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Real Estate Insight

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Improving property portfolio performance through diversification

Executive summary

- Property has long been considered a mainstream asset class for institutional investors. But for most, there has been a strong bias for property investments in their own country, with exposure to domestic markets of up to 100%.
- Many investors, often incorrectly, associate non-domestic property investments with higher risk than domestic ones. This often leads to investors choosing higher-risk strategies for their non-domestic investments, relative to domestic, or they avoid investing internationally as they cannot find the higher absolute core returns they are looking for.
- Non-domestic property investments can provide more choice with new sectors and strategies. They also provide an opportunity to take advantage of any mispricing in core, non-domestic markets.
- We argue that non-domestic property can provide an efficient way of achieving higher risk-adjusted returns through diversification.
- Investing in a direct, diversified, global or regional portfolio is only possible for the very largest investors. Hence, indirect investments are the entry route for most investors thinking about a diversified, non-domestic, core property allocation.
- Our upcoming white paper "Constructing a Global Real Estate Portfolio" will discuss in more detail the considerations that need to be made when building a regional or global portfolio.
- Tax, fees, currency and leverage are important considerations that play a role in deciding the appropriate non-domestic allocation.
- Although theory indicates that currency rates over time revert to the mean, currency fluctuations can have a significant impact on shorter-term performance. This could be a further reason for some euro-denominated investors to favour a diversified portfolio within the Eurozone rather than a global allocation.

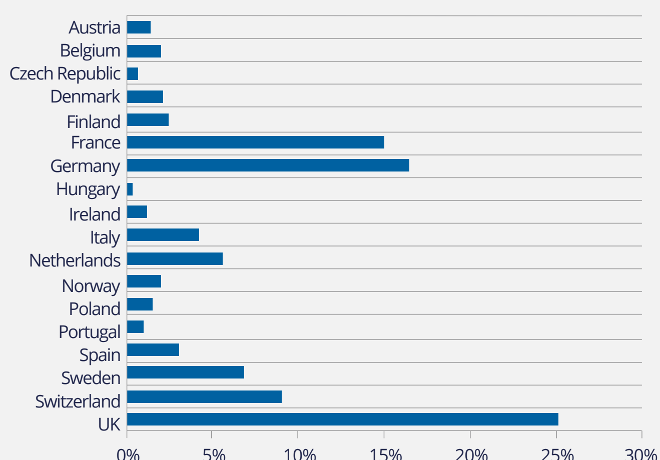
Improving your property portfolio's investment performance by including non-domestic property

Property has long been considered a mainstream asset class for institutional investors. But investors tend to have a strong home bias for property. The step from domestic to non-domestic property investment is not a trivial one and in some cases it may not be an appropriate solution. However, there are many potential benefits from creating a regional or global allocation, which we describe below. In this paper, we focus on non-domestic investments in Europe for European investors.

1. **More opportunities**

   For most investors, a step outside of their domestic property market rapidly expands the opportunity set (and improves diversification) as local markets typically represent only a fraction of the overall property universe. For a European investor, the investment universe could be expanded by four (for UK investors) to 50 times by allowing investments in other European countries. From a global perspective, the European market accounts for approximately 40% of the investible universe.

Chart 1: Estimated European property market sizes 2016 (% of total European market)



Source: MSCI, June 2017

Aberdeen Standard Investments

2. Access to sector and strategy opportunities

Not all domestic property markets are alike. In some countries, for example, institutional investment in specific property sectors is possible, whereas in other countries it is not. The clearest example of this is the residential sector where a typical institutional portfolio may have from zero to over 50% in the sector, depending on the country. It is likely that residential has been the most sought after property sector in Europe in recent years. The low risk to income and the growth potential from rapid population growth in key European cities remain attractive. In addition, the sector can be an effective portfolio diversifier as the demand drivers are different than for most commercial property sectors. Historically, the correlation between European residential markets and the traditional commercial sectors has been lower than between the commercial sectors.

