

A Work Project, presented as part of the requirement for the Award of a Master's degree in Economics from the Nova School of Business and Economics.

**Social Information, Tax Morale, and Preferences for Taxation:
Evidence from a Randomised Survey Experiment in Italy and Portugal**

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17-12-2021

Evidence shows that evasion by individual taxpayers is often affected by the behaviour of their peers. As the international community takes important steps to fight unfair tax competition, we study whether higher awareness of corporate tax avoidance affects the propensity of individual taxpayers to justify evasion, which we use as proxy for their propensity to evade. We conduct a randomised control trial in Italy and Portugal, with a random treatment providing information about tax revenue lost because of tax avoidance by multinationals in each country. Since this loss is substantially higher in Italy, we test whether the magnitude of revenue lost impacts the results. We also study if exposure to this type of information changes preferences for taxation and tax policy. While we see no significant effect for our treatment overall, we reveal important heterogeneous effects, mostly related to the ease of respondents to form an opinion, understand politics and the news, and their political orientation. These effects can only reinforce existing opinions, however, and cannot dissuade from prior beliefs nor prompt new ones.

Keywords:

Public Finance, Tax Competition, Tax Morale, Tax Policy, Randomisation, Survey Experiment

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209)

Introduction

One may contend that tax evasion and avoidance are as old as taxation itself. Nonetheless, the problem should not be understated as the economic and social consequences of dodging taxes are pervasive. At once, it shrinks the resources available to the government, lowers the quality and quantity of public goods and services, and weakens the country's fiscal balance, possibly increasing public debt. In addition, tax evasion and avoidance distort competition in favour of those engaging in such malpractices and hampers the effectiveness of redistributive policies, as those in the higher tail of the income distribution typically have more opportunities to evade. Hence, this may create a sentiment of taxation being unfair, motivating even more evasion and avoidance and reinforcing their negative consequences. The willingness of firms to invest in a country may also depend on the extent to which they can optimise their fiscal planning.

With this premise, it is understandable that countries implement mechanisms to promote tax compliance and maximise tax revenue. With the free movement of capital, however, the issue of tax competition has become increasingly relevant, as certain governments attract companies and foreign investment by offering favourable fiscal conditions (Tørsløv et al. 2018). The need to combat unfair tax policy has long been recognised by prominent international institutions and fora (European Council 1998; Organisation for Economic Cooperation and Development [OECD] 2009), and the recent agreement by 136 countries to introduce a minimum corporate tax rate at 15% by 2023 epitomises the will of a joint opposition against this practice, which is detrimental to most countries but a few, so-called tax havens (OECD 2021).

The relationship between profit shifting by firms and evasion by citizens has not been studied thoroughly in the past, although the matter is of evident appeal. In fact, there is consolidated evidence that citizens comply with their fiscal obligations for reasons that go beyond the mere enforcement by authorities, such as their own values, the behaviour of peers, and predominant

social norms. One may thus conjure that fiscal misconduct by multinationals reinforces evasion by taxpayers. If so, allowing tax avoidance will propagate tax evasion, and policymakers have a double incentive to combat the former to reduce the downsides of profit shifting itself while also ameliorating compliance by citizens.

This work project addresses this question through a randomised survey experiment in Italy and Portugal in which the treatment group was exposed to information on tax avoidance by firms. We assess whether exposure to such a treatment can significantly influence attitudes towards evasion of the respondents and what personal characteristics potentiate this effect. We enhance the relevance of our analysis for policy use by further testing if our treatment can also impact policy tastes of respondents for tax rates on citizens and multinationals. Inspired by Kuziemko et al. (2015), who distinguish preferences for redistribution from policy preferences, we inquire whether the current tax level on multinationals is adequate and if it should be increased. In fact, some respondents may not approve of a new tax policy if they do not trust their government or if they have specific opinions about taxes, tax competition, and government interventions.

We find no significant overall effect for social information about multinationals on prospective compliance and preferences for taxation, but we uncover heterogenous treatment effects in our sample, mostly depending on the ease of respondents to form their own opinion and understand the news, as well as their political orientation. For prospective compliance, the nationality and age of respondents, as well as their level of trust in institutions also matter. Because the size of tax revenue lost is larger in Italy, we suggest that the magnitude of tax avoidance is a driver of the significance of our effect. In all cases, however, social information can only reinforce prior beliefs and does not change existing opinions nor prompt new ones.

We contribute to the literature on the impact of social information on individual tax compliance decisions, where social information is defined as information about compliance by others. Our

survey experiment builds on prior evidence showing that exposure to misconduct deteriorates the willingness of taxpayers to comply with fiscal obligations and evaluates if this result holds when social information is not referred to immediate peers but multinationals. To the best of our knowledge, this research question has never been addressed before, despite its appeal for both academic and policy discussions. Moreover, the framework used in this work project can be easily replicated in other countries and thus provides a possible solution to the heterogeneity of methods that has long prevented cross-country comparisons of results from tax experiments.

In what follows, we review the relevant existing literature before describing the methods used to address our research questions, including a description of the survey and treatment design. We then present our data and results, drawing conclusions as regards their policy implications. As a last step, we highlight limitations to our study and potential avenues for further research.

Literature Review

Tax compliance decisions were originally formalised as a gamble under uncertainty, where an agent considers the trade-off between a reduced tax burden and the risk of paying what is due in addition to a sanction if caught (Allingham and Sandmo 1972). Nowadays, however, there is consensus that such a model cannot fully explain the high levels of compliance observed in the real world; rather, other elements collectively termed as tax morale have been demonstrated to influence taxpayer behaviour (Torgler 2002; Mascagni 2017). These factors are modelled as a new variable representing an additional moral or psychological cost to evasion, reinforcing the negative side of the trade-off (Fortin et al. 2007; Traxler 2010). Examples of tax morale include the intrinsic motivation and cultural background of the taxpayer, social influences, and peer effects (Luttmer and Singhal 2014).

Theoretical papers argue that taxpayers will evade more if they know that evasion is common because there is a tendency to adjust to the perceived prevalent social norm (Gordon 1989; Kim

2003; Traxler 2010). Yet, empirical evidence is still scant and contradicting. In an early work, Spicer and Becker (1980) find that knowledge of fiscal inequality exacerbates evasion for those paying more than the average and enhances compliance for those paying less. Similarly, using data from a randomised experiment in Minnesota, Coleman (1996, 2006) illustrated that it is possible to improve tax compliance of taxpayers that wrongly overestimate the pervasiveness of evasion by correcting their perception. In Peru, Del Carpio (2014) randomises reception of official letters from the municipality with information on compliance or on enforcement levels in the area, or a combination of both. Social information increased compliance by 20% relative to a no-letter control group, but almost half of this effect comes from receiving any letter in the first place. The other treatments had no effect.

A recent experiment highlights the possibility of asymmetric effects for social information. In a laboratory setting, Lefebvre et al. (2014) show that exposure to compliant behaviour by others does not significantly improve compliance of participants. By contrast, exposure to examples of misbehaviour deteriorates fiscal conduct. An explanation for this outcome is that individuals mimicked the choices of others trusting that they had a better understanding of detection risks, but their findings are also consistent with the broken windows theory, whereby people are more prone to misconduct when they see others behaving poorly, possibly because this reduces the moral cost of misbehaviour and favours self-justification.

Another valuable insight on the role of social information comes from Hammar et al. (2009), who exploit survey data from Sweden to analyse the perception of tax evasion with respect to several taxes. They find that the behaviour of politicians and of those in leading positions exerts a much stronger influence on tax compliance than the level of trust in other citizens. One clear implication of their result is that the analysis of tax morale should not be restricted to immediate peers but rather consider other agents in the economy. Along these lines, a recent experimental effort by López-Pérez and Ramirez-Zamudio (2020) in Peru shows that knowing that a famous

public figure diligently pays taxes increases donations by participants to the government. While paying taxes and donating to the government are not the same, the authors successfully shed light on the potential influence of role models.

It must also be noted however that multiple studies have failed to determine a significant role for social influence and information. For example, Castro and Scartascini (2015) are unable to uncover a significant treatment effect for messages intended to manipulate the beliefs of their experiment's participants about compliance of peers in Argentina. Similarly, Blumenthal et al. (2001) delivered individual letters inviting U.S. taxpayers to join the majority of citizens who pays their taxes but could not find any significant impact of such treatment on the compliance of the recipients of the letters.

Finally, Fellner et al. (2013) reveal countervailing effects for social information in Austria by looking at TV licences. Treated individuals received variations of a letter that contained one or a combination of three treatments: a threat, information on the high level of compliance, and a moral appeal. The control group was sent a neutral letter informing the recipients that had been selected because suspected of evasion, while a small subset of the sample received no letter at all. Results show that receiving a letter increases compliance, more so for the neutral message than any other particular content. Only the message recalling the risk of being caught proved effective. As for social information, the study finds very modest negative effects on compliance in areas of higher compliance, and very modest positive effects in areas of lower compliance.

Methodology

Survey design and distribution

In order to collect the data, a survey was created in both Italian and Portuguese using the online platform Qualtrics. We randomise our treatment across approximately half of the respondents, exposing them to a message containing information about tax avoidance by multinationals.

Other than for this message, the treatment and control group are asked the same set of questions. For the most part, the survey replicates the 2004 European Social Survey (ESS). We chose that round of the ESS as it contained questions on economic morality, including attitudes towards taxation. Since this was a rotating module, the ESS never conducted the same analysis a second time, which makes our replication an added value of this work project. Throughout, minor edits to the original survey were made to adapt it from face-to-face to online delivery. Overall, our survey contained 5 sections for a total of 54 questions covering respondents' use of media and exposure to news and politics, their political affiliation and trust in the institutions, religion, economic morality, and their socioeconomic profile. The survey had an expected duration of 13 minutes. We measured completion time for all submissions suspecting that too little time spent responding proxied lack of commitment and thus unreliability of the replies.

The survey was first tested in both versions with a small group of respondents to gain feedback and correct possible errors before being officially published and shared on September 30, 2021. For three weeks, the collection of responses followed a snowball sampling technique, whereby respondents were asked to forward the link to the survey to their connections.

