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Private Markets Real Estate Fundamentals

A primer on real estate investment strategies, property sectors, and industry dynamics

PitchBook is a Morningstar company providing the most comprehensive, most accurate, and hard-to-find data for professionals doing business in the private markets.

Introduction

With more eyes turning to real estate due to the recent surge of inflation, many industry participants are attempting to glean the finer points of how to approach this asset class. At first glance, real estate seems to be a simple enough concept: A plot of land with or without a building is purchased, perhaps modified or improved in some way, held for a period of time, then sold. Yet, like much of investing, there is far more to it than meets the eye. For private markets investors looking to move into the space or service providers with clients in the industry, the terminology, industry dynamics, investment strategies, and relevant considerations may appear opaque, confusing, or difficult to tie together. In part, this is because even industry participants do not fully agree on how each term should be used.¹

Beyond that, the connections between the real estate investment strategies—such as core, value-add, and opportunistic, which are frequently used to segment fundraising and performance data—can be difficult to link to economic drivers for the uninitiated. Conversely, the real estate property sectors and subsectors, such as multifamily, logistics, and office, experience so many different, niche factors influencing investment demand and performance that attempting to intuit each of them would be a frustrating exercise. These elements have motivated the creation of this primer, which aims to provide a clear and comprehensive picture of private markets real estate investing strategies, sectors, and economic drivers.

^{1:} Investors sometimes describe funds with core strategies as "core" but will also refer to "core" property types, or those that are considered lower risk to have more stable demand such as office, multifamily, industrial, and retail. Similarly, commercial real estate brokers may work on a variety of strategies and property types, but commercial property types typically refer to those used for business-to-consumer income-generating purposes. So, "commercial real estate" may refer to investors purchasing and holding properties, but it also may refer to a property type used for certain purposes. Additionally, some asset managers refer to investment in certain property types as a "strategy," which compounds confusion.



Real estate as an inflation hedge

Despite the complexities of the industry, real estate attracts investors throughout the economic cycle, but especially during periods of inflation. This is because the asset class is considered by many to be an inflation hedge, or a type of investment that protects investors against a decrease in the purchasing power of money. Theoretically, the logic holds up: Real estate is an essential good, and its providers can pass along heightened costs to consumers. Further, in contrast to changing toothpaste brands from a premium product to a more affordable option, there are large costs, such as those associated with moving, that come from switching to another home, office, or storefront.

In actuality, there is no quantitatively driven consensus on the topic. A study on the 43-year history of the NCREIF Property Index indicates that private real estate returns hold steady during inflationary periods when accompanied by moderate to high real GDP growth.² However, when real GDP growth is low, inflationary highs and lows are irrelevant and performance inevitably suffers. Some studies indicate that not only will real estate not hedge against inflation, but that it will also provide a perverse hedge, thereby decreasing in value as inflation increases.³ Still others show that it performs excellently as a hedge.⁴

Regardless of generalizations on the topic, few investors would argue that the asset class as a whole is immune to the harmful effects of inflation. Inflation results in higher interest rates, which leads to a higher cost of debt and higher operating costs, which are especially important to real estate investors hoping to make capital improvements to a property. These costs may increase more rapidly than owners can raise rents. If the costs cannot be passed on to tenants, investors may have to reduce return expectations. In other words, in order to effectively create a full inflation hedge, net income must compensate for these effects.

Practically speaking, elements that may contribute to inflation protection for real estate investors include high demand and low vacancy rates, tenant turnover allowing for rent increases, and common contractual stipulations such as escalation clauses.⁶ During times of inflation, property managers will more aggressively build rent increases into lease documents, often under escalation clauses. During non-inflationary times, leases may hover around a 2% to 3% annual increase, for example, while inflationary pressures may push that number closer to 4%, supplemented by contractual stipulations around cost-of-living adjustments.⁷ Some contracts even link rent increases directly to annual inflation rates. It bears emphasizing that, due to the localized nature of real estate and the multitude of factors at play, these elements are still only one part of the picture. Strong investment fundamentals should be the bedrock of dealmaking, with inflation hedging considered an ancillary benefit.

4: Ibid.

^{2: &}quot;Private Real Estate as a Hedge Against Inflation," Franklin Templeton, December 13, 2021.

^{3: &}quot;Real Estate Investments and the Inflation-Hedging Question: A Review," International Journal of Business and Management Studies, Daniel Ibrahim Dabara, et al, May 27, 2016.

^{5: &}quot;The Inflation Hedge Maze," PERE News, Peter Benson, March 2022.

^{6: &}quot;Is Real Estate an Inflation Hedge?" PERE, Guest Writer, March 16, 2022.

 $^{7:} Michael \, Soto, \, Director \, and \, Head \, of \, Office \, Research \, in \, Los \, Angeles \, at \, Savills, \, phone \, interview \, by \, Anikka \, Villegas, \, March \, 9, \, 2022.$



Private real estate fund types and access points

Similar to other private markets fund types, real estate funds can be either closed-end or open-ended. As discussed in a previous <u>analyst note</u>, closed-end real estate funds use the private equity (PE) model of accepting capital commitments, drawing down capital as investments are identified, and then returning capital as exits occur. They also have an established fund life set by the fund manager prior to fundraising, while open-ended funds, including evergreen funds, do not. Open-ended structures come in a number of guises, with defining features being their willingness to allow investors in and out during the life of the fund with no call-down structure—instead, complete immediate investment—and no contractual end date to the fund, thereby allowing investments to be held, or not, for as long as the fund manager deems appropriate.

Closed-end real estate funds often acquire assets, implement value-adds, and sell; while open-ended real estate funds will acquire assets, implement value-adds, if any, and then hold for as long as the fund manager feels the rental income is providing a suitable level of return, which could be many years, before selling. Core and core plus strategies are often structured as open-ended or evergreen funds, allowing assets to be held for long periods while providing strong, recurring cash flows. Like with private equity, closed-end real estate funds are functionally illiquid during the holding period, a double-edged sword that limits access to capital in case it is needed but also increases the likelihood of generating alpha. Additionally, that value-add and opportunistic funds more often operate using a closed-end fund structure contributes to the association of these fund types with higher returns.

Some investors may also choose to gain access to real estate through public or private REITs, or real estate investment trusts. Public, listed REITs provide greater liquidity than other real estate investment avenues. They are subject to the same compliance regulations as other publicly traded companies, but as a corporate structure designed to provide pass-through rental income, they avoid paying corporate taxes themselves—though investors do have to pay income tax on REIT income received. Because of the increased liquidity, public, listed REITs may move with the stock market, thus making them less strong as a diversifying investment to stocks. This was made abundantly clear during the global financial crisis (GFC), when REITs crashed due in part to their use of high amounts of leverage. There are also public but unlisted REITs, which are less liquid than—and have similar compliance obligations as—traded REITs but higher compliance obligations than private REITs.

Private REITs are unlisted and thus not subject to the same regulatory obligations as their public counterparts. Because of this, they are typically accessible only to institutional investors. They also tend to be illiquid investments, making them more of an inflation hedge. Yet, there are no hard and fast rules. There are some REITs that are public and unlisted but still afford investors the opportunity for monthly liquidity through a share repurchase plan.⁸ And, while listed REITs tend to trade with stocks rather than real estate in the short term, studies have shown that over the long term, REITs still provide inflation protection the majority of the time.⁹

^{8: &}quot;About Brookfield REIT," Brookfield, n.d.

