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ABSTRACTS

Statistics - Analysis, Modeling, Forecasting and Optimization - Applied in real estate valuation

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Abstract

Understanding statistics has become important once the methodology for evaluating each property has been merged with global assessment techniques. Thus, a link has been created between purely mathematical models used in the evaluation, market conditions and property analyzed.

This paper aims to highlight the importance of the use of statistics in real eastate valuation and also the determination of statistical modeling using differents techniques.

The article presents both the descriptive statistical part and the inferential statistics part. Descriptive statistics deal with the use of graphs, tables, and data synthesis sizes to describe a sample or population of data. Inferential statistics involve the use of sample data as the basis for formulating opinions (inferences) about a population represented by that sample. Statistical inferences include, among other things, the estimation of the central trend and dispersion of a current population, the prediction of the results and the detection of the underlying cause-effect structure.

Credible modeling through mathematical statistics includes determining enough data, residual analysis, analysis of the variables that is included in the final model and in the validation of the model.

This article applies statistical methods for improvements or even to automate the valuation process of real estate properties. Of course, the use of statistical models and more special statistical process applications provides extra support in formulating the opinion on the market value of the subject property.