

Portfolio view

A look at why and how to build
diversified, resilient global real
estate portfolios

August 2023 edition



Introducing LaSalle's *ISA Portfolio View*



LaSalle's *ISA Portfolio View* deals with **five foundational questions about real estate**. We discuss  the attractiveness of real estate in a multi-asset context, the  benefits of expanding horizons beyond an investor's domestic market,  how to make sense of the recent changes in relative sector performance with an eye to building resilient portfolios,  the interplay between the "four quadrants" of real estate, and  the importance of—and our approach to—managing investment risk.

Navigation guide:

The *ISA Portfolio View* is divided into five chapters based on these questions. That said, some sub-topics pertain to multiple questions, and this is indicated by highlighting multiple questions in the navigation bar. For example, the example navigation bar on the right indicates that a topic on the page is related to both the questions "why real estate?" and "why manage risk?"

To view more materials on a topic, you can jump from one page to the topic's summary page **by clicking on the icons in the navigation guide**.





Why real estate?

Real estate is a unique asset class as it shares characteristics with both bonds and stocks. Income is an important part of total returns, but real estate cashflows and returns fluctuate with market conditions. **The case for real estate is underpinned by the size of the asset class and its diversity.** Real estate's position in multi-asset portfolios hinges on its low return correlation to other asset classes and the potential for inflation hedging.

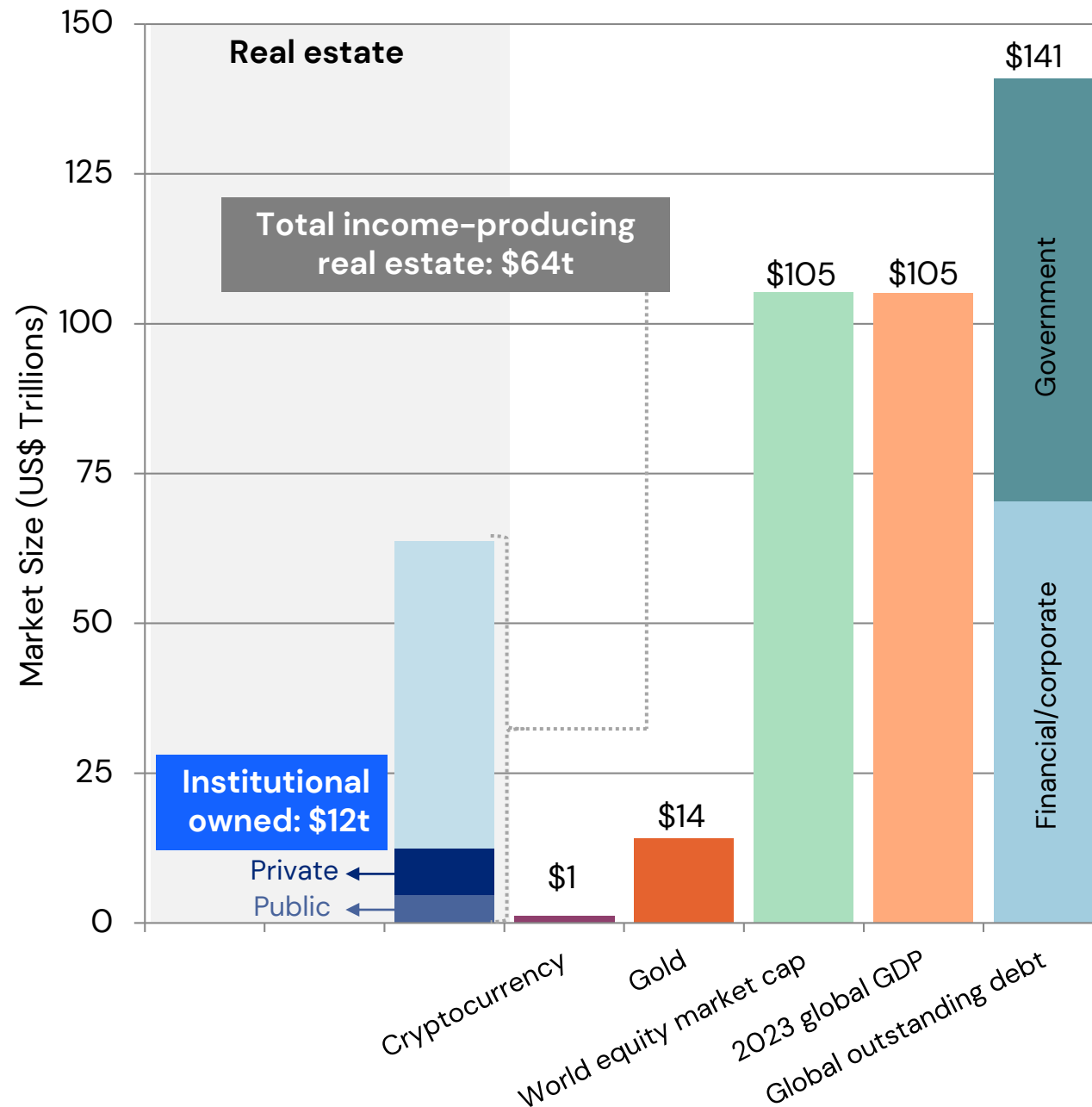
In this section:

1. Real estate is a **sizable asset class**, even in the context of the much larger equities and fixed income asset classes (pg. 4).
2. Gaining exposure to real estate has the potential to **increase risk-adjusted returns in a multi-asset portfolio** (pg. 5).
3. Under the right conditions, real estate can exhibit **inflation-hedging characteristics** (pg. 6).



Real estate is a sizable asset class

2023 LaSalle asset class size estimates



LaSalle regularly estimates the size of the **global real estate universe** in detail; with separate estimates, by country, for listed, institutional-owned and total income-producing real estate. These estimates show global real estate is a smaller cousin to stocks and bonds but very much in the same family of major asset classes by value.

Institutional investors – public and private together – own a fifth of global real estate, a slightly higher share in 2023 than in our previous updates. This reflects the fragmented nature of real estate ownership and varies considerably across markets, from under a tenth to more than half. In some markets, corporate-owned and family-controlled positions lead to lower institutional market ownership. It can also sometimes reflect a mismatch in the real estate that institutional investors are comfortable investing in and the broader universe of all leased real estate.

Public and private institutions split the universe of institutional-owned property. We estimate that about 40% of that institutional real estate is owned by listed real estate companies, with 60% owned by private investors. Real estate stands out among asset classes for the variety of channels through which investors can access it. (pg. 19–20)

LaSalle’s approach to market size estimates combines bottom-up and top-down data covering nearly every country, and it incorporates transparency and urbanization data to improve the top-down estimates. A full table summarizing our estimates is available via [this link](#).

Sources: Bank of International Settlements (debt totals), Oil and Gas Journal (oil reserves), Bloomberg (equity market size), Oxford Economics (GDP), and LaSalle. Gold is based on above-ground gold multiplied by spot price. Note that equity and debt outstanding includes REITs and real estate loans. Debt estimates as of Q4 2022. All other data as of June 30, 2023. The graphs shows all level values, with the notable exception of GDP. Income-producing real estate does not include owner-occupied residential, but it does include rented residential. Note: No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Real estate may bring diversification benefits

Real estate's role in a multi-asset portfolio hinges on its diversifying characteristics relative to other assets. Direct private real estate returns have displayed a low correlation to sovereign and corporate bonds as well as global equities. This observation underpins the case for real estate in a multi-asset portfolio, particularly over long-term horizons.

Total return correlations by asset class
[20-year correlation coefficients, Q1 2023]

	Global stocks ¹	Global corporate bonds ²	Global gov't bonds ³	UK direct property ⁴	US direct property ⁵	Canada direct property ⁶	Australia direct property ⁷	Japan direct property ⁸
Global stocks ¹	1.00	0.46	-0.21	0.30	0.12	0.07	0.11	0.13
Global corporate bonds ²		1.00	0.61	-0.07	-0.27	-0.16	-0.20	-0.20
Global government bonds ³			1.00	-0.16	-0.13	-0.05	-0.11	-0.10
UK direct property ⁴				1.00	0.64	0.38	0.58	0.39
US direct property ⁵					1.00	0.64	0.82	0.74
Canada direct property ⁶						1.00	0.63	0.46
Australia direct property ⁷							1.00	0.80
Japan direct property ⁸								1.00

Within private real estate correlations

■ Correlation < 0
 ■ 0 < correlation < 0.25

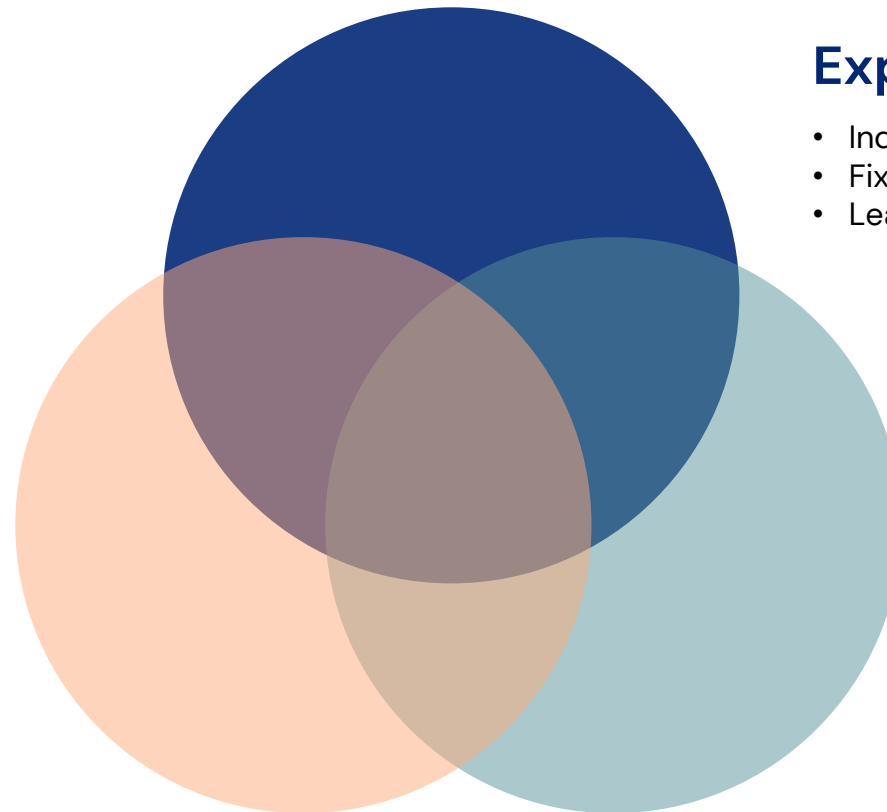
Sources: ¹ MSCI All Country Gross World Total Return Index in local currency, ² Citigroup World Corporate Bond Index Total Return in US dollars (local currency history not available prior to 1999), ³ Citigroup World Government Bond Index all maturities total returns in local currency, ⁴ UK MSCI Quarterly Standing Property Total Returns in British pounds, data prior to December 2001 is MSCI Annual. UK MSCI Quarterly Index used in all time periods available. Unleveraged, pre-fee, ⁵ US NCREIF Property Index Total Returns in US dollars. Data is unleveraged and pre-fee, ⁶ Canada MSCI Quarterly Standing Property Total Returns in Canadian dollars. Data is unleveraged and pre-fee, ⁷ Australia MSCI Quarterly Standing Property Total Returns in Australian dollars. Data is unleveraged and pre-fee, ⁸ Japan MSCI Quarterly (Based on monthly index) Standing Property Total Returns in Japanese yen. Data is unleveraged and pre-fee. No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Real estate has several (imperfect, uneven) links to inflation

Sources of inflation passthrough to real estate cashflows

Short leases

Faster passthrough of market conditions to cashflows



Explicit lease provisions

- Indexation to inflation in lease
- Fixed escalations
- Leases net of operating costs

Landlord pricing power

- Market rental growth
- Higher occupancy
- Lower incentives

Real estate is often attributed inflation hedging properties. The debate about whether real estate is a good inflation hedge does not have a single, definitive answer. Conclusions hinge on methodological issues like the time periods considered and how specifically an inflation hedge is defined. That said, there are a number of factors that help or hinder the ability of real estate cashflows to reflect changes in the inflationary environment. The Venn diagram above details the main ways real estate cash flows can act as a hedge for inflation.

The way lease contracts are structured is a primary transmission channel for inflation through to cash flows. Lease indexation clauses, which are common in Europe, fix future rents to outcomes in inflation indices like CPI. Fixed escalations hard-coded into leases are also widespread in other jurisdictions. Some net leases pass through changes in costs to tenants. Even where these structures may not be present, shorter lease duration allows the resetting of rents to market levels more rapidly.

Landlord pricing power is cyclical, and therefore cannot be embedded into a lease. However, **it is easier to increase rents at a pace in line with or above inflation when the balance of power favors landlords**, such as when high-quality space is limited, vacancy is low and plentiful tenant demand means that incentives stay low.

Sources: There is an abundant academic literature on the question of real estate and inflation hedging. Amongst these articles are W. Brueggeman, A. Chen and T. Thibodeau. (1984), R. Fogler (1983), D. Hartzell, J. Hekman and M. Miles (1987), CH Liu, DJ Hartzell, ME Hoesli (1997) and many others. Comments on lease structure practices were informed by JLL Global Standards Index (2019). No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.



Why global?

Investors should consider going beyond their home markets when building real estate portfolios. However, going global adds a layer of complexity that must be mitigated and weighed against the benefits.

In this section:

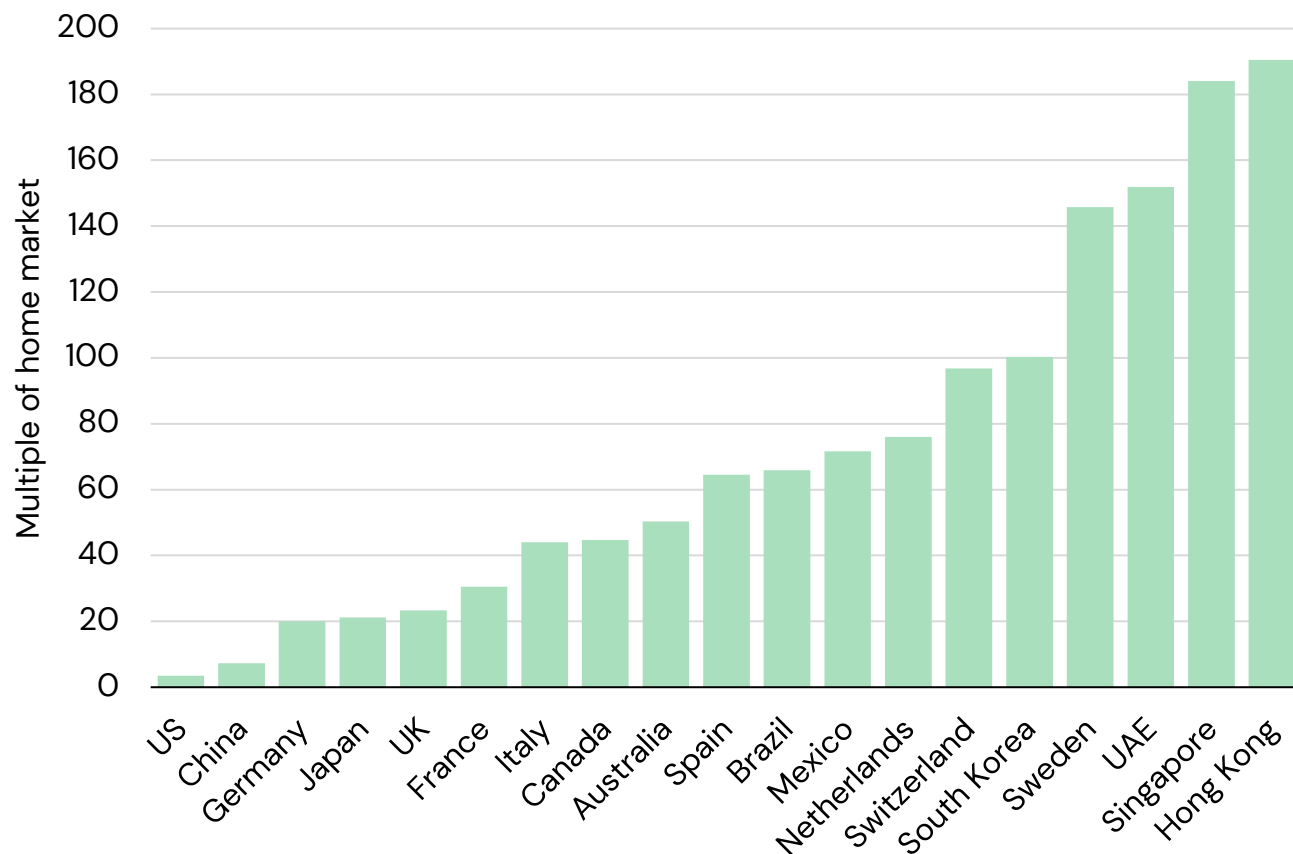
1. Going global offers investors an **expanded opportunity set**, in terms of the amount and variety of stock (pg. 8 and 10).
2. Local drivers **enhance diversification** advantages. Property market fundamentals can be highly localized. This results in low correlations across countries, which may help improve portfolio risk-adjusted returns (pg. 9).
3. Different markets have varying degrees of **transparency**. Some of the world's largest and most liquid are also the most transparent (pg. 11).
4. **Investing globally adds layers of complexity**. Dealing with different regulatory and tax regimes; currency volatility and hedging; and knowledge asymmetries can be seen as hurdles for some investors (pg. 12).



