# The Erosion of the Real Estate Home Bias: A U.S. Case Study in Risk Diversification

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As an asset class, real estate investing typically has a high degree of home bias, especially when compared to equities and fixed interest. However, this real estate home bias is starting to erode, with asset owners in most countries already investing internationally or actively exploring the options for building offshore exposures. Some of these asset owners are motivated purely by pricing, but many are also seeking diversification. This trend towards offshore investing is running in parallel with greater scrutiny from investment risk managers who want to integrate real estate risk analysis with other asset classes. The perceived diversification benefits of investing internationally may motivate risk managers to increase international exposure, but there are variations from country-to-country and investor-to-investor when it comes to the potential benefits. In this Global Intel Report MSCI explores the diversification benefit of international real estate for the US market.

**Allocating From Home To Abroad**

Real estate asset owners have historically been more inclined to invest directly in local assets. This preference for local assets typically stems from both greater familiarity with local markets and regulations as well as well as from a desire to simplify asset management practices. However, the traditional home-biased focus of real estate investing is starting to change with the globalization of real estate being driven by the largest Sovereign Wealth and Pension Funds, many of whom have explicit global mandates. There is also a broader trend, driven by recognition of the potential diversification benefits of international real estate exposure to investors. Most of these investors have started to understand the role of real estate in a multi-asset-class context, and this perspective tends to increase the demand for international real estate, further eroding home bias.

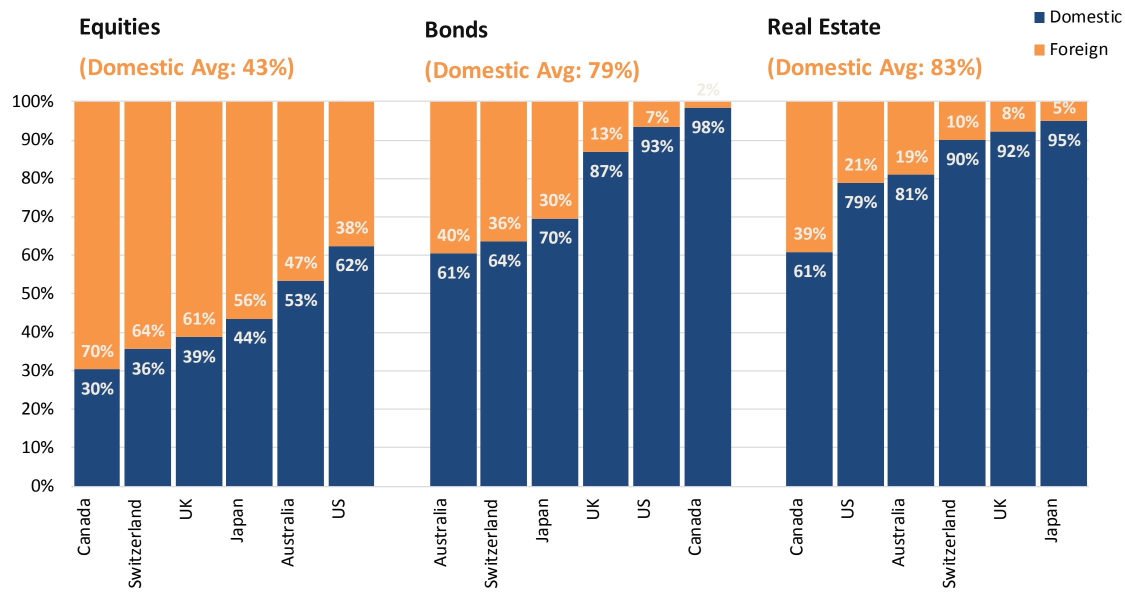



**Exhibit 1 Domestic and Foreign allocations across asset classes, 2013.**
Source: Towers Watson; MSCI Asset Owner Survey