Another example of how countries differ is demonstrated by the current growth of the European logistics sector. Some countries are more important for European supply chains and others are more advanced when it comes to e-commerce and logistics demand. Emerging sectors like healthcare, senior housing and student accommodation are much more available in some countries than others. Such differences create different drivers and opportunities for various niche sectors across Europe.

3. Higher returns

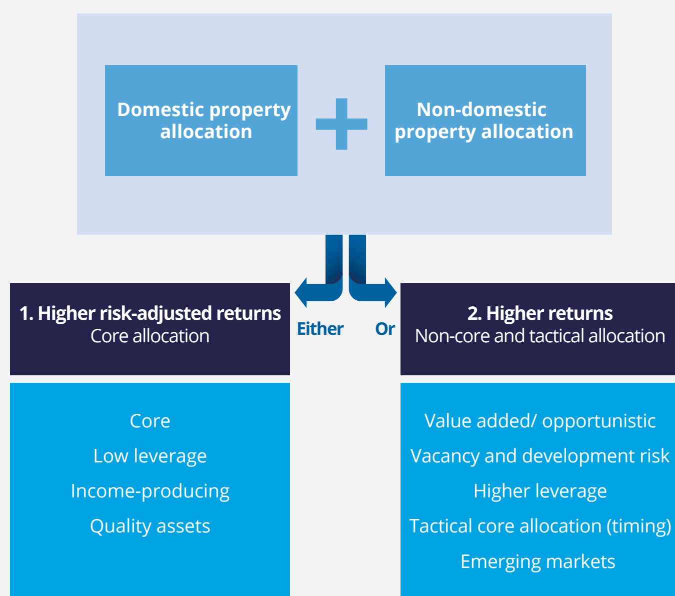
There are two separate return objectives for those investors considering an investment outside their domestic market.

a. Diversification and higher risk-adjusted returns (core-style allocation

or

b. High absolute returns (value add/development, leveraged)

Chart 2: Allocation – what are you looking for from property?



Source: Aberdeen Standard Investments, May 2018

In the short term, experienced investors may think that their domestic property market offers poor value; this often starts the drive to look for opportunities outside of their home country. Implicit in this is the use of the domestic return as the hurdle rate for non-domestic investment. We believe that this demand for a risk premium has led to some of the disappointment that investors have experienced when investing elsewhere.

Over the long term, higher inflation-adjusted returns are only available by taking on more risk; investors who keep their domestic market return as a hurdle are typically pushed up the risk curve when they invest elsewhere. A higher gross return is required in order to deliver a return net of fees and taxes – and those higher gross returns mean taking on more risk.

But focusing on just the return side of the equation seems likely to deliver potentially unwelcome outcomes. We suggest looking at:

- both risk and return
- diversification of the property portfolio
- diversification of the multi-asset portfolio.

This paper mainly focuses on enhancing risk-adjusted returns, but we also believe a good investment process can lead to higher absolute returns. As markets are not synchronised, a bigger investment universe provides different opportunities throughout the cycle, which allow investors to take advantage of mis-pricing in core non-domestic markets. Understanding the market cycle and areas of strong, structural demand relative to market supply can provide low-risk opportunities for value-add or development activities.

4. Higher risk-adjusted returns

Investing globally gives rise to the potential for higher risk-adjusted returns within the property portfolio and at the multi-asset level. The theory is straightforward: the non-domestic, global property portfolio outweighs a domestic-only property portfolio in terms of return per unit of risk.

If the correlation between the domestic and non-domestic portfolio was 1, there would be little reason to hold the domestic portfolio at all since doing so would lower the return per unit of risk. Given that the correlation between the domestic portfolio and the non-domestic portfolio is not 1, then it makes sense to hold some exposure to the domestic portfolio – thus creating a home bias. In general, the bias is likely to be higher than just the market weight.

