Appendix A

Proof of Proposition 1

1. Construction of symmetric equilibria for the four informational structures.

(i) and (ii) As shown in equations (10) and (14) of Anderson and Renault

$$p_u^* = \frac{1}{[1-F(x^{'})]f(x^{'}) + 2\int_a^{x^{'}} f(\varepsilon)^2 d\varepsilon}$$

and

$$p_m^{**} = \frac{1}{(1-k)\{[1-F(x^{'})]f(x^{'}) + 2\int_a^{x^{'}} f(\varepsilon)^2 d\varepsilon\}}$$

where $x^{'}$ is the critical reservation value such that the consumer holding $x^{'}$ is indifferent between searching again and sticking with the current firm i.e. $x^{'}$ is implicitly defined by $\int_{x^{'}}^{b} (\varepsilon - x^{'}) f(\varepsilon) d\varepsilon = c.$ Assuming that the match value is uniformly distributed on $[a, b]$ yields (i) and (ii).

(iii.) We now construct an equilibrium for the case in which half of the consumers are match informed post-search. To this effect, suppose a fraction k of the consumers who first visit firm 1 learn the price of that firm and the match value of both firm 1 and 2 and a fraction $(1-k)$ of the consumers learn only about the price and match value of firm 1. In equilibrium, the consumers always expect the price of firm 2 to be p^*. The difference in prices or price premium can be represented by $\Delta = p_1 - p^* > 0.$ The demand for firm1, from the uninformed consumers, is given by equation (9) of Anderson and Renault.

$$D_u(p_1, p^*) = (1/2)[1-F(x^{'}+\Delta)][1-F(x^{'})] + F(x^{'})$$
$$-\int_{a-\Delta}^{x^{'}} F(u+\Delta) f(u) du$$

The demand for firm 1, from the k informed consumers, partly consists of consumers who will stop at firm 1 itself (i.e. $\varepsilon_1 - p_1 \geq \varepsilon_2 - p^* - c$). This probability is given by $(1/2)\int_a^b F(\varepsilon - \Delta + c)$ $f(\varepsilon) d\varepsilon.$ The remaining portion of the demand comprises of consumers who start at firm 2 but search firm 1 (i.e. $\varepsilon_1 - p^* - c \geq \varepsilon_2 - p^*$) and purchase from firm 1 (i.e. $\varepsilon_1 - p_1 \geq \varepsilon_2 - p^*$). Lemma 1 and equation (15) of Anderson and Renault can be used to prove that $\Delta < c.$ This probability can thus be stated as $(1/2)\int_a^b F(\varepsilon - c)$ $f(\varepsilon) d\varepsilon.$ Note that since the consumer knows both match values, in equilibrium the consumer will never search and return from firm 2. The demand for firm 1 from the informed consumers can therefore be written as

$$D_m(p_1, p^*) = (1/2)\int_a^b [F(\varepsilon - \Delta + c) + F(\varepsilon - c)] f(\varepsilon) d\varepsilon$$

and the total demand is $(1-k)D_u\left(p_1, p^*\right) + kD_m\left(p_1, p^*\right)$.

Maximizing profit for firm 1 with respect to p_1 we obtain a unique solution (for the k-price informed consumers case) given by

$$p_m^*(k) = \frac{1}{(1-k)\{[1-F(x')]f(x') + 2\int_a^{x'} f(\varepsilon)^2 d\varepsilon\} + k\int_a^b f(\varepsilon - c) f(\varepsilon) d\varepsilon}$$

By symmetry, we obtain that $(p_m^*(k), p_m^*(k))$ with beliefs such that consumers expect firms to set $p_m^*(k)$ is an equilibrium. Finally, since the match values are assumed to be uniformly distributed over $[a,b]$, substitution in the above equation will yield (iii).

(iv) Suppose that a fraction k of the consumers who first visit firm 1 learn about their match value from firm 1 and about the prices in both firms. Suppose, without loss of generality, that $p_1 \geq p_2$. Let $\Delta = p_1 - p_2$. The expected benefit from searching firm 2 is $\int_a^b (\varepsilon_2 - \varepsilon_1 + \Delta) f(\varepsilon) d\varepsilon$. This implies that the consumer who first visits firm 1 will search firm 2 only if $\varepsilon_1 - \Delta < x'$. Hence a fraction $[1 - F(x' + \Delta)]$ of consumers who visit firm 1 stop there. Similar analysis for firm 2 yields that a fraction $[1 - F(x' - \Delta)]$ of the consumers who visit firm 2 first stop there. Since the decision to visit a firm is made at random, a consumer visits a given firm with probability 1/2. Secondly, a fraction $F(x' - \Delta)$ of the consumers who start at firm 2 and search firm 1, stop at firm1 if $\varepsilon_1 - \Delta > x'$. The consumers who search both firms will buy from firm 1 if $\varepsilon_1 - \Delta \leq x'$ and $\varepsilon_2 + \Delta \leq \varepsilon_1$. The demand from the informed consumers is therefore given by

