Chief Investment Office GWM Investment Research

Private real estate

Private markets education

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- Private real estate (PRE) strategies represent over USD
 1.1 tn or 10% of global private markets AUM.
- Real estate investing consists of receiving rental income and capital gains from the purchase and ownership of a piece of land or a building.
- Success in sourcing, developing, and exiting real estate projects can drive return premiums above public markets over a long time horizon.



Source: UBS

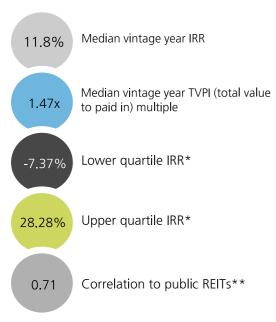
Summary

- Three main private real estate (PRE) strategies include core, value-add, and opportunistic.
- The core strategy aims at generating recurring rental income from high-quality properties in primary locations.
- Value-add real estate investing focuses on properties that require some level of lease-up, refurbishment, repositioning.
- At the higher end of the risk spectrum, "opportunistic investing" targets properties with high (re)development potential.
- When compared to publicly traded REITs, private real estate is generally less liquid, has lower correlation to public markets, has lower volatility, and incur higher fees.
- Private real estate managers can invest in niche strategies or drive value through more transformational projects than that of public REITs.
- Using Cambridge Associates data, PRE strategies (Opportunistic/Value-add) delivered a median 11.8% vintage year internal rate of return (IRR) and 1.47x total value to paid-in (TVPI) over the 1994–2018 period.
- PRE strategies outperformed public markets when observing FTSE NAREIT All Equity REITS public market equivalent (PME) returns by about 62bps over the 1994– 2018 vintage years.

- PRE funds can add attractive and differentiated sources of return as they expand investors' universe to real assets that have historically low correlation with traditional investments.
- With leases and rental income often adjusting with inflation, real estate investments may add an element of inflation protection.
- With significant differences in manager performance, key risks to private real estate include leverage, development execution, and exit timing.
- Other, more general private market risks also apply, including significant illiquidity of fund vehicles, limited control, and high fees.

This report is part of a series of short primers on specific private market strategies. You will find more information on the client portal. You can also contact your advisor for assistance.

Private real estate key statistics



Source: Pitchbook,UBS estimates based on historical data between 1994-2018. *Quartile IRR's reflect Pitchbook min and max values for lower and upper IRR's, respectively. **Compares correlation of vintage year IRR's. Data as of August 2022.

What does the private real estate strategy do?

Private real estate (PRE) strategies represent over USD 1.1tn, or 10%, of global private markets AUM. In its most basic form, real estate investing consists of receiving rental income and capital gains from the purchase and ownership of a piece of land or a building, spanning from residential and multi-family units to office, industrial, logistics, or retail space. Three main private real estate strategies include core, value-add, and opportunistic.

Core/core-plus real estate

- The core strategy is the best-known private real estate strategy and aims at generating recurring rental income from high-quality properties in primary locations.
- Such assets are typically fully or close to fully leased for the long term and benefit from a stable and high grade tenant base.
- Most of the annualized total returns of core investing come from rental income (90–100%), which is a function of the capability of tenants to pay rents and varies with occupancy rates. Gains from capital appreciation are typically limited (0–10%).
- Holding periods tend to be long, in the order of 10 years or more.

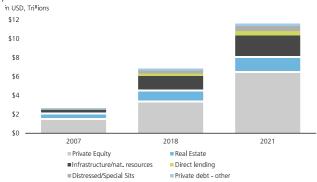
- Leverage applied by the fund typically falls in the 15– 30% range.
- A variant of this strategy is "core-plus," which has a slightly higher risk-return profile, based on re-leasing upside and the use of higher leverage than the core strategy.
- Core-plus returns are also primarily driven by rental income (80–90%) with relatively limited potential for capital gains (10–20%).
- Holding periods are also long, in the order of seven or more years. Leverage is typically around 50%.
- A core/core-plus real estate strategy is usually implemented through open-ended fund structures, and generally generate more stable returns over the cycle.