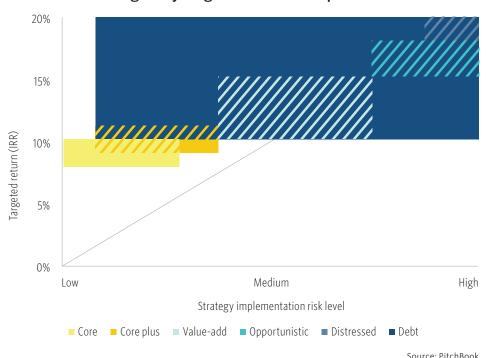
^{9: &}quot;Private Real Estate as a Hedge Against Inflation," Franklin Templeton, December 13, 2021.



Real estate investment strategies

The spectrum of real estate investment strategies covered in this section constitutes a high-level overview of generally accepted characteristics, definitions, and dynamics. Some funds may utilize a combination of these strategies, have slightly different targeted returns, or use different approaches to implementation. Like many investments, the returns for a real estate investment will be comprised of both systemic and idiosyncratic drivers. Interest rates, for example, will affect nearly all real estate strategies and property types, but a fund's approach and specific properties will be a key influence as well. In general, investing where new supply is low and demand is high, anticipating where public and private capital will flow, and acquiring properties at a price below local replacement cost will apply to most strategies and sectors. Many of these factors are tied to the old real estate axiom: location, location, location.¹⁰ Funds do frequently focus on specific geographical areas with characteristics investors perceive as attractive, and accurate predictions often result in outsized returns.11 More specific to the real estate investor's approach are elements such as reducing the operating expenses for existing properties and edifices as another avenue of enhancing cash flows. As always, investors must engage in their own due diligence to understand the nuances of a fund's strategy.

Real estate strategies by targeted risk-return profile

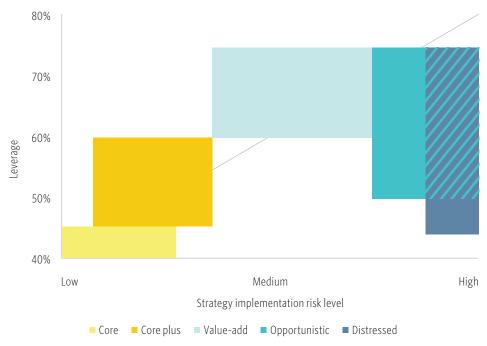


^{10:} Local real estate regulation, which is inherently determined by location, is an important factor in the success of an investment. Legislation can be a significant hurdle in locales with stringent or complex rules, such as California.

^{11:} Strategies may also have different market type focuses such as gateway markets—which are top tier in terms of population, economic health, density, and desirability—versus non-gateway markets or primary versus secondary versus tertiary markets, which are differentiated by population size.







Source: PitchBook

Core: Core investments target the lowest-risk forms of real estate investing, typically in strong markets and desirable locations. They seek high-quality properties with low vacancy rates. Core investment funds usually have a buy-and-hold strategy and include an income stream from property leasing and management activities. Because of the longer-term holding periods of the investments, core strategies often use open-ended rather than closed-end funds. Investors with a low risk appetite and greater focus on income and wealth preservation are likely to seek out funds with core strategies.

- Example investments: A fund with a core investment strategy might invest, for example, in a modern apartment building in a populous coastal city with a very high occupancy rate or an established, popular mall in an affluent neighborhood.
- Effort level: The effort level required for this strategy is lower, as core managers typically purchase assets that are fully or close-to-fully occupied on long-term leases. Effort will likely be more concentrated in the due diligence stages, ensuring that both the potential investment is performing as expected and there are no unwelcome surprises post-acquisition. During the holding period, the investor may either manage the property itself or contract out this responsibility, which will involve standard obligations around property maintenance and upkeep, tenant management, and financial and business operations.
- Asset holding period: Approximately seven to 10+ years
- *Risk-return profile*: The core strategy is generally characterized by lower risk and lower expected returns, with a meaningful current income component, often



comprising the majority of returns. The low risk profile is due to less capital outlay and less execution risk. IRR target for core funds is usually below 10%. For asset managers, the guiding return metric for core assets will be the in-place—actual, rather than anticipated—capitalization rate, also called a cap rate. This is calculated using net operating income (NOI) divided by purchase price. Cap rate spreads to the 10-year treasury, which show the difference between the interest rate on the 10-year treasury and the cap rate on a property, are also often used to determine asset pricing, as they contextualize the risk-return profile of the asset in the broader economic landscape. Depending on property sector and subsector, returns for a single core investment might hover around 6.5% IRR with a 4.5% cap rate.

Core managers typically use low to moderate leverage, around 40% to 45%.¹⁴
Assets are often financed through long-term fixed rate loans from either commercial mortgage-backed security lenders, life insurance companies, or commercial banks.¹⁵

• Drivers of investment demand and returns: Core strategies are utilized more frequently early in the economic cycle when properties can be purchased at depressed prices, so the risk-return profile is more attractive. This is partly why the buy-and-hold opportunity of open-ended core funds is valuable—core funds frequently outperform any inflation that may arise later in the economic cycle, but income returns can be boosted by capital gains if assets are purchased earlier in the cycle and property values rise as a market heats up.

In terms of inflation, because the prices of materials and labor are higher during inflationary times, properties that are already in good shape will be in higher demand, as they won't require costly capital outlays for upkeep or upgrades that detract from NOI. Core properties further benefit because supply will become constrained during these periods due to increased costs of capital improvements. Because this strategy utilizes a relatively low degree of leverage, interest rates may be less impactful to investors favoring core strategies. In the same vein, if interest rates are too high, investors may favor this strategy over others that require more leverage.

Core plus: Core plus investments are similar to core investments in that they target stable and fundamentally sound properties; they differ in that they seek assets with an opportunity to add value or enhance returns while holding and collecting rents. Core plus investments may possess a slightly higher risk profile due to exposure points such as upcoming lease expirations, minor renovation requirements, or positioning in a suburb or secondary market. Core plus strategies also often utilize open-ended rather than closed-end funds.

• Example investments: A fund with a core plus investment strategy would likely consider investing in an office space that could benefit from some cosmetic improvements such as new carpeting or lighting or a manufacturing facility that could use some HVAC updates.

^{12:} Warren McClean, Capital Markets Associate at JLL, phone interview by Anikka Villegas, March 1, 2022.

^{14: &}quot;What Are Core, Core Plus, Value-Add and Opportunistic Investments?" Origin Investments, Michael Episcope, February 21, 2018.

 $^{15:} Warren\,McClean, Capital\,Markets\,Associate\,at\,JLL, phone\,interview\,by\,Anikka\,Villegas, March\,1, 2022.$



- Effort level: The effort level required for core plus investments is slightly higher than core investments but lower than other strategies. As with core strategies, the bulk of effort will likely be required in the due diligence stages. During the holding period, the investor will have to manage the property in addition to completing the value-add, both of which may be contracted out.
- Asset holding period: Approximately three to 10+ years, with capital improvements or other value-add completed within three to five years and properties then either held or sold as a core asset
- Risk-return profile: Core plus investments are a bit higher risk than core investments but lower risk than all other strategies. Returns are similarly expected to be above those of core investments and below those of other strategies, as they are derived from both income and appreciation, with the former making up the majority of returns. As such, IRR target for core plus funds typically hovers around 10%. For asset managers, the guiding return metric for core plus assets will be the stabilized cap rate—which is calculated using stabilized, or anticipated post-value-add, NOI divided by purchase price—or return on cost, calculated using stabilized NOI divided by total cost, which encompasses both purchase price and value-add cost.¹⁶

Leverage tends to be utilized at moderate levels, around 45% to 60%.17 Core plus assets may initially be financed using short-term floating rate loans such as bridge loans and then refinanced to long-term fixed rate loans when the value-add is complete.

