Appendix A: Instructions

Instructions for the U1, K1, A1, U2, K2, A2 treatment.

Welcome to a decision-making study!

Introduction

Thank you for participating in today’s experiment in economic decision-making. These instructions describe the details of the experiment, so please read them carefully. If you have any questions while these instructions are being read, please raise your hand. At this time I ask that you refrain from talking to any of the other participants.

General Description

In the experiment you will be asked to make a decision regarding purchasing a hypothetical airline ticket. The ticket can be purchased from two (hypothetical) travel agencies. At different phases of the experiment, there will be different sets of rules and options available to you. The specifics of each phase will be clearly explained to you before the phase begins. In total there will be six phases. Each phase consists of 12 rounds. This part of the instructions describe the initial 3 phases.

In every round of the first three phases you will know your valuation $V$ of the ticket and it will differ from round to round. If in a particular round you purchase the ticket and pay price $p$ then your net gain in that round is $V-p$. If you do not purchase the ticket your net gain is 0. Net gains that you earn each round will determine your cash payoffs as described at the end of the instructions. Please note that ALL the monetary values are denominated in CENTS, so that 500 is 500 cents (= $5).

Example 1: Your valuation for the flight is 500. You purchased the ticket at a price of 200. Your net gain in this round is 300.

Travel Agencies

There are two ticket agencies: Agency 1 and Agency 2. Depending on the phase of the experiment you will either be able to use only one of them or you will have a choice of which one to use.

If you use Agency 1 to purchase the ticket you see the price of the ticket and you need to decide whether you are willing to pay the list price for this ticket or not. You can make this decision by pressing either the “Reject List Price” or “Accept List Price” button.
If you use Agency 2 to purchase the ticket you will have to name the price that you would like to pay. You “name” this price by typing it into a text box and then pressing the button that reads “Submit Price”. Agency 2 has a threshold price that it received from a hypothetical airline. Agency 2 will compare your price with its threshold price. If your price is higher you purchase the ticket and pay the price that you named. Otherwise, the ticket is not purchased.

Threshold prices that Agency 2 uses were generated by the computer for all 72 rounds before the beginning of this study and are unknown to you. You can only learn whether your price is higher or lower than the threshold and only AFTER you have submitted your price.

**Example 2:** Assume you play round 5 of the phase where only Agency 2 is available. Your valuation for the ticket in round 5 is 800. Your decision is what price to submit to Agency 2. Say you submit price \( p \). If \( p \) is higher than the threshold of Agency 2 then the ticket is sold to you and your net gain is 800 – \( p \). If \( p \) is less than the threshold price the ticket is not sold to you, your net gain is 0. Note that your net gain will be NEGATIVE if your bid is greater than your value AND you win the item.

**Cash Payments**

Your cash payments will be determined in the following way. Recall that the experiment consists of 6 phases with 12 rounds in each phase. At the end of the experiment, your total earnings for each phase will be summed up. ONE of the six phases will be chosen at random and all participants will be paid their earnings in cash for the chosen phase of the experiment. To choose the phase, one of the participants will pull a number out of a hat.

**Description of Phases 1–3.**

Following is a description of the phases that you will see in the first half of the study. Similar descriptions will be also available on the computer screen.

**Phase 1**

In this phase only Agency 2 is available. You are in the situation described by **Example 2**.

**Phase 2**

In this phase only Agency 2 is available. However, you know the price charged by Agency 1 even though you CANNOT use Agency 1 to purchase tickets.

**Phase 3**

Both agencies are available. You can either pay Agency 1’s price or you can submit your price to Agency 2. If Agency 2 rejects your price you are allowed to use Agency 1 if you wish to do so.
**Example 3:** Assume you play round 5 of the phase where both Agencies are available. Your valuation for the ticket is 700. Assume that the price of Agency 1 is 600. In this phase you are free to use either Agency. In particular, you can go ahead and pay 600 for the ticket to Agency 1. Alternatively, you could submit price $p$ to Agency 2. **Importantly,** if your price is rejected by Agency 2 you are still allowed to purchase the ticket from Agency 1. However, if you initially choose to Accept or Reject the list price, then you will **NOT** be able to name your own price for that round.
Description of Phases 4 through 6

This set of instructions describes phases 4, 5, and 6. Most of the instructions are similar to the first 3 phases but there are differences between the first 3 phases and these 3 phases. It is asked that you please follow closely to ensure that you understand these differences.

