# **Behavioral Surveys**

Experimental auctions were preceded by a three-part behavioral survey. Part 1 assesses participants' cognitive abilities using ICAR tests as given in (Condon et al, 2014). Parts 2 and 3 contain staircase risk and time preference tasks adopted from (Falk et al, 2016). This part takes about 10 minutes.

Each auction part is followed by a short survey assessing participant affective states and their feedback on the auction institution.

Each experimental session concludes with a short questionnaire containing qualitative questions on individual competitiveness.

### **Pre-experiment survey**

**Survey Section 1:** This section will contain five questions and you are given up to one minute to answer each question, taking approximately five minutes for this section. A  $3 \times 3$  matrix of patterns will be presented to you and you will be asked to indicate the best answer to complete the figure.

Note that each question defaults to "No Answer" if no response is given within the time frame.

[Survey Section 1 (Cognitive Abilities) employed five matrix reasoning questions given to participants are MR.43 – MR.47, as can be assessed through https://icar-project.com/.]

### **Survey Section 2:**

In this section you will be asked to make a hypothetical choice between a 50/50 Chance of getting 300 dollars or nothing, and a sure payment. Please choose whether you would prefer the 50/50 chance, or the sure payment for each of the following questions.

- 1. What would you prefer: a draw with a 50 percent chance of receiving 300 Dollars, and the same 50 percent chance of receiving nothing, or the amount of 160 Dollars as a sure payment?
  - i. 50/50 Chance Go to 17
  - ii. Sure Payment Go to 2
- 2. Would you prefer the 50/50 chance or the amount of 80 Dollars as a sure payment?
  - i. 50/50 Chance Go to 10
  - ii. Sure Payment Go to 3
- 3. Would you prefer the 50/50 chance or the amount of 40 Dollars as a sure payment?
  - i. 50/50 Chance Go to 4

- ii. Sure Payment Go to 7
- 4. Would you prefer the 50/50 chance or the amount of 60 Dollars as a sure payment?
  - i. 50/50 Chance Go to 5
  - ii. Sure Payment Go to 6
- 5. Would you prefer the 50/50 chance or the amount of 70 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 6. Would you prefer the 50/50 chance or the amount of 50 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 7. Would you prefer the 50/50 chance or the amount of 20 Dollars as a sure payment?
  - i. 50/50 Chance Go to 8
  - ii. Sure Payment Go to 9
- 8. Would you prefer the 50/50 chance or the amount of 30 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 9. Would you prefer the 50/50 chance or the amount of 10 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 10. Would you prefer the 50/50 chance or the amount of 120 Dollars as a sure payment?
  - i. 50/50 Chance Go to 14
  - ii. Sure Payment Go to 11
- 11. Would you prefer the 50/50 chance or the amount of 100 Dollars as a sure payment?
  - i. 50/50 Chance Go to 13
  - ii. Sure Payment Go to 12
- 12. Would you prefer the 50/50 chance or the amount of 90 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 13. Would you prefer the 50/50 chance or the amount of 110 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 14. Would you prefer the 50/50 chance or the amount of 140 Dollars as a sure payment?
  - i. 50/50 Chance Go to 15
  - ii. Sure Payment Go to 16
- 15. Would you prefer the 50/50 chance or the amount of 150 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 16. Would you prefer the 50/50 chance or the amount of 130 Dollars as a sure payment?