• Drivers of investment demand and returns: Core plus strategies are often implemented early in the economic cycle when property prices are low, providing more scope for capital appreciation on top of the income component. Like core strategies, open-ended funds allow core plus purchases early in the economic cycle at low prices with a hold throughout the economic cycle to when prices are higher, as there is no pressure to sell due to an artificial end date of the fund.

Further, to the extent that investors don't intend to physically alter core plus properties or will do so only in minor ways, they do not have to compete for scarce building resources when real estate markets heat up. As leverage is often used at moderate levels for this strategy, it may be more sensitive to interest rate hikes than its core counterpart, but it may also serve as a good option for investors with a more moderate risk appetite but who find the cost of debt too unattractive to invest in strategies that employ it aggressively.

Value-add: Value-add investments pursue higher returns by targeting properties that require more involved additive efforts such as major renovation, repositioning, or reduction of vacancy rates through marketing, for example. Value-add investments may require a longer holding period of seven to 10 years in order to fully execute additive efforts and make returns, largely through the sale of the property at exit.



- Example investments: A fund with a value-add investment strategy may consider acquiring a run-down medical clinic with outdated, built-in equipment or a historic but shabby hotel with a moderately low occupancy rate.
- Effort level: The effort level for this strategy is higher than in core and core plus due to the need for repositioning, major renovation, or other improvements for returns to be optimally realized. While diligence is still important, effort will be spread across the holding period, concentrated during the value-add and the period leading up to it. Use of property managers and general contractors is common and helps reduce the burden associated with this strategy, but ensuring execution of the investment thesis ultimately falls to the investor.
- Asset holding period: Approximately three to 10+ years, with capital improvements
 or other value-add completed within three to five years and properties then
 either held or sold depending on the asset owner's expectations of income versus
 market valuation.
- Risk-return profile: Value-add managers target a higher return and accept a higher risk profile than core and core plus managers. Due to medium to medium-high current cash flow compared with purchase price and plans to add value through leasing and repositioning strategies, current income and capital appreciation comprise more equal proportions of returns than with other strategies. Targeted IRR normally ranges from 10% to 15% for value-add funds. The asset manager's guiding return metric for value-add assets will be the return on cost.¹⁸

Moderate to high levels of leverage are typically utilized for this strategy, approximately 60% to 75%. ¹⁹ Value-add assets are normally financed through short-term floating rate loans from either a debt fund or a bank. These loans often have "future funding" provisions, which allow investors to borrow additional funds to cover leasing and capital costs.

• Drivers of investment demand and returns: Allocators may gravitate toward value-add strategies later in the economic cycle when lower-risk strategies are less likely to provide attractive returns and more effort is required to meet return requirements. However, the costs of construction materials and labor may be pushed higher by both inflation and increased competition for resources later in the economic cycle, which can cut into profits. Given that value-add strategies have a higher risk-return profile and often use more leverage than core and core plus strategies, when there are elevated macroeconomic concerns during the value-add process, this strategy may be less attractive. That said, when the value-add is done, opportunity exists for new occupants to come in at rents higher than a gradual rent-increase program might allow. The assets also may then be sold to core or core plus investors, offering appealing exit opportunities.

In addition, the use of higher levels of leverage means that interest rates will be more impactful to this strategy, although the fact that levels of leverage may still be relatively moderate means that this may not deter investors. Depending on the

^{18:} Warren McClean, Capital Markets Associate at JLL, phone interview by Anikka Villegas, March 1, 2022.

^{19: &}quot;What Are Core, Core Plus, Value-Add and Opportunistic Investments?" Origin Investments, Michael Episcope, February 21, 2018.



efficacy of counter-inflation measures, whether inflation continues to rise or remains high but falling will also affect the strategies of real estate investors. Those hoping to build substantial value during the holding period through capital improvements will be motivated to act and reap these benefits early if inflation is expected to continue to rise. Rather than forgo investments in value-add strategies, investors may choose to select larger and more experienced managers when rates and inflation are high. These types of managers typically garner increased confidence and are associated with less risk, in addition to having access to the resources necessary to tighten the timeline on projects if needed.

Opportunistic: Opportunistic investments tend to be made in properties that require substantial additive efforts due to a need for renovation, repurposing, high vacancy rates, or shifting supply-demand dynamics in a market. This category also includes new property development such as greenfield and brownfield projects.

- Example investments: An opportunistic fund may invest in a plot of raw land bought with the intention of building a cold-storage facility; an out-of-use industrial facility purchased with the intention of repositioning it to be used for retail and residential purposes; or a downtown office building bought to be converted, in part, to a data center.
- Effort level: The effort level required by opportunistic investments is high, as the strategy often involves investing in properties with high vacancy rates, a need for property transformation or repositioning, or the intention of ground-up development. As with the value-add strategy, diligence is still important, but the period requiring the most intensive effort will be leading up to and during the capital improvements or other major value-additive project. Contracting out some responsibilities is common, although investor involvement is both unavoidable for this strategy and necessarily burdensome.
- Asset holding period: Varies, but averages approximately five to eight years
- Risk-return profile: Opportunistic investments are higher risk and are expected to receive higher returns than core, core plus, and value-add strategies. Returns are anticipated to be derived more from capital appreciation than current income, as development is being done in anticipation of improved rent profiles rather than concurrent with rent collection. Expected IRR for an opportunistic fund is above 15%, and the guiding metric for asset managers is often return on cost.

Opportunistic investments may use higher levels of leverage, although the amount of leverage they can gain access to is limited by risk and lack of cash flows during the improvement or development projects. As such, some investments will be unable to support as much leverage, with bank lending for projects such as land development at levels more comparable to those used for core plus strategies.²⁰ Because of this, the range is wider, from 50% to 70% or more.²¹



• Drivers of investment demand and returns: Opportunistic strategies are more popular later in the economic cycle when investors need to accept more risk and apply more effort in order to make more attractive returns due to higher property prices. As with value-add, inflation or late-cycle competition for resources may also negatively affect opportunistic strategies because cost of construction and labor can cut into profit margins. This would be especially impactful for new property development. As previously discussed, with more leverage comes more sensitivity to interest rates, thus making opportunistic strategies highly sensitive to rate hikes.²² New developments or properties revamped using opportunistic strategies may also be eligible for sale to core or core plus investors at exit.

Distressed: Distressed investments target properties and/or mortgages wherein the current ownership is in or near default. In addition, if lenders cannot sell foreclosed-upon properties at auction, the property, also considered a distressed asset, may be sold at a reduced rate on the market.²³ Distressed and debt strategies are frequently lumped together, as distressed funds often invest in distressed debt, purchasing debt instruments and attempting to turn them around. When distressed debt is purchased and a project fails, equity is wiped out and the distressed debt holder becomes the asset owner, which can provide upside beyond the interest and principal typically provided by debt.