Treatment message

This experiment studies the role of social information by including an informational treatment on tax avoidance by multinationals. If people consider the behaviour of others when making their compliance decisions, as described in the literature, then it is interesting to study whether taxpayers consider the fiscal behaviour of multinationals too, especially in light of the expected change in compliance from the recent international deal on a minimum corporate tax rate.

The design of the treatment message builds on lessons learnt in previous research. First, we opt to convey information in a simple, direct, and factual way. As in Kuziemko et al. (2015), we are interested in testing if any information affects fiscal conduct and policy preferences, rather

than sophisticated discussions about the efficiency and fairness implications of tax compliance. For this reason, we render figures in the message as salient as possible, providing percentages and proportions rather than absolute values, which may be harder to visualise. The importance of complexity and salience for taxation and tax experiments has indeed been widely recognised (Chetty et al. 2009; Mascagni 2017). Lastly, we avoid including moral appeals and minimise framing effects, providing facts rather than normative statements. While this may lessen the effect of the treatment (Kolstad and Wiig 2019), we want to assess the role of social information and not of moral suasion. The treatment messages included in the survey are reported below.

Figure 1. Treatment message in the Italian version of the survey. English translation to the side.

Il questionario è quasi al termine. La sezione seguente tratterà di economia, partecipazione e tassazione. Prima di continuare, La prego di leggere quanto segue.

Ogni anno, quasi il **40% dei profitti delle multinazionali viene spostato verso dei paradisi fiscali.**

Nel 2018, il volume di questi spostamenti è stato di oltre **770 miliardi** di euro, una cifra pari a circa il **43% del PIL italiano.**

Gli Stati europei che non sono paradisi fiscali sono i più svantaggiati, perdendo il 18% del gettito fiscale dovuto dalle multinazionali.

In Italia, **31 702 miliardi** di euro fatturati nel paese nel 2018 sono stati spostati verso i paradisi fiscali.

Lo Stato italiano ha perso in media **1€ ogni 5€** dovuti dalle multinazionali.

(Fonte: <https://missingprofits.world/>)

The survey is almost over. The next section deals with the economy, social participation, as well as taxation. Please, read what follows.

Each year, almost **40% of multinational profits are shifted to tax havens.**

These shifts amounted to over **€770 billion** in 2018, about **43% of Italy's GDP.**

Non-haven European states are most hit, losing 18% of tax revenue owed by multinationals.

In Italy, **€31 702 billion** invoiced in the country in 2018 were shifted to tax havens.

The Italian State lost on average **€1 for every €5** owed by multinationals.

(Source: <https://missingprofits.world/>)

Figure 2. Treatment message in the Portuguese version of the survey. English translation to the side.

O questionário está quase a chegar ao fim. A secção seguinte fala de economia, participação e tributação. Antes de continuar, leia, por favor, o que se segue.

Todos os anos, quase **40% dos lucros das multinacionais são desviados para paraísos fiscais.**

Em 2018, o volume destes lucros globais desviados ascendeu a mais de **770 mil milhões de euros**, um valor equivalente a **quase quatro vezes o PIB de Portugal.**

Os Estados europeus que não são paraísos fiscais são os mais atingidos, perdendo 18% das receitas fiscais devidas pelas multinacionais.

Em Portugal, **3 231 milhões de euros** faturados no país em 2018 foram transferidos para paraísos fiscais.

(Fonte: <https://missingprofits.world/>)

The survey is almost over. The next section deals with the economy, social participation, as well as taxation. Please, read what follows.

Each year, almost **40% of multinational profits are shifted to tax havens.**

These shifts amounted to over **€770 billion** in 2018, **almost four times Portugal's GDP.**

Non-haven European states are most hit, losing 18% of tax revenue owed by multinationals.

In Portugal, **3 231 million euros** invoiced in the country in 2018 were shifted to tax havens.

(Source: <https://missingprofits.world/>)

We time exposure to treatment as the seconds that a respondents spends on the page showing the message because too little exposure is likely to hamper the effectiveness of the information or may imply that the respondent is already familiar with the topic, which would equally mean that the treatment may be less effective. Accordingly, we construct a treatment indicator that equals 0 for the control group, 1 for those exposed to the treatment for at most 15 seconds, and 2 for those exposed to it for more than 15 seconds.

Outcomes of interest

Table 1. Dependent variables.

Variable	Description
Tax morale	= 1 if respondent disagrees, strongly or not, that tax evasion can be justified.
Tax rate citizens	= 1 if respondent thinks that current tax rate on citizens is too high.
Tax rate multinationals	= 1 if respondent thinks that current tax rate on multinationals is too low.
Policy	= 1 if respondent agrees that the government should increase the tax rate on multinationals.

The effect of the treatment is studied with questions about economic morality and social norms. We elicit tax morale assessing the propensity to evade of respondents. However, as Mascagni (2017) puts it, an inherent difficulty in investigating tax evasion is convincing individuals to be honest about dishonest behaviour. The ESS already included a question asking respondents if they agreed or not that citizens should not evade taxes. Because this phrasing seems to prompt a morally accepted response, we followed an established strategy in the literature and ask if respondents would ever justify evasion (OECD 2019). We then construct a dummy measuring prospected compliance that equals 1 for those who disagree or strongly disagree with the claim.

We further assess how social information may influence respondents' preferences for taxation with questions inquiring whether the current tax rate on citizens or multinationals are adequate. Respondents could either agree, disagree as the rate under consideration is too high, or disagree as it is too low. In the case of taxes on citizens, the outcome variable is a dummy that equals 1 for respondents who believe the tax rate to be too high, while for multinationals the outcome

is a dummy that equals 1 when the respondent thinks that the tax rate is inadequately low. We do this to assess whether the treatment can trigger a feeling of unfairness towards the tax system that leads citizens to overemphasise their fiscal burden as they are reminded that multinationals can elude their fiscal obligations. If confirmed, this would highlight a potential spillover effect that is detrimental for the government, as raising awareness on elusion by multinationals may ultimately call for a reduction in the tax rate on citizens. Inspired by Kuziemko et al. (2015), who distinguish between preferences for redistribution and tastes for redistributive policy, we separate preferences for taxation from those for tax policy by asking respondents how strongly they agree or disagree that the government should increase the tax rate on multinationals, then create a dummy that equals 1 if the response reports an affirmative option. Doing so, we test if people realise that taxes on multinationals are low but would prefer that the government does not intervene, perhaps due to a lack of trust that the government could improve the situation or to the respondent's own views on taxation, tax competition, and government intervention.

The same section also contained questions used to control for other important determinants of tax morale. For example, we ask if respondents have evaded VAT in the past 5 years as frequent dodgers might exhibit consistently lower fiscal morality. As we suspect that respondents may not want to share that they have infringed the law but may be willing to admit that they know of people who did, we ask whether respondents know of someone who has evaded VAT over the past 5 years or have ever been offered to do so themselves. Collecting information on the frequency with which respondents are exposed to evasion, even if indirectly, allows us to also control for what may be perceived as the dominant social norm in terms of compliance.

Additional sections

The sections from the 2004 European Social Survey kept in our survey were chosen based on economic intuition and previous studies on social information and tax evasion. The treatment

is shown to respondents before the section on taxation and economic morality, which contains the questions of interest, and before the section collecting general demographics, which are not affected by the treatment. We can thus use all other information to control for several possible determinants of tax morale. Tables 1 and 2 in the Appendix report all control variables with a description and summary statistics or tables of frequency according to the variable type.

The first section in the survey investigates the respondent's average use of traditional and social media and how much of this time is dedicated to politics and the news. This is relevant because people's perception on the prevalence of an issue may be strongly biased by the coverage of the media in the country (Cottarelli 2018; Magnani 2019). Given the evidence in the literature that taxpayer tend to coordinate around the perceived dominant social norm, extended exposure to news may indicate the presence of media bias under the credible assumption that the media in both Portugal and Italy often deal with tax evasion.

The second section inquiries about respondents' political orientations and their level of trust in national and supranational institutions, as well as their satisfaction with some publicly provided services. Evidence on the role of political trust for tax compliance abounds, with accountability, fairness, and equity of the tax system being crucial to stimulate good fiscal behaviour (OECD 2019). It has also been suggested that citizens use evasion as a form of tax resistance, namely to express disagreement with public revenue management and the government. In particular, Cullen et al. (2021) illustrate that partisan alignment is associated to diminished evasion: those that have higher levels of trust in the institutions and share the line of action of their government should exhibit better fiscal conduct, and vice versa.

Political affiliation and trust are important to interpret policy implications too. Low satisfaction with the government may imply that citizens do not believe that public policy could effectively improve the current situation and will not support a new policy direction, even if they recognise

the existence of a problem. We bypass this issue in our analysis by separating preferences for current taxation from preferences for tax policy but also create a variable identifying those that view redistribution policy favourably. Some may in fact oppose government intervention and taxation because they hold different economic ideals: these people may acknowledge that big firms do not pay their fair share of taxes but reject higher taxation, nonetheless.

We include questions on religion because believers have been found to comply more in some instances (OECD 2019), though not all studies are conclusive (Khalil and Sidani 2020). In any case, because most religions forbid dishonest behaviour and introduce a moral obligation to contribute to the public good, collecting information in this respect may still be relevant.

Finally, the last section collects demographic information, which is related to different degrees of fiscal integrity. For example, older taxpayers tend to comply more (OECD 2019), and so do women (Spicer and Becker 1980; Forlin et al. 2007; OECD 2019), while the self-employed are typically found to evade more (Alm and Torgler 2006, Cottarelli 2018). Evidence on the effect of education on tax compliance is instead generally inconclusive (Khalil and Sidani 2020) or contradicting: where some demonstrate a positive relation (OECD 2019, Wong and Lo 2015), others find a negative one (Fonseca and Myles 2012).

Empirical strategy

If duly performed, random assignment of respondents into treatment and control groups by the survey platform ensures that treated and control units are comparable, on average, with respect to observed and unobserved characteristics. The only difference between groups will therefore be whether they have received the additional information on tax avoidance by multinationals, and a simple mean comparison of answers to the questions of interest between the groups will yield an estimate of the treatment effect that is unbiased. Individual t-tests and an Hotelling's generalised means test are performed to check for imbalances between treatment and control.

