SUMMARY

Although the portfolio theory has been introduced more than 40 years ago, its application to real estate is a recent one, especially in Asia. This is possibly due to the complexity of real estate as an investment media and the lack of information on real estate in this part of the world. This study aims to assess portfolio diversification benefits in Singapore through diversification strategies by property type and locality over the 1988-1996 period. It also assesses whether such diversification benefits differ during the period of general property price increases (1993-1996). To isolate the influence of location factor that may distort the results, portfolio diversification by property type is only conducted within the Central Region of Singapore.

Using data from the Urban Redevelopment Authority Real Estate Statistics Series and Real Estate Research Reports over the period from 1988 to 1996, the study found that both portfolio diversification by property type and property locality yield diversification benefits. However, diversification by property type is a better approach and should be adopted as part of real estate investment strategies. This is because its efficient frontier is located farther north-west of all other efficient frontiers constructed based on diversification by locality. This means that with a given level of risk, a higher return can be achieved using portfolio diversification by property type. This outcome is possibly caused by the heterogeneous nature of different property types which gives rise to low correlation of coefficients. The return of one property type in one locality is highly correlated to the same property type located in another locality due to small geographical region of Singapore. Sensitivity analysis conducted to study the impact of using prime yields for properties located in non-prime areas also reveals no adverse effect on the findings. In view of these, the first hypothesis that diversification by property type has better diversification benefit cannot be rejected.

The result of the portfolio diversification during the 1993-1996 period shows that there are diversification benefits to be gained even in the period of general rise in property prices. This is due to lower correlation coefficients between different property types. Portfolio diversification during this period therefore remains important and the hypothesis that little benefit can be derived from diversification in the period of general property price increases cannot be supported.