

Online Supplementary Material

A. Payoffs

Given the structure of the experiment, each subject's payoff (P_i)—after being informed about her class but before casting the die—consisted of four elements: The amount of tokens earned during the treatment (E_i), money earned in case of a correct prediction of one's own relative performance (M_i), money coming from the Hault and Laury (2002) lottery (L_i), and the payment of 3€ for filling out the questionnaire (Q_i). Thus:

$$P_i = E_i + M_i + L_i + Q_i.$$

The amount of tokens earned during the treatment depended both on the selected contract and the class $k \in \{H, M, L\}$ to which player i belonged. Thus:

$$E_{ik} = I_{ik} - T_{ik} + EF_i,$$

where I_{ik} and T_{ik} are, respectively, the income of and the tax paid by player i depending on his class k . EF_i is the expected amount of tokens received by the fund after unlucky people are refunded. This amount does not depend on class.

Given that the income of a rich subject (I_H) was 300, while a middle class participant was endowed with 200 tokens (I_M) and a poor participant with 100 (I_L), the relative earnings (E_H , E_M and E_L) were computed as follows:

Under the proportional contract (Neutral Welfare State), where the tax rate was 30% for everyone, the tax paid by rich, middle class and poor people was, respectively:

$$T_{HA} = 0.3 \times 300 = 90;$$

$$T_{MA} = 0.3 \times 200 = 60;$$

$$T_{LA} = 0.3 \times 100 = 30.$$

Consequently, because 21 subjects (seven per class) participated in each session, the fund (F_A) was equal to:

$$F_A = 7 \times 90 + 7 \times 60 + 7 \times 30 = 1260.$$

The sum equally redistributed among players was net of the amount of tokens used to refund unlucky people. The expected amount of this refund sum (ER) was:

$$ER = 7 \times 0.4 \times 80 + 7 \times 0.5 \times 80 + 7 \times 0.6 \times 80 = 840.$$

This means that the expected amount of tokens each subject received from the fund (EF_A) was:

$$EF_A = 420/21 = 20.$$

Consequently:

$$E_{HA} = 300 - 90 + 20 = 230;$$

$$E_{MA} = 200 - 60 + 20 = 160;$$

$$E_{LA} = 100 - 30 + 20 = 90.$$

Under the actuarially fair contract (Individualistic Welfare State), where the tax consisted of two components—a 10% tax rate plus a part proportional to risk—the tax paid by rich, middle class and poor people was, respectively:

$$T_{HB} = 0.1 \times 300 + 0.4 \times 80 = 62;$$

$$T_{MB} = 0.1 \times 200 + 0.5 \times 80 = 60;$$

$$T_{LB} = 0.1 \times 100 + 0.6 \times 80 = 58.$$

The fund (F_B) was equal to:

$$F_B = 7 \times 62 + 7 \times 60 + 7 \times 58 = 1260.$$

This means that the expected amount of tokens each subject received from the fund (EF_B) was again 20.

Consequently:

$$E_{HB} = 300 - 62 + 20 = 258;$$

$$E_{MB} = 200 - 60 + 20 = 160;$$

$$E_{LB} = 100 - 58 + 20 = 62.$$

Under the progressive contract (Prioritarian Welfare State), where the tax rate was 35%, 30% and 15% for rich, middle class and poor subjects, respectively, the tax paid was:

$$T_{HC} = 0.35 \times 300 = 105;$$

$$T_{MC} = 0.3 \times 200 = 60;$$

$$T_{LC} = 0.15 \times 100 = 15.$$

The fund (F_C) was equal to:

$$F_C = 7 \times 105 + 7 \times 60 + 7 \times 15 = 1260.$$

This means that the expected amount of tokens each subject received from the fund (EF_C) was again 20.