Value-add real estate

- Value-add real estate investing focuses on properties that require some level of lease-up, refurbishment, repositioning or other actions to enhance the value of the property and move toward the core-type attributes outlined above.
- As a result, "value-add" real estate investing focuses more than "core" strategies on future potential capital appreciation.
- Underlying property types include the same assets as in core, with the addition of other specialty types including hospitality assets, healthcare-related property, student housing, self-storage, and other niches.
- Value-add real estate investing requires careful planning of entry and exit points, close management of properties needing renovation, and/or redevelopment and possible repositioning.
- Fund managers have to identify attractive assets, implement relevant property improvements and tenant identification or upgrade strategy, and provide ongoing asset management.
- Vacancies are actively managed in order to accelerate transformations or reconversions.
- Returns from value-add real estate strategies are driven by a combination of income (30–50%) and capital gains (50–70%). Property holding periods tend to be in the five- to seven-year range, although investment vehicles tend to be 10-year closed-end funds.
- Leverage is typically in the range of 40–70%.
- Value-add real estate, due to the greater risks involved, seeks to generate higher returns than core strategies.

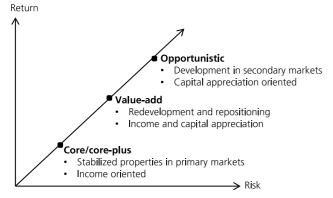
Fig.1: The private market industry has grown rapidly in the last decade

With over USD 1.1 trn, private real estate represents about 10% of total private markets AUM



Source: Pitchbook. Total exposure as of year-end, data as of August 2022.

Fig. 2: Illustration of private real estate strategies Potential risk-return across PRE strategies



Source: UBS

Opportunistic real estate

- At the higher end of the risk spectrum, "opportunistic investing" targets properties with high (re)development potential.
- These properties range from ground-up development (greenfield and brownfield); complex turnaround and redevelopment situations; and distressed situations including debt, real estate operating companies, land speculation, and even non-performing loan portfolios.
- Investors expect a substantial part of their return to be derived from capital appreciation. Besides traditional risks associated with market fundamentals, the fund manager needs to manage significant financial risks like leverage.
- Returns from opportunistic real estate strategies are driven very little by rental income (0–10%) and primarily focused on capital appreciation (90–100%).

- Commonly operated through closed-end fund structures, opportunistic real estate holds assets for five years or more, potentially longer in the case of groundup development and potentially shorter in the case of debt or other securities.
- Leverage tends to be in the 60–80% range. Opportunistic real estate seeks to generate high returns with relatively high risk related to execution.

Sources of value-add

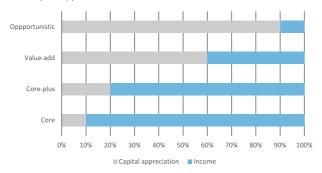
Real estate assets have various characteristics that differentiate themselves from other traditional assets. Given information asymmetry and local segmentation, properties often require significant managerial attention, specialized knowledge, and expertise.

- **Deal sourcing**: Successful private real estate managers uncover opportunities where others do not. Access to a pipeline of high-quality and hard-to-find deals is key. To gain an advantage against other bidders, managers rely on a strong network of property brokers, consultants, developers, as well as other preferred global and local partners.
- Profitability assessment: Assessing the return potential of a property is not easy, especially when value needs to be created. Industry expertise—especially when underwriting retail, hospitality, or healthcare transactions—is also required to forge a clear deal thesis. While for core assets, managers aim for attractive entry values, non-core assets typically require a detailed cost analysis on how to improve value, revenues, and operating profitability.
- Repositioning assets: For managers following a more opportunistic strategy, successful repositioning and developing new capabilities are the key factors to unlocking value to underlying assets.
- Transaction structuring: Property transactions, in particular for large projects, can require complex financing. Ownership of an asset can be obtained through a variety of instruments including loan pools, joint ventures, listed securities, as well as other real estate assets. Tax considerations and planning are also required pre- and post-acquisition.
- **Property management**: Good property management is the key to securing high stable cash flows. Real estate requires significant management attention including finding new tenants, extending new leases, optimizing rents, maximizing incremental revenues (parking/public spaces), planning maintenance, conducting operational or structural improvements, and minimizing expenses.
- **Exit process**: Property managers need to be adept at assessing the timing and exit method to maximize

realized gains. Planning multiple exit strategies in case something goes wrong is key.

