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Tax evasion and social information: an experiment in Belgium, France, and the Netherlands

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Abstract We experimentally study how receiving information about tax compliance of others affects individuals' occupational choices and subsequent evading decisions. In one treatment individuals receive information about the highest tax evasion rates of

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others in past experimental sessions with no such social information; in another treatment they receive information about the lowest tax evasion rates observed in the past sessions with no such social information. We observe an asymmetric effect of social information on tax compliance. Whereas examples of high compliance do not have any disciplining effect, we find evidence that examples of low compliance significantly increase tax evasion for certain audit probabilities. No major differences are found across countries.

Keywords Tax evasion · Social interactions · Peer effects · Cross-country comparisons · Experiments

JEL Classification H26 · D83 · C91

1 Introduction

Tax evasion is a worrisome phenomenon, in particular in times of economic crises when tax bases decline while needs increase. Albeit its social and economic importance and the recent expansion of research on tax evasion (Alm 2012) we still have limited knowledge of the determinants of this informal phenomenon (see Andreoni et al. 1998; Slemrod 2007). Tax evasion has often been studied as a rational decision making process under risk. According to this economics-of-crime approach, tax evasion is considered as a gamble with a probability of detection leading to sanctions. However, following the formal model of Allingham and Sandmo (1972), it has been shown that tax compliance cannot be entirely explained by the risk of deterrence and economic factors. Indeed, the Allingham-Sandmo model predicts a compliance rate much lower than what we actually observe. In this context, understanding tax morale—i.e., the intrinsic willingness of individuals to comply with the tax law—becomes crucial to explain the large differences between theoretical predictions and what is actually observed (Torgler 2007; Alm 2012).

It is conceivable that individual tax morale depends on the behavior of others in society. Indeed, many decisions made by individuals are influenced by the examples

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given by their peers [1] and similarly, we can hypothesize that individual tax behavior depends on the compliance of others in society and is affected by social norms (Myles and Naylor 1996; Alm and Torgler 2006; Fortin et al. 2007; Torgler 2007; Cummings et al. 2009; Alm 2012; Fonseca and Myles 2012). Relatedly, people with reference-dependent preferences may be influenced by others' behavior if this behavior constitutes a reference point. [2] Recently, field experiments have found evidence supporting the *broken windows theory* of Wilson and Kelling (1982). It has been shown that signs of disorder or littering induce the spreading of more disorder and littering when people can observe that others have violated a social norm (see notably Keizer et al. 2008). A *critical mass* model has also been suggested when some individuals take part in an activity only if a high enough fraction of the population is engaged in the activity (Schelling 1978). This model would suggest that in the domain of taxes, a high level of compliance in the group may discipline individuals, while a low level of compliance may discourage them from behaving honestly.

In this paper we are interested in how individuals' tax compliance responds to social information, i.e., information about others' tax compliance. Theoretically, the effect of social information has been shown to lead to coordination on social norms (Gordon 1989; Myles and Naylor 1996; Kim 2003; Traxler 2009). In the tax compliance context it means that if many people are evading taxes, individual taxpayers also have a greater incentive to evade taxes. Myles and Naylor (1996) have explored theoretically the critical proportion of tax evaders that would be sufficient to push an individual into evasion. A few attempts have been made to study empirically the effect of social information on tax compliance. In an experimental study, Fortin et al. (2007) tested the impact of a group's mean reported income on tax compliance. Their results point to a fairness effect but do not detect an endogenous social information effect. In a recent large-scale natural field experiment people were required by law to pay a fee for receiving public broadcasting but could also receive the channels without paying the fee (Fellner et al. 2013). The authors manipulated the information about actual levels of compliance but did not find a significant treatment effect. The actual compliance levels in this study were very high (94 %) suggesting that providing such information has little effect. It remains, however, unknown whether information about lower or very low compliance rates would also have no effect. Fonseca and Myles (2012) observed a very weak effect of communication (in the sense of a reinforced compliance) among non-student subjects but not for students. They also find a negligible impact on compliance of public announcements about the number of evaders who have been caught in an environment where subjects are not informed about audit rates. All this evidence suggests a very limited effect of social infor-

[1] This has been observed in various fields, such as schools achievements (Sacerdote 2001; Zimmerman 2003), recreational activities(Bramoullé et al. 2009), contribution to public goods (Fischbacher et al. 2001), consumption (Moretti 2011), labor supply (Aaronson et al. 1999), effort at work (Falk and Ichino 2006; Mas and Moretti 2009; Bandiera et al. 2009; Beugnot et al. 2013), quitting decisions (Rosaz et al. 2012), participation in retirement plans (Saez and Duflo 2003), or criminal activities (Glaeser et al. 1996; Keizer et al. 2008).

[2] For an application of reference-dependent preferences to reporting behavior, see Heinemann and Kocher (2013) who study the impact of a regime shift from a progressive toward a proportionate tax tariff on tax evasion.

mation. On the other hand, studying social externalities when auditing resources are congested, using a large dataset of small businesses and professionals in Italy, Galbiati and Zanella (2012) measure a large social multiplier. These contrasting results show the need for further investigations of the influence of social information on individual behavior.

In this paper, we explore how a different informational content—namely good versus bad examples—influences individual tax compliance in an environment with recursive interactions. We use a laboratory experiment, because it allows us identifying social information effects in a controlled way. Indeed, the available administrative data and household surveys on tax behavior are often not accurate and informative enough for such identification. There are also several econometric problems related to the identification of social information effects using field data. In particular, it is not trivial to identify precisely the definition of the influence group. Even if the peer group is well defined and exogenously composed, it is difficult to identify separately the different sources of interdependent behavior when people interact in groups simultaneously (Manski 1993). The controlled environment offered by the laboratory enables us to address these issues by randomly assigning individuals to groups and by controlling the flow of information.

In our experiment, like in Gerxhani and Schram (2006), subjects have to choose in isolation between a "registered" random income, the realization of which will be known to the tax authority for sure and taxed accordingly, and an "unregistered" random income that will only be known to the tax authority with some probability. If subjects choose the unregistered income, after being informed on their actual income, they have to decide on whether reporting this income or not. In case of not reporting, they risk a fine for underreporting. To study the influence of the social information of others' reporting behavior, we have designed two variants of the previous situation that allow us to compare the impact of a high level (that we call "good" examples) and a low level of compliance (that we call "bad" examples). In these treatments with social information, before making their decisions, subjects receive information about the behavior of peers in past sessions with no social information. More precisely, they learn the minimum or maximum proportion of subjects in the same situation in past sessions, chose the unregistered income and the minimum or maximum proportion of subjects who reported their income. In half of the sessions with social information, we conveyed the minimum proportions, and in the other half the maximum proportions observed in past sessions with no social information. In this way, subjects receive social information about the behavior of others that may influence their own behavior regarding tax evasion. This recursive method of identification avoids the reflection problem that hinders the identification of peer effects when individuals and groups interact simultaneously (see also Bellemare et al. 2010; Beugnot et al. 2013).