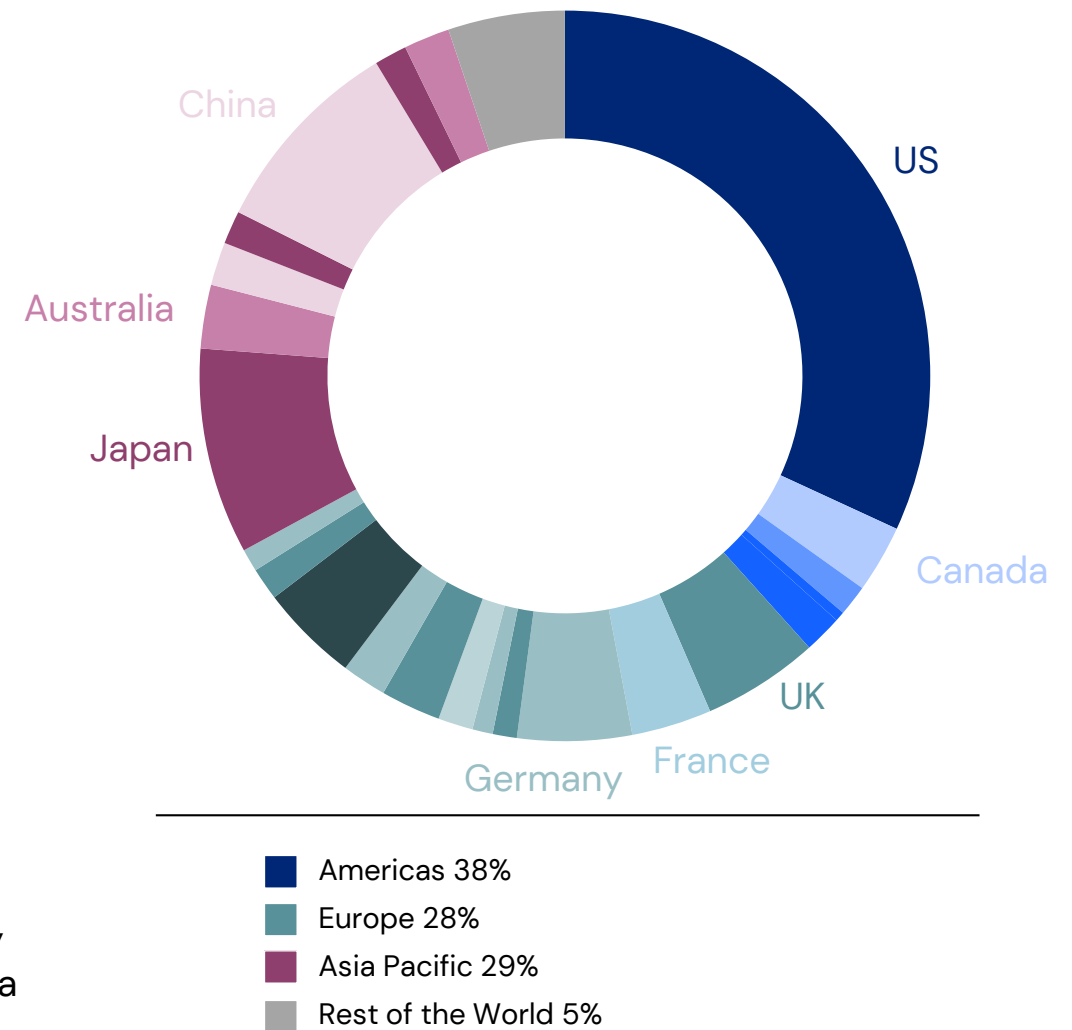
Going global means a broader opportunity set



Expansion of the real estate opportunity set by going global
 [Global institutional RE universe as multiple of size of local market]



Share of the institutional invested real estate universe
 [% of global total by country]



Investing globally expands the opportunity set for investors. This is especially true for investors with medium or smaller-sized domestic markets, where taking a global perspective can multiply the real estate opportunity set by a factor of 50 or more.

Institutional-owned real estate is fairly evenly split across the three major regions of the Americas, Asia Pacific and Europe. We believe these estimates from LaSalle’s real estate universe analysis better reflect the true opportunity set than other splits based on simple GDP or even real estate indices, which can sometimes be lopsided based on where coverage is highest or which types of investment fund products predominate.















Global diversification can be achieved with a fairly small number of countries. The eight countries with the most institutional-invested real estate together account for 70% of the invested universe. A focus on these larger markets—as well as multi-country funds or listed securities—can enable investors to efficiently achieve diverse exposures. We also discuss the challenges that come with differences in market practices, currency, regulation and building market knowledge (pg. 12).

Source: LaSalle. Estimates as of June 30, 2023. No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Going global may boost diversification potential

Diversification across countries is a key pillar to the case to support investing outside an investor's home market. Real estate returns show low correlations between countries over long periods of time. This reflects the fact that occupier markets are highly localized. The rents generated by real estate are closely tied to hyper-local demand and supply conditions. The sector composition of different countries' real estate universes (pg. 10) also drives some return differences at the aggregate level. While capital markets are more tied to national drivers, like central banks' policies and domestic borrowing costs, they still move according to different rhythms across countries. **Diversifying across countries may help reduce investors' exposure to any one dominant driver of performance differentials and may help produce portfolios with lower overall volatility than single-country portfolios.**

20-year quarterly total return correlations by country
[Quarterly annualized correlations to Q4 2022]

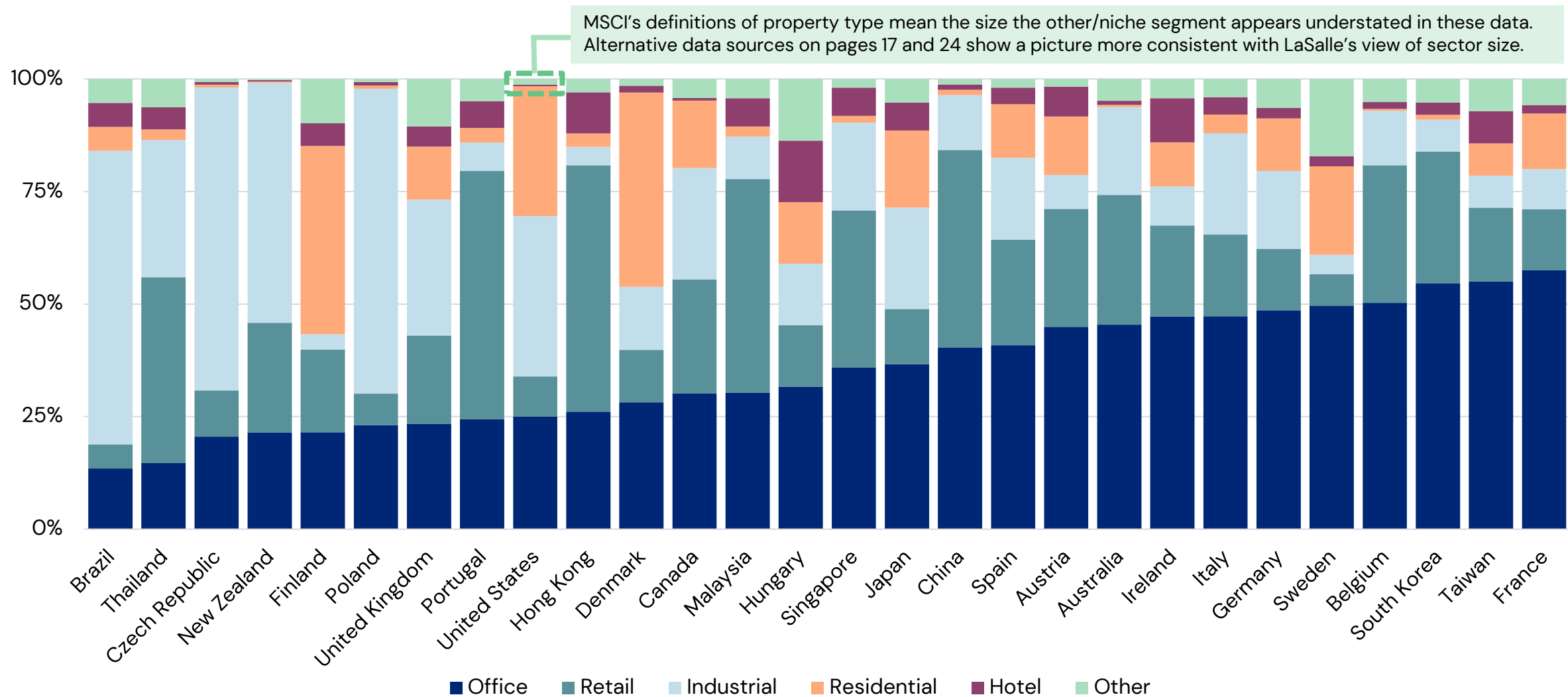
	 US direct property ¹	 Canada direct property ²	 UK direct property ³	 France direct property ⁴	 Spain direct property ⁵	 Japan direct property ⁶	 Aus. direct property ⁷
 US direct Property ¹	1.00	0.76	0.62	0.76	0.72	0.76	0.87
 Canada direct property ²		1.00	0.51	0.81	0.50	0.55	0.80
 UK direct property ³			1.00	0.53	0.52	0.39	0.59
 France direct property ⁴				1.00	0.79	0.79	0.89
 Spain direct property ⁵					1.00	0.87	0.85
 Japan direct property ⁶						1.00	0.84
 Australia direct property ⁷							1.00

 Correlation < 0.6  Correlation between 0.6 and 0.8

Sources: ¹ US NCREIF Property Index Total Returns in US dollars. Data is unleveraged and pre-fee, ² Canada MSCI Annual Standing Property Total Returns in Canadian dollars. Data is unleveraged and pre-fee, ³ UK MSCI Annual Standing Property Total Returns in British pounds, unleveraged, pre-fee, ⁴ France MSCI Annual Standing Property Total Returns in euros data is unleveraged, pre-fee, ⁵ Spain MSCI Annual Standing Property Total Returns in euros data is unleveraged, pre-fee, ⁶ Japan MSCI Annual (Based on monthly index) Standing Property Total Returns in Japanese yen. Data is unleveraged and pre-fee, ⁷ Australia MSCI Annual Standing Property Total Returns in Australian dollars. Data is unleveraged and pre-fee. No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Going global broadens sector diversity

Estimates of institutional investible universe by property type and country [%]

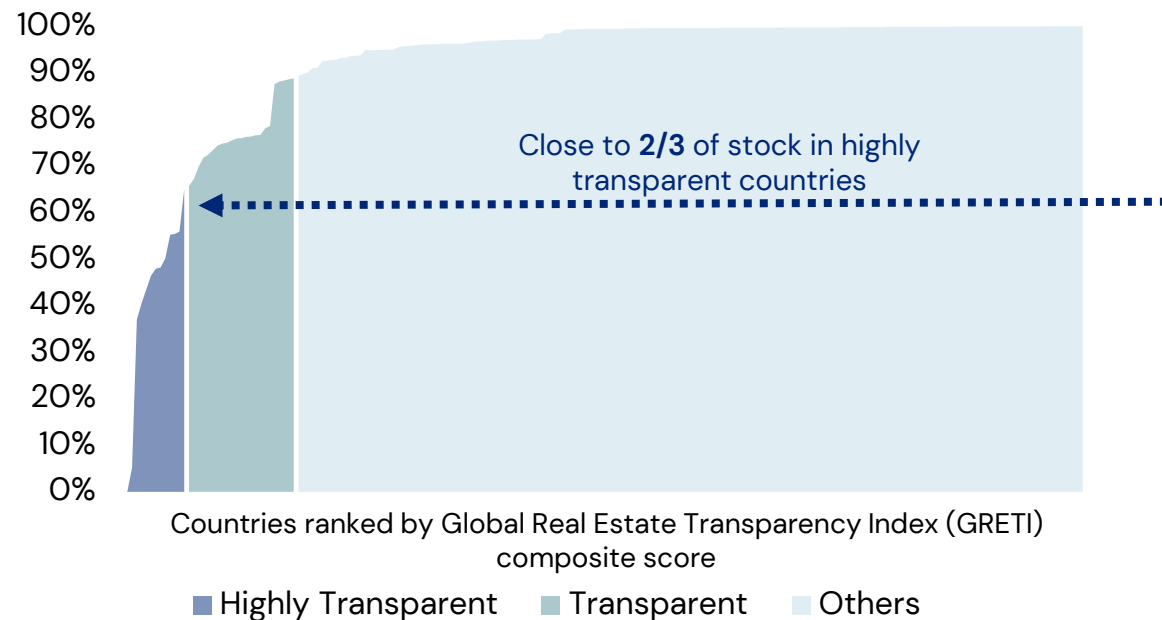


By going outside of their home market, investors also boost the range of different property types available to them. For example, residential assets make a small share of investors opportunity sets in many countries. For example, a Malaysian investor might struggle to access standing, institutional-grade, residential-for-rent properties in their home market. Provided that this investor seeks to have a diverse set of property types in their portfolio, they can achieve this goal by seeking residential properties in other markets like the US, or parts of Europe where that type of product is more readily available. Our **Going Mainstream** framework discusses the evolution of emerging sectors as they mature (pg. 16).

Sources: KTI Finland Annual Property Index, MSCI Austria Annual Property Index, MSCI Belgium Annual Property Index, MSCI China Annual Property Index, MSCI Czech Republic Annual Property Index, MSCI Denmark Annual Property Index, MSCI France Annual Property Index, MSCI Germany Annual Property Index, MSCI Hong Kong Annual Property Index, MSCI Hungary Annual Property Index, MSCI Italy Annual Property Index, MSCI Japan Annual Property Index, MSCI Korea Annual Property Index, MSCI Malaysia Annual Property Index, MSCI Netherlands Annual Property Index, MSCI Norway Annual Property Index, MSCI Poland Annual Property Index, MSCI Portugal Annual Property Index, MSCI Singapore Annual Property Index, MSCI Spain Annual Property Index, MSCI Sweden Annual Property Index, MSCI Taiwan Annual Property Index, MSCI Thailand Annual Property Index, MSCI US Annual Property Index, MSCI UK Annual Property Index, MSCI/Property Council of New Zealand Annual Property Index, MSCI/REALPAC Canada Annual Property Index, The Property Council of Australia/MSCI Australia Annual Property Index, MSCI Brazil Annual Property Index, MSCI/SCSI Ireland Annual Property Index, all as of December 31, 2022 or latest available figure, calculations by LaSalle (June 2023) No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Value is concentrated in transparent markets

Cumulative share of the institutional universe by transparency score



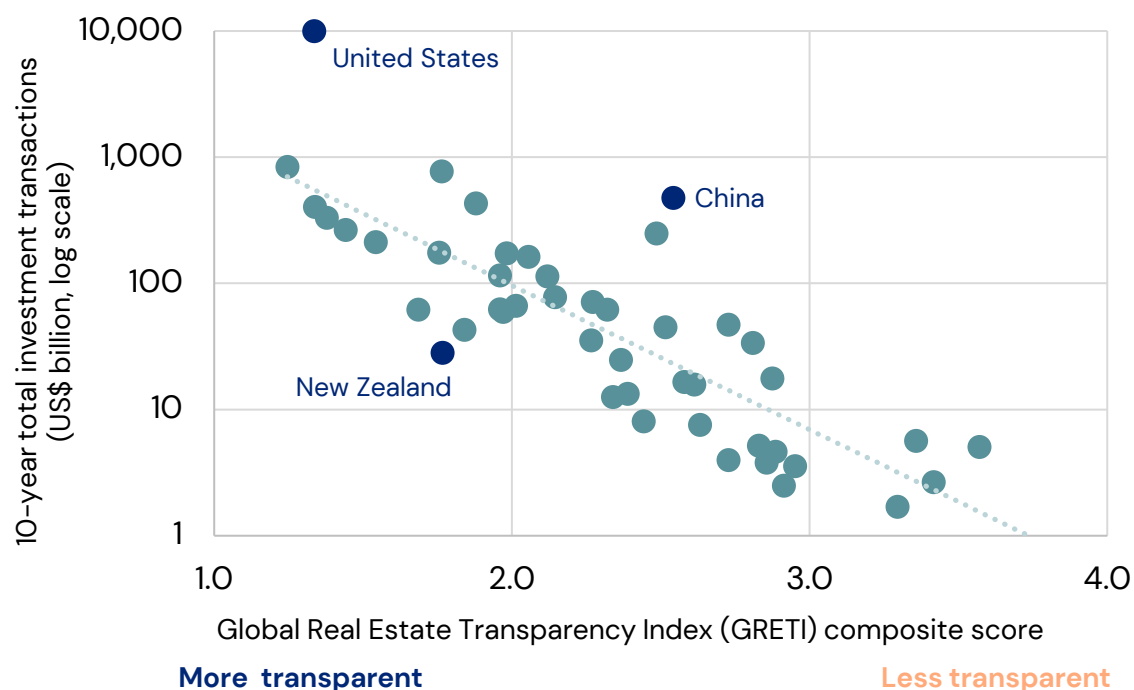
GRETI: Highly transparent markets

Market	2022 Composite Score
United Kingdom	1.25
United States	1.34
France	1.34
Australia	1.38
Canada	1.44
Netherlands	1.54
Ireland	1.69
Sweden	1.76
Germany	1.76
New Zealand	1.77
Belgium	1.84
Japan	1.88



[See report here](#)

Transparency score and investment volumes by country



The *Global Real Estate Transparency Index* (GRETI), a longstanding collaboration between LaSalle and JLL, helps quantify the degree of transparency across multiple parts of the investment process around the world. It considers transparency around investment performance, market fundamentals, listed vehicles, regulatory and legal factors, the transaction process and sustainability.

