

General Instructions for Borrowers

Welcome to the experimental laboratory!

Today, you will participate in an economics experiment. By participating, you can earn money. The amount of money you make depends on your own decisions and the decisions of other participants. Therefore, it is important that you carefully read the following instructions.

The instructions you have received from us are for your private information. **During the experiment, communication is absolutely prohibited.** If you have any questions, please contact us by raising your hands. An experimenter will come to you and answer your questions. Failure to comply with the rules will result in exclusion from the experiment and all payments. The decisions you make during the experiment are **anonymous**. Only the experimenter knows your identity but your decisions cannot be assigned to your identity.

For your participation in the experiment, you will receive a show up fee of **5 Euros**. The additional payment depends on your decisions and the decisions of other participants.

The experiment is divided into different periods. In each period, you have to make decisions that you enter in the computer. In total, there are 10 periods. At the end of the experiment, 2 periods are randomly selected for your payment. For that, one period from period 1 to 5 and one period from period 6 to 10 will be randomly selected. Your payment during the experiment will be calculated in **points**. The total number of points obtained in the two selected periods will be converted into Euros and then paid to you in cash. For the conversion, the following exchange rate applies:

100 Points = 2 Euro.

In total, you receive your earnings from the 2 payment periods plus the show up fee of 5 Euros in cash.

Please wait in your cabin during the payout phase until you are summoned by us to collect your payment. Please bring all the documents you have received from us when you receive your payment.

Before the experiment, all 20 participants were divided into two groups of 10 who independently participate in the experiment. In each group, there are 5 borrowers and 5 lenders.

Throughout the experiment, you are a borrower in your group of 10.

Brief overview about the experimental procedure

Throughout the experiment, your group consists of the same 10 persons: you (as a borrower), 4 other borrowers and 5 lenders.

The experiment consists of 10 periods. In each period, you will be randomly paired with one of the 5 lenders of your group of 10.

At the beginning of each period, each borrower and lender has an endowment of 150 point.

[Treatment Communication:] In each period, there is a communication phase, in which you as a borrower can decide to write a message to the lender you were paired with. Only borrowers can write a message and lenders can read it.

In each period, the lender you have been paired with has to decide on the loan amount he wants to grant. The granted loan has to be between 10 points and 100 points and can be either 10, 40, 70 or 100 points. The loan will be automatically invested in a project.

You will earn a project revenue, which is 4 times as high as the granted loan. Your loan debt is always two and a half times as high as the granted loan.

As a borrower, you have to decide whether you want to repay the loan debt or not.

At the end of each period, your income and the income of the lender are calculated. You and the lender will be informed about your income.

The experiment consists of 10 periods. At the end of the experiment, your income from each period is calculated and converted in Euros and 2 periods are randomly selected for payment. For that, one period from period 1 to 5 and one period from period 6 to 10 will be randomly selected. The points of these two periods will be converted into Euros and paid out in cash together with the 5 Euros show up fee.

Detailed information about the experimental procedure

Throughout the experiment, you are in a group of 10 people. The 9 others in your group are the same people during the whole experiment. Your group of 10 consists of 5 borrowers and 5 lenders. You are a borrower during the entire experiment.