Fig. 3: Illustration of private real estate return derivation

Core strategies are typically more income oriented, while Opportunistic are more capital appreciation oriented



Source: UBS

Public REIT vs. private real estate

With investors likely familiar with public REITs (real estate investment trusts), we compare and contrast key factors between REITs and private real estate funds.

- REITs are pools of properties (equity REIT) or mortgages (mortgage REIT) that are bundled in the form of a security.
- Similar to a PRE fund, an equity REIT owns and operates real estate. However, unlike PRE funds, REITs have generally lower fees and are more transparent and liquid given that shares are publicly traded on an exchange.
- However, in exchange for higher liquidity, REIT shares can trade at a premium or discount to net asset value (NAV), depending on market dynamics. Additionally, REIT returns typically exhibit higher volatility and correlation to public markets versus that of private real estate.
- Given higher leverage usage, yields for private real estate are typically higher than for public REITs, assuming similar strategies.
- Given the reliance on income to generate returns, REIT strategies tend to focus more on core and value-add strategies, while private real estate funds can implement core, value-add, and/or opportunistic.
- Public REITs tend to be sector-specific (malls, wireless towers, logistics, data centers, multi-family, healthcare, etc.), while private real estate funds tend to be diversified across all sectors.
- Private real estate managers can invest in niche strategies or drive value through more transformational projects than is possible for public REITs.

Performance analysis

Introduction to vintage year returns

- Private market returns are assessed using vintage year performance, which reflects the sum of all cash flows (contributions, distributions) from funds incepted in the referenced year.
- For example, if hypothetical fund ABC reported vintage year 2005 IRR of 15%, ABC was incepted in 2005 and the IRR reflects all investment activity performed over the course of its lifecycle: contributions and distributions made in 2005, 2006, 2007, etc., until the end of the fund.
- If hypothetical fund XYZ reported vintage year 2008 TVPI of 1.3x, the fund returned USD 1.30 for every USD 1 invested through the duration of the fund's life (2008– 2018).

Historical performance and comparisons versus public market returns

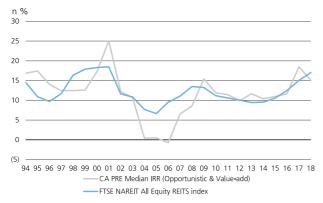
- Using Cambridge Associates data, PRE strategies delivered a median of 11.8% vintage year IRR and 1.47x TVPI over the 1994–2018 period.
- The standard deviation of vintage year IRR was 5.7% and 0.26x on a TVPI basis over the 1994–2018 period.
- We observe significant differences in lower quartile versus upper quartile returns, indicating elevated dispersion between fund managers and highlighting the importance of manager due diligence.
- We note that the Cambridge Associates PRE index comprises a mix of Opportunistic and Value-add strategies only. A comparison to public FTSE NAREIT All Equity REITS PME is therefore suboptimal given strategy mismatch as listed REITS are mainly focused on Core strategies.
- Still, the data shows an outperformance of PRE returns of about 62bps over the 1994–2018 vintage years. Relative performance may however differ depending on vintage years.
- When observing private real estate strategies with a Core focus (typically open ended unlisted REIT structure), returns have been similar to publicly listed REITs with lower volatility.

Real estate and the business cycle

- Real estate returns are generally linked to economic cycles, with GDP growth, low unemployment, consumer spending, and low interest rates supporting real estate dynamics.
- However, dynamics can vary by geography and asset type (office, apartment, industrial, retail, etc.), with vacancy rates, rental growth, and new construction also influencing the real estate market.
- PRE returns were highest soon after the global financial crisis (2009 vintage) and the Dot-com crisis (2001 vintage). This period exhibited depressed property prices and lower cost of capital.
- PRE returns were lowest a few years before the global financial crisis (2004–2006 vintages). These investment periods exhibited higher purchase prices, rising cost of capital, and liquidity pressure leading up to the global financial crisis.