Importantly, subjects were not informed that these values corresponded to extreme values (minimum or maximum), so that we can compare the sensitivity of behavior to the two types of social information in a controlled way. This was implemented in a non-deceptive way (see below).

We conducted the experiment in Belgium (Flanders and Wallonia), France, and the Netherlands. This allows us to investigate compliance behavior across different cultural

settings when holding both institutions and information constant in order to increase the generalizability of our results. Flanders and Wallonia in Belgium share the same social and fiscal institutions but not necessarily the same values and social norms. Languages are the same in Wallonia and France and in Flanders and the Netherlands, shaping potential cultural similarities and differences. In this respect our study contributes to the recent experimental literature on cross-country studies of tax evasion (Alm et al. 1995; Alm and Torgler 2006; Gerxhani and Schram 2006; Torgler and Schneider 2007; Cummings et al. 2009; Lewis et al. 2009).

Our findings reveal an asymmetric effect of social information on individuals' tax compliance. When individuals receive information that corresponds to the lowest evasion rates of their peers, tax compliance does not increase. This suggests that "good examples" of high compliance have no disciplining effect on tax evasion. In contrast, we find evidence that individuals' compliance is affected negatively when they receive information that corresponds to the highest evasion rates of their peers. Especially, when the audit probability is relatively high observing that many individuals evaded taxes leads to higher tax evasion. This finding is consistent with the "broken window" theory and with social learning. Across countries we find some differences in tax evasion that are consistent with the Eurobarometer (European Commission 2007). However, social information about the highest evasion rates tends to wipe out cross-country differences.

The remainder of this paper is organized as follows. Section 2 presents the experimental design and the procedures, and it presents our predictions. Section 3 reports the experimental results. Section 4 concludes.

2 Experimental design and predictions

2.1 Experimental design

Our experiment consists of a No-Information treatment and two variants of a social Information treatment. The design of the baseline condition was inspired by Gerxhani and Schram (2006) and consists of three stages repeated for 30 periods. In the first stage of each period, subjects choose their source of income by taking either a "registered" income (a salaried job), the realization of which will be known to the tax authority for sure, or an "unregistered" income (a self-employed job) that will be known to the tax authority only with some probability. This is intended to replicate the finding of Schmölders (1960) and Alm and Torgler (2006) showing that self-employed workers have lower tax morale than salaried workers. Each job lasts one period and is associated with various possible gross incomes. In a salaried job, gross income can take one of the values 200, 300, 450, 550, 650, or 750 points, each equally likely (expected gross income = 483.33), while in a self-employed job it can take one of the values 150, 200, 350, 550, 750, or 850 points (expected gross income = 475). The standard deviation of income is larger in the self-employed job than in the salaried job, as observed in the field. We acknowledge that in the field in some professions the expected gross income can also be higher in self-employed jobs than in salaried jobs. We did not implement this because we wanted to make sure—at least for risk averse and

Table 1 Gross and net payoffs in points by type of job

Salaried job						
Gross income	200	300	450	550	650	750
Net income	150	225	337.5	412.5	487.5	562.5
Self-employed job						
Gross income	150	200	350	550	750	850
Net income if reported	112.5	150	262.5	412.5	562.5	637.5
Net income if no report and no audit	150	200	350	550	750	850
Net income if no report and audit, $F = 50$	25	50	125	225	325	375
Net income if no report and audit, $F = 75$	0	25	100	200	300	350

risk-neutral subjects—that the choice of the self-employed job is motivated by the possibility of evading taxes and not by a higher expected gross income.[3]

In the second stage, after the subjects have made their choice between a salaried job and a self-employed job, the computer program selects a gross income at random. The salaried wage is automatically taxed at 25 %.[4] If the individual has chosen a self-employed job, he has to make a second choice between reporting and not reporting his income.[5] A reported income is taxed at 25 %.

In the third stage, an audit occurs with a probability p, with $p \in \left\{\frac{1}{6}, \frac{1}{4}, \frac{1}{2}\right\}$, depending on the auditing condition.[6] If an unreported income is detected, the gross income is taxed at 25 %, and a fine has to be paid. The fine amounts to 25 % of the gross self-employment income plus a fixed amount F, with $F \in \{50, 75\}$ depending on the fine condition in the respective period. This manipulation of the fixed cost allows us to vary the cost of detection. Before choosing between a salaried job and a self-employed job, in each period subjects are informed about the values of p and F prevailing in that period. At the end of each period, they are informed whether they have been audited and get to know their net payoff. Table 1 displays the payoffs associated with each possible situation.

2.1.1 The social information treatments

In the No-Information treatment, subjects do not receive any information on others' behavior. However, in field settings people may be informed on what others do, and

[3] In Gerxhani and Schram (2006) the expected gross income is also higher in the salaried job than in the self-employed job.

[4] This aims at capturing the fact that in salaried jobs tax evasion is made impossible by the fact that employers report the wage paid to the employees to the tax authorities.

[5] Alternatively, we could have asked the players to choose the amount to be reported. For the sake of simplicity, we only offered a binary choice.

[6] In our experiment, like in most experiments on tax evasion, audit probabilities are higher than in the field. We note, however, that we are mainly interested in identifying how behavior adjusts to variations in the audit probabilities and not so much in its precise values. Moreover, tax authorities are usually not revealing the true audit probabilities (Alm 1988). Hence, perceived audit probabilities are largely subjective and may be overweighed by individuals.

this social feedback may influence their behavior (see Wilson and Kelling 1982; Keizer et al. 2008). To investigate the influence of such information, we have implemented two social information treatments. In these treatments, before making their occupation decision, subjects are informed on the proportions of subjects who chose the salaried job and the self-employed job, respectively, in previous sessions for the same audit probability and fixed fine. In addition, after learning their gross income, subjects who chose the self-employed job are informed on the proportion of individuals in some previous sessions who made the same choice, received the same gross income, and chose to report it, and the proportion of those who, in the same conditions, chose not to report their income. This recursive information method of identification eliminates any reflection problem that would otherwise impair the identification of endogenous peer effects (Manski 1993).