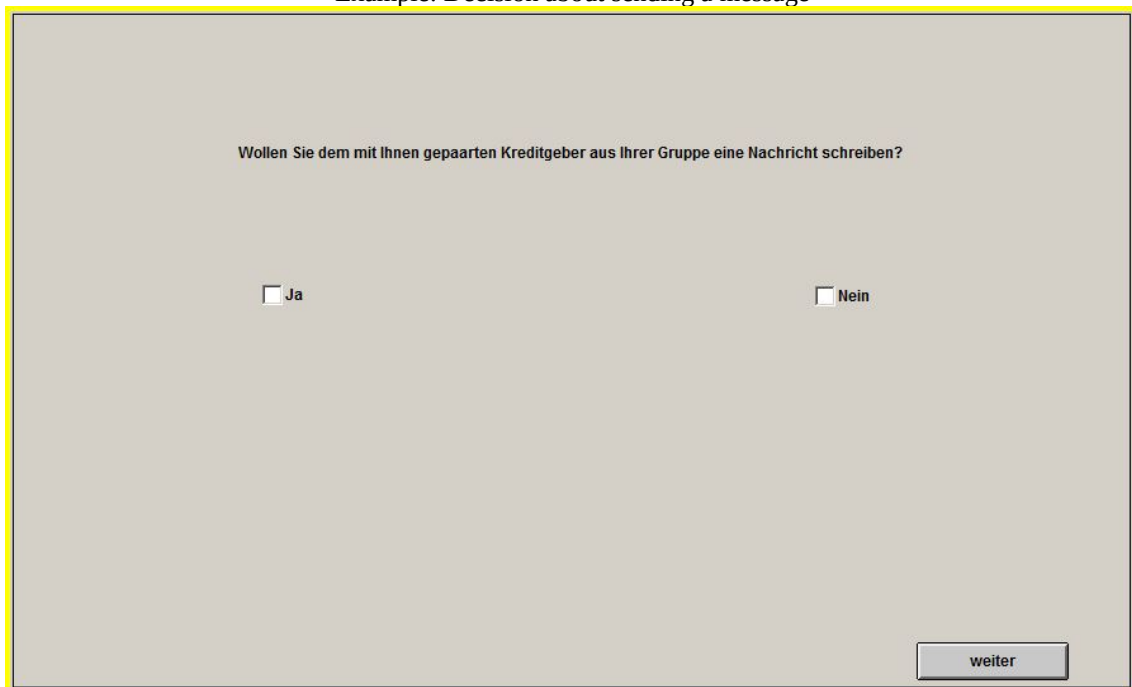
In each period, you will be paired with a lender from your group of 10. In each period, a new pairing will be randomly selected. Thus, in course of the experiment you will be paired with different lenders from your group of 10.

0. Communication (only for communication treatment)

At the beginning of each period, you can decide whether you want to send a message to the lender you were paired with. This message can contain up to 300 signs and you have to enter the message into the system. You can also decide not to write a message to the lender. Only you as a borrower can send a message. The lender can read it but he cannot reply to it.

You will see the following screen and can decide whether you want to write a message or not. If you decide not to send a message, go directly to the decision phase of the corresponding period:

Example: Decision about sending a message



Wollen Sie dem mit Ihnen gepaarten Kreditgeber aus Ihrer Gruppe eine Nachricht schreiben?

☐ Ja ☐ Nein

weiter

Translation:

Line 1: Do you want to send a message to the lender you were paired with?

Line 2: Yes No

Click “yes”, if you decide to write a message to the lender you were paired with and then click next. After that, you will see the following screen:

Example: Decision about sending a message



Translation

Line 1: Message to the lender you were paired with:

Line 2: (Please confirm the transmission of the message by clicking “Enter”)

Enter your message in the field highlighted in blue and confirm your entry by clicking “Enter”. Following, click “next”. Please note that you have to type the complete message and only click “Enter” at the end of the message. Please use the “Enter”-key only to send your message and not to make a line break.

1. Loan, project revenue and loan debt

At the beginning of each period, you and all the other borrowers have an endowment of 150 points. Each lender has also an endowment of 150 points.

The lender you have been paired with has to decide on the amount of the loan he grants you. There are 4 different loan amounts that can be granted. The amount of the loan is either 10, 40, 70 or 100 points.

The loan is automatically invested in a project. You will get a project revenue, which is four times as large as the granted loan (e.g. 280 in case of a loan amount of 70). Your loan debt is two and a half times as large as the loan amount (e.g. 175 in case of a loan amount of 70).

Table: Project revenue and loan debt

Loan amount	10	40	70	100
Project revenue	40	160	280	400
Loan debt	25	100	175	250

2. Repayment of loan debt

You have to decide whether you want to settle the loan debt. You make your repayment decision in each period, before you get to know which loan amount the lender has granted you. Therefore, you have to decide for each of the four loan amounts whether you repay your loan debt.