Fig. 4: Private real estate IRR vs. FTSE NAREIT All Equity REITS PME index

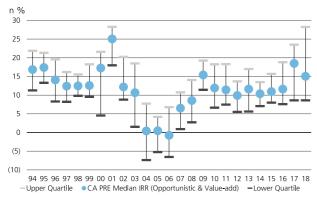
PRE has outperformed public markets in 13 out of 25 vintage years between 1994 and 2018



Source: Cambridge Associates, UBS. Data as of August 2022.

Fig. 5: Private real estate return dispersion per vintage year

High level of dispersions within each vintage year shows importance of manager selection



Source: Cambridge Associates, UBS. Data as of August 2022.

Real estate in your portfolio

- PRE funds can add attractive and differentiated sources of return as they expand investors' universe to real assets that have historically low correlation with traditional equity and fixed income investments.
- PRE funds can earn a premium above public market equivalent returns for providing long-term capital, enabling this active approach to sourcing assets, executing on repositioning projects, and optimizing property operations.
- For core or value-add focused strategies, PRE investments can provide a sizable yield component to returns with potentially lower volatility.
- With leases and rental income often adjusting with inflation, real estate investments may add an element of inflation protection.

Risks

- Changes in general business conditions including GDP, unemployment, interest rates, household formation, and household income can affect real estate returns.
- Risks of investing in real estate projects include substantial leverage, potential inability to service this debt, and deal timing.
- Risks of investing in PRE funds include blind pool structure, potential for unwanted or unintended sector risks or concentration.
- Tenants may delay or default on rent obligations. Additionally, higher-than-expected vacancy rates may adversely impact returns.
- Real estate projects may incur unforeseen damages to property, which may delay completion and/or increase costs.
- Given the long lead time for new development, exit conditions may be considerably different from the time initial investments were made.
- Private real estate funds are longer-term investments, with the typical fund life around 7–10 years.
- Other, more general private market risks also apply, including significant illiquidity of fund vehicles, limited control, disclosure, and transparency on underlying holdings, and high fees. These risks cannot be fully eliminated, but can be reduced through extensive institutional due diligence and rigorous investment and monitoring processes.

Appendix

Selected definitions

- **Correlation**: the degree to which the fluctuations of one variable are similar to those of another.
- **Leverage**: the use of borrowed capital or instruments to increase the potential return (but also potential losses) of an investment, a simple example is a mortgage used in real estate transactions.
- **Leveraged buyout funds**: a private equity strategy using borrowed capital to gain control of a company.
- **Illiquidity premia**: the premium that an investor can demand depending on how difficult it is to convert the underlying security can be converted to cash.
- **Multiples**: a term that measures some aspect of a company's financial well-being, determined by dividing one metric by another metric. The metric in the numerator is typically larger than the one in the denominator, because the top metric is usually supposed to be many times larger than the bottom metric.
- **Multiple expansion**: describes the way a particular valuation metric increases to reflect a higher value assigned to an underlying investment.
- **Value add**: describes the operational, business, or structural improvements private market managers seek through underlying portfolio investments.
- **Cash flows**: cash flow is the net amount of cash and cash-equivalents being transferred into and out of a fund.
- **Public Market Equivalent (PME):** a method that converts public market returns to a benchmark that can be compared to private market returns.
- **IRR**: a return method used to evaluate private market investments and reflects the discount rate at which the present value of an investment's future cash flow equals the cost of the investment.
- **TVPI (Total Value to Paid In**): a return metric that describes the total capital distributed back to the investor + residual value left in the fund divided by invested capital.
- **Exit**: the time period in which an investor can convert holdings into cash to be liquidated over a designated period of time.
- **IPO**: the first sale of stock by a private company to the public. Also referred to as an "initial public offering."
- **Standard deviation**: a measure of the degree to which individual values vary from the distribution mean. The higher the number, the greater the risk.
- **Dry powder**: refers to cash reserves kept on hand by a private markets firm to cover future obligations, purchase assets or make acquisitions.
- **J-curve**: illustrates a period of initial negative cash flows (contributions) towards positive cash flows (distributions back to the investor) over a period of time.
- **Sponsor**: the general partner in a limited partnership who organizes and signs up investors.
- **Secondary buyout**: describes a sale between private market firms
- **Trade sale/strategic sale**: describes a sale of a business to another business operating in a similar industry.
- **Senior debt**: loans or debt securities that have claim prior to junior obligations and equity on a corporation's assets in the event of liquidation.

