This electronic appendix is for "Squeezing Lemonade into Lemons: Making Efficient Markets Inefficient" by Bart Wilson and Artie Zillante. The appendix includes instructions for the experiment as well as screenshots for the treatments.

Experiment Instructions

We have instructions for our two-sided multilateral negotiations (TSMN) treatment as well as our posted-offer treatment. Instructions for all sessions were read out loud as subjects followed along with the electronic version at their computer.

Instructions (TSMN)

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Welcome

This is an experiment in the economics of decision making. The instructions are simple, and if you follow them carefully and make good decisions, you may earn a considerable amount of money which will be paid to you in CASH at the end of the experiment.

In this experiment you are a {buyer or seller}. There are 16 buyers and 4 sellers in this experiment including you. The experiment will last 1500 seconds.

During that time each buyer will have the opportunity to purchase **one** (**and only one**) unit of a fictitious item from **one** of the sellers. To do so, a buyer will need to "stand" in line at one of the seller's "stores" by clicking on the radio button at the top portion of the screen.

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Buyers and Sellers

Once a buyer is at the front of a line, a chat window will appear in the upper left portion of the screen. This chat window is a private conversation between the buyer and seller. You are free to discuss all aspects of the experiment, with the following exceptions: you may not reveal your name, discuss side payments, make threats, or engage in inappropriate language (including such shorthand as 'WTF'). If you do, you will be excused and you will forfeit your earnings.

At any time during the conversation, a seller can make an offer to sell an item to the buyer by entering in the desired price into the "Offer" textbox and clicking the Make Offer button. The offer will appear below the seller chat window, and the buyer can choose to Accept or Reject it. If the offer is rejected, the seller may enter a new offer. If the offer is accepted, the earnings box in the middle of the screen will reflect the outcome. Each buyer can only purchase **one** unit during the entire experiment.

A buyer and a seller can leave the conversation at any time by clicking on a Leave button. All outstanding offers will be canceled when a conversation is terminated. A buyer may continue to enter new lines until the time remaining for shopping expires.

Regular or Super?

There are two types of items available, *regular* and *super*. Each seller can only sell one or the other. Only the individual seller knows whether he or she sells *regular* or *super* items to the buyers.

If buyers purchase an item, they receive as profit the difference between their value and the price they pay.

TO SUM UP: Value - Price Paid = Buyer Profit

The value of the item depends upon whether it is a *regular* or a *super*. The value to buyers of a *super* item is greater than a *regular* item. The average value across all buyers for the *super* and *regular* items is **2400**. Only the individual buyer knows his or her value for a *super* and *regular* item. This is shown in the "Potential Earnings" section in the middle of the buyer screen.

Only after purchasing a unit will the buyer know if he or she has received a *super* or <u>regular</u> item from the seller. The "Potential Earnings" section will indicate whether the buyer has received a *super* or *regular* item.

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Sellers earn profit by selling units at a price greater than their cost. Sellers can sell several units to the buyers. For each unit that a seller sells to a buyer, a seller receives as profit the difference between the price that the buyer pays and the cost of the unit.

TO SUM UP: Price – Cost per Unit = Seller Profit per Unit

Each row in the "Earnings" section of the screen represents one unit that a seller can sell to a buyer. These rows fill in as the seller sells units to the buyers. Recall that each seller can only sell either *supers* or *regulars*, but not both.

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Shopping Time

Only a subset of buyers will be able to shop at any point in time during the experiment. Buyers will receive a message in the middle of their screen when they can shop. Each buyer only has 300 seconds to purchase a unit. If time elapses before a buyer purchases a unit, he or she will **not** have another opportunity to shop.

<The following statement appeared only the buyer's screen. It was read out loud with all the instructions with "x" replacing "0.92".>

Except during the 300 second-window for shopping, buyers earn an additional 0.92 cents per second. <end>

If you wish to review the instructions, you may go back at this time. If you feel you are prepared to proceed with the actual experiment, click on the **Start** button. The experiment will begin once everyone has clicked on the **Start** button. If you have a question that you feel was not adequately answered by the instructions, please raise your hand and ask the monitor before proceeding.

Instructions (Posted Offer)

<page 1>

Welcome

This is an experiment in the economics of decision making. The instructions are simple, and if you follow them carefully and make good decisions, you may earn a considerable amount of money which will be paid to you in CASH at the end of the experiment.

In this experiment you are a {buyer or seller}. There are 16 buyers and 4 sellers in this experiment including you. The experiment will last 1500 seconds.

During that time each buyer will have the opportunity to purchase **one** (**and only one**) unit of a fictitious item from **one** of the sellers. To do so, a buyer will need to "stand" in line at one of the seller's "stores" by clicking on the radio button at the top portion of the screen.

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Buyers and Sellers

Once a buyer is at the front of a line, the buyer will see the advertised price of the seller.

The buyer can either Accept the offer and purchase at that price, or the buyer can leave by clicking on a Leave button. A buyer may continue to enter new lines until the time remaining for shopping expires.

If the offer is accepted, the earnings box in the middle of the screen will reflect the outcome. Each buyer can only purchase **one** unit during the entire experiment.

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Regular or Super?

There are two types of items available, *regular* and *super*. Each seller can only sell one or the other. Only the individual seller knows whether he or she sells *regular* or *super* items to the buyers.

If buyers purchase an item, they receive as profit the difference between their value and the price they pay.

TO SUM UP: Value - Price Paid = Buyer Profit

The value of the item depends upon whether it is a *regular* or a *super*. The value to buyers of a *super* item is greater than a *regular* item. The average value across all buyers for the *super* and *regular* items is **2400**. Only the individual buyer knows his or her value for a *super* and *regular* item. This is shown in the "Potential Earnings" section in the middle of the buyer screen.