Below, you can see the corresponding decision screen:

Example: Decision about repayment of loan debt

Periode

1 von 10

Verbleibende Zeit [sec]: 27

Sie können Kredite in der Höhe von 10 bis 100, in 4 Schritten, erhalten. Die Kredithöhe kann 10, 40, 70 oder 100 betragen. Der Kredit wird automatisch in ein Projekt investiert, das einen Projektertrag von 4 mal die Kredithöhe liefert. Sie können sich jetzt entscheiden, ob Sie Ihre Kreditschuld begleichen und eine Rückzahlung leisten wollen. Bitte markieren Sie bitte die entsprechenden Rückzahlungen, welche Sie leisten wollen und klicken Sie anschließend auf weiter.

Kredit	Projektertrag	Kreditschuld	Rückzahlung
10	40	25	0 ☐ 25
40	160	100	0 ☐ 100
70	280	175	0 ☐ 175
100	400	250	0 ☐ 250

weiter

Translation

Line 1, 2 and 3: You can get a loan between 10 points and 100 points. There are 4 different loan amounts that can be granted to you. The amount of the loan is either 10, 40, 70 or 100 points. The loan is automatically invested in a project. The project revenue is four times as large as the granted loan. You can now decide whether you settle your loan debt and make a repayment. Please indicate the corresponding repayment, which you want to make and then click next.

1. Column: Loan
2. Column: Project revenue
3. Column: Loan debt
4. Column: Repayment

If you decide to settle your loan debt, the repayment will be equal to the loan debt.

3. Your income

In each period, your income will depend on:

- the size of the loan of the lender,
- your repayment decision.

Your income is determined by your endowment from the beginning of a period plus the project revenue minus the repayment.

$$\text{Your income} = 150 + \text{project revenue} - \text{repayment}$$

Thus, your income depends largely on the loan the lender grants you. Further, you can increase your income by deciding not to settle your loan debt and not to make a repayment.

In the following table, you can see your income for each possible loan amount:

Table: Income of the borrower

Loan amount	10	40	70	100
Project revenue	40	160	280	400
Loan debt	25	100	175	250
Your income				
in case of repayment	165	210	255	300
in case of no repayment	190	310	430	550

4. Income of lender

In each period, the income of the lender will depend on:

- the size of the loan of the lender,
- your repayment decision.

The income of the lender is determined by the endowment at the beginning of a period minus the loan plus your repayment.

$$\text{Income} = 150 - \text{loan} + \text{repayment}$$

Thus, the income of the lender depends largely on your repayment. If you decide to settle your loan debt, the income of the lender is higher in case of a larger loan (because the repayment is larger than the loan in case of a project success). If you do not repay your loan debt, the income of the lender is higher if he grants the smallest possible loan amount.

In the following table, you can see the income of the lender for each possible loan amount:

Table: Income of the lender

Loan amount	10	40	70	100
Project revenue	40	160	280	400

Loan debt	25	100	175	250
Income of the lender				
in case of repayment	165	210	255	300
in case of no repayment	140	110	80	50

5. Information about your income

At the end of each period, you will get information about your income on your screen, which will look as follows:

Periode
1 von 10

Ihre Entscheidung und die resultierende Auszahlung in dieser Periode:

Sie haben einen Kredit in Höhe von: 40 erhalten
Sie haben entschieden, Kredite in dieser Höhe: zu begleichen
Das Investitionsprojekt liefert einen Ertrag von: 160

Ihr Einkommen in dieser Periode:

Ihr Kapital: 150
+ Ertrag des Investitionsprojektes: 160
- Ihre Rückzahlung: 100
= Ihr Einkommen: 210

weiter

Translation

Line 1: Your decision and the resulting payment in this period:

Line 2: You got a loan of 40

Line 3: You have decided to settle the loan debt

Line 4: The investment project yields a revenue of 160

Line 5: Your income in this period:

Line 6: Your endowment: 150

Line 7: + Project revenue 160

Line 8: - Your repayment 100

Line 9: = Your income: 210

At the end of each period, the lender will get information about his income on his screen, which will look as follows:

