

ONLINE APPENDIX

Tax Evasion and Social Information:

An Experiment in Belgium, France and the Netherlands

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1. Instructions of the Tax treatment under the Information condition (*The instructions for the No-Information are similar except for the sentences that are underlined below –but were not underlined in the instructions distributed to the subjects*)

We thank you for taking part in this experiment on decision-making. In the experiment, your earnings will depend on your decisions and random events. It is important that you carefully read these instructions. The experiment consists of three independent parts. At the end of the experiment, you will be paid the sum of your earnings in these parts. In addition, you will receive 3 Euro for showing up on time. You will be paid in cash your earnings at the end of the session individually and confidentially.

All your decisions are anonymous. You will never enter your name in the computer.

During the experiment you are not allowed to communicate. If you have questions then please raise your hand. One of us will come to you to answer your question.

You have received the instructions for the first part. You will receive the instructions for the second and the third part after you have completed the first part.

Part 1

During this part, you will make ten successive decisions. At the end of the experiment, one of these decisions will be randomly drawn by the computer software for determining your earnings.

Each decision is a paired choice between “Option A” and “Option B”. All the decisions and options are displayed in the table below. They will be also displayed on your computer screen. You will have to choose between these options by clicking either option A or option B.

- Look at Decision 1.

Option A pays 2 € with 1 chance out of 10 and it pays 1.6 € with 9 chances out of 10

Option B pays 3.85 € with 1 chance out of 10 and it pays 0.1 € with 9 chances out of 10

- Look at Decision 2.

Option A pays 2 € with 2 chances out of 10 and it pays 1.6 € with 8 chances out of 10

Option B pays 3.85 € with 2 chances out of 10 and it pays 0.1 € with 8 chances out of 10

The other eight decisions are similar. Note that as you move down the table, the chances of a higher prize for each option increase. In fact, for Decision 10 each option pays the highest payoff for sure, so your choice here is between 2 € and 3.85 €.

To summarize:

- You make ten decisions. For each decision, you choose between Option A and Option B. You may choose A for some decisions and B for others. There are no correct or incorrect answers.
- After you have made your ten decisions, you must confirm this set of decisions by clicking the OK button. Once you have clicked this button, you can no longer change your decisions.
- At the end of the session, the computer software will select randomly one of your ten

decisions. Each decision has an equal chance of being relevant for your earnings. Thereafter, with a new random draw, the computer program will determine your money earnings for the option (A or B) you chose for that decision according to the chances indicated for the option you chose.

If you have any question, please raise your hand. Your questions will be answered in private.

| The ten decisions | |
|--|--|
| Decision 1 Option A: 1 chance out of 10 of receiving 2 € and 9 chances out of 10 of receiving 1.6 € Option B: 1 chance out of 10 of receiving 3.85 € and 9 chances out of 10 of receiving 0.1 € | |
| 1. | Decision 2 Option A: 2 chances out of 10 of receiving 2 € and 8 chances out of 10 of receiving 1.6€ Option B: 2 chances out of 10 of receiving 3.85 € and 8 chances out of 10 of receiving 0.1 € |
| 2. | Decision 3 Option A: 3 chances out of 10 of receiving 2 € and 7 chances out of 10 of receiving 1.6€ Option B: 3 chances out of 10 of receiving 3.85 € and 7 chances out of 10 of receiving 0.1 € |
| 3. | Decision 4 Option A: 4 chances out of 10 of receiving 2 € and 6 chances out of 10 of receiving 1.6€ Option B: 4 chances out of 10 of receiving 3.85 € and 6 chances out of 10 of receiving 0.1 € |
| 4. | Decision 5 Option A: 5 chances out of 10 of receiving 2 € and 5 chances out of 10 of receiving 1.6€ Option B: 5 chances out of 10 of receiving 3.85 € and 5 chances out of 10 of receiving 0.1 € |
| 5. | Decision 6 Option A: 6 chances out of 10 of receiving 2 € and 4 chances out of 10 of receiving 1.6€ Option B: 6 chances out of 10 of receiving 3.85 € and 4 chances out of 10 of receiving 0.1 € |
| 6. | Decision 7 Option A: 7 chances out of 10 of receiving 2 € and 3 chances out of 10 of receiving 1.6€ Option B: 7 chances out of 10 of receiving 3.85 € and 3 chances out of 10 of receiving 0.1 € |
| 7. | Decision 8 Option A: 8 chances out of 10 of receiving 2 € and 2 chances out of 10 of receiving 1.6€ Option B: 8 chances out of 10 of receiving 3.85 € and 2 chances out of 10 of receiving 0.1 € |
| 8. | Decision 9 Option A: 9 chances out of 10 of receiving 2 € and 1 chance out of 10 of receiving 1.6€ Option B: 9 chances out of 10 of receiving 3.85 € and 1 chance out of 10 of receiving 0.1 € |
| 9. | Decision 10 Option A: 10 chances out of 10 of receiving 2 € and 0 chance out of 10 of receiving 1.6€ Option B: 10 chances out of 10 of receiving 3.85 € and 0 chance out of 10 of receiving 0.1 € |

