbook, as of 12/31/24 (Opportunistic includes Distressed)

DRY POWDER ($B) – CLOSED-END FUNDS



*Source: Pitchbook, 12/31/24 (*2024 dry powder through 6/30/24)*

Real estate debt

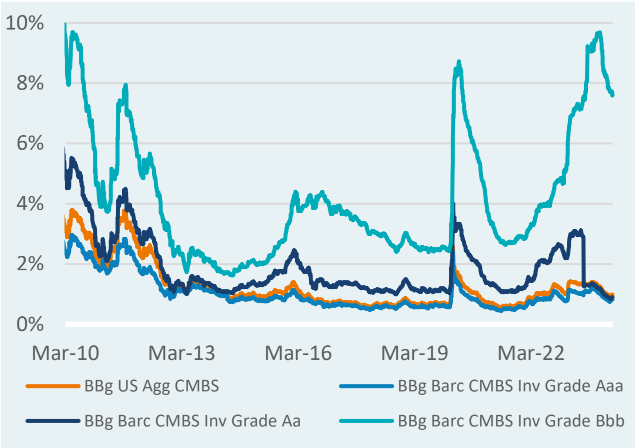
- Returns have come down overall in real estate debt following a compelling market environment in 2023 where credit was providing equity-like returns. Spreads have tightened over the last 12 months as banks and other lenders reentered the CRE debt market.
- Declining base rates have also impacted total returns as the Fed shifted to a more accommodative monetary policy.
- As real estate values firm up, lenders will have better insight into loan-to-value metrics. We expect a sizable amount of capital that has been on the sidelines to reenter the market, likely pushing spreads down further as underwriting improves.
- CMBS spreads are tighter, and new issuances surged in 2024 following a multi-year low set in 2023.
- Like many, we had hoped for a larger opportunity in distressed credit following the banking crisis, but lenders were able to amend and extend long enough to weather the storm.

PRIVATE MARKET LENDING SPREADS

		Market level Indicative Spread (bps)		
Loan Type	Max LTV Range	Jan-24	Dec-24	YoY Change in Spread
Core CRE Loan	<65%	280	250	-30
Value-add CRE Loan	<65%	320	315	-5
Mezzanine (moderate leverage)	60-70%	725	600	-125
Mezzanine (high leverage)	70-80%	975	800	-175

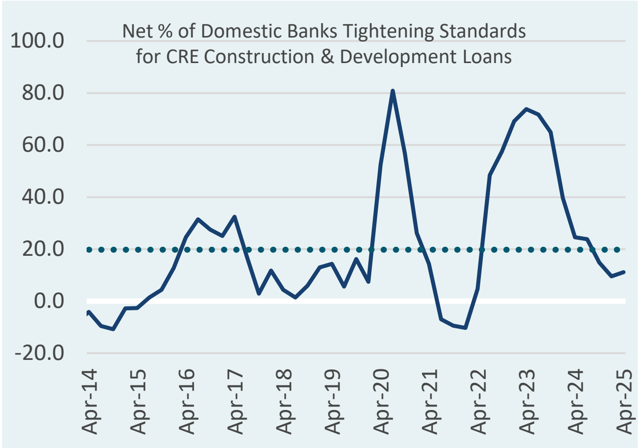
Source: Cushman & Wakefield

CMBS SPREADS



Source: Bloomberg, as of 1/24/25

DECLINE IN CONSTRUCTION FINANCING



Source: FRED, as of 4/1/25

REITs

— REITs were up slightly in 1Q'25, outperforming the S&P 500 by 10% in the quarter. REITs also outperformed broader equities over the trailing 12 months. This is a reversal from recent years, when REITs underperformed the S&P 500 in 2024, 2023 and 2022.

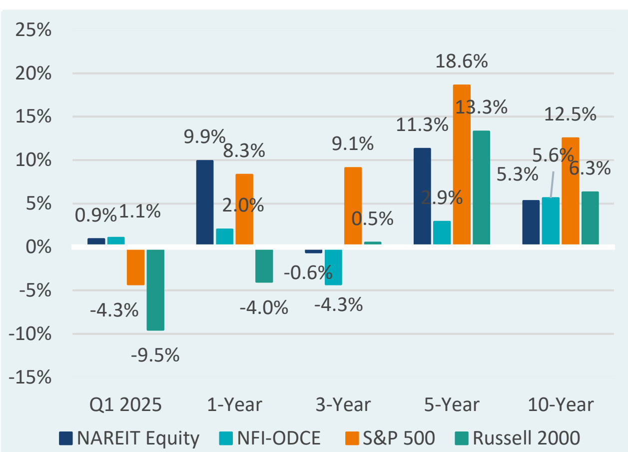
— REITs have outperformed private core real estate over the last 1-, 3-and 5- year periods. REITs and private core real estate now have similar returns over the longer 10-year period (5.3% vs 5.6%).

— REITs are currently trading at a discount of approximately 14% of NAV through April 2025, a reasonable entry point for those looking to get into the asset class.

— We remain neutral on REITs despite the moderate discounts to NAV. The volatility in the asset class makes it difficult to be tactical and the NAVs themselves will be volatile given the valuation uncertainty in real estate more broadly.

