

GENERAL INSTRUCTIONS

(translated from French to English)

We provide here the instructions of four treatments that are representative of our treatments: NL186, LP186, AP186, and the partial treatment with a 186 fine (only the fine differs in the treatments for which we do not display the instructions here).

Welcome to this experiment, which consists of making decisions in two independent markets. The situation you are about to face is the following. You and another participant represent firms that compete in two independent markets: the market for product 1 (market 1) and the market for product 2 (market 2). In this competitive setting, the profits made by each firm in each market will depend on your price and the price chosen by your competitor. However, it is possible to form a cartel with your competitor in each market, which would allow each of you to earn a higher profit in each market by agreeing on the price you charge. However, in reality, forming a cartel is illegal. If the Competition Authority (from now on referred to as the "Authority") succeeds in obtaining evidence of its existence, it applies a financial penalty (fine) to each firm, member of the cartel. This evidence can be obtained in two ways: either by *whistleblowing of* one of the cartel members (report) or by *detection through an investigation by the Authority*.

When no cartel has yet been detected or reported, the probability that the Authority will investigate and detect a first cartel is 10 %. Once a cartel has been detected, the probability that it will detect the second cartel (if not previously reported) is 26 %.

Stages of the experiment. You are 16 participants in total, divided into two independent groups of 8 participants. In this experiment, you will have to make decisions in several independent matches. During a match, you will be paired with the same competitor, whose identity you will not know, for one or more periods. The duration of the match is random: after each period, you have 85 chances out of 100 that the match continues. The total duration of the experiment is therefore uncertain, but in any case, we will stop the game after a maximum of 2h30.

Once the match is over with the same competitor, you will be paired with another competitor for a new independent match, unless 20 or more periods have already taken place, in which case the experiment will end. **You cannot be matched a second time with the same competitor.** Thus, if 19 or fewer periods have taken place, you have 15 (=100-85) chances out of 100 to be matched with a new competitor. If 20 or more periods have already taken place, the experiment ends with 15 chances out of 100. The matches are independent: once you are matched with a new competitor, you can no longer be convicted for a cartel previously formed with your previous competitor.

Your earnings are counted in points. The number of points you will earn depends on your decisions, your competitor's decisions and the probabilities. At the end of the experiment, your

points will be converted into Euros and paid out in cash privately. The conversion rate will be 1 Euro for 160 points. Your earnings will be calculated as the sum of the gains (and possible losses) of 2 matches drawn at random (if the experiment consists of only one match, only that match will be considered). In this experiment, it is possible that you make losses. To limit the risk of ending the experiment with a loss, you start with an initial endowment of 800 points.

Before the experiment starts, there are trial periods to familiarize yourself with the decision mechanism. During these periods, the computer will play the role of your competitor; these periods will not affect your payoffs. When the experiment starts, you will be matched with a real competitor. The trial periods will be divided into three phases with several situations. This will be explained to you directly on the screen.

From this point, the instructions are different for each treatment.

These are the instructions for NL186, LP186 and AP186. The parts that are different between the treatments are indicated in different colors every time a change applies.

Course of the experiment.

You are in competition with a competitor in two separate markets (Market 1 and Market 2). You will have to make decisions in each market. These decisions may be different in Market 1 and Market 2, but the rules that apply in each market are the same up to Step 2.

The stages of the experiment are the following:

Step 1: Forming or not forming a cartel

At step 1, in each successive market, you have the choice between 2 possible actions: to ***agree with your competitor to form a cartel*** and decide together on the price charged or ***not to agree to form a cartel*** and therefore let competition play out. In the latter case, you will choose your price in Step 2 independently without having communicated with your competitor. In some cases, however, you may no longer be able to communicate and thus agree to form a cartel. This is explained in the following instructions. In addition, we will show you later the table which combines the profits obtained according to the prices chosen by each of you.

