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Tax morale and conditional cooperation

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Why so many people pay their taxes, even though fines and audit probability are low, is a central question in the tax compliance literature. Positing a *homo oeconomicus* having a refined motivation structure sheds light on this puzzle. This paper provides empirical evidence for the relevance of conditional cooperation, using survey data from 30 West and East European countries. We find a high correlation between perceived tax evasion and tax morale. The results remain robust after exploiting endogeneity and conducting several robustness tests. We also observe a strong positive correlation between institutional quality and tax morale. *Journal of Comparative Economics* **35** (1) (2007) 136–159. Institute for Empirical Research in Economics, University of Zurich, Winterthurerstrasse 30, CH-8006 Zurich, Switzerland; CREMA—Center for Research in Economics, Management and the Arts, Switzerland; University of California, School of Law, Room 209 Boalt Hall, Berkeley, CA 94720-7200, USA.

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1. Introduction

Nobody likes paying taxes. The most popular instrument to force people to pay their taxes is deterrence policy. In line with the economics of crime approach and based on expected utility

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maximization, Allingham and Sandmo (1972) present a formal model showing that the extent of tax evasion is correlated negatively with the probability of detection and the degree of punishment. However, their model has many shortcomings. People who exhibit empirically observed levels of risk aversion normally pay their taxes, although there is a low probability of getting caught and being penalized. Thus, people are more honest than deterrence models would predict. Graetz and Wilde (1985), Alm et al. (1992) and Frey and Feld (2002) find that there is a wide gap between the risk aversion that would guarantee such a high compliance and the much lower individual risk aversion observed in reality. Alm (1999) and Torgler (2002) show that tax compliance experiments also indicate that individuals report a higher level of income than the expected utility model would predict. This high level of cooperation is not specific to the tax compliance literature. According to Ochs and Roth (1989) and Roth (1995), many ultimatum experiments have shown that the modal offer is (50,50), that the mean offer is somewhere around (40,60), and that the smaller the offer, the higher the probability that the offer will be rejected. Moreover, according to Ledyard (1995) and Davis and Holt (1993), public good experiments indicate that, on average, subjects contribute between 40 and 60 percent of their endowment to a public good. Baldry (1987) identifies a need to revise the theory rather than questioning the experimental method.

Traditional models also have the disadvantage that they treat taxation as an isolated case. However, Alm et al. (1992) and Wenzel and Taylor (2004) indicate that subjects do not act as isolated individuals playing a game against nature. In this paper, we emphasize the relevance of the social context in which tax compliance takes place. The behavior of other taxpayers is important to understand taxpayers' compliance. As a consequence, theories of pro-social behavior, which take the behavior of others into account, may be promising. Taxpayers may be willing to pay their taxes conditionally, depending on the pro-social behavior of other taxpayers. Therefore, the more other taxpayers are perceived to be honest, the more willing individuals are to pay their own taxes. The extent to which others also contribute triggers more or less cooperation and systematically influences the willingness to contribute. We use survey data to test whether conditional cooperation can be identified. Section 2 provides a brief overview of the existing literature on social comparisons. In Section 3, we present our theoretical approach and develop our hypotheses. Section 4 contains the empirical results. Section 5 concludes with a summary and discussion of the main results.

2. The existing literature on pro-social behavior

Standard expected utility theory has difficulty explaining taxation behavior. In addition, empirical evidence in the tax compliance literature testing the effects of social comparisons is lacking. In the 1980s, two studies ran experiments investigating social comparisons, but they obtained mixed results. Spicer and Becker (1980) told each of 57 participating students that his or her tax rate (tax bracket) had been determined at 40 percent. Of the 57 participants, 19 were told that the average tax rate was 65 percent, 19 participants were told that it was 15 percent and the remaining 19 students were told that the average tax rate applied to all participants was 40 percent, which, of course, corresponded to the facts. Finally, the remaining 19 participants were told that all participants had the same tax rate of 40 percent, which was the truth. On average, 23 percent of the total taxes due were evaded. The group levied with the perceived high average taxation evaded by 32 percent; the group with the apparently low taxation evaded by 12 percent and the group with the medium taxation evaded by 25 percent. Hence, their results suggest that social comparisons are relevant. Webley et al. (1988) use a similar experimental