Only after purchasing a unit will the buyer know if he or she has received a *super* or *regular* item from the seller. The "Potential Earnings" section will indicate whether the buyer has received a *super* or *regular* item.

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Sellers earn profit by selling units at a price greater than their cost. Sellers can sell several units to the buyers. For each unit that a seller sells to a buyer, a seller receives as profit the difference between the price that the buyer pays and the cost of the unit.

TO SUM UP: Price – Cost per Unit = Seller Profit per Unit

Each row in the "Earnings" section of the screen represents one unit that a seller can sell to a buyer. These rows fill in as the seller sells units to the buyers. Recall that each seller can only sell either *supers* or *regulars*, but not both.

<page 5>

Shopping Time

Only a subset of buyers will be able to shop at any point in time during the experiment. Buyers will receive a message in the middle of their screen when they can shop. Each buyer only has 300 seconds to purchase a unit. If time elapses before a buyer purchases a unit, he or she will **not** have another opportunity to shop.

While the buyers are shopping, sellers post advertisements <Private treatment> that buyers only see when at the front of the line <end>. The advertisement includes the price at which the seller is willing to sell, and it may or may not include the type of unit that the seller wishes to advertise as selling.

<The following statement appeared only the buyer's screen and was announced as such. It was read out loud with "x" replacing "0.92".>

Except during the 300 second-window for shopping, buyers earn an additional 0.92 cents per second.

<end>

If you wish to review the instructions, you may go back at this time. If you feel you are prepared to proceed with the actual experiment, click on the **Start** button. The experiment will begin once everyone has clicked on the **Start** button. If you have a question that you feel was not adequately answered by the instructions, please raise your hand and ask the monitor before proceeding.

Screenshots

The following six figures contain screenshots for the buyers and sellers in our three treatments. The first pair of figures contains the screenshots for the TSMN treatment. The second contains the screenshots for the posted-offer treatments where sellers could not see the posted-offers of other sellers and the third contains the screenshots for the posted-offer treatments where the sellers could see the posted-offers of other sellers.



Figure 1 Screenshot for a buyer in a TSMN treatment

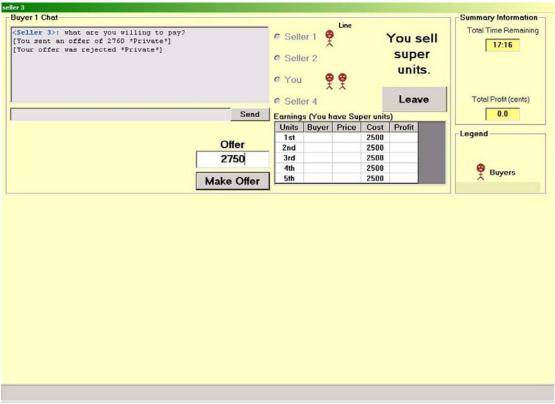


Figure 2 Screenshot for a seller in a TSMN treatment

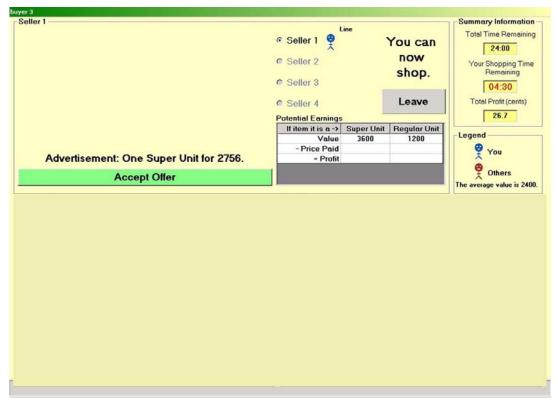


Figure 3 Screenshot for a buyer in a PO-private treatment

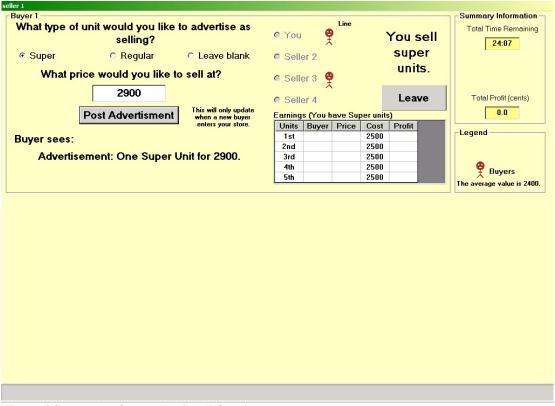


Figure 4 Screenshot for a seller in a PO-private treatment

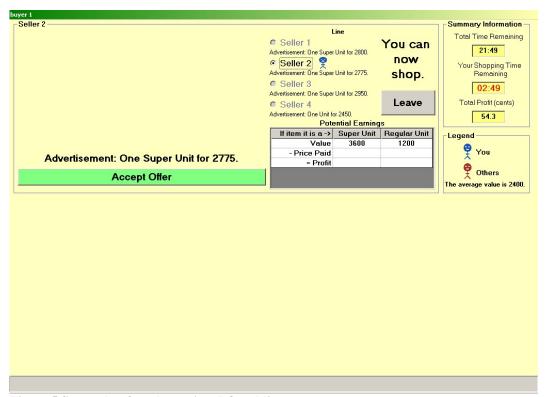


Figure 5 Screenshot for a buyer in a PO-public treatment



Figure 6 Screenshot for a seller in a PO-public treatment