

Cyclical **Tax Enforcement**

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Tax Enforcement (I)

- Most **people dislike paying taxes**, although they enjoy public goods (or some of them)....
- The best strategy of rational individuals is behaving as **free-riders**. Thus, it is not a matter of bad or good guys, but of smart guys=rational individuals!... well, maybe you can call them immoral guys, ok (role of *tax morale*).
- Being that the best individual strategy does not mean it is the optimal **collective action** (Nash eq. is suboptimal)... Social welfare can be improved by means of forcing the payment of taxes

Tax Enforcement (II)

- Note, though, matters would be relatively easy if governments were able to tax individuals according to their ability-to-pay: **lump-sum taxes**
- However, such a characteristic is not observable or verifiable, since individuals do not have the right incentives to reveal it
- That is why, the public sector has to base taxes on **proxies of the ability-to-pay**: consumption, wealth... and the most important one, income

Tax Enforcement (III)

- The problem of this alternative (to lump-sum taxes) is that **taxpayers might react:**

- **Real responses:** e.g., decreasing labor supply or savings
- **Evasion/Avoidance:** cheating the tax administration breaking (estimation: real challenge) or not the law

Most of current empirical literature concludes non-real responses are the most important ones (<https://equitablegrowth.org/in-conversation-with-emmanuel-saez/>)

Tax Enforcement (IV)

- If this is so, maybe governments should focus more on closing tax loopholes (as a source of avoidance) or... increase **tax enforcement** as a way to reduce evasion (and check the legality of avoidance).
- Obviously, there are **limits** as tax enforcement is costly, while some loopholes are needed to adjust the definition of the tax base to tax capacity, but also to promote certain welfare-enhancing behaviors

(Open question 1: would it be ok having a **tax amnesty** “regularly”?)

Tax Enforcement (V)

- We are going to take as granted the tax administration (so, no longer the public sector or the government in general) is in charge of **enforcing tax compliance**
- The main instrument in hands of the tax administration is the **audit probability, p** .
- Allingham and Sandmo (1972) were the first authors analyzing how individuals react to changes in p . Basically, they set an analogy between **evasion** and **a gamble**.

Tax Enforcement (VI)

- This means that taxpayers will bet (see whether they can certainly skip paying taxes) as long as their expected benefits are greater than expected costs. That is, **if evasion is a fair gamble to the taxpayer:**

$$\text{tax-rate} > p(\text{tax_rate} + \text{fine}) > 0$$

That is, they will evade if the expected benefits (LHS) are larger than expected costs (RHS).

(Open question 2: how could tax evasion be fully and easily avoided?)

Tax Enforcement (VII)

- If tax-payers are risk-neutral, and as long as evasion is a fair gamble, tax compliance will be null.
- However, this is not what we might expect: individuals tend to be **risk-averse**. That is, from the model above, the conclusion is that in equilibrium tax compliance will be an interior solution $(0,1)$.
- Still, such a model has a problem... in fact, we economists when we realize the predictions of theory do not match with reality, call it a **paradox** (dividend, voting... and now, evasion).

Tax Enforcement (& VIII)

- Here, the paradox consists of the fact that the level of evasion predicted by the model (based on numerical simulations) is much larger than what we observe in reality.
- Main **explanations**:
 - Tax morality
 - Withholding taxes, or even
 - Patriotism

Final thought: technology might help in the medium term to reduce or to fully eliminate the extent of evasion. Will see!

How all this connects with the rest of the seminar

- In the previous model, we took p as given... here we will set a model to obtain the “**optimal**” p
- On top of that, the running model of AS (1972) is a static model: this is the key difference with our model, which empirical relevance we also test. Hence, we analyze the role of tax enforcement along time, and in particular along the **economic cycle**...

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