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An agent-based model for the assessment of LTV caps

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Abstract

We assess the effects of regulatory caps in the loan-to-value (LTV) ratio for housing mortgages using an agent-based model. Sellers, buyers and banks interact within a computational framework that enables the application of LTV caps to a one-step

housing market. We first conduct a simulation exercise; later, we calibrate the probability distributions based on actual European data from the Household Finance and Consumption Survey. In both cases, the application of an LTV cap results in a modified distribution of buyers in terms of property values, bidding prices and properties sold, depending on the probability distributions of the LTV ratio, wealth and debt-to-income ratios considered. The results are of similar magnitude to other studies in the literature embodying other analytical approaches, and they suggest that our methodology can potentially be used to gauge the impact of common macroprudential measures.

Keywords: [Agent-based models](#), [Macroprudential policy and house prices](#), [Household survey](#)

JEL codes: [D14](#), [D31](#), [E50](#), [R21](#)

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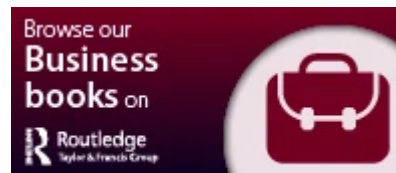
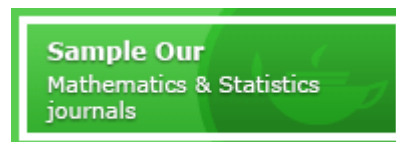
Disclosure statement

No potential conflict of interest was reported by the author(s).

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