- **If you and your competitor both choose to collude on the same market**, the cartel is formed in this market. You can then communicate and try to agree on a price. In particular, a window opens allowing you to propose a price from the following list {0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12}. In this way, you can tell your competitor the minimum price that you think is acceptable in this collusion. Your competitor does the same. As soon as everyone has chosen a price, these prices are displayed on the screen. You can again make a new proposal and so can your competitor, but only if you offer a higher price than the minimum of the price you offered before. You can repeat this process until 20 seconds have passed. At the end of this time, the negotiated price will be the lowest of the last two prices you and your competitor offered. Note that if you or your competitor do not offer a price during the 20 seconds, collusion is not possible in this market but is nevertheless reprehensible because you have previously decided to communicate with your competitor. Notice that you have no obligation to stick to the agreed price when you choose your price in step 2.
- As long as the cartel remains in this market, it can be proven. **Even when it ends in one period, the Authority can still detect it and condemn it in the next period** if it has not been reported or detected in the current period. Thus, if the Authority is informed of the existence of this ongoing cartel (following a report in the current period (see steps 3 and 5 below) or following detection in the current or next period (see step 4)), you may be fined (even if you have not succeeded in proposing a price, the fact that you agreed to communicate beforehand being sufficient to provide evidence of the cartel). You move to step 2 in this market.

Note that you can form a cartel for the first time on a market in any period as long as a possible cartel formed on the other market has not been respected and/or reported.

- **If at least one of you chooses not to collude on a market, no communication between you is possible and no cartel can be formed in this market at this period.** You continue with step 2.

Step 2 for the market(s) where no cartel was formed in step 1: price selection

You are now in step 2. You have to choose a price from these: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12. Your competitor also chooses a price. You do not know the price chosen by your competitor when you choose your own price. Your earnings will depend on the price you choose and the price chosen by your competitor, according to the following table:

| | | Your competitor's price | | | | | | | | | | | | |
|------------|----|-------------------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Your price | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 29 | 38 | 47 | 56 | 64 | 68 | 68 | 68 | 68 | 68 | 68 | 68 | 68 |
| | 2 | 36 | 53 | 71 | 89 | 107 | 124 | 128 | 128 | 128 | 128 | 128 | 128 | 128 |
| | 3 | 20 | 47 | 73 | 100 | 127 | 153 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| | 4 | 0 | 18 | 53 | 89 | 124 | 160 | 196 | 224 | 224 | 224 | 224 | 224 | 224 |
| | 5 | 0 | 0 | 11 | 56 | 100 | 144 | 189 | 233 | 260 | 260 | 260 | 260 | 260 |
| | 6 | 0 | 0 | 0 | 0 | 53 | 107 | 160 | 213 | 267 | 288 | 288 | 288 | 288 |
| | 7 | 0 | 0 | 0 | 0 | 0 | 47 | 109 | 171 | 233 | 296 | 308 | 308 | 308 |
| | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 107 | 178 | 249 | 320 | 320 | 320 |
| | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 100 | 180 | 260 | 324 | 324 |
| | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 178 | 267 | 320 |
| | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 171 | 269 |
| | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 160 |

For example:

- If you choose a price of 7 and your competitor chooses a price of 10, you earn 308 and your competitor earns 0.
- If you choose a price of 6 and your competitor chooses a price of 4, you earn 53 and your competitor earns 196.

You have 20 seconds maximum to choose your price. If you have not chosen a price within this time, your price will be set to 0 and you will win 0.

If you had formed a cartel in this market in the previous period and this cartel has not already been reported or detected by investigation, this cartel remains detectable by the Authority's investigation at this period, if you are still with the same competitor: you go to step 4.

Otherwise, the period is over.

Step 2 for the market(s) where a cartel was formed in step 1: choice of prices and whether or not to stick to the cartel agreement

In each market where you have chosen to form a cartel, you are now in step 2. You both have to choose between ***sticking to the cartel agreement*** or ***not sticking to the agreement ('deviating' from the agreement)***. Sticking to the agreement means setting the negotiated price you agreed on beforehand; not sticking to the agreement means setting a different price than the one you agreed on with your competitor (in this case, the cartel is not respected). Your competitor may or may not **stick to the cartel agreement too**. You will only know the competitor's choice at the end of step 3, but depending on the case, the gains will depend on the prices you choose and the prices your competitor chooses according to the table above.

For example, if in a market you and your competitor decide to collude and together set a price equal to 6 then

- **If you both stick to the cartel agreement:** each will get 160.
- **If you stick to the cartel agreement but your competitor does not, for example by setting his price at 4:** you will get 53; your competitor will get 196.
- **If you deviate by setting a price equal to 5 but your competitor respects the agreement:** you will get 189; your competitor will get 107.
- **If both of you deviate, your competitor sets a price of 4 and you set a price of 5:** he gets 160 and you get 100.

