



UvA-DARE (Digital Academic Repository)

Inducing good behavior

van der Veen, A.

[Link to publication](#)

Citation for published version (APA):
van der Veen, A. (2012). *Inducing good behavior*.

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

E. Instructions “Keeping out Trojan Horses”

Before each part of experiment computerized instructions were shown, that could be viewed by participants in their own pace. The instructions differ in length depending on the part of the experiment they precede. At the start of the experiment, there was a relatively large text with all the details of the auction and the payoffs. Before each of the following parts the instructions give only the changes with respect to the previous block.

They differ also in content depending on the type of auction and the sequence of limited and unlimited liability (LULU vs ULUL). While most of the explanations is the same for all types of auctions and liability, there are some differences explaining the various types of auctions and liabilities. We will give you the instructions for every part for the LULU design and indicate where they differ and indicate for which variation(s) it is applicable.

Instructions for part 1

Introduction

You are about to participate in an economic experiment. The instructions are simple. If you follow them carefully, you can make a substantial amount of money. Your earnings will be paid to you in euros at the end of the experiment. This will be done in private, one participant at a time.

Earnings in the experiment will be denoted by “francs”. At the end of the experiment, francs will be exchanged for euros. The exchange rate will be 3.5 eurocent per franc, or 3.5 euro for each 100 francs.

At the top of your screen, you will see the button “ready”. Please, click this when you have completely finished the instructions.

Auctions

In today’s experiment, you will participate in auctions. In these auctions you may try to obtain a fictitious good. In the remainder of these instructions we will explain the way in which the auction is organized and the rules you must follow.

Rounds

Today's experiment consists of 48 rounds. In each round, a fictitious good will be auctioned. The 48 rounds are split in 4 blocks of 12. We will now explain the instructions for the first 12 rounds. Instructions for later rounds will appear after round 12. In every round, you will be a member of a group. This group consists of you and two other people. It is unknown to you and to other participants who is in which group. In addition, we will make new groups in every round. Thus, the members of your group will change from round to round.

The Value of the Auctioned Good

The value of the fictitious good will be the same for all three bidders in your group. More precisely, the fictitious good is a bundle of three objects. The total value of the good equals the total value of the three objects:

$$(\text{Value of the good}) = (\text{Value of object 1}) + (\text{Value of object 2}) + (\text{Value of object 3})$$

Before you participate in the auction in any round, you will be informed about the value of one of the three objects. We will call this information your "signal". This signal can be any number (randomly determined by the computer) between 0 and 100 francs. Similarly, each of the two other participants in your group will be informed about the value of one of the other objects. So, the total value of the good is equal to the sum of the signals of the three bidders in your group.

Note the following about the signals:

1. The signal for each bidder is determined independently of the signals of the other two bidders;
2. A signal can be any number between 0 and 100;
3. Any signal between 0 and 100 is equally likely.

For example, if your signal equals 50, and the signals of the other two bidders in your group are 25 and 75 respectively, the value of the fictitious good will be:

$$(\text{Value of the good}) = 50 + 25 + 75 = 150$$

Note that the value of the fictitious good will always lie between 0 and 300.

The Auction

[For EN:] In the auction, the computer will gradually raise the price from 0 to 300. At each price, you and the other members of your group can indicate to step out of the auction.

When the first bidder steps out of the auction, the auction will stop for a few seconds. The other two bidders will be informed at which price the first bidder stepped out. The auction ends

when the second bidder steps out of the auction. The remaining bidder gets the good: he or she will obtain the value of the three objects. This bidder pays the price at which the second bidder stepped out of the auction.

If two or three participants step out of the auction at the same price, the computer will randomly determine which one will actually step out. The other(s) will remain in the auction. If two or three bidders remain in the auction up to a price of 300, the computer will randomly determine who wins the object. This bidder has to pay 300 francs.

[For FP:] In the auction, you and the other members of your group will submit a bid. This must be a number between 0 and 300. The bidder submitting the highest bid gets the good. He or she will obtain the value of the three objects for a price equal to his or her bid. If two or three participants submit the same bid, the computer will randomly determine which one will win. The winner pays his or her own bid.

Earnings

[For LULU:] If the winner in a certain round pays less than the value of the good, his or her earnings in that round will be:

$$(\text{Earnings}) = (\text{Value of the good}) - (\text{Price})$$

In contrast, the price paid by the winner may turn out to be higher than the good's value. If this is the case, then the winner does not have to cover the loss in the auction. However, the bidder will face a cost of 4 francs, which will be subtracted from his or her earnings so far. Note that the winner will pay 4 francs even if his or her loss is only 1, 2, or 3 francs.

If not winning, a bidder's earnings will be zero.

[For ULUL:] The winner's earnings in a round will be:

$$(\text{Earnings}) = (\text{Value of the good}) - (\text{Price})$$

Note that the price paid by the winner may turn out to be higher than the object's value. If this is the case, then the winner makes a loss, which will be subtracted from his or her total earnings in this part so far.

Starting Capital

[For LULU:] At the beginning of part 1, each participant will obtain a starting capital of 50 francs. This starting capital may be used to cover potential losses made in part 1. So, your total

earnings in this part will be the starting capital of 50 plus earnings in the auctions minus the cost in case of a loss in the auction.

