Research Seminar "Quantitative Economics"

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Abstract

Existence and Uniqueness of Recursive Equilibria with Aggregate and Idiosyncratic Risk

Abstract
In this paper, I study the existence and uniqueness of recursive equilibria in economies with aggregate and idiosyncratic risk. Rather than relying on compactness to establish existence, I exploit the monotonicity property of the equilibrium model and rely on arguments from convex analysis. This methodology does not only give rise to a convergent iterative procedure, but more strikingly, it also yields uniqueness. To illustrate my theoretical results, I establish sufficient conditions for the existence and uniqueness of solutions to the stochastic growth model with heterogeneous agents as in Krusell and Smith (1998).