You have 20 seconds maximum to choose your price. After this time, your price will be set to 0 and you will make a profit of 0.

If the collusion has not been stuck to by at least one of you, the cartel in this market will be permanently destroyed. You will not be able to agree to form a new cartel in this market at step 1 in the next periods of the current match. However, *the cartel remains condemnable during this period and the next one*. In addition, you will not be able to form a cartel in the other market from the next period onwards. The consequences will be the same if you did not manage to offer a price in the previous step when you were planning to form a cartel.

Of course, this history is only kept within the current match, *i.e.* with your current competitor. Matches are completely independent of each other. When you start a new match (*i.e.* with a new competitor), the situation in each market is reset: you can form a cartel and the cartels made in previous matches are no longer condemnable.

Step 3: Possible reporting of the cartel

For NL186:

For any cartel existing by that time, you and your competitor both choose whether to ***report the cartel to the Authority*** or ***not to report the cartel***. Thus:

- **If you both choose not to report:** you go to step 4.
- **If at least one of you decides to report:** each of you pays a fine of 186 for each cartel reported.

For LP186 and AP186:

For any cartel in existence at that time, you and your competitor both choose whether to **report the cartel to the Authority** or **not to report the cartel**. The firm that is reported by its competitor while not reporting it on its side must pay a fine of 186 to the Authority. Thus:

- **If you both choose not to report:** you go to step 4.
- **If you report but your competitor does not:** your competitor alone pays the fine of 186.
- **If you do not report but your competitor does:** you alone pay the fine of 186.
- **If you both report:** you each pay 50% of the fine, i.e. 93 each.

Any cartel that is reported in a market is permanently destroyed and is no longer condemnable. This means that for all subsequent periods, at step 1, you can no longer communicate in order to form a cartel in this market and in the other market from the next period onwards until the end of the match.

You are informed at the end of this step of the actions chosen by your competitor in steps 2 and 3.

For any existing cartel or any cartel that has been destroyed but can still be detected by the Authority (*i.e.* formed during the period or the previous period), the experiment continues in step 4.

Step 4: Possible detections by the Authority's investigation

The Authority may detect a cartel directly by means of an investigation, which may change your current earnings. In each period, in each market, as long as a cartel has not yet been reported or detected by the Authority, the Authority may carry out an investigation with some probability which may vary depending on the situation. If the investigation takes place and the cartel exists or existed in the previous period, it is systematically detected. Thus:

- **If the Authority has not yet detected a cartel with your competitor in the current match, neither in market 1 nor in market 2,** the probability of detection of each cartel is **10%**.
 - If no cartel is detected by the Authority in any markets, no fine is applied and the period ends.
 - If the Authority detects one or more cartels, then you and your competitor pay the fine of 186 each on each market detected, even if this cartel was destroyed but remained condemnable (*i.e.* not yet reported or detected and formed in this or the previous period). On the market(s) on which the Authority has detected a cartel, the cartel is definitively destroyed, can no longer be convicted and you can no longer communicate in order to form a cartel in this market in step 1 of the next periods until the end of the match.

- **If the Authority has already detected a cartel in a previous period in market 1 or market 2**, then the operation is the same as above but the probability of detection is increased to **26 %**.

In all cases where **one and only one cartel** has been detected by an investigation from the Authority (and not reported) in this period and there is still a convictable cartel, you proceed to step 5.

Step 5: Possible reporting in case only one cartel has been detected by the Authority's investigation and there is still a convictable cartel in the other market.

Both you and your competitor have the option of reporting the remaining cartel or not reporting it. Please note, however, that you will be asked to make this decision before step 4 is completed, in case step 5 is implemented. In case step 5 does not happen, your decisions will not be implemented.

For NL186:

The gains are as follows:

- **If you both choose not to report**, the period ends and a new period or match starts.
- **If at least one of you reports**: each of you pays a fine of 186 for this second reported cartel.

In the second case, the cartel is permanently destroyed and can no longer be convicted. From the next period onwards, you can no longer communicate in order to form a cartel on both markets at step 1 until the end of the current match.

After this step, a new period (or match) starts.

