

Abstract

This thesis studies the housing market in Ireland within the Heterogeneous Agent Model (HAM) framework. The choice of Ireland for empirical research is motivated by the impact of the recent property bubble on whole Irish economy. At first, the thesis shows general features of HAMs and provides overview of relevant literature. Subsequent survey of behavioral aspects influencing market agents suggests presence of heterogeneity on housing markets. The behavioral evidence for heterogeneity shows why HAMs are good choice for studying those markets. For estimation of the model, we use the Irish data covering the period between 1978 and 2014. Important feature of the HAM used in this thesis is the switching between fundamental and momentum strategies. Because the fundamental value has crucial role in the model, we considered its four approximations in our estimations. The estimation results imply that the housing market agents in Ireland are heterogeneous. Interestingly, the nature of strategies used by the agents in the estimated model are dependent on the method of fundamental value approximation. Additionally, the agents switch to the strategy which performed better in previous periods. The simulations with estimated models are able to replicate the market fluctuations. Moreover, the simulations show how switching between strategies influences price dynamics. The results of this thesis provide important evidence for suitability of HAMs for housing markets and markets with long cycles in general.

JEL Classification C61, D84, R31, E32

Keywords real estate market, Ireland, heterogeneous agent model, market dynamics, behavioral finance

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