The example in Table 1 shows a set of assumptions for a (hypothetical) domestic portfolio and a pan-European property portfolio, and how they could be combined when looking to maximise risk-adjusted returns.

The table demonstrates the theory of far higher risk-adjusted returns for the combined portfolio than for the domestic only portfolio, but the reality can be quite different. In Section 3, we look at the impact of leverage, fees and tax.

Table 1: The theoretical impact of adding non-domestic property to a domestic portfolio

Correlation = 0.5	Domestic %	Pan-Europe %	Combined %
Return	6.9	6.9	6.9
Std. Dev.	12.3	8.3	8.1
Return/risk	0.56	0.83	0.85
Weight in combined	15.0	85.0	100.0

Source: Aberdeen Standard Investments, May 2018

Assumptions	
Return	Annual return of Pan-European IPD index
Std. Dev.	Forward looking view on market standard deviation. Domestic = weighted average of country assumptions.
Correlation	Average correlation between European All Property indices

2. Risk reduction and diversification within a property portfolio

The benefits of real estate as an asset class are well known among most investors: attractive risk-adjusted total returns, a high and stable income return, and diversification benefits when held in a portfolio with equities and bonds. While these features are valid for the overall market, they don't always hold true for individual assets or smaller portfolios. As asset-specific risks (location, sector, tenant, building etc) are high for individual properties, a relatively high number of assets are required in a portfolio in order to replicate the favourable characteristics of the overall market. In this section, we will briefly look at two objectives when deciding appropriate portfolio size.

a) **Risk reduction** – how many assets are required for portfolio volatility to approach market volatility

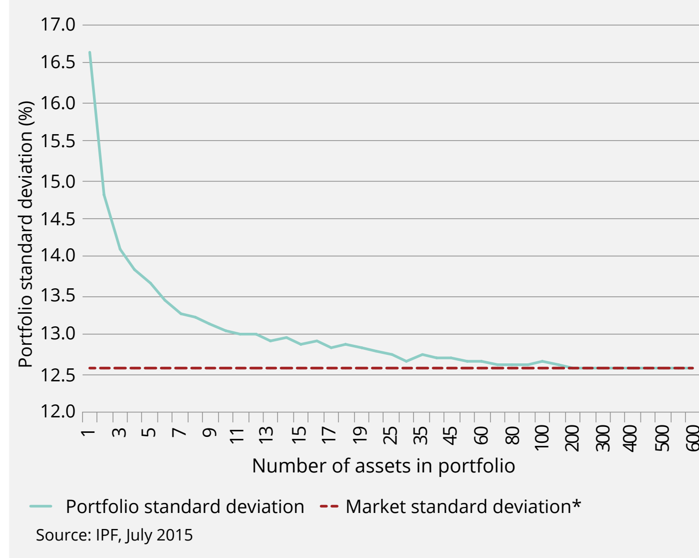
b) **Diversification** – how many assets are required in a portfolio in order for property market returns to be reflected in a specific property portfolio

a) Risk reduction

Based on analysis of the UK property market (see IPF, Individual Property Risk, July 2015), a portfolio of 100+ assets eliminates most asset-specific risks. The volatility of the overall portfolio (standard deviation of returns) converges with the market-level risk (Chart 3) and the asset-specific risk is virtually eliminated. But even a portfolio of just 20-30 assets can provide significant risk reduction. The number of assets required is dependent on lot sizes, the more unequal the lot sizes the higher the portfolio size required to reduce the risk. A low cross correlation of total returns between assets (given differences in location, sector, tenant type, lease structure) results in significant risk reduction.

An allocation across multiple regions (such as Europe or globally), rather than specific to a particular country, should lead to greater risk reduction benefits given lower cross asset correlations. This reflects the benefits of having a diversified portfolio across many countries with exposure to varying local economic conditions, interest rates cycles, and property lease structures (such as lease indexation, rental uplifts or lease lengths).

