

Harmful or Beneficial? Environmental Technology Transfer under Fiscal Competition*

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Abstract

To achieve economic development and environmental protection, prospective host countries of foreign direct investment must introduce superior environmental technologies in addition to hosting a multinational enterprise (MNE). This study theoretically investigates the relationship among fiscal competition between two asymmetrically sized potential host countries in a region (one large and the other small), environmental technology transfer by the country outside the region, and regional welfare. One local firm exists only in the large country, and both countries design lump-sum fiscal policies to attract the MNE. We find that the county outside the region in which the headquarters of the MNE is located does not have an incentive to unilaterally transfer clean technology to the local firm when fiscal competition is absent, whereas it has such an incentive when fiscal competition is present. When clean technology transfer does not lead to a location change, it increases the welfare of the country in which the MNE is not located and may decrease the welfare of the country in which the MNE is located. When clean technology transfer brings about a location change, regional environmental damage may increase. Moreover, we consider the case in which the large country with a local firm offers a side-payment for clean technology transfer.

Keywords: Fiscal competition, Technology Transfer, Transboundary Pollution

JEL Codes: F15, F18, F23, H25, Q56

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