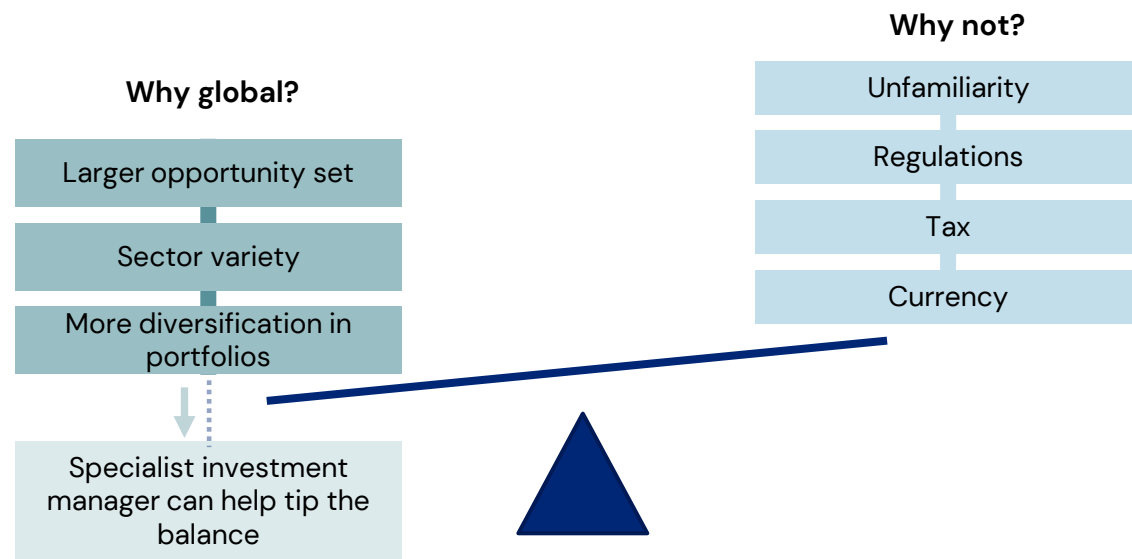
According to their GRETI classifications, **the vast majority of the institutional universe is "Transparent" or "Highly Transparent"** markets, adding to real estate's attractiveness. As shown on the top chart, combining GRETI with our own estimates of the institutional investible universe (pg. 8) highlights that when ranked from most transparent to least transparent, 65% of the investible universe falls within the most transparent category.

More transparent markets tend also to be more liquid. As shown on the lower left chart, higher market transparency is associated with higher transaction activity. Policymakers and market participants can expect to see higher liquidity when market practices become more transparent.

Sources: LaSalle Research and Strategy (June 2023), JLL/LaSalle Global Real Estate Transparency Index (GRETI) (2022), RCA (Q2 2023). No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Caveats: Investing globally adds complexity

Benefits and drawbacks of investing internationally



The **benefits of building cross-border portfolios** are discussed elsewhere (pg. 8-11), but the **barriers facing investors** are important caveats. Investors have unique circumstances and needs, therefore there is no one-size-fits-all answer when considering how to go global.

Foreign markets can be unfamiliar. Investors looking outside their home markets may need to overcome information asymmetries due to the sheer variety of markets abroad and their idiosyncrasies. Investors will often seek expert partners or managers to help them address any home-market bias.

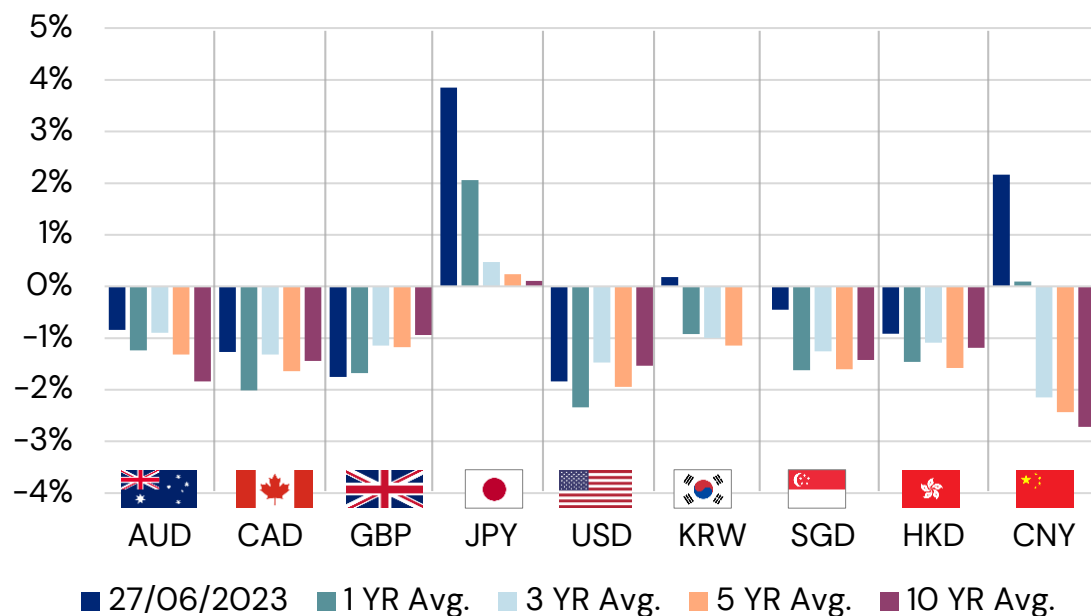
The rules of the game are different. The **laws** that apply to the ownership and management of real estate are dictated by national, city or at times smaller administrative bodies. Similarly, **taxes** for the operation and ownership of property may be different between one investor type and another; this can require significant structuring that can have an impact on returns.

Multiple currencies makes global portfolios more complex. Major movements in the exchange rates could materially alter the home-currency return of an investment. Through diversification, adding countries to a portfolio helps improve volatility-adjusted returns. At the same time, adding currency pairs to a portfolio induces currency-linked volatility, if unhedged.

Investors can choose to hedge currency exposures in their real estate portfolios. Exactly how each investor does that can vary, but a hedging program adds costs and can be an operational burden that not all investors are equipped to manage. Choosing whether to hedge or not depends on many factors, such as the length of the investor's investment horizon, tolerance for volatility, and expertise in dealing with currency hedging.

Hedging costs to euros: cash-on-cash impact from currency

[Drag/pick-up on returns to euro-denominated investors 3m forward hedging contracts]



Source: Bloomberg, LaSalle Research and Strategy (June 2023). No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.



Why be sector smart?

Secular forces have altered the outlook for the various property types. In many parts of the world, **real estate portfolios today look different to how they did decades ago**. Careful consideration of sector selection is important in constructing real estate portfolios.

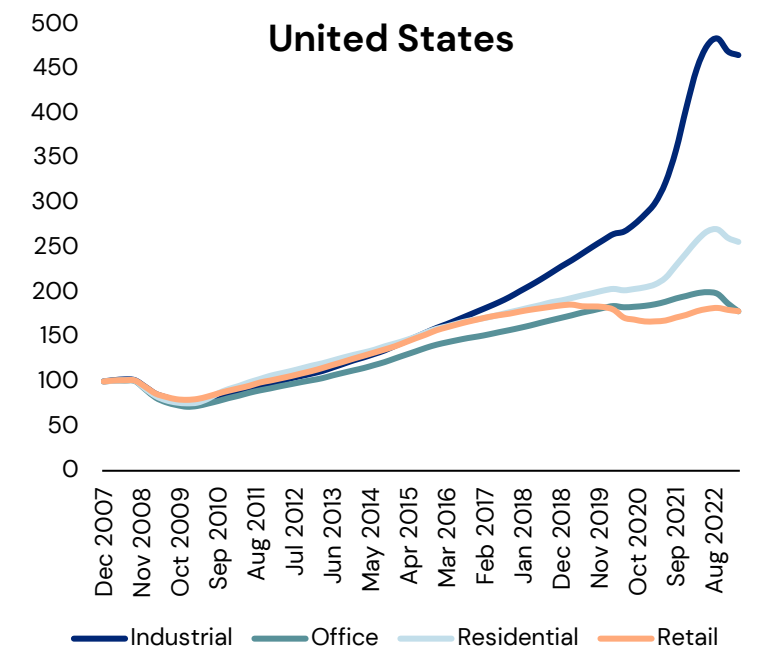
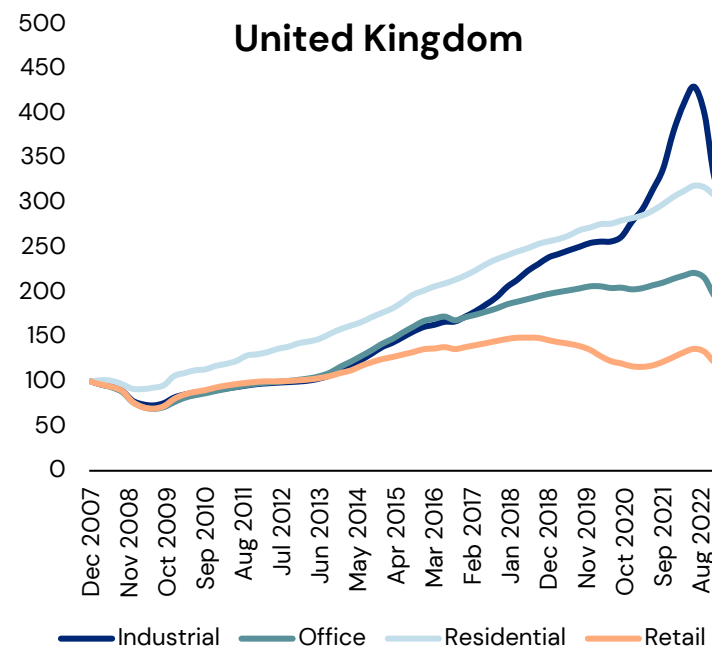
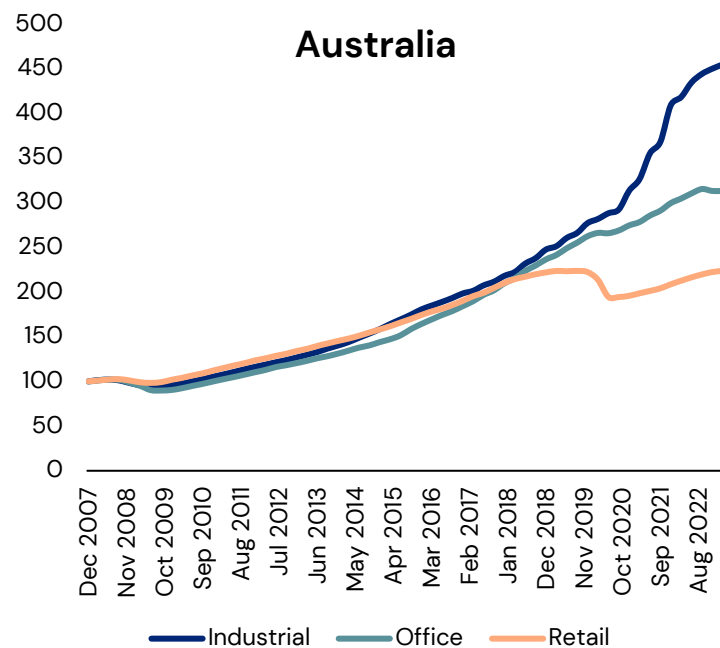
In this section:

1. Sector selection has been a **dominant driver of outperformance** over the last cycle (pg. 14).
2. Many **new sectors have emerged** and more still are emerging to cater to evolving user needs (pg. 15-16).
3. Investing in operating platforms has become more common, and it is the only way to invest in some sectors at scale (pg. 17).



Property type divergence means sector selection has been dominant driver of returns

Total return indices
[December 2007 = 100]



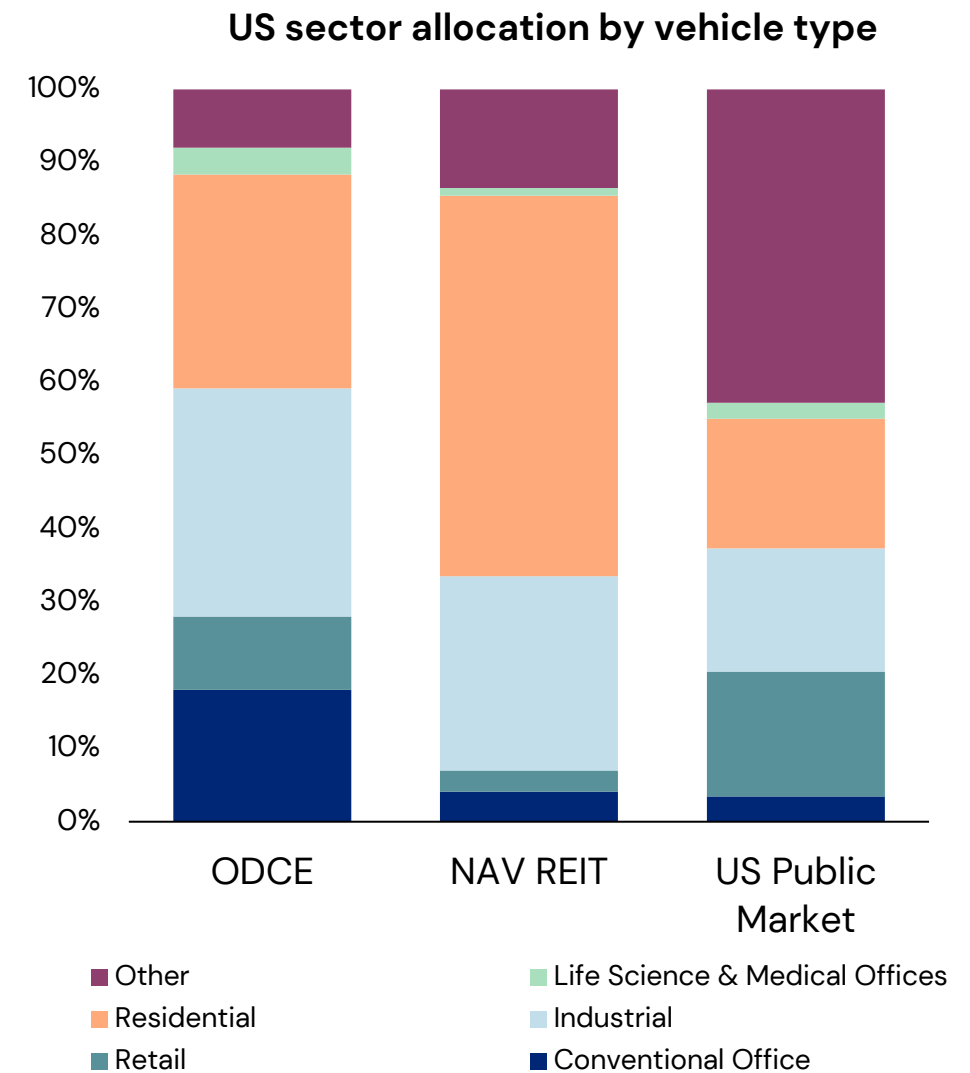
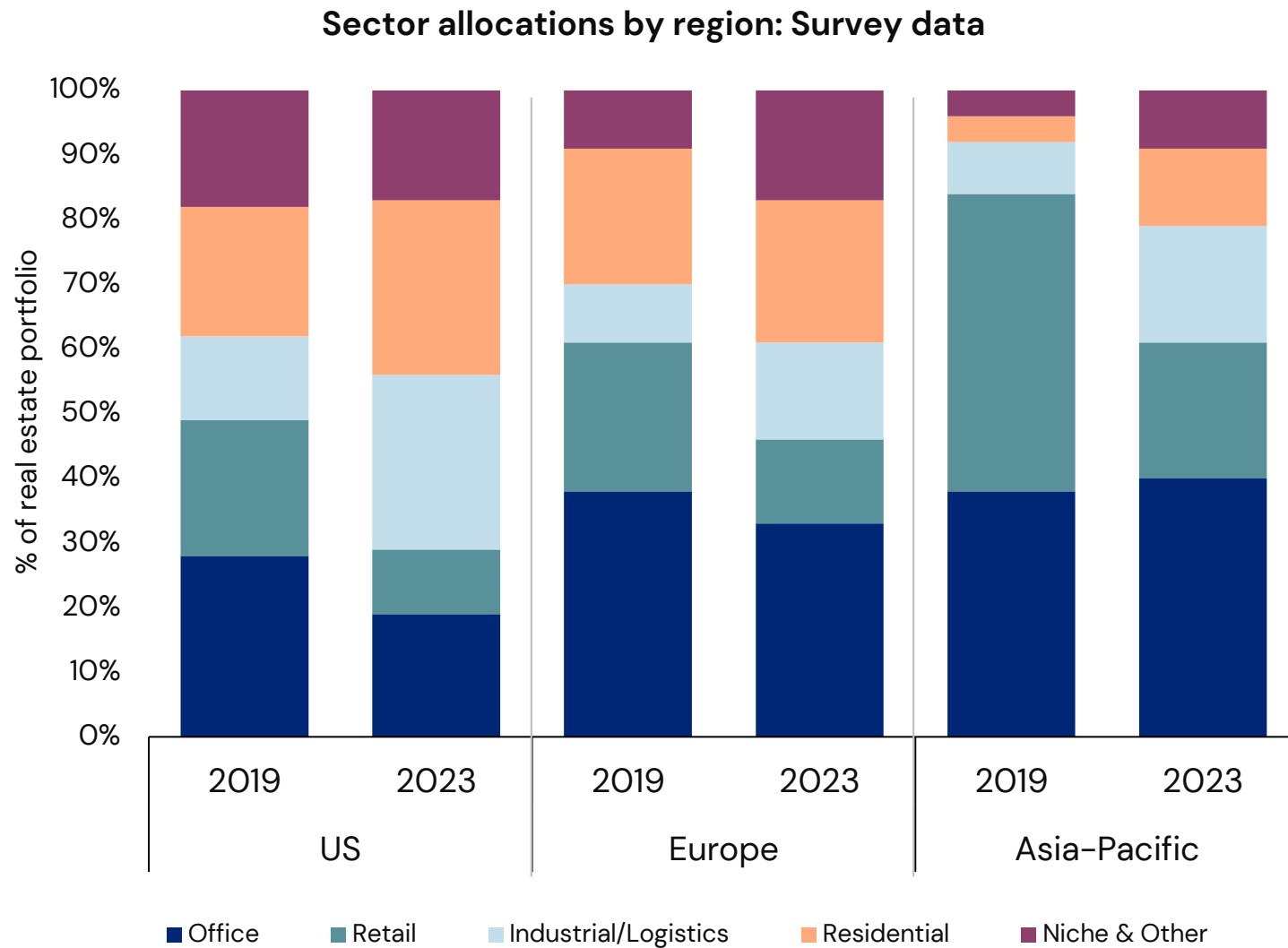
The importance of sector selection in real estate portfolio construction has risen over the last decade. The charts above highlight the gulf in performance between the top performing sectors and the laggards. In general, **industrial** and **residential** have performed strongly, and the performance of the other traditional property types, particularly **retail** and **offices** have been softer.