Consequently:

$$E_{HC} = 300 - 105 + 20 = 215;$$

$$E_{MC} = 200 - 60 + 20 = 160;$$

$$E_{LC} = 100 - 15 + 20 = 105.$$

B. Tables and Figures

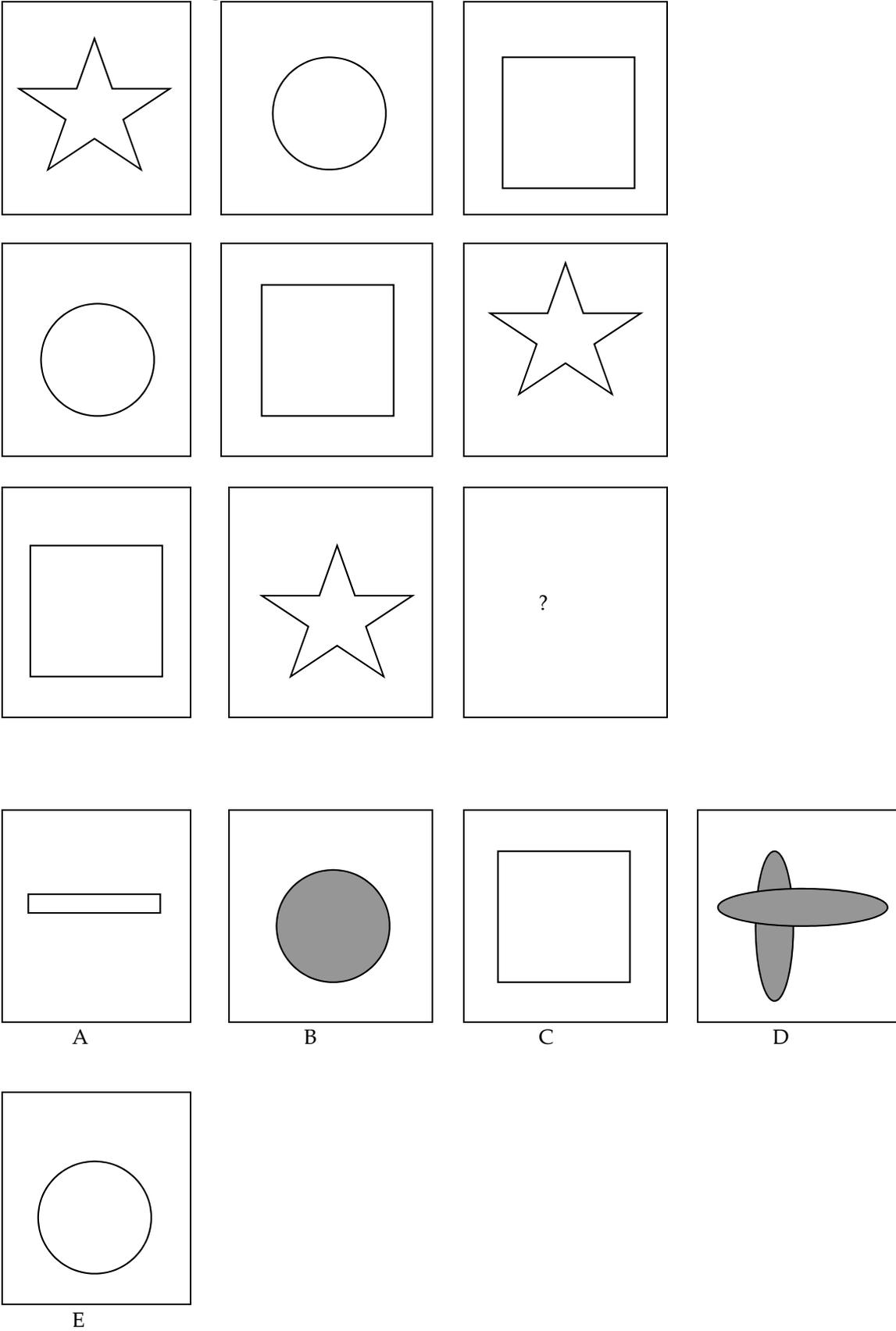


Figure S1. An example of Raven's matrix. Determine the missing square, choosing among options A, B, C, D and E.

Table S1. Preference distribution across the three contracts under the VOI condition, given the choice under the NO_VOI condition.

