

Translation of the Instructions:

- Welcome to our experiment. Please read these instructions carefully! From now until the end of the experiment you are not allowed to communicate with the other participants. If you have any question, please raise your hand and we will answer you privately.
- At the beginning of the experiment each one of you will be assigned a number. From then on, you and the other participants will be identified by this number, please keep it until you receive your payment. In addition, there are two empty sheets of paper that you can use during the experiment.
- In this experiment you will repeatedly make decisions that can earn you a reasonable amount of money. How much you earn depends on your decisions but also on the decisions of the other participants.
- All participants receive the same instructions.
- In this experiment you represent a firm, the same as one other firm in the market, that produces and sells the same product on the market. You will be matched with the other firm during the whole experiment.
- You will stay anonymous from the other participants during and after the experiment.
- In each period, all firms have to make one decision, namely what quantity they wish to produce. [**In the PC and BRO treatments only:** You can produce any quantity from 0 to 100 (even fractions).]
- The costs of production are 1 ECU (Experimental Currency Unit) per unit (this holds for all firms).
- The following important rule holds: The larger the total (aggregate) quantity produced by the two firms, the smaller the price in the market. Moreover, the price will be zero from a certain amount of total output upwards.
- Your profit per unit of output will be the difference between the market price and the unit cost of 1 ECU. Note that you will incur a loss if the market price is below the unit costs. Your profit per period is, thus, equal to the profit per unit multiplied by the number of units you sell.
- **In the PT treatment only:** You will be given a profit table showing the profit levels (or losses) that you and the other firm can obtain by choosing certain quantities. The quantities of your firm are listed across the top of the table while the quantities produced by the other firm are listed down on the left-hand margin. The profits for your firm and the other firm are given in the body of the table by the intersection of the quantities produced. The *top* number in bold print denotes *your profit* and the bottom number denotes the profit of the other firm.
- **In the PT treatment only:** Although, because of space limitations the table presents only odd numbers, you can also choose even numbers or fractions between 19 and 61.

- **In the PC and BRO treatments:** During the experiment you can use a ‘profit calculator’ before you decide on the quantity to produce. You place your quantity and the (hypothetical) quantity of the other firm and the ‘profit calculator’ calculates your profit.
- **In the BRO treatment only:** You can also use another kind of ‘profit calculator’. This second calculator, calculates the “M” quantity (the quantity that gives you the highest profit given a hypothetical quantity selected by the other firm) and the associated profit.
- In each period the output decision of the other firm will be registered, the corresponding price will be determined and the profits will be computed.
- After each period you receive feedback about the quantities produced by you and the other firm in the last period, and your profit in the last period, and also about your accumulated profit so far.
- The experiment consists of exactly 20 periods.
- During the experiment all payoffs are given in ECU. Each participant starts with an initial amount of 500 ECU.
- After the experiment we will exchange your payoff into €. The exchange rate is 1600 ECU/€ where 1600 ECU equals 1 €.
- The total profit in the experiment is the total amount earned in the 20 periods of the experiment (including the initial amount of 500 ECU).
- At the end of the experiment we will add up your profits and calculate your money reward. This will be done in such a way that the other participants will not see how much you earned and you will not see how much they earned. You will receive your money immediately in cash.

Computer screen PT treatment

| | | |
|-------|----------|----------------------------|
| Runde | 2 von 20 | verbleibende Zeit [Sek]: 0 |
|-------|----------|----------------------------|

| | |
|---|---------|
| Ergebnisse der vergangenen Periode | |
| Deine Menge | 33.00 |
| Menge der anderen Firma | 33.00 |
| Dein Gewinn | 1089.00 |
| Dein bisheriger Gesamtgewinn | 1589.00 |

Wähle deine Produktionsmenge

OK

Computer screen PC treatment

Round 2 out of 20 Remaining time [sec]: 0

| Gewinn-Rechner | | |
|-------------------------|-------------|-------------|
| Menge der anderen Firma | Deine Menge | Dein Gewinn |
| 33.00 | 33.00 | 1089.00 |
| 33.00 | 34.00 | 1088.00 |
| 33.00 | 35.00 | 1085.00 |
| 33.00 | 36.00 | 1080.00 |

Ergebnisse der vergangenen Periode

Deine Menge 23.00
Menge der anderen Firma 23.00
Dein Gewinn 1219.00
Dein bisheriger Gesamtgewinn 1719.00

Hier hast du die Möglichkeit, deine Entscheidung zu simulieren, um mögliche Konsequenzen zu sehen:

Deine Menge
Menge der anderen Firma

Wähle deine Produktionsmenge

Berechne **OK**

Computer screen BRO treatment

Periode verbleibende Zeit (Sek) 0

2 von 20

Gewinn-Rechner I

| Menge der anderen Firma | Deine Menge | Dein Gewinn |
|-------------------------|-------------|-------------|
| 24.00 | 13.00 | 806.00 |
| 24.00 | 14.00 | 854.00 |

Hier hast du die Möglichkeit, deine Entscheidung zu simulieren, um mögliche Konsequenzen zu sehen:

Deine Menge

Menge der anderen Firma

Berechne

Ergebnisse der vergangenen Periode

Deine Menge 33.00

Menge der anderen Firma 22.00

Dein Gewinn 1452.00

Dein bisheriger Gesamtgewinn 1952.00

Gewinn-Rechner II

| Menge der anderen Firma | Deine "M" Menge | Dein Gewinn |
|-------------------------|-----------------|-------------|
| 20.00 | 39.50 | 1560.25 |
| 30.00 | 34.50 | 1190.25 |
| 40.00 | 29.50 | 870.25 |
| 50.00 | 24.50 | 600.25 |

Hier hast du die Möglichkeit, deine "M" Menge zu berechnen, um mögliche Konsequenzen zu sehen:

Menge der anderen Firma

Berechne

Wähle deine Produktionsmenge

OK