Is there an Expert-Induced Demand for Tax Evasion?

Carla Marchese* and Andrea Venturinii*

Università del Piemonte Orientale*
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Game theoretic approach (Lipatov, 2012)
Motivation and basic insights

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What should we learn from the physician-induced demand for health care literature?

Both physicians and tax advisors are not necessarily "perfect agents"
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- Proportional tax system, with sanctions on the evaded tax

The expected return per unit of evaded tax is

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\rho = \left( 1 + \frac{s}{p} \right) > 0
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Taxpayers are plagued by a biased perception of the probability of audit

\[ r = [1 - \phi(p)(1 + s)] > 0 \]
Rank-dependent utility approach: an example
Diversity of circumstances implies that both over and underestimation of $p$ can occur.
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Comparative static:

$$\frac{\partial E^*(s, t)}{\partial s} < 0 \quad (1)$$

$$\frac{\partial E^*(s, t)}{\partial t} > 0 \quad (2)$$
Contracting with the tax preparer

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- The sharing of information between the parties renders the breaching of the contract and/or whistle-blowing unlikely.
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\[ B(\overline{E}) = rt\overline{E} - g(\overline{E}) - [rtE^* - g(E^*)] \]

Since \( E^* \) is given, the marginal benefit depends only on the suggested evasion \( \overline{E} \) on the market.
Example of the total benefit of suggested evasion
The demand price is the slope of the total benefit.
It becomes negative when evasion is larger than the optimal one.

Lemma

*The participation constraint is never binding.*
Unbiased and biased demand for

\[ \phi(p) > p \]
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The market equilibrium

- We have worked out the case in which $\varphi(p) > p$
- Competition is in per capita quantities
- We show that second order conditions are compatible with concave or convex demand and the stability condition is satisfied
- The equilibrium price is:

$$P(\bar{E}^*) = c \left[ 1 - \frac{1}{n\eta} \left( \frac{E^* - \bar{E}^*}{E^*} \right) \right] = c\mu$$

**Lemma**

*The equilibrium price is decreasing in the absolute value of the elasticity and in the number of tax preparers, while it is increasing in the absolute value of the percentage difference between the suggested evasion and the evasion amount the representative taxpayer would have chosen without advice.*
hp: \( \varphi(p) > p \) and also the tax preparer risks a sanction proportional to the taxpayer’s evaded tax

**Proposition**

*Whenever \( f(p) > p \), increasing the sanction on the taxpayer is more effective than increasing the sanction on the tax preparer.*

- Intuition: the mark-up is larger. The effect is reinforced if demand is convex.
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The Tax Agency only observes \( E \) and \( E \).

Tax preparation has ambiguous effects with respect to tax compliance. Targeting the clients of a tax preparer can pay only if the latter specializes.
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THANK YOU!