Tax Evasion, Quality of Public Expenditure and Deterrence: A Theoretical Model.

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Abstract

Every government cares of citizens’ satisfaction and should aim to make them as happy as possible. What people like more is paying low taxes and consuming as many public goods as possible. Once a government is elected, however, it deals with serious constraints that usually make it impossible to realize these dreams. The main constraint is the public budget, often affected by debts and restrictions, among which tax evasion is the most hotly debated. Fighting tax evasion is an electoral slogan beyond political faiths because a Government able to reduce tax evasion has more chances to be re-elected.

In the seminal work by Alligham and Sandmo (1972) the individual decision to evade taxes is modeled as a gamble, and tax evasion is found to be negatively correlated to penalty and the probability of detection. However, the main frontier today is rather to consider tax evasion as the final decision of a much more complex iter involving both intrinsic individual motivations and purely economic incentives (see Slemrod, 2007).

Among external incentives, the empirical literature on the effects of enforcement on taxpayers’ behaviour has come up with conflicting results. DeBacker et al. (2015) show that tax audits reduce tax compliance immediately after audit. Conversely, Beer et al. (2019) find that taxpayers receiving an additional tax assessment report higher taxable income in the first year after audit.

An alternative approach has focused on tax morale to be intended as an application of the so-called "exchange equity” theory: accordingly, tax- payers comply if they feel that the utility gained from the consumption of public goods matches the amount of taxes paid to finance them; if not, they try to restore equity through tax evasion. Exchange equity finds support on both theoretical (Bordignon, 1993) and experimental grounds (Alm and Mal ́ezieux, 2021; Torgler, 2002).

We put these two lines together and investigate how the effectiveness of tax enforcement affects the relationship between tax compliance and the quality of public expenditure. Assuming that tax evasion is negatively corre- lated to citizens’ satisfaction on Government’s action, we use a simple model in which a revenue-maximizing Government sets the tax rate and choose to finance a public project among two, where one project Pareto dominates the other. Accordingly, we say that the Pareto-dominating (resp. Pareto- dominated) project is of high (resp. low) quality. A single taxpayer always evades with positive probability and otherwise decides whether to pay/evade taxes after observing the tax rate, but not the quality of expenditure (unless he pays a monitoring cost). High-quality expenditure is more expensive than low-quality spending, but worth the cost from a taxpayer’s perspective.

Assuming that the provision of high-quality expenditure is socially efficient, we find that the tax rate is set low enough to push the taxpayer to pay if the enforcement is very effective; otherwise, the taxpayer evades and the government has interest to set the highest possible tax rate. In both scenarios, the taxpayer never monitors and the quality of expenditure is set low. Surprisingly, the probability of detection does not affect the existence of equilibria where the government mixes between high- or low-quality expenditure, which only depends on the monitoring cost; nevertheless, the probability of detection shows an unexpected negative effect on the probability that quality is set high in these equilibria and, in turn, on social welfare.

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