The chasm in relative performance stems from **structural changes in demand from occupiers** for space, as well as **increased institutional acceptance** of some of these sectors in real estate portfolios (pg. 15). The divergence between **industrial/logistics** and **retail** is a prime example of this dynamic. Consumers habits have changed, moving away from using bricks and mortar locations to deliver goods to consumers towards a model where transactions occur online, and the storage and distribution of goods requiring distribution warehouses and other logistics facilities around the world.

As a result of this chasm in relative performance, portfolios without significant allocations to industrial or residential are likely to have struggled to keep up with market returns. **It is unclear, however, how long the relative performance pattern we see today will persist.** We believe that when making sector-led portfolio composition decisions we should take into account the risks inherent in them. We discuss this in more detail when considering why fair value approaches can contribute to portfolio construction. (pg. 28)

Source: MSCI Global Quarterly Property Index data as of June 19, 2023. No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Sector allocations undergoing long-term shift



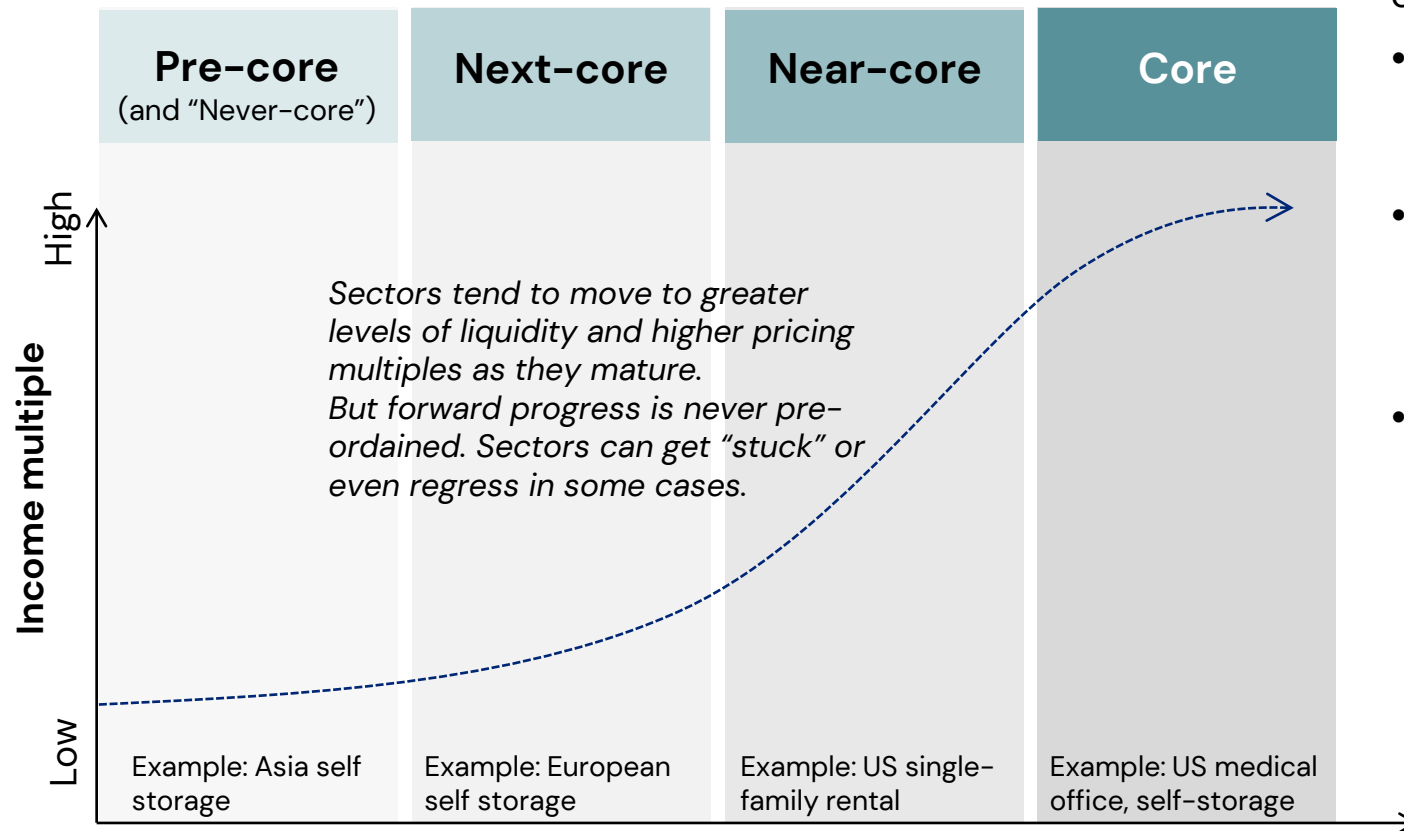
For many investors, portfolios today look very different relative to the past, particularly with regards to sector allocations. The data above show current allocations as reported by a survey of institutional investors. Both industrial/logistics and residential allocations have increased across main regions over recent years. Meanwhile, a combination of value declines and sector rotation have contributed to a decline in retail allocations across the three regions, and in office allocations in all regions except for Asia Pacific.

A look at sector allocations by type of vehicle in the US may offer some hints as to allocation trends going forward. NAV REITs, a form of open-ended non-traded REIT, emerged in the latter half of the past decade. Their recent inception suggests their portfolio construction, which is heavy on residential, logistics, and niche assets, gives a clue as to the future for other fund types, such as institutional open-end core funds (represented by the ODCE index). The listed market, meanwhile, has always been heavy on niche sectors due to their operational nature.

Source: PREA Investor Intentions Survey, 2019 and 2023; NCREIF; NAREIT; NAV REIT data as of end-2022 from company reports published in 2023. No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Evolution of niche sectors creates opportunity

LaSalle "Going mainstream" framework



The institutionalization of once-niche real estate sectors creates numerous opportunities.

- For investors seeking higher returns, being an **early mover** can allow them to realize yield compression/multiple expansion while optimizing operations.
- For core investors, investing in sectors later in the maturation process can provide **diversification benefits**. Allocations to formerly niche sectors in core portfolios continue to grow.
- Global investors are well positioned to **apply lessons and best practices** gained in other markets. Niche sectors tend not to be the same stage of evolution across countries.

Checklist of niche maturation factors

Scalability

- Institutional ownership
- Property type total market size

Cash flow volatility

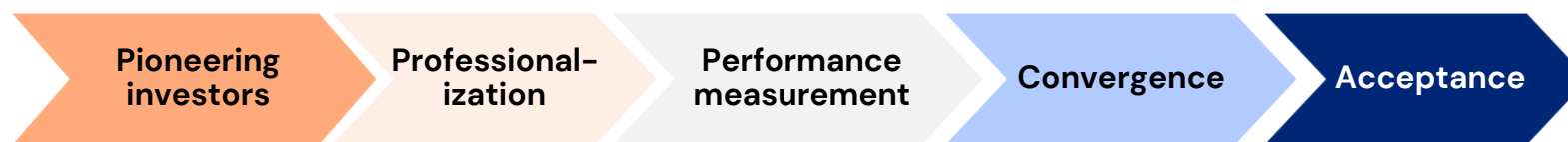
- Sensitivity to economic cycle
- Contractual factors: Remaining lease term (how long tenants are obliged to stay), renewal rate, credit of tenant entities
- Non-contractual factors: Effective tenancy duration (how long tenants actually stay), observed default rate
- Granularity and diversification of tenant base

Operational characteristics and risk

- Operational intensity
- Operational model (lease vs. management contract vs. JV)
- Depth of skilled third-party manager / operator alternatives
- Ease of changing property management / operator
- Risk of obsolescence due to new technology

Transparency

- Data available on returns and fundamentals
- REIT activity in property type



- Unmet need
- Risk-tolerant investors
- Operating expertise developed
- No financial history
- Few trades

- Specialists start to track
- Rising transparency
- Quality of income proven

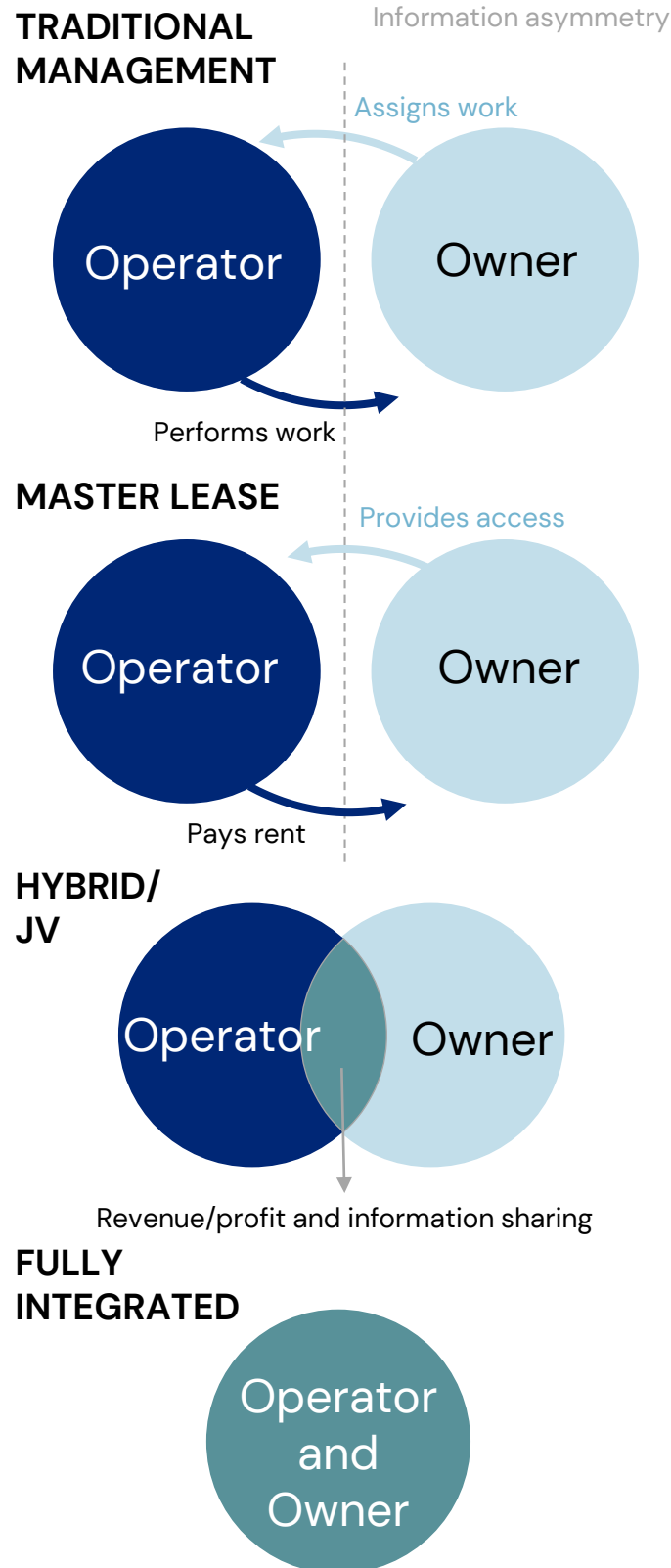
- Wider price discovery
- Enters real estate indices
- Track records
- REIT reporting
- Increasing confidence

- Capital inflows accelerate
- Higher allocations
- IRR/yield spreads converge
- Declining risk perception

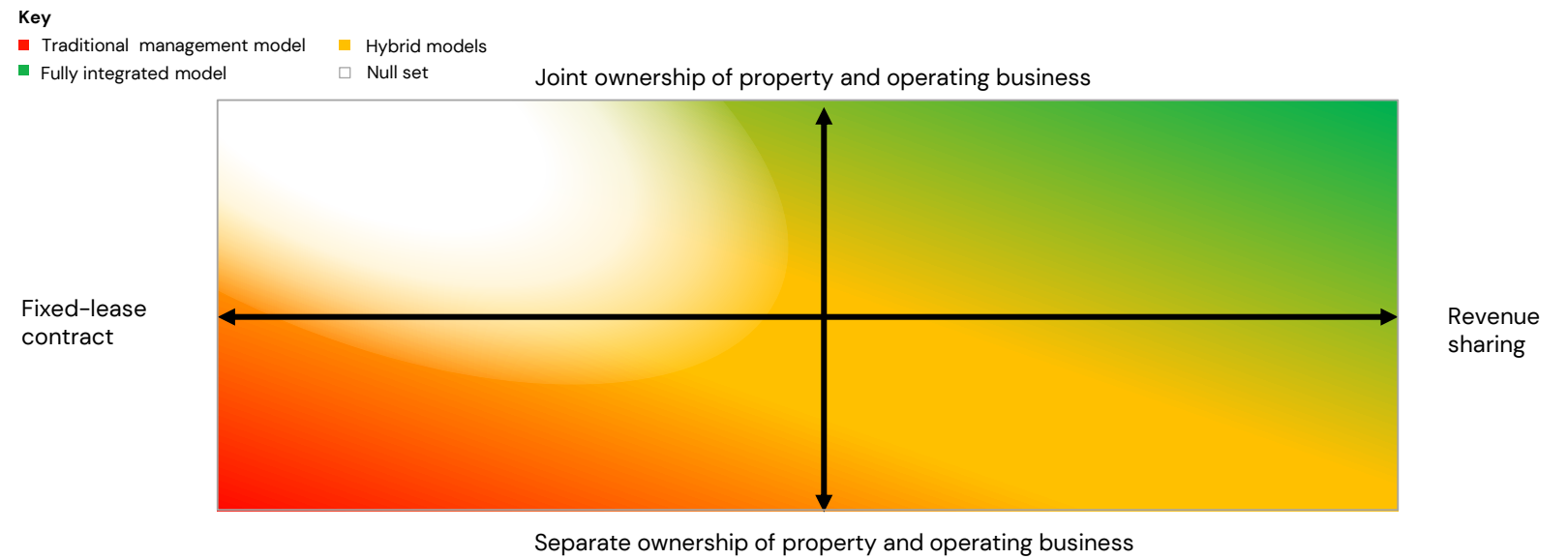
- Little/no premium
- High share of benchmark
- Included in portfolios as risk diversifier

Operational real estate rising in importance

Principal-agent taxonomy of operational real estate models



Ownership and cashflow structure of operating real estate models

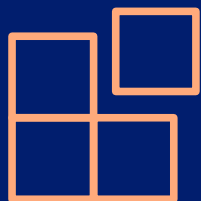


Niche property sectors tend to be more operational than traditional real estate sectors. Also, we have observed that secular trends are making all real estate investments more operational in nature. **Operational real estate models can take a myriad of forms**, and investment managers are well-placed to help investors navigate this complex landscape and select the appropriate type of arrangement for a particular situation.

