

## Instructions Appendix

### An Experimental Test of the Consistent-Conjectures Hypothesis

*American Economic Review*, 75 (3), June 1985, 314-325.

**Data:** All decisions for all periods are shown in tables 2, 3, and 4 of the published paper.

**Payoff Table:** The Payoff Table alluded to in the instructions that follow is Table 1 in the published paper.

#### Instructions (with random stopping after period 7)

You are about to take part in a decision-making experiment. You will be able to make choices which, together with the choices of other participants, determine the payoff which you will receive. Whatever payoffs you accumulate will be yours to keep as your payment for participating in the experiment.

There are two sellers in this experiment. Sellers produce a hypothetical product, and each seller must decide how much of the product to offer for sale. This decision will be called an “output choice.” Your monetary earnings in this experiment will depend on your own output choice and on the output choice of the other seller.

Before you is a profit table. The numbers across the top represent your own output choice. The numbers down the left side of the table represent the output choice of the other seller. The output chosen by the other seller identifies a row in the table, and your output identifies a column. The cell where that column and that row intersect reveals the profit you will receive for that specific combination of outputs. Profit is in cents. The other seller has a profit table which is exactly like yours, so the profit opportunities are symmetrical. The other seller is a student, and both of you are in separate rooms.

Before you is a plate containing 50¢. This is yours to keep, along with any profits you accumulate during the experiment. However, if you sustain losses in excess of your profits, the amount of your losses will be taken out of the original 50¢ stake. You *cannot* lose any of your own money. If your losses should reach 50¢, you will be excused from the experiment.

Profits and losses will be determined by both your own and the other seller's output choices in each “decision period.” During each decision period, you and the other seller will

choose outputs from the choices available in the profit table. You will record your decisions on a Decision Sheet found in front of you. Each period, we will collect your Decision Sheet, record the other seller's choice, determine payoffs, and return the sheet. While we have your Decision Sheet, please note reasons for your output choice on the Explanation Sheet.

Each experiment will begin with a single "trial period" in which you and the other seller make a decision. Then we will record the other seller's output choice on your Decision Sheet, and we will let you use the payoff table to compute the profit or loss for each of you. Someone will check your calculations to be sure that you understand how to record the payoff tables. Profits will *not* be paid and losses will *not* be collected for the trial period. After each subsequent decision period, we will collect output choices, compute profits, and pay your profit or take away your loss.

The number of decision periods in each experiment will be determined by a random device. In particular, there will be at least seven decision periods. After the seventh period, a single die will be thrown, and there will be no more decision periods if the throw of the die yields a six. If the throw results in any number one through five, there will be an eighth period, and the number obtained by the throw of the die will be recorded in the right column on the Decision Sheet. Then the die will be thrown again after the eighth period, and a six will end the experiment. The die is thrown after each subsequent period to determine whether the experiment continues or not, and the probability that it will terminate is  $1/6$  in each case.

When the random device determines that an experiment is terminated, you will start a new experiment with a different person as the other seller. At this time, note your position number which is written on your money plate. At the beginning of each new experiment you will be told the position number of the other seller in your market.

As you participate in the experiment, it is very important that you do not communicate with other subjects who may be in the same room. This means that you will have to suppress elation, disgust or other emotions, the expression of which may reveal how you feel about outcomes during the experiment. It will do you no good to try to influence the behavior of another person in the room or to try to observe another person's output choices because the other sellers in your market are seated in the other rooms. However, we still ask that no communication occur between subjects since the experiment becomes useless for our purposes if communication occurs.

We request also that you do not talk to other persons about any details of the experiment after you leave. They might participate in later experiments and be influenced to play differently. Since the experiments are all different, this could work to their disadvantage, and it will bias our results as well.

Are there any questions?

## INSTRUCTIONS TO THE PERSON CONDUCTING THE EXPERIMENT:

### **Instructions to be read to the subjects before the first market experiment:**

Have you finished reading the instructions? Are there any questions?\*

As you can see, there are \_\_\_ of you in this room. There is also another room nearby with \_\_\_ people who are students like yourself. In the first market experiment, each of you is matched with one of the people in the other room, and each of them is matched with one of you. Thus there are \_\_\_ pairs of people in this market experiment. If the throw of the die causes this market experiment to end early, there will be another market experiment in which each of you is paired with a different person. In total, the session will last about two hours. Are there any questions? If not, go ahead and mark your output choice for the trial period which begins the experiment.

