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Theoretical Analysis of Local Public Finance, Taxation, and Expenditure

Pigouvian Taxes with Market Structures

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Abstract

This paper employs Cournot's model of complementary goods to analyze the optimal Pigouvian taxation under joint and independent ownership with externalities. When the marginal damage is small (large), a Pigouvian taxation is unnecessary (necessary), because the quantity (environmental) distortion is more serious than the environmental (quantity) distortion. This finding has never been presented in the literature. In contrast to Cournot (1838), a striking result is that independent ownership may be welfare superior to joint ownership when the marginal damage of externality is large in the absence of governmental intervention.

Keywords: Pigouvian taxation, Market structure, Joint ownership, Independent ownership

JEL Classification Numbers: H23, L10

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