

Real Estate Investing

Wide-ranging
opportunities

What you need to know about real estate



1

What are the key benefits of private markets real estate?

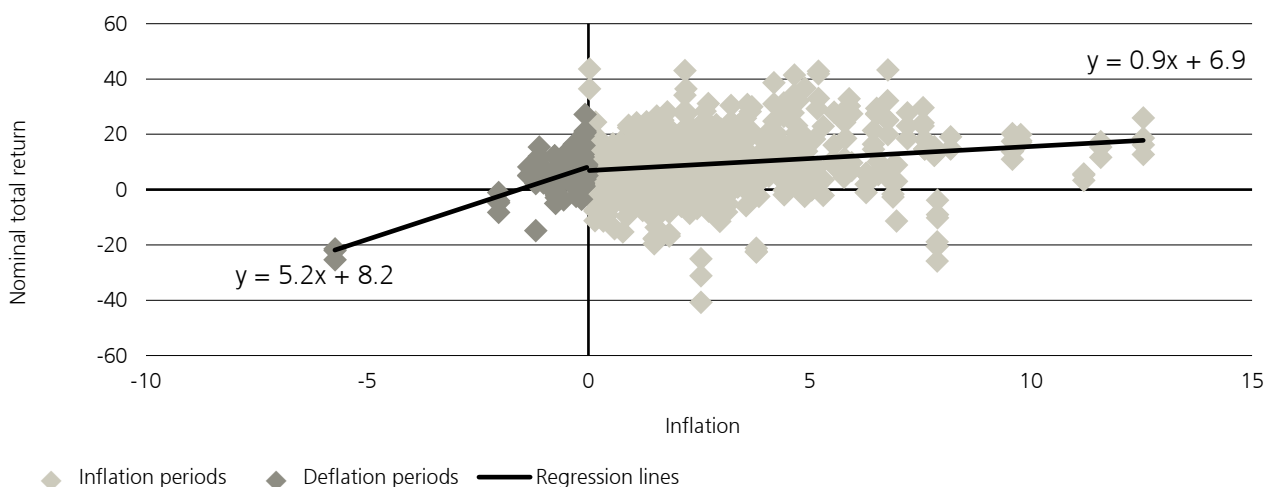
Private markets real estate offers investors four key benefits. First, it brings diversification benefits to multi-asset portfolios. Real estate has low and sometimes even negative correlations of returns with other asset classes such as bonds and equities. Hence adding real estate to an equity and bond portfolio can improve the risk-return trade-off and mean that investors can achieve a desired level of return for a lower level of risk, giving them an enhanced opportunity set.

The second benefit is income from rents paid by occupiers of buildings through contractual lease agreements. Real estate owners also have the opportunity to grow and increase rental income by actively managing and improving properties. In doing so, they must balance the cost of any capital expenditure involved against the long-term benefits of an uplift in rental income. They could also look to reduce vacancy if part of a property is unlet.

The third benefit that real estate offers investors is the opportunity for capital value growth. This is partly linked to rental income, since managing a property to provide a higher rental income or a higher expected growth in rental income will boost capital values. Also, steps to make rental income more secure and less risky, such as long leases linked to inflation, can reduce the discount rates used for cash flow analysis and lead to an uplift in capital values.

Finally, private markets real estate offers inflation protection. Property is a real asset and rental income typically grows around in line with inflation. Short leases allow rents to be reset to capture inflation, while within-lease rents linked to inflation are another form of protection. Ultimately, though, what matters to investors is how the income protection feeds through to total returns. Looking at property returns across 26 markets globally dating back to 1980, we find that real estate provided inflation protection of 90% and that for a one percentage point increase in inflation property returns increased, on average, by 0.9 percentage points (see Figure 1).

Figure 1: Real estate total returns and inflation (% YoY)



Source: MSCI; NCREIF; UBS Asset Management, Real Estate & Private Markets (REPM), June 2023. Note: based on 1814 annual data points spanning the office, retail, industrial and residential sectors from 26 countries to 2021, with oldest data from 1980. Past performance is not a guarantee for future results.



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In what different ways can investors access real estate?

The real estate market has matured significantly over recent decades to offer investors a multitude of ways to access it. The traditional way of investing in real estate was to buy assets directly. This allows for full control and choice in the types of properties purchased, including their location, sector and other characteristics. However, apart from the largest investors with the deepest pockets, this approach can suffer from a lack of diversification since many investors can only afford one or two assets. An alternative is a club deal where investors pool resources.

Club deals typically include around two to four investors who get exposure to a larger number of assets than had they been investing alone, while still having some control and a targeted exposure. Unlisted real estate funds are another option and pool together many investors, allowing investment in many underlying properties and thus providing good diversification benefits. These funds focus either on offering a broad exposure to the market or to a more narrow or specialist part of the market. Real estate funds offer their investors varying levels of liquidity, though full liquidity may not be available during times of market stress.