- i. 50/50 Chance Go to next section
- ii. Sure Payment Go to next section
- 17. Would you prefer the 50/50 chance or the amount of 240 Dollars as a sure payment?
  - i. 50/50 Chance Go to 25
  - ii. Sure Payment Go to 18
- 18. Would you prefer the 50/50 chance or the amount of 200 Dollars as a sure payment?
  - i. 50/50 Chance Go to 22
  - ii. Sure Payment Go to 19
- 19. Would you prefer the 50/50 chance or the amount of 180 Dollars as a sure payment?
  - i. 50/50 Chance Go to 20
  - ii. Sure Payment Go to 21
- 20. Would you prefer the 50/50 chance or the amount of 190 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 21. Would you prefer the 50/50 chance or the amount of 170 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 22. Would you prefer the 50/50 chance or the amount of 220 Dollars as a sure payment?
  - i. 50/50 Chance Go to 23
  - ii. Sure Payment Go to 24
- 23. Would you prefer the 50/50 chance or the amount of 230 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 24. Would you prefer the 50/50 chance or the amount of 210 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 25. Would you prefer the 50/50 chance or the amount of 280 Dollars as a sure payment?
  - i. 50/50 Chance Go to 29
  - ii. Sure Payment Go to 26
- 26. Would you prefer the 50/50 chance or the amount of 260 Dollars as a sure payment?
  - i. 50/50 Chance Go to 27
  - ii. Sure Payment Go to 28
- 27. Would you prefer the 50/50 chance or the amount of 270 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 28. Would you prefer the 50/50 chance or the amount of 250 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section

- 29. Would you prefer the 50/50 chance or the amount of 300 Dollars as a sure payment?
  - i. 50/50 Chance Go to 31
  - ii. Sure Payment Go to 30
- 30. Would you prefer the 50/50 chance or the amount of 290 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section
- 31. Would you prefer the 50/50 chance or the amount of 310 Dollars as a sure payment?
  - i. 50/50 Chance Go to next section
  - ii. Sure Payment Go to next section

### **Survey Section 3:**

In this section you will be asked to make several hypothetical choices between receiving 100 Dollars today, or a larger amount in 12 months. Please indicate which option you would prefer for each of the following questions.

- 1. Please consider the following: would you rather receive 100 Dollars today or 154 Dollars in 12 months?
  - i. Today Go to 17
  - ii. In 12 Months Go to 2
- 2. Would you rather receive 100 Dollars today or 125 Dollars in 12 months?
  - i. Today Go to 10
  - ii. In 12 Months Go to 3
- 3. Would you rather receive 100 Dollars today or 112 Dollars in 12 months?
  - i. Today Go to 7
  - ii. In 12 Months Go to 4
- 4. Would you rather receive 100 Dollars today or 106 Dollars in 12 months?
  - i. Today Go to 6
  - ii. In 12 Months Go to 5
- 5. Would you rather receive 100 Dollars today or 103 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 6. Would you rather receive 100 Dollars today or 109 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 7. Would you rather receive 100 Dollars today or 119 Dollars in 12 months?
  - i. Today Go to 8
  - ii. In 12 Months Go to 9
- 8. Would you rather receive 100 Dollars today or 122 Dollars in 12 months?

- i. Today End of survey
- ii. In 12 Months End of survey
- 9. Would you rather receive 100 Dollars today or 116 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 10. Would you rather receive 100 Dollars today or 139 Dollars in 12 months?
  - i. Today Go to 14
  - ii. In 12 Months Go to 11
- 11. Would you rather receive 100 Dollars today or 132 Dollars in 12 months?
  - i. Today Go to 13
  - ii. In 12 Months Go to 12
- 12. Would you rather receive 100 Dollars today or 129 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 13. Would you rather receive 100 Dollars today or 136 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 14. Would you rather receive 100 Dollars today or 146 Dollars in 12 months?
  - i. Today Go to 16
  - ii. In 12 Months Go to 15
- 15. Would you rather receive 100 Dollars today or 143 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 16. Would you rather receive 100 Dollars today or 150 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 17. Would you rather receive 100 Dollars today or 185 Dollars in 12 months?
  - i. Today Go to 18
  - ii. In 12 Months Go to 25
- 18. Would you rather receive 100 Dollars today or 202 Dollars in 12 months?
  - i. Today Go to 22
  - ii. In 12 Months Go to 19
- 19. Would you rather receive 100 Dollars today or 193 Dollars in 12 months?
  - i. Today Go to 20
  - ii. In 12 Months Go to 21
- 20. Would you rather receive 100 Dollars today or 197 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey

- 21. Would you rather receive 100 Dollars today or 189 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 22. Would you rather receive 100 Dollars today or 210 Dollars in 12 months?
  - i. Today Go to 23
  - ii. In 12 Months Go to 24
- 23. Would you rather receive 100 Dollars today or 215 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 24. Would you rather receive 100 Dollars today or 206 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 25. Would you rather receive 100 Dollars today or 169 Dollars in 12 months?
  - i. Today Go to 29
  - ii. In 12 Months Go to 26
- 26. Would you rather receive 100 Dollars today or 161 Dollars in 12 months?
  - i. Today Go to 28
  - ii. In 12 Months Go to 27
- 27. Would you rather receive 100 Dollars today or 158 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 28. Would you rather receive 100 Dollars today or 165 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 29. Would you rather receive 100 Dollars today or 177 Dollars in 12 months?
  - i. Today Go to 31
  - ii. In 12 Months Go to 30
- 30. Would you rather receive 100 Dollars today or 173 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey
- 31. Would you rather receive 100 Dollars today or 181 Dollars in 12 months?
  - i. Today End of survey
  - ii. In 12 Months End of survey

### **Post-auction survey**

0. For every period in the auction, I

- 1. always bought the object Hide 5 and 7
- 2. sometimes bought the object, and sometimes not.
- 3. never bought the object Hide 4 and 6
- 1. When I bid, all I cared about was buying as fast as possible.
  - 1. Completely Disagree
  - 2. Disagree
  - 3. Somewhat Disagree
  - 4. Neither Agree Nor Disagree
  - 5. Somewhat Agree
  - 6. Agree
  - 7. Completely Agree
- 2. When I bid, all I cared about was paying the lowest price possible.
  - 1. Completely Disagree
  - 2. Disagree
  - 3. Somewhat Disagree
  - 4. Neither Agree Nor Disagree
  - 5. Somewhat Agree
  - 6. Agree
  - 7. Completely Agree
- 3. When I bought the object, I often thought that I could have bought it at a lower price if I bid differently.
  - Completely Disagree
  - 2. Disagree
  - 3. Somewhat Disagree
  - 4. Neither Agree Nor Disagree
  - 5. Somewhat Agree
  - 6. Agree
  - 7. Completely Agree
- 4. When I did not buy the object, I often thought that I could have bought it and made a profit if I bid differently.
  - 1. Completely Disagree
  - 2. Disagree
  - 3. Somewhat Disagree

- 4. Neither Agree Nor Disagree
- 5. Somewhat Agree
- 6. Agree
- 7. Completely Agree
- 5. When I bought an object in the auction, I felt:
  - 1. Extremely Sad
  - 2. Sad
  - 3. Somewhat Sad
  - 4. Neither Happy Nor Sad
  - 5. Somewhat Happy
  - 6. Happy
  - 7. Extremely Happy
- 6. When I did not buy an object in the auction, I felt:
  - 1. Extremely Sad
  - 2. Sad
  - 3. Somewhat Sad
  - 4. Neither Happy Nor Sad
  - 5. Somewhat Happy
  - 6. Нарру
  - 7. Extremely Happy

## **Post-experiment survey**

This subsection provides details on our post-auction survey questions.

### Section 1 (competition preference, risk preference, time preference and regret):

Please rate each statement according to the given scales.