- Example investments: A fund with a distressed strategy might invest in the debt of value-add or opportunistic projects that were overleveraged, experienced some bad luck or bad management, and defaulted. These kinds of funds would also likely consider investing in nonperforming mortgages in an economically developing community or a chain of gyms unable to maintain sufficient membership to remain afloat.
- Effort level: Turning around distressed assets or managing distressed debt requires moderate to high levels of effort. Specifically, managing distressed assets will require additive efforts comparable to those of opportunistic strategies, and managing distressed real estate debt may involve assuming an active posture in facilitating repayment. While investors may contract out the responsibilities of the former, the latter more frequently requires the watchful eye and expertise of the asset manager.
- Asset holding period: Approximately three to 10+ years
- Risk-return profile: Distressed investments are more varied in their risk-return profiles due to the different circumstances under which the investment may become distressed. However, targeted returns will be around 20% IRR for distressed funds. The composition of returns will also depend on the investor's strategy. For those properties where debt repayment is not feasible and the investor is or becomes the asset owner, returns may be comprised almost entirely of capital appreciation rather than current income. However, if the investor hopes to turn around the performance of a debt instrument by facilitating repayment, income may comprise a more

^{22:} Given that we've been at historically low interest rates in recent years, increased sensitivity can mean detrimental impacts when interest rates return to more normal levels.

 $[\]underline{\textbf{23: "The Do's and Don'ts of Investing in Distressed Properties,"} \textit{Forbes, Steve Byrne, April 5, 2021.}$



sizeable proportion of returns. Nondebt distressed strategies may use a range of leverage, from low to high, depending on what is accessible.

• Drivers of investment demand and returns: More opportunities exist for use of distressed strategies during economic recession, as more properties are propelled into economic distress during those periods. In addition, downturns can be localized, so sometimes the distress is not being felt at a national level but may be found in places that are feeling strain for more region-specific reasons. As a bonus, when the distress is derived from a reset in the economic cycle, competition for resources has likely waned, so turning around the property may be less costly for investors than it would be later in the economic cycle.

Because distressed strategies are almost inextricably linked with debt, they experience similar drivers of investment demand and returns. Additionally, because investors in distressed real estate believe that they can extract more value from the property than the sellers, who may be more risk-averse or believe that the effort associated with the task is not worth the anticipated payout, idiosyncratic and asset-specific factors will have a large role to play in the returns that are made.

Debt: Real estate debt funds provide short- to medium-term capital for real estate borrowers, often for development or redevelopment projects. Unlike other strategies, real estate debt investors will frequently lend capital to real estate firms or asset owners. The speed with which real estate debt funds can dispense capital provides an advantage, as rapid closings are common in the space. Other firms in the real estate debt space will originate loans and invest in debt securities targeting high-quality real estate.²⁴ Real estate debt investors can invest in either performing or nonperforming (distressed) debt. The amount of equity in the market drives the amount of debt, with debt being a strategy that those new to real estate frequently utilize to enter the space.²⁵

- Example investments: A real estate debt fund might purchase a nonperforming mortgage portfolio or lend to an established real estate firm that needs capital to expand into a new market. In addition, a real estate debt fund might offer mezzanine financing or bridge loans to help finance shorter-term redevelopments.
- Effort level: Effort level is varied. Depending on the type of debt, the effort level ranges from low to high. In many cases, the effort required is up-front, as investors assess whether investments are worth backing. Then, once capital has been lent, investors can sit back and collect principal and interest. Real estate debt investors often focus on particular loan strategies or investment theses, which may aid slightly in reducing effort level.
- Asset holding period: Approximately three to five years. Fund life may not be shortened, however, as funds may recycle capital if they are paid back early or earlier than five years into the life of the fund, such that fund managers can lend that capital out again to increase the fund return.



- Risk-return profile: Real estate debt investments are also varied with respect to their risk-return profiles, although this is influenced by whether debt is subordinated or unsubordinated. Targeted IRR can range from 10% to 20% for funds of this strategy, with returns coming from interest payments and leverage on the fund.
- Drivers of investment demand and returns: Debt is contractual in nature. As such, returns are based on the agreement signed in the beginning of the investment, with investors receiving pre-established interest and principal. Because of this, the real indicator of what investors can expect to earn is how much money is available, through both funds and banks, to projects. The number of lenders looking for opportunities to lend will influence rates, driving them down due to competition and decreasing the investment returns funds can garner. Regulation of banks is also a driver of returns for private debt in real estate, with the GFC serving as an example of how more stringent regulation can result in a shift toward private credit for real estate.²⁶

The potential for market downturn also makes holding debt more attractive than holding equity, as it reduces the risk involved with the investment. In an inflationary environment, there is still advantage to real estate debt, so long as loans have floating rates, as rising inflation typically translates to rising rates. Fixed-rate debt, on the other hand, will suffer during inflationary periods, as interest payments will be steady while the value of those payments declines. When interest rates increase, floating rate loans pick them up automatically in the private credit coupon.²⁷ The magnitude of inflation is also an important consideration. While there may be escalation clauses in real estate debt contracts, the annual percentage increase stipulated may not keep up with inflation in extreme scenarios. As such, debt may provide only so much protection against inflation.

Real estate sectors and subsectors

While the fund landscape is frequently delineated by the strategies outlined above, understanding of the economic drivers of real estate is better served by dividing the asset class according to property sector and subsector. It is worth noting that a fund's ability to invest in certain property types will be influenced by its size. For example, massive developments in high-barrier markets, such as large-scale apartment communities in supply-constrained cities such as San Francisco and Los Angeles, will yield deal sizes large enough to exclude smaller funds. Conversely, some industrial properties may not meet the size threshold at which it makes sense for larger funds to invest, despite presenting an attractive opportunity.

Residential: Residential real estate is focused on purchasing properties or plots of land with or without edifices, that are zoned or purposed as living space. Residential properties targeted by private real estate investors are often part of mixed-use developments with multifamily properties such as apartment buildings coupled with retail or office components.



• Multifamily: Multifamily dwellings contain multiple separate housing units within one or several buildings in a complex. Examples of properties included in the multifamily category include apartments, residential cooperatives, residential condominiums, duplexes, and other residences attached to one another.

Drivers of returns for multifamily properties may include local population growth, especially driven by young professionals, job growth with compensation aligned with the desired pricing scheme of apartments, and infrastructure spending that makes locations more attractive. Similarly, when home prices and single-family rental home prices push consumers out of the market for those property types, they are often driven to multifamily properties.

Further, the ages and rates at which consumers are having children will influence the interplay of multifamily and single-family property demand and investment returns. Couples without children require less space than those with children, thus making them more likely to remain in multifamily rentals. Even trends such as increased pet ownership can have an effect: While childless couples may not need as much room, many cite having a dog as their reason for buying a home.²⁸

In terms of drivers of investment demand, standard apartment leases last an average of one year, so the ability to continuously raise rent is a nice hedge against inflation, thus making multifamily properties more attractive during inflationary periods. Local regulation may, however, dictate the extent to which rents can rise each year, which may dampen the hedging effect.²⁹

• **Single-family**: Single-family properties have one dwelling per lot, with no shared common wall, foundation, or other interconnection with another residence, nor any shared facilities or essential services with another residence.

For investment funds, increases in property values, which are influenced by several factors, will be the primary driver of returns. These factors include shifting preferences around living space, population growth driven by individuals in the child-bearing age demographic, job growth with compensation aligned with the desired pricing scheme of the homes, infrastructure spending, and public school enrollment rates. Investment funds more interested in current income through house rentals are likely to benefit from inflation and might look in locations where home prices are too high for many families to afford. In addition, at times when banks are demanding larger down payments and rising interest rates are making mortgage payments unaffordable for those who would have purchased homes, rental homes will be in higher demand.

In terms of investment demand, while this property type was historically seen as too small and labor-intensive to catch the eye of private real estate funds, investment in single-family rentals grew increasingly common in the wake of the GFC due to large quantities of inexpensive homes that could be purchased in bulk. This has been controversial, however, as the properties that typically make up first-time



homebuyer stock are being purchased by investment funds, thus leaving few affordable options for those hoping to reach the first rung of home ownership. Further, when private investors purchase single-family homes, they may choose to not rent them out if local regulation dictating permitted YoY rent increases does not allow sufficient rent escalation to satisfy investors. This, in turn, inflates rental and property prices due to insufficient supply, contributing to housing scarcity.