The other type of unlisted fund structure is the multi-manager vehicle, which also pools together money from many investors. Rather than investing in real estate directly multi-managers invest in many single unlisted real estate funds and other types of vehicles, such as co-investments or joint ventures in specific assets or portfolios. Overall, multi-manager solutions offer maximum diversification benefits, with exposure to a very large number of individual assets. For larger investors an SMA (separate managed account) multi-manager solution is possible, allowing the portfolio to be tailored to meet the specific needs of the investor in terms of construction and investment criteria.

Finally, another route for real estate investment is through listed markets and public listed real estate companies. This can be done using REITs (Real Estate Investment Trusts), which are property companies listed on the stock exchange which attract certain tax benefits compared to the wider equity market. Their shares can be publicly traded. In Switzerland listed real estate funds are also available to investors.

3

How does real estate compare to other asset classes?

Unlisted real estate sits between bonds and equities in terms of its risk-return characteristics. Historically it has offered higher returns than bonds, but lower risk than equities and listed real estate (see Figure 2). Real estate also has a low correlation with bonds, while at the same time delivering higher returns with only slightly higher volatility. As such, it is often used as a portfolio diversifier.

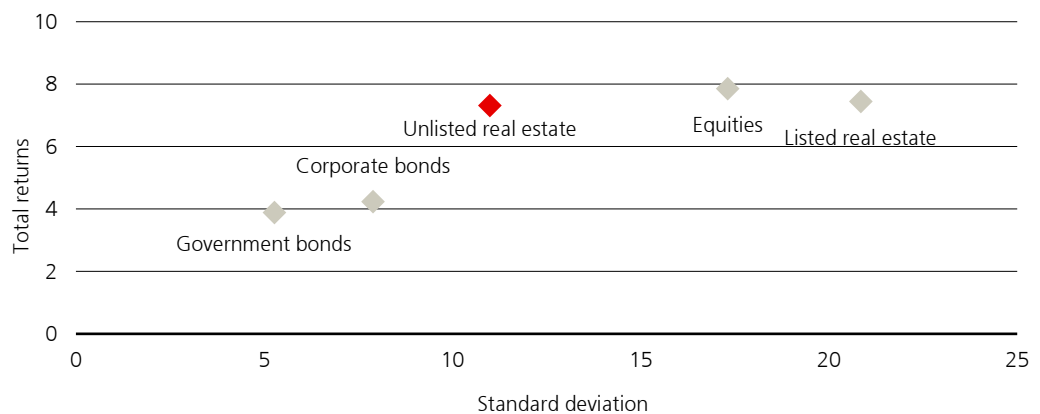
Real estate sits in between bonds and equities and brings diversification benefits.

The favorable risk-adjusted performance is the result of the high proportion of the total return derived from the contractual payment of rents by tenants, the income return. Over the long-term, core real estate, the lowest risk profile form of real estate investment, is expected to deliver the majority (70-80%) of its total return from income, with the remainder coming from capital growth.

When assessing real estate in terms of volatility of returns, it is important to understand the difference between appraisal-based returns and transaction-based returns. Appraisals rely on the estimated value of properties, while transactions are based off actual transactions which have occurred between investors. Returns based on appraisals are typically less volatile, putting real estate closer to bonds in terms of risk and volatility.

It is also important to note that real estate is a less liquid asset class compared to the daily traded public markets in equities and investors need to take this into consideration. In downturns it may not be possible to sell real estate investments, or only at a significant discount. As such, real estate investors typically have long term investment horizons and do not require the high levels of liquidity provided by public markets.

Figure 2: Global total returns and standard deviation (28 years 1995 to 2022, % p.a.)



Source: Thomson Refinitiv; MSCI; UBS Asset Management, Real Estate & Private Markets (REPM), May 2023. Note: Unlisted real estate returns de-smoothed. Government bonds, corporate bonds and listed real estate in USD. Unlisted real estate and equities in local currency. Past performance is not a guarantee for future results.

4

What does the real estate investment universe include and what are the different types of real estate?

As a whole, the global real estate market, including listed and unlisted real estate, is estimated to be worth USD 11 trillion¹. This makes it about 7% of the overall global investment market across all asset classes according UBS Asset Management Investment Solutions. The traditional commercial real estate investment sectors were office, retail and industrial. Retail is divided into high street retail, shopping malls and retail warehouse parks. Industrial, which only really emerged as an institutional asset class between the millennium and Global Financial Crisis, is divided into manufacturing space and warehouse and logistics properties.