Acknowledging that every situation is different, operational models can be thought of as principal-agent relationships, in involving **owners** of real estate and **operators** who carry out business activities within the properties.

In the **traditional management model**, ownership is separate, but owners will still have some degree of responsibility of assigning work putting controls in place. **Ground and master leases** are special cases where the landlord has no ability to influence the property. In the **fully integrated model**, the owner of the property also owns the operating business, and they are fully aligned. The ownership and cashflow-sharing lines between owner and operator disappear and the performance of the venture stems from both the operating business as well as the real estate portfolio. **Hybrid models**, like joint ventures, sit between traditional management and integrated models. Ownership of the properties and operating businesses are typically separate, but there are information and revenue-sharing mechanisms built into the relationship, forging closer financial alignment.

More operationally intensive sectors can open the doors to property types with drivers that are often less tied to the real estate and business cycles, enhancing diversification potential versus traditional sectors.



Why be quadrant smart?

Real estate investments come in a wide variety of shapes and forms; investors should act strategically across quadrants and styles.

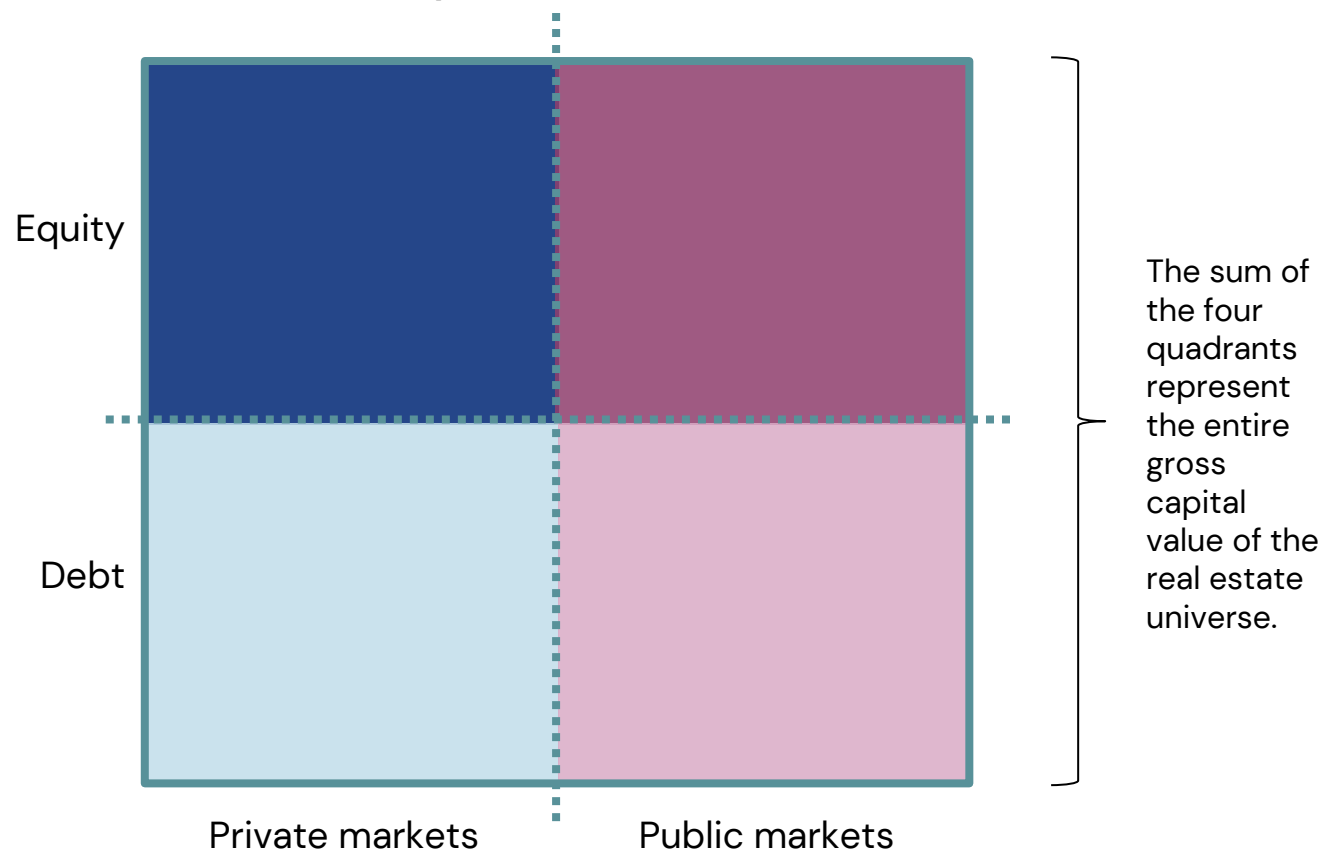
In this section:

1. **Investors can select from a range of diverse ways to access real estate.** Selecting among them involves considering various trade-offs (pg. 19-20).
2. **Listed real estate** performs similarly to private real estate, particularly over longer periods of time (pg. 21). Shorter-term deviations between public and private are common, but combining public and private approaches helps build portfolios that are diversified by sector, and may enhance volatility-adjusted returns (pg. 22-24). There is also good evidence to support active, rather than passive, REIT investing (pg. 25).
3. **Real estate debt capital markets are at different stages of maturity.** They are most mature in the US, with a diverse roster of lenders, and dominated by bank finance elsewhere (pg. 26).

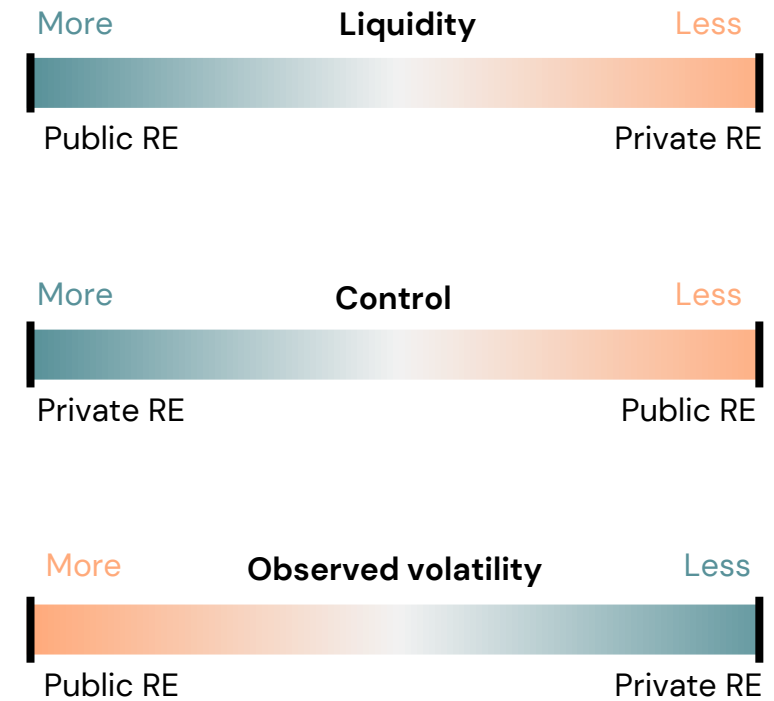


Consider strategies across the four quadrants

The “four quadrants” of real estate



Key trade-offs between public and private



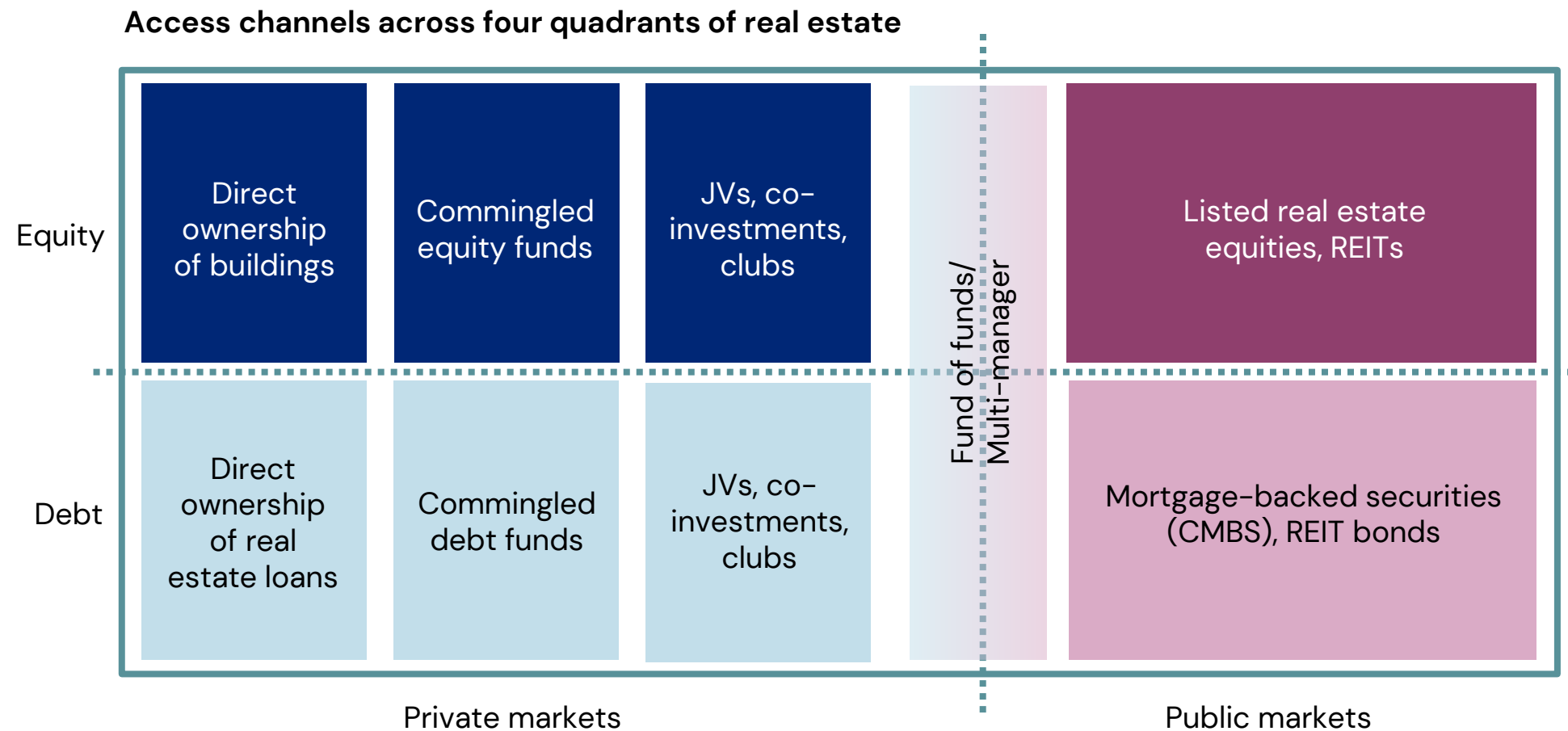
Real estate is funded with a combination of **debt** and **equity**. An investor’s choice between debt and equity investing will depend on risk appetite, views of relative pricing/value and broader portfolio considerations. With a higher position on the capital stack, debt positions enjoy some downside protection but limited upside. Equity positions typically have higher return requirements as investors must be compensated for the higher risk profile of being in a first-loss position. Debt markets vary widely across the globe (pg. 26), shaping the debt investing opportunity set.

Investors can access these assets through both **public** and **private** markets. Public market real estate equities investing involves owning tiny fractions of companies that own diversified portfolios of properties and have virtually no control over the underlying buildings. Direct, private owners of property have full **control**, but due to large lot sizes in real estate, will need much more capital to achieve **diversification**.

At the same time, real estate investors must balance **liquidity** and **volatility** preferences. At one end of the spectrum, REITs trade frequently, with prices swiftly responding to changes in conditions, but this creates the impression of higher volatility. Assets in private markets are slower to incorporate new information into valuations, resulting in lower observed volatility, and the sale of a property may take many months. However, over long periods of time, public and private real estate perform similarly (pg. 21), which should not be surprising as they are simply different “wrappers” for the same sorts of underlying real estate.

Public and private markets can have complementary uses from a portfolio composition perspective (pg. 23), and when used dynamically combining public and private markets can also enhance volatility-adjusted returns (pg. 24).

Diverse menu of access routes for investors, but many trade-offs to consider

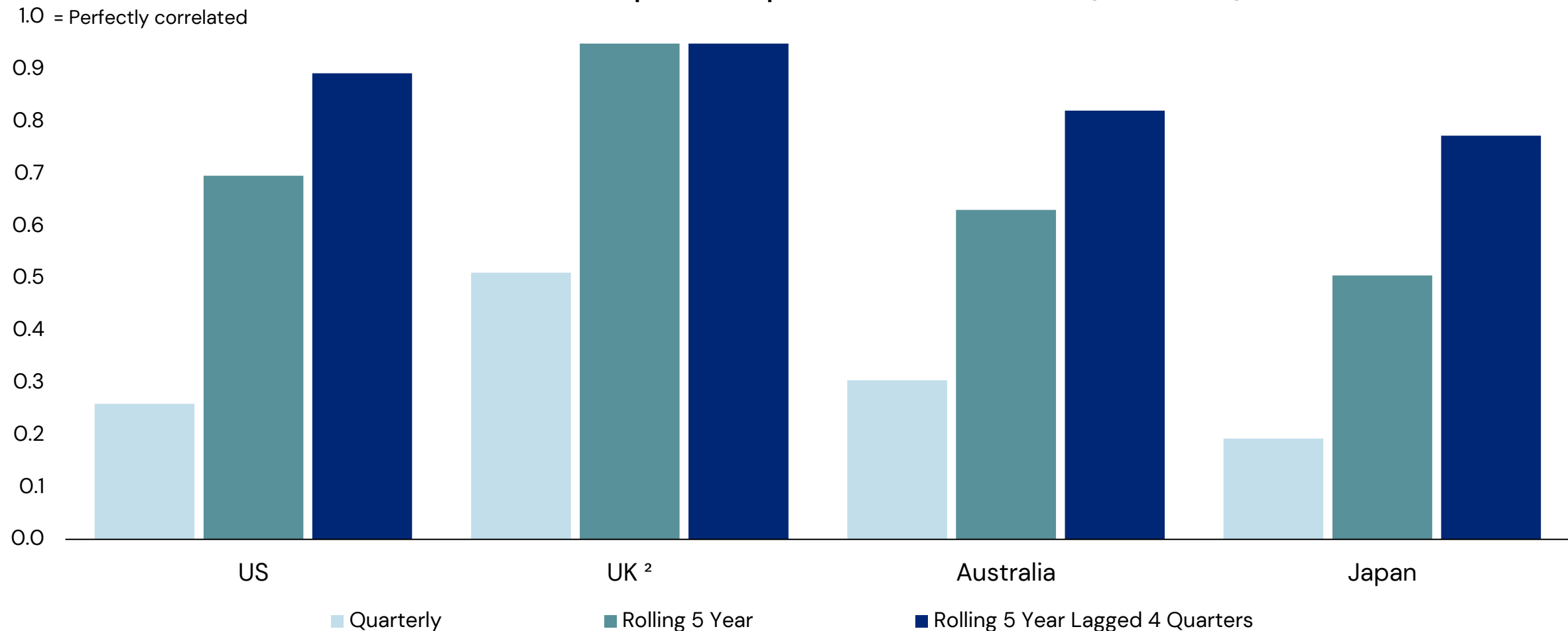


Just like there are many reasons to invest in real estate, there are many ways to do so. The four quadrants of real estate give us a high-level overview of the types of real estate exposure investors can invest in. Deciding specifically how to access real estate assets involves more choices than four, as detailed above. **Direct ownership** of assets, where an investor buys and holds real estate investments utilizing mostly in-house expertise and capabilities, is probably the most understood way of access properties. Commingled equity and debt funds pool capital from various sources and are managed by a real estate investment manager. Partnerships between two or more investors, or between groups of investors and operators can take the form of **joint ventures** and **clubs**. Meanwhile, traditionally, **co-investment** arrangements take place between a comingled fund and a capital partner, whereby the capital partner provides a portion of the equity capital to acquire an asset. **Fund of funds/multi-manager** investors can put capital to work into several other comingled funds and other structures like the ones above.