		Contract chosen under the NO_VOI condition		
		Prioritarian	Neutral	Individualistic
Contract chosen under the VOI condition	Prioritarian	N = 24	N = 6	N = 11
	Neutral	N = 8	N = 19	N = 13
	Individualistic	N = 24	N = 7	N = 35

Table S2. Ordered probit regression (R1)—marginal effects. Dependent variable: CHOICE_VOI.

	Choice_VOI = Prioritarian	Choice_VOI = Neutral	Choice_VOI = Individualistic
GUESS_FIRST	-0.221 (0.001)	-0.058 (0.073)	0.28 (0.002)
GUESS_LAST	0.188 (0.184)	0.001 (0.953)	-0.189 (0.120)
WELFARE_STATE	-0.174 (0.050)	-0.031 (0.178)	0.205 (0.049)
STATUS_IMPROVEMENT	0.017 (0.666)	0.003 (0.674)	-0.02 (0.666)
SKILL_INDEX	-0.07 (0.389)	-0.012 (0.428)	0.082 (0.388)
PERSONAL_INDEX	-0.076 (0.148)	-0.013 (0.255)	0.089 (0.147)
FINANCIAL_RISK	0.018 (0.491)	0.003 (0.509)	-0.021 (0.489)
PHYSICAL_RISK	0.004 (0.859)	0.001 (0.860)	-0.005 (0.859)
DEMOGRAPHIC CONTROLS		YES	
N		127	
Log Likelihood		-118.69307	
Prob > chi-squared (<i>p</i> values in parentheses)		0.0017	

Table S3. Ordered probit regression (R2)—marginal effects. Dependent variable: CHOICE_NO_VOI.

	Choice_NO_VOI = Prioritarian	Choice_NO_VOI = Neutral	Choice_NO_VOI = Individualistic
FIRST	-0.422 (0.000)	-0.076 (0.127)	0.498 (0.000)
LAST	0.227 (0.025)	-0.018 (0.492)	-0.209 (0.015)
WELFARE_STATE	-0.114 (0.242)	0.0005 (0.962)	0.114 (0.242)
STATUS_IMPROVEMENT	0.058	-0.0003	-0.058

	(0.198)	(0.962)	(0.196)
SKILL_INDEX	-0.095	0.0004	0.095
	(0.292)	(0.962)	(0.291)
PERSONAL_INDEX	-0.012	0.0001	0.012
	(0.834)	(0.963)	(0.834)
DEMOGRAPHIC CONTROLS		YES	
N		128	
Log Likelihood		-104.32398	
Prob > chi2		0.0000	
(p values in parentheses)			

Table S4. Preferred contract under the VOI condition (percentages by expected category).

		Preferred contract under the VOI condition		
		Prioritarian	Neutral	Individualistic
Expected category	Rich	8.3%	33.3%	58.3%
	(N = 48)	(N = 4)	(N = 16)	(N = 28)
	Middle class	34.9%	22.9%	42.2%
	(N = 83)	(N = 29)	(N = 19)	(N = 35)
	Poor	50%	31.2%	18.8%
	(N = 16)	(N = 8)	(N = 5)	(N = 3)

Chi-squared test: $p = 0.002$ Fisher-exact test: $p = 0.001$.

Table S5. Preferred contract under the NO_VOI condition (percentages by category).

		Preferred contract under the NO_VOI condition		
		Prioritarian	Neutral	Individualistic
Category	Rich	4.1%	13.6%	79.6%
	(N = 49)	(N = 2)	(N = 8)	(N = 39)
	Middle class	40.8%	36.7%	22.4%
	(N = 49)	(N = 20)	(N = 18)	(N = 11)
	Poor	69.4%	12.2%	18.4%
	(N = 49)	(N = 34)	(N = 6)	(N = 9)

Chi2 test: $p = 0.000$.

Table S6. Less favored contract under the VOI condition (percentages by expected category).

		Less favored contract under the VOI condition		
		Prioritarian	Neutral	Individualistic
Expected category	Rich	66.7%	14.6%	18.7%
	(N = 48)	(N = 32)	(N = 7)	(N = 9)
	Middle class	33.7%	34.9%	31.3%
	(N = 83)	(N = 28)	(N = 29)	(N = 26)
	Poor	37.5%	12.5%	50.0%
	(N = 16)	(N = 6)	(N = 2)	(N = 8)

Chi2 test: $p = 0.001$ Fisher-exact test: $p = 0.001$ Cramér's V = 0.2472.

