ABSTRACT

Real estate performance measurement is essential for the making of property investment decisions. However, given the characteristics of real estate and its market, there is a lack of transaction data and the tendency to rely on appraisal data for the measurement of real estate performance. Moreover, there is an increasing need for macro level property valuation of property portfolios. In view of this, there is a growing concern of appraisal smoothing at the disaggregate and aggregate levels of valuation and its effects on valuation accuracy. There is also a necessity to create an optimal index that gives a reliable and accurate proxy of property values.

Therefore this study seeks to make a comparison between transaction, valuation and de-smoothed price indices to determine which is more accurate and makes a better proxy for price, if price is used as a measurement for accuracy.

After a review of the relevant literature of the topic and statistical analysis of data which are germane to the study, it was found that valuation accuracy is enhanced after application of an autoregressive model to de-smooth the valuation property returns. It also affirms the findings of past researchers/ studies that after de-smoothing, the volatility of the price index is increased. It is also more highly related to market returns than the valuation price index.

The study also shows that the confidence factor of appraisers, parameter "p", has a large impact on the extent of de-smoothing. The application of a higher parameter results in less de-smoothing.