Part 2 (*Instructions distributed after part 1 has been completed*)

During this part, your earnings are counted in points. Your earnings in cash from this part will be calculated according to the following conversion rate:

$$100 \text{ points} = \text{€}3$$

This part consists of 30 independent periods. At the end of the experiment, the computer program will randomly select two of these periods for payment, where each period has the same chance to be chosen. Your earnings in this part will be the average of your payoffs in these two periods.

Description of each period

In each period, you must choose between taking a salaried job or a self-employed job. Each job lasts only one period.

□ Each job is associated with various possible gross incomes.

* In a salaried job, your gross income can take the value 200, 300, 450, 550, 650 or 750 points.

* In a self-employed job, your gross income can take the value 150, 200, 350, 550, 750 or 850 points.

After you have made your choice between a salaried job and a self-employed job, the computer program selects randomly your gross income for this period and you will be informed about it.

□ Any income should be reported such that it can be taxed. The unique tax rate is 25%.

* In a salaried job, your income will be automatically taxed and the net (= after tax) income amounts to 75% of your gross income. Therefore your net income can take the value 150, 225, 337.5, 412.5, 487.5 or 562.5 points, depending on your gross income.

* In a self-employed job, you will make a second decision. You will choose between reporting your self-employment income or not reporting it.

If you **do report** your income, it will be taxed at 25%. Your net income will amount to 75% of the gross income from self-employment. Therefore, your net income can take the value 112.5, 150, 262.5, 412.5, 562.5 or 637.5 points, depending on your gross income.

If you **do not report** your self-employment income, you can be audited according to a certain audit probability. This audit probability can vary across periods. There are 3 different audit probabilities (it can be 1 chance out of 6, or 1 chance out of 4, or 1 chance out of 2). The consequences of an audit are described below. There are 2 possible cases.

- If you are not audited, your net income is equal to your gross income. It can take the value 150, 200, 350, 550, 750 or 850 points, depending on your gross income.
- If you are audited, your income is taxed at 25% and a fine has to be paid. The fine amounts to 25% of your gross self-employment income plus a fixed amount of 50 or 75, depending on the period.

In periods where the fixed amount of the fine amounts to 50 points, your final income can take the value 25, 50, 125, 225, 325 or 375 points, depending on your gross self-employment income.

In periods where the fixed amount of the fine amounts to 75 points, your final income can take the value 0, 25, 100, 200, 300 or 350 points, depending on your gross self-employment income.

□ Information

At the beginning of each period, you are informed on the probability of an audit and on the fixed amount of the fine in that period.

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.

In addition, if you choose the self-employed job, after learning your gross income you are informed on the proportion of participants in some previous experiments who made the same

choice and who received the same gross income, chose to report and the proportion of participants who chose not to report.

In these previous experiments the rules were the same as in this experiment, except that the participants did not have such information.

At the end of each period, you are informed on whether you have been audited (in case you have chosen the self-employed job and did not report) and on your final income in this period. Thereafter, a new period will start automatically.

To sum up, in each period:

- at the beginning you are informed on the probability of an audit and on the fixed amount of the fine;
- you are also informed about the decisions of participants in some previous experiments for the same probability of audit and the same fixed amount of the fine as you;
- you choose between a salaried job and a self-employed job;
- you are informed on your gross income;
- if you have chosen a self-employed job, you are also informed about the decisions of participants in some previous experiments before you choose between reporting your self-employment income or not reporting it;
- if you have chosen a self-employed job and did not report you are informed on whether you have been audited;
- at the end you are informed about your final income in this period.