Two variants of this treatment have been implemented. In some sessions, we implemented the "Info-Min condition," in which we displayed the minimum proportion of subjects choosing the self-employed job ever observed in any session played under the No-Information condition. Thereafter, for those who chose self-employment, we also displayed the minimum proportion of people choosing to engage in tax evasion, i.e., not reporting their self-employed income, ever observed in past sessions of the No-information condition. This Info-Min condition aims at measuring how the example of high compliance influences individuals' behavior. In contrast, in the "Info-Max condition" information is given about the maximum proportion of subjects choosing the self-employed job ever observed in any past session of the No-information condition. Those who chose self-employment were also informed about the maximum proportion of people choosing to evade taxes in previous sessions of the No-information condition. This Info-Max condition aims at measuring how the example of low compliance influences individuals' behavior. Importantly, in order to avoid any confound as, e.g., experimenter demand effects, subjects were not informed of the fact that they saw extreme values observed in previous session. In both conditions they received exactly the same instructions (see online appendix).[7] The implemented variation in social information also allows us to investigate whether high and low compliance examples

[7] The instructions said: "You also receive information on the decisions of participants who in some previous experiments were in the same conditions as you are now. More precisely, before making your decision, you are informed on the proportion of participants who chose the salaried job and the proportion of those who chose the self-employed job in previous experiments for the same audit probability and the same fixed amount of the fine as you." They also stated: "In these previous experiments the rules were the same as in this experiment, except that the participants did not have such information." We have chosen this phrasing carefully in order to avoid deception. We did not inform subjects that they saw extreme values of previous sessions, but according to Hey (1998) and Hertwig and Ortman (2008) withholding information should not be considered as deception, whereas providing subjects with wrong information should be viewed as deception. Moreover, fully disclosing that the information contained extreme values would have confounded the comparison between the two conditions, because the informational contend would have been different. Our subjects received exactly the same instructions in both conditions of the social information treatment. Comparing the effect of explicit versus implicit social information is, however, an interesting question which could be explored in future research. See also Jamison et al. (2008) for an interesting study on the negative impact of using deception regarding the identity of interacting partners.

have a symmetric effect on behavior.[8] The proportions presented to the subjects in the two conditions can be found in the online appendix.

2.1.2 Pre- and post-experimental questionnaires

While it has been found that the likelihood of tax evasion is associated with the degree of risk aversion (Andreoni et al. 1998; Kirchler 2007; Torgler 2007), it is unknown whether risk preferences mediate the influence of social information on individual compliance behavior. To investigate this, we elicited our participants' risk preferences at the very beginning of the session, using the Holt and Laury (2002) paired lotteries procedure (see also Cohen et al. 1987).[9] No feedback on lottery outcomes was given to subjects until the very end of the session, so that the outcome of this task could not influence behavior in the tax evasion game.

At the end of each session, we recorded individual demographic characteristics and elicited opinions toward tax evasion and illegal work and political orientations. A few questions were taken from the Eurobarometer survey on undeclared work in the European Union European Commission (2007).[10] We also included questions on tax morale taken from the Taxpayer Opinion Survey (United States 1987).[11] Finally, we control for cognitive reflection of our subjects in a parsimonious way using the three question version of the Cognitive Reflection Test by Frederick (2005).

2.2 Predictions

In line with the related experimental literature (Gerxhani and Schram 2006), in the following we assume that individuals are expected utility maximizers. In the salaried job expected gross earnings amount to 483.33 points (SD = 208.97; min = 200; max = 750) and to 475 points (SD = 289.40; min = 150; max = 850) in the self-employed job. If incomes are reported, in the salaried job expected net earnings amount to 362.5 points and to 356.25 points in the self-employed job. Therefore, for a risk-neutral individual, the choice of the self-employed job should be only motivated by the possibility of tax evasion. When $F = 50$, the expected net earnings from not reporting are 427.08 points for $p = 1/6$, 403.13 for $p = 1/4$, and 331.25 for $p = 1/2$. When $F = 75$, the corresponding expected net earnings from not reporting are 422.92, 396.88, and 318.75

[8] The two conditions are directly comparable, since we used the same instructions. Only the indicated proportions can possibly influence behavior. This would not have been possible if we had indicated that these proportions correspond to minimum or maximum values.

[9] Subjects made ten successive choices between two paired lotteries, "option A" and "option B" (see online appendix). The payoffs for option A are either €2 or €1.60 and those for the riskier option B are either €3.85 or €0.10. In the first decision, the high payoff in both options has a probability of one tenth, and this probability increases by steps of one tenth as the number of the decision increases. Risk neutrality should lead subjects to cross-over from option A to option B at the fifth decision, while risk-loving individuals are expected to switch earlier and risk-averse individuals later.

[10] In particular, we asked subjects to which extent they find a series of behaviors related to fraud acceptable or not using a ten-point Likert-type scale (see online appendix).

[11] Subjects had to rate on a scale from 1 to 6 their feelings regarding the degree of acceptability of statements about tax fraud (see online appendix).

points. This indicates that a risk-neutral player who plans to evade should choose the self-employed job when the probability of an audit is lower than $1/2$ and the salaried job otherwise, regardless of the fixed amount of the fine.[12] Using the Constant Relative Risk Aversion utility function and parameters such as calculated in Holt and Laury (2002), it can be shown that an average risk-averse player will choose the salaried job for $p = 1/2$ and $p = 1/4$, but will choose either the salaried job or the self-employed job when $p = 1/6$ depending on his degree of risk aversion. In contrast, a risk-seeking individual will choose the self-employed job for $p = 1/6$ and $p = 1/4$, but he will opt for the salaried or the self-employed job when $p = 1/2$ depending on his degree of risk seeking, regardless of the value of F.

Information on the behavior of others in previous sessions may affect individual decisions. Myles and Naylor (1996) argue that individuals can be better off from following the standard behavior in the group due to *social conformity* and s*ocial learning* effects. The effect of information about others' behavior may also be related to emotional perceptions (see Coricelli et al. 2010) and may reduce the reluctance of individuals to cheat when they observe that many other people misbehave. This corresponds to the *broken windows* effect or to the *critical mass model* effect.

Finally, individuals may have a taste for tax compliance reflecting cultural values. Behavior may, therefore, differ across countries (see Alm and Torgler 2006; Schneider 2007; Halla and Schneider 2013).

2.3 Procedures

Our experiment was conducted in three countries and four different locations: the Behavioral & Experimental Economics Laboratory (BEElab) at Maastricht University (The Netherlands), the Catholic University of Leuven (Belgium, Flanders), the Groupe d'Analyse et de Théorie Economique (GATE-CNRS) in Lyon (France), and the University of Liège (Belgium, Wallonia).[13] This was unknown to the subjects. The experiment was computerized using the REGATE-NG software developed at GATE (Zeiliger 2000). In all locations, students were recruited from undergraduate classes in economics and business only, by means of the ORSEE software (Greiner 2004). Only Dutch students participated in the Maastricht sessions, Flemish students in the Leuven sessions, Walloon students in the Liège sessions, and French students in Lyon. In total, 257 subjects (43.58 % female) took part in 17 sessions. Details of these sessions are given in Table 2. Each subject participated only once.

In order to make sure that people understood that not reporting one's income means cheating on taxes, the instructions were deliberately phrased in non-neutral terms (see

[12] These predictions hold for any income level. Hence, learning one's own actual income should not change the decision to report or not to report it. However, for the minimum gross income of 150 points, $F = 75$ and $p = 1/4$, the subjects should be indifferent between reporting or not, as the expected earnings are 112.50 in both cases.

[13] In Lyon and Maastricht, we could use experimental labs. In Leuven and Liège, we used large lecture halls and a mobile lab, with enough space between participants to ensure confidentiality of decisions.

