Background
Public real estate markets in Europe have performed strongly over the last few years and this strong performance has rekindled investor interest. It was not always like this, as Figure 1 shows, in the early part of the decade companies were still recovering from the recession that gripped commercial property markets around the globe. The performance of the public real estate sector reflected the poor state of the underlying commercial market. During the second half of the last decade the economic fundamentals had improved though most investor focus was now concentrated on growth stocks and the public real estate markets suffered as a result. However, the highlight has undoubtedly been the last few years.

Performance and diversification
European real estate assets provided excellent diversification benefits to portfolio investors. This is especially true following the 2000 stock market decline. In this latter period, adding real estate to a mixed asset portfolio increases return and decreases risk. While this is not true for every country in the EPRA dataset, it is consistent with USA NAREIT data and thus we believe that it is a general, not isolated, effect.

Figure 2 shows the rolling annual total returns (on a monthly basis) for each month since January 2000. While the performance for real estate securities was lower until the stock market decline, real estate has outperformed the overall stock market in every month following November 2000.

European real estate securities have performed well, although some countries have experienced poor returns over the last 15 years. In terms of the last decade, from June 1995 to June 2005, Belgium and Switzerland experienced the lowest returns. However, for each European country in the sample, the average return on the EPRA real estate index exceeded that of the MSCI equity index on a risk-adjusted basis (Figure 3, next page). The best performing markets were France, Sweden and Spain. This may be due to local market conditions, the smallness of our sample data in some countries or to individual company influences—one of the key limitations of this study is the smallness of the sample. However, USA REIT studies suffered from the same issues
in the 1980s and it was only in the mid-1990s that a substantial number of REITs were available for study. France has added SIICs (a form of the REIT) and Germany and the UK are considering REIT legislation—we would expect that this would encourage more publicly listed real estate firms in Europe.

All major indices, except for Sweden, kept pace or exceeded inflation rates. This does not imply that real estate is an inflation hedge, but it is one measure of riskiness for an asset. The EPRA real estate portfolio did well on this measure.

Real estate continues to behave as a defensive asset. It follows the market on soft downturns, but not as strongly, and has proven counter-cyclical during the major adjustment of 2000. During the 1998 and the February 2002 through June 2003 adjustment, both stocks and real estate fell in performance but real estate showed less of a decline. During the general market adjustment of June 2000 through October 2001, the market fell considerably, but the EPRA real estate index grew in value at a solid pace. We believe that the defensive nature of real estate is one of its key benefits and provides diversification potential for investors. The defensive nature of real estate is in large part due to a solid cash flow of dividends.

**Portfolio analysis**

In the table that follows, the impact of adding an increasing amount of real estate to a portfolio containing equities, bonds and cash is shown. For every country as more real estate is added to the portfolio the average return of the portfolio increases (moving from portfolio 1 to portfolio 3). In portfolio 1, the asset allocation does not include real estate, 50% of the portfolio is in equities, 40% in bonds and 10% in cash. In portfolio 2, the proportion in equities and bonds drops to 45% and 35% respectively and 10% of the portfolio total is invested in the EPRA index in each country. In the third portfolio (portfolio 3), the proportion invested in real estate is increased to 20% of the total, while the amount in equities and bonds falls to 40% and 30% respectively. In almost all cases the total risk (standard deviation) of the portfolio falls. The exceptions are Spain, Italy and the UK, where risk increases slightly.

**Correlation analysis**

In order to gain a more detailed understanding of the relationship between the different asset classes a correlation matrix is calculated for each country. A feature of this analysis is a high average correlation between equities and real estate securities (0.47). However, as the analysis in the section above demonstrated, despite this high correlation real estate securities do provide diversification benefits to investors. Real estate has a higher positive correlation to the bond market (average correlation 0.12) than does the stock market and this may reflect the income characteristics of public real estate securities. Also real estate is more sensitive to increasing cash rates than is the overall stock market (average correlation of -0.11 compared to -0.02 for stocks).

**Summary**

This study has also shown that despite a large correlation with equities, investment in public real estate markets provides European investors with good growth opportunities and the potential to reduce risk by combining it with other assets in a well-diversified portfolio.