With a successful randomisation, the average treatment effect of social information regarding multinationals on compliance and tax preferences can be estimated by means of a regression of each outcome of interest on a constant, the treatment indicator, and a set of relevant controls. Since all dependent variables are dummies, we use a linear probability model, opting for this rather than a nonlinear alternative to exploit the direct interpretability of coefficients. We first regress a simple specification of the dependent variables on the treatment indicator and the control variables. Next, we add interactions of the outcome variable with relevant controls to understand possible heterogeneous effects.

Data

Submissions were no longer considered after November 21, 2021. Over three weeks, the survey gathered 1031 responses. After removing incomplete replies, 756 observations were left, with 612 coming from Italy and 144 from Portugal. The treatment group included 365 individuals. The median completion time for the survey was 12.2 minutes, whereas the median exposure to treatment lasted for 26 seconds. For 73 treated individuals, or 9.7% of the treated, exposure to the informational message was below or equal to 15 seconds.

As can be seen in Table 2, the vast majority of our sample does not justify evasion and agrees that tax rates on citizens are too high, with this being true in the national subsamples too. Albeit still the majority, a smaller fraction of the full sample agrees that multinationals pay little taxes and that their tax rate should be increased, more so in the Italian than the Portuguese sample.

As for demographics, females constituted just under 67% of the full sample and the mean age of respondents was 42.4 years. While the Italian sample shows similar figures, the Portuguese sample is more balanced in terms of gender representation, with 52.8% of respondents being females, and remarkably younger, with 32.2 years as mean age. Other important differences across national samples include area of residency and educational attainments: respondents

from Portugal mostly live in a large city or in the suburbs of one and have received university education; on the other hand, the Italian counterparts mostly live in a town or village and only less than half of them has obtained at least a bachelor's degree.

Table 2. Summary statistics for the dependent variables, the treatment indicator, and some demographics.

Variable	FULL SAMPLE		ITALIAN SAMPLE		PORTUGUESE SAMPLE	
<i>Outcome variables</i>	Mean	SD	Mean	SD	Mean	SD
Tax morale	.802	.399	.807	.395	.778	.417
Tax rate citizens	.853	.354	.858	.349	.833	.374
Tax rate multinationals	.616	.487	.644	.479	.500	.502
Policy	.593	.492	.608	.489	.528	.501
<i>Treatment indicator</i>	Freq.	Percent	Freq.	Percent	Freq.	Percent
treated = 0	391	51.7	321	52.4	70	48.6
treated = 1	73	9.7	53	8.7	20	13.9
treated = 2	292	38.6	238	38.9	54	37.5
Total	756	100	612	100	144	100
<i>Demographics</i>	Mean	SD	Mean	SD	Mean	SD
Italian	.810	.393	1	0	0	0
female	.668	.471	.700	.458	.529	.501
age	42.4	16.2	44.8	15.2	32.2	14.5

Tax morale = 1 if respondent does not justify evasion. Tax rate citizens = 1 if respondent agrees that tax rate on citizens is too high. Tax rate multn. = 1 if respondent agrees that tax rate on multinationals is too low. Policy = 1 if respondent agrees that the tax rate on multinationals should be increased. Treated = 0 for the control group, = 1 for people exposed to the treatment for ≤ 15 seconds, = 2 otherwise. Italian = 1 if respondent is Italian. Female = 1 if respondent is female. Age = age in 2021.

Respondents are mainly working (57.9%), studying (17.5%), or retired (12.0%). While workers are the predominant category in both subsamples, there are more retirees than students among the Italian respondents, whereas the opposite is true for the Portuguese. Students are a relatively small share of the full sample, which is a plus in our analysis since students may not know what paying taxes is like in reality and may not respond to incentives as taxpayers would (Fonseca and Myles 2012). Given the small share of self-employed, who typically evade more (OECD 2019), we should observe higher prospective compliance than in a normal population.

Results

Tables 3 to 6 in the Appendix show that randomisation was successful, meaning that treatment and control groups are comparable on average, and we can retrieve the average treatment effect.

Main regression

In the simplest specification, outcome variables are regressed on the treatment indicator and a set of relevant controls. As reported below, we find no statistically significant effects from the exposure to our treatment for all dependent variables.

Table 3. Relevant results for the simplest specification.

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy
treated = 1	0.0202 (0.0544)	-0.0262 (0.0514)	0.0417 (0.0685)	0.0449 (0.0698)
treated = 2	-0.0304 (0.0333)	0.0249 (0.0299)	0.0574 (0.0410)	0.0566 (0.0423)
Constant	0.763*** (0.0641)	0.886*** (0.0641)	0.520*** (0.0802)	0.506*** (0.0814)
Observations	595	595	595	595
R-squared	0.119	0.077	0.096	0.083

Treated = 0 for the control group, = 1 for people exposed to the treatment for ≤ 15 seconds, = 2 otherwise.

We control for completion time, general demographics, education, employment and financial situation, exposure to news, trust and satisfaction with the institutions, political affiliation. For tax morale, we additionally control for religiosity, past evasion, and altruism. For tax and policy preferences, we additionally control for Europeanism and preferences for redistribution. See Table 7 in the Appendix for the full list of coefficients.

Robust standard errors in parentheses. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1

Several reasons may explain this outcome. First, the information provided may not have been impactful enough to bear an effect, despite our efforts to make it salient. If so, the message may have not changed the opinion of respondents who already had strong views on compliance and tax policies based on prior political and economic beliefs. Second, the treatment may have been too complex for some, failing to convey its content and exert an effect on these respondents. Third, national samples may react differently to the treatment, with these effects not emerging overall. Finally, social information may simply not be a relevant determinant of tax morale or tax preferences when it concerns multinationals. That is, individual taxpayers do not consider the fiscal behaviour of big companies when making their own compliance decisions or when forming an opinion about tax policy.

For tax compliance, it may also be that our treatment affects respondents differently based on their age, since younger generations may have not interiorised a social norm of compliance, or

based on levels of trust in the institutions, as information about elusion by multinationals may make citizens with low trust levels more prone to justify evasion as a form of tax resistance.

To discern the possible causes of this absence of significance and reveal potential heterogenous effects, we regress additional specifications that include interactions of the treatment indicator with relevant control variables.

Ease of forming an opinion and complexity of understanding the news

By running a regression including an interaction of the treatment with a dummy that equals 1 for respondents who struggle to form their own opinion about politics and issues in the news, our treatment is now significant in all specifications for those who easily make up their mind. Exposure to the treatment reduces the probability of not justifying evasion by 7.2 percentage points (pp), on average. Social information also increases the likelihood that these respondents agree that citizens bear an inadequately large tax burden by 7.2pp and that multinationals face one that is too light by 11.5pp. Finally, treated respondents who easily form an opinion are on average 8.3pp more likely to support an increase in the corporate tax rate. Coefficients are all significant for a 10% level, with treatment effects for current tax preferences being so at 5%.

These findings suggest that our treatment bears an impact on respondents who probably already have a personal view on compliance and tax policy. By contrast, social information does not seem to alter preferences for those that possibly have no prior opinion.

We extend the analysis by interacting the treatment with a dummy reporting if it is hard for the respondent to understand news relating to politics and the government. In this setting, effects are statistically significant only in the first two specifications but for opposing scenarios. For fiscal morality, our treatment significantly increases the propensity to justify evasion by 12.6pp on average for respondents that can follow the news, with this estimate being significant for a 5% level. Instead, for tax preferences on citizens, it is those who cannot always understand the

latest developments in politics that react significantly to the message, becoming more likely to agree that citizens pay too much in taxes by 12.8pp, on average.

Table 4. Relevant results for the specification including the interaction of treatment with *own opinion* and *complex*.

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy	Tax morale	Tax rate citizens	Tax rate multin.	Policy
treated = 1	-0.0177 (0.0661)	-0.0110 (0.0628)	0.0769 (0.0785)	0.136* (0.0775)	0.0518 (0.0908)	0.0671 (0.0930)	0.0110 (0.120)	0.0124 (0.133)
treated = 2	-0.0723* (0.0422)	0.0715** (0.0361)	0.115** (0.0471)	0.0836* (0.0495)	-0.126** (0.0625)	0.0815 (0.0616)	0.0383 (0.0714)	0.0355 (0.0768)
own op. = 1	-0.0408 (0.0510)	0.0829** (0.0379)	-0.0287 (0.0622)	-0.0497 (0.0634)				
treated = 1 & own op. = 1	0.0553 (0.138)	-0.0558 (0.101)	-0.128 (0.155)	-0.329** (0.155)				
treated = 2 & own op. = 1	0.178** (0.0738)	-0.151** (0.0623)	-0.187** (0.0898)	-0.0927 (0.0911)				
complex = 1					-0.103** (0.0466)	0.132*** (0.0487)	-0.0387 (0.0592)	-0.0420 (0.0616)
treated = 1 & complex = 1					-0.0585 (0.116)	-0.142 (0.110)	0.0460 (0.145)	0.0488 (0.156)
treated = 2 & complex = 1					0.158** (0.0731)	-0.0859 (0.0710)	0.0286 (0.0879)	0.0316 (0.0925)
Constant	0.548*** (0.147)	0.862*** (0.0657)	0.488*** (0.0808)	0.480*** (0.0827)	0.580*** (0.147)	0.813*** (0.0716)	0.542*** (0.0882)	0.530*** (0.0896)
Observations	544	595	595	595	544	595	595	595
R-squared	0.203	0.086	0.103	0.090	0.204	0.093	0.096	0.084

Treated = 0 for the control group, = 1 for people exposed to the treatment for ≤ 15 seconds, = 2 otherwise.

Own opinion = 1 if respondent finds it hard to form an opinion about issues in the news. Complex = 1 if respondent struggles to understand news relating to politics and the government.

We control for completion time, general demographics, education, employment and financial situation, exposure to news, trust and satisfaction with the institutions, political affiliation. For tax morale, we additionally control for religiosity, past evasion, and altruism. For tax and policy preferences, we additionally control for Europeanism and preferences for redistribution. See Tables 8 – 9 in the Appendix for the full list of coefficients.