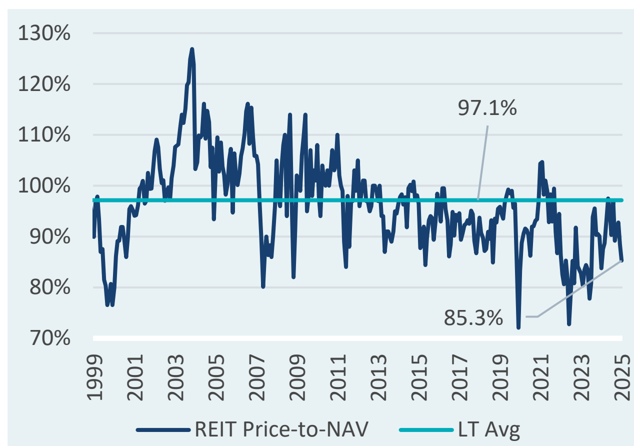
— REITs do offer differentiated exposures vs private core real estate. Outside of the four main property types, core real estate exposure to other property types is 10%, while REIT exposure to those same non-core sectors is greater than 56% and has been increasing over the last two decades, as shown below.

REIT PERFORMANCE



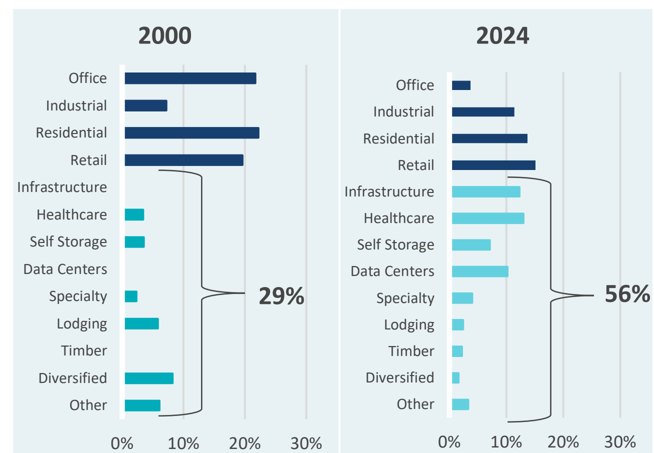
Source: Bloomberg, NAREIT, NCREIF, as of 3/31/25

REIT PRICE TO NAV



Source: CenterSquare, as of 4/30/25

GROWTH IN ALTERNATIVE PROPERTY TYPES



Source: NAREIT

Commodities

— Commodities were up over 5% in 2024, led by precious metals. Gold has rallied 40% over the last year, as a mix of political and economic uncertainty has driven demand for safe-haven assets. Oil prices have fallen sharply over the same period as markets are forecasting a surplus in inventory.

— The roll return component of the index has declined the last couple years and is now flat as of 1Q25. Oil has traded in backwardation since 2022 but has now moved into slight contango for further out contracts.

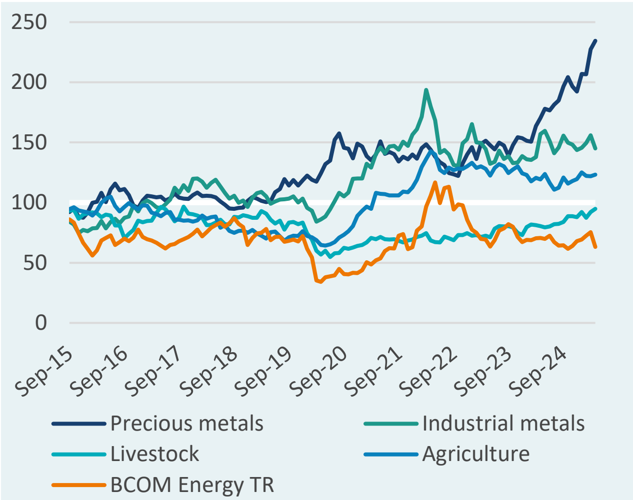
— Our outlook for commodities shifted to negative in 2023, and we continue to hold that view for 2025. Despite potential for inflationary pressures, we consider a sustained resurgence in inflation to be a lower probability outcome. We would recommend investors avoid allocations to commodity futures.

INDEX AND SECTOR PERFORMANCE

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg Commodity	3.9	8.9	8.9	12.3	(0.8)	14.5	2.8
Bloomberg Agriculture	(0.4)	2.0	2.0	1.0	(3.4)	12.1	2.0
Bloomberg Energy	4.0	11.0	11.0	7.1	(6.8)	16.4	(2.8)
Bloomberg Grains	(1.8)	(1.5)	(1.5)	(9.7)	(11.9)	5.8	(1.7)
Bloomberg Industrial Metals	4.2	8.6	8.6	13.2	(6.7)	13.1	4.5
Bloomberg Livestock	5.5	4.7	4.7	13.5	7.9	9.0	(0.8)
Bloomberg Petroleum	3.0	3.2	3.2	(3.3)	4.5	32.0	3.9
Bloomberg Precious Metals	10.0	18.3	18.3	39.0	15.0	14.2	8.6
Bloomberg Softs	2.3	11.5	11.5	34.7	16.1	24.7	7.4