$$D_p(p_1, p^*) = (1/2)[1 - F(x' + \Delta)][1 - F(x' - \Delta)] + F(x' - \Delta)[1 - F(x' + \Delta)]$$
$$- \int_a^{x' + \Delta} F(\varepsilon - \Delta) f(\varepsilon) d\varepsilon$$

where the first term in the demand equation corresponds to those consumers who stopped at the first firm they sampled and the second term corresponds to those consumers who sample both firms if and only if they start at firm 2. The final term corresponds to those who sample both firms irrespective of where they start. Maximizing profit for firm 1 with respect to p_1 we obtain a unique solution (for the k-price informed consumers case) given by

$$p_p^*(k) = \frac{1}{(1+k)\{[1-F(x^{'})]f(x^{'}) + 2\int_a^{x^{'}} f(\varepsilon)^2 d\varepsilon\}}.$$

By symmetry, we obtain that $(p_p^*(k), p_p^*(k))$ with beliefs such that consumers expect firms to set $p_p^*(k)$ is an equilibrium. Letting F be the uniform distribution over $[a,b]$ we get (iv).

(v), (vi) and (vii) are evident from the functional forms given in (i)-(iv) and follow from direct computation.

2. *Uniqueness*

Uniqueness of the equilibrium for the Match Informed and the Price Informed cases follow from arguments similar to those made in Anderson and Renault (2000) for the Uninformed and the Pre-Search Match Informed cases. Below, for each informational structure, we construct firm 1's best response function to arbitrary prices by firm 2 assuming that consumers believe that a firm whose price they do not know is equal to the equilibrium price derived in the previous section. For the chosen parameter values, the best response functions are increasing in $p_2 \in [0, y]$ in all cases and intersect the 45-degree line once and only once.

2.1 *Uninformed case*

Assume that firms set (p_1, p_2) but the consumers at firm i continue to expect that $p_j = p*$. Define $\Delta_1 = p_1 - p*$ and $\Delta_2 = p_2 - p*$. Half of the consumers go to firm 1 and stick with it $(\varepsilon_1 - p_1 - p* > x^{'})$, thus demand coming from those consumers is $(1/2)[1 - F(x^{'} + \Delta_1)]$. Half of the consumers start at firm 1 and search firm 2 if $(\varepsilon_1 - p_1 - p* < x^{'})$, but come back to firm 1 if $(\varepsilon_1 - p_1 > \varepsilon_2 - p_2)$. Thus, demand from such consumers is $(1/2)\int_a^{x^{'}+\Delta_1} F(\varepsilon_1 - p_1 + p_2) f(\varepsilon) d\varepsilon$. Finally, half of the consumers start at firm 2 and come to firm 1 if $(\varepsilon_2 - p_2 - p* < x^{'})$. They stick with firm 1 if $(\varepsilon_1 - p_1 > \varepsilon_2 - p_2)$, demand from these consumers is $(1/2)\int_a^{x^{'}+\Delta_2} 1 - F(\varepsilon_2 - p_2 + p_1) f(\varepsilon) d\varepsilon$. The demand for firm 1 is therefore given by

$$D_p(p_1, p_2) = (1/2)\{[1 - F(x^{'} + \Delta_1)] + \int_a^{x^{'}+\Delta_1} F(\varepsilon_1 - p_1 + p_2) f(\varepsilon) d\varepsilon.$$

$$+ \int_a^{x^{'}+\Delta_2} 1 - F(\varepsilon_2 - p_2 + p_1) f(\varepsilon) d\varepsilon.$$

Firm 1's best response function is obtained by maximizing $p_1 D_p(p_1, p_2)$ with respect to p_1. For the parameters in the experiment, the solution to the maximization problem yields the following functional form for the best response

$$P_1^*(p_2) = 5400\ (\text{-}0.007997 + 0.00010692\sqrt{1794.61\ +\ 129.55p_2\ +\ p_2^2})$$

Figure A1 shows firm 1's profit as a function of p_1 and p_2 and firm 1's best response function.