Traded on public exchanges, real estate securities can provide investors with swift access to real estate assets across the debt and equity space. Debt instruments like mortgage-backed securities or bonds issued by real estate investment trusts (REITs) allow issuers to raise debt capital, whilst the investors purchasing the securities access those cash flows. Similarly, REITs and listed real estate companies can raise equity capital in exchange for partial ownership of the companies.

Over longer periods of time, public and private real estate perform similarly

Correlations between public and private real estate returns (2002–2022) ¹



Due to concerns about equity market volatility, some institutional investors have favored private real estate over public real estate. **Publicly traded real estate securities react quickly to changing market conditions, reflecting changes to real estate fundamentals or macroeconomic dynamics.** While public real estate can be more volatile than private real estate over shorter time frames, public and private real estate returns are highly correlated with returns driven by underlying real estate over the longer holding periods more common in private investing.

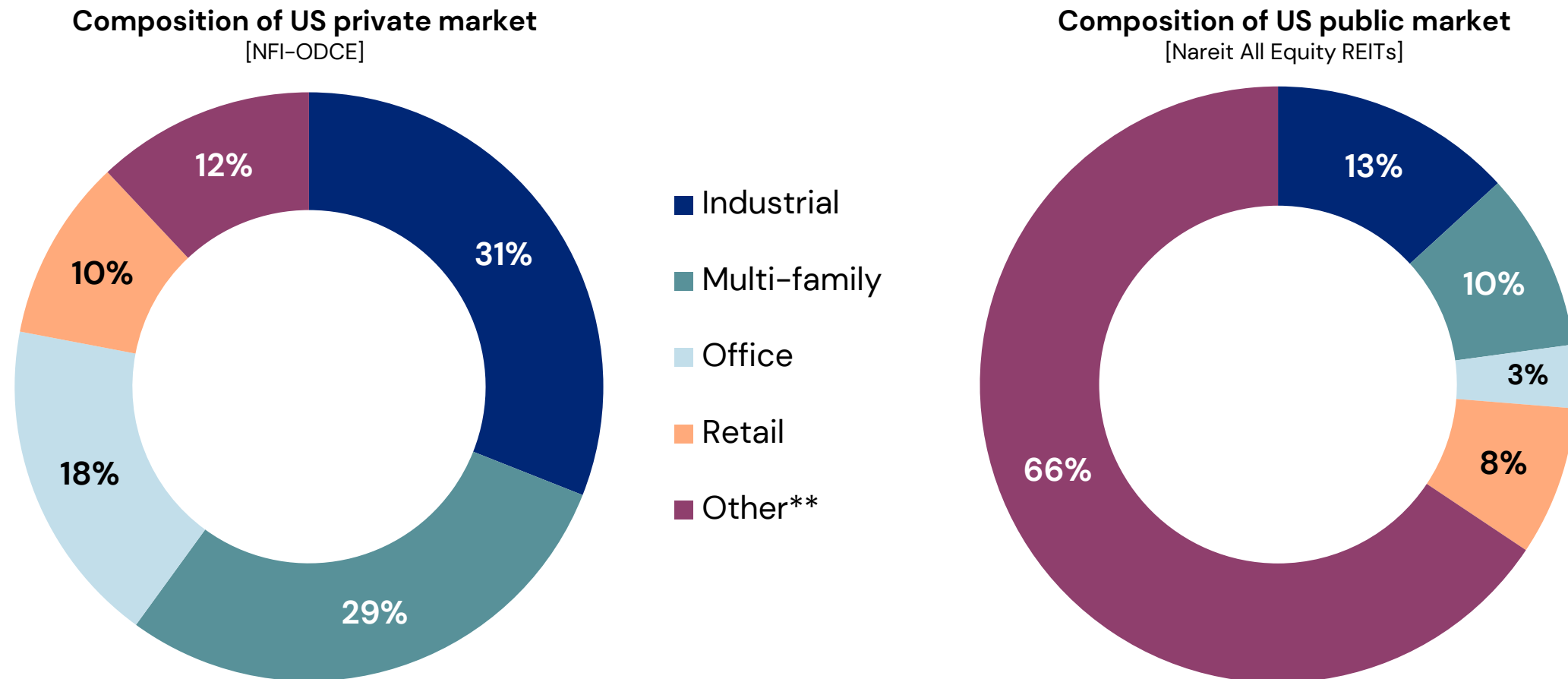
There is strong evidence that public and private real estate returns are closely linked. The chart above highlights that despite differences in geographic and property type composition as well as leverage levels, public and private real estate correlations rise as time horizons increase and increase even more once a one-year lag is introduced to account for valuation lags and other factors.

¹ Public real estate returns based on FTSE EPRA Nareit Developed Index. 20-year returns from 2002 to 2022.

² Lagged UK five-year correlation is expressed in terms of correlation without a lag because the appraisal process in the UK is relatively timely.

Sources: Bloomberg, NCREIF (NPI), MSCI, LaSalle Investment Management. As of December 2022. No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Public and private sector mix has diverged

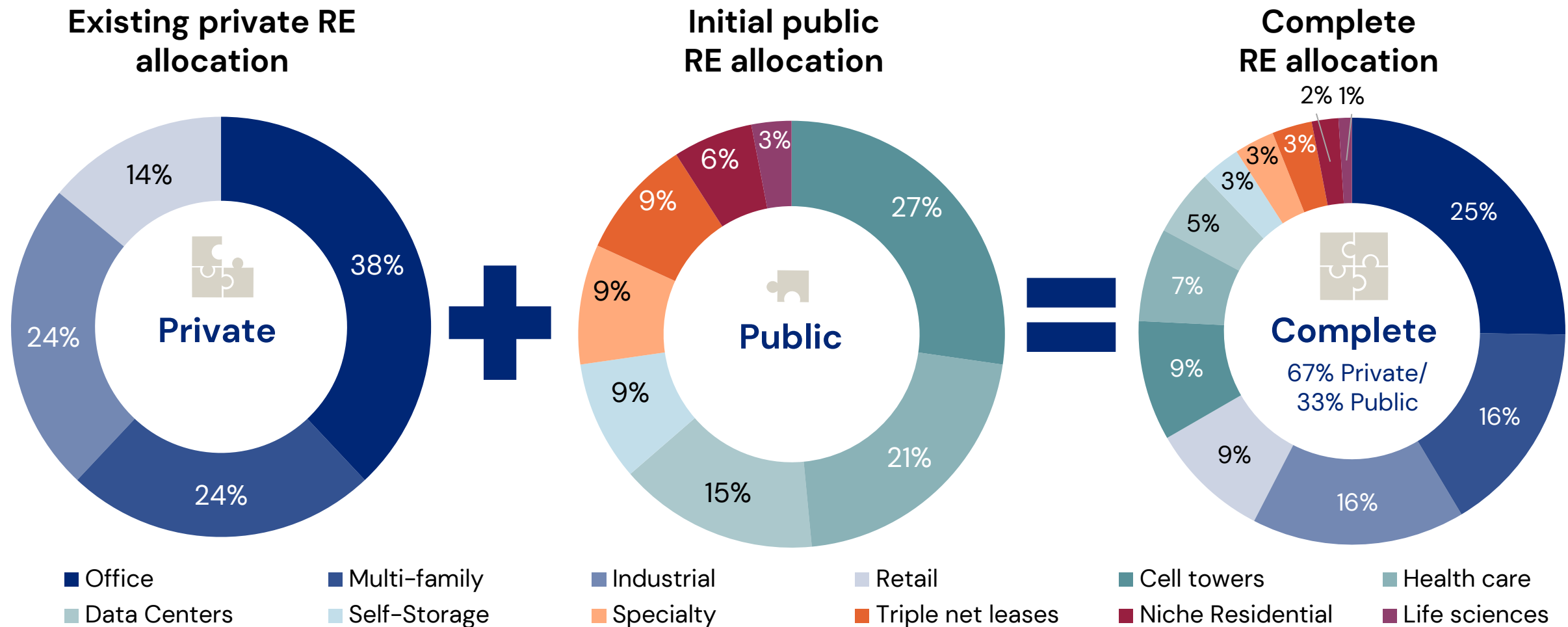


The composition of private and public real estate indices has diverged materially. Using the US market as a proxy, we observe that **private markets are dominated by four 'core' sectors of industrial, office, multi-family and retail, with minimal exposure to other sectors. In public markets, these 'core' sectors are limited to roughly one-third of the total, and two-thirds are comprised of property types such as cell towers, data centers, healthcare, self-storage, triple net lease and niche residential.** Public markets' opportunity set allows investors to easily access a range of sectors unavailable in the private market. With broader sector choice and exposure to different underlying drivers of performance, investors can boost their portfolio's diversification potential by including public real estate.

Looking forward, given the underlying demographic and secular forces underpinning many of these niche sectors, and investors' increasing willingness to explore nascent sectors, LaSalle expects the opportunity set to continue to expand. The public market is likely to continue leading in the development of new and emerging property types. While the US has led this shift to niche or new economy property types, LaSalle would expect other global markets to follow a similar trajectory over time (pg. 16).

**Other includes cell towers, data centers, healthcare, life sciences, lodging, niche residential (single family homes, student housing, manufactured housing), self-storage, specialty, timber and triple net lease. Source: LaSalle, Nareit All Equity REITs Index, NCREIF. Public sector classifications use LaSalle Securities classifications. Data as of March 31, 2023. No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Public and private real estate can be used as complements to “complete” sector exposures



Completion strategy case study

The charts above detail LaSalle Securities' work with a client (a US healthcare system) to reconfigure their existing real estate allocation to better align with today's real estate universe.

LaSalle's client was invested in several private real estate funds with heavy retail and office exposure. The client expressed concern to LaSalle about performance of the funds, as well as a lack of exposure to the new economy or niche property types which had become so prominent in the public real estate market. LaSalle mapped the look-through exposure of the client's private funds and designed a niche public real estate allocation to "complete" the client's real estate portfolio and achieve their desired goals.

Source: LaSalle Securities, FTSE Nareit All Equity REIT Index, a US healthcare system, fund fact sheets. data as of December 31, 2018

Combined portfolio shows 67% private real estate and 33% niche sector REITs percentages, which was proposed to client by LaSalle Securities.

Niche residential is comprised of single-family homes, manufactured housing and student housing.

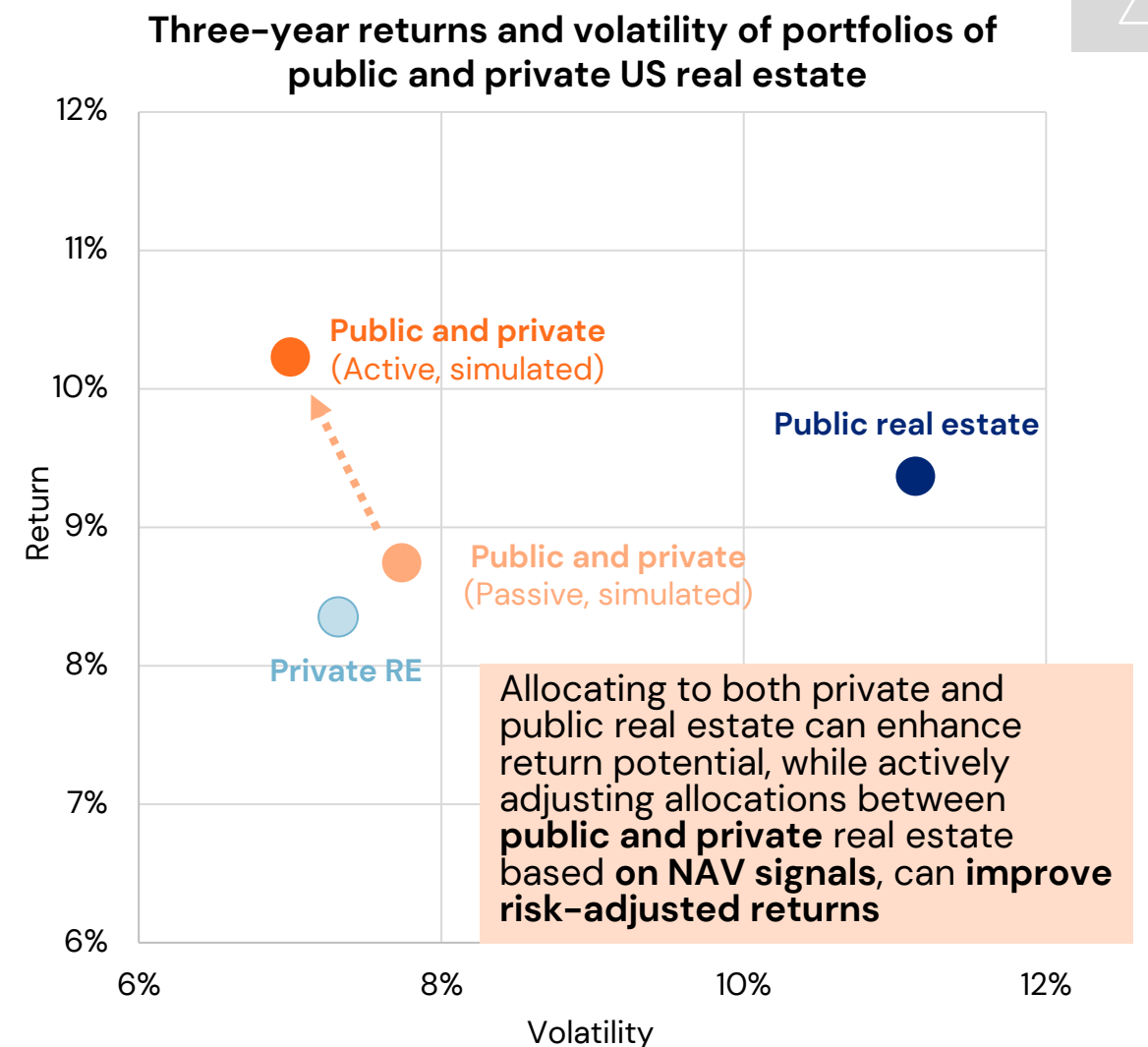
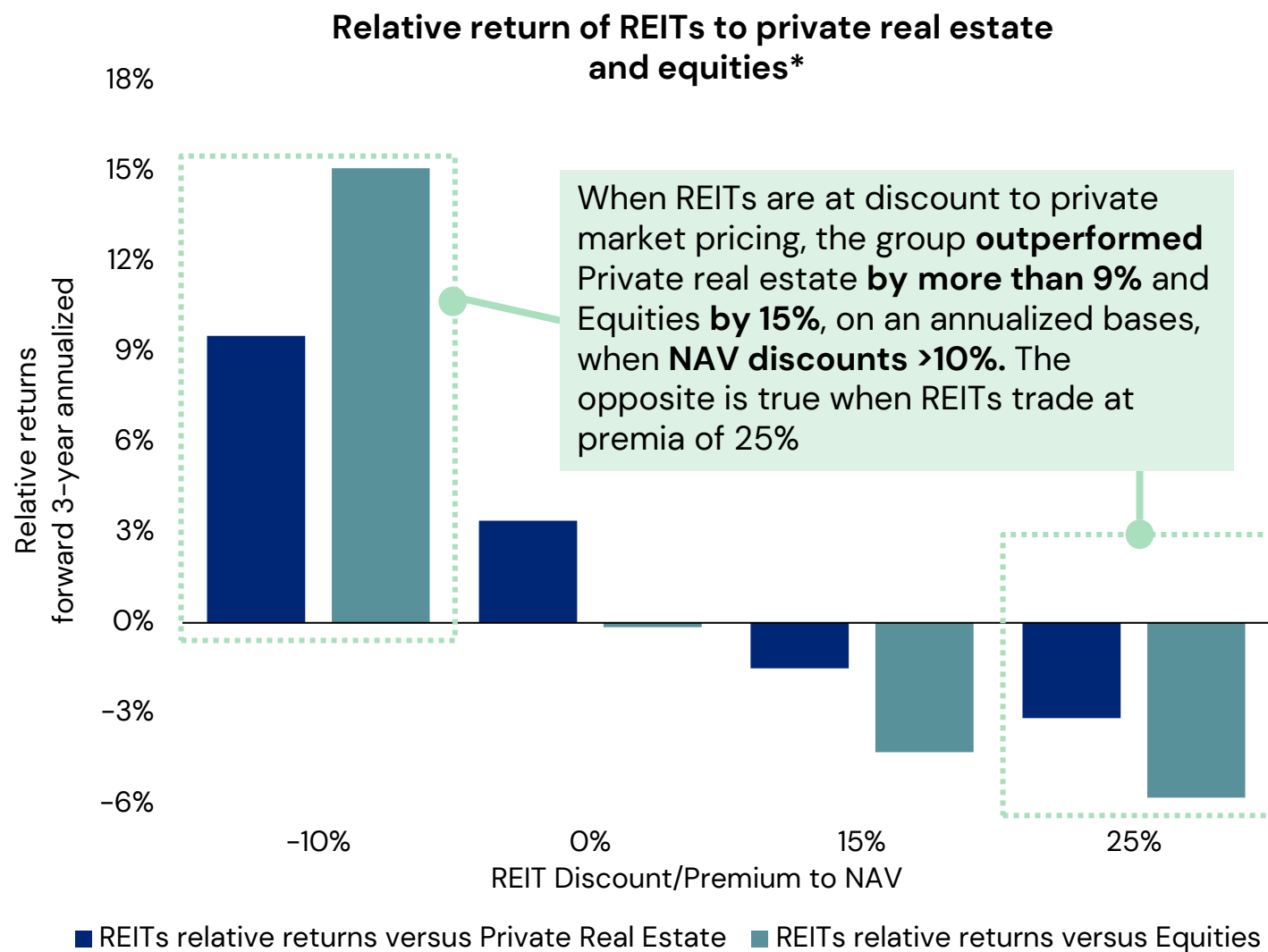
Public real estate allocation assumes LaSalle Securities' property sector classifications as of August 31, 2019. No assurances are given that these trends will continue or materialize as expected.

Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Using public and private real estate together may enhance returns

With real-time trading, public markets typically adjust more rapidly to changes in market conditions than private markets. This creates an opportunity for investors to dynamically adjust their allocations between public and private markets based on where they believe there are stronger risk-adjusted return prospects. Based on our analysis of past signals, **when REITs trade at steeper discounts to private market valuations, public market investments have tended to outperform private real estate markets and the wider stock market.**

Our analysis also highlights that **combining portfolios with public and private market exposures can be shown to add to private market returns and dampen public market volatility.** This dynamic is accentuated when investors actively adjust their strategy based on public/private pricing differentials.



Source: LaSalle Securities (June 2023). Note that returns are for the period covering December 2001 to December 2022. Real Estate Securities' returns are based on FTSE Nareit All Equity REITs Index. Equity returns are based on US Constituents of the MSCI Equities Index. Private returns are based on the NCREIF ODCE index. Returns are three-year annualized returns. See Methodological Notes on pg. 34 for more details. No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Evidence that active REIT managers outperform benchmarks suggests active approach

Excess return* of REIT portfolios by percentile

	1-year	3-year	5-year	7-year	10-year
5th percentile	3.40	4.15	3.21	2.78	2.90
25th percentile	0.21	2.65	2.45	1.91	1.76
Median	-0.85	1.24	1.46	0.93	0.82
75th percentile	-1.85	0.40	0.36	-0.09	-0.02
95th percentile	-3.13	-2.05	-2.23	-1.27	-0.86
Observations (N)	50	48	45	42	34

Alpha** of REIT portfolios by percentile

	1-year	3-year	5-year	7-year	10-year
5th percentile	3.19	4.17	3.14	2.75	2.90
25th percentile	0.12	2.14	2.38	1.94	1.83
Median	-1.12	0.84	1.37	1.02	0.90
75th percentile	-2.33	-0.26	0.21	-0.02	0.18
95th percentile	-4.82	-2.26	-2.15	-1.07	-0.72
Observations (N)	50	48	45	42	34

There is evidence that active management of REIT portfolios consistently outperforms passive approaches. The tables above detail net-of-fee performance results for the competitive set of global REIT managers. The table highlights that, with positive excess returns, managers at the median consistently outperformed preferred benchmarks over the medium- and longer-term. In addition, a large portion of outperformance in these periods derived from alpha, indicating stock picking skill by active managers.

There are a number of possible explanations for this observation. Supported by the rise in passive investment in stock markets more generally, **equity markets are likely dominated by investors that are non-specialist**, more short-term focused and less focused on total return and long-term opportunities, creating inefficiencies and opportunities for other investors. REITs, being a small part of global equity markets, but a large part of global institutional real estate universe, can create **informational differences between specialist and generalist investors**. Finally, **active REIT managers appear able to leverage their expertise to identify mispricing** between fundamentally based fair value and share prices and then seize those opportunities.

*Excess return is defined as returns in excess of the manager's preferred benchmark.

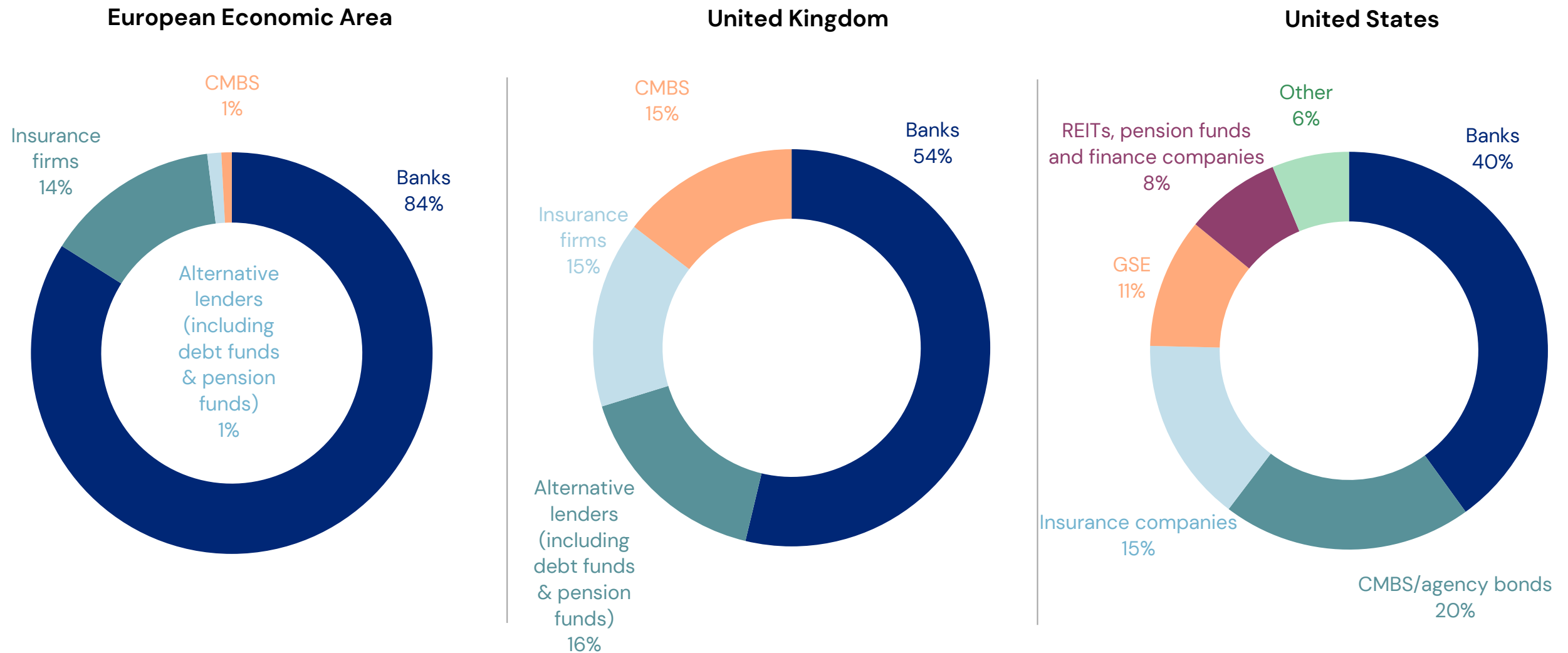
**The incremental return of a manager when the market is stationary or extra return due to non-market factors

Source: LaSalle Securities, eVestment. Data is as of December 31, 2022, and is based on net of fee returns uploaded by each manager to eVestment as of February 14, 2023.

No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty. See Methodological Notes on pg. 34 for more details.

Capital sources diversify as debt markets mature

Sources of debt market capital by geography



Much like we see when looking at property types (pg. 16), the composition of debt lending to real estate evolves as markets mature. Regulatory factors and lender appetite for real estate help shape the landscape, but understanding the lending landscapes in mature markets is a helpful blueprint to how other, less mature markets might look in the future.

As markets mature, sources of debt capital tend to become less concentrated. Above we show the mix of lenders to commercial real estate in Europe, the UK and the US; data for Asia Pacific nations is scarce and thus cannot be shown here. The European financing market is relatively earlier in its evolution and has historically been heavily reliant on banks. By contrast, the US has a mature debt market with a variety of lender groups, as well as unique characteristics, such as the government-sponsored enterprises (GSEs). In the UK, alternative lenders have been responsible for a growing share of loan origination since the GFC, demonstrating a likely future path for Europe.

Source: Federal Reserve Flow of Funds, Bank of England, Refinitiv, Bayes Business School, European Banking Authority, European Insurance and Occupational Pensions Authority, Real Estate Capital, LaSalle (June 2023). No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.



Why manage risk?

Investors seek returns to compensate them for putting their capital at risk. Investors will have different risk/return tolerances, but understanding the sources of risk and how these interact with the real estate cycle can help navigate this trade off.

In this section:

1. We recommend that a rigorous **“fair value” approach** form a key part of establishing investment strategy (pg. 28).
2. Strategy **styles** offer a range of options to investors around how much activity, complexity and risk they want to take on (pg. 29).
3. Changes to the macro environment give rise to **vintage effects**. Diversifying across vintages is important (pg. 30).
4. **ESG-related risks** should be considered (pg. 31).
5. **Our approach** to risk management involves quantifying and monitoring investment risk and ensuring that adequate compensation is achieved for a given level of risk (pg. 32).



Fair value approach considers balance between risk and return

Over the past decade, selecting sectors with secular tailwinds has proven fruitful for investors (pg. 14). However, there is no guarantee that the current pattern of sector selection will be the same in another decade's time. Mispricing can be observed as bubbles form when markets get over-exuberant for strongly performing sectors and when out-of-favor sectors reprice as investor demand plummets. Additionally, market fundamentals tend to self-correct: supply finds ways to emerge in sectors with strong demand and underperforming property types may see a removal of uncompetitive stock. Just using the strength of historical fundamentals or momentum of recent returns is unlikely to provide excess performance over time; it is critical to consider the price paid relative to the prospective fundamental strength an asset offers. **Because a fair value approach provides a disciplined framework through which to weigh all the factors impacting future returns, it is a critical part of portfolio construction and managing risk.**

Fair value is the comparison between:

Required return

vs.

Expected return

= the return an investor **should demand**

= the return **offered by the market today**

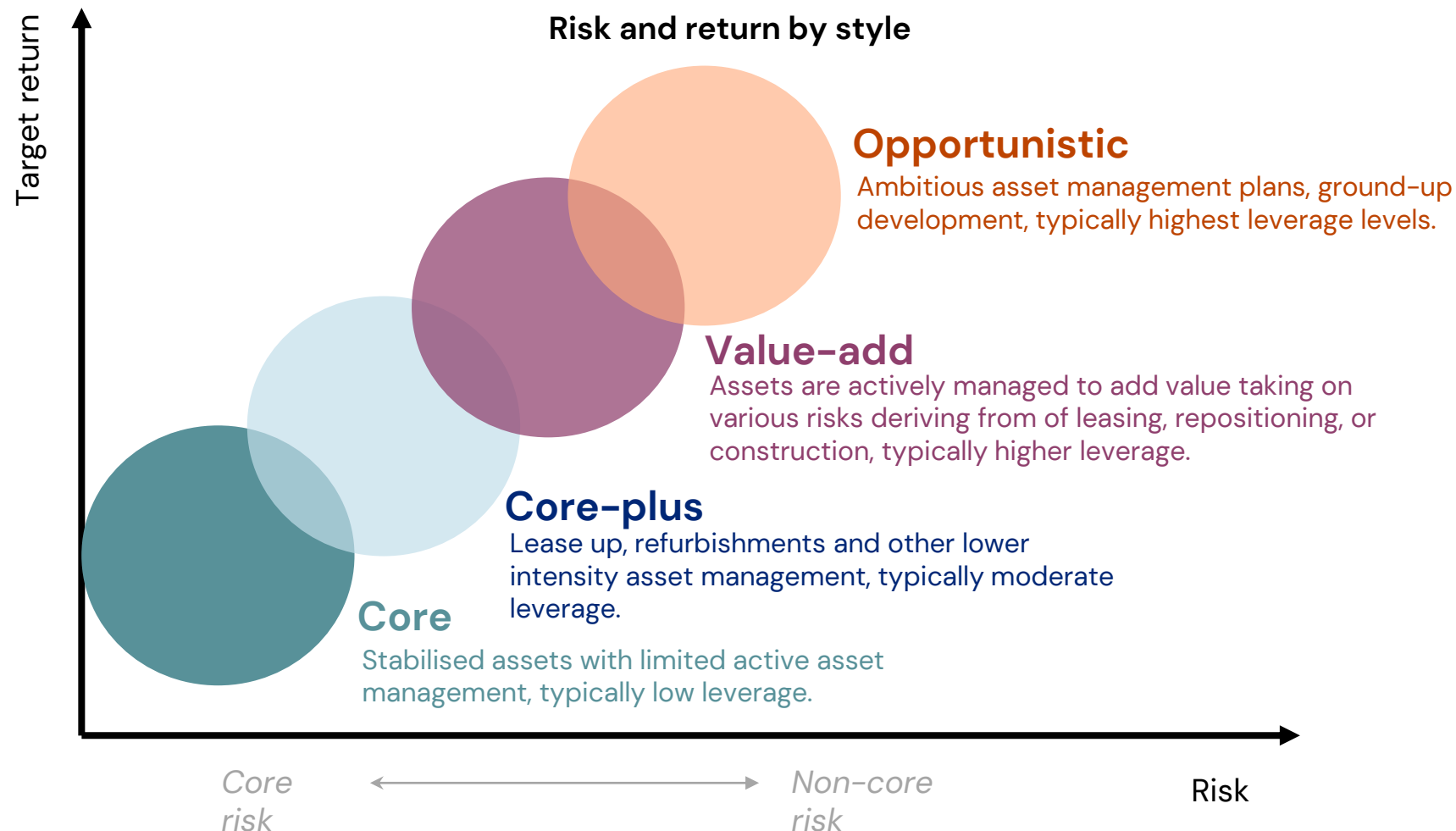
Principles of a fair value approach

Fair value approaches provide **discipline** and **consistency** for comparing expected returns with the returns we would require for a given asset. Investors should aim to be disciplined on the price paid for corresponding fundamentals and capital market conditions.

Projecting the absolute level of expected return of an investment is good starting point, but it is critical to **take account of the level of risk inherent to that investment**. Riskier assets require a higher margin of safety, because they can experience deeper periods of low or negative returns which could wipe out the excess expected return. By finding assets that are mispriced relative to their fundamental growth and risk profile, we can construct portfolios with larger margins of safety—excess on top of a typical market return.

More than just another analytical framework, this approach provides **a common language** that allows investors to focus on the key questions around decisions. Are we fairly reflecting income growth prospects for an investment? Are we underestimating the level of capital expenditure needed to keep the asset competitive? Do capital market conditions support our entry and exit pricing assumptions?

