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Presentation Title
Optimal Non-Linear Taxation of Internalities
(with Andreas Gerster)

Abstract

A growing literature has shown that behavioral biases influence consumer choices. So-called internalities are ubiquitous in many settings, including energy efficiency investments and the consumption of sin goods, such as cigarettes and sugar. In this paper, we use a mechanism design approach to characterize the optimal non-linear tax (or subsidy) for correcting behaviorally biased consumers. We demonstrate that market choices are informative about biases, which can be exploited for targeting biased consumers via a non-linear tax schedule. We derive sufficient statistics for approximating the optimal non-linear tax and use them to characterize the properties of the optimal tax schedule. Our results also demonstrate when a policy maker should employ quantity regulation rather than linear corrective taxation, which can be understood as two polar cases of the optimal non-linear taxation problem. Furthermore, we show that the implementability of optimal non-linear internality taxes requires that there is a minimum alignment between consumers' perceived preferences and the normative stance of the policy maker. We apply our findings by determining the optimal non-linear subsidy for energy efficiency in the light bulb market.

Keywords
Optimal commodity taxation; non-linear taxation; behavioral economics; public economics; internalities

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