Table 2 Details of the experimental sessions by location

Location conditions	Belgium Flanders	Belgium Wallonia	France	The Netherlands	Total
No-Information	23 (2)	19 (1)	33 (2)	24 (2)	99 (7)
Info-Min	20 (1)	17 (1)	20 (1)	19 (1)	76 (4)
Info-Max	22 (1)	19 (1)	20 (1)	21 (3)	82 (6)
Total	65 (4)	55 (3)	73 (4)	64 (6)	257 (17)
% of female subjects	41.54	36.36	52.05	42.19	43.58

The numbers are those of subjects. The numbers of sessions are in parentheses

online appendix).[14] The instructions and the text shown on the computer screens have been written first in English. Then native speakers translated them into Dutch and French. A reverse translation into English has finally been done, and adjustments were made in each language to maximize the comparability between the French and Dutch instructions. The instructions in Dutch were used in Leuven and Maastricht; those in French were used in Liège and Lyon. With the help of local assistants, the same bilingual experimenter conducted all sessions at the four different sites to avoid experimenter effects across sites.

To ensure comparability across sites we used the same random sequence of audit probabilities, fixed amounts of fine, and gross incomes in all four locations. To determine the values to be displayed in the Info-Min and the Info-Max conditions of the social information treatment, we ran first all sessions with the No-Information treatment. We then identified for each audit probability and each value of the fixed fine the minimum and the maximum proportions of participants choosing self-employment. Similarly, we determined the minimum and maximum proportions of individuals reporting and not reporting their income for each level of gross income in the self-employed job.

Upon arrival, each subject was randomly assigned to a computer. The instructions for the first part (i.e., risk preference elicitation) were distributed and read aloud by the experimenter. After their questions were answered in private, subjects made their ten lottery choices. When all subjects had completed this part, we distributed and read aloud the instructions for the tax evasion part. A comprehension questionnaire was administered to check that the rules of the experiment were well understood. All questions were answered in private. Once the 30 periods of this part were completed, the computer screens displayed the post-experimental questionnaire. Then, at the end of the session, subjects were paid their earnings in a separate room and in private. In the payout room, we first played the lottery of the Holt and Laury task. Each subject rolled a ten-sided die to determine which decision number would be played for real. For the selected decision, the subject rolled the die again for determining the payoff in the chosen lottery.

For the tax evasion part of the experiment, we applied a conversion rate of 100 experimental points to 3 Euros. Two of the 30 periods were randomly drawn for

[14] We used notions like income, tax, audit, and fine. The instructions did not include any loaded terms such as fraud, cheating, or tax evasion.

Table 3 Distribution of choices per condition and country

Location	Belgium		France	Netherlands	Total
	Flanders	Wallonia			
Percentage of self-employed	59.44 (49.11)	57.09 (49.51)	60.50 (48.89)	65.05 (47.69)	60.64 (48.85)
No-Information	61.01 (48.81)	50.53 (50.04)	60.10 (48.99)	63.75 (48.11)	59.36 (49.12)
Info-Min	52.50 (49.98)	48.43 (50.02)	62.67 (48.41)	64.91(47.77)	57.37 (49.46)
Info-Max	64.09 (48.01)	71.40 (45.23)	59.00 (49.22)	66.67 (47.18)	65.20 (47.64)
Percentage of evaders	38.72 (48.72)	36.48 (48.15)	42.60 (49.46)	43.96 (49.65)	40.65 (49.12)
No-Information	38.84 (48.77)	28.42 (45.14)	42.22 (49.42)	44.03 (49.68)	39.23 (48.83)
Info-Min	35.83 (47.99)	34.51 (47.59)	42.50 (49.48)	48.42 (50.02)	40.44 (49.09)
Info-Max	41.21 (49.26)	46.32 (49.91)	43.33 (49.59)	39.84 (48.99)	42.56 (49.45)

The numbers refer to proportions of subjects. These proportions are obtained from the total number of subjects by treatment and/or condition (see details in Table 2). The percentage of evaders is not conditional on having chosen the self-employment. Standard deviations are in parentheses

payment at the end of the session. Average earnings were 16.89 Euros (SD = 4.69), including a 3 Euros show-up fee. A session lasted on average 52 minutes, excluding payment.

3 Results

First, we give an overview of the choices of tax evasion by location and information condition. This descriptive analysis is followed by a regression analysis of the determinants of tax compliance.

3.1 Descriptive analysis

Table 3 displays the average percentage of individuals who chose the salaried job and self-employment, respectively, as well as the percentage of evaders related to the total number of subjects in each condition.

Table 3 shows that overall, 60.64 % of the subjects choose an occupation that allows for tax evasion (59.36 % in the No-Information condition alone). Interestingly, 32.96 % of these subjects report their income nevertheless (33.92 % in the No-Information condition alone), which is not in line with the theoretical predictions for risk-neutral individuals. This behavior could possibly be attributed to mental accounting, assigning different statuses to the two sources of money (income and evaded taxes), to isolation if subjects valuate separately each of the two stages of the decision process, or to excess optimism if subjects choose self-employment not because it offers the perspective of tax evasion but in the hope of receiving the maximum possible net income (i.e., 637.50 with the self-employed job and 562.50 with the salaried job).

Theoretically, risk-neutral subjects should not evade when the audit probability is 50 % and should not comply for lower audit probabilities. Observed behavior differs

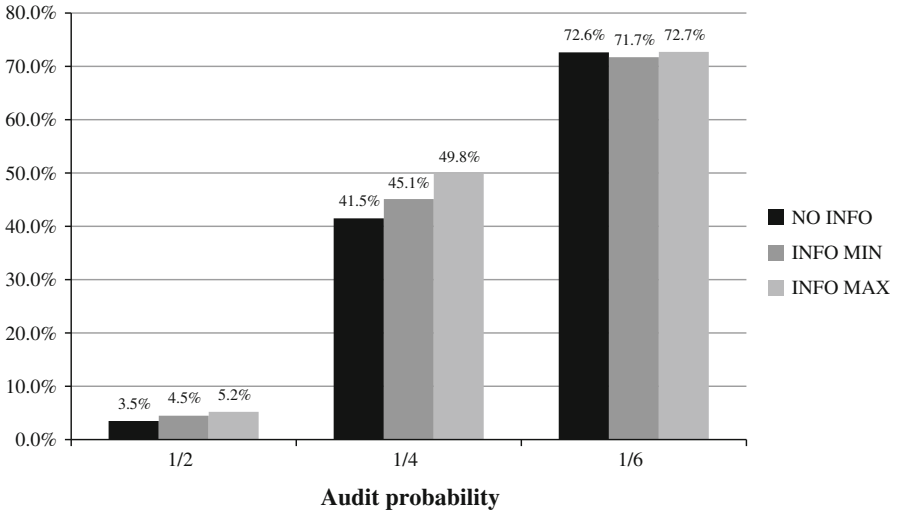

Fig. 1 Relative frequency of evaders relative to the total number of subjects by information condition and audit probability

significantly from this prediction, showing evidence of risk-seeking behavior when the probability of an audit is high and risk-averse behavior when the probability is low or medium. However, comparative statistics show the theoretically predicted changes. Overall, 4.4 % of the individuals evade taxes when the audit probability is $1/2$, 45.2 % when it is $1/4$ and 72.3 % when it is 1/6. The probability of evasion is significantly different from 0 when the audit probability is 1/2 (t tests with each individual as a unit of observation, $p < 0.001$). This probability is systematically different from 100 for the other audit probabilities ($p < 0.001$). These probabilities of evasion according to audit probabilities are all significantly different one from another ($p < 0.001$).