Core and non-core strategies give investors choice along the risk spectrum



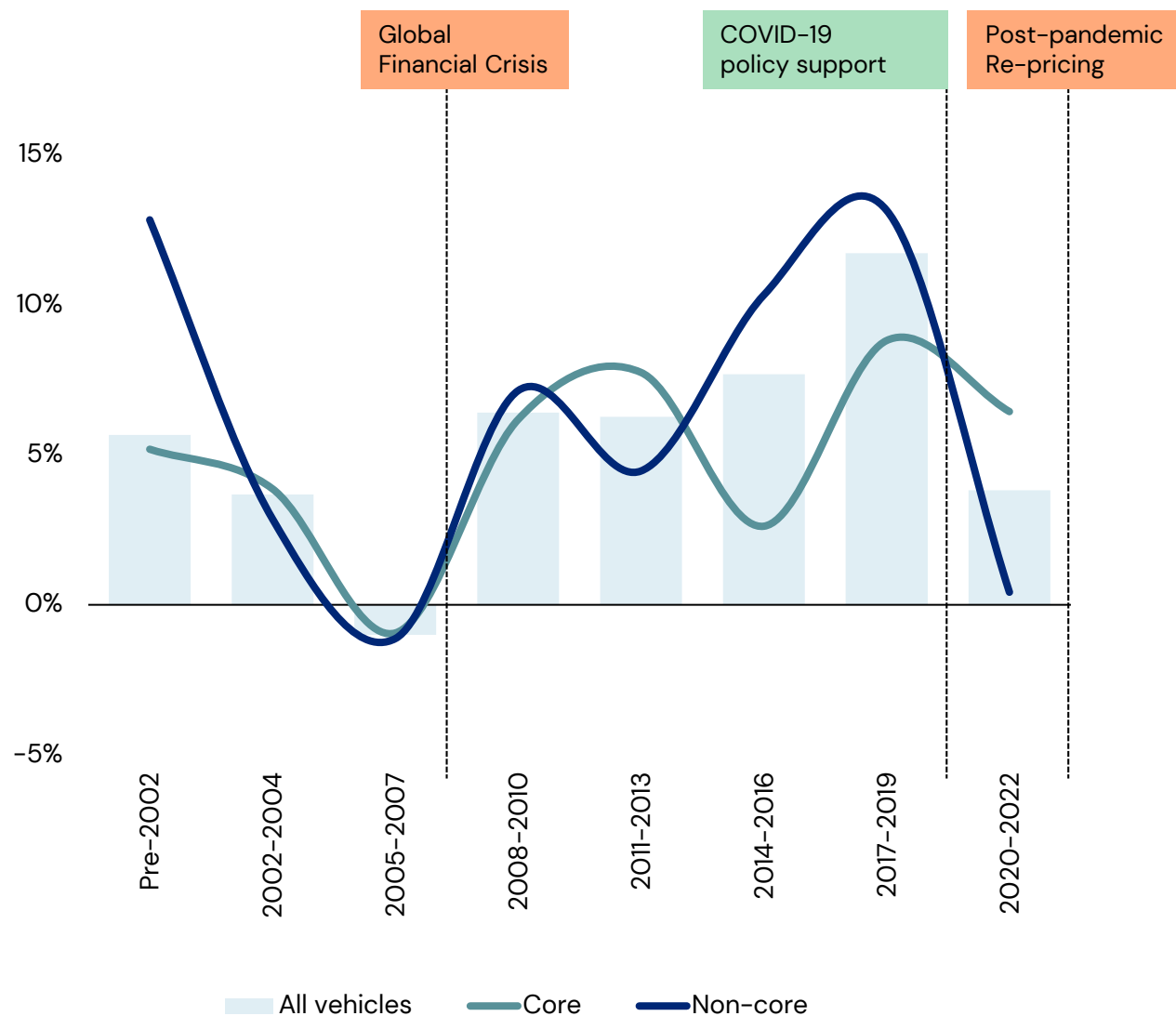
Investors can make use of a range of strategy types (or styles) depending on their needs and risk tolerance. Above is a simple taxonomy of what the range of style types and their defining features. **Core** strategies target the lowest returns but take on the least risk to achieve them. At the other end of the scale, **opportunistic** investments make intensive use of riskier activities, like development to deliver higher returns. Typically, in most classifications of investment style, higher risk strategies coincide with higher levels of leverage. However, this need not be the case. For example, there are times when leverage is not accretive to returns due to elevated debt costs. On the whole, we do not believe that focusing solely on leverage will paint a complete picture of an investment.

The delineation between strategy styles can be blurry. This can arise because there is no *a priori* reason why ambitious business plans or development activity cannot occur with no leverage or lease up risk, for instance. Therefore, we tend to refer to these strategies in broader terms: as **core** and **non-core**. It is easier to distinguish between strategies that take on more risks in some “buckets” and those where more limited risks are taken.

There are no hard and fast rules as to how investors should balance the different strategy styles. That said, in addition to considering it by geography, property type and vintage, **diversification across styles should be an integral part of any investor's portfolio construction.**

Timing matters, but diversifying across vintages can help manage risk

IRR* by vintage** and strategy



Investors aggregate properties into portfolios to diversify away asset-specific risks factors. It is important to recall that market-level risks are unavoidable even in well-diversified portfolios.

Events (i.e., “shocks”) and the economic cycle give rise to vintage effects in real estate performance. Changes in occupier market fundamentals alter the path for market fundamentals and net operating income (NOI). Meanwhile, changes in capital markets impact the relative pricing of real estate relative to stocks and bonds, required returns, as well as capital-raising conditions.

These changes create divergences between outcomes for the capital that was invested prior to the change in conditions, and capital that is deployed after. For example, median IRRs for funds with a first close **prior to the global financial crisis were weaker than the vintage immediately following it.** Recession and higher interest rates acting as a drag on values of the capital already deployed. By contrast, with massive fiscal and monetary support at play, the **vintage of funds raised immediately before the pandemic saw a boost to returns.**

With typically higher leverage and more ambitious business plans, non-core strategies tend to be more sensitive to changes in the environment, both positively and negatively.

While the data shows that some vintages are stronger than others, unforeseen changes in the macro environment are hard to plan for. As a result, **diversifying across vintages can help investors navigate some of this uncertainty.**

*IRR is the internal rate of return of the pooled cashflows of funds in each vintage ** Vintage effects describe the differential impact of investing capital in one period as opposed to another. Vintage here is defined as the year of first closing.
 Source: INREV Global IRR Index Q4 2022 (04/2023) No assurances are given that these trends will continue or materialize as expected. Nothing herein constitutes a guarantee or prediction of future events or results and accordingly the information is subject to a high degree of uncertainty.

Managing investment risk is more than a box-ticking exercise

As discussed elsewhere, investors seek to be compensated for the risk they take on (pg. 28). However, investors' perception of what is considered too much or too little risk will inevitably vary. As a result, and to align the interests of clients and investors, there is a fundamental need for a clear and consistent risk management framework. **By setting a baseline of common principles, actions can be judged using this framework to ensure an appropriate level of risk is being taken to achieve the agreed-upon objectives.**

"Risk Management" as a whole is a catch-all topic that encompasses operational risks, governance issues and investment-level traits. The successful interaction of the three is important to a successful implementation. Here we focus on the importance of and—LaSalle's approach to—risk management from the investment perspective.

Four principles to LaSalle's approach to investment risk management

I. Discipline

- **Risk management is part of the process and should be more than a box-ticking exercise.** For it to be an ally in robust decision-making, it must be embedded as part of a clear investment process with risk controls. This ensures ongoing and appropriate oversight, consistency and rigor.
- A globally consistent approach that spans both the operational and investment elements of risk; risk management is an intrinsic part of our investment philosophy.
- Our investment risk strategy incorporates proprietary tools and reflects four broad groups of measures, that span **strategic considerations**, **real estate fundamentals**, **income characteristics** and **climate concerns**.



Strategic considerations



Real estate fundamentals



Income characteristics



Climate concerns

II. Independence

- **To be effective, risk management needs to be independent from investment and portfolio management teams.** At LaSalle, this means that reporting lines go through both the Global General Counsel and the Head of Research and Strategy, both roles which have seats at LaSalle's Global Management Committee. This provides a clear path for escalation, and access to legal and quantitative expertise on the research team.

III. Risk/return optimisation

- **A key tenet of our approach is that we prioritize risk optimisation (rather than minimisation),** to achieve the objectives tailored to our clients.
- Through a disciplined approach, we seek potential mismatches in risk and return, enhancing our decision-making ability as an investment manager.

IV. Diversification

- We have discussed the role of diversification elsewhere (pg. 5, 9). From an investment risk management perspective, we **seek to build well-diversified portfolios for investors, keeping their objectives and limitations in mind.**

Consider ESG in a risk management context

Many—but not all—investors have added sustainability and social objectives alongside investment performance goals. Trade-offs between impact and financial goals, if any, should not be made blindly; clearly identified, measurable objectives are essential. **But even if ESG goals are not pursued, financial risks stemming from structural trends such as climate change must be considered** in order to manage capital prudently. Secular changes from climate change and new regulations have the potential to impact performance for all investors.

APPROACH:	Traditional		Responsible / sustainable	Impact	
	Risk naïve	Risk aware		"Finance first"	"Impact first"
Financial goals	Seeks attractive financial returns				Accept lower returns
Manage "ESG-related" risks		Considers climate, social and regulatory risks to the extent they impact financial returns; seeks related opportunities			
Impact goals			Reduces negative outcomes for people / planet		
			Generates positive outcomes for people / planet		
			"Additional" contribution to solutions		
Strategy and tactics	<ul style="list-style-type: none"> Comply with existing regulations 	<ul style="list-style-type: none"> Same as left, plus... Incorporate modeling of physical and transition climate risks Avoid or limit exposure to assets heavily exposed to ESG risks, and/or require higher return Invest in green improvements needed to meet current and anticipated market or regulatory requirements 	<ul style="list-style-type: none"> Same as left, plus... Exclusion approach limits exposure to assets and tenants with certain environmental and social characteristics Active approach goes beyond exclusions to improve environmental and social outcomes (e.g., brown-to-green strategies that deliver attractive financial return) 	<ul style="list-style-type: none"> Same as left, plus... Act earlier than strictly necessary in base case assessment of financial returns, or when returns are not yet proven Emphasis on "additionality"—i.e., investments that otherwise would not happen 	<ul style="list-style-type: none"> Addresses environmental and societal challenges through strategies that may generate a below-market financial return for investors Additionality essential
		Most consistent with fiduciary investment management			



Methodological notes

Notes

Real Estate Securities' returns are based on FTSE Nareit All Equity REITs Index. Equity returns are based on US Constituents of the MSCI Equities Index. Private returns are based on the NCREIF ODCE index. Returns are three-year annualized returns. NAVs are from December 31, 1998 to December 31, 2019. Returns are December 31, 2001 to December 31, 2022. This is in order to present returns of a full three-year period subsequent to NAV assessment date. Sample NAV assessment dates are quarterly for the above noted period and were divided into four groups after being sorted from largest discount to highest premium. Note that the first and last group each contain 15% of the samples while the second and third groups each contain 35% of the samples. Real estate securities NAV P/(D) figures along the x-axis are the average of the quarterly samples within each group. Three-year annualized relative returns of the subsequent periods, noted on the y-axis, are the average of the relative return between the noted assets classes calculated for the samples within each group.

Relative return of REITs to private real estate and equities

Neither MSCI nor any other party involved in or related to compiling, computing or creating the MSCI data makes any express or implied warranties or representations with respect to such data (or the results to be obtained by the use thereof), and all such parties hereby expressly disclaim all warranties of originality, accuracy, completeness, merchantability or fitness for a particular purpose with respect to any of such data. Without limiting any of the foregoing, in no event shall MSCI, any of its affiliates or any third party involved in or related to compiling, computing or creating the data have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages. No further distribution or dissemination of the MSCI data is permitted without MSCI's express written consent.

Return – Annualized total return from December 31, 1992 to December 31, 2022 using FTSE EPRA Nareit Developed for Public RE and NCREIF ODCE index for private real estate.

Returns and volatility of portfolios of public and private real estate

Volatility –Green Streets methodology – standard deviation of annualized rolling three-year returns.

Public and Private (Active) – this hypothetical back tested return does not represent performance from actual trading of an account or portfolio, and it is not a guarantee or representation of future results. Active return is based on a hypothetical portfolio with REIT weighting range of 0-50% determined by NAV P/(D) Z-scores. Rebalanced quarterly with a one quarter lag between signal and reallocation.

Page 24

Public and Private (Passive) – This simulated portfolio demonstrates how a simple 25%/75% allocation to REITs/Private real estate can increase risk adjusted returns. The portfolio allows for the REIT allocation to float within +/- 10% bands i.e., weighting can range from 15%-35%. This is a common strategy to reduce turnover and constant reallocation to maintain weights within the range as the market moves over time.

Back tested performance results have certain inherent limitations. Such results do not represent the impact that material economic and market factors might have on an investment adviser's decision-making process if the adviser were actually managing client money. Back tested performance also differs from actual performance because it is achieved through the historical simulation of model portfolios designed with the benefit of hindsight. Actual portfolio performance will be different from back tested performance as the portfolio managers exercise additional judgment in constructing an actual portfolio, in addition to the rebalancing utilized during the back testing. Additionally, the performance of an actual portfolio has the potential to incur losses as well as earn profits and may include the deduction of advisory and custodian fees that were not incorporated in the back testing.

Excess return and Alpha of REIT portfolios by percentile

Competitive set based on the eVestment's Global REIT manager universe. Universe is comprised of 35 managers and managers may have multiple products within the competitive set. Each individual product is counted as an observation in each respective time period. Competitive set observations are limited to products within the universe which have both excess return and alpha data fields populated. LaSalle Securities has two products included in the competitive set, LaSalle Global Real Estate Securities and LaSalle Core Global Real Estate Securities. Both LaSalle products have produced positive excess return and alpha in each of the included periods in review.

Page 25

Excess return is defined as returns in excess of the manager's preferred benchmark and are uploaded to eVestment by the manager. Manager's preferred benchmark is selected by the manager and may vary by product. Alpha is calculated by eVestment based on the manager's uploaded return series and is defined as the incremental return of a manager when the market is stationary or extra return due to non-market factors. Median is defined as the middle observation within the rank-ordered competitive set. Median product will likely vary by time period. Product performance and percentile rank may vary by period.

Contributors

Eduardo Gorab

Head of Global Portfolio Research and Strategy

London

+44 207 852 4214

eduardo.gorab@lasalle.com

Brian Klinksiek

Global Head of Research and Strategy

London

+44 207 852 4878

brian.klinksiek@lasalle.com

Ben Lentz

Managing Director, Securities Portfolio Manager

Baltimore

+1 410 878 4850

ben.letz@lasalle.com

Dennis Wong

Senior Strategist

Singapore

+65 6494 3596

dennis.wong@lasalle.com

Daniel Mahoney

Head of Europe Research and Strategy

Chicago

+1 312 897 4023

daniel.mahoney@lasalle.com

Zuhaib Butt

Director of Investment Risk Strategy and Management

London

+44 207 852 4066

zuhaib.butt@lasalle.com

Frederik Burmester

Research Analyst

Munich

+49 175 965 0387

frederik.burmester@lasalle.com

Rich Kleinman

Head of Americas Research and Strategy and Americas Co-CIO

Chicago

+1 312 897 4025

richard.kleinman@lasalle.com

Chris Battista

Senior Product Manager

Baltimore

+1 410 878 4934

christopher.battista@lasalle.com

Hina Yamada

Research Analyst

London

+44 20 7399 5875

hina.yamada@lasalle.com

Elysia Tse

Head of Asia Pacific Strategy

Singapore

+65 6494 3599

elysia.tse@lasalle.com

Dominic Silman

Head of Research and Strategy, Debt and Value-Add Capital, Europe

London

+44 207 852 4119

dominic.silman@lasalle.com

Matthew Wapelhorst

Research Analyst

Chicago

+1 312 897 4285

matthew.wapelhorst@lasalle.com

Important Notice and Disclaimer

This publication does not constitute an offer to sell, or the solicitation of an offer to buy, any securities or any interests in any investment products advised by, or the advisory services of, LaSalle Investment Management (together with its global investment advisory affiliates, "LaSalle"). This publication has been prepared without regard to the specific investment objectives, financial situation or particular needs of recipients and under no circumstances is this publication on its own intended to be, or serve as, investment advice. The discussions set forth in this publication are intended for informational purposes only, do not constitute investment advice and are subject to correction, completion and amendment without notice. Further, nothing herein constitutes legal or tax advice. Prior to making any investment, an investor should consult with its own investment, accounting, legal and tax advisers to independently evaluate the risks, consequences and suitability of that investment.

LaSalle has taken reasonable care to ensure that the information contained in this publication is accurate and has been obtained from reliable sources. Any opinions, forecasts, projections or other statements that are made in this publication are forward-looking statements. Although LaSalle believes that the expectations reflected in such forward-looking statements are reasonable, they do involve a number of assumptions, risks and uncertainties. Accordingly, LaSalle does not make any express or implied representation or warranty, and no responsibility is accepted with respect to the adequacy, accuracy, completeness or reasonableness of the facts, opinions, estimates, forecasts, or other information set out in this publication or any further information, written or oral notice, or other document at any time supplied in connection with this publication. LaSalle does not undertake and is under no obligation to update or keep current the information or content contained in this publication for future events. LaSalle does not accept any liability in negligence or otherwise for any loss or damage suffered by any party resulting from reliance on this publication and nothing contained herein shall be relied upon as a promise or guarantee regarding any future events or performance.

By accepting receipt of this publication, the recipient agrees not to distribute, offer or sell this publication or copies of it and agrees not to make use of the publication other than for its own general information purposes.

Copyright © LaSalle Investment Management 2023. All rights reserved. No part of this document may be reproduced by any means, whether graphically, electronically, mechanically or otherwise howsoever, including without limitation photocopying and recording on magnetic tape, or included in any information store and/or retrieval system without prior written permission of LaSalle Investment Management.

Amsterdam

Atlanta

Baltimore

Beverly Hills

Chicago

Denver

El Segundo

Hong Kong

London

Luxembourg

Madrid

Mexico City

Munich

New York

Paris

San Diego

San Francisco

Seoul

Shanghai

Singapore

Sydney

Tokyo

Toronto

Vancouver