Finite Bubbles in Ambiguous Updating

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Abstract

This paper presents two players' equilibrium model in which bubbles of security prices occur in finite time even when both players know that the prices are bubbles. We firstly describe a Bayesian model with asymmetric information mainly based on Conlon (2004, Econometrica) and secondly extends it to non-Bayesian setting in which players cannot identify the true probability but a set of probabilities with ambiguity aversion employing epsilon contamination. We proved that in non-Bayesian approach bubble prices rise more steeply than those in Bayesian and increase sharper and sharper as time passes if players update the ambiguous probabilities.

Keywords: Bubble, Asymmetric Information, Ambiguity, Epsilon contamination, Updating.