- **Junior debt**: loan or security that ranks below other loans or securities with regard to claims on assets or earnings. In the case of borrower default, creditors who own subordinated debt won't be paid out until after senior debt holders are paid in full.
- **Vintage year**: is the year in which the first influx of investment capital is delivered to a project or company. This marks when capital is contributed by venture capital, a private equity fund or a partnership drawing down from its investors.
- **M&A**: mergers and acquisitions is a general term that refers to the consolidation of companies or assets through various types of financial transactions. M&A can include a number of different transactions, such as mergers, acquisitions, consolidations, tender offers, purchase of assets and management acquisitions.
- **Blind pool**: money collected from several people which is put into a fund and invested for their profit. It is left unspecified which properties are to be acquired.
- **Unit economics**: a measure of direct revenues and costs on a unit basis for a particular business model.
- **Minority stake**: reflects a non-controlling interest that is less than 50% of a particular entity.
- **Spin off**: describes the separation of an independent company from a larger parent.
- **Control provisions**: designed to provide a level of influence over significant operational and business matters.
- **Redemption rights**: gives investors the right to force a company to repurchase their shares after a period of time.
- **Idiosyncratic risk**: risk associated with a narrow set of factors pertaining to a particular company. Risk that has little association with overall market risk.
- **Tag-along provisions**: provides a minority shareholder the right to join in on a sale of a company that is initiated by a majority shareholder.

Non-Traditional Assets

Non-traditional asset classes are alternative investments that include hedge funds, private equity, real estate, and managed futures (collectively, alternative investments). Interests of alternative investment funds are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of alternative investment funds, and which clients are urged to read carefully before subscribing and retain. An investment in an alternative investment fund is speculative and involves significant risks. Specifically, these investments (1) are not mutual funds and are not subject to the same regulatory requirements as mutual funds; (2) may have performance that is volatile, and investors may lose all or a substantial amount of their investment; (3) may engage in leverage and other speculative investment practices that may increase the risk of investment loss; (4) are long-term, illiquid investments, there is generally no secondary market for the interests of a fund, and none is expected to develop; (5) interests of alternative investment funds typically will be illiquid and subject to restrictions on transfer; (6) may not be required to provide periodic pricing or valuation information to investors; (7) generally involve complex tax strategies and there may be delays in distributing tax information to investors; (8) are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits.

Interests in alternative investment funds are not deposits or obligations of, or guaranteed or endorsed by, any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in an alternative investment fund and should consider an alternative investment fund as a supplement to an overall investment program.

In addition to the risks that apply to alternative investments generally, the following are additional risks related to an investment in these strategies:

- Hedge Fund Risk: There are risks specifically associated with investing in hedge funds, which may include risks associated with investing in short sales, options, small-cap stocks, "junk bonds," derivatives, distressed securities, non-U.S. securities and illiquid investments.
- Managed Futures: There are risks specifically associated with investing in managed futures programs. For example, not all managers focus on all strategies at all times, and managed futures strategies may have material directional elements.
- Real Estate: There are risks specifically associated with investing in real estate products and real estate investment trusts. They involve risks associated with debt, adverse changes in general economic or local market conditions, changes in governmental, tax, real estate and zoning laws or regulations, risks associated with capital calls and, for some real estate products, the risks associated with the ability to qualify for favorable treatment under the federal tax laws.
- Private Equity: There are risks specifically associated with investing in private equity. Capital calls can be made on short notice, and the failure to meet capital calls can result in significant adverse consequences including, but not limited to, a total loss of investment.
- Foreign Exchange/Currency Risk: Investors in securities of issuers located outside of the United States should be aware that even
 for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issuer's "home" currency
 can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other
 risks (such as political, economic or regulatory changes) that may not be readily known to a U.S. investor.

Appendix

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