On the Existence and Uniqueness of Pure-Strategy Nash Equilibrium in Asymmetric Rent-Seeking Contests

Takeshi Yamazaki*
Department of Economics, Niigata University
8150 Ikarashi 2-no-cho, Niigata-shi 950-2181, Japan
E-mail: tyamazak@econ.niigata-u.ac.jp

Published in *Journal of Public Economic Theory*

Abstract

There can be three types of heterogeneity among players in a rent-seeking contest. First, the effectiveness of agent's effort on the winning probabilities may differ among players. Secondly, players may evaluate the rent or prize of the rent-seeking contest differently. Thirdly, players may face different financial constraints. This article proves under standard assumptions in the literature that there exists a unique pure-strategy Nash equilibrium in a general asymmetric rent-seeking contest with these three types of heterogeneity among players.

JEL Classification Numbers: C72, D43, L13.
Key Words: Rent Seeking, Nash Equilibrium, Uniqueness

* An earlier version of this article was circulated as “On the Existence and Uniqueness of Pure-Strategy Nash Equilibrium in Rent-Seeking Games with Budget Constraints.” I would like to thank Kojun Hamada, Koji Okuguchi, Ferenc Szidarovszky, and an associate editor and two referees of this journal for invaluable comments and suggestions on various versions of this paper. All remaining errors are of course mine.