Social information does affect behavior. The percentage of participants who choose the self-employed job is significantly higher in the Info-Max condition than in the No-Information treatment (Mann–Whitney tests,[15] M–W hereafter, $p = 0.065$ for all the countries pooled together, and $p = 0.004$ for Wallonia) and than in the Info-Min condition (M–W, $p = 0.052$ for all countries and $p = 0.007$ for Wallonia). There is no difference between No-Information and the Info-Min conditions (M–W, $p = 0.807$). There are also no significant differences in the percentages of evaders across conditions, except for Wallonia (M–W, $p = 0.008$). The picture is somewhat different when considering audit probabilities. Figure 1 displays the relative frequency of evaders (*stricto sensu, i.e.,* relative to the total number of subjects regardless of their occupational choice) by information condition and audit probability.

We find a statistically significant effect of the Info-Max condition compared to the No-Information treatment on the proportion of evaders, except when the audit probability is low (M–W, $p = 0.075$ when the audit probability is $1/2$, and $p < 0.001$

[15] All Mann-Whitney non-parametric tests reported in this paper are two-tailed. The mean choice of each subject across periods is taken as one independent observation.

when the audit probability is 1/4). There is no significant difference between the Info-Min condition and the No-Information treatment for any audit probability. When the probability is low ($p = 1/6$), there is no significant difference between any pair of the information conditions. We attribute this to the fact that for the very low audit probability, the percentage of cheaters has already reached a maximum in the No-Information treatments. We also test for treatment differences regarding the effect of different fine levels but do not detect any significant effects.

Overall, the statistical analysis indicates that only the bad example of low compliance (Info-Max condition) has an effect on the level of tax evasion, whereas the good example of high compliance (Info-Min condition) does not have any effect. These results support a *broken windows* effect or the *critical mass model* in the tax evasion context, at least when the audit probabilities are not too low.

When comparing across countries and regions, Table 3 suggests that the percentage of individuals who choose the self-employed job is higher in France and the Netherlands than in the Belgian regions. Pairwise tests indicate that only Wallonia and the Netherlands differ significantly (M–W, $p = 0.027$ when all data are pooled and $p = 0.040$ for the No-Information treatment only).[16] Looking at the proportion of evaders *stricto sensu*, Wallonia has the lowest proportion closely followed by Flanders. The difference is significant between Wallonia and France (M–W, $p = 0.066$ when all data are pooled, and $p = 0.015$ for the No-Information treatment) and between Wallonia and the Netherlands (M–W, $p = 0.021$ and $p = 0.005$, respectively). There is no difference between the two Belgian regions.

3.2 An econometric analysis of the impact of social information on tax evasion

We supplement the above basic analysis with an econometric investigation of the determinants of tax evasion and the effects of the two forms of social information. This allows us to explore the relative importance of the various possible determinants of the decision to evade taxes. The decision in our experiment comprises two steps: first, the choice of the occupation and second, the decision to evade taxes. Theoretically, the choice of the occupation should already explain the decision to evade (or not). However, the above basic analysis has shown that a fraction of subjects who chose the self-employed job nevertheless reports their income. Therefore, we estimate a two-stage probit model with a correction for a potential sample selection bias. In the first step, we estimate the determinants of the occupational choice by means of a random-effects Probit model. In the second step, we explain the probability to evade, conditional on the choice of self-employment, with another random-effects Probit model. Table 4 displays the results[17].

[16] The difference between Wallonia and the Netherlands is no longer significant when we correct p-values for multiple testing.

[17] We include random effects to control for the lack of independence between observations, because each individual is observed 30 times. The use of a panel method is justified, as confirmed by the significance of the ρ coefficient in table 4 which rejects the inexistence of unobserved individual level heterogeneity. Another way of correcting for the lack of independence of observations within individuals would be to consider our panel as a special case of clustered data such that errors are correlated over time for a given

Table 4 Determinants of evasion—two stages random effects probit model

	Choice of a self-employed job	Tax evasion			
		(1)	(2)	(3)	(4)
Audit policy					
High fixed fine	−0.342***	−0.204***	−0.213***	−0.214***	−0.214***
	(0.042)	(0.054)	(0.055)	(0.055)	(0.055)
Audit probability: 1/6	Ref.	Ref.	Ref.	Ref.	Ref.
Audit probability: 1/4	−1.169***	−0.685***	−0.832***	−0.834***	−0.832***
	(0.056)	(0.089)	(0.117)	(0.117)	(0.117)
Audit probability: 1/2	−3.045***	−2.159***	−2.506***	−2.517***	−2.509***
	(0.066)	(0.341)	(0.397)	(0.398)	(0.398)
Condition					
No-Information	Ref.	Ref.	Ref.	Ref.	Ref.
Info-Min	−0.134	0.150	0.038	0.384	0.384
	(0.183)	(0.145)	(0.159)	(0.323)	(0.323)
Info-Min*Audit probability 1/4	–	–	0.187	0.184	0.184
			(0.130)	(0.130)	(0.130)
Info-Min*Audit probability 1/2	–	–	0.310	0.310	0.308
			(0.210)	(0.211)	(0.211)
Info-Min*Flanders	–	–	–	−0.551	−0.560
				(0.430)	(0.430)
Info-Min*France	–	–	–	−0.663	−0.674
				(0.421)	(0.425)
Info-Min*Netherlands	–	–	–	−0.065	−0.070
				(0.427)	(0.427)
Info-Max	0.302*	0.002	−0.104	0.339	0.332
	(0.180)	(0.141)	(0.153)	(0.301)	(0.302)
Info-Max*Audit probability 1/4	–	–	0.186*	0.187*	0.186*
			(0.120)	(0.120)	(0.120)
Info-Max*Audit probability 1/2	–	–	0.355*	0.354*	0.349*
			(0.208)	(0.208)	(0.209)
Info-Max*Flanders	–	–	–	−0.501	−0.518
				(0.405)	(0.409)
Info-Max*France	–	–	–	−0.415	−0.414
				(0.397)	(0.397)
Info-Min*Netherlands	–	–	–	−0.751*	−0.755*
				(0.398)	(0.398)

