

A Spatial Theory of Ostracism*

Tomohiko Kawamori[†]

Faculty of Economics, Osaka University of Economics

Kazuo Yamaguchi[‡]

Faculty of Economics, Rissho University

January 22, 2015

Abstract

We investigate a variant of Hotelling–Downs model such that politicians choose their policies under ostracism where each voter votes to a politician whose policy is least preferable for him, and the politician who obtains the most votes is expelled. We present a necessary and sufficient condition for a strategy tuple to be a Nash equilibrium and show that in any Nash equilibrium, politicians’ policies are same. We identify the equilibrium policy set in the sense that a politicians’ policy tuple is a Nash equilibrium if and only if the all policies in the tuple are same and in the equilibrium policy set. We also show that under mild assumptions, the equilibrium policy set is a superset of the set of medians in all directions, bounded, closed, convex, increasing in the number of politicians, convergent to the convex hull of support of voters’ ideal policy distribution as the number of politicians tends to infinity, and nonempty in sufficiently large population of politicians.

Keywords: Ostracism, Hotelling–Downs model, Spatial theory of election

JEL classification: D72, C72

*The authors are grateful to Hiroaki Ino, Taiju Kitano, Toshiji Miyakawa, and Masahiro Shoji for their useful comments.

[†]Faculty of Economics, Osaka University of Economics, 2-2-8 Osumi, Higashiyodogawa-ku, Osaka 533-8533, Japan. kawamori@osaka-ue.ac.jp.

[‡]Faculty of Economics, Rissho University, 4-2-16 Osaki, Shinagawa-ku, Tokyo 141-8602, Japan. kazuoyamaguchi@ris.ac.jp.