Chart 3: UK property: risk reduction and portfolio size



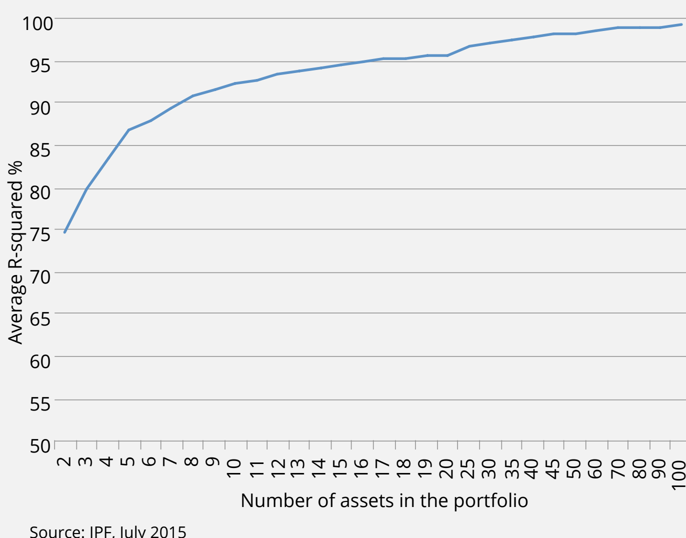
Source: IPF, July 2015

b) Diversification

A larger portfolio also leads to diversification – this is the degree to which overall property market returns determine the returns of a specific property portfolio. The smaller the portfolio size, the greater the asset-specific risk that drives the return of the portfolio. Chart 4 shows the R^2 of portfolio returns with market returns as the portfolio size increases for the UK for the period from 2002 to 2013.

A portfolio of only 20 assets results in an R^2 of over 95%. A portfolio of 100 assets results in an R^2 of over 99%. As a pan-regional or global portfolio is structured to be spread across multiple countries, it is unlikely to track local property market indices in each case, though a high R^2 is still to be expected (over 90%).

Chart 4: UK property: R square of portfolio returns with market returns



Source: IPF, July 2015

Allocation should deviate from benchmarks and deliver higher risk-adjusted returns

The result is an allocation that is different in structure to the property market universe in order to achieve portfolio outperformance. This can be achieved by combining the following aspects when constructing the property portfolio:

- **Strategic allocation:** long-term regional allocations should capture local investment risk and return leakage (i.e, taxes and fees)
- **Tactical allocation:** short-term opportunities take account of how local markets are priced
- **Investment themes and local market cycles:** bottom-up research on themes that shape strategic asset-level decisions, as well as awareness of the market cycle to aid tactical investment decisions.