Table 4 continued

	Choice of a self-employed job	Tax evasion			
		(1)	(2)	(3)	(4)
Individual characteristics					
Gross income	–	0.080***	0.080***	0.080***	0.080***
		(0.009)	(0.009)	(0.009)	(0.009)
Male	0.125	0.207*	0.217*	0.244*	0.243*
	(0.161)	(0.126)	(0.126)	(0.126)	(0.126)
Age	−0.019	−0.030*	−0.030*	−0.034**	−0.035**
	(0.020)	(0.016)	(0.016)	(0.016)	(0.016)
Safety index –H.&L.	−0.122**	−0.097**	−0.100**	−0.094**	−0.095**
	(0.051)	(0.041)	(0.041)	(0.041)	(0.041)
Self-reported risk attitude	0.154***	0.071**	0.075**	0.076**	0.075**
	(0.043)	(0.035)	(0.036)	(0.036)	(0.036)
Cognitive performance	0.150*	0.096	0.095	0.110	0.111
	(0.085)	(0.066)	(0.067)	(0.067)	(0.068)
Relative wealth	−0.025	–	–	–	–
	(0.037)				
Country					
Wallonia	Ref.	Ref.	Ref.	Ref.	Ref.
Flanders	0.053	0.054	0.064	0.404	0.420
	(0.225)	(0.174)	(0.175)	(0.288)	(0.290)
France	0.343	0.589***	0.603***	0.974***	0.995***
	(0.228)	(0.182)	(0.183)	(0.288)	(0.289)
Netherlands	0.351	0.227	0.243	0.532*	0.550*
	(0.229)	(0.177)	(0.178)	(0.287)	(0.289)
Opinions					
Rich pay too much taxes	–	–	–	–	0.063
					(0.123)
Cheat if get away	–	–	–	–	0.051
					(0.122)
Pay in cash	–	–	–	–	−0.001
					(0.122)
Tax evasion	–	–	–	–	−0.056
					(0.177)
Period	0.001	0.001	0.001	0.001	0.001
	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)
Inverse Mills' ratio	–	−0.022	0.072	0.078	0.074
		(0.228)	(0.239)	(0.240)	(0.240)

Table 4 continued

	Choice of a self-employed job	Tax evasion			
		(1)	(2)	(3)	(4)
Constant	1.994***	1.087**	1.143**	0.890*	0.859*
	(0.627)	(0.481)	(0.484)	(0.503)	(0.514)
N	7710	4675	4675	4675	4675
L.L.	−2741.25	−2167.70	−2165.25	−2160.95	−2160.64
Wald	2274.3	726.99	727.44	732.77	733.37
Rho	0.567***	0.403***	0.405***	0.394***	0.393***

*, **, and *** indicate significance at the 10, 5, and 1 % level, respectively. Standard errors are in parentheses. Info-Min condition, Info-Max condition, audit probability 1/4 and 1/2, high fixed fine, Flanders, France, the Netherlands, and male are dummy variables. The gross income takes the value of the perceived income divided by 100. The safety index is given by the number of times the participant has chosen the safe option A in the Holt and Laury lottery and can take any integer value between 0 and 10 (*ex ante* measure). The self-reported risk attitude takes a value between 1 (risk averse) and 9 (willing to take full risks) (*ex post* measure). Cognitive performance indicates the number of correct answers in the three questions of the Cognitive Reflection test. The opinion on "Cheat if get away" and on "Pay in cash" can take a value between 1 (this behavior is perfectly acceptable) and 6 (this behavior is not at all acceptable). The opinion on "Tax evasion" is coded in the opposite direction: 1 indicates that the behavior is absolutely unacceptable, while 10 indicates that it is absolutely acceptable. The opinion on "Rich pay too much taxes" is coded 1 if the participant answered "agree" or "strongly agree" to the following statement: "Rich pay too much taxes," and 0 otherwise

The first equation models the choice of occupation. The binary dependent variable indicates whether the individual has chosen to be self-employed (value = 1) or not (value = 0). The independent variables include dummy variables for each audit probability (with probability 1/6 as the reference) and for the high fine in case of detected tax evasion. They also comprise dummies for the Info-Min and the Info-Max conditions (with the No-Information treatment as the reference)[18]. Potentially important time-invariant individual characteristics are also included: gender, age, cognitive performance (as measured by the number of correct answers in the Cognitive Reflection Test), relative family wealth, and risk preferences. Risk preferences are captured both by the safety index given by the number of safe choices in the Holt and Laury task and by self-reported risk preferences for which a low value indicates, in contrast to the safety index, higher risk aversion.[19] The last set of independent variables consists of

Footnote 17 continued
individual. This approach has, however, the disadvantage of being less efficient. In the appendix (Table 5) we provide estimation results of this approach and find that the results are similar to those presented here.

[18] We do not use the actual proportions of those who have chosen the self-employment job or the proportions of evasion presented to the subjects, since they were absent in the No-Information treatment. Moreover information on past tax evasion was only presented to those who chose the self-employment occupation. By introducing dummy variables for the Info-Min and the Info-Max conditions, we directly control for the effect of receiving information on peers' "good" and "bad" behavior.

[19] Only ten subjects switched more than once between the two option choices in the Holt and Laury task. In case of multiple switches, the safety index has been calculated as the mean switching point. We have also performed the same estimation when withdrawing the observations from these ten individuals; the results are qualitatively the same.

dummies for each location (with Wallonia as the reference category) and a time trend to control for a possible learning effect over time.

In the second step, we estimate four specifications of the decision to evade taxes that we present successively. In specification (1) we add to the other independent variables the inverse of the Mill's ratio taken from the first-step regression to control for a potential selection bias (this variable is in fact never significant, indicating that there is no selection bias) We also include the subject's gross income obtained from the choice of being self-employed, instead of the self-reported wealth family indicator.

The results of these first two models show that both likelihoods to choose the self-employed job and, conditional on this choice, to evade taxes decrease with higher fines and higher audit probabilities (compared to an audit probability of 1/6). The negative impact of audit probabilities and fines is consistent with previous experiments and with evidence based on survey data (Friedland et al. 1978; Dubin et al. 1990; Slemrod et al. 2001). As for individual characteristics, we find that both elicited and self-reported risk attitudes consistently indicate that more risk-averse players are less likely to choose the self-employed job and, conditional on this choice, to evade taxes. Cognitive performance as measured by the CRT test only increases the probability to choose the self-employed job. Gender affects only the tax evasion decision, with men more likely to evade than women as previously observed in the literature (Spicer and Becker 1980; Baldry 1986). Moreover, a higher realized income increases the probability to evade taxes. After controlling for the deterrence policy factors and individual characteristics, the likelihood of choosing the self-employed job and the likelihood of evasion are similar across Belgian regions and the Netherlands, but they are significantly higher in France. This result is similar to the one reported in the Eurobarometer survey (European Commission 2007). Social information affects significantly individuals' decision to choose the self-employed job, but conditional on this choice, it has no significant effect on the decision to evade taxes, regardless of the nature of social information. This result is in consistent with previous studies who also find weak effects (Fortin et al. 2007; Fonseca and Myles 2012; Fellner et al. 2013).