In this part of the experiment you will be asked to make a decision regarding purchasing a hypothetical airline ticket. You can either purchase the ticket for a morning flight or for an evening flight. The ticket can be purchased from two (hypothetical) travel agencies.

In every round of the last three phases you will know your valuation $M$ for the morning flight and your valuation $E$ for the evening flight. If in a particular round you purchase the ticket for a morning flight and pay price $p$ then your net gain in that round is $M-p$. Similarly, if you buy the ticket for the evening flight and pay price $p$ then your net gain is $E-p$. If you do not purchase any flight your net gain is 0. Net gains that you earn in each round will determine your cash payoffs as was already described.

**Example 1:** Your valuation for the morning flight is 500. You purchased the ticket at a price of 200. Your net gain in this round is 300.

**Travel Agencies**

There are two ticket agencies: Agency 1 and Agency 2. Depending on the phase of the experiment you will either be able to use only one of them or you will have a choice of which one to use.

If you use Agency 1 to purchase the ticket you see the price of the morning and evening flights. Your decision is which flight, if any, to buy.

**Example 2:** Assume you play round 5 of the phase where Agency 1 is available. Your valuation for the morning flight in round 5 is 1000 and your valuation for the evening flight is 900. The price for either flight is 800. Your decision is whether to purchase the ticket and for which flight. If you purchase the morning flight your net gain in round 5 is $1000-800=200$.

Agency 2 is different from Agency 1. First of all, if you buy tickets from Agency 2 you will **NOT** know whether this is a morning or an evening flight ticket until you pay for it. Second, if you use Agency 2 to purchase the ticket you name the price that you would like to pay. These two things together mean that at the moment when you submit the price you do not know whether you are purchasing the morning or the evening flight. And you will **NOT** know until you pay for the ticket.

Whether Agency 2 sells you a ticket and whether this will be a morning or an evening flight is determined as follows. In every round Agency 2 has a threshold price. If the price that you submit is higher than the threshold price then Agency 2 sells you a ticket and you pay your price. Otherwise, the ticket is not sold. The time of the flight is
determined randomly. Think of it that if your price is accepted Agency 2 flips a coin and if it is heads you get a morning flight and if it is tails you get an evening flight.

Threshold prices that Agency 2 uses were generated by the computer for all 72 rounds before the beginning of this study and are unknown to you. You can only learn whether your price is higher or lower than the threshold and only AFTER you have submitted your price.

**Example 3:** Assume you play round 5 of the phase where only Agency 2 is available. Your valuation for the morning flight is 1000 and your valuation for the evening flight is 1100. Your decision is what price to submit to Agency 2. Say you submit price \( p \). If \( p \) is higher than the threshold price of Agency 2 the ticket is sold to you. If this is the morning ticket your net gain is 1000–\( p \). If it is the evening ticket your net gain is 1100–\( p \). If \( p \) is less than the threshold price the ticket is not sold to you, your net gain is 0. Note that your net gain will be NEGATIVE if you win the item AND your price is greater than your value for that item. Any negative amounts will be subtracted from your earnings for this phase.

**Phases 4–6**

Following is a description of the phases that you will see in the first half of the study. Similar descriptions will be also available on the computer screen.

**Phase 4**

In this phase only Agency 2 is available. You are in the situation described by **Example 3**.

**Phase 5**

In this phase only Agency 2 is available. However, you know the prices charged by Agency 1 even though you CANNOT use Agency 1 to purchase tickets.

**Phase 6**

Both agencies are available. You can either pay Agency 1’s price or you can submit your price to Agency 2. If Agency 2 rejects your price you are allowed to use Agency 1 if you wish to do so. If you purchase the ticket from Agency 2 the round ends.

**Example 4:** Assume you play round 5 of the phase where both Agencies are available. Your valuation for the morning flight is 700. Your valuation for the evening flight is 600. Assume that the price of Agency 1 is 500 for both flights. In this phase you are free to use either Agency. In particular, you can pay 500 for either morning or evening ticket to Agency 1. Alternatively, you could submit price \( p \) to Agency 2. **Importantly**, if your price is rejected by Agency 2 you are still allowed to purchase the ticket from Agency 1. However, if you initially choose to Accept or Reject the list price, then you will **NOT** be able to name your own price for that round.
Appendix B: Screenshots

Figure 1 Screenshot for the U1 Treatment

Figure 2 Screenshot for the K1 Treatment
Figure 3 Screenshot for the A1 Treatment

Figure 4 Screenshot for the U2 Treatment
Figure 5 Screenshot for the K2 Treatment

Figure 6 Screenshot for the A2 Treatment