Table S7. Less favored contract under the NO_VOI condition (percentages by category).

		Less favored contract under the NO_VOI condition		
		Prioritarian	Neutral	Individualistic
Category	Rich	85.7%	4.1%	10.2%
	(N = 49)	(N = 42)	(N = 2)	(N = 5)

	Middle class (N = 49)	26.5% (N = 13)	30.6% (N = 15)	42.9% (N = 21)
	Poor (N = 49)	22.5% (N = 11)	12.2% (N = 6)	65.3% (N = 32)

Chi2 test: $p = 0.000$ Cramér's V = 0.4442.

Table S8. Preferred contract (percentages by category) under the NO_VOI condition, by subjects preferring the Individualistic contract under the VOI condition.

		Preferred contract under the VOI condition: Individualistic		
		Prioritarian	Neutral	Individualistic
Category	Rich (N = 23)	4% (N = 1)	0% (N = 0)	96% (N = 22)
	Middle class (N = 24)	29% (N = 7)	29% (N = 7)	42% (N = 10)
	Poor (N = 19)	84% (N = 16)	0% (N = 0)	16% (N = 3)

Table S9. Preferred contract (percentages by category) under the NO_VOI condition, by subjects preferring the Prioritarian contract under the VOI condition.

		Preferred contract under the VOI condition: Prioritarian		
		Prioritarian	Neutral	Individualistic
Category	Rich (N = 15)	7% (N = 1)	33% (N = 5)	60% (N = 9)
	Middle class (N = 13)	92% (N = 12)	8% (N = 1)	0% (N = 0)
	Poor (N = 13)	85% (N = 11)	0% (N = 0)	15% (N = 2)

Table S10. Probit regression (R3)—marginal effects. Dependent variable: SWITCH.

GUESS	-0.59	
	(0.000)	
WELFARE_STATE	-0.046	
	(0.706)	
STATUS_IMPROVEMENT	-0.037	
	(0.517)	
SKILL_INDEX	-0.087	
	(0.411)	
PERSONAL_INDEX	-0.002	
	(0.974)	
FINANCIAL_RISK	0.031	
	(0.411)	
PHYSICAL_RISK	-0.053	
	(0.132)	
DEMOGRAPHIC CONTROLS		YES
N		127
Log Likelihood		-62.923137

Prob > chi2 0.0000
(*p* values in parentheses)

Table S11. Preference distribution under both VOI and NO_VOI conditions (by middle class subjects who correctly predicted their status).

		Middle Class subjects who correctly predicted their status under the VOI condition		
		Contract under NO_VOI		
		Prioritarian	Neutral	Individualistic
Contract under VOI	Prioritarian	N = 8	N = 0	N = 0
	Neutral	N = 0	N = 7	N = 0
	Individualistic	N = 3	N = 4	N = 8

Table S12. Ordered probit regression (R4)—marginal effects. Dependent variable: CHOICE_NO_VOI (for the middle class only).

	Choice_NO_VOI = Prioritarian	Choice_NO_VOI = Neutral	Choice_NO_VOI = Individualistic
GUESS_FIRST	0.533 (0.006)	-0.443 (0.017)	-0.09 (0.147)
GUESS_LAST	0.554 (0.030)	-0.498 (0.045)	-0.056 (0.198)
WELFARE_STATE	-0.805 (0.003)	0.633 (0.031)	0.172 (0.120)
STATUS_IMPROVEMENT	-0.074 (0.539)	0.059 (0.545)	0.016 (0.566)
SKILL_INDEX	-0.232 (0.354)	0.182 (0.387)	0.049 (0.358)
PERSONAL_INDEX	-0.122 (0.336)	0.096 (0.361)	0.026 (0.381)
FIRST_PROGRESSIVE	0.683 (0.000)	-0.568 (0.002)	-0.115 (0.105)
FIRST_ACTFAIR	-0.201 (0.390)	0.155 (0.397)	-0.047 (0.459)
DEMOGRAPHIC CONTROLS		YES	
N		42	
Log Likelihood		-24.832047	
Prob > chi-squared	0.0003		

(*p* values in parentheses)

Table S13. Preferred contract by category under the NO_VOI condition (by the expected middle class subjects who under the VOI condition wrongly predicted their status).

