

## BASELINE INSTRUCTIONS

### INTRODUCTION

This is an experiment in the economics of decision making. If you follow the instructions carefully you could earn a considerable amount of money which will be paid to you in a check at the end of the experiment. In today's experiment, all of your earnings on the computer will be denominated in experimental dollars, which will be translated into U.S. dollars at the end of the experiment. The translation rate today will be that 400 experimental dollars equals one U.S. dollar. From this point on, everything on your screen is your own private information and there should be no communication with any other participant except as you are directed in these instructions.

You are one of seven persons in a group. The decision that you must make during each decision period is how to divide a stock of tokens between an individual and a group exchange. There are four stages in today's experiment, each consisting of seven periods, for a total of 28 periods. Because the rules of the exchanges are somewhat different, we will go over first the rules for the first stage (the first seven periods). We will continue with the instructions for the second stage and the end of the first seven periods and so forth.

### INSTRUCTIONS FOR STAGE 1

In stage one, each of you receives, at the beginning of each period, 100 tokens. You must decide how to invest the tokens: either in your own Individual Exchange, or in a Group Exchange. The tokens earn money differently in the two exchanges, so we will go over them in turn.

*The individual exchange:* Each token that you invest in your own individual exchange earns exactly 1 experimental dollar for that period.

*The group exchange:* The rule for earnings in the group exchange is different. After each of you has made your investment decision, the computer sums all of the tokens that each of you has invested in the group investment exchange. It then pays each one of you one-half times the number of summed tokens invested in the group exchange *regardless of how many tokens you have invested*. For example, if the seven of you invest a total of 200 tokens in the Group Exchange, each one of you would earn 100 experimental dollars from the Group Exchange. If the seven of you invested a total of 500 tokens in the Group Exchange, each of you would earn 250 experimental dollars from the Group Exchange, and so forth. In either of these two examples, your total earnings would equal your earnings from the Group Exchange plus your earnings from tokens invested in your Individual Exchange. We have provided a payoff chart for other values of possible investments in the Group Exchange.

You must use all of your tokens in each period, that is, the number of tokens invested in your Individual Exchange added to the number of tokens you invest in the Group Exchange must equal 100. You may not carry tokens over from one period to another.

If you will now look at your computer screen, you will see that we are displaying a practice round in which you can familiarize yourself with the process of investing your tokens. This practice round has no impact at all on your final earnings. Please go to your screen and try making different types of investments. When you are done, please hit the CONTINUE button.

If you will look at your screen now, you will see the results for this practice round. The screen shows you

Your earnings from your individual exchange  
The total number of tokens invested in the group exchange  
Your earnings from the group exchange  
Your total earnings

To summarize, tokens invested in your Individual Exchange earn a certain return of one experimental dollar. Earnings from the Group Exchange depend upon the total of the investments in the Group Exchange from your group. Are there any questions?

Finally, please notice that we are handing each of you a sealed envelope. This contains some additional information for later in the experiment. Please do not open the envelope before we instruct you to do so.

## INSTRUCTIONS FOR STAGE 2

The earnings rules of the Individual Exchange and the Group Exchange are the same in Stage 2 as they are in Stage 1. However, in this stage we begin each round with a computer enacted tax of 30 tokens on each one of you. Of this tax, 80 percent will be invested in the group exchange for you, while 20 percent will disappear. In other words, of the 30 tokens that are taken from you as a tax, 24 will be invested in the group exchange, 6 disappear. That means that across all seven of you, 210 tokens will be taken as a tax, and 168 tokens will be automatically invested in the group exchange.

At the beginning of each period, each of you then has the decision of how to invest your remaining 70 tokens. As before, you may divide them between your Individual Exchange and the Group Exchange. Your Individual Exchange continues to earn 1 experimental dollar per token, and the group exchange continues to earn one-half times the sum of all tokens invested in the group exchange. Remember that this sum includes the 168 tokens automatically invested from the tax plus any additional amount that you decide to invest.

On the next page of the handout, you will see a screen print of how your token investment screen will look.

Are there any questions?