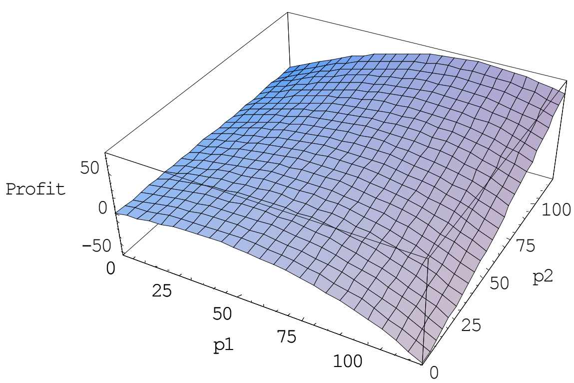
2.2 Price Informed case

In the price informed case, the demand equation remains the same as that derived for the uninformed case with the sole exception that p_2 need not be equal to $p*$. Therefore Δ is redefined to equal $p_1 - p_2$. For the parameters in the experiment, the solution to the maximization problem yields the following functional form for the best response.

$$P_1^*(p_2) = 10800(\text{-}0.0157 + 0.0000534\sqrt{119404.66 + 510.89p_2^2 + p_2})$$

Figure A2 shows firm 1's profit as a function of p_1 and p_2 and firm 1's best response function.

Figure A1



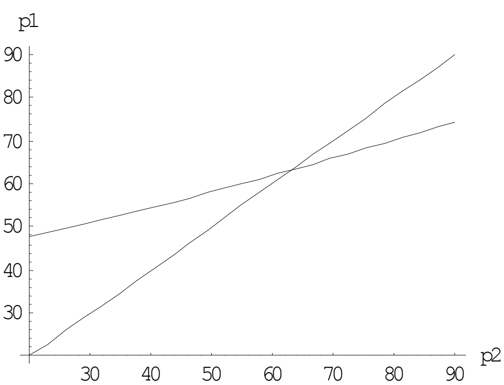
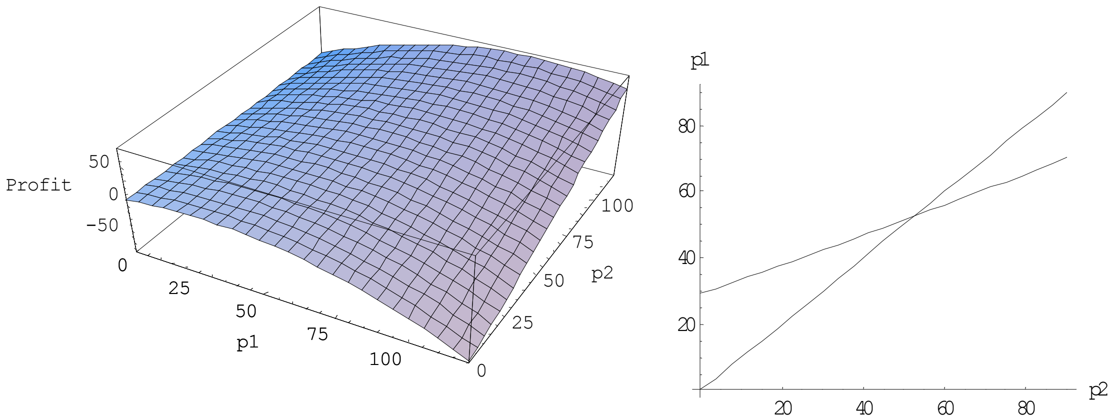


Figure A2



2.3 Match Informed case

Consumers who will start (1/2) and stop at firm 1 itself (i.e. $\varepsilon_1 - p_1 \geq \varepsilon_2 - p^* - c$). This probability is given by

$$(1/2)\int_a^b F(\varepsilon - \Delta + c) \;\; f(\varepsilon)d\varepsilon. \qquad (1)$$

Consumers who start at firm 2 (1/2) but search firm 1 (i.e. $\varepsilon_1 - p^* - c \geq \varepsilon_2 - p_2$) and purchase from firm 1 (i.e. $\varepsilon_1 - p_1 \geq \varepsilon_2 - p_2$). Now $\Delta_2 < c$ may no longer be true. This probability can thus be stated as $(1/2)\int_a^b F(\varepsilon_1 - \max\{c - \Delta_2, p_1 - p_2\}) f(\varepsilon)d\varepsilon$. Thus

$$(1/2)\int_a^b F(\varepsilon_1 - p_1 + p_2\}) f(\varepsilon)d\varepsilon \qquad \text{if } \Delta_1 < c \qquad (2)$$

$$(1/2)\int_a^b F(\varepsilon_1 - c + \Delta_2) f(\varepsilon)d\varepsilon \qquad \text{if } \Delta_1 > c \qquad (3)$$

Consumers who start at firm 1 (1/2), search firm 2 (i.e. $\varepsilon_2 - p^* - c \geq \varepsilon_1 - p_1$) but come back to firm 1 (i.e. $\varepsilon_1 - p_1 \geq \varepsilon_2 - p_2$). This implies that $c \leq \Delta_2$, which is not possible in equilibrium but may in fact take place (i.e. $\varepsilon_1 + p_2 - p_1 > \;\; \varepsilon_1 - \Delta_1 + c$) with probability

$$(1/2)[\int_a^b \{F(\varepsilon_1 - p_1 + p_2\}) - F(\varepsilon_1 - \Delta_1 + c)\} f(\varepsilon)d\varepsilon] \qquad (4)$$

out of equilibrium.