Periode	
1	von 10
Ihre Entscheidung und die resultierende Auszahlung in dieser Periode:	
Sie haben einen Kredit in Höhe von: 40 gewährt Der Kreditnehmer hat die Kreditschuld: beglichen	
Ihr Einkommen in dieser Periode: Ihr Kapital: 150 - Kredit: 40 + Rückzahlung des KN: 100 = Ihr Einkommen: 210	
weiter	

Translation

Line 1: Your decision and the resulting payment in this period:

Line 2: You have granted a loan amount of 40

Line 3: The borrower has settled the loan debt

Line 4: Your income in this period:

Line 5: Your endowment: 150

Line 6: - Loan: 40

Line 7: + Repayment of the borrower: 100

Line 8: = Your income: 210

The lender will see his chosen loan amount, whether he gets a repayment and his income.

6. Examples for possible incomes

Example 1: The lender decides to grant a loan of 100 points. You decide to settle the loan debt of 250 points for a loan size of 100 points.

- The income of the lender: $150 - 100 + 250 = 300$ Points
- Your income: $150 + 400 - 250 = 300$ Points

Example 2: The lender decides to grant a loan of 100 points. You decide not to repay the loan debt of 250 points for a loan size of 100 points.

- The income of the lender: $150 - 100 = 50$ Points
- Your income: $150 + 400 = 550$ Points

Example 3: The lender decides to grant a loan of 10 points. You decide to settle the loan debt of 25 points for a loan size of 10 points.

- The income of the lender: $150 - 10 + 25 = 165$ Points
- Your income: $150 + 40 - 25 = 165$ Points

Example 4: The lender decides to grant a loan of 10 points. You decide not to repay the loan debt of 25 points for a loan size of 10 points.

- The income of the lender: $150 - 10 = 140$ Points
- Your income: $150 + 40 = 190$ Points

Payment:

After the 10 periods, a participant is selected at random to come to the experimenter and draw 2 distinct numbers, one between 1 and 5 and one between 6 and 10. The numbers will be publicly announced and will determine the payment periods for all participants. Therefore, 2 different periods will be randomly selected for payment, one from the first 5 periods and one from the second 5 periods. The selected periods will be entered into the computer program by the experimenter. Your earnings will then be reported on the screen.

Your payoff is computed as follows:

Your payoff for pay period 1 in points
+ Your payoff for pay period 2 in points
= Your overall payoff in points

Your final payoff in Euro (100 points = 2 Euro)
+ The show up fee = 5 Euro
= Your payoff in Euro

After completion of the experiment and before we start with the payouts, please fill in the questionnaire that follows the experiment. When you have completed the questionnaire, please remain seated at your place before we start paying the participants. Please wait in your

cabin until you are called by us to collect your payment. Please bring all documents you have received from us when you receive your payment.

The experiment begins when all participants are fully familiar with the procedure of the experiment and understand the consequences of their decisions and the decisions of others for their earnings. To ensure this, we ask you to solve some control questions. Your solutions to the control questions have no effect on the income you can earn in the experiment.

You receive the control questions below in paper form and on the computer screen. Please solve them on paper first. In order to verify the accuracy of your answers you are asked to answer the questions again on the computer screen.

The experiment begins once you have correctly solved all the control questions. After completion of the experiment, please fill in a questionnaire on the screen. Then the payout commences.

If you have any questions, please raise your hand. An experimenter will come to you and answer your question.

Control Questions

Question:

a) What is your endowment at the beginning of each period?

Answer:

b) What is the endowment of a lender at the beginning of each period?

Answer:

c) What is the maximum loan amount?

Answer:

d) What is the minimum loan amount?

Answer:

e) Do you have to settle the loan debt?

Answer:

f) The lender has decided to grant a loan of 40. You have decided to repay the loan debt for a loan amount of 40.

- What is your income?
- What is the income of the lender?

Answer:

g) The lender has decided to grant a loan of 40. You have decided not to repay the loan debt for a loan amount of 40.

- What is your income?
- What is the income of the lender?

Answer: