

The performance implications of adding global listed real estate to an unlisted real estate portfolio: A case study for UK Defined Contribution funds.

Executive summary

This paper seeks to provide a better understanding of the performance implications for investors who choose to combine listed real estate with an unlisted real estate allocation. Specifically, it provides a detailed investor level analysis of the impact of combining UK unlisted fund and global listed real estate fund exposures to satisfy the requirements of a real estate allocation in a UK Defined Contribution Pension fund.

The catalyst for this paper was the recent report by the Pensions Institute: “Returning to the core: rediscovering a role for real estate in Defined Contribution pension schemes”. This highlighted both the rationale for real estate in DC funds, and specifically, the use of a blended product, which combined a 70% UK unlisted allocation with a 30% global listed allocation, to provide this exposure. We call this 70/30 mix a DC Real Estate Fund.

In addition there are currently three factors which are of utmost importance to investors, which lie behind the increased interest in blending listed and unlisted real estate:

- i) Liquidity
- ii) Cost
- iii) Ease of implementation

One of the key challenges for both asset allocators and product developers is how to provide real estate exposure in a mixed asset portfolio with acceptably high levels of liquidity and low levels of cost. Clearly, a 100% exposure to unlisted funds or direct real estate would not be expected to meet this demanding criteria.

Key Questions : In this paper we set out to answer the following questions:

- * **Return enhancement:** What is the “raw” performance impact of adding listed real estate to an unlisted portfolio?
- * **Risk adjusted impact:** What is the impact on portfolio Volatility and Sharpe Ratio?
- * **Tracking error:** Does adding a global listed element significantly increase the tracking error of the portfolio relative to a UK direct property benchmark?
- * **Currency impact:** Does adding a global listed portfolio introduce a material currency risk into portfolio returns?
- * **Cash drag:** What is the impact on returns and volatility of adding cash to the portfolio?
- * **Risk attribution:** What adjustments are necessary to understand the true relative contributions to portfolio risk?
- * **Portfolio contribution:** Does this blended real estate product provide the diversification benefits of real estate in a multi-asset portfolio?

Differences from other studies

BLENDING LISTED AND UNLISTED REAL ESTATE

Firstly, we have taken actual fund data rather than index data i.e. we are analysing deliverable returns to investors. Similarly, by using fund data not only are we seeking to capture the impact of identifiable costs at all levels, but also provide a structure which has minimal implementation issues at a practical level. We rebalanced the portfolio quarterly so as to meet the target allocations (including a cash holding), and took account of resultant transaction costs.

Secondly, rather than use a single period, or peak to trough periods, we have broken down the study into an analysis during distinct stages of the cycle and over the full horizon (15 years).

Thirdly, our dataset comprises UK unlisted funds and global real estate securities funds, whereas previous studies have looked at the performance impact of combining listed and unlisted indices of the same country.

Finally, our study is seeking to provide greater understanding of the resultant impact of incorporating a real estate asset exposure for a specific investment requirement, namely the UK DC pension fund market.

Conclusions

*** Return enhancement:** Over the past 15 years a 30% listed real estate allocation has provided a total return enhancement of 19% (c. 1% p.a. annualised) to our unlisted real estate portfolios. Over the past 10 years this was 43% (c. 2% p.a. annualised), a result which is consistent with the previous Consilia Capital study. Over five years the enhancement is c. 4% p.a. annualised, amounting to +390% in absolute terms).

*** Risk adjusted impact:** The price of this enhanced performance and improved liquidity profile is, unsurprisingly, higher portfolio volatility, of around 2% p.a., from 6.4% to 8.4%. However, because of the improved returns, the impact on the Sharpe ratio is limited.

*** Tracking Error.** We found that there is an additional 4% tracking error cost vs. the direct UK real estate market when including 30% listed allocations. We believe that this is surprisingly small given that the listed element comprises global rather than purely UK stocks. We also find that c. 1.3% tracking error arises for a well-diversified unlisted portfolio highlighting that pure IPD index performance is unachievable. This tracking error rises to 2% if subscription costs are included.

*** Currency impact:** We found that the annual difference in returns and volatility between a hedged and an unhedged global listed portfolio over the 15 year period of the study was not material.

*** Cash drag:** We found that the impact of adding a 5% cash buffer to the portfolio was to reduce annualised returns over the period by 0.6%, from 7.7% p.a. to 7.1%, and reduce volatility from 8.4% to 8%.

*** Risk attribution:** While the volatility of listed exposure is well-known, it is equally well-recognised that the true volatility of unlisted funds is greater than commonly stated. We refined our measurements for risk by accounting for non-normalities and valuation smoothing and found that unlisted funds contributed to a greater share of overall risk.

*** Portfolio contribution.** We modelled the impact of using our DC Real Estate Fund rather than 100% unlisted exposure in a mixed asset portfolio of equities and bonds. The impact was extremely similar, and marginally better if unsmoothed data was used as a comparable, modestly raising the Sharpe ratio for the mixed asset portfolio over the 15-year period, whether a 10% or 20% real estate weighting was used.

Authors

Alex Moss: alex.moss@consiliacapital.com

Kieran Farrelly: kfarrelly@townsendgroup.com

The full paper is for EPRA members only. Contact Fraser Hughes: f.hughes@epra.com