• **Student housing**: Some real estate investors specialize in providing residences for those attending college. Student housing investment properties will typically be located near campuses with large student populations where the university provides housing only to a small proportion of students.

Unsurprisingly, the key driver of returns for this property type is university enrollment. Populations with a larger middle class tend to have higher enrollment rates, with an added benefit that students' parents can co-sign leases, thereby providing a potentially more reliable ability to pay. Periods of recession also drive enrollment skyward; higher education is used to make candidates more attractive in a more competitive job market. Investors also focus on universities with strong admissions demand as they are less likely to experience reduced enrollment even when macroeconomic factors aren't pushing people toward education.

As far as investment demand is concerned, inflation may boost the attractiveness of this property type, although tenant turnover occurs more variably than with multifamily properties, ranging from annually to every few years.

• Manufactured home: Manufactured home properties are plots of land on which managers lease space to multiple manufactured homeowners. Put plainly, these properties are often referred to as trailer parks or RV parks. 30 Like other property types, manufactured home properties exist on a spectrum of quality, with the highend properties offering amenities such as gyms, swimming pools, hot tubs, and communal areas. Nonetheless, this property type is often considered the lowest possible entry point to homeownership from an affordability standpoint.

Drivers of investment returns include periods of recession, high property values, and heightened rental pricing for single-family and multifamily properties, as buyers priced out of other residential property types may turn to manufactured homes in order to reduce costs. Age demographics also come into play, as many mobile homeowners are of retirement age, with some manufactured home properties even dedicated specifically to senior housing.³¹ In areas with large senior populations in the lower or lower-middle class, manufactured home properties are likely to see stronger returns. Zoning and public sentiment are especially influential for this property type, as its stigma may create barriers to its inclusion in desirable residential areas.

As a less common property type among private fund investors, investment demand tends to fluctuate and does not appear to be tied to specific macroeconomic factors, aside from those that drive returns.



Commercial: Commercial real estate is concerned with purchasing properties used by tenants for business and income-generating purposes. Commercial properties differ from industrial real estate by focusing on business-to-consumer operations.³² These types of properties tend to be located near residential areas to maximize consumer accessibility.

• Hospitality and recreation: Hospitality and recreation properties encompass those utilized for lodging, such as hotels, motels, and resorts; food and beverage services, such as restaurants, bars, and coffee shops; and recreational uses, such as professional and amateur sports and gaming. These properties are sometimes also categorized as "special-purpose" rather than commercial properties.

This is one of the few property types that is both highly sensitive to customer preferences and often incredibly operationally intensive for the property owner. Because of these two factors, property owners tend to keep a lean team internally and contract out management responsibilities to specialists. For example, an investor may purchase a struggling resort property and contract out the financial and business management, human resources, supervision, security, maintenance, and other operational responsibilities to a management company.

When coupled with recession, inflation may make these property types less appealing, as lease terms tend to be long and consumers are less likely to spend on inessential experiences, thus driving returns downward. As investments, these properties will fare better in a macroeconomic environment with more disposable income for consumers and a physical environment with access to transportation, nearby attractions, and economic development.

The degree to which the area surrounding the property is economically developed will influence its perceived safety and appeal and affect the availability of complementary products and services. For example, a motel located near bars or restaurants will likely fare better than one that is isolated. The same may be said for a resort surrounded by other hotels, malls, and restaurants targeting the same consumer price point compared with one with a much higher price point than the surrounding area.³³

Inflation does not drive investment demand for this property type, due to its more limited hedging abilities. Demand is more often tied to other macroeconomic factors that drive returns.

• Healthcare: Healthcare properties include those related to physical and mental health, such as hospital campuses, medical offices, long-term care facilities, and addiction treatment centers. Laboratory space, which has seen increased demand in recent years, may be categorized under either the healthcare or office subsector, depending on its use. As with other property types, some developments blend healthcare properties with other uses such as wellness, retail, and residential.³⁴

^{32:} There are exceptions to this, however, as with some office properties where the lessee provides services to other businesses, such as a law firm serving corporate clients.

^{33:} Of course, this speaks to only one point in time. Investors may look to revamp properties in underdeveloped areas in hopes that the project or some other factor will stimulate the economy in the future and the investor can buy low and sell high. Nonetheless, the economic development of an area at one time influences a property's value in that moment.

^{34: &}quot;Rendina Healthcare Real Estate," Rendina Healthcare Real Estate, n.d.



Because developments may require a deep understanding of the needs of healthcare providers, including of technological requirements and how the facility's infrastructure must accommodate them, healthcare properties thus also possess an additional layer of complexity.

Consider, for example, the structural requirements mandated by large machinery such as X-ray machines. Investors may choose to forgo this responsibility by leasing the space as a blank slate, though forcing occupants to retrofit an existing structure may mean losing out on additional rental income. The midpoint between these options would be to tailor a space for a particular purpose without building in equipment, which also allows multiple service providers in one edifice to modify templated spaces to suit their needs.

Drivers of investment returns for healthcare properties are heavily linked to population growth among certain demographics. For example, if a large proportion of an area's residents are older adults, demand for long-term care facilities could be anticipated to increase, thus bolstering returns. The average income of a neighborhood may also indicate which healthcare properties experience greater demand, as lower income is linked to particular health outcomes such as obesity, heart disease, and liver disease. Facial and ethnic makeup of an area may have an impact as well, as groups have different risk exposure to various illnesses. For example, racial and ethnic minorities in the US are 1.5 times to almost 4 times more likely than their non-Hispanic white counterparts to require renal replacement therapy due to end-stage renal disease.

Other factors investors may consider when evaluating potential returns include transportation availability and distance from other hospitals, as minimum-distance requirements may influence which location is optimal.³⁸ Conversely, investors may benefit from a clustering effect, wherein different healthcare-related service providers pop up in close proximity to one another, thus creating one general location where consumers can trust that varied needs will be met.

Healthcare properties may not function ideally as an inflation hedge, as lease terms tend to be longer, thereby necessitating escalation clauses for hedging. As such, investment demand is less likely to be driven by inflation than by other factors. However, at least in the United States, increased costs due to inflation can be passed on to consumers, which may mitigate some of the aforementioned effects.³⁹

 Retail: Retail properties are used as brick-and-mortar locations to sell products or services to consumers. They range from shopping centers to boutiques and pop-up shops to supermarkets.

^{35: &}quot;The Impact of Poverty on the Current and Future Health Status of Children," National Library of Medicine, Paediatr Child Health, Rita Paul-Sen Gupta, MSc, Margaret L. de Wit, PhD, and David McKeown, MDCM MHSc FRCPC, October 2007.

^{36: &}quot;Why So Many Dialysis Centers in Black Neighborhoods?" The Chicago Crusader, Lenora Blackmore, September 17, 2019.

^{37: &}quot;Hemodialysis Disparities in African Americans: The Deeply Integrated Concept of Race in the Social Fabric of Our Society," National Library of Medicine, Keith C. Norris, et al., May 2017.

^{38: &}quot;Minimum-Distance Requirements Could Harm High-Performing Critical-Access Hospitals and Rural Communities," Health Affairs, Michelle M. Casey, et al, April 2015.



