跨國性污染下最適環境及貿易政策之分析

Optimum Cross-border Environment and Trade Policy :　A Case of Imperfect Competition

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摘要：本文建構了一個同時顧及貿易、市場結構及跨國性污染三大課題的模型架構，來探討本國政府極大化社會福利的最適關稅政策之制訂。當本國需求曲線不會過於凸向原點的情況下，若本國政府關心環境保護的課題時，本國政府應提高進口關稅稅率。當本國面對兩個來自不同經濟開發程度國家的外國廠商之進口時，本國政府應對已開發國家的產品課徵較低的關稅。此外，在本國政府對外國獨占廠商的進口品課徵固定稅率的關稅且兩國政府不合作的情況下，外國政府的最適環境政策為對污染性投入課徵污染稅。

關鍵詞：庫諾-奈許競爭、跨國性污染、最適環境政策

Abstract: This paper discusses the optimal environmental and tariff policies in the case where a country, in absence of domestic producers must choose among various alternatives designed to mitigate pollution level abroad. Assuming linear demand and cost structures with n suppliers engaging in Cournot-Nash competition (quantity), the optimal tariff rate is greater than $1/n$ of that if there were only one supplier. For $n = 2$ with different economic developmental stages, the optimal discriminatory

tariff rate is higher for the supplier from less-developed economy as the manufacturing process generates more pollution, For $n = 1$ (monopoly) and with non-coordination and fixed tariff rate, the optimal environmental policy is for the foreign country to levy pollution tax on her producer. In the case of full coordination, the optimal environmental policy is indeterminate, i.e. either a tax or a subsidy could serve the exceeds the welfare due to reduced level of pollution, the optimal tariff under non-coordination scheme is greater than that under coordination assumption. The reverse also holds true in terms of consumers surplus and domestic welfare.

Key words: Cournot-Nash competition, cross-border pollution, optimal environmental policies