The Lingering Effect of Capacity Coordination on Firm Behavior in Post-depression Periods: Evidence from a Laboratory Experiment*

Keisaku Higashida†
School of Economics
Kwansei Gakuin University, Japan

Kenta Tanaka
Faculty of Economics
Musashi University

Abstract

This study experimentally examines whether capacity coordination in depression, which is sometimes allowed under antitrust laws, influences the firm behavior in periods after demand recovers. Following Hampton and Sherstyuk (2012), we conducted a series of laboratory experiment by adopting the two-stage capacity-price decision-making duopoly setting. We adopted three treatments in terms of capacity coordination: no coordination, weak coordination, and strong coordination. Under the strong coordination treatment, the subjects cannot deviate from the coordinated capacity, which they can do so under the weak coordination treatment. The results of the experiment indicate that the experiences of success and failure of coordination influence subjects' capacity choices during periods after demand recovers even if capacity coordination is not allowed in those post-depression periods. In particular, capacity may be greater in the post-depression periods than in the pre-depression periods under the weak coordination.

Keywords: Capacity coordination, demand shocks, lingering effect, laboratory experiment.
JEL Classification: K21, L41.

---

* We are grateful to Tomohiko Inui, Tadashi Ito, Jan Hagemejer, and the participants of 43rd Eastern Economic Association Annual Conference. We also acknowledge the financial support from the Murata Science Foundation and the JSPS under Grant-in-Aid for Scientific Research (B, 25285075)

† Corresponding Author. Address: 1-155. Ichiban-cho, Uegahara, Nishinomiya, Hyogo, 662-8501, JAPAN. E-mail: keisaku@kwansei.ac.jp