The general rotation towards online retail, turbocharged by the pandemic, has seen demand for warehouse and logistics space surge, while at the same time seen a large drop in demand for traditional bricks-and-mortar retail premises. The office sector has been significantly impacted by new flexible working arrangements introduced during the pandemic and permanently adopted thereafter. The forced shift to work from home created a new hybrid work culture which brought uncertainty for offices and superfluous supply.

Some markets also have sizeable residential rental sectors, including the US, Japan, Netherlands and Switzerland. Nascent residential markets are also present in a growing number of countries, such as Australia. Moreover, within the residential sector, there are a number of subsectors, including standard apartments or multifamily, single family homes, affordable housing, housing for seniors such as retirement communities and also student housing. In recent years the global real estate market has also expanded to include new and emerging sectors such as life sciences or lab space, data centers and health care.

Another area with appeal for investors, particularly in the new higher interest rate environment, is real estate debt. This can take many forms and can be fixed or floating rate and sit at different positions in the capital stack. It can be bridging loans or development loans. Ultimately, it is lending backed by real estate assets in some form. It is typically less risky than a pure equity investment, but can still deliver attractive returns to investors, particularly for sectors which banks have pulled back from lending to and are seeking finance from other sources. Debt can play an important role in a diversified real estate portfolio and at times will outperform equity investments.

Source: ¹ As at end-2022, MSCI





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What are the different risk profiles for real estate investment?

Property investment has three main investment risk profiles: core, value-add and opportunistic. Core offers the lowest risk and returns while opportunistic offers the highest risk and returns. Opportunistic strategies typically include development and niche or frontier markets, with double-digit returns targeted, largely driven by capital appreciation. Whereas core strategies focus on lower returns of around 5-7%, the majority of which comes from income, with longer holding periods and a focus on fully leased assets in the best locations. Value-add investments are the middle ground, with active management strategies and returns coming from both income and capital growth.

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What impact is tech having?

Digitization and technology are increasingly important considerations in real estate investment, as they are across the wider economy. Applications in real estate include blockchain and crypto, which remain niche, but should ease access to the sector in the future and provide a decentralized way to record and transfer ownership of assets. This could potentially make the process of buying and selling property much faster, easier and more secure.

Prop-tech is another fast-evolving area, loosely defined as any technology that touches the built environment. For example, tech is critical in the drive to reduce carbon emissions as hundreds, if not thousands, of building sensors collecting real time data can be used to create a digital twin of an asset and used to analyze it. This virtual representation can be stress-tested by climate change and

extreme weather scenarios to predict energy usage, emissions and occupant health.

The responsibilities of an active asset manager will undoubtedly require a focused approach to effectively incorporate prop-tech going forward. Net zero policies and regulatory requirements are encouraging green-tech as governments ramp up subsidies to incentivize less wasteful development and greener buildings. For example, the encouragement of electric vehicle parking spots and methods to track energy consumption and carbon emissions by tenants.

Tech also affects real estate in other areas such as market analytics and the seamless delivery of market and research data, which can go down to the property level and help develop a deep understanding of specific markets.

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What are the benefits of international real estate?

Investors typically make their first real estate investments in their domestic markets, before moving on to invest in other countries later. Their home market is the natural choice given they will be most familiar with it. This creates a strong home bias, which typically leads to over-exposure to domestic real estate which results in concentration risk. International investment brings to investors a much larger, global real estate investment universe which can complement any domestic holdings they might have rather than being a substitute for them. Moreover, international investment may serve a different purpose in a portfolio. Correlations of real estate returns across international markets are generally lower than between sectors within countries. This means that investors can reap significant benefits from international property investment in terms of diversification.

International investment can unlock a large, global market with opportunities not available at home.

Investors can also gain the ability to tactically invest and benefit from real estate markets at different stages in the cycle. For example, the UK market has typically led other global markets in price movements due to its valuation practices and large and liquid market. International diversification also helps protect investors against idiosyncratic shocks that affect individual markets in isolation, such as natural disasters like earthquakes, or political events such as Brexit.

Another benefit of international investment is that the global market can present niche and emerging investment opportunities which are unavailable or inaccessible in an investor's domestic market, or not at the same scale as in other global markets. For example, life sciences and lab space real estate is a niche and growing sector being driven by growth in pharmaceuticals and medical research. It evolved in the US, where it is focused on Boston, San Diego and San Francisco, with local universities supplying talent to the sector. The UK is also seeing a growing institutional real estate market for lab space, also being driven by leading universities which spawn start-ups and growth in pharmaceuticals and medical research. By contrast, in many countries life sciences real estate does not exist in any significant scale and hence investors must go abroad if they want to access this sector. This is the case also for other sectors as well, such as industrial and logistics property for Swiss investors or for investors whose domestic markets do not offer residential investment opportunities.