		Expected middle class subjects who wrongly predicted their status under the VOI condition		
		Choice under the NO_VOI condition		
		Prioritarian	Neutral	Individualistic
Category	Rich	N = 1	N = 5	N = 19

	(N = 25)			
	Poor (N = 28)	N = 19	N = 3	N = 6

C. INSTRUCTIONS

SCREEN 1. Before we begin, please type your experiment ID code into the field on your computer screen.

SCREEN 2. Welcome. Thank you for agreeing to participate in this experiment.

This experiment will not be particularly difficult or involve tricky questions. You will simply need to follow step by step the instructions as they appear on your screen. The answers you will provide will be confidential. Those who process the data from the experiment will not be able to match your name to your choices.

During the experiment, you will be asked to make choices. It is therefore important for the success of the experiment that you do not talk to each other and that you read the instructions very carefully.

At the end of the experiment, you will receive your payment in cash. The actual amount will depend partly on your choices, partly on the choices of the other participants, and partly on chance.

SCREEN 3. During the first phase of the experiment you will be asked to perform a task for 30 minutes. You will have to solve some Raven's matrices – a nonverbal test used to measure cognitive abilities.

At the end of the 30 minutes, participants will be ranked according to their performance and they will be allocated in three categories.

Participants from 1 to 7 (category 1) will be endowed with 300 tokens

Participants from 8 to 14 (category 2) will be endowed with 200 tokens

Participants from 15 to 21 (category 3) will be endowed with 100 tokens

Each token in this task is worth 0.1 euro

SCREEN 4. However, as it happens in real life, there is a risk to partially lose one's own endowment. In particular, each category is associated to a different probability to lose 80 tokens. This probability is inversely correlated to each category ranking. It is 40% for category 1, 50% for category 2 and 60% for category 3

SCREEN 5. This implies that, after allocating participants across the three categories, each subject will cast a ten-sided die.

For participants belonging to category 1, the rules are:

If you cast a number from 1 to 4, you will lose 80 tokens

If you cast a number from 5 to 10, you will keep your endowment

For participants belonging to category 2, the rules are:

If you cast a number from 1 to 5, you will lose 80 tokens

If you cast a number from 6 to 10, you will keep your endowment

For participants belonging to category 3, the rules are:

If you cast a number from 1 to 6, you will lose 80 tokens

If you cast a number from 7 to 10, you will keep your endowment

SCREEN 6. During the second phase, you will be instructed about three different contracts. You will be asked to assign 3 points to your preferred contract, 2 to your second preferred contract and 1 to your less preferred contract.

At the end of the experiment, the contract that is scored the highest will be implemented.

SCREEN 7.

Here you can find a description of the three contracts:

CONTRACT A

Each participant will have to pay on her/his endowment a 30% tax rate.

The tax revenue will be used, first of all to refund those who lose 80 tokens. The remaining part will be equally shared among all the participants.

CONTRACT B

Each participant will have to pay a tax that consists of two elements:

1) a 10% tax rate on her/his endowment

2) a part that is directly correlated to the risk subjects face to lose the 80 tokens. This part consists of 32 tokens for participants who belong to category 1, 40 tokens for participants who belong to category 2 and 48 tokens for participants who belong to category 3.

The tax revenue will be used, first of all to refund those who lose 80 tokens. The remaining part will be equally shared among all the participants.

CONTRACT C

Each participant will have to pay on her/his endowment a tax that depends on the her/his category. In particular, participants who belong to category 1 will have to pay a 35% tax rate, participants who belong to category 2 will have to pay a 30% tax rate and participants who belong to category 3 will have to pay a 15% tax rate.

The tax revenue will be used, first of all to refund those who lose 80 tokens. The remaining part will be equally shared among all the participants.

SCREEN 8. We ask you to answer some control questions. After that, you will be asked, first to assign a score to each contract and, then, to perform the task.

SCREEN 9. Please assign a score to each contract – 3 to the most preferred contract, 2 to your second preferred contract and 1 to your less preferred contract

CONTRACT A _____

CONTRACT B _____

CONTRACT C _____

SCREEN 10. Before performing the task, we ask you to guess the category you will belong to. If your guess will be correct, at the end of the experiment you will receive 1 more euro

PARTICIPANTS PERFORM THE ACTIVITY FOR 30 MINUTES

SCREEN 11.

You solved XXX Raven's Matrices

You are in category XXX and your endowment is XXX euro

Now, you have the possibility to score the three contracts again – 3 to the most preferred contract, 2 to your second preferred contract and 1 to your less preferred contract. The contract that obtains the highest score NOW will be implemented.

CONTRACT A _____

CONTRACT B _____

CONTRACT C _____

SCREEN 12. Now it is time for each participant to cast the ten-sided die to establish whether she loses 80 tokens.

We remind you that:

For participants belonging to category 1, the rules are:

If you cast a number from 1 to 4, you will lose 80 tokens

If you cast a number from 5 to 10, you will keep your endowment

For participants belonging to category 2, the rules are:

If you cast a number from 1 to 5, you will lose 80 tokens

If you cast a number from 6 to 10, you will keep your endowment

For participants belonging to category 3, the rules are:

If you cast a number from 1 to 6, you will lose 80 tokens

If you cast a number from 7 to 10, you will keep your endowment

SCREEN 13. *Payoffs display*

SCREEN 14. Now, we will ask you both to complete a short questionnaire - which we will hand out shortly and to participate in another short activity which will allow you to increase your final payoff.

Please remain seated and refrain from talking to other participants. Once everyone has completed both the questionnaire and the activity, we will give you instructions about how to receive your payment.

AT THIS POINT, PARTICIPANTS ARE ASKED TO PARTICIPATE TO A HOLT&LAURY LOTTERY AND TO FILL IN A BRIEF QUESTIONNAIRE BEFORE RECEIVING THEIR PAYMENT

D. QUESTIONNAIRE

Selected questions used to derive variables included in our econometric analysis

SUCCESS_INDICES

Below are listed several reasons why some people get ahead and succeed in life and others do not. Using a 1-5 scale - where 1 means 'not important at all' and 5 means 'extremely important' – please tell me how important it is a reason for a person to succeed.

A: Willingness to take risks

B: Money inherited from families

C: Hard work and initiative

D: Ability or talent a person is born with

E: Physical appearance and good looks

F: Connections and knowing the right people

G: Being a member of a particular race or ethnic group

H: Getting the suitable education or training

I: Being male or female

WELFARE_STATE

Which of the following sentences is more in line with your way of thinking?:

A: We should live in a society where the size of the Government is large even if taxes are high

B: We should live in a society where the tax burden is low but everyone should take care of herself

RISK_INDICES

Using a 0-10 scale - where 0 means 'completely risk averse' and 10 means 'Completely willing to accept risk' please tell me what is your attitude towards risk for each of the specific contexts?

A: Car driving

B: Money matters

C: Leisure and sport activities

D: Career

E: Health

DEMOGRAPHYC VARIABLES

1. Date of Birth Year |__||__||__||__|

2. Sex Male Female

3. To which religious denomination do you belong?

Catholic

Protestant

Muslim

Buddhist

Jewish

Atheist

Agnostic

Some other religion (specify) _____

4. Do you do voluntary work? Yes No

5. Score of the school leaving examination ||_||_||_||

6. Are you a working student? Yes No

7. In political issues people often refer to position on 'left' and 'right'. Where would you locate your political opinions in the following 1-9 scale – where 1 means 'left' and 9 means 'right'?

1 2 3 4 5 6 7 8 9 I do not know |_||

Left

Right

STATUS_IMPROVEMENT

Using a 1-5 scale – where 1 means 'I do not agree at all' and 5 means 'I completely agree' – please tell me how much you agree with the following sentence: In Italy, people like you and your family are likely to improve their standard of living.