Expanded abstract

Why do we justify tax evasion? Empirical evidence from a Factorial Survey in Spain

States are forced to collect revenues to fund public goods. Since taxes reduce one`s disposable income, they represent a burden, which rational individuals attempt to reduce. The standard economic model (Allingham & Sandmo, 1972) tries to explain tax evasion by taxpayer's earned income, tax rates, the risk of detection, and the severity of penalties However, observed tax compliance is much higher than predicted by this model. In order to resolve this puzzle, literature distinguishes between coercive compliance (standard economic model) and voluntary compliance (legitimacy-based model). Several researchers also highlighted that morality can contribute to explain why people voluntary comply. The aim of this article is to analyse, for the first time, tax morality via a factorial survey experiment (vignette analysis, cf. Auspurg & Hinz, 2015) conducted 2017 among Spanish citizens.

Our factorial survey consisted in fictitious descriptions of several self-employed couples of different countries. The respondents had to judge how justified tax evasion would be for each of the presented couples which differed on ten dimensions (factors). Eight of the dimensions referred to a couple's gross household income, their tax duty in per cent, the evaded amount of money in per cent, the risk of becoming detected, a country's expenditure for the social welfare services, the level of honesty of citizens in tax matters, the level of corruption in the country, and the number of dependent children of the couple. For testing whether the rate or the total amount of the tax duty has a greater impact on the justifiability of tax evasion and whether the rate or the total amount of evaded money has a greater impact on the justifiability of tax evasion, two further dimensions were included in the vignette descriptions, namely the tax duty in Euros as the two-way interaction between the gross household income and the tax duty in per cent and the amount of evaded money in Euros as the three-way interaction between the gross household income, the tax duty in per cent, and the evaded money in per cent.

An advantage of using a factorial survey experiment is that it not only allows causality to be tested, but that it also allows testing simultaneously both, the impact of situational factors described in the vignettes as well as the impact of respondent characteristics on the justifiability of tax evasion. Potentially relevant personal factors were derived from Inglehart's (Inglehart & Welzel 2005) modernisation theory and theories about morality and moral change (Nunner-Winkler, 1996a). These factors included the respondent's age cohort, their level of education, self-reported belonging to a denomination, as well as measures for equality and harm avoidance which constitute, according to Nunner-Winkler, the minimal principles of an inner-worldly justifiable morality.

In order to test the impact of situational conditions on the justifiability of tax evasion, a factorial survey was used. For eight dimensions, each with two levels, the completely crossed vignette universe consists of 28 = 256 combinations of vignette characteristics. Since it is impossible for respondents to judge the whole vignette universe, a confounded D-efficient design (Dülmer, 2016) consisting of 16 different vignette samples (sets) was constructed. Each of the 16 vignette sets reached the maximal D-efficiency of 100, indicating that all ten dimensions were balanced and orthogonal which implies that their effects can be estimated uncorrelated. The same applies to the combined confounded D-efficient design also for all higher-order interaction terms so that it perfectly covers the central features of the vignette universe. For the survey, the order of the vignettes has been randomised and each respondent has been randomly assigned one of the 16 designs.

The data for our factorial survey were collected in Spain 2017 through an internet survey of people aged 18 and over. In order to avoid underrepresenting older and less well-educated people, a representative quota was applied to these two respondent characteristics. The gross sample size of our survey consisted of 905 respondents. Excluding respondents without Spanish citizenship and with missing values from the analyses resulted in a net sample size of 869 respondents. The response rate for the 16 different simple D-efficient designs in the net sample size ranged from 5.8 to 6.4 per cent. Since every respondent had to judge more than one vignette, the answer behaviour is embedded in the personal context of each participant. For analysing the hierarchical structured data adequately, multilevel regression analysis (Hox et al., 2018) was used.

Multilevel analysis showed that most hypotheses were confirmed empirically. At the vignette level, the couple's gross household income and a country's level of corruption turned out to have the greatest impact on the justifiability of tax evasion, followed by the tax rate, a country's expenditure for the social welfare services, having dependent children, the evaded amount of money in per cent, and the risk for becoming detected. The results confirmed that the justification of tax evasion is higher, if the gross household income is lower, if the level of corruption is higher, if the tax rate is higher, if the expenditure for the social welfare services is low, if there are dependent children, if the percentage of evaded money is lower, and if the risk of becoming detected is lower. Empirically it also turned out that neither the level of honesty (tax compliance) of citizens in a country, nor the tax duty in Euros as well as the amount of evaded money in Euros became significant. The effects of the two latter predictors were virtually zero. These results show that when the percentage as well as the corresponding total amount is available, respondents focus on the relative rather than on the absolute amount when judging the justifiability of tax evasion. All in all, our empirical results confirmed that legitimacy aspects and morality can contribute to explain under what conditions tax evasion might be justifiable. Based on the knowledge we have gained from the vignette level, one might think of implementing progressive tax politics, focussing on fighting corruption at the country level, or supporting families with dependent children.

At the respondent level, older age cohorts and higher educated people were less willing to justify tax evasion than younger cohorts and less-well educated people. While these results confirmed our assumptions derived from Inglehart's value change theory and from moral change theory, belonging to a denomination as an indicator for formative security failed to become significant. Hence, for testing the impact of religion for future research more adequately it is advisable to replace belonging to a denomination by importance of religion. In addition to these predictors, we also tested for the first time the impact of the two minimal principles of an inner-worldly justifiable morality on the justifiability of tax evasion. The principle of equality was measured by Schwartz's (2007) universalism item "He/she thinks it is important that every person in the world should be treated equally. He/she believes everyone should have equal opportunities in life", the principle of harm avoidance by the reversed question "Occasionally, it is alright to ignore moral rules even at the expense of others and to follow your own interests". Empirically, these two principles showed the greatest impact on the justifiability of tax evasion, reinforcing the relevance of morality in explaining tax compliance.

All in all, our study confirmed that tax compliance goes beyond the mere calculation of personal material gain and loss. A practical implication of our study is that the state should make increasing effort to exercise transparency and effectively convey citizens that the use of taxes is fair, equitable and free of corruption.