So there are 4 cases:

If $\Delta_1 < c$ and $\Delta_2 < c$ then equations (1) + (2)= $\frac{1}{2} + \frac{(p_2 - p_1)}{2(b-a)}$

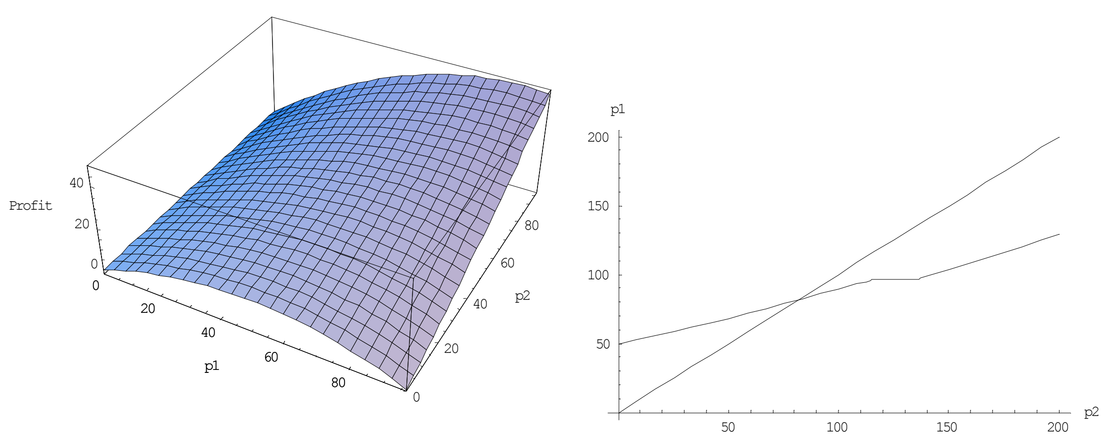
If $\Delta_1 > c$ and $\Delta_2 < c$ then equations (1) + (3)= $\frac{1}{2} + \frac{(p_2 - 2p_1 + c + p^*)}{2(b-a)}$

If $\Delta_1 < c$ and $\Delta_2 > c$ then equations (1) + (2) + (4)= $\frac{1}{2} + \frac{(2p_2 - p_1 - p^* - c)}{2(b-a)}$

If $\Delta_1 > c$ and $\Delta_2 > c$ then equations (1) + (3) + (4)= $\frac{1}{2} + \frac{(p_2 - p_1)}{(b-a)}$

The functional form for the demand function differs depending on the values of p_1 and p_2. The best response function is obtained by maximizing $p_1 D_m(p_1, p_2)$ with respect to p_1 and yields a function with three different pieces, but one and only one intersection with the 45-degree line.

Figure A3



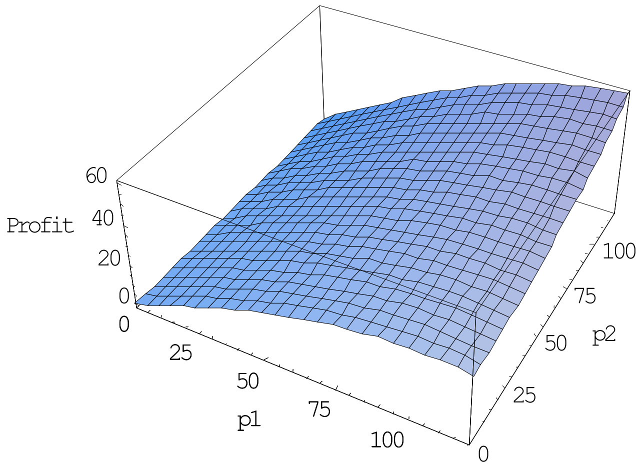
2.4 Pre- Search Match Informed case

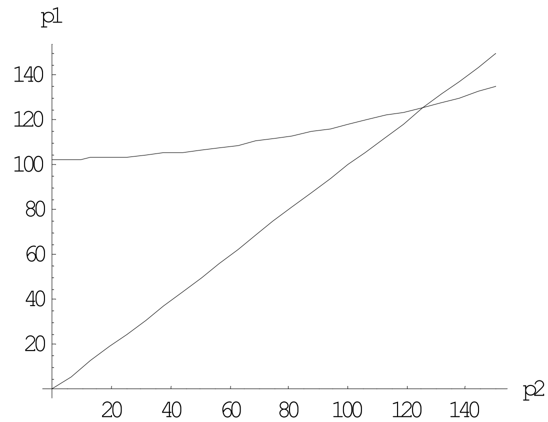
The analysis for this case is similar to that for the Uninformed case. For the parameters in the experiment, the functional form for the best response is as follows

$$P_1^*(p_2) = 10800(-0.000093 + 0.000053\sqrt{32403.0562936834 + 3.028016025431347 p_2 + p_2^2})$$

Figure A4 shows firm 1's profit as a function of p_1 and p_2 and firm 1's best response function.