The table in appendix summarizes all possible gross and net incomes.

Part 3 and end of the session

In this part we ask you to answer several questions about you and your opinions. All your answers are anonymous and will be kept confidential. We appreciate if you answer all questions sincerely.

At the end of part 3, the computer program will calculate and show your total earnings from part 1 and for part 2. Thereafter, you will be paid out anonymously and confidentially.

During the whole experiment you are not allowed to communicate in any way with other participants. If you have a question, please raise your hand; your question will be answered in private.

Before we start the experiment we ask you to answer a few questions in order to test your understanding of the instructions. These questions will appear on your computer screen shortly.

Appendix: Table of incomes (in points)

| <i>SALARIED JOB</i> | | | | | | |
|--|--------------|------------|--------------|--------------|--------------|--------------|
| If your gross income is: | 200 | 300 | 450 | 550 | 650 | 750 |
| Your net (after tax) income is: | 150 | 225 | 337.5 | 412.5 | 487.5 | 562.5 |
| <i>SELF-EMPLOYED JOB</i> | | | | | | |
| If your gross income is: | 150 | 200 | 350 | 550 | 750 | 850 |
| Your net income if the gross income from the self-employed job is reported is: | 112.5 | 150 | 262.5 | 412.5 | 562.5 | 637.5 |
| Your net income if the gross income from the self-employed job is not reported and | | | | | | |
| - not audited | 150 | 200 | 350 | 550 | 750 | 850 |
| - audited with a fixed amount of the fine = 50 | 25 | 50 | 125 | 225 | 325 | 375 |
| - audited with a fixed amount of the fine = 75 | 0 | 25 | 100 | 200 | 300 | 350 |

2. Information Condition

The table below presents the information that is presented to the subjects according to the situation (Audit probability – fine –income) they are in.

Minimum and maximum information presented in the information condition

| Proportion of subjects choosing the self-employed occupation observed in one session | | | | | | |
|---|------------|------------|------------|------------|------------|------------|
| Audit probability | 1/2 | | 1/4 | | 1/4 | |
| Fine | 50 | 75 | 50 | 75 | 50 | 75 |
| Minimum | 13% | 11% | 60% | 50% | 85% | 72% |
| Maximum | 31% | 28% | 83% | 76% | 98 | 97% |
| Proportion of subjects choosing to not report their income observed in one session | | | | | | |
| Gross income | 150 | 200 | 350 | 550 | 750 | 850 |
| Minimum | 45% | 58% | 60% | 57% | 52% | 57% |
| Maximum | 72% | 71% | 78% | 77% | 81% | 84% |

3. Post experimental questionnaire

Your sex: Female Male

Your age: _____ years

Your nationality:

Your study discipline:

- business
- economics
- engineering, computer sciences
- maths, physics, chemistry
- medicine
- others

Your school or university:

Your father's highest finished education:

- no certificate
- vocational training certificate
- high school final exam (baccalaureat)
- university degree

Your mother's highest finished education

- no certificate
- vocational training certificate
- high school final exam (baccalaureat)
- university degree

How many paid hours per week do you work on average next to your study:

Did you take a loan to pay your education?

Do you own a personal car? yes no

In your opinion, how do your parents' income compare with that of the other students of your university/school?

Your parents are

| | | | | | | | | | | |
|--|---------------|---|---|---|---------|---|---|---|---|---------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| | among the 10% | | | | in the | | | | | among the 10% |
| | the poorest | | | | average | | | | | the richest |

Click 1 if you believe your parents's income is among the lowest 10%, 2 for the lower 20%, etc. Click 5 if you believe your parents' income are average. Click 10 if you believe your parents' incomes are among the highest 10%.

How do you see yourself: Are you generally a person who is fully prepared to take risks or do you try to avoid taking risks?

(1=Risk averse9=Willing to take full risk)

Would you define your political opinions as (multiple options possible with a maximum of 2)

- right
- middle
- left
- liberal
- conservative
- green/ecological
- religiously inspired
- none of the above
- Don't know

Please rate the following statements:

Most crime...

- ... is committed by unworthy beings, and the government must protect law-abiding citizens and their property.
- ... is committed by fallen human beings, and the government is honor-bound to help them recover and become good citizens again.
- ... is a fact of life, and it is the responsibility of each individual to protect him- or herself. The government should not intervene.
- none of the above
- Don't know

Progressive taxation (i.e. higher tax rates for people with a higher income than for people with lower income)...