For LP186:

The gains are as follows:

- **If you both choose not to report**, the period ends and a new period or match starts.
- **If you report but your competitor does not**, you get a cancellation of your fine for this second cartel and your competitor alone pays the fine of 186 for this cartel.
- **If you do not report but your competitor does**, you alone pay the fine of 186 for this cartel.
- **If both of you report**, then you each pay 50% of the fine, i.e. 93 each.

In the last three cases, the cartel is permanently destroyed and can no longer be convicted. From the next period onwards, you can no longer communicate in order to form a cartel on both markets at step 1 until the end of the current match.

After this step, a new period (or match) starts.

For AP186:

The gains are as follows:

- **If you both choose not to report**, the period ends and a new period or match starts.

- **If you report but your competitor does not**, you alone get a reward of 186 which cancels your fine for the first convicted cartel and your competitor alone pays the fine of 186 for this cartel.
- **If you do not report but your competitor does**, you alone pay the fine of 186 for this cartel and your competitor alone gets the reward of 186 which cancels his fine for the first convicted cartel. He therefore pays no fine.
- **If both of you report**, then you each pay 50% of the fine of 186 for this cartel and each receive 50% of the reward of 186 which will then cancel out 50% of the fine for the first convicted cartel.

In the last three cases, the cartel is permanently destroyed and can no longer be convicted. From the next period onwards, you can no longer communicate in order to form a cartel on both markets at step 1 until the end of the current match.

After this step, a new period (or match) starts.

These are the instructions for the partial treatment for LP and AP with a 186 fine

Course of the experiment.

The situation is as follows. You and your competitor have formed a cartel in each market by communicating and coordinating your prices in order to make an individual profit of 180 points in each market (market 1 and market 2). The authority has just detected the cartel in market 1 but not in market 2. You are therefore each fined 186. In this situation, you have to make a decision during this period which will condition your possibility of forming a cartel in market 2 in the next period. The decision is as follows:

Whether or not to report the second cartel which has not been detected by the authority

You and your competitor have the option of reporting, or not, the remaining cartel. The firm that is reported by its competitor while not reporting it on its side must pay a fine of 186 to the Authority.

For LP186:

The gains are as follows:

- **If you both choose not to report**, the period ends and a new period or match starts with step 1.
- **If you report but your competitor does not**, you get a cancellation of your fine for this second cartel and your competitor alone pays the fine of 186 for this cartel.
- **If you do not report but your competitor does**, you alone pay the fine of 186 for this cartel.
- **If both of you report**, then you each pay 50% of the fine, i.e. 93 each.

In the last three cases, the cartel in market 2 is permanently destroyed and can no longer be convicted. From the next period onwards, you can no longer communicate in order to form a cartel on both markets at step 1 until the end of the current match.

After this step, a new period (or match) starts.

For AP186:

The gains are as follows:

- **If you both choose not to report**, the period ends and a new period or match starts.
- **If you report but your competitor does not**, you alone get a reward of 186 which cancels your fine for the first convicted cartel and your competitor alone pays the fine of 186 for this cartel.
- **If you do not report but your competitor does**, you alone pay the fine of 186 for this cartel and your competitor alone gets the reward of 186 which cancels his fine for the first convicted cartel. He therefore pays no fine.
- **If both of you report**, then you each pay 50% of the fine of 186 for this cartel and each

receive 50% of the reward of 186 which will then cancel out 50% of the fine for the first convicted cartel.

In the last three cases, the cartel is permanently destroyed and can no longer be convicted. From the next period onwards, you can no longer communicate in order to form a cartel on both markets at step 1 until the end of the current match.

After this step, a new period (or match) starts.

In the next period, if the current match continues, the steps of the experiment are as follows:

Step 1: Formation or not of the cartel in the undetected and unreported market

To the extent that the cartel in market 1 has been convicted, you can no longer collude in this market. Furthermore, if you have reported the remaining cartel in the previous period, you can no longer continue to communicate in this second market either in order to collude. In this case, you can only compete with your competitor, setting prices completely independently without any communication.

In the previous period, if you and your competitor have not reported the second cartel formed, you have the choice between 2 possible actions for this second market: to ***continue your cartel with your competitor*** and decide together on the price charged, or to ***no longer agree to form a cartel*** and thus let competition play out. In the latter case, you choose your price independently without communicating with your competitor.