Drivers of investment returns for retail properties include population growth and socioeconomic demographic changes. As might be expected, increased expendable income is correlated with greater demand for these properties. Increasingly, age demographics also play a role, as older consumers are more likely to opt for inperson rather than online shopping. Transportation availability and local crime indexes factor in as well.⁴⁰ Investors with larger fund sizes may be attracted to large retail developments such as malls or mixed-use developments because of higher price tags and density and proximity of consumers.

Inflation may be harmful to the valuations of retail property types providing products or services that less expensive substitutes can displace. If inflation is combined with recession, some consumers may opt for cheaper e-commerce options compared with higher-end boutiques or at-home treatments rather than spa services. For retail property types where essential products or services constitute a meaningful component of those provided, inflation and recession are likely to be less impactful to tenants, and thus, less likely to harm property values. Still, factors such as the shift to e-commerce, which substantially reduces consumer traffic, can harm performance for these property types.

These nuances lead to a complex relationship between inflation and investment demand in this sector. For property owners, building in escalation or other contractual clauses that account for inflation is key, as leases tend to be around five years long. ⁴¹ Through price changes, retail locations can also pass along inflation-related costs, such as those from rent increases or adjusted wages, to consumers.

• Office space: Office space properties are plots of land on which office buildings are located. They include traditional offices, creative spaces, co-working spaces, executive suites, and flex space.

Office space investment return drivers include office-using employment growth and trends influencing how office space is used, as well as the frequency of inoffice work for in-office workers. The latter is especially salient in a post-COVID-19 pandemic world, with proven feasibility of remote work and higher employee demand for remote or remote-flexible jobs. 42 Relatedly, the sectors that are occupying the majority of office space can indicate potential growth or shrinkage in the market. For example, technology companies have driven much of the demand for office space in recent years. However, the tech sector's employees can easily work remotely, and its workforce comprises some of the most in-demand highly skilled workers, thus creating more bargaining power for the workers—including around issues of remote versus in-office work and desired amenities such as kitchens, recreational areas, and lounges.

Certain events will influence the success of an investment depending on its sector. Large corporate headquarter shifts will boost office demand in the new locale, as professional service providers follow their key accounts. A developing business ecosystem, even if not tethered to the success of one massive corporation, will have

^{40: &}quot;5 Key Site Drivers for Retail Commercial Real Estate Locations," REoptimizer, Don Catalano, February 13, 2012.

^{41: &}quot;Retail Real Estate: An Investor's Industry Overview," Invest, Nate Nead, April 15, 2018.

^{42;} Michael Soto, Director and Head of Office Research in Los Angeles at Savills, phone interview by Anikka Villegas, March 9, 2022.



the same effect. For some professional services firms, such as legal and accounting services, residential growth will also increase the value of an investment or boost the appeal of a potential investment. Investors may also look for good school systems, population trends, or a nascent startup scene, as these factors can also influence office growth.⁴³

Inflation may drive investment demand, as office leases frequently have escalation clauses built in, sometimes tied to local rent increases or the consumer price index, thus making this property type a more effective hedge.

• Self storage: Self-storage properties are those on which consumers can rent units to use for personal storage purposes. There are four types of self-storage facilities: drive-up, which are the standard units; climate-controlled; specialty, such as used to store art, boats, or wine; and flex or mixed use, where there may be office storage combined with personal storage.⁴⁴

Investment return drivers for this property type include the population density of urban areas, trends around remote work, which allow employees greater freedom to change locations, consumer habits around spending, and even local architecture. If buildings in a particular area tend not to have basements or other storage spaces, demand for self storage may be greater. During the pandemic, many had to make space in their homes to create workspaces, which led to an uptick of self-storage use during a period of low supply growth, and, subsequently, strong performance.

Inflation may drive investment demand for this property type. While consumers could be inclined to cut expenses such as unnecessary storage costs if inflation is coupled with recession, the impact of inflation on self-storage property owners is able to be transferred to consumers due to short-term leases. ⁴⁵ In addition, because self-storage properties require minimal management and maintenance, operating cost increases resulting from inflation would likely be insubstantial.

Industrial: Industrial real estate also targets properties used for business purposes, but generally focuses on business-to-business operations or those centered on manufacturing. Industrial real estate properties are typically located on the outskirts of cities or in more rural areas. Its base demand is led by overall consumption and the channels through which it occurs. In developed countries, most industrial real estate is comprised of logistics rather than manufacturing properties.⁴⁶

 Manufacturing: Manufacturing properties include the buildings, structure, machinery, and/or equipment used to manufacture goods or process materials.
 Manufacturing properties in developed countries tend to be utilized by more niche industries that require nearby research & development facilities such as biotechnology, although these may be categorized under office or healthcare properties as well.

^{43:} Michael Soto, Director and Head of Office Research in Los Angeles at Savills, phone interview by Anikka Villegas, March 9, 2022.

^{44: &}quot;How to Invest in Self-Storage Real Estate," Overland Group, April 16, 2020.

^{45: &}quot;How to Invest in Self-Storage Real Estate," U.S. News, Kayleigh Kulp, August 12, 2019.

^{46:} Michael Soto, Director and Head of Office Research in Los Angeles at Savills, phone interview by Anikka Villegas, March 9, 2022.



In less developed countries, consumer goods demand may drive investment returns, although many manufacturing properties are owner-occupied.⁴⁷ Because trade heavily influences demand for consumer goods, fluctuations between globalization and economic nationalism at the macro level will affect demand for the different types and quantities of manufacturing properties, potentially either boosting or stifling returns. There are other reasons for reshoring, or the cessation of offshoring or outsourcing, such as desire for transparency around environmental, health, and safety standards, intellectual property protections, raw material access, and supply chain efficiencies.⁴⁸ When assessing individual properties, fund managers will also consider proximity to a workforce appropriate for the production process and proximity to end-consumers, which influences shipping costs.

The economic cycle, rather than inflation, typically drives investment demand for this property type. Manufacturing is frequently the target of core and core plus strategies, utilized earlier in the economic cycle when investors can purchase more expensive property types at depressed prices. In addition, especially if coupled with recession, inflation can drive down demand for consumer goods and increase the costs of inputs, which may make it a less effective hedge.

• Logistics: Logistics properties typically encompass warehouse, distribution, and fulfillment centers, including cold storage. Unlike manufacturing, these properties are spread throughout both developed and developing countries, often concentrated in hubs.

Drivers of investment returns for logistics properties include consumption hikes—which are attributable to population, wage, and employment increases—and use of e-commerce over traditional brick-and-mortar stores. Online order fulfilment utilizes more than three times the logistics space of commerce through brick-and-mortar stores, largely due to storage of online inventory exclusively in warehouses, online storefronts offering greater product variety, and higher volatility in sales patterns, among others factors. ⁴⁹ In-fill distribution centers, or those that exist closer to city centers and occupy once-vacant lots, have become increasingly valuable due to e-commerce, as they are able to meet demand for fast delivery and experience low supply growth.

On the macro level, increasing globalization is another growth lever for demand, as logistics real estate is central to global commerce. Decause warehousing typically comprises a small percentage of supply chain cost and transportation comprises a far higher percentage, a more localized driver of returns would be an increased manufacturing or logistics presence near the property, lessening its distance from potential customers. That proximity doesn't mean much without drivable roads, however, so access to good infrastructure is similarly important to investors seeking such investments.

^{47:} Michael Soto, Director and Head of Office Research in Los Angeles at Savills, phone interview by Anikka Villegas, March 9, 2022.

^{48: &}quot;The US Manufacturing Renaissance: Driving a Resurgence in Industrial Real Estate," Development Magazine, NAIOP, Spring 2016.

