

# Tariffs, Vertical Oligopoly and Market Structure

Tomohiro Ara\*

Arghya Ghosh†

Fukushima University

University of New South Wales

September 2016

## Abstract

What is the relationship between domestic competition policy and international trade policy in the presence of vertical specialization? Should the government liberalize entry in its domestic final-good market in order to enhance an effect of liberalization in input trade? To address these questions, we develop a vertical oligopoly model in which the relative thickness of upstream and downstream markets plays a key role in welfare evaluations. In our model, a Home government imposes tariffs on imported input from Foreign upstream firms, and simultaneously restricts entry of Home downstream firms. Since Home and Foreign countries are vertically interdependent in this setting, trade policy has a crucial impact not only on Foreign firms, but also on Home firms through “firm-colocation” effects. We find that, in the short-run equilibrium, the optimal tariff is higher, the thicker is the Home final-good market (relative to Foreign input market). In the long-run equilibrium, however, this relationship is overturned and the optimal tariff is higher, the thinner is the Home final-good market. This finding suggests that reduction of import tariff for Foreign input has its greater effect on welfare when accompanied by liberalization of entry in the Home final-good market in longer-term perspectives.

**Keywords:** Tariffs, Vertical Oligopoly, Free Entry

**JEL Classification Numbers:** F12, F13

Very preliminary and incomplete

---

\*Faculty of Economics and Business Administration, Fukushima University, Fukushima 960-1296, Japan. *Email address:* tomohiro.ara@gmail.com.

†School of Economics, UNSW Business School, University of New South Wales, Sydney, NSW, 2052, Australia. *Email address:* a.ghosh@unsw.edu.au