Figure A4





3. Monopoly Price

The consumer will buy if and only if $p \le \min\{y, y+\varepsilon - c\}$ where ε is the realized match value.

Suppose p < y (check later), then the consumer buys if and only if $\varepsilon \ge -y + c + p$

On the other side, the monopolist maximizes expected profit, i.e. max $p(1 - F(-y+p+c))$

Given the assumption of uniform distribution, $1 - F(-y+p+c) = \dfrac{b+y-p-c}{b-a}$.

The FOC is $\dfrac{b+y-p-c}{b-a} - \dfrac{p}{b-a} = 0$. The SOC is satisfied. So $p^m = \dfrac{b+y-c}{2}$

With $y = 200$, $b = 110$, $a = 10$ and $c = 15$, $p^m = 295/2 = 147.5 < y = 200$.

Figure A5: Uninformed - Firm 1's profit assuming $p_2 = p^*$.

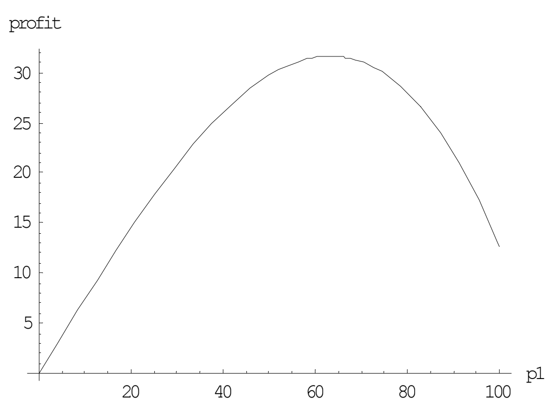


Figure A6: Match Informed - Firm 1's profit assuming $p_2 = p^*$.

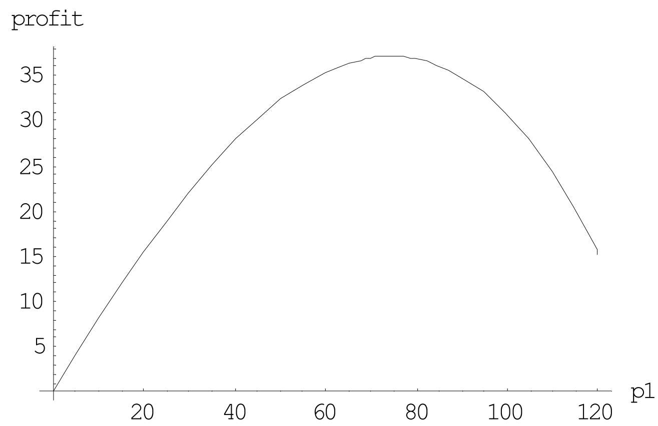


Figure A7: Pre-Search Match Informed - Firm 1's profit assuming $p_2 = p^*$.

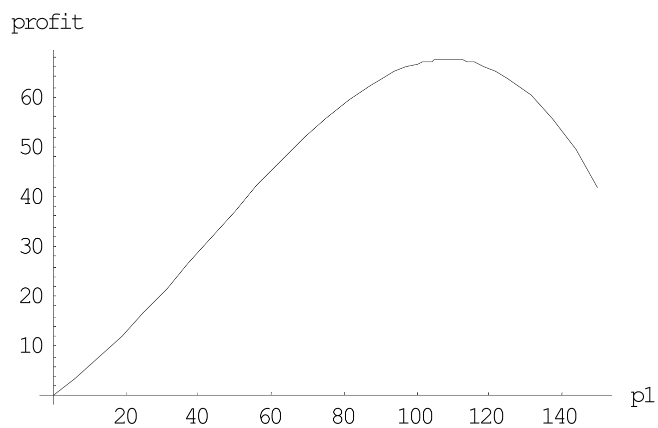
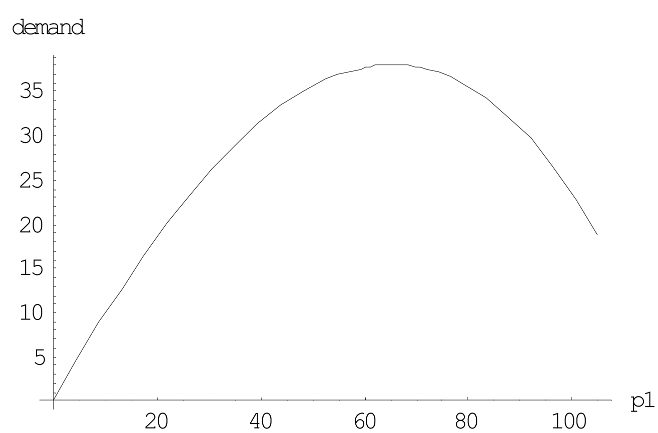


Figure A8: Price Informed - Firm 1's profit assuming $p_2 = p^*$.