However, as suggested by the descriptive statistics, the effect of social information could be affected by the deterrence measures the individuals face. To explore this, specification 2 of the tax evasion regression in Table 4 introduces interaction effects between each social information condition and the audit probabilities. The results show that high compliance by others has no significant effect on individual choice regardless of the audit probability. In contrast, the probability of tax evasion is significantly higher when subjects are given examples of low compliance by others. This effect is marginally significant when the audit probability is intermediate (1/4) or high (1/2). There is no significant difference between the Info-Max condition and the No-information treatment when the audit probability is 1/6. Since we control for individual risk preferences, this suggests that "bad" social information does not affect those who have a strong tax morale (those who do not evade even when the audit probability is low).[20]

[20] We also tested for interaction effects between risk attitude (as given by the Holt and Laury test) and the social information conditions as well as for interaction effects between risk attitude, social information conditions, and the audit probability. The results showed that those who are more risk averse are less likely

Specification 3 in Table 4 introduces interaction terms between each social information condition and each country. In the No-Information condition there are differences in tax evasion across locations, with French subjects evading more than Wallonians. Examples of low compliance increase the level of tax evasion in all regions except the Netherlands where social information tends to reduce the likelihood to evade. It should be noted that the combined effect of audit probability and the Info-Max condition remain significant after controlling for the interaction between this condition and the location.

Finally in specification 4, we also control for individual opinions. We include a binary measure of an individual's opinion regarding progressive tax policies (labeled "Rich pay too much taxes").[21] We also control for subjects' opinions on tax morale and undeclared work by considering the degree of unacceptability of three statements presented in the post-experimental questionnaire.[22] These questions are added here to control for possible differences in terms of fraud acceptability. We are aware of that these variables may suffer from a potential endogeneity and/or justification bias and results should be interpreted with caution. In fact, none of these opinion variables have a significant effect, while the other results still hold.

4 Discussion and conclusion

We have conducted a laboratory experiment in Flanders and Wallonia in Belgium, France and the Netherlands to identify the influence of social information on the decision of individuals to evade taxes. To measure this influence in a controlled and unbiased way, we have (a) controlled the composition of the group of peers and (b) disseminated social information in a recursive way by using behavior of other participants who previously participated in our experiment and made their decisions without receiving social information. With this method, our target individuals could be exposed to information about behavior of others while avoiding that the latter could be influenced also by the former. This avoids the reflection problem which often impairs the identification of endogenous peer effects when using field data.

Footnote 20 continued
to evade when they are given good examples of compliance than those who are less risk averse. On the other hand, those who are more risk averse are more inclined to evade tax, when the audit probability is higher, and they receive information on low level of compliance. These regression results are available upon request.

[21] This variable is coded 1 if the subject has agreed or strongly agreed with the following statement: "The rich have to pay too much taxes", and 0 otherwise.

[22] The three statements are "Almost every taxpayer would cheat to some extent if s/he thought s/he could get away with it" (labeled "Cheat if get away" hereafter); "Being paid in cash for a job and then not reporting it on your tax form" (labeled "Pay in cash" hereafter); "Someone evades taxes by not or only partially declaring income" (labeled "Tax evasion" hereafter). The first two statements are taken from the TOS survey and are rated on a scale from 1 (perfectly acceptable) to 6 (perfectly unacceptable). The last statement is taken from the Eurobarometer and is rated in the opposite direction from 1 (absolutely unacceptable) to 10 (absolutely acceptable).

The most important result of our study is that social information on others' tax compliance has an asymmetric influence on individuals' behavior. Individuals do not change their tax compliance behavior when they are exposed to the "good example" of the highest rates of compliance previously observed. In contrast, when exposed to the "bad example" of the lowest rates of compliance previously observed individuals, tax compliance gets worse. This holds for all investigated audit probabilities, except the lowest one.

This asymmetric endogenous peer effect is not consistent with the *critical mass* theory *à la* Schelling that would predict an effect of both good and bad examples on individual behavior. It is compatible with two other ideas of social influence. The so-called *broken window* theory asserts that individuals feel less committed to behave well when they observe that many others do not behave well. Bad examples would be more influential than good examples, because the former provide a reinforcing self-justification to individuals to act dishonestly without altering their self-image. In contrast, good examples may give bad conscience, and so dishonest people may tend to simply ignore them or reinterpret them in their own favor. Another idea of social influence relates to social learning; in our game for most subjects equilibrium behavior would be to evade taxes except when the audit probability is high. Some individuals may feel more confident to evade taxes when a large proportion of others is doing so, because they may believe that others have a better perception of the appropriate decision under risk. Both ideas of social influence seem plausible. However, social learning cannot fully explain the observed behavior, because we also found that when the audit probability is low, individuals do not evade taxes more when they learn that a high proportion of their peers evaded. Since this result holds even after controlling for individual risk preferences, it suggests that individuals who do not evade even when the risk of being caught is low are motivated by a stronger tax morale and that they are less likely influenced by the bad examples of others.

The asymmetric social information effect evidenced in our study complements previous analyses of social norms on tax compliance. In comparison with Fortin et al. (2007) who estimate linear-in-means models of compliance and find no endogenous peer effects, we show that social reference points can matter. Overall, one may not observe a strong impact of *mean* evasion rates by others if people are only influenced by "bad" examples that reduce the psychic cost of evading. This pleads for the use of other models than the linear-in-means model that is usually used in the literature to study peer effects. Compared to notably Alm and Torgler (2006), Cummings et al. (2009), Torgler (2007), and Torgler (2007) who have shown that cross-country differences in tax compliance can be partly explained by differences in the overall attitude toward governments, our results suggest that cross-country differences may be attenuated by the dissemination of social information. This suggests further research on how social information may—or may not—reduce the disparities in compliance due to different citizens' attitudes toward governments. Finally, our results complement those of Fonseca and Myles (2012) who observed a negligible impact on compliance of public announcements about the number of evaders who have been caught when subjects were not informed about the audit rates. This may be seen as support of our interpretation that the asymmetric effects we observe in our experi-

ment are not due to social learning but rather due to a self-justification of dishonest behavior.

One should be careful with extrapolating our findings to the population of taxpayers for several reasons. We have explored only a small range of parameters in the audit policy with relatively high audit rates, and we have artificially formed the groups of peers. It is certainly perceivable that in the field social information has a stronger impact when individuals know who the reference group members are or when behavior is reinforced through feedback loops. Still, our findings point toward the importance of not ignoring the existence of peer effects when studying tax compliance behavior. This also holds for policies designed to deter tax evasion. In particular, our results suggest that disseminating information about the extent to which people comply with taxes may not encourage higher compliance; if it exerts an influence on compliance, this influence may rather be negative than not positive. Finally, a possible limitation of our study is that our subject pool consists of students with no or little experience in paying taxes, and behavior of students and taxpayers can differ (see notably Fonseca and Myles 2012).

