

Abstract

Having at hands instruments capable of effective housing appraisal can be essential not only for the real property evaluator in a bank, policy maker or real estate agent, but also for single individual seeking for an objective way to assess the tenure choice decisions. The housing market data are of a spatial nature. We address the spatial issues by implementing spatial modelling techniques into a hedonic price model. The main focus of the thesis is put on building a kriging model, which shows to be a powerful tool in explaining and predicting the prices of housing in the Prague at market. The kriging model comes out the best from the comparison of performance with the traditional spaceless hedonic pricing model as well as the common econometric spatial models. The usefulness of our kriging model is demonstrated in a possible application as the extension of the net present value model of the optimal tenure choice for a prospective first home owner. In a simplified economic scenario we found that the optimality of the tenure choice depends on the inflation, expected holding period as well as the precise location of the flat in the Prague.