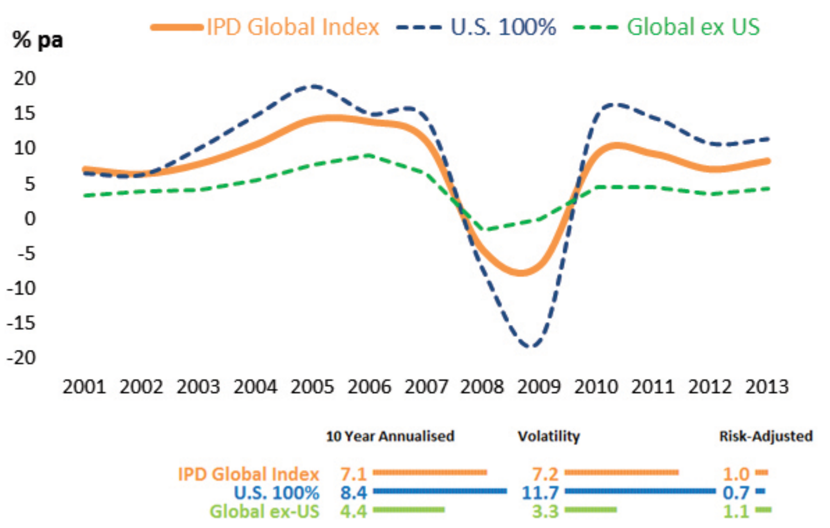
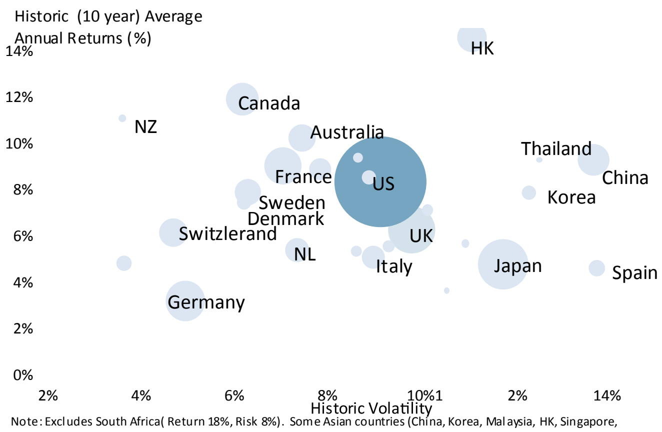



**Exhibit 2 Rationale for international real estate exposure: the US example, comparing US returns with the IPD Global Index and the IPD Global Index ex US**
Source: IPD

The appetite for international exposure across asset classes is demonstrated by surveys conducted by Towers Watson (for Equities and Bonds) and MSCI (for Real Estate). This work shows that the bias toward domestic investment is lowest for equities, but far higher for fixed income and for real estate. There is a logic for fixed income having a relatively strong home bias given its role in hedging domestic liabilities, but this appears somewhat less intuitive for domestic real estate as a hedging asset.

The trend of investors increasing exposure to international real estate raises questions about unforeseen risk implications, particularly in terms of how much overseas real estate is allocated in a portfolio, its geographic location risk, and the leverage that might be employed. The global financial crisis (GFC) taught investors that international diversification can be used to mitigate the risks of a strong downturn in an individual country. The GFC also revealed the extent to which inter-and intra-country correlations may increase in a crisis, emphasizing the need for truly diversified global investment strategies to mitigate portfolio risk. The significant benefits of international diversification are illustrated in the chart that shows the return implications of different global exposures. Exhibit 2 compares the performance of the IPD Global Index with that of the IPD US Index (in blue) and the IPD Global Index series ex-US (in green). At a glance, it is possible to see the greater volatility of the US, particularly during the GFC. The chart also suggests that the IPD Global ex-US generates lower return but for far lower risk than a pure US exposure, leading to a higher return per unit of risk for ex-US exposure. This illustrates the benefits of international diversification, which are compounded when correlations benefits are taken into account.

One of the central benefits of international real estate is the significant differences that persist between countries. These differences are captured in Exhibit 3, which shows the historic return against the volatility of the main markets covered by the




Note: Excludes South Africa( Return 18%, Risk 8%). Some Asian countries (China, Korea, Malaysia, HK, Singapore, Taiwan and Thailand) based on returns over 7 years.

**Exhibit 3 Risk/Return characteristics of major global real estate markets.**
Source: IPD

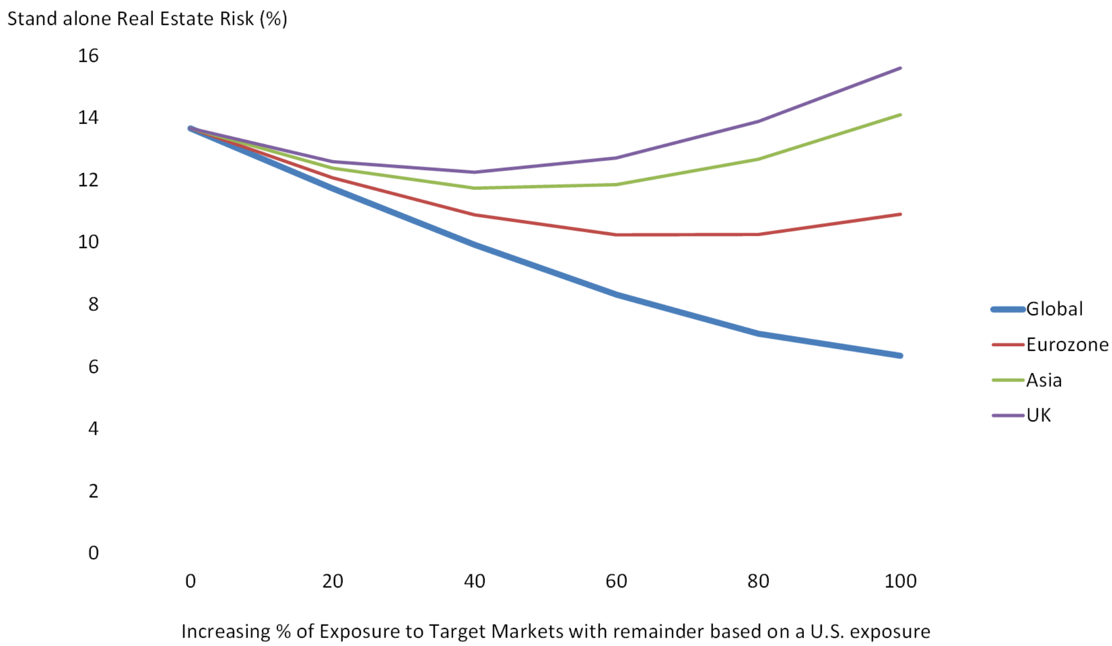
| Portfolio Weights | | Global (ex USA) LTV | | | | |
|---|---|---|---|---|---|---|
| USA LTV 20% | Global (ex USA) | 0% | 20% | 40% | 60% | 80% |
| 100 | 0 | 13.66 | 13.66 | 13.66 | 13.66 | 13.66 |
| 80 | 20 | 11.56 | 11.73 | 12.02 | 12.61 | 14.54 |
| 60 | 40 | 9.55 | 9.92 | 10.57 | 11.94 | 16.42 |
| 40 | 60 | 7.68 | 8.32 | 9.42 | 11.73 | 19.01 |
| 20 | 80 | 6.10 | 7.06 | 8.68 | 11.99 | 22.05 |
| 0 | 100 | 5.08 | 6.35 | 8.46 | 12.70 | 25.39 |