Our results suggest several avenues of future research. A natural extension of our study would consist of collecting more data without social information to explore the impact of even lower and even higher evasion rates than implemented here. Indeed, a broader range of values regarding the lowest and highest evasion rates would allow to determine both a lower threshold of evasion with a disciplining effect and an upper threshold above which the "broken window" effect would emerge. Moreover, while our design is static, it would be interesting to study how the impact of social information would change if subjects received information about increasing highest compliance rates over time.[23] Further research should also investigate the nature of endogenous social interactions on tax compliance to disentangle the influence of social learning from that of conformity. Another interesting extension would consist of identifying which individuals are more likely to be influenced by social information and which are less likely to be under the influence of others. It would be also useful to explore the impact of other types of information, for example, the frequency at which peers have been audited, as we can suspect that individuals may perhaps be more influenced by this information. In our study social information homogenizes behavior across regions but the cross-country differences were initially limited. It would be also interesting to study whether social information has the same influence when countries hold more different institutions and cultures. Finally, in our experiment the decision to evade or not was binary. It would be interesting to extend the study to a continuous decision framework.

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[23] We thank an anonymous reviewer for these suggestions.

5 Appendix: Supplementary regressions

See Table 5.

Table 5 Determinants of tax evasion—two stage probit model (cluster s.e.)

	Choice of a self-employed job	Tax evasion			
		(1)	(2)	(3)	(4)
Audit policy					
High fixed fine	−0.242***	−0.136**	−0.161**	−0.170***	−0.168**
	(0.034)	(0.067)	(0.067)	(0.067)	(0.067)
Audit probability: 1/6	Ref.	Ref.	Ref.	Ref.	Ref.
Audit probability: 1/4	−0.819***	−0.470***	−0.623***	−0.658***	−0.652***
	(0.074)	(0.167)	(0.192)	(0.193)	(0.193)
Audit probability: 1/2	−2.125***	−1.671***	−2.075***	−2.196***	−2.176***
	(0.103)	(0.602)	(0.644)	(0.643)	(0.645)
Condition					
No-Information	Ref.	Ref.	Ref.	Ref.	Ref.
Info-Min	−0.065	0.100	0.044	0.354	0.355
	(0.122)	(0.112)	(0.131)	(0.225)	(0.223)
Info-Min*Audit probability 1/4	–	–	0.109	0.114	0.115
			(0.118)	(0.118)	(0.118)
Info-Min*Audit probability 1/2	–	–	0.059	0.080	0.079
			(0.239)	(0.243)	(0.245)
Info-Min*Flanders	–	–	–	−0.374	−0.379
				(0.333)	(0.332)
Info-Min*France	–	–	–	−0.651**	−0.644**
				(0.307)	(0.311)
Info-Min*Netherlands	–	–	–	−0.123	−0.129
				(0.321)	(0.319)
Info-Max	0.235**	−0.020	−0.097	0.300	0.301
	(0.117)	(0.117)	(0.128)	(0.222)	(0.222)
Info-Max*Audit probability 1/4	–	–	0.142*	0.151*	0.149*
			(0.107)	(0.109)	(0.109)
Info-Max*Audit probability 1/2	–	–	0.351	0.364	0.355
			(0.260)	(0.258)	(0.261)
Info-Max*Flanders	–	–	–	−0.433	−0.443
				(0.322)	(0.326)
Info-Max*France	–	–	–	−0.407	−0.405
				(0.289)	(0.289)

Table 5 continued

	Choice of a self-employed job	Tax evasion			
		(1)	(2)	(3)	(4)
Info-Min*Netherlands	–	–	–	–0.617**	−0.622**
				(0.305)	(0.303)
Individual characteristics					
Gross income	–	0.064***	0.064***	0.064***	0.064***
		(0.013)	(0.013)	(0.013)	(0.013)
Male	0.055	0.160	0.171*	0.201*	0.199*
	(0.102)	(0.104)	(0.102)	(0.103)	(0.103)
Age	−0.014	−0.016	−0.017	−0.023*	−0.023*
	(0.012)	(0.012)	(0.012)	(0.012)	(0.012)
Safety index –H.&L.	−0.077**	−0.063	−0.071*	−0.064	−0.064
	(0.034)	(0.039)	(0.039)	(0.039)	(0.039)
Self-reported risk attitude	0.106***	0.040	0.049	0.058*	0.057*
	(0.033)	(0.032)	(0.034)	(0.034)	(0.034)
Cognitive performance	0.110**	0.059	0.068	0.083	0.086
	(0.052)	(0.053)	(0.055)	(0.057)	(0.057)
Relative wealth	−0.018				
	(0.026)				
Country					
Wallonia	Ref.	Ref.	Ref.	Ref.	Ref.
Flanders	0.053	0.016	0.029	0.308	0.317
	(0.153)	(0.131)	(0.128)	(0.254)	(0.257)
France	0.271*	0.343**	0.380***	0.765***	0.774***
	(0.145)	(0.148)	(0.145)	(0.231)	(0.229)
Netherlands	0.270*	0.093	0.125	0.410*	0.414*
	(0.141)	(0.154)	(0.150)	(0.234)	(0.234)
Opinions					
Rich pay too much taxes	–	–	–	–	0.055
					(0.092)
Cheat if get away	–	–	–	–	−0.001
					(0.101)
Pay in cash	–	–	–	–	0.004
					(0.097)
Tax evasion	–	–	–	–	−0.001
					(0.150)
Period	0.001	−0.001	−0.001	−0.001	−0.001
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Inverse Mills' ratio	–	−0.162	0.076	0.152	0.134
		(0.514)	(0.530)	(0.528)	(0.529)

Table 5 continued

	Choice of a self-employed job	Tax evasion			
		(1)	(2)	(3)	(4)
Constant	1.349***	0.868**	0.853**	0.580	0.560
	(0.419)	(0.367)	(0.368)	(0.387)	(0.399)
N	7710	4675	4675	4675	4675
L.L.	−3603.17	−2465.59	−2462.66	−2440.48	−2439.68
Pseudo R^2	0.303	0.168	0.169	0.177	0.177

*, **, and *** indicate significance at the 10, 5, and 1 % level, respectively. Standard errors are in parentheses. Info-Min condition, Info-Max condition, audit probability 1/4 and 1/2, high fixed fine, Flanders, France, the Netherlands, and male are dummy variables. The gross income takes the value of the perceived income divided by 100. The safety index is given by the number of times the participant has chosen the safe option A in the Holt and Laury lottery and can take any integer value between 0 and 10 (*ex ante* measure). The self-reported risk attitude takes a value between 1 (risk averse) and 9 (willing to take full risks) (*ex post* measure). Cognitive performance indicates the number of correct answers in the three questions of the Cognitive Reflection test. The opinion on "Cheat if get away" and on "Pay in cash" can take a value between 1 (this behavior is perfectly acceptable) and 6 (this behavior is not at all acceptable). The opinion on "Tax evasion" is coded in the opposite direction: 1 indicates that the behavior is absolutely unacceptable, while 10 indicates that it is absolutely acceptable. The opinion on "Rich pay too much taxes" is coded 1 if the participant answered "agree" or "strongly agree" to the following statement: "Rich pay too much taxes," and 0 otherwise

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