**Welcome**

Thank you for deciding to take part in this study.

Please read the instructions carefully as you will be asked to answer comprehension questions regarding their specific content.

Your earnings will depend on your choices and the choices of other participants in this session. Your earnings will be expressed in " **points** ". For every point you earn during this session, you will receive **0.03 euro cents** . Even if your overall profit is lower, you will still be given **at least 5 euros**.

At the end of this session, you will receive the earned amount via **PayPal**. You will be paid privately.

**Communication between participants is strictly prohibited**. Furthermore, we would like to highlight the fact that you will only be able to use the computer functions necessary for the purposes of this study.

If you have any questions, you can let us know by raising your hand. We will answer your questions by coming to your cubicle.

**General instructions**

You will be part of a group made up of 3 people **: Small (S), Medium (M) and Large (L)** .

The assignment to a group and a letter is made **randomly** by the computer. Letters and groups will remain the same for the duration of the session.

On the following pages you will find detailed instructions.

Today's session consists of **30 rounds** . In each round you will be able to make two choices, one in **Part 1** about where to put your endowment and the other in **Part 2** about whether you want to reduce other people's earnings.

**Instructions Part 1**

At the start of each round, each participant receives an **endowment**. You need to decide how to allocate this endowment between a **private** and **public account** .

You can choose between these three actions:

1. **put the endowment in the private account (and nothing in the public one)**;
2. **put the endowment in the public account (and nothing in the private account)**;
3. **make your choice depend on the actions of others**:

○ **Put the endowment into the public account as long as at least one other member of the group chooses the same action 3 as you (or a similar action, as will be explained later).**

**○ If not, put the endowment in the private account.**

Choices are made **simultaneously** by group members. At the time of choice, you cannot observe the choices of others. You will only be able to observe them at the end of the round.

On the next page you will find a detailed explanation of how earnings are calculated.

The endowment placed in the **private account** generates a **gain of 12 points for you**.

The endowment placed in the **public account** generates a **gain in points both for you and for each member of the group**, as will be explained below.

Your total earnings are:

Earnings in Part 1 = **points from your private account** + **points from your public account**.

S

M

L

if private account: if private account: if private account:

**+12 points only for S + 12 points only for M +12 points only for L**

-------------------------------------------------- -------------------------------------------------- ----

if public account: if public account: if public account:

**+4 points for each +6 points for each +8 points for each   
member of the group member of the group member of the group**

For example, if everyone chooses to put the endowment into the public account, each member earns 18 points = 4 + 6 + 8.

If M and L put their endowment in the public account, while S puts it in the private account, the earnings are as follows:

|  |  |  |
| --- | --- | --- |
| **S** | **M** | **L** |
| Private account | Public account | Public account |
| earns 26 points  = 12 from private account +  6 + 8 from public account | earns 14 points  = 0 + 6 + 8 | earns 14 points  = 0 + 6 + 8 |

Consider another example. If all group members put their endowment into the private account (= action 1), the earnings are 12 points each.

In this last example, what happens **if only one member chooses** instead to make his choice depend on the actions of the others (= **action 3**)? In this example, the result is the same: everyone puts the endowment into the private account.

What happens **if two** group members choose to make their choice depend on the actions of others (= **action 3**)? In this example, two members put the endowment in the public account and one in the private account.

**Action 3 is actually more complex:** it involves exceptions and commitments that will become clear in the instructions for Part 2.

Summing up:

- the private account generates earnings only for themselves and of the same amount for S, M ,L

- the public account generates earnings for everyone and to a variable extent depending on who puts the endowment into the public account.

Below is a last example to clarify the Instructions on Part 1.

Suppose that **S and M** put their **endowment in the public account** and **L** put his **endowment in the private account**. The public account gain is therefore equal to 4 + 6 = 10 for each member of the group, as illustrated below:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **S** | **M** | **L** |
| Endowment | Public account | Public account | Private account |
| Earnings Part 1 | **10 = 0 + 4 + 6** | **10 = 0 + 4 + 6** | **22 = 12 + 4 + 6** |

Now look at the computer screen. You will find questions on the instructions, which we ask you to answer. If you have any questions, raise your hand and we will answer them privately.

**Instructions Part 2**

In Part 2, **you can choose to incur a cost to reduce the earnings of other members of your party. The possibility of leaving everyone's earnings unchanged at no cost to you or others always remains open.**

**Reducing the earnings of others costs you 1 point for each target** and results in a decrease in earnings of 8, 5, or 2 points for the target. The effect depends on who the target is, more precisely:

target: S

target: M

target: L

**Reduction of 8 points. Reduction of 5 points. Reduction of 2 points.**

**Can you reduce anyone's earnings? No, there are restrictions. What you can actually do depends on what you already chose in Part 1.**

**Now consider the three possible scenarios:**

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**Action 2 Action 3 Action 1**

**Let's move on to the first scenario.** If you have put your endowment in the public account (Action 2), then you can only reduce the earnings of those who have put the endowment in the private account .

