

Replica Core Equivalence Theorem: An Extension of Debreu-Scarf Limit Theorem to Double Infinity Monetary Economies*

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Abstract

An overlapping generations model with the double infinity of commodities and agents is the most fundamental framework to introduce outside money into a static economic model. In this model, competitive equilibria may not necessarily be Pareto-optimal. Although Samuelson (1958) emphasized the role of fiat money as a certain kind of social contract, we cannot characterize it as a cooperative game-theoretic solution like a core. In this paper, we obtained a finite replica core characterization of monetary equilibria. Preferences are not necessarily assumed to be ordered.

KEYWORDS: Monetary Equilibrium, Overlapping Generations Model, Core Equivalence, Replica Economy, Non-Ordered Preference

JEL Classification: C71, D51, E00

*We wish to express special gratitude to professor Takashi Hayashi (Glasgow University) for his important comments and advice. We are also grateful for comments by professors Tomoyuki Kamo (Kyoto Sangyo University), Atsushi Kajii (Kyoto University) and Tomoki Inoue (Meiji University), and to participants in Poster Session at Seinan Gakuin University (October 11, 2014, Autumn Meeting of Japanese Economic Association). A part of this research was supported by the Grant-in-Aid for Scientific Research from the Japan Society for the Promotion of Science in 2013 (No.25380227) and Osaka University Cross-Boundary Innovation Program.

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