^{49: &}quot;The Drivers Behind Logistics Warehousing's Bright Future," GlobeSt, Paul Bergeron, October 5, 2021.

^{50: &}quot;Logistics Real Estate," Prologis, n.d.

^{51: &}quot;Rising Transportation and Supply Chain Costs Are Driving Industrial Real Estate Leasing Activity," Logistics Management, Jeff Berman, September 17, 2021.



As with manufacturing, investment demand in logistics properties is often aligned with core and core plus strategies and driven more by the economic cycle, as it is more attractive earlier in the cycle when prices are lower.

• **Data centers**: These properties contain facilities that house the critical applications and data of companies or institutions, using a network of computing and storage resources, with key components including servers, routers, and firewalls, among other elements.⁵² Many types and tiers of data centers exist. For some, proximity to major customers is a consideration, as latency, or the time it takes for data to be transferred between its source and its destination, and reliability of connection dictate customer satisfaction.⁵³

At a macro scale, return drivers for data centers include global digitization and migration to the cloud, economic development, and technological access and adoption. At a micro scale, increased processing of Big Data, a shift to e-commerce, and heightened participation in virtual reality and online gaming fuel returns. In addition, an increased focus on cybersecurity and business continuity bolsters returns for data centers, as outsourced expertise and security, as well as redundancy, are in high demand.

Similar to the other industrial property types, the macroeconomic landscape and microeconomic demand drivers influence investor appetite for this property type far more than inflation does. In part, this is because data centers are operationally intensive to maintain, so when labor and hardware costs increase with inflation, this property type is affected heavily. This property type is one of the few that is not frequently mentioned as a potential inflation hedge.

Land: This type of real estate is focused on the purchase of properties that derive their value largely from the land itself rather than from developments built on a certain lot. This includes undeveloped property or vacant land, also known as raw land, and agricultural land.

• Raw land: Raw land is untouched terrain or land that has not had any improvements made upon it, which typically means it is without basic utilities such as electricity, water, or sewage. Traditionally, this also means it has not been cultivated for crops or livestock. Acquisition and development of raw land definitionally occurs most frequently with opportunistic and value-add strategies, although some investors may employ a buy-and-hold strategy more aligned with core or core plus.

This property type is necessarily subject to attractive supply-demand dynamics, with the supply of undeveloped land inherently decreasing with time. Investors looking to make land purchases may look for properties that are in the path of development, as undesirable locations can become far more valuable as a city's suburbs continue to expand. Proximity to city services and local zoning may also influence the value of an investment.



Times of inflation may be beneficial to landholders if they do not plan to make any improvements themselves, as their costs are few and inflationary times are often paired with rapid economic growth, which could lead to demand for more housing, warehouses, or other building projects. The opposite is also true, though: Inflation may put downward pressure on demand for this property type, as those looking to develop the land are deterred by heightened interest rates and development costs. Still, for long-term buy-and-hold strategies, appreciation may keep up with inflation enough to create an inflation hedge.⁵⁴ This is not without risk, as raw land comes without tenants, and, as such, often lacks a meaningful current income component.

Given these dynamics, investment demand may be driven, in part, by inflation. This is most applicable to investors with a long investment horizon and plenty of time to reap the benefits of appreciation throughout inflationary and economic cycles.

• Agricultural land: Agricultural land is used for the cultivation of crops or livestock and includes farmland, timberland, orchards, and ranches.⁵⁵ The improvements made to the land to cater to these functions differentiate agricultural land from raw land. In the United States, a small percentage of agricultural land is owned by institutional investors, which typically lease the land to farmers or ranchers.⁵⁶ Investors' returns on agricultural land investments are typically comprised of half cash flow and half appreciation, with a slight majority of US farmland being leased rather than owned.⁵⁷

The value of agricultural land is dictated largely by the assets that can be grown on it. Levers that may increase this value include investment in technology and infrastructure such as addition of drip irrigation, certifications such as United States Department of Agriculture Organic, and intentional crop cycling. Crop cycling is important because the type of crops historically grown on land will influence the biology and chemistry of soil, in turn affecting the likelihood of success in growing other crop types.

At the macro scale, drivers of investment returns also include population growth and economic development, with increases in income resulting in higher caloric intake.⁵⁸ Because agricultural goods are necessities, consumers will generally pay more when cost increases are passed along. However, because they are a necessity, governments may step in to avoid consumers being priced out of buying food. When prices are rising, the value-add organic strategy may suffer, as consumers feeling the pinch may switch back to lower-cost options.

Investment demand may, then, be driven by inflation—though where interest is directed will likely shift somewhat based on this factor. In terms of the interplay between the economic cycle and the strategy used, each of the real estate investment strategies can be executed on agricultural land, which may make it suitable throughout. For example, a core strategy might utilize a sale lease-back approach, while a value-add manager could buy the land and convert it to organic before leasing it to farmers at a higher cost per acre. ⁵⁹

^{54: &}quot;What Is Raw Land Investing?" Crest Real Estate, Jason Somers, September 21, 2020

^{55:} In PitchBook's database and reports, agricultural land typically falls into the "real assets" category, but it is covered here to be comprehensive. 56: Craig Wichner, Managing Partner of Farmland LP, phone interview by Anikka Villegas, March 25, 2022. 57: Ibid.

^{58: &}quot;Why You Should Invest in Farmland," Forbes, Nav Athwal, August 2, 2021.

^{59:} Craig Wichner, Managing Partner of Farmland LP, phone interview by Anikka Villegas, March 25, 2022.



ESG and Impact investing in real estate

ESG in real estate: Broadly, ESG refers to environmental, social, and governance risk factors and value creation opportunities. In the context of investing, "doing ESG" means utilizing the principles of ESG risk management and value creation to improve returns. ESG is distinguished from Impact in that it is concerned with inward-facing, nonfinancial risks and opportunities and their effects on company performance. In recent years, private equity firms with theses centered on real estate investment have demonstrated increased awareness of ESG, with major players publishing ESG policies, reports, and disclosures.⁶⁰

As might be expected, ESG analysis pertaining to real estate largely centers on the environmental component, although social risk exposure may be present due to use of contracted labor, which is common in property management. ESG opportunities in real estate are also abundant, with considerable capacity to reduce costs and benefit financially from buildings made more sustainable. Because land and edifices are so long-lasting, proactive preparedness for upcoming regulation, resource constraints, and climate change challenges can help asset owners sell at a premium.

Some real estate investments may provide a trifecta of ESG risk exposure; ESG opportunity, or benefit to the company or investor; and Impact opportunity, or benefit to society. These include affordable housing, which may present a regulatory burden pertaining to creation of affordable units in buildings of a certain size, depending on location and regulation; an ESG opportunity to gain access to state or federal funds for this purpose; and an Impact opportunity to address the housing crisis, particularly in cities where essential workers such as teachers and police officers cannot afford to live.

ESG factors that tend to be material to real estate investments include:

- Climate change adaptation, such as accommodation of green energy or meeting greenhouse gas reduction requirements
- Energy and water management, such as water efficiency in residential buildings
- Management of tenant sustainability impacts, such as health impacts of manufacturing operations on surrounding civilians
- Environmental compliance and ecological impacts, such as effects of the property on local ecology and complying with local environmental regulations
- Employee matters, such as employee health and safety and social and labor conditions; for example, ensuring employees are safe and don't experience discrimination or harassment
- Supply chain social and environmental management, including ethical sourcing of contracted labor or building materials
- Business ethics and regulatory compliance and anti-bribery and corruption, such as educating employees on appropriate interactions with government touchpoints

60: "2020 ESG Report," Brookfield, n.d.