Robust standard errors in parentheses. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1

We may explain these two opposing results as follows. Regarding compliance, we argue that exposure to our treatment is ineffective for those that typically struggle to follow the news since they may have failed to fully grasp the content of our message and were therefore improperly treated. Conversely, social information exerted its expected negative effect only on those who understand current developments because these were more likely to comprehend and interiorise our message. This result suggests that social information ought to be readily understandable to influence compliance attitudes, and that its effectiveness is necessarily limited by the individual taxpayer's understanding of it.

As for tax preferences on citizens, assuming that people who not always understand news about the government and politics may have not fully processed our message, the treatment may have conveyed a sentiment of taxation being unfair to these respondents, who voiced their discontent complaining about their fiscal burden. This presents a potential backfiring effect of using social information to raise political support for a policy raising tax rates on multinationals, as it might lead taxpayers who struggle to process this information to demand less taxes. We see no impact in terms of policy action possibly because these respondents fail to grasp the implicit negative effects of tax competition and, rather than addressing the issue, only care that they can pay less.

Political affiliation

Another way to test if respondents react heterogeneously to the treatment based on their prior opinion is to discriminate based on political alignment. We do this by interacting our treatment indicator with a categorical variables taking a value of 1 for respondents who place themselves on the left-side of the political spectrum, and 2 for those that place themselves to its right.

Our treatment bears statistically significant effects in all specifications only for left-wingers. Estimates forecast an average increase in their likelihood not to justify evasion by 11.1pp, with the effect significant at the 5%. They are also 9.4pp less likely to agree that taxes on citizens are inadequately high, 0.3pp more likely to agree that taxes on multinationals are too low, and 21.7pp more likely to think that the government should increase corporate tax rates. While the former effect is significant for a 10% level, the other two are significant even at the 1%.

The same cannot be said about respondents aligning with right-wing ideologies, nor for those in the centre of the political spectrum, as the corresponding coefficients are never significant. There is one exception for people in the centre of the spectrum as regards preferences for taxes on multinationals; in that case, being exposed to the treatment makes these respondents more likely to agree that corporate tax rates are inadequately low by 12.2pp on average, and we can

exclude that this estimate is equal to zero for a significance level of 10%. Interestingly, being treated is no longer significant for people in the centre of the political spectrum when it comes to policy action, namely the last specification, which may be an indication that preferences for taxation and preferences for tax policy do not always coincide, as was the case for redistribution and redistributive policies in Kuziemko et al. (2015).

Table 5. Relevant results for the specification including the interaction of treatment with *politics*.

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy
treated = 1	0.0702 (0.0822)	0.0577 (0.0471)	0.0254 (0.0994)	-0.0430 (0.104)
treated = 2	0.0177 (0.0639)	-0.000898 (0.0396)	0.122* (0.0687)	0.0825 (0.0727)
politics = 1	0.128** (0.0502)	-0.165*** (0.0476)	0.188*** (0.0616)	0.157** (0.0631)
politics = 2	0.0663 (0.0668)	-0.0114 (0.0418)	-0.0946 (0.0813)	-0.0779 (0.0806)
treated = 1 & politics = 1	-0.145 (0.128)	-0.232* (0.134)	-0.0298 (0.152)	0.146 (0.147)
treated = 1 & politics = 2	-0.134 (0.167)	-0.0827 (0.103)	0.161 (0.184)	0.235 (0.191)
treated = 2 & politics = 1	-0.0352 (0.0732)	0.0716 (0.0681)	-0.119 (0.0910)	-0.0221 (0.0945)
treated = 2 & politics = 2	-0.0926 (0.105)	-0.0232 (0.0664)	-0.0683 (0.114)	-0.0724 (0.117)
Constant	0.508*** (0.149)	0.884*** (0.0634)	0.502*** (0.0849)	0.514*** (0.0867)
Observations	544	595	595	595
R-squared	0.197	0.089	0.100	0.087

Treated = 0 for the control group, = 1 for people exposed to the treatment for ≤ 15 seconds, = 2 otherwise.

Politics = 0 if respondent places himself in the centre of the political spectrum, = 1 if to the left, = 2 if to the right.

We control for completion time, general demographics, education, employment and financial situation, exposure to news, trust and satisfaction with the institutions, political affiliation. For tax morale, we additionally control for religiosity, past evasion, and altruism. For tax and policy preferences, we additionally control for Europeanism and preferences for redistribution. See Table 10 in the Appendix for the full list of coefficients.

Robust standard errors in parentheses. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1

Overall, these results go in the expected direction for left-wingers in both Italy and Portugal, who historically favour government intervention and redistribution, and thereby taxation too. For them, social information appears to reinforce pre-existing tax preferences. The absence of significant effects for right-wingers may instead be explained by the fact that the ideology of parties from the right has recently focused more on conservatism than liberalism, especially in

Italy, so that political affiliation is not an important mediating factor for those at the right-side of the political spectrum when it comes to the effect of social information.

Nationality

The interaction of the treatment indicator and the nationality dummy yields no relevant effects for our treatment on the propensity to justify evasion nor on preferences for taxation on citizens. However, we do reveal heterogenous treatment effects in the two subsamples with respect to preferences for taxation on multinationals and policy action. Italian respondents who received the treatment are more prone to agree that multinationals face a fiscal burden that is too light, by 17.8pp, and that the government should increase the tax rate on these companies, by 12.8pp on average. These effects are significant for a 5% and 10% level, respectively.

Table 6. Relevant results for the specification including the interaction of treatment with *Italian*.

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy
treated = 1	0.0310 (0.112)	-0.0329 (0.0999)	-0.0290 (0.137)	0.0253 (0.140)
treated = 2	-0.0307 (0.0840)	0.0566 (0.0665)	-0.0200 (0.0900)	-0.0159 (0.0894)
Italian = 1	0.0818 (0.0652)	0.0100 (0.0541)	0.100 (0.0706)	0.0525 (0.0708)
treated = 1 & Italian = 1	-0.0460 (0.132)	0.0117 (0.114)	0.0938 (0.158)	0.0223 (0.161)
treated = 2 & Italian = 1	0.0175 (0.0911)	-0.0401 (0.0738)	0.0980 (0.101)	0.0917 (0.101)
Constant	0.523*** (0.152)	0.876*** (0.0693)	0.561*** (0.0895)	0.536*** (0.0901)
Observations	544	595	595	595
R-squared	0.194	0.078	0.097	0.084

Treated = 0 for the control group, = 1 for people exposed to the treatment for ≤ 15 seconds, = 2 otherwise.

Italian = 1 if respondent is Italian.

We control for completion time, general demographics, education, employment and financial situation, exposure to news, trust and satisfaction with the institutions, political affiliation. For tax morale, we additionally control for religiosity, past evasion, and altruism. For tax and policy preferences, we additionally control for Europeanism and preferences for redistribution. See Table 11 in the Appendix for the full list of coefficients.

Robust standard errors in parentheses. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1

A possible explanation for the treatment being more significant for Italian respondents may be that the message shown to them is more salient thanks to larger figures, both in absolute terms, with €31,072 billion of lost tax revenue in Italy versus €3,231 in Portugal, and in relative terms.

In fact, the Italian message reports a sentence stating that the Italian government lost on average €1 for every €5 owed by multinationals; a similar statement is not included in the Portuguese version since the respective proportion, €1 for every €10, would not have been as dramatic.

Heterogenous effects on compliance: age and trust in institutions

Exposure to the treatment raises the likelihood of treated individuals born after 1990 to justify evasion by 16pp on average, with the estimate being significant at the 1%. This is in line with previous evidence showing that fiscal morality increases with age (OECD 2019); on the other hand, given the relatively high correlation between being young and being a student in our sample, with a coefficient of 0.62, our results conform with previous research showing that students typically exhibit poorer fiscal conduct (Fonseca and Myles 2012). Either way, the negative treatment effect for those born after 1990 may be explained by a lack of an internalised social norm of compliance that is instead gained over time and with real taxpaying experience. In fact, there is no effect in older respondents, who may have consolidated beliefs about their preferred fiscal behaviour. Overall, our estimates suggest once again that the informational message reinforces an attitude that was already present.

Trust may also be a mediating factor for our treatment effect. Hammar et al. (2009) show that levels of trust for people in leading positions exert a stronger impact on citizens' tax compliance decisions than trust in other taxpayers. Our analysis reveals that exposure to treatment has a significant impact for all respondents whose average trust in institutions falls below the 70% percentile. On average, the treatment message increases the probability of justifying evasion by 12.0pp for the bottom 30% of the distribution and by 11.5pp for the middle 40%. Estimates are significant at the 5% and 10% levels, respectively. This negative relation between trust and prospected compliance is not surprising: the more taxpayers doubt their institutions, the less they will be willing to entrust them with their money, so that they might want to try and retain

it by evading. Our treatment seems to reinforce this effect, exacerbating compliant behaviour of individuals who may have already been prone to dodging their fiscal obligations due to their low levels of trust.

Table 7. Relevant results for the specification including the interaction of treatment with *young* and *trust*.

Variables	Tax morale	Variables	Tax morale
treated = 1	-0.0608 (0.0750)	treated = 1	-0.00338 (0.0945)
treated = 2	-0.00132 (0.0414)	treated = 2	-0.00709 (0.0480)
young = 1	-0.113** (0.0501)	trust = 1	-0.000424 (0.0461)
treated = 1 & young = 1	0.161 (0.115)	trust = 2	-0.155** (0.0656)
treated = 2 & young = 1	-0.0422 (0.0741)	treated = 1 & trust = 1	0.0477 (0.120)
		treated = 1 & trust = 2	-0.0734 (0.175)
		treated = 2 & trust = 1	-0.0868 (0.0744)
		treated = 2 & trust = 2	0.0803 (0.0881)
Constant	0.534*** (0.149)	Constant	0.511*** (0.145)
Observations	544	Observations	544
R-squared	0.198	R-squared	0.203

Treated = 0 for the control group, = 1 for people exposed to the treatment for ≤ 15 seconds, = 2 otherwise.

Trust = 0 if respondent's trust levels are in the top 30%; = 1 if in the middle 40% of the distribution, = 2 if in the bottom 30%. Young = 1 if respondent was born after 1990.

