

Fund characteristics have a strong impact on fund returns which vary across market cycles

- > Optimal fund size ranges from €1.2 billion to €4.3 billion, averaging €2.2 billion
- > Fund age at 10 years delivers an excess return of 4.5% per annum on average over the investment horizon
- > Gearing at 20.5% delivers an additional excess return of 3.7% per annum
- > Macroeconomic variables are strong drivers of fund returns

A proper assessment of non-listed real estate risk factors is crucial given the rapid development of this market over the last few decades. Such assessment requires a comprehensive evaluation of macroeconomic risk factors impacting non-listed real estate fund performance, as well as taking into account fund specific characteristics and the evolution of the business cycle.

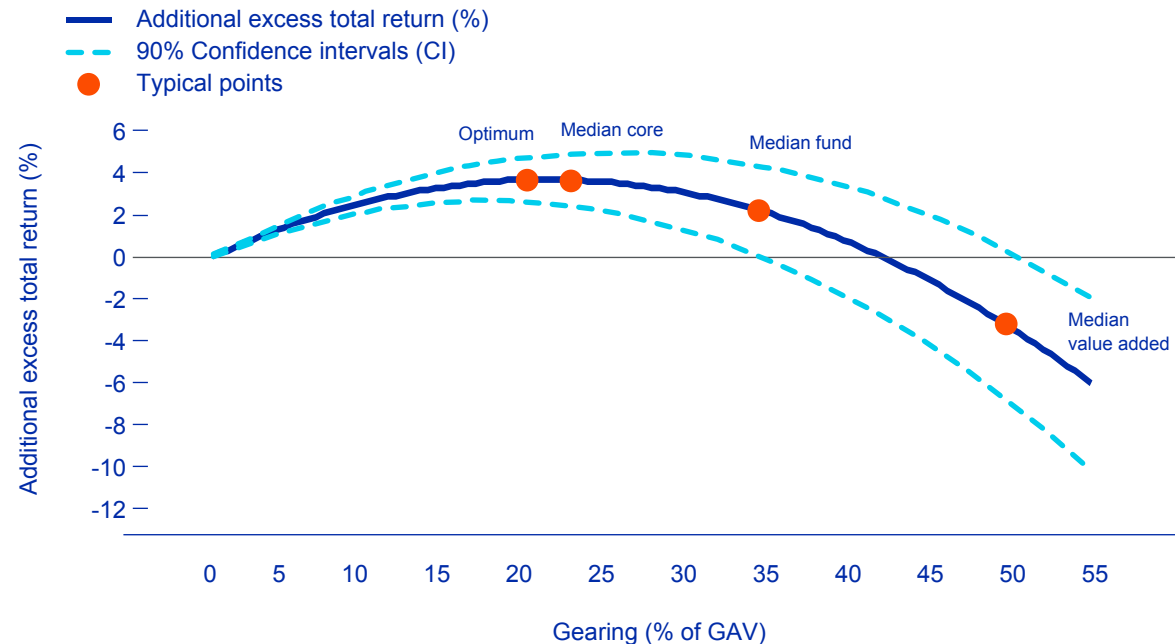
This study explores the drivers of non-listed real estate fund returns, with a focus on those invested in the United Kingdom, Germany, the Netherlands, France and Italy over the period 2001 to 2014. The analysis also differentiates observations by sector of investment, and controls for fund characteristics such as size, gearing, age, as well as investment type and structure.

Results show that fund characteristics are of great importance to fund returns. While differences exist across countries, no statistical differences were found across sectors. The analysis further highlights that there is an optimal fund size in the range from €1.2 billion to €4.3 billion, suggesting that only the largest funds in the sample actually have

an adequate size to deliver excess returns. An optimal gearing level also exists and most funds were overleveraged given the evolution of real estate markets during the period. Further analyses showed that the optimal gearing level varies with respect to market

phase and investment style, where value added funds are more sensitive than core funds. Therefore, fund managers should have the flexibility to adjust gearing levels according to investment style and market phase.