Appendix B: Sample Instructions (UI – MI – PI session)

General

This is an experiment in the economics of market decision-making. Various research agencies have provided funds for the conduct of this research. The instructions are simple and if you follow them carefully and make good decisions you may earn a considerable amount of money that will be paid to you in cash at the end of the experiment. It is in your best interest to fully understand the instructions, so please feel free to ask any questions at any time. It is important that you do not talk and discuss your information with other participants in the room until the session is over.

All transactions in today's experiment will be in experimental francs. These experimental francs will be converted to real US dollars at the end of the experiment at the rate of ___________ experimental francs = $1. Notice that the more experimental dollars you earn, the more US dollars you earn. What you earn depends partly on your decisions and partly on the decisions of others.

In this experiment we are going to conduct markets in which you will be a participant in a sequence of trading periods. In every period you will be a **seller** of a fictitious good X. The 16 participants in today's experiment will be randomly re-matched every period into 8 markets with 2 sellers in each market. Therefore, the specific person who is the other seller in your market will change randomly after each period.

The experiment consists of 3 sections, where each section will comprise of 24 trading periods. The buyers in today's experiment are simulated by computerized "robots". There are 200 buyers in each of the 8 markets. Each buyer attaches a particular value to the good from each seller - which indicates how much the good is worth to the buyer. This value will be termed as "match value" in the experiment. The information available to the buyers to facilitate their purchase decisions changes in every section. Therefore, instructions pertaining to each section will be given at the start of that particular section. Furthermore, at the start of each section you will be given a starting balance of 20000 experimental francs. Any positive earnings will be added to this starting balance and any negative earnings will be subtracted from it.

Seller's Trading Instructions

1. As a seller you can sell multiple units of good X every period but each buyer will purchase exactly one unit of the good each period. The good costs you nothing to produce.

2. At the beginning of each period, you decide on what price to charge per unit of good X. The buyers will not pay a price greater than 200 experimental francs for the single unit of good X. This maximum price is the same for all buyers and sellers and will be displayed on everyone's decision screen. Sellers are not allowed to post a price above this maximum.

3. An example of the decision screen is shown in figure 1. The past period pricing decisions of both sellers and your past profits and quantity sold are displayed in the lower half of the screen. You are also given information about the 'average match value' that all buyers would have received by purchasing good X from you and the other seller. Click *Continue* after making your pricing decision. The computer will wait until all sellers have made their decisions before displaying anyone's price to the market.

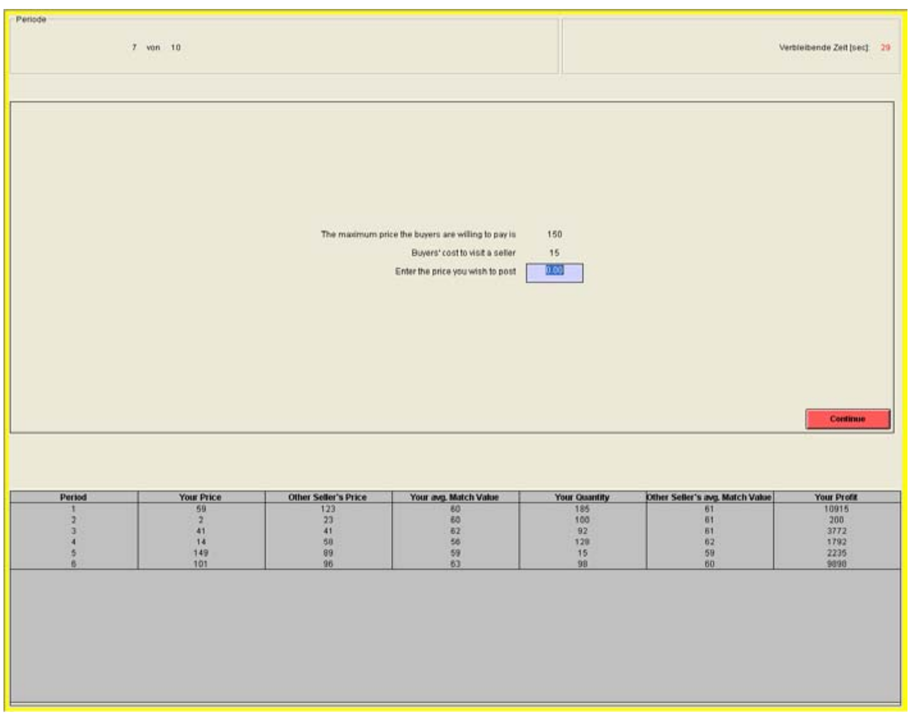


Fig. 1 Decision Screen

At the end of each period, your profit is computed and displayed on the outcome screen as shown in Figure 2. Your profit is calculated as follows:

$$\textbf{\textit{Profit}} = \textbf{\textit{(price}} \times \textbf{\textit{number of units sold)}} - 3500$$