Real estate markets do differ across the globe and are subject to different risks and local practices. Investor expertise is normally focused on their domestic markets, which can be a deterrent for those wanting to invest abroad. Currency risk, market transparency and tax issues must also be taken into consideration. For these reasons, it is important to partner with investment managers who have expert knowledge of local markets. International real estate provides the ability to benefit from local managers and their specialist expertise in their local markets, which is important to offset the asymmetry of information between domestic and non-domestic investors.

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How does currency impact international real estate investment?

When investing in real estate globally, investors expose themselves to currency risk. This also occurs for investment in any asset class which is outside of the currency zone of the investor. Depending on the type of investment, direct or via a fund, currency risk is driven by the difference between the investor's currency and the currency in which the properties are transacted in and rents received in.

Long term investors in direct property assets have flexibility in their exit timing and two main options in how they approach currency risk. They can either take on the currency exposure in full and let their investments fluctuate in value as market exchange rates move, or they can hedge their currency exposure, either fully or partially. In real estate, the tendency to hedge is generally greater than for equities, but less than for bonds. Another way of reducing currency risk is using debt denominated in the currency of the investment to finance the asset purchase.

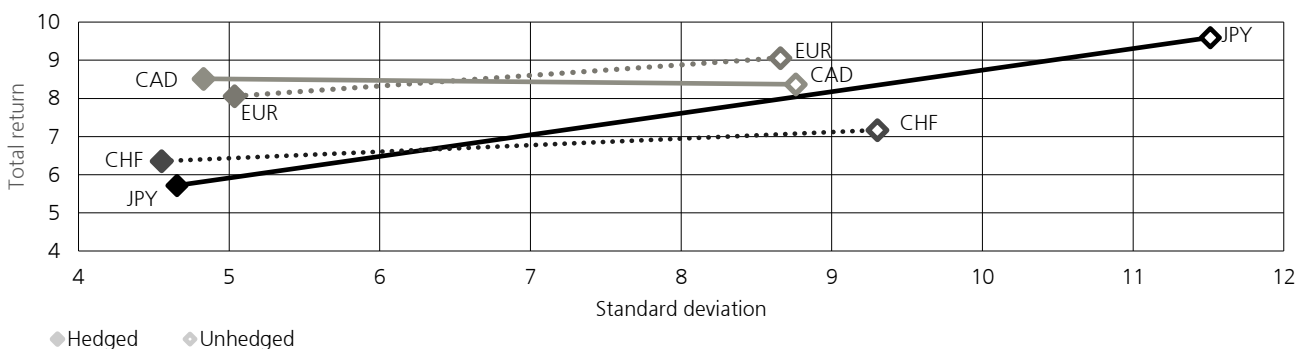
A hedged currency position effectively equalizes the interest rates between the investor's home currency and the target investment currency. Hence investors in lower interest rate currency zones, such as Japan, the eurozone or Switzerland, typically incur hedging costs when investing into higher interest rate zones such as the US, Canada and Australia.

Investors in higher interest rate zones, such as the US, Canada and Australia benefit from hedging gains for investments into lower interest rate markets. Currency hedging over long periods does require investors to have cash available to settle hedging contracts. For example, for investments into the eurozone, if the euro is stronger than interest rate differentials and forward exchange rates predict, a cash payment will be needed to settle the hedging contract. This will offset the gain made on the real estate holdings due to the stronger than expected euro.

The main difference between hedged and unhedged positions is the volatility in returns over time (see Figure 3). Unhedged returns are a lot more volatile due to fluctuations in market exchange rates and hence are more risky over short periods. However, unhedged investment in real estate allows investors to take positions on currencies.

In the long run, returns on hedged and unhedged positions are similar, since forward rates should on average reflect actual realized exchange rate movements. In general, unhedged returns have been slightly higher though, reflecting persistent US dollar strength compared to forward exchange rates and corresponding currency gains compared to hedged positions. This has been particularly true for Japanese investors as the yen has weakened over time by more than implied by forward rates.

Figure 3: Global all property annualized total returns and standard deviation 1995-2022, hedged and unhedged (by currency hedged to, % p.a.)



Source: Thomson Refintiv; MSCI; NCREIF; UBS Asset Management, Real Estate & Private Markets (REPM), June 2023. Note: refers to global neutral allocation based on market and sector sizes. Past performance is not a guarantee for future results.



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How will the new interest rate environment affect real estate?

Predicating interest rates is always fraught with uncertainty. However, our best estimate is that post-pandemic, stabilized interest rates will lie somewhere between those prevailing before the Global Financial Crisis (GFC) and the decade following it. During the pre-GFC period, which we define as 1995 to 2007 and call the 'golden period', policy interest rates in the US, UK, Canada and Australia averaged 4% and higher (see Figure 4 on next page).