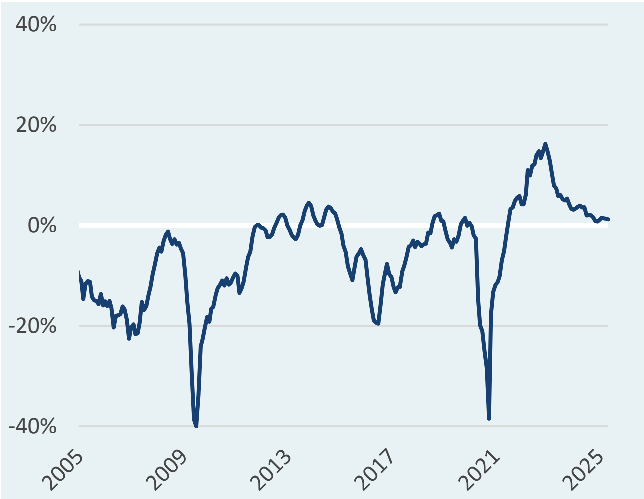
Source: Morningstar, as of 3/31/25

SECTOR PERFORMANCE



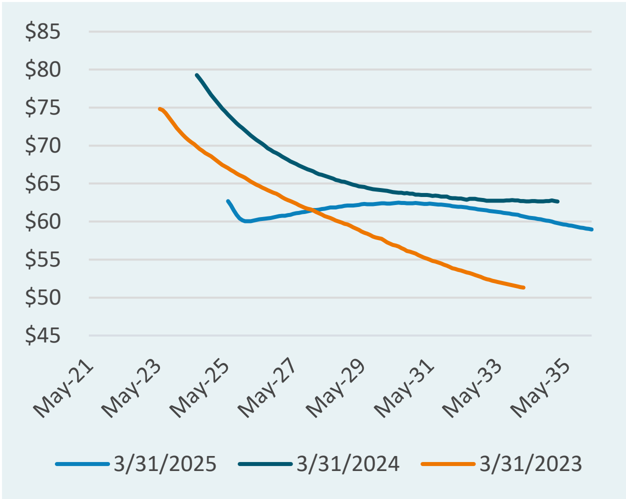
Source: Bloomberg, as of 3/31/2025

ROLL RETURN



Source: Bloomberg, as of 3/31/2025

CURVE SHAPE (WTI)

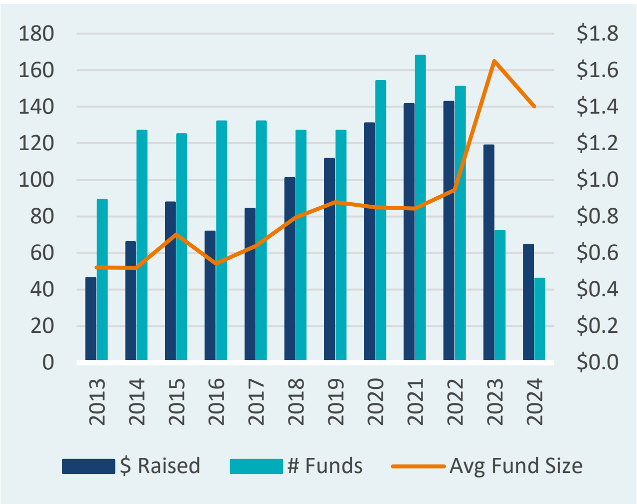


Source: Bloomberg, as of 3/31/2025

Private infrastructure

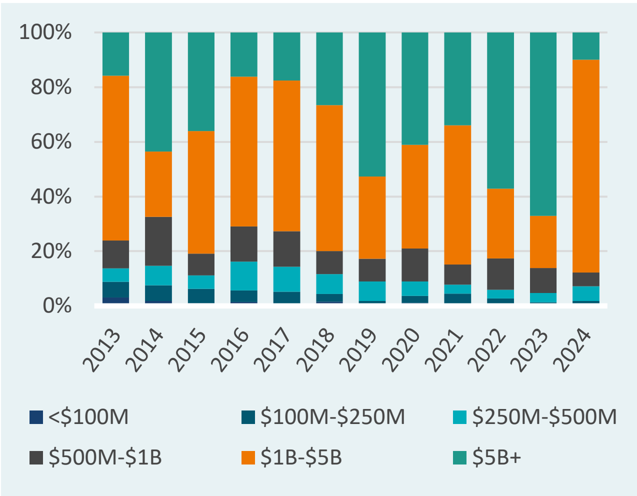
- Infrastructure fundraising is down again in 2024 from its 2021 peak, though we expect an improving fundraising environment in 2025. Capital flows in infrastructure are still dominated by larger funds, though we did see more capital raised in funds less than $5B in 2024.
- The trend we hear from investors, including ourselves, is a preference for mid-market infrastructure strategies. Interestingly, newly formed GPs targeting this space have found fundraising for a first-time fund challenging. One possible explanation for the pattern of capital flowing to the largest GPs is that investors see less upside in backing a new manager in an asset class with narrower return outcomes. You see this phenomenon in asset classes where return dispersion is generally lower, like credit/fixed income. To the extent that this assumption is accurate, we believe the asset class would be healthier with a larger pool of lower-to-mid market managers providing access to smaller deal opportunities.
- We find the trend of asset classes drifting from traditional project finance infrastructure into buyout strategies and de-novo platform companies concerning. We are not alone in viewing this strategy shift as a symptom of a broader problem of too much capital chasing few opportunities and the stretch for higher returns. We would like to see core-plus/value-add managers embrace a back-to-basics approach.