[For ULUL:] At the beginning of part 1, each participant will obtain a starting capital of 150 francs. This starting capital may be used to cover potential losses made in part 1. So, your total earnings in this part will be the starting capital of 150 plus earnings in the auctions. You cannot earn less than zero in this part. If your total earnings end up below zero after a certain round, you will start at zero in the next round.

Instructions for part 2

We will now start the second part of the experiment. Part 2 will be almost the same as part 1. The same fictitious good will be sold in the same auction. Again, the good consists of three objects, and each bidder will obtain a signal equal to the value of one of the objects. The exchange rate remains 3.5 eurocent per franc, or 3.5 euro for each 100 francs. Part 2 will also consist of 12 rounds.

[For LULU:] The only difference is that in part 2, the winner of the good has to cover the loss if the price turns out to be higher than the value of the good. Therefore, the winner's earnings in a round will be as follows.

[For ULUL:] The main difference is that in part 2, the winner of the good does not have to cover the loss if the price of the good turns out to be higher than its value. The winner's earnings in a round will be as follows.

Earnings

[For LULU:] The winner's earnings in a round will be:

$$(\text{Earnings}) = (\text{Value for the good}) - (\text{Price})$$

Note that the price paid by the winner may turn out to be higher than the object's value. If this is the case, then the winner makes a loss, which will be subtracted from his or her total earnings in this part so far.

[For ULUL:] If the winner in a certain round pays less than the value of the good, his or her earnings in that round will be:

$$(\text{Earnings}) = (\text{Value of the good}) - (\text{Price})$$

In contrast, the price paid by the winner may turn out to be higher than the good's value. If this is the case, then the winner does not have to cover the loss in the auction. However, the bidder will face a cost of 4 francs, which will be subtracted from his or her earnings so far. Note that the winner will pay 4 francs even if his or her loss is only 1, 2, or 3 francs.

If not winning, a bidder's earnings will be zero.

Starting Capital

[For LULU:] At the beginning of part 2, each participant will obtain a starting capital of 150 francs. This starting capital may be used to cover potential losses made in part 2. So, your total earnings in this part will be the starting capital of 150 plus earnings in the auctions. You cannot earn less than zero in this part. If your total earnings end up below zero after a certain round, you will start at zero in the next round. So, you will not lose part of your earnings in part 1 if your starting capital of 150 francs turns out not to be sufficient to cover losses in part 2.

[For ULUL:] At the beginning of part 2, each participant will obtain a starting capital of 50 francs. This starting capital may be used to cover potential losses made in part 2. So, your total earnings in this part will be the starting capital of 50 plus earnings in the auctions minus the cost in case of a loss in the auction.

Instructions for part 3 for the LULU treatment¹

We will now start the third part of the experiment. Part 3 will be exactly the same as part 1. So, the same fictitious good will be sold in the same auction. Again, the good consists of three objects, and each bidder will obtain a signal equal to the value of one of the objects. The exchange rate remains 3.5 eurocent per franc, or 3.5 euro for each 100 francs. Part 3 will also consist of 12 rounds.

Recall that the only difference between part 3 and part 2 is that in part 3, the winner of the good does not have to cover the loss if the price of the good turns out to be higher than its value. Therefore, the winner's earnings in a round will be as follows.

Earnings

If the winner in a certain round pays less than the value of the good, his or her earnings in that round will be:

$$(\text{Earnings}) = (\text{Value of the good}) - (\text{Price})$$

In contrast, the price paid by the winner may turn out to be higher than the good's value. If this is the case, then the winner does not have to cover the loss in the auction. However, the

¹The instructions for the ULUL treatment are very similar, with parts 3 and 4 swapped.

bidder will face a cost of 4 francs, which will be subtracted from his or her earnings so far. Note that the winner will pay 4 francs even if his or her loss is only 1, 2, or 3 francs.

If not winning, a bidder's earnings will be zero.

Starting Capital

At the beginning of part 3, each participant will obtain a starting capital of 50 francs. This starting capital may be used to cover potential losses made in part 1. So, your total earnings in this part will be the starting capital of 50 plus earnings in the auctions minus the cost in case of a loss in the auction.

Instructions for part 4 for the LULU treatment

We will now start the fourth and last part of the experiment. Part 4 will be exactly the same as part 2. The same fictitious good will be sold in the same auction. Again, the good consists of three objects, and each bidder will obtain a signal equal to the value of one of the objects. The exchange rate remains 3.5 eurocent per franc, or 3.5 euro for each 100 francs. Part 4 will also consist of 12 rounds.

Recall that the only difference between part 3 and part 4 is that in part 4, the winner of the good has to cover the loss if the price turns out to be higher than the value of the good. Therefore, the winner's earnings in a round will be as follows.

Earnings

The winner's earnings in a round will be:

$$(\text{Earnings}) = (\text{Value for the good}) - (\text{Price})$$

Note that the price paid by the winner may turn out to be higher than the object's value. If this is the case, then the winner makes a loss, which will be subtracted from his or her total earnings in this part so far.

Starting Capital

As in part 2, at the beginning of part 4, each participant will obtain a starting capital of 150 francs. This starting capital may be used to cover potential losses made in part 4. So, your total earnings in this part will be the starting capital of 150 plus earnings in the auctions.

You cannot earn less than zero in this part. If your total earnings end up below zero after a certain round, you will start at zero in the next round. So, you will not lose part of your

earnings in parts 1, 2 and 3 if your starting capital of 150 francs turns out not to be sufficient to cover losses in part 4.