Dumping Behavior and Anti-Dumping Laws in an Infinite Horizon International Duopoly Model[◆]

by

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Abstract

We present an infinite-horizon international-duopoly model, with the assumption that current output choices affect the probability of anti-dumping enforcement and the magnitude of anti-dumping duties, and examine both exporting and importing firms' dynamic behavior. We solve for a Markov Perfect (Closed-Loop) Equilibrium, where the state variable at each period is the expected anti-dumping penalty, given in that period, and a strategic effect is also considered. We show that equilibrium dumping still exists even under the threat of anti-dumping duties, that it is compatible with price-equalization under the Closed-Loop regime, but not under the Open-Loop one, and that it can increase social welfares for both countries.

JEL classification numbers F13, L11, L13.

Key Words Dynamic Duopoly, Dumping, Anti-Dumping Laws, Markov Perfect Equilibrium, Strategic Effect

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REFERENCES

- Blonigen, B and J, Park (2001) "Dynamic Pricing in the Presence of Antidumping Policy: Theory and Evidence," *NBER working paper* No.8477.
- Brander, J and M.Spencer (1984) "Trade Warfare: Tariffs and Cartels", *Journal of International Economics* May 16, 227-242.
- Farrell, J., and E.Maskin (1989) "Renegotiation in Repeated Games," *Games and Economic Behavior* 1, 327-360.
- Fudenberg, D and J.Tirole (1987) *Dynamic Models of Oligopoly*, Fundamentals of Pure and Applied Economics.
- Fudenberg, D and J, Tirole (1991) Game Theory, Chapter 13.Cambridge, MA: M.I.T Press.
- Harrington, J (2002) "Cartel Pricing Dynamics in the presence of an Antitrust Authority," mimeo-graphed, Johns Hopkins University.
- Maskin, E and J, Tirole (1987) "A Theory of Dynamic Oligopoly 3: Cournot Competition". *European Economic Review.* 31, 947-68.
- Ministry of Economy, Trade, and Industry (METI). "Policy Information: United States
 —Anti-Dumping Measures on Certain Hot-Rolland Steel Products From Japan: First
 Submission of The Government of Japan (Public Summery)" http://meti.go.jp/
- Prusa, T. (1994)"Pricing behavior in the presence of anti-dumping law" *Journal of Economic Integration*, 9
- Reizes, J (1993) "Anti-dumping policy". International Economic Review, November 34 (4). 745-63.
- Staiger, R. and F, Wolak (1992) "The Effect of Domestic Anti-dumping law in the presence of Foreign Monopoly". *Journal of International Economics*, May 32 (3-4), 265-87.
- Tirole, J (1988) Theory of industrial Organization. Cambridge, MA: M.I.T Press.