INFRASTRUCTURE FUNDRAISING



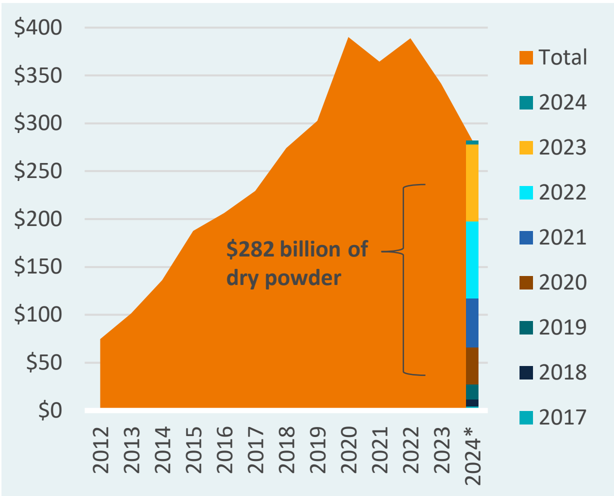
Source: Pitchbook, as of 9/30/2024

% OF CAPITAL RAISED BY LARGE FUNDS



Source: Pitchbook, as of 12/31/2024

CAPITAL OVERHANG



Source: Pitchbook, as of 6/30/2024

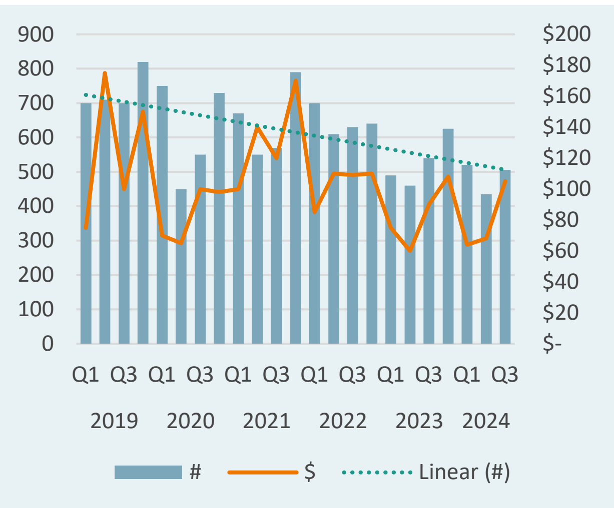
Private infrastructure (continued)

— Infrastructure returns have held steady, outperforming other private market asset classes in recent years, which have struggled with the higher rate environment. We have voiced our skepticism of this unusual disparity given the infrastructure's links to interest rate movements, but returns have defied our expectations. While investors are undoubtedly happy to see the values in their portfolios move up, this has had the unintended effect of reducing the capital available to deploy by LPs due to the denominator effect.

— Transaction activity has come down within infrastructure, mirroring the broader private market segment. As fundraising is expected to improve in 2025, we expect a pickup in transaction activity, some of which may come from take-privates, given the relative pricing of the public markets compared to that of privates. We remain cautious about valuations in the asset class broadly, though we believe they will stay elevated as long as capital continues to flow into the asset class.

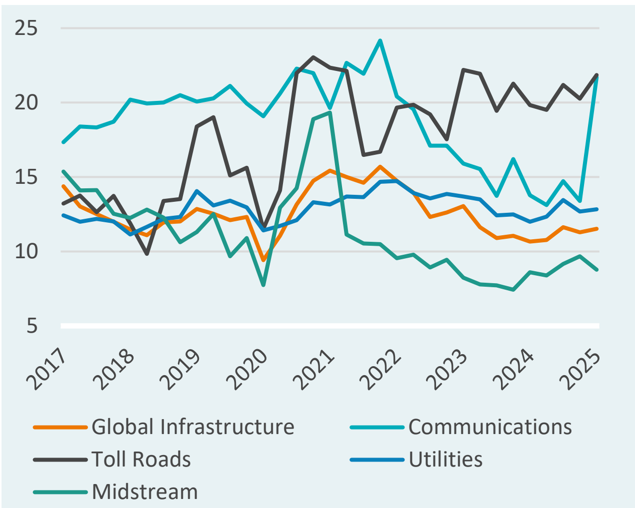
— Last year, we warned of a slowdown in GDP growth; current forecasts show that slowdown is underway. Sector dispersion would be expected as transportation could face headwinds with slowing global trade. Digital infrastructure has some secular tailwinds but is highly dependent on the spending habits of a small group of technology companies. In highly regulated/contracted sectors with limited GDP risk (e.g., utilities), we expect to remain resilient. Energy transition infrastructure has been more dependent on growth than other sectors, and as a result, may be susceptible to slowing.