We control for completion time, general demographics, education, employment and financial situation, exposure to news, trust and satisfaction with the institutions, political affiliation. For tax morale, we additionally control for religiosity, past evasion, and altruism. For tax and policy preferences, we additionally control for Europeanism and preferences for redistribution. See Tables 12 – 13 in the Appendix for the full list of coefficients.

Robust standard errors in parentheses. *** p-value < 0.01, ** p-value < 0.05, * p-value < 0.1

Conclusion

Prior literature on tax morale has suggested that exposure to good examples of tax behaviour can improve fiscal conduct, whereas witnessing negative behaviours may worsen it. This work project tests whether a message containing information about elusion by multinationals can increase the likelihood of survey respondents to justify evasion. While we do not find evidence of an effect in the overall sample, our results reveal significant heterogeneity in the impact of exposure to our treatment for tax compliance attitudes and preferences for taxation by citizens. These primarily manifest based on the ease with which respondents can form their own opinion

and with which they understand news and politics, as well as their political orientation. For tax and policy preferences regarding multinationals, the nationality of the respondent also matters, further suggesting that the magnitude of the tax revenue lost to evasion by multinationals is an important mediator of our treatment effect. Age and trust in institutions play a significant role in terms of fiscal morality instead, with younger respondents and those with lower mean levels of trust responding to our treatment by justifying evasion more, on average.

Overall, we are able to confirm that exposure to social information can influence compliance and policy preferences and extend the literature by including multinationals in the list of agents whose behaviour is considered by citizens when making their compliance decisions. However, this effect is not always negative, as would be expected based on the existing evidence. Rather, for both prospected compliance and policy preferences, social information seems to reinforce what one would expect to be the pre-existing preference of a certain group of respondents, so that the direction of the impact is dependent on the individual mediating factor. At the same time, this implies that social information cannot dissuade from prior beliefs nor generate new ones for those that had none to begin with. That is, taxpayers are affected by the behaviour of multinationals only if it reinforces an opinion that they already held, which also explains why we do not find significant treatment effects when focusing on the overall sample but rather only on specific subgroups.

Whereas most results from existing studies on tax morale were limited to the academic interest, we construct a policy-oriented analysis that can serve as a first indication for the role of social information in shaping preferences for government action. Though not significant overall, our treatment significantly raises the probability that certain types of respondents perceive taxes on multinationals as inadequately low, as well as the probability that they agree with a hypothetical increase in this tax rate. That is, awareness on elusion by big firms could not only change these respondents' perception of current tax levels on multinationals but would also make them more

prone to support novel policy action introducing higher corporate tax rates. The appeal of this result for the policy arena is clear in view of the most recent developments in international tax cooperation, with 136 countries committing to set a 15% minimum tax rate on multinationals. Moreover, albeit seemingly trivial, distinguishing preferences for current tax rates from future tax rates is important as citizens may not trust their government enough to support a new policy direction. Our results explicitly dismantle this suspect for the heterogeneous effects.

An equally important conclusion from our analysis is that social information about evasion by multinationals does not change the perception of respondents regarding their level of taxation in a statistically significant way if not for those who find it hard to understand news relating to politics and the government. Building on our results, policymakers who wish to inform citizens about elusion opportunities for multinationals to stimulate support for higher corporate tax rates should consider that this practice may backfire for this subgroup of the population, who would react to social information by demanding lower tax rates on citizens. In addition, because our treatment has significant negative effects on fiscal morality for certain respondents, spreading information about multinationals' behaviour may also exacerbate evasion by taxpayers. It is up to policymakers to evaluate the trade-off between increased support for government action to combat avoidance and potential discontent of citizens coupled with the corrosion of tax morals.

The estimates from our analysis should be interpreted with caution, however. With no initial randomisation from the populations of interest to obtain a representative sample, results are not externally valid and cannot be generalised. Moreover, since the survey was distributed using a snowball technique spreading across connections, respondents tend to be similar in terms of observable and unobservable characteristics. This is evident for the Portuguese sample, mostly formed by students and respondents who attended higher education. In addition to its reduced representativeness, this sample has also a meagre size, including only 144 valid observations.

Another natural constraint of these results is that they stem from a survey in which respondents were asked about illegal behaviour. Despite our efforts to elicit honest answers, these results are not an indicator of actual behaviour but rather of attitudes towards tax evasion. A related issue is that surveys remain a somewhat artificial environment that cannot guarantee that respondents behave as claimed in their responses. That is, morals showcased when replying to the survey may wither when faced with the tangent opportunity to evade and save money.

Nonetheless, this research effort can pride itself with several strengths. First, despite the fewer responses from the Portuguese survey, the full sample consisted of more than 700 observations, allowing us to use all statistical properties needed to conduct our empirical analysis properly. Moreover, and most importantly, although lacking external validity, successful randomisation of respondents to treatment and control groups has ensured that our estimates are unbiased and can be interpreted as average treatment effect in our sample.

The methods employed in this work project also provide interesting avenues for further efforts. Since our survey replicated a module of the 2004 European Social Survey that has never been reintroduced, our data could be used for a qualitative within-country comparison of answers to investigate whether and how compliance attitudes have evolved over time. This type of analysis becomes even more interesting under the impression, also confirmed by several international organisations, that the Portuguese government has adopted a paradigm shift in its fight against evasion that is still not present or not as marked in Italy (International Monetary Fund 2016; Italian Ministry of Economy and Finance 2018; Wilks et al 2019). Ensuring external validity, a comparison of compliance attitudes at 17 years of distance could potentially reveal important implications on the effectiveness of adopting a long-term approach to combat tax evasion and enrich our knowledge on a pervasive and always relevant issue.

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Appendix

Table 1. Description and summary statistics for dummy control variables.

Variable	Description	FULL SAMPLE		ITALIAN SAMPLE		PORTUGUESE SAMPLE	
		Mean	SD	Mean	SD	Mean	SD
news	= 1 if respondent's news exposure is beyond the 70 th percentile	.388	.488	.377	.485	.431	.497
interest	= 1 if respondent has more than "Little interest" in politics	.594	.491	.531	.499	.861	.347
complex	= 1 if respondent struggles to understand politics "Sometimes" or more often	.713	.453	.747	.435	.569	.497
own opinion	= 1 if respondent finds it "Hard" or "Very hard" to form an opinion about politics and issues in the news	.323	.468	.345	.476	.229	.422
redistribution	= 1 if agree that government should act to level income inequalities	.479	.500	.432	.496	.678	.469
religious	= 1 if respondent's self-assessment of religiosity is beyond the 70 th percentile	.218	.413	.225	.418	.189	.393
altruist	= 1 if respondent agrees that society is better when people spend some of their time helping others and disagrees that it would be better if everyone only cared about their own interest	.635	.482	.622	.485	.690	.464
evader	= 1 if respondent has evaded VAT at least once in the past 5 years	.443	.497	.456	.498	.392	.490
noVAT_others	= 1 if respondent knows of someone who has evaded VAT in the past 5 years	.798	.402	.798	.402	.797	.403
female	= 1 if respondent female	.668	.471	.700	.458	.529	.501
young	= 1 if respondent was born after 1990	.349	.477	.280	.449	.645	.480
city	= 1 if respondent lives in big city or suburbs	.201	.401	.065	.246	.776	.418
higher_educ	= 1 if respondent has achieved higher degree than high school	.479	.500	.412	.493	.762	.427
selfempl	= 1 if respondent is self-employed	.114	.318	.131	.337	.034	.181
poverty	= 1 if respondent's income is below the poverty line*	.319	.466	.358	.480	.171	.378

*reference for the poverty line is 657€ per capita in Italy (Varrella 2021) and 468€ per capita in Portugal (Perista 2019).

Table 2. Description and frequency tables for categorical control variables.

Variable	Description	FULL SAMPLE		ITALIAN SAMPLE		PORTUGUESE SAMPLE	
		Freq.	Percent	Freq.	Percent	Freq.	Percent
trust	= 0 if respondent's mean level of trust exceeds the 70 th percentile	210	27.78	148	24.18	62	43.06
	= 1 if respondent's mean level of trust falls in the middle 40% of the distribution	262	34.66	202	33.01	60	41.67
	= 2 if respondent's mean level of trust is below the 30 th percentile	199	26.32	184	30.07	15	10.42
	Not given	85	11.24	78	12.75	7	4.86
politics	= 0 if respondent picks a central degree in the political spectrum	298	39.42	225	36.76	73	50.69
	= 1 if respondent sits at the left of the political spectrum	280	37.04	235	38.40	45	31.25
	= 2 if respondent sits at the right of the political spectrum	151	19.97	128	20.92	23	15.97
	Not given	27	3.57	24	3.92	3	2.08
satisfaction	= 0 if respondent's mean level of satisfaction with the education and health sector exceeds the 70 th percentile	161	21.30	122	19.93	39	27.08
	= 1 if respondent's mean level of satisfaction with the education and health sector falls in the middle 40% of the distribution	350	46.30	280	45.75	70	48.61
	= 2 if respondent's mean level of satisfaction with the education and health sector are below the 30 th percentile	234	30.95	200	32.68	34	23.61
	Not given	11	1.46	10	1.63	1	0.69
EU	= 0 if respondent thinks that European integration has gone too far	229	30.29	165	26.96	64	44.44
	= 1 if respondent is happy with the current level of European integration	109	14.42	102	16.67	7	4.86
	= 2 if respondent thinks that European integration should go further	398	52.65	326	53.27	72	50.00
	Not given	20	2.65	19	3.10	1	0.69
revenue orig.	= 0 if main source of income is not one of the following	22	2.91	13	2.12	9	6.25
	= 1 if main source of income is subordinate work compensation	538	71.16	417	68.14	121	84.03
	= 2 if main source of income is revenue from self-employment	81	10.71	72	11.76	9	6.25
	= 3 if main source of income is the pension	101	13.36	97	15.85	4	2.78
Not given	14	1.85	13	2.12	1	0.69	
lifestyle	= 0 if respondent's income allows them to live comfortably	363	48.02	278	45.42	85	59.03
	= 1 if respondent's income allows them to make ends meet	325	42.99	277	45.26	48	33.33
	= 2 if respondent's income makes it "Hard" or "Very hard" to live	54	7.14	44	7.19	10	6.94
	Not given	14	1.85	13	2.12	1	0.69

Table 3. Individual two-sample t-tests. No variable is unbalanced for a 10% significance level in either the full or the national samples.