Fig. 2 Outcome Screen

Once the outcome screen is displayed you should record all of the trading information, your price, your average match value, your quantity sold, the other seller's price and average match value in your Personal Record sheet. Also, record your profit from this period and the total profit from all previous periods. Then click on the button on the lower right of your screen to begin the next trading period. Recall that you will be randomly re-matched with a different seller every period.

Robot Buyers' Match Values

1. Each buyer receives a pair of match values in each period – the match value from seller 1 and the match value from seller 2. For each buyer, these match values are determined by computerized random draws of two numbers between 10 and 110. Each of the numbers 10.00, 10.01……109.99, 110 is equally likely on each draw. Moreover, these match values are independently drawn each period for each buyer. This means that the match value of a buyer does not depend on the actions of the participants of the experiments, nor on the match values drawn for other buyers or the match values drawn in other periods. For example, if the match value of a buyer from seller 1 is 96.3 in period 1 then the match value of other buyers from seller 1 could possibly also be equal to 96.3, but they could just as easily be any other value between 10 and 110. Furthermore, each buyer's match value is drawn independently for both the sellers. For example, if the match value of a buyer from seller 1 is 26 in period 1 then this buyer's match value from seller 2 could possibly also be equal to 26, but it could just as easily be any other value between 10 and 110. Sellers might notice that the average match value figure displayed on the outcome screen is close to 60 in most periods. This is simply because although, as stated above, the match values are randomly drawn between 10 and 110, the number of buyers (200) is so large that the average of all match values for a seller's product will always be a number close to 60.

2. At the beginning of each period, the buyers are randomly assigned to each seller .That is, 100 buyers start at seller 1 and 100 buyers start at seller 2. A buyer must incur a visit cost of 15 experimental francs to visit the seller and complete the purchase. However, the buyer may decide to visit the other seller prior to purchasing. If the buyer decides to visit the other seller, it can do so by paying an additional visit cost of 15 francs. This cost will remain the same throughout the experiment.

   Example: Suppose a buyer is initially assigned to seller 1. It must therefore visit seller 1 first by paying a visit cost of 15.

   - If the buyer decides to purchase from seller 1, then it will pay a total visit cost of 15 experimental francs.
   - If the buyer decides to visit seller 2 prior to purchasing, then it will have to pay an additional visit cost of 15 francs to visit seller 2. Therefore, the total visit cost of a buyer who visits both sellers is 30 experimental francs. Note that once a buyer has visited both the sellers, it may buy from either seller.

3. A buyer's benefit from purchasing from a particular seller is equal to

   200 + match value from that seller – price posted by that seller - total visit cost

<u>Section 1 (Periods 1-24)</u>

In this section all buyers know the price and match value of a seller only after visiting the seller. The buyer first visits the seller it was assigned to.

The buyer's purchase decision is determined as follows:
The buyer will purchase immediately from the assigned seller if

200 + match value from *assigned* seller – price posted by *assigned* seller ≥ 186

and otherwise it will visit the other seller.

If the buyer decides to visit the other seller, then it learns the price and match value of the other seller. It will purchase from the other seller if

200 + match value from the *other* seller – price posted by the *other* seller > 200 + match value from *assigned* seller – price posted by *assigned* seller

Notice that a buyer's purchase decision depends on the match values it receives from both sellers and on the prices posted by them.

Example: Suppose a buyer is assigned to seller 1. The buyer first visits seller 1 and learns the price posted by seller 1 and its match value from the good sold by seller 1. Suppose seller 1 posted a price of 50.

- Case 1: Suppose the buyer's match value from seller 1 is 81. Then the buyer receives 200+81-50=231 from purchasing from seller 1. This is greater than 186, therefore, the buyer will purchase from seller 1.

- Case 2: Suppose the buyer's match value from seller 1 is 30. Then the buyer receives 200+30-50=180 from purchasing from seller 1 which is less than 186. The buyer will therefore visit seller 2. To do so it must pay a visit cost of 15. Upon visiting seller 2, the buyer learns the price posted by seller 2 and its match value from the good sold by seller 2.
    - Suppose seller 2 posted a price of 70 but the match value to the buyer is 61. Then the buyer receives 200+61-70=191 from purchasing from seller 2. This is greater than what it would receive from purchasing from seller 1 (180). The buyer will therefore purchase from seller 2.