The materiality of ESG issues for a particular investment in this asset class depends on the real estate strategy utilized and sector and subsector into which the investment fits. Core investors increasingly target purchases of buildings with already strong ESG profiles, while value-add investors may work to retrofit a building to improve its environmental sustainability and then sell it to core investors. Opportunistic investors likely focus more on building ESG features into new developments from the ground up, thus positioning them to escape obsolescence throughout their lifetime.

Impact in real estate: Impact refers to the positive environmental and social effects of an entity on the external world and is concerned with outward-facing effects on society. Impact investing aims to directly influence social and environmental causes while still accumulating wealth through investment returns. Impact investing may or may not involve either utilizing positive social and environmental impacts to improve returns or accepting concessionary returns to further social and environmental causes.

Real estate investments can be characterized as Impact investments if they create certain types and amounts of social or environmental good. In some ways, real estate is especially well-positioned for Impact investing. Land is both the foundation of many of our most important ecosystems and necessarily where we reside and develop our communities. As such, sustainable management of that land and the operations that occur in, on, and around it is integral to the continuation of society. In addition, the basic human needs for food and shelter are met using real estate, thus putting investors in this asset type in a position to improve the health and welfare of many if they so choose.

The Impact themes most likely to be relevant to real estate investments include:

- Opportunity zones
- Affordable housing
- Green buildings
- Sustainable land management
- Sustainable forestry

Note: ESG and Impact in real estate will be covered comprehensively in an upcoming analyst note. The note will delve into ESG risks and opportunities and Impact investing, among other topics.



Key players

Top real estate investors by fundraising totals between 2012 and 2022*

Investor	Fund count	Commitments (\$B)
Blackstone	24	\$115.0
Brookfield Asset Management	17	\$42.5
GLP	23	\$33.8
Starwood Capital Group	8	\$27.5
Lone Star Funds	7	\$25.5
The Carlyle Group	11	\$21.3
Union Investment Institutional Property	7	\$19.4
Oaktree Capital Management	9	\$17.0
Angelo, Gordon & Co.	14	\$15.5
Goldman Sachs Asset Management	6	\$14.7
Rockpoint Group	6	\$14.1
China Merchants Kunlun Capital	11	\$14.0
Kohlberg Kravis Roberts	9	\$14.0
PGIM Real Estate	18	\$13.6
PGGM	2	\$13.4

Source: PitchBook | Geography: Global *As of April 27, 2022 Note: These figures include only closed-end funds.

Top core real estate investors by fundraising totals between 2012 and 2022*

Investor	Fund count	Commitments (\$B)
Union Investment Institutional Property	6	\$19.4
BentallGreenOak	2	\$9.8
China Merchants Kunlun Capital	4	\$8.1
GLP	5	\$8.0
Lendlease	4	\$6.0
China Resources Capital Management	4	\$4.7
Nuveen Real Estate	7	\$3.5
Phillips Edison & Co.	5	\$3.4
AEW Europe	6	\$3.3
PGIM Real Estate	4	\$3.2
Investa Office Fund	2	\$2.8
Prologis**	1	\$2.8
Allianz Real Estate	2	\$2.8
Ampère Gestion	2	\$2.5
Caisse des Dépôts Group	2	\$2.5

Source: PitchBook | Geography: Global *As of April 27, 2022 **Acquired in 2011

Note: These figures include only closed-end funds.



Top core plus real estate investors by fundraising totals between 2012 and 2022*

Investor	Fund count	Commitments (\$B)
Rockpoint Group	3	\$4.7
Kildare Partners	3	\$4.1
GLP	3	\$3.7
Spear Street Capital	3	\$3.3
Bouwinvest Real Estate Investors	1	\$3.3
FPA Multifamily	4	\$2.6
Brookfield Asset Management	3	\$2.4
Angelo, Gordon & Co.	2	\$2.3
Beos	4	\$2.0
IMT Capital	3	\$1.9
Artemis Real Estate Partners	3	\$1.7
Deutsche Asset Management Real Estate Investment Management	1	\$1.5
Tristan Capital Partners	3	\$1.3
Invesco Real Estate	3	\$1.3
Oak Street Real Estate Capital	1	\$1.3

Source: PitchBook | Geography: Global *As of April 27, 2022 Note: These figures include only closed-end funds.

Top value-add real estate investors by fundraising totals between 2012 and 2022*

Investor	Fund count	Commitments (\$B)
CBRE Group	11	\$9.6
Nordic Real Estate Partners	6	\$8.5
Angelo, Gordon & Co.	6	\$8.3
Crow Holdings Capital - Real Estate	14	\$8.2
Greystar Real Estate Partners	6	\$6.4
GreenOak Real Estate	8	\$6.3
Bridge Investment Group	7	\$6.2
Exeter Property Group	7	\$6.0
IPI Partners	2	\$5.3
ICONIQ Capital	2	\$5.3
DRA Advisors	3	\$5.0
DivcoWest	4	\$4.9
AEW Capital Management	7	\$4.9
GLP	5	\$4.8
GCP	1	\$4.6

Source: PitchBook | Geography: Global *As of April 27, 2022 Note: These figures include only closed-end funds.



Top opportunistic real estate investors by fundraising totals between 2012 and 2022*

Fund count	Commitments (\$B)
19	\$99.0
6	\$28.8
7	\$27.4
9	\$20.8
10	\$17.4
1	\$13.1
12	\$12.1
7	\$11.9
3	\$10.3
3	\$9.4
3	\$7.0
8	\$6.8
4	\$6.3
4	\$6.1
5	\$5.8
	19 6 7 9 10 1 12 7 3 3 3 8 4

Source: PitchBook | Geography: Global *As of April 27, 2022 Note: These figures include only closed-end funds.

Top distressed real estate investors by fundraising totals between 2012 and 2022*

Investor	Fund count	Commitments (\$B)
Lone Star Funds	4	\$23.3
Rialto Capital	5	\$6.3
PAG	3	\$6.2
Secured Capital	3	\$6.2
AllianceBernstein	2	\$4.3
Federal Capital Partners	6	\$3.3
Cerberus Capital Management	3	\$3.2
Ares Management	2	\$2.7
PCCP	5	\$2.4
Churchill Real Estate Holdings	1	\$2.0
Dune Real Estate Partners	1	\$1.8
Cale Street Partners	1	\$1.5
C-III Capital Partners	3	\$1.4
Revcap	2	\$1.4
TCI Fund Management	1	\$1.3

Source: PitchBook | Geography: Global *As of April 27, 2022 Note: These figures include only closed-end funds.



Top debt real estate investors by fundraising totals between 2012 and 2022*

Investor	Fund count	Commitments (\$B)
Blackstone	5	\$16.0
Goldman Sachs Asset Management	3	\$14.4
O'Connor Capital Partners	1	\$10.0
Brookfield Asset Management	4	\$8.8
Axa Investment Managers-Real Assets	4	\$7.5
Oaktree Capital Management	6	\$6.6
Torchlight Investors	4	\$6.0
Pretium Partners	3	\$6.0
PGIM Real Estate	6	\$5.4
AllianceBernstein	3	\$5.4
Kayne Anderson Real Estate	6	\$5.0
Almanac Realty Investors	3	\$4.5
Madison Realty Capital	5	\$4.4
Intermediate Capital Group	4	\$4.1
DigitalBridge Group	4	\$3.9

Source: PitchBook | Geography: Global *As of April 27, 2022

 $Note: These\ figures\ include\ only\ closed-end\ funds.$

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