INSTRUCTIONS –PEC–

Welcome! You are participating in an economics experiment. In this experiment you will play the role of a trader, who can hold two types of goods. If you read these instructions carefully and make appropriate decisions, you may earn between $6 and $25, depending on your decisions. You will be immediately paid out in cash at the end of the experiment.

Please turn off all cell phones and other communication devices. During the experiment you are not allowed to communicate with other participants. If you have any questions, the experimenter will be glad to answer them privately. If you do not comply with these instructions, you will be excluded from the experiment and deprived of all payments aside from the minimum payment of $6 for attending. This experiment will have 9 practice rounds and 50 playing rounds.

THE EXPERIMENT

In this game, 8 players participate in a market. The experiment will consist of two stages every round:

Stage I: Each player is faced with a production decision: how many Rues (R) and Sennas (S) to produce. Your decision screen will show a *trade-off in production*, which displays all possible combinations of the two goods that you can produce.

Please refer to the screenshot of the game: The quantity of R is on the horizontal axis, while the quantity of S is on the vertical axis.

- If you would like to produce more R, then you have to forgo producing some S. At this point, increasing production of R by one more means giving up more than one S.
- If you would like to produce more S, then you have to forgo producing some R. If you choose to increase S by one, then you have to forgo more than one R.

The trade-off between producing R and S is always changing. If you keep increasing the production of one good, you must give up more and more of another good.

Stage II: <u>After</u> you decide how many R and S to produce, you will find out which of the two goods is profitable. This means that *you will earn points from only one type of good* in any given round.

Since there are 8 market participants, four randomly selected players will find out that they can only earn points from producing R while the remaining four will find out that they only earn profit from producing S. Thus, you might have a good that you do not get points from.

To increase your earnings, you can trade away the good you do not like. Since you are part of a market, the market marker (the experimenter) will count how many R and S are available for trade and then compute the Price at which you will exchange the unwanted good.

Price of R = *Sennas* available for trade in the market /
Rues available for trade in the market

This means you get X Sennas per 1 Rue.

Points: Your points from each round are computed as follows:

If you get points from Sennas:

Points = Number of Sennas you have + Number of Sennas you buy

You can buy S by selling R. The quantity of S that you can buy is R produced * Price of R

If you get points from Rues:

Points = Number of Rues you have + Number of Rues you buy

You can buy R by selling S. The quantity of R that you can buy is S produced / Price of R.

Interface

The graphical interface is similar to what you will see during the game. You only have to hover your mouse over the line to see the different values of (R, S) and then click to make your choice. When selecting your production, you will have to click on the desired output level and then confirm your choice.

Trading

For a trade to occur, you do not need to enter the amount of R or S that you would like to trade. The market maker will take the useless good from your holdings and trade it for another good.

The points for the good you profit from will be highlighted in blue on your screen. For example, if it turns out that you profit from R, you will see your points for R in blue.

Information available to you:

- **T**: period
- **Points**: Earnings given production choice and shock

- **Production**: Your choice of R and S
- **Price (of R)**: how many S you receive for exchanging one R
- **Cost (of R)**: how many S you give up to produce the last unit of R
- **Change in points - increase by 1R**: how your points would change if you increased production of R by one unit (or change in profitability)

Change in Points describes how much better (or worse) off you would be if you increase production of R by one unit, holding prices and costs constant.

If you profit from S, your change in profit = p - c or you sell one extra R at price p and that one extra R cost you c Sennas to produce.

If you profit from R, your change in profit = 1 - c/p, where 1 is from producing the additional R, and -c/p is the cost of increasing your production of R.

Your payment

The points you earn from all rounds will be added up, exchanged into dollars and paid to you, along with your show up fee, in cash at the end of the experiment. The exchange rate of points to cash is written on the board.

Practice Rounds

The first 9 rounds will be for practice only. The price of R will be selected randomly and stay the same for three periods. Please note that this will not be the case in the actual game, where the price is determined by the collective action of market participants. The practice rounds are meant to show you how your productions choices affect your payoff. You will see your payoff under two alternative scenarios, where you profit from R and where you profit from S.

Frequently Asked questions

Q: Do I know which good will be profitable before I choose how many R and S to produce?
A: No, you will know what type of good you get points from (like) after you make a decision.

Q: Why is the shape of the production possibilities curved? A: Because the cost of production is different at each point. It is always changing, which is shown by the changing slope.

Q: How do I trade? A: The experimenter will act as a market maker. S/he will see how many R and S are available for trade among all 8 players and then determine the price according to the relative amount of each good. The market marker will then take the good you do not like, and give you the good that you do like at the specified price. Your final points are then dependent on the market determined price.