INFRA DEAL VOLUME & VALUE



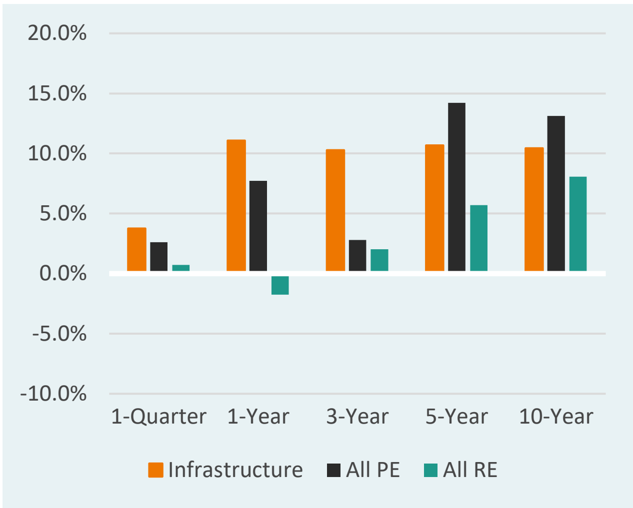
Source: Preqin, as of 9/30/2024

INFRASTRUCTURE VALUATIONS – EV/EBITDA



Source: Bloomberg; ICE BofA Indices, as of 3/31/2025

Q3 '24 TRAILING POOLED TWR

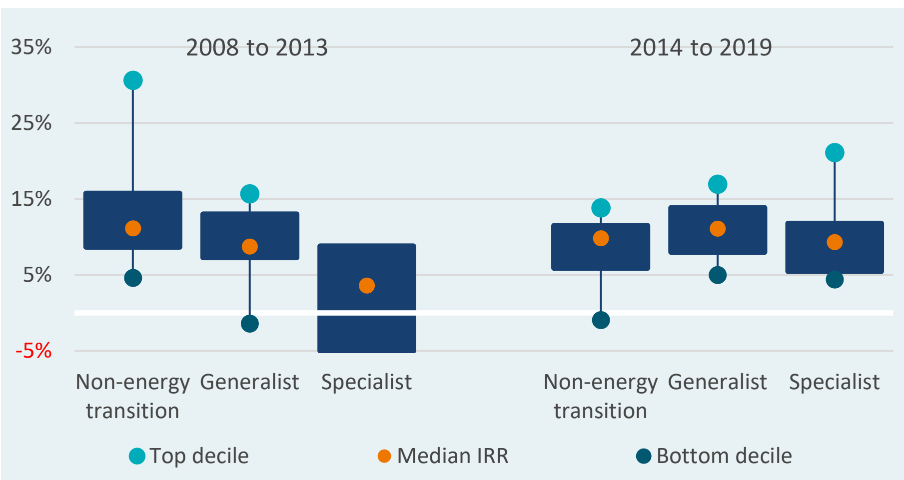


Source: FTSE C|A, as of 9/30/2024

Infrastructure – Energy transition

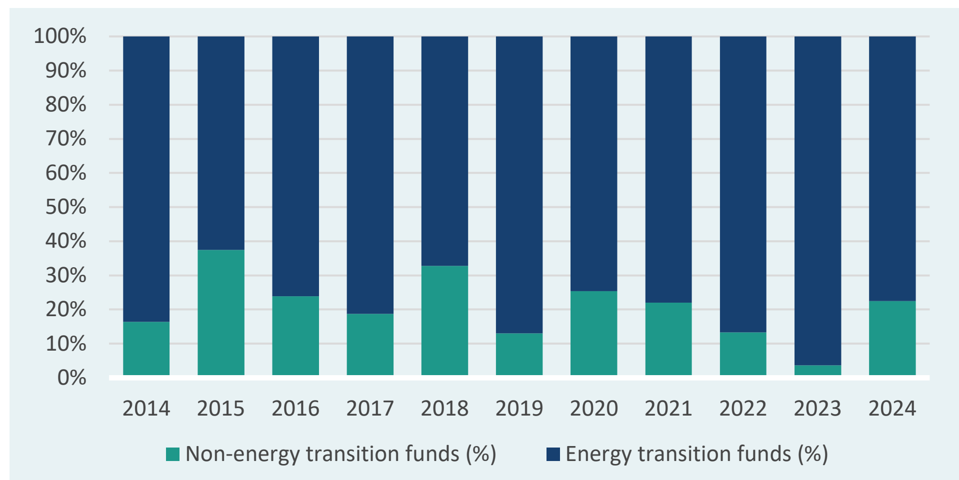
- In the past, we have alluded to the data on this space being opaque because the theme can be invested across asset classes. According to Pitchbook, since 2014, 80% of the capital raised in infrastructure has been to funds that identify as energy transition (ET) or an energy transition sector as a target for the fund.
- We have often described the ET space as challenging to navigate, given some mispriced risks, including technology and commercialization risks. This appears to be reflected in the performance data dispersion from 2008 -2013, where Specialist (only investing in ET) underperformed that of the Generalist (investing in traditional and may invest in ET), and even more so, Non-ET strategies.
- A decade ago, wind and solar renewables were the primary way to invest in this theme. Today, the space includes renewable low-carbon energy assets like EV charging infrastructure, Carbon Capture Utilization and Storage (CCUS), and battery storage assets as well as traditional renewables; solar, wind, hydropower, geothermal, bioenergy or waste-to-energy, and nuclear technologies.
- Performance of more recent vintage years shows that Generalists, who have adopted allocations to ET, and Specialists seem to outperform non-energy transition strategies. Strong power prices globally, technology leaps and the broadening of the investment landscape are likely contributors. If not already, we think this may reflect a turning point in infrastructure's adoption of ET.

