Type-Symmetric Randomized Equilibrium

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Monday, November 30, 2015

Abstract

We introduce the notion of type-symmetric randomized equilibrium (TSRE) into economic theory, and demonstrate its formulations and roles in theories of large games and of large exchange economies. A TSRE requires that all players with the same type of characteristics choose the same randomized choice, and reveals a generic microfoundation for the macro notion of solution used in the literature. In particular, we show that if the space of agents' names is modeled by the classical Lebesgue unit interval, any Nash (or Walrasian) equilibrium distribution is uniquely determined by one TSRE in a large game (or economy, respectively). Through examples, we also show that this uniqueness characterization fails for a non-Lebesgue name space. Finally, we discuss the relationship of all equilibrium notions in a large game where a saturated name space is assumed.