Competition in Two-Sided Markets: An Aggregative-Games Approach*

Susumu Sato†

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This article develops an aggregative-games framework for studying asymmetric platform oligopoly in two-sided markets. Using a model of platform choice that has a unique stable consumption equilibrium, I derive an IIA demand system for two-sided platforms that generalizes multinomial logit models. Then, I represent platform competition as an aggregative game and apply it to three competition analyses: platform dominance, platform mergers, and long-run equilibrium with fringe entry. The dominance of a large platform is associated with a higher consumer surplus on one side only when the consumers benefit from both network effects and two-sided pricing. The merger analysis demonstrates that network effects serve as a synergy but also make large mergers harmful to consumers, and the pre-merger price structure provides useful information on the effects of two-sided pricing. In an equilibrium with fringe entry, any change in competitive environments that benefits consumers on one side hurts consumers on the other side.

Keywords: Aggregative games; network effects; two-sided markets; dominance; mergers; free entry

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†Institute of Economic Research, Hitotsubashi University. 2-1 Naka, Kunitachi, Tokyo 186-8603, Japan. E-mail: susumusato.econ@gmail.com