Variable	FULL SAMPLE					ITALIAN SAMPLE					PORTUGUESE SAMPLE				
	Mean diff.	N	St. Error	t-value	p-value	Mean diff	N	St. Error	t-value	p-value	Mean. Diff.	N	St. Error	t-value	p-value
news	0.013	756	0.035	0.367	0.713	0.038	612	0.039	0.975	0.33	-0.087	144	0.083	-1.054	0.293
interest	-0.012	756	0.036	-0.329	0.742	0.004	612	0.04	0.087	0.931	-0.036	144	0.058	-0.611	0.542
complex	-0.025	756	0.033	-0.767	0.443	-0.024	612	0.035	-0.689	0.491	-0.052	144	0.083	-0.623	0.534
own opinion	-0.017	756	0.034	-0.497	0.620	-0.024	612	0.039	-0.624	0.533	-0.001	144	0.071	-0.016	0.987
redistribution	0.019	745	0.037	0.515	0.607	0.02	602	0.04	0.486	0.627	0.042	143	0.079	0.541	0.59
religious	-0.015	744	0.03	-0.502	0.616	-0.012	601	0.034	-0.343	0.732	-0.034	143	0.066	-0.518	0.605
altruist	-0.014	737	0.036	-0.394	0.694	-0.004	595	0.04	-0.108	0.914	-0.046	142	0.078	-0.584	0.56
evader	0.012	742	0.037	0.339	0.735	0.016	599	0.041	0.4	0.69	-0.012	143	0.082	-0.14	0.889
noVAT_others	0.021	736	0.030	0.720	0.472	0.005	593	0.033	0.149	0.881	0.089	143	0.067	1.333	0.185
female	-0.002	734	0.035	-0.054	0.957	-0.03	594	0.038	-0.808	0.419	0.101	140	0.085	1.193	0.235
young	0.023	728	0.035	0.647	0.518	0.036	590	0.037	0.976	0.33	0.031	138	0.082	0.383	0.703
city	0.002	745	0.029	0.051	0.959	0.01	602	0.02	0.508	0.612	0.047	143	0.07	0.665	0.507
higher_educ	-0.035	745	0.037	-0.946	0.345	-0.017	602	0.04	-0.429	0.668	-0.066	143	0.072	-0.92	0.359
selfempl	0.006	700	0.024	0.251	0.802	0.014	581	0.028	0.486	0.627	-0.035	119	0.034	-1.051	0.296
poverty	0.01	677	0.036	0.286	0.775	-0.009	537	0.042	-0.226	0.821	0.062	140	0.064	0.968	0.335

Means are computed for categorical variables too if these are based on ordinal data, namely for *satisfaction*, *EU*, and *lifestyle*, as well as *politics* after restoring the left-right scale. We cannot compute the mean for *revenue origin* but test balance between the two samples overall with the Hotelling's generalised means test, reported in Tables 4 – 6 in the Appendix.

Table 4. Hotelling's generalised means test for the full sample. We cannot reject the null hypothesis that a vector of the means of the two groups are equal, meaning that the two groups are balanced overall.

Variable	Min	Max	CONTROL GROUP			TREATMENT GROUP		
			Mean	SD	Obs.	Mean	SD	Obs.
news	0	1	0.392	0.489	291	0.36	0.481	253
interest	0	1	0.605	0.49	291	0.593	0.492	253
complex	0	1	0.677	0.468	291	0.739	0.44	253
own opinion	0	1	0.299	0.459	291	0.332	0.472	253
redistribution	0	1	0.498	0.501	291	0.447	0.498	253
religious	0	1	0.206	0.405	291	0.217	0.413	253
altruist	0	1	0.646	0.479	291	0.644	0.48	253
evader	0	1	0.471	0.5	291	0.478	0.501	253
noVAT_others	0	1	0.825	0.381	291	0.834	0.373	253
female	0	1	0.632	0.483	291	0.632	0.483	253
young	0	1	0.368	0.483	291	0.372	0.484	253
city	0	1	0.196	0.398	291	0.202	0.402	253
higher_educ	0	1	0.509	0.501	291	0.561	0.497	253
selfempl	0	1	0.127	0.334	291	0.099	0.299	253
poverty	0	1	0.316	0.466	291	0.289	0.454	253
trust	0	2	0.983	0.781	291	0.988	0.774	253
politics	0	2	0.78	0.747	291	0.866	0.765	253
satisfaction	0	2	1.124	0.76	291	0.996	0.681	253
EU	0	2	1.223	0.911	291	1.308	0.868	253
revenue orig.	0	3	1.337	0.731	291	1.265	0.682	253
lifestyle	0	2	0.605	0.615	291	0.538	0.633	253

2-group Hotelling's T-squared = 19.336425

F test statistic: $((544-22-1)/(544-2)(22)) \times 19.336425 = .84487401$

H0: Vectors of means are equal for the two groups

F(22,521) = 0.8449

Prob > F(22,521) = **0.6692**

Table 5. Hotelling test for the Italian sample. We cannot reject the null hypothesis that a vector of the means of the two groups are equal, meaning that the two groups are balanced overall.

Variable	Min	Max	CONTROL GROUP			TREATMENT GROUP		
			Mean	SD	Obs.	Mean	SD	Obs.
news	0	1	0.391	0.489	238	0.328	0.471	201
interest	0	1	0.563	0.497	238	0.522	0.501	201
complex	0	1	0.697	0.46	238	0.776	0.418	201
own opinion	0	1	0.319	0.467	238	0.348	0.478	201
redistribution	0	1	0.454	0.499	238	0.403	0.492	201
religious	0	1	0.218	0.414	238	0.219	0.415	201
altruist	0	1	0.647	0.479	238	0.627	0.485	201
evader	0	1	0.492	0.501	238	0.488	0.501	201
noVAT_others	0	1	0.819	0.386	238	0.836	0.371	201
female	0	1	0.651	0.478	238	0.672	0.471	201
young	0	1	0.307	0.462	238	0.318	0.467	201
city	0	1	0.063	0.244	238	0.045	0.207	201
higher_educ	0	1	0.445	0.498	238	0.488	0.501	201
selfempl	0	1	0.151	0.359	238	0.109	0.313	201
poverty	0	1	0.345	0.476	238	0.333	0.473	201
trust	0	2	1.029	0.798	238	1.065	0.782	201
politics	0	2	0.815	0.752	238	0.92	0.751	201
satisfaction	0	2	1.143	0.761	238	1.025	0.681	201
EU	0	2	1.261	0.89	238	1.358	0.831	201
revenue orig.	0	3	1.408	0.767	238	1.343	0.726	201
lifestyle	0	2	0.622	0.623	238	0.552	0.615	201

2-group Hotelling's T-squared = 21.674401

F test statistic: $((439-22-1)/(439-2)(22)) \times 21.674401 = .93785632$

H0: Vectors of means are equal for the two groups

F(22,416) = 0.9379

Prob > F(22,416) = **0.5445**

Table 6. Hotelling test for the Portuguese sample. We cannot reject the null hypothesis that a vector of the means of the two groups are equal, meaning that the two groups are balanced overall.

Variable	Min	Max	CONTROL GROUP			TREATMENT GROUP		
			Mean	SD	Obs.	Mean	SD	Obs.
news	0	1	0.396	0.494	53	0.481	0.505	52
interest	0	1	0.792	0.409	53	0.865	0.345	52
complex	0	1	0.585	0.497	53	0.596	0.495	52
own opinion	0	1	0.208	0.409	53	0.269	0.448	52
redistribution	0	1	0.698	0.463	53	0.615	0.491	52
religious	0	1	0.151	0.361	53	0.212	0.412	52
altruist	0	1	0.642	0.484	53	0.712	0.457	52
evader	0	1	0.377	0.489	53	0.442	0.502	52
noVAT_others	0	1	0.849	0.361	53	0.827	0.382	52
female	0	1	0.547	0.503	53	0.481	0.505	52
young	0	1	0.642	0.484	53	0.577	0.499	52
city	0	1	0.792	0.409	53	0.808	0.398	52
higher_educ	0	1	0.792	0.409	53	0.846	0.364	52
selfempl	0	1	0.019	0.137	53	0.058	0.235	52
poverty	0	1	0.189	0.395	53	0.115	0.323	52
trust	0	2	0.774	0.669	53	0.692	0.673	52
politics	0	2	0.623	0.713	53	0.654	0.789	52
satisfaction	0	2	1.038	0.759	53	0.885	0.676	52
EU	0	2	1.057	0.989	53	1.115	0.983	52
revenue orig.	0	3	1.019	0.416	53	0.962	0.341	52
lifestyle	0	2	0.528	0.575	53	0.481	0.7	52

2-group Hotelling's T-squared = 15.468302

F test statistic: $((105-22-1)/(105-2)(22)) \times 15.468302 = .55975322$

H0: Vectors of means are equal for the two groups

F(22,82) = 0.5598

Prob > F(22,82) = **0.9379**

Table 7. Full results for the simplest specification.