The golden period saw robust growth in the economy and inflation in the advanced economies averaged just below 2%. The post-GFC period, which we define as 2011 to 2019 and call the 'easy money period', saw unprecedentedly low interest rates, negative even in the eurozone, Switzerland and some other countries. Central banks also massively expanded their balance sheets to support faltering economies.

On exiting the COVID-19 pandemic, however, central banks were forced to confront intense inflationary pressures, exacerbated by the war in Ukraine. Inflation reached double-digits and 40-year highs in many countries. Assuming inflation returns to 2% and there are no new shocks to the economy, we expect interest rates to reach stabilized levels by around 2026.

Ultimately there are two components to nominal interest rates. First, real interest rates and second, expected inflation. In the long run, the inflation component is determined largely by central bank policy. There has been discussion about increasing central bank inflation targets or altering them to target the price level, for example. This could result in higher inflation and feed through to higher interest rates and cause transition effects as the economy and asset markets adjusted.

Governments have an incentive for higher inflation since it would reduce their real debt burdens, which ballooned during the pandemic. Our base case though is that the current policy framework and inflation targets will prevail. Another risk to inflation and interest rates is central bank policy errors which see inflation deviate from target for an extended period.

The second component of nominal interest rates is the real interest rate. Stabilized real interest rates are those at which the economy grows without generating upward or downward pressure on inflation. There are several forces pushing real interest higher. First, aging populations are set to start spending pension savings as they retire. Second, spending on health and social care is set to rise due to aging populations and advances in medicine. Third, the war in Ukraine is set to see defense spending increase, particularly for European countries as they move to meet their NATO 2006 commitment to spend 2% of their GDP on defense.



Finally, the green transition and measures to reduce carbon emissions will require massive public and private sector investment for an extended period. All these factors are set to boost demand in the economy relative to supply, while the labor force share of the population is set to shrink as populations age.

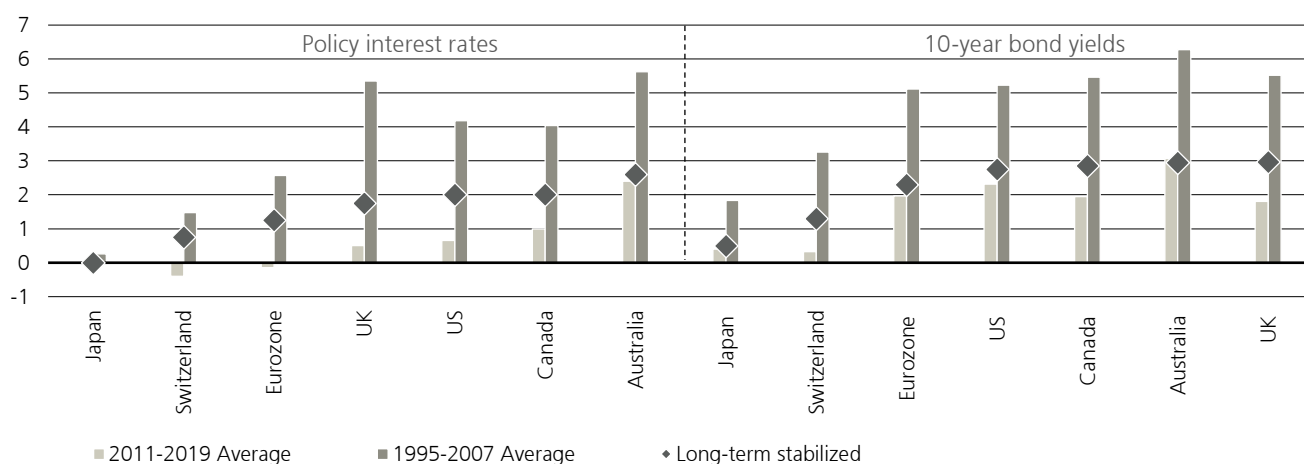
For example, between 2015 and 2050 the World Health Organization (WHO) expects the proportion of the world's population over 60 to nearly double, rising from 12% to 22%. This shifting in the balance of demand and supply is set to put upward pressure on real interest rates to take demand out of the economy.

There are some factors which may mitigate the impact by boosting supply though, such as the fourth industrial revolution, which is seeing further technological innovation, such as in the rapidly advancing area of AI. Overall, though, this is a different environment to either the golden or easy money periods.

In the stabilized post-pandemic world, higher interest rates mean investors are set to receive a higher yield on real estate investments. Real estate typically offers a risk or yield premium compared to government bonds to compensate investors for the increased risk of real estate investment. This includes occupiers defaulting on rental payments. It is debatable as to whether the real estate risk premium will rise or fall compared to the golden and easy money periods.

