

# **Endogenous Commodity Taxation Under Asymmetric Information: A Signalling Approach**

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Optimal tax theory and public choice theory differ sharply on the design of commodity tax systems; the former stresses the optimality of nonuniform taxes based on the Ramsey rule, while the latter approach advocates a system of uniform commodity taxes in order to preclude lobbying activity. This paper suggests that, in an environment characterised by asymmetric information, such lobbying activity may have socially beneficial effects by revealing private information. To illustrate this possibility, incomplete information is introduced into a model of endogenous commodity taxation (in which taxes are determined through a political process involving lobbying). Interest groups (defined by their consumption tastes) are assumed to have private knowledge concerning their price-responsiveness of demand. Separating Perfect Bayesian equilibria, in which the government learns each group's elasticity by observing its lobbying intensity, are shown to exist, and to be unique under reasonable assumptions. The conditions under which the taxes in the lobbying equilibrium approximate the (Ramsey) optimal taxes more closely than does the uniform tax (imposed in the absence of lobbying) are derived.

**JEL Classification:** D72; H21; D82

**Keywords:** Commodity Taxation; Lobbying; Asymmetric Information

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