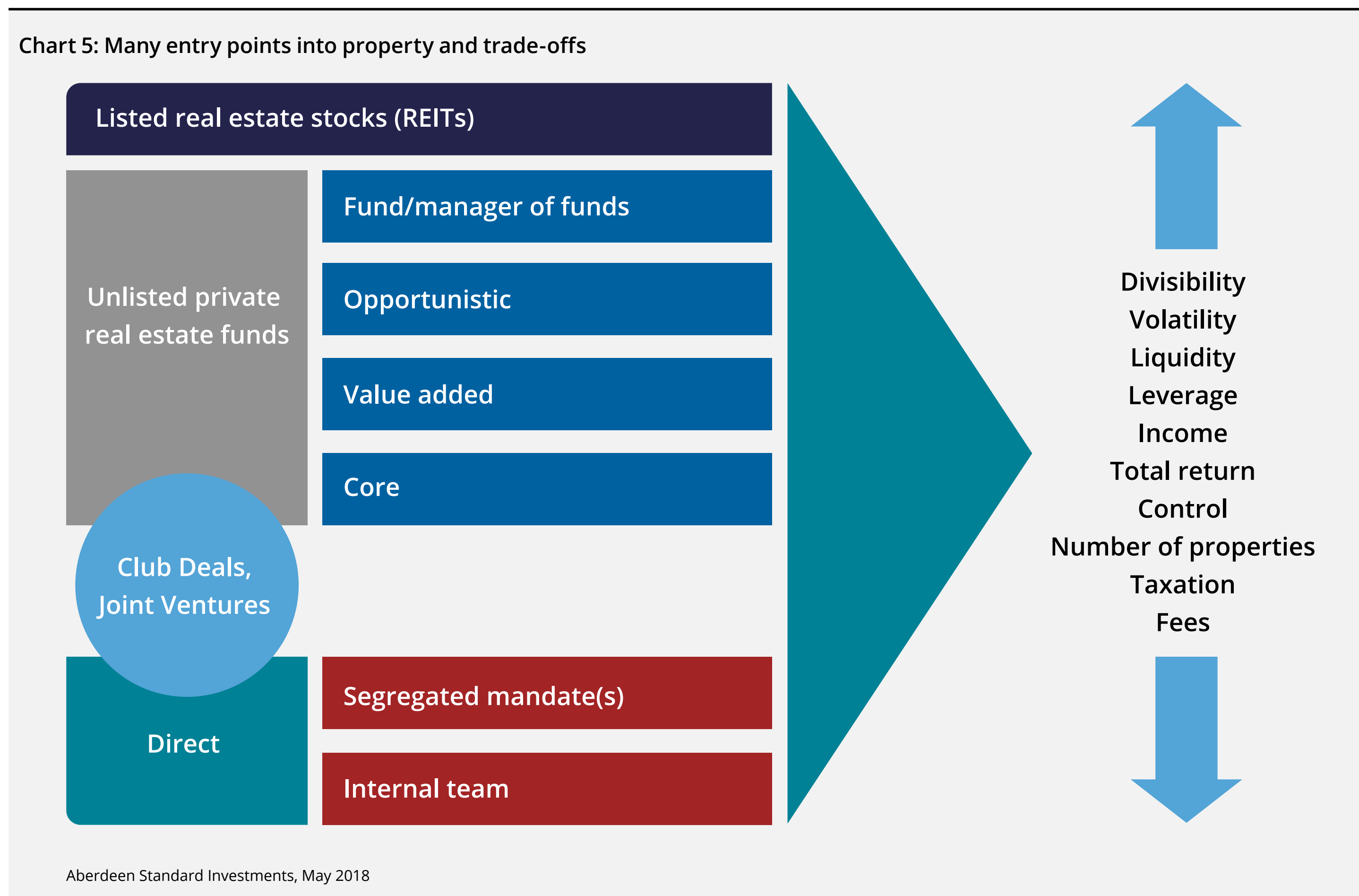
3. Access points to real estate

Investors need to consider how they intend to access property markets as this will determine whether an international or domestic solution makes the most sense, or if a blend of the two is more appropriate.

Entry points to property and trade-offs

As described in the section above, property portfolio performance will be dependent on portfolio size. This has implications for how investors should gain exposure to different markets: whether they should invest directly into non-domestic properties or gain exposure to indirect property investments. Investment size is not the only variable that plays a role when thinking about non-domestic investments; there are a series of trade-offs between risk, returns and liquidity (Chart 5).

Chart 5: Many entry points into property and trade-offs



Aberdeen Standard Investments, May 2018

Assuming that an investor wishes to diversify risk across countries and property sectors, a global or regional portfolio using the direct investment route is restricted to all but the very largest investors given the volume of capital required.

Indirect property investments access properties through public or private unitised vehicles. Public vehicles include real estate investment trusts (REITs); private vehicles include unlisted property funds or funds of funds. REITs have a high, short-term correlation with the stock market, but the medium-term return tends to be correlated with the underlying property market. This reflects the high dividends REITs pay to investors and their focus on income-producing assets. Unlisted funds, or funds of funds, tend to behave more like the underlying property market, with a lower correlation to stocks when looking at performance. But investors should be aware that unlisted funds can trade at a discount or premium to net asset value (NAV) depending on the point of the cycle, the reporting period for valuations, fund leverage and evidence for pricing.