Compared to the golden period, global real estate markets are much more mature and with more investment options and more liquidity. This would argue for a lower risk premium. By contrast, the easy money period saw investors flock to real estate as they looked to generate a positive yield as interest rates on swathes of the government bond market turned negative, focused on Europe and Japan. This resulted in sharp downward pressure on real estate risk premiums. Given in the post-pandemic era we expect interest rates and bond yields to be higher, we also expect some increase in the risk premium on property as investors are able to generate an income from risk-free government bonds again.

Figure 4: Interest rates (%)



Source: Oxford Economics; Thomson Refinitiv; UBS Asset Management, Real Estate & Private Markets (REPM), June 2023

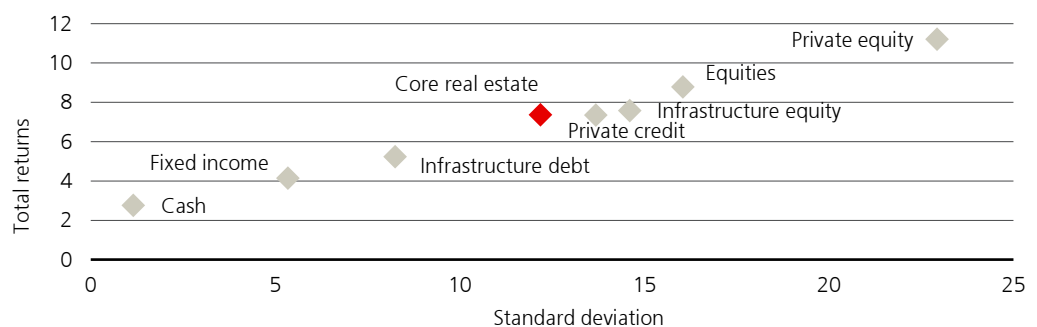


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What are return expectations for real estate?

In the long term, we expect real estate to continue to sit between bonds and equities and exhibit the risk-return characteristics outlined in question 3. With modest leverage of around 20%, we expect real estate to generate long-run stabilized returns of around 6-7% p.a. when hedged to Swiss francs (see Figure 5). We expect value-add real estate strategies to generate higher returns. It is important to note that real estate and other private markets assets are typically less liquid than daily traded public markets and investors need to take this into consideration. Also, risk and return profiles for specific investments will vary from these figures.

Figure 5: Global long term total return and risk expectations (CHF, % p.a.)



Source: UBS Asset Management, Investment Solutions, June 2023. Note: all returns are hedged and net of fees. The expected returns and standard deviations are based on our forward-looking equilibrium model. The model projects our views for investment markets over the next 40-50 years and is not affected by current macroeconomic and market conditions, including valuation, state of interest rates, and credit defaults. The views include subjective assumptions we make. These statements are not guarantees of future performance and undue reliance should not be placed on them. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, which may cause actual performance and financial results in future periods to differ materially from any projections of future performance or result expressed or implied by such forward-looking statements. Although forward-looking statements are based upon what we believe are reasonable assumptions, there can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. The reader is cautioned not to place undue reliance on forward-looking statements. Past performance is not a guarantee for future results.

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What sustainability factors need to be considered in real estate investment?