### INSTRUCTIONS FOR STAGE 3

In the next stage, the rules for investment in the individual and group exchanges will be the same as in Stage 2 except that the tax will no longer automatically be 30 tokens. Instead you and the other six members of your group will determine the tax for your group. This will be done by a voting process. As before, whatever tax you as a group choose, 80 percent will be invested in the group exchange and 20 percent will disappear.

Here is how the voting will proceed for you to choose your tax rate. You will submit to the computer what level you would like the tax to be. The computer will rank all the nominations from highest to lowest and choose the median, or middle, amount. In your case, this will be the 4<sup>th</sup> highest number. That tax rate will be the one chosen for all seven members of your group.

As an example, suppose that your group nominated the tax levels of : 98 tokens, 77 tokens, 60 tokens, 40 tokens, 39 tokens, 18 tokens, and 0 tokens. Then the winning tax would be 40 tokens because it is the median, or 4<sup>th</sup> highest. (Notice that 40 is NOT the average). Using the same rule as before, if the tax is 40 tokens then 80 percent (that is, 32 tokens) would be invested in the group exchange from each of you, for a total investment of 224 tokens.

As before, after the tax has been determined and you have been informed of its value for this period, you will have the opportunity to make an additional investment decision with your remaining tokens. You will have the opportunity to vote on a new tax level in each period in this stage.

Investment in your individual exchange continues to earn one experimental dollar per token. Investment in the group exchange continues to earn for each person  $.5 \times$  (the sum of all tokens invested in the group exchange) including the 80 percent of the total from the tax.

On the following page is a print of the screen in which you are asked to submit your preferred tax level.

Are there any questions?

#### INSTRUCTIONS FOR STAGE 4

In Stage 4, all of the rules are the same as in stage 3. The only difference is that some of you will have a different return from the individual exchange than you did before, while others of you will continue to earn one experimental dollar per token invested in your individual exchange. To the extent that some participants' values have changed, the identities of these participants were chosen anonymously and at random by the computer before any of your decisions were made. You may now open the envelope we gave you at the beginning of the experiment which contains a piece of paper telling you what your return from the individual exchange will be for the next seven periods. Please do not share this information with anyone.

The rules for choosing the group's tax level do not change.

The rule that the tax will be 80 percent invested in the group exchange does not change.

The payoff to each person from the group exchange stays at one-half times (the sum of all tokens invested in the group exchange).

Are there any questions?

#### INSTRUCTIONS FOR STAGE 4 IN CONTROL SESSIONS

In Stage 4, all of the rules are the same as in Stage 3. You may now open the envelope we gave you at the beginning of the experiment which contains a piece of paper telling you what your return from the individual exchange will be for the next seven periods. Please do not share this information with anyone.

The payoff to each person from the group exchange stays at one-half times (the sum of all tokens invested in the group exchange).

Are there any questions?

## ANNOUNCEMENT FOR SPECIAL SUBJECT POOL

In today's experiment, in addition to paying you your final earnings from today's experiment, the experimenters will also make a contribution to the New Life Children's Home in Guatemala equal to each of your final earnings in today's experiment (excluding the \$10 show up fee). That is, to use some arbitrary examples, if you make \$1.00 in earnings in the experiment, you will receive that \$1.00 in earnings, *and* we will make a contribution of \$1.00 to New Life Children's Home. If you make \$5.00 in earnings in the experiment, you will receive that \$5.00 in earnings *and* we will make a \$5.00 contribution to New Life, and so forth for any amount of earnings that you make.

Please note that this applies to the total earnings you make in the experiment. This specifically includes your earnings from the group account and your earnings from your individual account. We match your *total* earnings at the end of the experiment (excluding the show-up fee). Another way of saying the same thing is that at the end of experiment we will add-up each of your earnings (excluding show-up fees) and write a single check to New Life Children's Home for that amount. You will be shown this check.

New Life Children's home operates a home in Guatemala. From their web-page the following information is obtained: "NLCH is truly a 'home' for these needy children, where their physical, emotional, and spiritual needs are addressed." Each child is provided a "sound academic Christian education." Members of the [the campus ministry] of FSU have participated in mission trips to the New Life Children's home in Guatemala.

Are there any questions?