- On the other hand, suppose seller 2 posted a price of 70 but the match value to the buyer is 22. Then the buyer receives 200+22-70=152 from purchasing from seller 2. This is less than what it would receive from purchasing from seller 1 (180). The buyer will therefore purchase from seller 1.

<u>**Section 2 (Periods 25-48)**</u>

In this section again there are two types of buyers.
Half of the buyers (100) are Type A buyers. They know the price and match value of a seller only after visiting the seller. Their purchase decision is made in the same manner as described in section 1.

The remaining buyers (100) are Type B buyers. Type B buyers know the price of a seller only after visiting the seller but they learn the match values of both sellers by visiting the seller they were assigned to.
Type B buyers' purchase decision is determined as follows:
The buyer will purchase immediately from the assigned seller if

200 + match value from *assigned* seller – price posted by *assigned* seller ≥ 103 +match value from the *other* seller.

If the buyer decided to visit the other seller, then it learns the price from that seller. The buyer will purchase from the other seller if

200 + match value from the *other* seller – price posted by the *other* seller > 200 + match value from *assigned* seller – price posted by *assigned* seller

Notice that a buyer's purchase decision depends on both the match values it receives from both sellers and the prices posted by them.

Example: Suppose a Type B buyer is assigned to seller 1. Initially the buyer visits seller 1 and learns the price posted by seller 1 and its match value from the good sold by seller 1 and seller 2. Suppose the buyer's match value from seller 1 is 41 and the match value from seller 2 is 60.

- Case 1: Suppose seller 1 posted a price of 50. Then the buyer receives 200+41-50=191 from purchasing from seller 1. This is greater than103+60=163 therefore the buyer will purchase from seller 1.
- Case 2: Suppose seller 1 posted a price of 100. Then the buyer receives 200+41-100=141 from purchasing from seller 1. This is less than 103+60=163 therefore the buyer will visit seller 2. To do so it must pay a visit cost of 15. Upon visiting seller 2, the buyer learns the price posted by seller 2.

    - Suppose the price posted by seller 2 is 32. Then the buyer receives 200+60-32=228 from purchasing from seller 2. This is greater than what it receives from purchasing from seller 1 (141). The buyer will therefore purchase from seller 2.
    - On the other hand, suppose the price posted by seller 2 is 132. Then the buyer receives 200+60-132=128 from purchasing from seller 2. This is less than what it receives from purchasing from seller 1 (141). The buyer will therefore purchase from seller 1.

<u>Section 3 (Periods 49-72)</u>

In this section there are two types of buyers.
Half of the buyers (100) are Type A buyers. They know the price and match value of a seller only after visiting the seller. Their purchase decision is made in the same manner as described in section 1.

The remaining buyers (100) are Type C buyers. Type C buyers know the match value of a seller only after visiting the seller but they learn the price of both sellers by visiting the seller they were assigned to.
Type C buyers' purchase decision is determined as follows:
The buyer will purchase immediately from the assigned seller if

200 + match value from *assigned* seller – price posted by *assigned* seller ≥ 255 - price posted by the *other* seller.

If the buyer decides to visit the other seller, then it learns the match value from that seller. The buyer will purchase from the other seller if

200 + match value from the *other* seller – price posted by the *other* seller > 200 + match value from *assigned* seller – price posted by *assigned* seller

Notice that a buyer's purchase decision depends on the match values it receives from both sellers and on the prices posted by them.

Example: Suppose a Type C buyer is assigned to seller 1. The buyer first visits seller 1 and learns the price posted by seller 1 and seller 2 and its match value from the good sold by seller 1. Suppose seller 1 posted a price of 50 and seller 2 posted a price of 70.

- Case 1: Suppose the buyer's match value from seller 1 is 81. Then the buyer receives 200+81-50=231 from purchasing from seller 1. This is greater than 255-70=185 therefore the buyer will purchase from seller 1.

- Case 2: Suppose the buyer's match value from seller 1 is 30. Then the buyer receives 200+30-50=180 from purchasing from seller 1. This is less than 255-70=185 therefore the buyer will visit seller 2. To do so it must pay a visit cost of 15. Upon visiting seller 2, the buyer learns the match value from seller 2.
    - Suppose the match value to the buyer from seller 2 is 61. Then the buyer receives 200+61-70=191 from purchasing from seller 2. This is greater than what it receives from purchasing from seller 1 (180). The buyer will therefore purchase from seller 2.

    - On the other hand, suppose the match value to the buyer from seller 2 is 22. Then the buyer receives 200+22-70=152 from purchasing from seller 2. This is less than what it receives from purchasing from seller 1 (180). The buyer will therefore purchase from seller 1.