

Tariff Escalation when Environmental Damage Matters

Yoshitaka Kawagoshi^{a*} and Yasuhiro Takarada^b

^a Faculty of Economics, Kyoto Sangyo University, Japan; ^b Faculty of Economics, Nanzan University, Japan.

* Motoyama, Kamigamo, Kita-ku, Kyoto 603-8555, Japan. Email: kawagosh@cc.kyoto-su.ac.jp

Abstract

This paper examines how environmental damage affects tariff escalation in vertically related markets. Using a two-country oligopoly model with final- and intermediate-good firms, we first show that tariff escalation arises even without environmental externalities because a tariff on the final goods extracts rents from both foreign final- and intermediate-good firms. Incorporating emissions from production, we find that the optimal tariff gap depends on the origin and cross-border nature of pollution. Local emissions from domestic final-good production narrow the tariff gap and may eliminate tariff escalation, while emissions from domestic intermediate-good production widen it. When emissions are global, increases in environmental damage uniformly strengthen tariff escalation.

Keywords: Tariff escalation, vertically related market, environmental damage

JEL classification: F13; F18; D43