INFRASTRUCTURE RETURN DISPERSION



Source: Pitchbook, as of 6/30/2024

% CAPITAL RAISED BY ENERGY TRANSITION WITHIN INFRASTRUCTURE

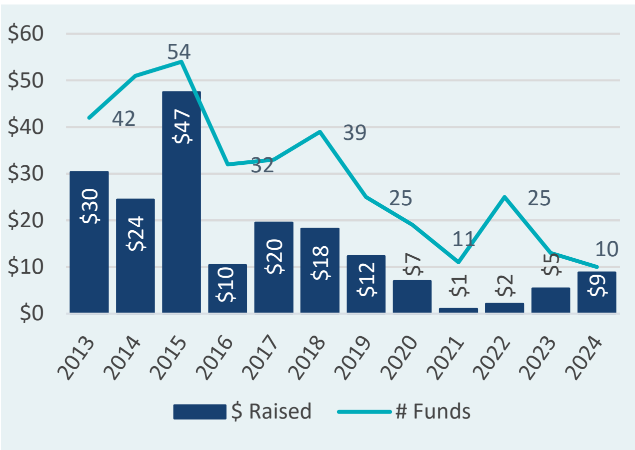


Source: Pitchbook, as of 6/30/2024

Energy – Oil/gas

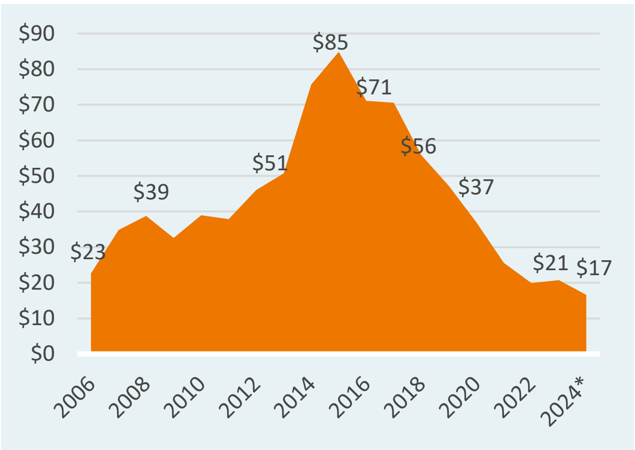
- Fundraising has been a challenge in oil and gas for the better part of a decade. That being said, the sector raised ~2x the amount of capital raised in 2023 and more than the last three years combined. While the top two or three GPs in the sector have successfully raised capital, the pace has been slow. Fundraising may face further challenges if oil prices continue their downward trend.
- Dry powder figures reveal limited capital from sponsors in the sector. This situation presents a compelling contrarian opportunity, given that valuations for oil and gas have trended lower than last year. This is particularly noteworthy compared to the multiples seen in other sectors, as displayed by S&P 1500 NTM Multiples.
- The challenges of liquidity and the transition away from hydrocarbons represent significant risks to the private oil and gas sector. Demand for oil and gas is projected to remain stable for the forthcoming decade; however, uncertainty increases beyond this time frame. A primary consideration is the potential market for oil and gas assets in the next 7 to 10 years. In addition, regulations can adversely affect the valuation of oil and gas investments, though less of a threat for the next four years as it was just a year ago.
- There is a noticeable divergence in the oil and gas markets, with oil demand showing signs of flattening, while projections indicate that gas demand is expected to continue increasing.

FUNDRAISING IN OIL/GAS



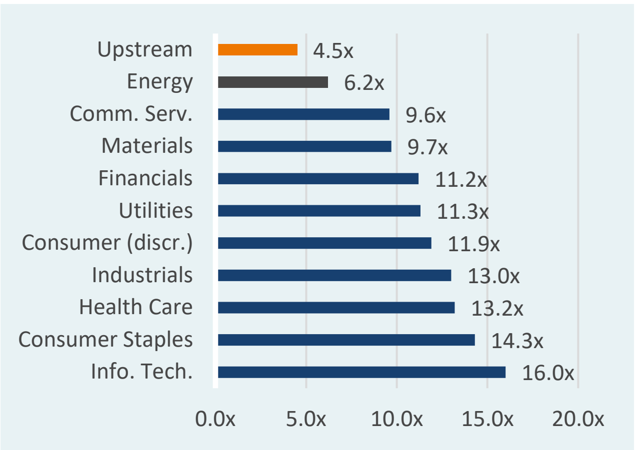
Source: Pitchbook, as of 12/31/2024

DRY POWDER IN THE OIL/GAS SECTOR



Source: Pitchbook, as of 9/30/2024

EV/EBITDA MULTIPLES (S&P 1500 NTM EBITDA MULTIPLES)



Source: Factset, as of 5/2/2025

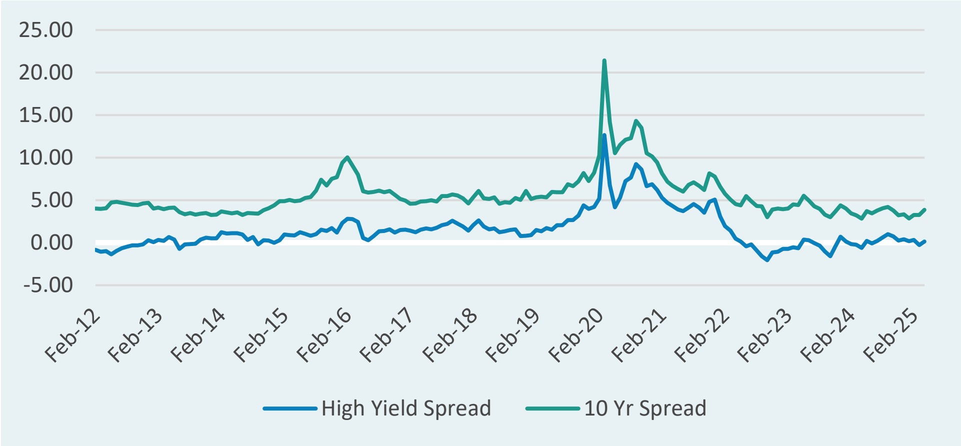
Midstream energy/MLPs

— Midstream energy stocks were up 24% in 2024, as measured by the Alerian MLP Index. It has been an impressive 4-year run of high double digit returns in the listed midstream market. As volumes for both oil and gas have grown, cash flows for midstream companies have improved. Price appreciation has outpaced distribution growth leading to yields for listed midstream companies now below high-yield bonds but at a premium to Treasuries.

— Private midstream funds face similar fundraising challenges as their upstream counterparts, and similarly, had trouble finding portfolio exits. More concerning for private midstream has been the challenge in deploying capital. Several midstream funds that we track are behind on investment deployment and we believe a mix of fewer development projects being greenlit and lower cost of capital from the public midstream companies are the culprit.

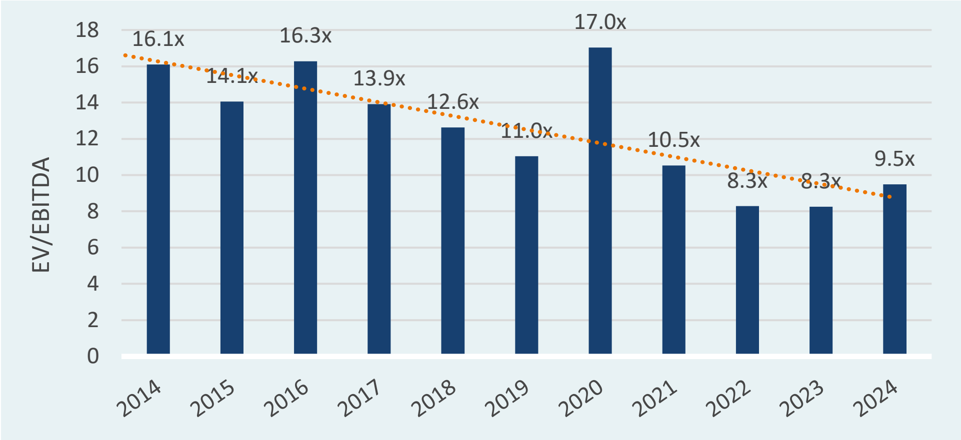
— There is an interesting gap between private midstream transactions and public market multiples that we believe is an opportunity for private midstream assets to be acquired at accretive values for the publics. Low commodity prices may put a damper on transaction activity in the near-term, but we could see more transaction activity as publics, flush with cash, look for bolt-on growth opportunities.

