

Pass-Through and the Welfare Burden of Taxation in Differentiated Oligopoly*

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Abstract

This paper studies the welfare burden of unit and ad valorem taxes in symmetrically differentiated oligopoly with non-linear demands and non-constant marginal costs. The general formulae for the marginal welfare loss from a change in tax rate are provided under both price and quantity competition by using such empirical concepts as the pass-through rate. We then show that the ad valorem tax pass-through rate can be expressed in terms of the unit tax pass-through rate. Finally, we show that the unit tax pass-through rate is expressed only in terms of the demand elasticities and curvatures, and the second derivative of the cost function, meaning that the welfare burden of taxation is completely characterized by these demand and supply primitives.

Keywords: Oligopoly; Product differentiation; Unit tax; Ad valorem tax; Welfare; Pass-through; Elasticities; Curvatures.

JEL classification numbers: D43; L11; L13.

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