Our white paper "Constructing a Global Real Estate Portfolio" will discuss in more detail the considerations that need to be made when building a regional or global portfolio.

Be aware of leverage, taxes and fees

Not only do the characteristics of the underlying property markets determine the optimal non-domestic allocation, but the choice of how to enter these markets is not a trivial one. Four key factors determine the extent to which an investor should have non-domestic property exposure.

1. Taxation (and its impact on return)

Going global is likely to mean that the returns available to domestic investors are not always available to non-domestic investors. While vehicles can be structured to minimise the leakage from tax, it is not possible to completely eliminate this drag on return. This is important because as the return on the global portfolio falls, its relative attractiveness falls too.

2 Fees (and their impact on return)

Accessing unlisted funds incurs a fee and this lowers the net return to the investor. Investing in a fund of funds will incur another set of fees for fund selection and management. That said, these costs are offset by the cost savings associated with not having to build an internal property investment team.

3 Currencies (and their impact on risks or returns)

Currency risks increase volatility, which is more important for core-type investments than for higher-risk strategies. Currency risks can be hedged, to some extent, but that will come with a cost and they can significantly reduce returns. For low-risk investors with the euro as their home currency, this may suggest that investing in other markets denominated in euros is preferable to a global allocation in other currencies and the associated risks.

Table 2 shows the same analysis as Table 1, but we adjust for slightly higher fees/costs for managing a European portfolio relative to a domestic one. We also include a tax leakage that reduces returns for the non-domestic portfolio by 0.8 percentage points per annum. Note that different fee levels and tax leakages vary significantly between investors, markets and legislations, and must be investigated on a case-by-case basis.

Table 2: A practical example of adding non-domestic property to a domestic portfolio

Correlation = 0.5	Domestic %	Pan-Europe %	Combined %
Gross return	6.9	6.9	6.9
- Management fee/cost	0.5	0.6	0.6
- Tax leakage	0.0	0.8	0.6
= Net return	6.4	5.5	5.7
Std. Dev.	12.3	8.3	8.2
Return/risk	0.52	0.66	0.70
Weight in combined	24.0	76.0	100.0

Source: Aberdeen Standard Investments, May 2018

4. Leverage (and its impact on risk)

Property investment vehicles may use leverage to some extent, but it tends to increase risk faster than it increases returns. Once leverage is added, the relative attractiveness of a core non-domestic portfolio tends to diminish as risk-adjusted returns are likely to fall.

Table 3: A practical example where the domestic portfolio is unleveraged while the European has 50% leverage

Correlation = 0.5	Domestic %	Pan-Europe %	Combined %
Gross return	6.9	9.1	7.7
- Management fee/cost	0.5	0.6	0.5
- Tax leakage	0.0	0.8	0.3
= Net return	6.4	7.7	6.8
Std. Dev.	12.3	16.6	12.0
Return/risk	0.52	0.46	0.57
Weight in combined	66.0	34.0	100.0

Source: Aberdeen Standard Investments, May 2018

Conclusion

Taxes, fees, currencies and market knowledge make it more challenging for property investors to invest abroad. Despite the hurdles, there is a clear advantage for most investors to explore these opportunities as they can improve portfolio performance by increasing absolute returns and/or risk-adjusted returns.

In this paper, we use a theoretical example with realistic assumptions to show what proportion of a property portfolio should be allocated to non-domestic property, if maximising the risk-adjusted return is the goal.
The non-domestic allocation varies from 85% (if no differences in taxes and fees are assumed), to 76% (when adjusting for fees and taxes), and to 34% (if we assume the non-domestic portfolio uses 50% leverage and the domestic allocation is unleveraged).

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