MLP SPREADS VS HIGH YIELD & TREASURIES



Source: Bloomberg, as of 3/31/2025

MIDSTREAM VALUATIONS (EV/EBITDA)

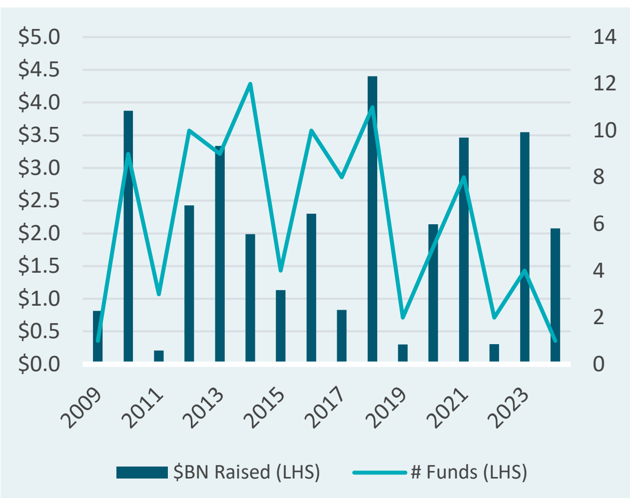


Source: Bloomberg; Alerian MLP Index, as of 12/31/2024

Metals and mining

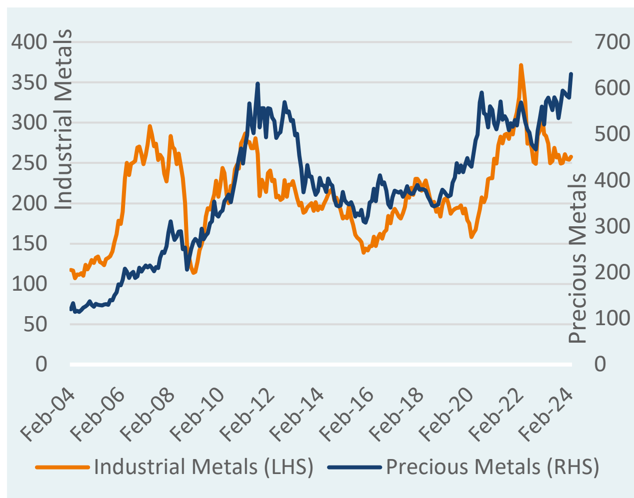
- For the last 15 years, fundraising in mining has hovered around $2 billion/year, on average. We anticipate that mining will remain a niche category with a small set of institutions willing to risk capital in a challenging asset class.
- Mining exploration budgets for non-ferrous metals fell in 2024 and are forecasted to fall again in 2025, according to S&P Global. Declining commodity prices across several base metals, rising costs and capital constrained junior mining companies had led to a pullback in spending from recent peak levels in 2022.
- Prices for industrial metals have settled lower than the all-time highs of 2022, although historically speaking, prices remain high. Precious metals, on the other hand, have continued to rally over the last couple of years as various financial or geopolitical concerns fueled the buying of safe-haven assets.
- Like others, we see tailwinds in the industrial/base metals that supply critical minerals to decarbonization investments. We generally, try to allocate to mining when commodity prices are low and capital is scarce. Today the picture is mixed with high gold and copper prices and low prices for most other base metals. We would be cautious about strategies with significant gold allocations.

FUNDRAISING IN MINING



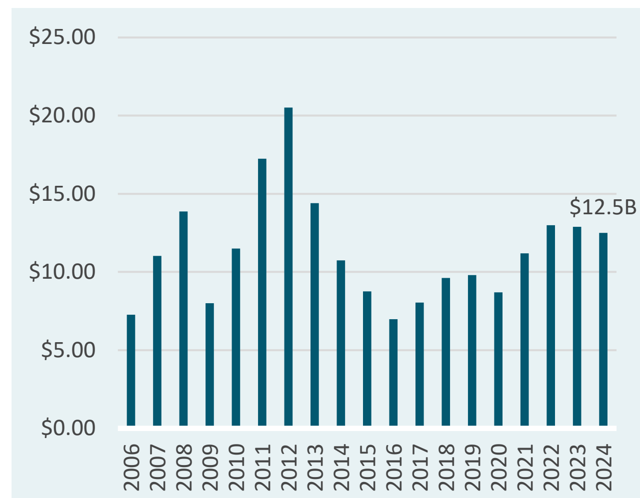
Source: Pitchbook, as of 9/30/2024

METAL PRICES



Source: Bloomberg, as of 3/31/2025

GLOBAL MINING EXPLORATION BUDGET ($B)