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy
treated = 1	-0.00274 (0.0593)	-0.0262 (0.0514)	0.0417 (0.0685)	0.0449 (0.0698)
treated = 2	-0.0163 (0.0346)	0.0249 (0.0299)	0.0574 (0.0410)	0.0566 (0.0423)
duration	-7.34e-05 (0.000175)	6.10e-05 (9.62e-05)	0.000283 (0.000172)	9.76e-05 (0.000203)
Italian	0.0834* (0.0503)	-0.00439 (0.0378)	0.149*** (0.0532)	0.0907* (0.0542)
news	0.0324 (0.0333)	0.00296 (0.0305)	0.0302 (0.0405)	0.0363 (0.0413)
trust = 1	-0.0297 (0.0345)	0.0254 (0.0385)	-0.00962 (0.0470)	-0.00819 (0.0483)
trust = 2	-0.131** (0.0505)	0.0210 (0.0447)	0.0658 (0.0604)	-0.0586 (0.0634)
altruist	0.0746** (0.0355)			
satisfaction = 1	0.0280 (0.0387)	0.0568 (0.0407)	0.0339 (0.0502)	0.0178 (0.0506)
satisfaction = 2	0.0302 (0.0522)	0.0626 (0.0484)	-0.0433 (0.0611)	0.0181 (0.0620)
politics = 1	0.102*** (0.0393)	-0.157*** (0.0339)	0.141*** (0.0449)	0.163*** (0.0459)
politics = 2	0.0180 (0.0520)	-0.0332 (0.0331)	-0.103* (0.0578)	-0.0840 (0.0583)
religious	0.00903 (0.0384)			
young	-0.116*** (0.0374)	-0.0352 (0.0336)	-0.0985** (0.0424)	-0.0723* (0.0438)
female	0.0323 (0.0359)			
selfempl	-0.171** (0.0682)			
higher_educ	-0.0217 (0.0375)			
lifestyle = 1	-0.0222 (0.0352)			
lifestyle = 2	-0.116 (0.0844)			
noVAT_others	-0.0234 (0.0413)			
poverty	0.0204 (0.0403)	0.0110 (0.0309)	-0.0263 (0.0432)	-0.0641 (0.0445)
evader	-0.0537 (0.0327)			
EU = 1	-0.0545 (0.0641)	0.0224 (0.0411)	-0.0751 (0.0748)	0.0791 (0.0735)
EU = 2	0.0331 (0.0417)	-0.00433 (0.0331)	-0.0340 (0.0476)	-0.0132 (0.0486)
redistribution	0.0548 (0.0339)	-0.0427 (0.0302)	0.0314 (0.0401)	0.0433 (0.0417)
interest	0.0577 (0.0410)			
own opinion	0.0362 (0.0376)	0.0164 (0.0284)	-0.116*** (0.0448)	-0.116** (0.0452)

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy
revenue orig. = 1	0.198 (0.127)			
revenue orig. = 2	0.121 (0.140)			
revenue orig. = 3	0.0969 (0.138)			
Constant	0.523*** (0.148)	0.886*** (0.0641)	0.520*** (0.0802)	0.506*** (0.0814)
Observations	544	595	595	595
R-squared	0.194	0.077	0.096	0.083

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 8. Full table of results for the specification including the interaction of treatment with *own opinion*.

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy
treated = 1	-0.0177 (0.0661)	-0.0110 (0.0628)	0.0769 (0.0785)	0.136* (0.0775)
treated = 2	-0.0723* (0.0422)	0.0715** (0.0361)	0.115** (0.0471)	0.0836* (0.0495)
own opinion = 1	-0.0408 (0.0510)	0.0829** (0.0379)	-0.0287 (0.0622)	-0.0497 (0.0634)
treated = 1 & own opinion = 1	0.0553 (0.138)	-0.0558 (0.101)	-0.128 (0.155)	-0.329** (0.155)
treated = 2 & own opinion = 1	0.178** (0.0738)	-0.151** (0.0623)	-0.187** (0.0898)	-0.0927 (0.0911)
duration	-5.80e-05 (0.000175)	4.64e-05 (0.000102)	0.000262 (0.000184)	7.66e-05 (0.000201)
Italian	0.0877* (0.0505)	-0.00436 (0.0377)	0.149*** (0.0531)	0.0916* (0.0541)
news	0.0342 (0.0328)	0.00322 (0.0306)	0.0310 (0.0403)	0.0386 (0.0412)
trust = 1	-0.0343 (0.0345)	0.0283 (0.0386)	-0.00482 (0.0470)	-0.000655 (0.0483)
trust = 2	-0.135*** (0.0504)	0.0233 (0.0442)	0.0698 (0.0602)	-0.0516 (0.0635)
altruist	0.0756** (0.0357)			
satisfaction = 1	0.0240 (0.0387)	0.0596 (0.0406)	0.0376 (0.0502)	0.0202 (0.0504)
satisfaction = 2	0.0296 (0.0518)	0.0606 (0.0483)	-0.0462 (0.0610)	0.0146 (0.0621)
politics = 1	0.0983** (0.0392)	-0.155*** (0.0339)	0.144*** (0.0446)	0.167*** (0.0458)
politics = 2	0.0135 (0.0517)	-0.0300 (0.0329)	-0.0986* (0.0580)	-0.0804 (0.0587)
religious	0.0121 (0.0381)			
young	-0.114*** (0.0373)	-0.0363 (0.0336)	-0.1000** (0.0424)	-0.0739* (0.0436)
female	0.0333 (0.0362)			
selfempl	-0.167** (0.0671)			
higher_educ	-0.0227 (0.0370)			
lifestyle = 1	-0.0156 (0.0354)			
lifestyle = 2	-0.0920 (0.0835)			
noVAT_others	-0.0194 (0.0416)			
poverty	0.0170 (0.0399)	0.0106 (0.0307)	-0.0269 (0.0433)	-0.0649 (0.0443)
evader	-0.0590* (0.0330)			
EU = 1	-0.0625 (0.0636)	0.0291 (0.0404)	-0.0674 (0.0755)	0.0807 (0.0736)
EU = 2	0.0314 (0.0418)	-0.00206 (0.0330)	-0.0316 (0.0475)	-0.0138 (0.0486)
redistribution	0.0530 (0.0340)	-0.0427 (0.0300)	0.0315 (0.0400)	0.0438 (0.0416)

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy
interest	0.0551 (0.0407)			
revenue orig. = 1	0.198 (0.127)			
revenue orig. = 2	0.108 (0.138)			
revenue orig. = 3	0.0968 (0.136)			
Constant	0.548*** (0.147)	0.862*** (0.0657)	0.488*** (0.0808)	0.480*** (0.0827)
Observations	544	595	595	595
R-squared	0.203	0.086	0.103	0.090

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 9. Full table of results for the specification including the interaction of treatment with *complex*.

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy
treated = 1	0.0518 (0.0908)	0.0671 (0.0930)	0.0110 (0.120)	0.0124 (0.133)
treated = 2	-0.126** (0.0625)	0.0815 (0.0616)	0.0383 (0.0714)	0.0355 (0.0768)
complex = 1	-0.103** (0.0466)	0.132*** (0.0487)	-0.0387 (0.0592)	-0.0420 (0.0616)
treated = 1 & complex = 1	-0.0585 (0.116)	-0.142 (0.110)	0.0460 (0.145)	0.0488 (0.156)
treated = 2 & complex = 1	0.158** (0.0731)	-0.0859 (0.0710)	0.0286 (0.0879)	0.0316 (0.0925)
duration	-8.84e-05 (0.000177)	6.03e-05 (0.000105)	0.000283 (0.000172)	9.77e-05 (0.000205)
nationality	0.0903* (0.0506)	-0.0147 (0.0375)	0.152*** (0.0536)	0.0938* (0.0544)
news	0.0409 (0.0329)	0.00218 (0.0299)	0.0306 (0.0408)	0.0367 (0.0417)
trust = 1	-0.0315 (0.0338)	0.0170 (0.0393)	-0.00738 (0.0475)	-0.00581 (0.0489)
trust = 2	-0.129** (0.0501)	0.0118 (0.0451)	0.0685 (0.0606)	-0.0557 (0.0637)
altruist	0.0799** (0.0357)			
satisfaction = 1	0.0234 (0.0384)	0.0605 (0.0408)	0.0329 (0.0503)	0.0167 (0.0506)
satisfaction = 2	0.0257 (0.0521)	0.0626 (0.0487)	-0.0433 (0.0615)	0.0181 (0.0622)
politics = 1	0.101*** (0.0388)	-0.163*** (0.0345)	0.143*** (0.0454)	0.165*** (0.0465)
politics = 2	0.0279 (0.0523)	-0.0318 (0.0324)	-0.103* (0.0580)	-0.0844 (0.0585)
religious	0.0207 (0.0384)			
young	-0.103*** (0.0373)	-0.0410 (0.0333)	-0.0968** (0.0427)	-0.0704 (0.0439)
female	0.0465 (0.0365)			
selfempl	-0.163** (0.0691)			
higher_educ	-0.0321 (0.0376)			
lifestyle = 1	-0.0227 (0.0352)			
lifestyle = 2	-0.110 (0.0837)			
noVAT_others	-0.0223 (0.0415)			
poverty	0.0207 (0.0402)	0.00786 (0.0309)	-0.0256 (0.0436)	-0.0633 (0.0448)
evader	-0.0567* (0.0326)			
EU = 1	-0.0702 (0.0648)	0.0364 (0.0409)	-0.0792 (0.0755)	0.0747 (0.0741)
EU = 2	0.0266 (0.0418)	0.00536 (0.0331)	-0.0369 (0.0479)	-0.0163 (0.0488)
redistribution	0.0522 (0.0337)	-0.0390 (0.0300)	0.0304 (0.0403)	0.0422 (0.0419)

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy
interest	0.0562 (0.0412)			
ownop	0.0465 (0.0386)	-0.00845 (0.0288)	-0.109** (0.0473)	-0.109** (0.0473)
revenue_orig = 1	0.197 (0.125)			
revenue_orig = 2	0.0983 (0.139)			
revenue_orig = 3	0.0931 (0.135)			
Constant	0.580*** (0.147)	0.813*** (0.0716)	0.542*** (0.0882)	0.530*** (0.0896)
Observations	544	595	595	595
R-squared	0.204	0.093	0.096	0.084

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 10. Full table of results for the specification including the interaction of treatment with *politics*.

