Improving and extending the OTB house price model in the Netherlands

Keywords: home-ownership, house prices, long term, equilibrium, the Netherlands, model, dynamics

OTB Department / Housing Studies

Area of Research: Housing market

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Main question:
Is the current house price fair? How to model house price dynamics?

Research Summary: The housing market in the Netherlands is quite a special case when compared with 'the mainstream housing markets' such as the US, where the market is highly liberalized. Indeed, rigorous regulation and strong government intervention are the most distinguishing features of the Dutch housing market. The previous OTB house price model is established on the basis of affordability in the sense of maximum borrowing capacity, which is closely linked to the Dutch tax deduction policy. With the intention to better explain historical price movement and to forecast future prices, the research project focuses on improving and extending the OTB house price model. For instance, we are interested in the long term equilibrium of house prices, market dynamics, impacts of government intervention, and ripple effects among regions. The 2008 crisis turns over the tide of increasing house prices, which motivates the question how the house price will behave in different scenarios. One challenge is to reach an appropriate model for the house prices.

Research Methodology: In the existing literature, house prices have been mainly investigated in the context of competitive markets. To reach an appropriate model under regulation, essential market features will be considered and incorporated to the modeling process. In terms of empirical methodology, time series econometrics will be applied.

Deliverables: A house price model to better explain and forecast the house price movements in the Netherlands.

Link: www.otb.bk.tudelft.nl

Key Publications:
– Tu, Q., de Haan, J. & Boelhouwer, P. (2014), House price and long term equilibrium in the Netherlands. Paper presented at the ENHR 2014 Conference, Edinburgh, 2014.
– Boelhouwer, P., de Haan, J. & Tu, Q. (2014), Improving and extending the Dutch house price model. Research proposal presented at the ENHR 2014 Conference, Edinburgh, 2014.
– Tu, Q., de Haan, J. & Boelhouwer, P. (2016) The mismatch between conventional house price modeling and regulated markets: Insights from The Netherlands, Journal of Housing and the Built Environment, pp. 1–21. doi:10.1007/s10901-016-9529-y
– Tu, Q., de Haan, J. & Boelhouwer, P. (2017): House prices and long-term equilibrium in the regulated market of the Netherlands, Housing Studies, DOI:10.1080/02673037.2017.1346786

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