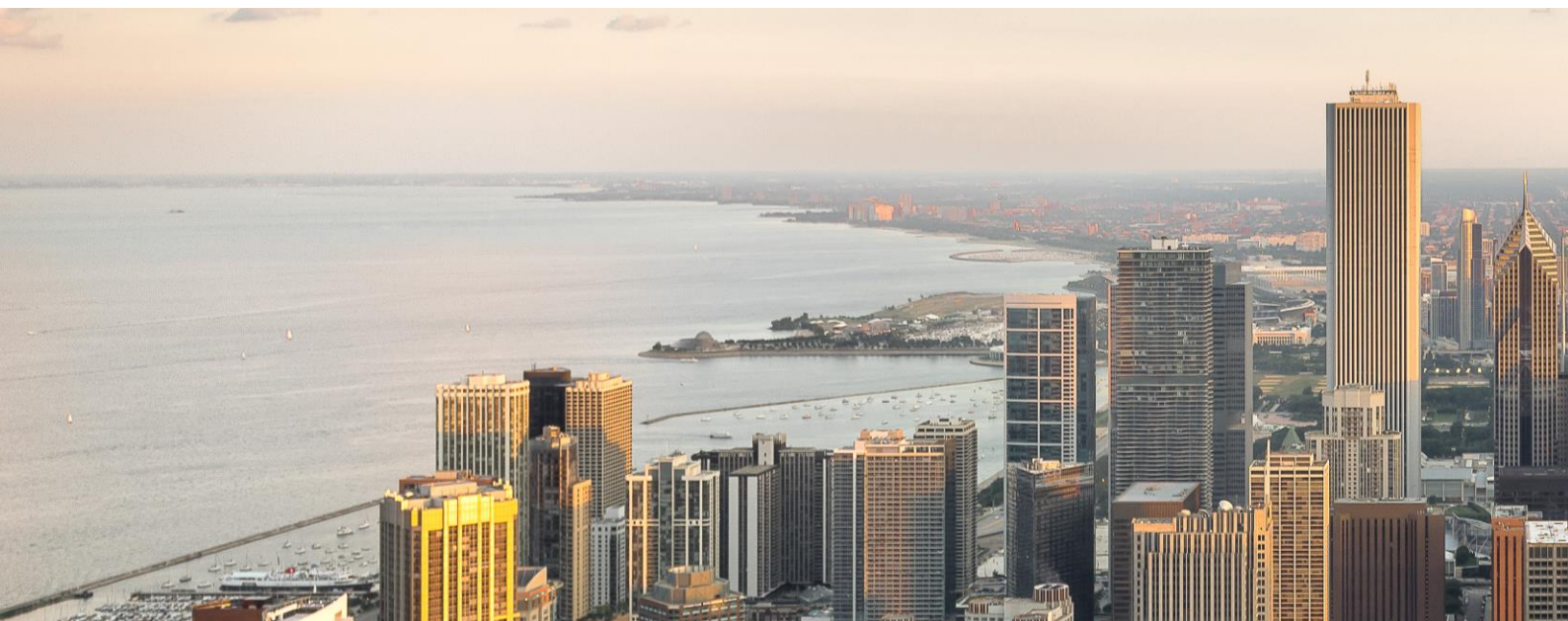
In order to achieve our ambition of becoming the financial provider of choice for clients who wish to mobilize capital towards the achievement of the UN's Sustainable Development Goals (SDGs) and the orderly transition to a low-carbon economy, sustainability at UBS Asset Management is a key pillar of our investment strategies including real estate. Real estate plays a significant role in the global transition to a low-carbon economy since it generates almost 40% of total global emissions and faces ever-increasing risks from climate change and regulation². These factors present both short and long term challenges as well as opportunities for real estate investment strategies.

For years, research has identified the link between consideration of sustainability factors and performance across multiple real estate markets and sectors, with the terms 'green premium' and 'brown discounts' being increasingly used when discussing real estate investment. The term 'green premium' refers to tenants paying higher rents for 'green' real estate assets i.e. assets designed and operating with improved building efficiency across energy, water and waste etc. There is also an increasing focus on social and digital factors such as onsite fitness facilities and sustainable dining options. This contrasts with the term 'brown discount' for assets with lower environmental performance credentials.

Research has found a positive and significant effect of BREEAM ratings of 'Very Good', 'Excellent' and 'Outstanding' on prime central London office rents, with premiums ranging from 3.7% to 12.3% after normalizing for other property characteristics. With increasing tenant demand and regulatory pressures, such as the Minimum Energy Efficiency Standards (MEES) in the UK and Local Law 97 in New York, green premiums and brown discounts are becoming critical for the real estate sector. In addition to financial benefits gained by investors, we believe the incorporation of sustainability characteristics in the investment process positively impacts stakeholders including employees and local communities.

In addition to tenant demands and regulatory pressures for 'green' real estate assets, the real estate sector faces considerable risks which need to be effectively identified and managed. Two key climate risks are physical risk and transition risk. Physical risk is defined as harm, damage or loss to real estate assets caused by acute and chronic climate related events such as hurricanes, flooding, or heatwaves. The effects of physical risks include loss of real estate assets, rising insurance premiums, increased regulatory burdens, and reputational and financing risks.

Source: ² International Energy Agency, December 2019



In 2022 global natural disasters resulted in economic losses totaling USD 313 billion, around the 21st century average. Global insured losses rose to USD 132 billion, 57% above the 21st century average³. Hence real estate investors cannot ignore physical risks and they must effectively address and incorporate them into their investment processes to avoid a negative impact on returns. Transition risks refer to those arising from efforts to mitigate climate change, specifically risks related to meeting net zero carbon reduction targets by 2050.

As the world transitions to a low-carbon economy, significant reductions in carbon emissions are needed across business sectors, including real estate, in order to avoid regulatory, reputational and stakeholder risks and impacts such as fines and loss of consumer confidence etc. One of the key tools used by the real estate sector to assess transition risk is the Carbon Risk Real Estate Monitor (CRREM), which has defined science-based decarbonization pathways which are aligned with the goals of the 2015 Paris Agreement.