Variables	Tax morale	Tax rate citizens	Tax rate multn.	Policy
treated = 1	0.0702 (0.0822)	0.0577 (0.0471)	0.0254 (0.0994)	-0.0430 (0.104)
treated = 2	0.0177 (0.0639)	-0.000898 (0.0396)	0.122* (0.0687)	0.0825 (0.0727)
politics = 1	0.128** (0.0502)	-0.165*** (0.0476)	0.188*** (0.0616)	0.157** (0.0631)
politics = 2	0.0663 (0.0668)	-0.0114 (0.0418)	-0.0946 (0.0813)	-0.0779 (0.0806)
treated = 1 & politics = 1	-0.145 (0.128)	-0.232* (0.134)	-0.0298 (0.152)	0.146 (0.147)
treated = 1 & politics = 2	-0.134 (0.167)	-0.0827 (0.103)	0.161 (0.184)	0.235 (0.191)
treated = 2 & politics = 1	-0.0352 (0.0732)	0.0716 (0.0681)	-0.119 (0.0910)	-0.0221 (0.0945)
treated = 2 & politics = 2	-0.0926 (0.105)	-0.0232 (0.0664)	-0.0683 (0.114)	-0.0724 (0.117)
duration	-7.58e-05 (0.000181)	6.12e-05 (9.41e-05)	0.000291* (0.000171)	9.73e-05 (0.000206)
Italian	0.0848* (0.0508)	-0.00141 (0.0372)	0.146*** (0.0536)	0.0820 (0.0551)
news	0.0351 (0.0331)	0.00359 (0.0304)	0.0292 (0.0407)	0.0318 (0.0418)
trust = 1	-0.0313 (0.0345)	0.0225 (0.0387)	-0.00658 (0.0473)	-0.00864 (0.0487)
trust = 2	-0.132*** (0.0504)	0.0219 (0.0446)	0.0694 (0.0606)	-0.0563 (0.0635)
altruist	0.0740** (0.0355)			
satisfaction = 1	0.0277 (0.0388)	0.0574 (0.0405)	0.0327 (0.0503)	0.0177 (0.0509)
satisfaction = 2	0.0295 (0.0522)	0.0630 (0.0487)	-0.0435 (0.0612)	0.0182 (0.0623)
religious	0.0122 (0.0401)			
young	-0.114*** (0.0373)	-0.0350 (0.0333)	-0.0951** (0.0426)	-0.0693 (0.0442)
female	0.0333 (0.0357)			
selfempl	-0.170** (0.0688)			
higher_educ	-0.0239 (0.0374)			
lifestyle = 1	-0.0215 (0.0357)			
lifestyle = 2	-0.119 (0.0836)			
noVAT_others	-0.0264 (0.0413)			
poverty	0.0178 (0.0405)	0.00677 (0.0310)	-0.0264 (0.0432)	-0.0617 (0.0444)
evader	-0.0472 (0.0326)			
EU = 1	-0.0519 (0.0634)	0.0217 (0.0412)	-0.0734 (0.0753)	0.0810 (0.0737)
EU = 2	0.0326 (0.0421)	-0.00535 (0.0328)	-0.0377 (0.0477)	-0.0139 (0.0487)

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy
redistribution	0.0541 (0.0340)	-0.0434 (0.0302)	0.0320 (0.0401)	0.0440 (0.0418)
interest	0.0559 (0.0412)			
own opinion	0.0383 (0.0374)	0.0182 (0.0280)	-0.116*** (0.0448)	-0.117** (0.0451)
revenue orig. = 1	0.192 (0.129)			
revenue orig. = 2	0.116 (0.142)			
revenue orig. = 3	0.0917 (0.139)			
Constant	0.508*** (0.149)	0.884*** (0.0634)	0.502*** (0.0849)	0.514*** (0.0867)
Observations	544	595	595	595
R-squared	0.197	0.089	0.100	0.087

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 11. Full table of results for the specification including the interaction of treatment with *Italian*.

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy
treated = 1	0.0310 (0.112)	-0.0329 (0.0999)	-0.0290 (0.137)	0.0253 (0.140)
treated = 2	-0.0307 (0.0840)	0.0566 (0.0665)	-0.0200 (0.0900)	-0.0159 (0.0894)
Italian = 1	0.0818 (0.0652)	0.0100 (0.0541)	0.100 (0.0706)	0.0525 (0.0708)
treated = 1 & Italian = 1	-0.0460 (0.132)	0.0117 (0.114)	0.0938 (0.158)	0.0223 (0.161)
treated = 2 & Italian = 1	0.0175 (0.0911)	-0.0401 (0.0738)	0.0980 (0.101)	0.0917 (0.101)
duration	-7.55e-05 (0.000175)	6.09e-05 (9.62e-05)	0.000289* (0.000171)	0.000100 (0.000204)
news	0.0329 (0.0335)	0.00174 (0.0309)	0.0325 (0.0406)	0.0388 (0.0414)
trust = 1	-0.0297 (0.0345)	0.0256 (0.0384)	-0.0126 (0.0472)	-0.00974 (0.0486)
trust = 2	-0.130** (0.0508)	0.0213 (0.0446)	0.0636 (0.0604)	-0.0598 (0.0635)
altruist	0.0750** (0.0355)			
satisfaction = 1	0.0288 (0.0387)	0.0564 (0.0408)	0.0344 (0.0503)	0.0185 (0.0506)
satisfaction = 2	0.0310 (0.0524)	0.0623 (0.0483)	-0.0415 (0.0612)	0.0192 (0.0620)
politics = 1	0.102*** (0.0393)	-0.157*** (0.0339)	0.140*** (0.0451)	0.163*** (0.0462)
politics = 2	0.0199 (0.0522)	-0.0350 (0.0332)	-0.102* (0.0581)	-0.0814 (0.0588)
religious	0.0108 (0.0385)			
young	-0.116*** (0.0376)	-0.0354 (0.0336)	-0.0984** (0.0424)	-0.0720 (0.0437)
female	0.0330 (0.0361)			
selfempl	-0.170** (0.0683)			
higher_educ	-0.0215 (0.0375)			
lifestyle = 1	-0.0229 (0.0353)			
lifestyle = 2	-0.114 (0.0850)			
noVAT_others	-0.0240 (0.0414)			
poverty	0.0199 (0.0403)	0.0110 (0.0309)	-0.0271 (0.0434)	-0.0644 (0.0447)
evader	-0.0521 (0.0328)			
EU = 1	-0.0541 (0.0642)	0.0222 (0.0410)	-0.0774 (0.0747)	0.0785 (0.0735)
EU = 2	0.0336 (0.0419)	-0.00478 (0.0330)	-0.0342 (0.0478)	-0.0127 (0.0487)
redistribution	0.0551 (0.0341)	-0.0428 (0.0302)	0.0307 (0.0401)	0.0431 (0.0418)
interest	0.0583 (0.0410)			

Variables	Tax morale	Tax rate citizens	Tax rate multin.	Policy
ownop	0.0363 (0.0377)	0.0166 (0.0285)	-0.117*** (0.0448)	-0.116** (0.0453)
revenue orig. = 1	0.196 (0.127)			
revenue orig. = 2	0.119 (0.140)			
revenue orig. = 3	0.0952 (0.137)			
Constant	0.523*** (0.152)	0.876*** (0.0693)	0.561*** (0.0895)	0.536*** (0.0901)
Observations	544	595	595	595
R-squared	0.194	0.078	0.097	0.084

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 12. Full table of results for the specification including the interaction of treatment with *young*.

Variables	Tax morale
treated = 1	-0.0608 (0.0750)
treated = 2	-0.00132 (0.0414)
toung = 1	-0.113** (0.0501)
treated = 1 & young =1	0.161 (0.115)
treated = 2 & young = 1	-0.0422 (0.0741)
duration	-6.21e-05 (0.000176)
nationality	0.0809 (0.0508)
news	0.0279 (0.0335)
trust = 1	-0.0308 (0.0343)
trust = 2	-0.133*** (0.0506)
altruist	0.0791** (0.0355)
satisfaction = 1	0.0308 (0.0387)
satisfaction = 2	0.0343 (0.0523)
politics = 1	0.106*** (0.0391)
politics = 2	0.0213 (0.0516)
religious	0.0116 (0.0385)
female	0.0271 (0.0359)
selfempl	-0.176** (0.0681)
higher_educ	-0.0245 (0.0375)
lifestyle = 1	-0.0204 (0.0354)
lifestyle = 2	-0.115 (0.0831)
noVAT_others	-0.0268 (0.0408)
poverty	0.0126 (0.0405)
evader	-0.0525 (0.0329)
EU = 1	-0.0501 (0.0639)
EU = 2	0.0329 (0.0417)
redistribution	0.0524 (0.0342)
interest	0.0556 (0.0409)

Variables	Tax morale
ownop	0.0374 (0.0375)
revenue orig. = 1	0.192 (0.127)
revenue orig. = 2	0.123 (0.140)
revenue orig. = 3	0.0937 (0.137)
Constant	0.534*** (0.149)
Observations	544
R-squared	0.198

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 12. Full table of results for the specification including the interaction of treatment with *trust*.

Variables	Tax morale
treated = 1	-0.00338 (0.0945)
treated = 2	-0.00709 (0.0480)
trust = 1	-0.000424 (0.0461)
trust = 2	-0.155** (0.0656)
treated = 1 & trust = 1	0.0477 (0.120)
treated = 1 & trust = 2	-0.0734 (0.175)
treated = 2 & trust = 1	-0.0868 (0.0744)
treated = 2 & trust = 2	0.0803 (0.0881)
duration	-9.38e-05 (0.000170)
nationality	0.0785 (0.0509)
news	0.0314 (0.0343)
altruist	0.0774** (0.0359)
satisfaction = 1	0.0274 (0.0389)
satisfaction = 2	0.0265 (0.0529)
politics = 1	0.105*** (0.0392)
politics = 2	0.00958 (0.0519)
religious	0.00778 (0.0392)
young	-0.119*** (0.0376)
female	0.0343 (0.0361)
selfempl	-0.172*** (0.0664)
higher_educ	-0.0235 (0.0377)
lifestyle = 1	-0.0254 (0.0353)
lifestyle = 2	-0.110 (0.0854)
noVAT_others	-0.00703 (0.0413)
poverty	0.0204 (0.0404)
evader	-0.0599* (0.0332)
EU = 1	-0.0419 (0.0647)
EU = 2	0.0344 (0.0422)

Variables	Tax morale
redistribution	0.0432 (0.0351)
interest	0.0556 (0.0409)
ownop	0.0347 (0.0377)
revenue orig. = 1	0.208* (0.125)
revenue orig. = 2	0.128 (0.138)
revenue orig. = 3	0.116 (0.136)
Constant	0.511*** (0.145)
Observations	544
R-squared	0.203

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1