In this scenario, the overall cost to you of reducing the earnings of others will be 1 point if only one member of your group has put the private account endowment. It will be 2 points if two members of your group have put the endowment in the private account. Your choice may also have no consequence (0 points) if everyone has put the endowment into the public account. You will be able to observe the actions of others at the end of the round, but not at the moment of your choice.

Consider the example below where one member puts the endowment in the private account and two in the public account.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **S** | **M** | **L** |
| Endowment | Private account | Public account | Public account |
| Earnings Part 1 | 26 | 14 | 14 |
| **Reductions suffered** | **-8** | 0 | 0 |
| **Decision to reduce the earnings of others** | No  0 | **Yes**  **-1** | No  0 |
| Earnings in the round | 18 | 13 | 14 |

In Part 2, **M** chooses to reduce the earnings of others. The result is a cost of 1 point for **M and a reduction of 8 points for S**'s gains (see table).

If, in addition, **L also** wants to reduce the earnings of others, the reductions are cumulative. In this case, **S** will be deducted 16 points = 8 + 8 and at the end of the round he will gain 10 points.

**Let's move on to the other scenario, which clarifies the content of action 3.**

If you have made your choice dependent on the actions of others (Action 3), then you have already made commitments for both Part 1 and Part 2.

In particular, with action 3 you undertake to put the endowment in the public account, as already explained, **and you also undertake to reduce the earnings of those who put the endowment in the private account** -- provided that at least one other member of the group choose the same action as you.

With action 3, no decisions will be required in Part 2. If you are the only one who chose action 3, then your endowment is automatically placed in the private account and the earnings of others remain unchanged.

If another member of the group also chose action 3 (or a **similar action**), then your endowment is automatically placed in the public account and you commit to reducing the earnings of those who put the endowment in the private account.

By **similar action**, we mean: putting the endowment into the public account (= action 2) and then reducing the earnings of those who put the endowment into the private account . A group where everyone chooses this similar action leads to the same result as a group where everyone chooses action 3. The same result is obtained when some in the group choose the similar action and others choose action 3.

**Let's move on to the last scenario.**

If you have put your endowment in the private account (Action 1), then you cannot change other members' earnings unless they have reduced yours.

For example, if no one has targeted you for reductions, it doesn't matter what you choose in Part 2. However, if someone has reduced your earnings, you can reduce theirs in turn, paying a cost of 1 point. If both party members have reduced your earnings, you can in turn reduce theirs for 2 points.

Be careful because in Part 2 you have to make a choice before knowing what the others' choices were in the round.

Consider the example below, where **M** reduces the earnings of those who put the endowment into the private account, in this case **S.** In turn, **S** has chosen to reduce the earnings of those who reduce his own.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **S** | **M** | **L** |
| Endowment | Private account | Public account | Public account |
| Earnings Part 1 | 26 | 14 | 14 |
| **Reductions suffered** | **-8** | **-5** | 0 |
| **Decision to reduce the earnings of others** | **Yes, for those who reduce mine**  **-1** | **Yes**  **-1** | No  0 |
| Earnings in the round | 17 | 8 | 14 |

In practice, **S** suffers a reduction of 8 points by **M** and, in turn, incurs a cost of 1 point to reduce **M 's earnings** by 5 points, see table.

We see a variation of the previous example, where, in addition, **L also** reduces the earnings of those who put the endowment in the private account.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **S** | **M** | **L** |
| Equipment | Private account | Public account | Public account |
| Earnings Part 1 | 26 | 14 | 14 |
| **Reductions suffered** | **-16** | **-5** | **-2** |
| **Decision to reduce the earnings of others** | **Yes, for those who reduce mine**  **-2** | **Yes**  **-1** | **Yes**  **-1** |
| Earnings in the round | 8 | 8 | 11 |

In this example, **S** suffers a reduction of 16 points (=8+8). In fact, the reduction of **L** is cumulative with that of **M.** This time, **S** incurs a cost of 2 points to reduce the gains of **M** and **L**, see table.

Summing up:

- if you put the endowment in the public account you can reduce the earnings of those who put the endowment in the private account

- if someone has reduced your earnings, you can in turn reduce theirs

Now look at the computer screen. You can proceed to answer the questions on Part 2. If you have any doubts, raise your hand and we will answer them privately.