- ... is a just form of taxation, because it takes from those who have and give to those who don't have.
- ... is bad like all taxation.
- ... is bad because it is detrimental to efficiency.
- none of the above
- Don't know

The rich have to pay too much taxes.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree
- Don't know

The freer the economy, the freer the people.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree
- Don't know

Life on earth was created by some supreme being.

- Strongly Disagree
- Disagree
- Agree
- Strongly Agree
- Don't know

There is evidence that part of the population is engaged in undeclared work, in the sense of activities which circumvent declaration to tax authorities or social security institutions, but which are otherwise legal. Payment may be in money or in kind. This could be people working in certain sectors of activity like construction, transport or agriculture for example but also in hotels, restaurants and cafes. Undeclared work is also common in the whole range of household services - such as gardening, babysitting and elderly care -, personal services - like hairdressing, cosmetic or medical treatment - and repair services for cars, clothes, or computers.

What would you estimate is the share of the population which works without declaring the income or part of the income to tax or social security institutions in each of the following countries/regions?

| | Belgium Wallonia | Belgium Flanders | France | Former East Germany | Former West Germany | Netherlands |
|-----------------------------|---------------------|---------------------|--------|------------------------|------------------------|-------------|
| Less than 1 % | | | | | | |
| From 1 % to less than 5 % | | | | | | |
| From 5 % to less than 10 % | | | | | | |
| From 10 % to less than 20 % | | | | | | |
| From 20 % to less than 30 % | | | | | | |
| From 30 % to less than 40 % | | | | | | |
| From 40 % to less than 50 % | | | | | | |
| 50 % or more | | | | | | |
| Don't know | | | | | | |

According to you, in your country what is the percentage of chance (between 0 and 100%) that the Tax authority controls a tax return?

Do you personally know any people who work without declaring their income or part of their income to tax or social security institutions?

- Yes No Don't know

In your opinion, which of the following categories are most likely to carry out undeclared work? Please indicate the first and second most likely.

| | First | Second |
|---------------------|-------|--------|
| Unemployed | | |
| Self-employed | | |
| Pensioners\ retired | | |
| Full-time employees | | |
| Part-time employees | | |
| Students | | |
| Legal immigrants | | |
| Illegal immigrants | | |
| Others | | |
| Don't know | | |

Have you in the last twelve months acquired any services or goods of which you had a good reason to assume that they embodied undeclared work, i.e. that the income was not completely reported to tax or social security institutions?

- Yes No Don't know

Do you know anybody who has in the last twelve months acquired any services or goods of which s/he had a good reason to assume that they embodied undeclared work, i.e. that the income was not completely reported to tax or social security institutions?

Yes No Don't know

How do you assess the following behaviours. For each of them, please indicate to what extent you find it acceptable or not. Please use the following scale: '1' means that you find it 'absolutely unacceptable' and '10' means that you find it 'absolutely acceptable.'

| | | | | | | | | | | | |
|--|-------------------------|---|---|---|---|---|---|-----------------------|---|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |
| | Absolutely unacceptable | | | | | | | Absolutely acceptable | | | |

Someone receives welfare payments without being legally entitled

Someone uses public transport without a valid ticket

A private person is hired by a private household for work and he\ she does not report the payment received in return to tax or social security institutions although the law requires that it should be reported

A firm is hired by a private household for work and it does not report the payment received in return to tax or social security institutions although the law requires that it should be reported

A firm is hired by another firm for work and it does not report its activity to tax or social security institutions although the law requires that it should be reported

A firm hires a private person and all or a part of the salary paid to him\ her is not officially registered although the law requires that it should be reported

Someone evades taxes by not or only partially declaring income

Please answer the following questions on a scale from 1 to 6, where 6 means that in your opinion the described behavior is not at all acceptable and 1 means that it is perfectly acceptable.

Trading or exchanging goods or services with a friend or neighbor and not reporting it on your tax form.

Reporting your main income fully, but not including some small outside income.

Being paid in cash for a job and then not reporting it on your tax form.

Not reporting some earnings from investments or interest that the government would not be able to find out about.

Almost every taxpayer would cheat to some extent if s/he thought s/he could get away with it.

The chances of getting caught are so low that it is worthwhile trying to cut corners a little on your taxes.