Risk decreases through country diversification

Risk increases with addition of leverage

Note: Table assumes LTV = 0.2 for the USA Real Estate portfolio. Table varies LTV for the 30-country Global (ex USA) portfolio via short USD position. Calculations assume that currency risk is hedged for the Global (ex USA) portfolio vs USD base currency

**Exhibit 4 Varying the nature of international real estate exposure for US investors.**
Source: IPD




Note: Risk estimates based on different international real estate exposures, assuming 20% leverage for domestic exposure and 20% leverage for international exposure. Source: MSCI Research

**Exhibit 5 Risk implications of exposure to different international real estate markets: The case of a US investor diversifying overseas.**
Source: IPD

MSCI's Barra risk model, with the size of the bubbles representing the size of the real estate markets. This chart shows that the US has tended to generate slightly below average performance with high volatility that contrasts, for instance, with France and Sweden, which have tended to generate higher returns for lower volatility. Although the chart excludes the issue of correlations between markets, it suggests that a US investor with overseas real estate exposure might benefit from risk reduction, while a German investor might benefit from return enhancement. The relatively high risk and low return Japan-based investor might, in contrast, benefit from both return enhancement and risk reduction from international exposure.

In the context of these different behaviors, it is possible to explore the trade-off between US and non-US real estate, and the implications of adding different levels of leverage to the international exposure. In this case, a loan-to-value ratio of 20 percent is assumed for the domestic real estate portfolio, taking the overall stand-alone risk up to 13.66 percent. The table in Exhibit 4 shows, in the green highlighted area, the impact of increasing the international real estate exposure by 20 percent increments with no leverage being added to the international exposure. This demonstrates the significant reductions in risk, from 13.66 percent for full domestic exposure to about 5 percent for full international exposure.

The table also shows the impact of increasing leverage for different levels of international exposure. In all cases, the addition of leverage increased risk but, for international exposure up to 40 percent, loan-to-value can be increased to 60 percent and result in a lower level of overall risk than a purely domestic portfolio. The table also shows that high levels of leverage, generally loan-to-value over 60 percent, had a significant impact on overall risk levels.

These results demonstrated that market selection has significant risk implications. Given the relatively high volatility of the UK and its correlations with the US, there are smaller risk reduction benefits in building a purely UK international exposure.

The benefits were far greater for a Eurozone exposure, but the most significant benefits arose from exposure to the full range of markets in the IPD Global Index. Clearly, there was a range of scenarios that could be generated, but these examples illustrated the benefits of international exposure and how they could help drive portfolio construction as well as helping measure the risk of actual exposure.

**Conclusion**

The real estate home bias is starting to decline, with asset owners in many countries already investing internationally, or actively exploring the options for building such exposure. This trend is running in parallel with more risk managers seeking to integrate real estate risk analysis with other asset classes in their portfolios. The diversification benefits of investing internationally can significantly reduce the risk of real estate exposure. As always with real estate, the implications vary from country to country and investor to investor. A range of other factors also need to be considered, such as return objectives and the risks associated with implementation and market pricing. But these trends, complemented as they are by the increasing availability of real estate platforms through which investment can take place, are set to further erode the home bias that has, until recently, been a major characteristic of the real estate asset class.

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Max Arkey works in product management at MSCI Real Estate where he heads up indexes and market information products. These analytics are mission critical to the investment process for 19 of the top 20 largest global asset managers, all the way through to specialized domestic investors.

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