

Learning Economics Concepts through Game-Play: An Experiment

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Appendix B. Instructions

Instructions Part 1

These instructions were handed out at the beginning of the experiment. Below, blue brackets indicate the sections of the text which were conditional on the treatment condition.

Welcome and thank you for participating in this experiment.

From now on, please do not communicate with other participants. If you have a question please raise your hand. One of the experimenters will attend to you and answer your questions. Please use the computer only as instructed. Don't start or end any programs, and do not change any settings. If you don't conform to these rules during the experiment we will have to exclude you from any payoffs.

The experiment consists of two parts and a questionnaire. At the end of the experiment, either Part 1 or Part 2 will be randomly selected for payoff.

In Part 1 of this experiment, some participants will play a game which is designed to teach an economic concept, and other participants will read a textbook chapter which explains the concept. If Part 1 is selected for payoff, you will receive a flat fee of \$30 for your participation (in addition to the show-up fee of \$5).

[LOW INC: Part 2 of the experiment will be explained later. **HIGH INC:** In Part 2 of the experiment you will participate in a test which checks how much you have learned in Part 1. Part 2 consists of 8 multiple-choice questions and 5 essay questions. For the multiple-choice questions, you will receive \$3 for each question you answer correctly. For the essay questions, you have a 1 in 10 chance that you will be selected to be paid out. If you are selected, one of your 5 essay questions will be selected and marked by an experienced marker according to exam standards. You can get to up to 25 points for the essay question, and for each point you will receive \$10. Hence you can earn up to \$250. These payments will be in addition to your \$5 show-up fee. Further details will be provided later in the Part-2-instructions.]

In the questionnaire you will be asked questions about your experience when getting familiar with the economic concept through playing a game / reading the chapter.

In this session, all participants will [TEXTBOOK: read the textbook chapter, GAME: play the game].

[TEXTBOOK: You have 60 minutes to read the material distributed to you and understand the concepts described. The textbook chapter will be distributed in a minute.]

[GAME: You have 60 minutes to play the game and understand the featured concepts. In a minute, we will start the game on your computer. We will then come around and log you into the game. Once we logged you in, you can start playing.

You will only need the headphones and the mouse to play the game. Once again, please use the computer only as instructed. Don't start or end any programs, and do not change any settings.]

Instructions Part 2

These instructions were handed out after participants completed part 1 of the experiment, and were the same in all treatment conditions.

In this part of the experiment, you will participate in a test which checks how much you have learned in Part 1.

Please do not communicate with other participants. Please use the computer only as instructed. Don't start or end any programs, and do not change any settings. You are not allowed to use your mobile phone, and we ask you to put away any other personal items. If you don't conform to these rules during the experiment we will have to exclude you from any payoffs.

This part consist of 8 multiple-choice questions and 5 essay questions.

You will have 15 minutes to answer the 8 multiple choice questions. The questions will be handed out in a minute. You need to enter your answers at the computer screen. The screen will disappear after 15 minutes. If part 2 is selected for payoff, you will receive \$3 for each multiple-choice question you answer correctly.

Then you will have 30 minutes to answer the 5 essay questions. The questions will be handed out after the multiple-choice part finished. You need to answer these questions in writing on the provided space in the booklets.

If this part 2 is selected for payoff, you will be asked to roll a ten-sided die with numbers 0-9. If the die shows a number between 1 and 9, then you will not be paid for the essay questions. If the die shows a 0, then you will be paid for one of your 5 essay question answers. So you have a 1-in-10 chance to be paid for your essay answers. To select the essay question which will be paid, you will roll the die again. If the die shows 1 or 2, then question 1 will be paid. Respectively, if the die shows 3 or 4 (5 or 6, 7 or 8, 9 or 0), then question 2 (3, 4, 5) will be paid. Your selected question answer will be given to an

experienced marker who will mark it according to Microeconomics-1 exam standards within a week following the experiment. You can get to up to 25 points for the essay question. For each point awarded you will receive \$10. So in total you may earn up to \$250 for this part, if the part is selected and you rolled a 0 in the first die roll. We will write down your email address if you are selected, and contact you by email to facilitate payment.

These payments will be in addition to your \$5 show-up fee. It is clear that, under this procedure, in both the multiple choice questions and the essay questions your best response is to answer all the questions as best as you can. The more correct answers you provide, the higher will be your payment if this part is selected for payoff.