Figure 1: Impact of gearing on non-listed real estate fund returns



Source: INREV, authors' calculations

Vehicle structure also matters; open end funds outperform closed end ones during crisis periods and closed end funds display a specific relationship with respect to age. The optimal investment horizon for these funds is around 10 years and should not exceed 13 years. A fund with an investment horizon of 10 years can expect the highest average yearly return of 4.5%. For an investment horizon exceeding 13 years, the total investment value decreases.

Macroeconomic risk factors also affect fund performance, with real GDP growth, interest rates, inflation components, money supply and stock market returns having the most significant impact. A yearly 1.0% increase in GDP growth yields a 2.9% additional excess fund return over the risk-free rate on average, but differences exist across investment styles.

For a 1.0% variation in inflation or money supply, the impact on fund returns is 5.6% and 0.4%, respectively. A relative variation of 1.0% in the interest rate is linked with an average decrease in fund returns of -0.007%. For a 1.0% increase

‘Fund managers should have flexibility in adjusting gearing according to investment style and market phase’

in stock market performance, fund returns would increase by 0.3%, but not across all countries.

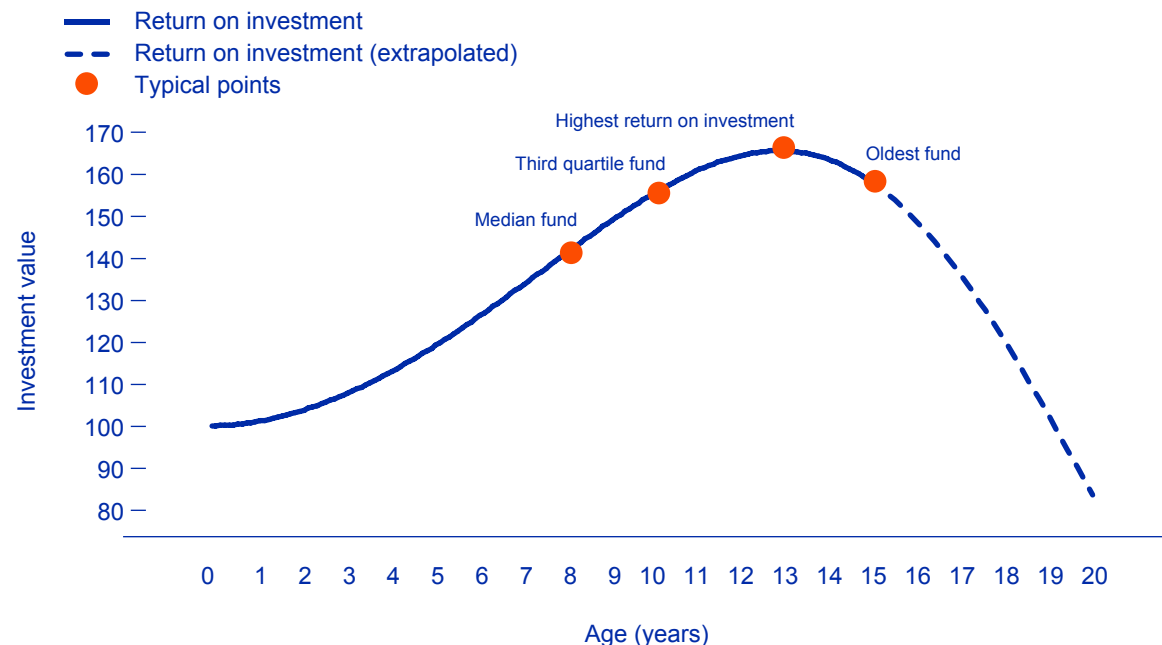
The same analysis was also performed for listed and direct real estate investments, suggesting that the three kinds of real estate exposure react broadly in the same way to macroeconomic risk factors. However, listed real estate investments seem to be more responsive to macroeconomic risk factors

than non-listed funds and direct investments. Meanwhile, non-listed funds are more akin to direct real estate than to listed real estate securities indicating that non-listed funds allow for an exposure to real estate which is more comparable to that of direct investments than to listed.

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Figure 2: Impact of age on the value of an investment in non-listed closed end funds



Source: INREV, authors' calculations