### **Instructions to be read to the subjects before the second market experiment:**

For the second experiment, the identity of the other seller has changed, as you can see on your Decision Sheet. Thus each of you is now matched with a different person in the other room, and each person in the other room is matched with a different person in this room. The procedure for the second experiment will be the same as that of the first, and as before, we will begin throwing dice after period seven to determine when the experiment terminates. There will be no trial period this time, so you may now mark your output decision for period 1 which begins the second market experiment.

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\*Answers to questions should not reveal information or certain terminology which is not contained in the instructions, e.g., say “market” and “other seller” instead of “duopoly” and “competitor” or “rival”. (Feel free to say: “The answer to that will become apparent as the experiment progresses.”)

## **INSTRUCTIONS** (with rematching after each period)

You are about to take part in a decision-making experiment. You will be able to make choices which, together with the choices of other participants, determine the payoff which you will receive. Whatever payoffs you accumulate will be yours to keep as your payment for participating in the experiment.

There are two sellers in this experiment. Sellers produce a hypothetical product, and each seller must decide how much of the product to offer for sale. This decision will be called an “output choice.” Your monetary earnings in this experiment will depend on your own output choice and on the output choice of the other seller.

Before you is a profit table. The numbers across the top represent your own output choice. The numbers down the left side of the table represent the output choice of the other seller. The output chosen by the other seller identifies a row in the table, and your output identifies a column. The cell where that column and that row intersect reveals the profit you will receive for that specific combination of outputs. The other seller has a profit table which is exactly like yours, so the profit opportunities are symmetrical. The other seller is a student, and both of you are in separate rooms.

Before you is a plate containing 50¢. This is yours to keep, along with any profits you accumulate during the experiment. However, if you sustain losses in excess of your profits, the amount of your losses will be taken out of the original 50¢ stake. You *cannot* lose any of your own money. If your losses should reach 50¢, you will be excused from the experiment.

Profits and losses will be determined by both your own and the other seller's output choices in each “decision period.” The identity of the other seller changes after each decision period; see the “position number of other seller” column on the attached Decision Sheet. During each decision period, you and the other seller who is matched with you for that period will choose outputs from the choices available in the profit table. You will record your output decision on the Decision Sheet. Each period, we will collect your Decision Sheet, record the other seller's choices, determine payoffs, and return the sheet. While we have your Decision Sheet, please note reasons for your output choice on the Explanation Sheet.

Each experiment will begin with a single “trial period” in which you and the other seller matched with you for the trial period will make a decision. Then we will record the other seller's output choice on your Decision Sheet, and we will let you use the payoff table to compute the

profit or loss for each of you. Someone will check your calculations to be sure that you understand how to read the payoff tables. Profits will *not* be paid and losses will *not* be collected for the trial period. After each subsequent decision period, we will collect output choices, compute profits, and pay your profit or take away your loss. Again, note that the position number of the other seller changes after each decision period. The experiment will end after you have been paired once with each of the other sellers.

As you participate in the experiment, it is very important that you do not communicate with other subjects who may be in the same room. This means that you will have to suppress elation, disgust or other emotions, the expression of which may reveal how you feel about outcomes during the experiment. We ask that no communication occur between subjects since the experiment becomes useless for our purposes if communication occurs.

We request also that you do not talk to other persons about any details of the experiment after you leave. They might participate in later experiments and be influenced to play differently. Since the experiments are all different, this could work to their disadvantage, and it will bias our results as well.

Are there any questions?

**Instructions to be read to the subjects:**

The participants in this experiment are students like yourself. Participants are located in this room and in another room nearby. In the trial period, each of you is matched with one of the people in the other room, and each of them is matched with one of you. In period 1 which follows the trial period, each of you will be matched with a different person. This switching continues so that for each of you, the identity of the other seller changes each period. The experiment will end after you have been paired once with each of the other sellers.