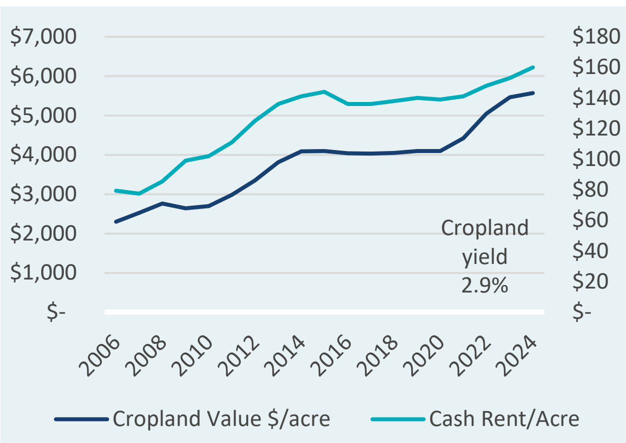


Source: S&P Global, as of 12/31/2024

Agriculture

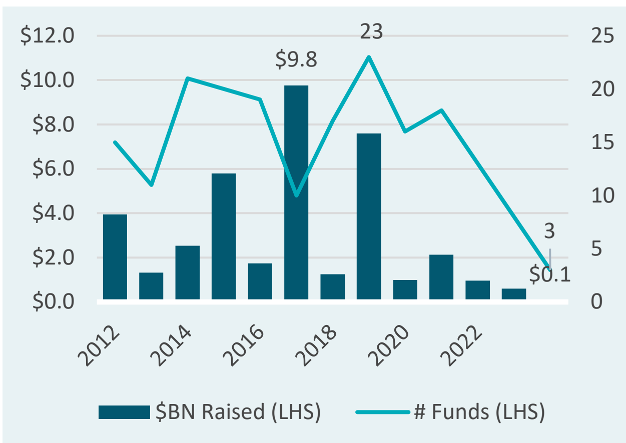
- Cropland values continued to rise for the fifth year, albeit modestly, ending the year at $5,570/acre according to the USDA. Yields rose slightly to 2.9%, as farmers benefited from some relief in production costs and increased government relief payments.
- Achieving an attractive yield (income) from farmland has been challenging for much of the asset class's history. We still struggle with current farmland values, especially with interest rates at their current levels, the low income levels they generate and entering a lower commodity cycle.
- For 2025, the U.S. agricultural sector is anticipated to experience net farm income at its third-highest level since 1960. Government payments are projected to reach their second-highest level, reflecting ongoing support.
- We think appreciation growth will likely moderate from recent highs, but farmland values tend to be sticky. We will likely see increased income reflected in yields, allowing the asset class to support the valuation increases it has seen over the past few years. In other words, growing into its valuations.
- Agriculture's long-term investment thesis is unchanged: a growing population, food needs, and a highly fragmented and constrained market. However, we have yet to see this materialize to investor returns.

NATIONAL CROPLAND VALUES VS RENTS



Source: USDA, as of 12/31/2024

FUNDRAISING IN AGRICULTURE



Source: Pitchbook, as of 12/31/2024

BLOOMBERG AGRICULTURE PRICES

Source: Bloomberg, as of 3/31/2025

Appendix

Detailed returns by asset class

Pooled Returns by asset class	1 Year	3 Year	5 Year	10 Year
NCREIF ODCE	-1.4%	-2.3%	2.9%	5.9%
Refinitiv Real Estate – Value-Add	-2.6%	-3.1%	3.3%	7.0%
Pitchbook Real Estate – Value-Add*	-5.0%	0.6%	5.6%	9.4%
Refinitiv Global Infrastructure	6.7%	8.2%	10.0%	10.2%
Refinitiv Global Natural Resources	7.2%	11.1%	9.2%	4.1%
Pitchbook Oil/Gas*	7.4%	15.4%	8.6%	3.3%
Pitchbook Metals, Timber & Agriculture*	4.5%	6.6%	5.2%	3.3%
NCREIF Timberland	7.0%	9.7%	7.8%	5.4%
NCREIF Farmland	-1.0%	4.4%	4.8%	5.9%
Public Index (as of 12/31/24)				
Russell 3000	23.8%	8.0%	13.9%	12.5%
MSCI ACWI	17.5%	5.4%	10.1%	9.2%
S&P Global Infrastructure	15.1%	7.1%	5.3%	5.9%
S&P Global Natural Resources	-8.9%	1.1%	5.1%	4.6%
FTSE NAREIT Composite	4.7%	-4.3%	2.9%	5.6%
DJ US Select REIT	6.9%	-4.1%	2.3%	3.7%

*Source: Refinitiv C|A as of December 31, 2024; *Pitchbook as of September 30, 2024; NCREIF as of December 31, 2024*

The role of real assets

	Strategy	GDP sensitivity	Inflation sensitivity	Income orientation	Return enhancing	Risk reducing	Liquidity
Privately-traded real assets	Private real estate core	High	Moderate	High	Moderate	Moderate	Moderate
	Private real estate value added	High	Low/None	Moderate	High	Low/None	Low/None
	Private real estate opportunistic	High	Low/None	Low/None	High	Low/None	Low/None
	Private infrastructure	Moderate	Moderate	High	Moderate	Moderate	Low/None
	Timber	Low/None	Low/None	Low/None	Moderate	High	Low/None
	Farmland / agriculture	Low/None	Moderate	Moderate	Moderate	High	Low/None
Publicly-traded real assets	TIPS	Low/None	Moderate	Low/None	Low/None	High	High
	Commodity futures	Moderate	High	Low/None	Low/None	Moderate	High
	REITs	Moderate	Low/None	Moderate	High	Low/None	High
	MLPs	Moderate	Moderate	High	High	Moderate	High
	Listed infrastructure	Moderate	Moderate	Moderate	High	Low/None	High
	Natural resources equity	Moderate	High	Low/None	High	Low/None	High

Magnitude	Low/None	Moderate	High

Note: the summary above was determined using historical averages and correlations on a relative basis within each category. It is important to note that investments within these asset classes are often heterogeneous and may possess different qualities and sensitivities (see Appendix for further details).

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**:** 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 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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