Abstract

Past studies on the impact of direct real estate in a mixed-asset portfolio used securitised real estate return or valuation indices return as a proxy for real estate. However, there is a controversy over the relationship between securitised real estate market and the real estate market. Similarly, the use of valuation returns for portfolio performance measurement and analysis has been a polemical issue. Therefore, this study uses actual real estate market transaction data to evaluate the impact of real estate in a mixed-asset portfolio. After a review of the relevant literature on the topic, data from the Singapore market from 1992 to 2001 were statistically analysed. It was found that real estate generally outperformed other assets, albeit having the lowest coefficient of variation. However, stock and bonds had better performances than real estate during periods of declining property market. Furthermore, the results confirm the findings of past studies that real estate has a weak or negative correlation with stocks and bonds. Thus, real estate has a positive impact on the return of a mixed-asset portfolio. However, in a declining property market condition, the inclusion of real estate in a mixed-asset portfolio had a negative or very minimal positive impact on return. Finally, it was found that with a quarterly portfolio return of 0.42% and risk of 2.10%, about 34% of fund is allocated to residential real estate during the entire period.

Key words: Returns, risk, correlation, real estate transaction data, allocation