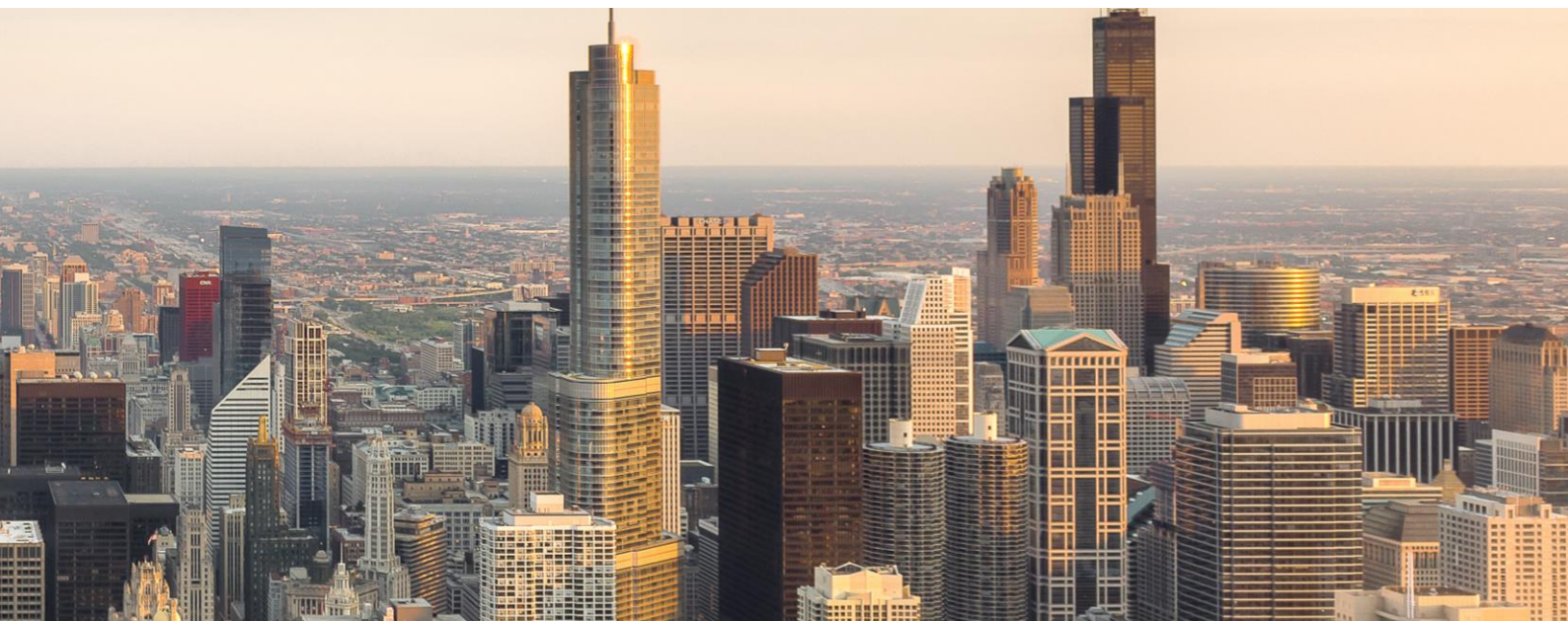
The CRREM tool can be used to understand where a real estate asset's emissions intensity is relative to the 1.5 degree carbon reduction pathway and to determine its point of stranding if it has one – the point in time at which an asset is no longer compliant with the Paris Agreement reduction pathway.

Source: **3** AON, Weather, Climate and Catastrophe Insight report 2023

Real estate investors have access to various sources of reliable, verified sustainability performance data. One of the key tools available for private markets investors is the GRESB Real Estate Assessment. This is an annual assessment based on self-reported data submitted by property owners and managers. It serves as a global sustainability benchmark and reporting framework for listed property companies, private property funds, developers and investors.

The assessment focuses on measuring entity and asset-level performance in areas such as leadership, policies, reporting, tenants and community, energy, water and building certifications. While sustainability has traditionally focused on environmental pillars, the social aspect of sustainability is becoming increasingly critical for stakeholders, including investors and regulators. There is a growing focus on social issues today across the industry and methods of measurement are evolving, which is key to being able to manage towards meeting social goals and targets. In the real estate sector, this has presented itself in various ways such as affordable housing, incorporating wellness standards in 'green buildings', tenant engagement, and measurement of social value i.e. a real estate asset's contribution to its surrounding community and the UN SDGs.

With the rapidly-evolving nature of technology and innovation, tools and processes used to monitor and assess sustainability performance in the real estate sector will improve over time. These could include advanced technologies such as machine learning and blockchain capabilities repurposed to solve critical challenges in the real estate sector, and the incorporation of greener, low-carbon intensive building materials in the construction process.



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