Ethnic diversity, Decentralization and Tax Morale: An experimental Analysis

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Abstract

Following Becker (1968), the classical model of tax evasion (Allingham and Sandmo, 1972) assumes that individuals are amoral decision makers. Their choice concerning how much income to report in their income tax declaration according to the benefits of evasion which are influenced by tax rate are lower or higher than the costs of this defective behavior which depends on the probability of detection and penalty. Extensive empirical literature finds that tax evasion cannot just be treated as a simple gamble (Webley et al., 2010). In particular given the usual sanction and probability detection, the Allingham and Sandmo’s model, would predict that virtually everybody should be evading taxes (Smith and Kinsey, 1987). As a result a large number of contributions to the literature extended the original theoretical framework in a number of directions. One of the most relevant strands of this literature focuses on the Tax morale (for a recent survey Luttmer and Singhal, 2014). It is usually defined as a moral obligation or an intrinsic motivation to pay taxes, and it can be considered as “an umbrella term capturing non-pecuniary motivations for tax compliance as well as factors that fall outside the standard, expected utility framework” (Luttmer and Singhal, 2014, p. 150). As a result of the relevance of a non-purely economic factor played in taxpayer decision, a growing number of researches on tax evasion approaches the issue by experimental method (see for a survey Webley et al., 2010). In this paper we aim to contribute to this issue by jointly considering different strands of this literature and empirically test their relevance by an experimental approach.

A first stream of literature that we follow explores how culture and institutions affect tax compliance (e.g. Alm and Martinez-Vazquez, 2003; Cummings et al. 2009; DeBacker et al. 2015; Kountouris and Remoundou 2013). Among these researches, Torgler (2005, 2007), Güth et al. (2005) and Torgler et al. (2010) specifically

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investigate how federalism and direct democracy, shaping Tax morale, affect tax compliance. The basic intuition behind the effects of the joint interaction of culture and institutions on politico-economic outcomes is that a community (e.g. country, region, ethnic group) shares certain cultural values, which lead to the choice of certain institutions (Alesina and Giuliano, 2016). Accordingly, good cultural values (e.g. altruism, honesty, fairness) generate good institutions and, in turn, better institutions reinforce morality.

Another line of tax compliance research tries to explain differences in compliance behavior across cultures focusing on citizens’ attitudes toward governments (Dell’Anno 2009). In particular, there are some studies that find empirical (mainly experimental) evidence that the degree of ethnic diversity of the country’s population affects individuals' attitudes towards tax compliance and, more generally, of the desire of the citizens to support redistributive policies (see for an overview Li, 2010).

This paper expressly focuses on the ethnic differences and its interaction with institutional arrangements as relevant drivers of tax compliance. Following Guth et al. (2005), we experimentally test if a shift from a decentralized to a centralized tax system modifies the behavioral incentives to contribute to the public good via taxes. Going along Belmonte et al. (2017), we assume that individuals averted to ethnic diversity are more reluctant to contribute to the provision of public goods that benefits other ethnic groups and, therefore, display a lower tax morale. Our mechanism uses the idea that if jurisdictions are more ethnically homogeneous, so that, in result, citizens feel more attached to their community, their aversion towards other ethnic groups is therefore likely to have a lower impact on the individuals' tax morale.

From a methodological viewpoint, our experimental setting extends Guth et al. (2005) in several ways. First, while Guth et al. fix the audit probability equal to zero, we include penalty to increase external validity of the experiment. Specifically, Guth et al. (2005) design an experiment in which they analyze the tax compliance as a problem of fiscal exchange rather than one of legal deterrence. For this reason, their assumption of zero audit probability, takes advantage of avoiding differences in individual risk preferences as potential explanation for differences in tax compliance. In our viewpoint this omission has a relevant cost in term of external validity in tax compliance experiment. As Davos 2014 claims, the models of tax compliance generally focus on deterrence. That is, the omission of parameters of deterrence (i.e. audit probability and fine rate) may confound the phenomenon of Tax morale with other forms of moral attitude, as altruism or generosity. From our point of

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5 They follow an approach of analysis of public goods experiments supporting the idea that contribution behavior is mainly due to reciprocal and conditionally cooperative attitudes (see, e.g., Keser and van Winden, 2000; Fischbacher et al. 2001).
view, if it is unambiguous that Tax morale is an “intrinsic motivation to pay taxes” the difference with other types of morale is due to a feeling of guilt and shame for whoever fails to comply a behavior to which a sanction is applied to.

Despite this, to avoid that a more realistic experimental design produces confounding mechanisms, we analyze tax compliance behavior for each individual as differences between treatments. This way, given that income and audit parameters are kept constant across treatments and taxpayer’s risk preference and endowment doesn’t change during the experiment for the same subject, thus experimental outcomes only depend on decentralization, ethnic fragmentation and ethnic aversion. Also, to make the decision of foregoing a portion of own endowment more salient, we introduce the real effort mechanism to gather participant endowment. In other words, instead of having at the beginning of each period a certain amount of laboratory currency to pay taxes, participants have to solve some simple logic questions. Thus, they will receive an endowment level according to their performance in answering the questions.

Moving on the description of our design, each experimental session is divided into 4 phases, each lasting 10 rounds. In each round, each participant will be asked to decide how much of his/her income to declare to the tax authority. Participants will be divided into different groups. After his/her decision, the audit procedure will start and the eventual sanctions will be applied. Once the audit procedure is over, the total tax revenue, collected imposing a tax rate of 30% of the declared income, will be equally distributed to the other group members. The structure of each round will be the same during the whole experiment.

The only difference between the 4 phases is given by the fact that the number of taxpayers and beneficiaries of tax revenue are different subsamples of the total population of participants into the experiment. Namely, in the first phase, tax revenue will be equally distributed to all participants. At the end of period 10, the second phase will start and each participant will be assigned to a group of participants with different nationality. Before deciding how much of each own income to declare to the tax authority, each participant will be informed on the nationality of his/her group members. At the end of period 20, his/her group members will be characterized by being enrolled to different degrees and sharing the same nationality; Finally, at the end of period 30, each group members will be randomly selected according to their nationality and degree.

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References