- 1. "Competition brings the best out of me."
  - 1. Not At All Like Me
  - 2. Not Like Me
  - 3. Somewhat Not Like Me
  - 4. Neutral
  - 5. Somewhat Like Me
  - 6. Like Me

- Exactly Like Me
   "Whenever I make a choice, I try to get information about how the other alternatives turned out."
   Strongly Disagree
   Disagree
   Somewhat Disagree
   Neither Agree Nor Disagree
  - 5. Somewhat Agree
  - 6. Agree
  - 7. Strongly Agree
- 3. "If I make a choice and it turns out well, I still feel like something of a failure if I find out that another choice would have turned out better."
  - 1. Strongly Disagree
  - 2. Disagree
  - 3. Somewhat Disagree
  - 4. Neither Agree Nor Disagree
  - 5. Somewhat Agree
  - 6. Agree
  - 7. Strongly Agree
- 4. Please rate this questions with "somewhat agree." (Attention check question)
  - 1. Strongly Disagree
  - 2. Disagree
  - 3. Somewhat Disagree
  - 4. Neither Agree Nor Disagree
  - 5. Somewhat Agree
  - 6. Agree
  - 7. Strongly Agree
- 5. "Whenever I make a choice, I'm curious about what would have happened if I had chosen differently."
  - 1. Strongly Disagree
  - 2. Disagree
  - 3. Somewhat Disagree
  - 4. Neither Agree Nor Disagree
  - 5. Somewhat Agree

- 6. Agree
  7. Strongly Agree
  6. "When I think about how I'm doing in life, I often assess opportunities I have passed up."
  1. Strongly Disagree
  2. Disagree
  - 2. Computed Diagram
  - 3. Somewhat Disagree
  - 4. Neither Agree Nor Disagree
  - 5. Somewhat Agree
  - 6. Agree
  - 7. Strongly Agree
- 7. "Once I make a decision, I don't look back."
  - 1. Strongly Disagree
  - 2. Disagree
  - 3. Somewhat Disagree
  - 4. Neither Agree Nor Disagree
  - 5. Somewhat Agree
  - 6. Agree
  - 7. Strongly Agree
- 8. How willing or unwilling you are to take risks?
  - 1. Completely Unwilling To Do So
  - 2. Unwilling
  - 3. Somewhat Unwilling
  - 4. Neither Unwilling Nor Willing
  - 5. Somewhat Willing
  - 6. Willing
  - 7. Completely willing To Do So
- 9. Are you generally an impatient person, or someone who always shows great patience?
  - 1. Very Impatient
  - 2. Impatient
  - 3. Somewhat Impatient
  - 4. Neither Impatient Nor Patient
  - 5. Somewhat Patient
  - 6. Patient

#### 7. Very Patient

10. How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future?

- 1. Completely Unwilling To Do So
- 2. Unwilling
- 3. Somewhat Unwilling
- 4. Neither Unwilling Nor Willing
- 5. Somewhat Willing
- 6. Willing
- 7. Completely Willing To Do So

#### Survey section 2 (demographics):

- 1. What is your age? (Enter a Numerical Value)
  - · Your answer:
- 2. Please Indicate Your Major:
  - Your answer:
- 3. What is your standing at the University?
  - i. 1st Year Undergraduate
  - ii. 2nd Year Undergraduate
  - iii. 3rd Year Undergraduate
  - iv. 4th Year Undergraduate
  - v. 5th Year And Beyond Undergraduate
  - vi. Graduate Student
  - vii. Professional Degree
- 4. Which gender do you identify with?
  - i. Female
  - ii. Male
  - iii. Non-binary
  - iv. Rather Not Say
- 5. How many economics or business classes have you taken?
  - i. None
  - ii. 1
  - iii. 2
  - iv. 3
  - v. 4
  - vi. 5 or More

- 6. What is your age? (Enter a Numerical Value)
  - Your answer:
- 7. The experiment was very interesting.
  - i. Strongly Disagree
  - ii. Disagree
  - iii. Somewhat Disagree
  - iv. Neither Agree Nor Disagree
  - v. Somewhat Agree
  - vi. Agree
  - vii. Strongly Agree
- 8. The instructions were easy to understand.
  - i. Strongly Disagree
  - ii. Disagree
  - iii. Somewhat Disagree
  - iv. Neither Agree Nor Disagree
  - v. Somewhat Agree
  - vi. Agree
  - vii. Strongly Agree
- 9. Please add any additional comments about the experiment below:
  - Your answer: