

Loan Supply and Asset Price Volatility: An Experimental Study

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Abstract : This paper investigates credit cycles by means of an experiment based on a Kiyotaki & Moore (1997) model with heterogeneous expectations. The aim is to examine how a credit squeeze caused by high lender-level risk perceptions affects the real prices of a collateralised asset, with a special focus on the macroeconomic implications of rising price volatility in terms of total welfare and the number of bankruptcies that occur. To do that, a learning-to-forecast experiment (LtFE) has been run where participants are asked to predict the future price of land and then rewarded based on the accuracy of their forecasts. The setting includes one lender and five borrowers in each of the twelve sessions split between six control groups (G1) and six treatment groups (G2). The only difference is that while in G1 the lender always satisfies borrowers' loan demand (bankruptcies permitting), in G2 he/she closes the entire credit market in case three or more bankruptcies occur in the previous round. Experimental results show that negative risk-driven supply shocks amplify the volatility of collateral prices. This uncertainty worsens the agents' ability to predict the future value of land and, as a consequence, the number of defaults increases and the total welfare deteriorates.

Keywords : Behavioural Macroeconomics, Credit Cycle, Experimental Economics, Heterogeneous Expectations, Learning-to-Forecast Experiment

Conference Title : ICEE 2022 : International Conference on Experimental Economics

Conference Location : Dubai, United Arab Emirates

Conference Dates : February 15-16, 2022