- **If you and your competitor both choose to collude on this market**, the cartel continues in this market. You can then communicate and try to agree on a price. In particular, a window opens allowing you to propose a price from the following list {0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12}. In this way, you can tell your competitor the minimum price that you think is acceptable in this collusion. Your competitor does the same. As soon as everyone has chosen a price, these prices are displayed on the screen. You can again make a new proposal and so can your competitor, but only if you offer a higher price than the minimum of the price you offered before. You can repeat this process until 20 seconds have passed. At the end of this time, the negotiated price will be the lower of the last two prices you and your competitor offered. Note that if you or your competitor do not offer a price during the 20 seconds, collusion is not possible in this market but is nevertheless reprehensible because you have previously decided to communicate with your competitor. Notice that you have no obligation to stick to the agreed price when you choose your price in step 2.
- As long as the cartel remains in this market, it can be proven. **Even when it ends in one period, the Authority can still detect it and condemn it in the next period** if it has not been reported or detected in the current period. Thus, if the Authority is informed of the existence of this ongoing cartel (following a report in the current period (see steps 3 below) or following detection in the current or next period (see step 4)), you may be fined (even if you have not succeeded in proposing a price, the fact that you agreed to

communicate beforehand being sufficient to provide evidence of the cartel).
 You move to step 2 in this market.

- **If at least one of you chooses not to collude on this market 2, no communication between you is possible and no cartel can be formed in this market at this period.** You continue with step 2.

Step 2 for market 1 and for market 2 if no cartel has been pursued in step 1: price selection

You are now in step 2. You have to choose a price from these: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12. Your competitor also chooses a price. You do not know the price chosen by your competitor when you choose your own price. Your earnings will depend on the price you choose and the price chosen by your competitor, according to the following table:

| | | Your competitor's price | | | | | | | | | | | | |
|------------|----|-------------------------|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Your price | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 1 | 29 | 38 | 47 | 56 | 64 | 68 | 68 | 68 | 68 | 68 | 68 | 68 | 68 |
| | 2 | 36 | 53 | 71 | 89 | 107 | 124 | 128 | 128 | 128 | 128 | 128 | 128 | 128 |
| | 3 | 20 | 47 | 73 | 100 | 127 | 153 | 180 | 180 | 180 | 180 | 180 | 180 | 180 |
| | 4 | 0 | 18 | 53 | 89 | 124 | 160 | 196 | 224 | 224 | 224 | 224 | 224 | 224 |
| | 5 | 0 | 0 | 11 | 56 | 100 | 144 | 189 | 233 | 260 | 260 | 260 | 260 | 260 |
| | 6 | 0 | 0 | 0 | 0 | 53 | 107 | 160 | 213 | 267 | 288 | 288 | 288 | 288 |
| | 7 | 0 | 0 | 0 | 0 | 0 | 47 | 109 | 171 | 233 | 296 | 308 | 308 | 308 |
| | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 107 | 178 | 249 | 320 | 320 | 320 |
| | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 100 | 180 | 260 | 324 | 324 |
| | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 89 | 178 | 267 | 320 |
| | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 73 | 171 | 269 |
| | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 160 |

For example:

- If you choose a price of 7 and your competitor chooses a price of 10, you earn 308 and your competitor earns 0.
- If you choose a price of 6 and your competitor chooses a price of 4, you earn 53 and your competitor earns 196.

You have 20 seconds maximum to choose your price. If you have not chosen a price within this time, your prize will be set to 0 and you will win 0.

If you had formed a cartel in this market in the previous period and this cartel has not already been reported or detected by investigation, this cartel remains detectable by the Authority's investigation: you go to step 4.

Otherwise, the period is over.

Step 2 for market 2 if a cartel has been formed: Choice of prices and whether or not to stick to the cartel agreement

You and your competitor have chosen to continue the cartel in market 2. You are now in step 2. You both have to choose between ***sticking to the cartel agreement*** or ***not sticking to the agreement (or 'deviating' from the agreement)***. Sticking to the agreement means setting the negotiated price you agreed on beforehand; not sticking to the agreement means setting a different price than the one you agreed on with your competitor (in this case, the cartel is not respected). Your competitor may or may not **stick to the cartel agreement too**. You will only know the competitor's choice at the end of step 3, but depending on the case, the gains will depend on the prices you choose and the prices your competitor chooses according to the table above.

For example, if in a market you and your competitor decide to collude and together set a price equal to 6 then

- **If you both stick to the cartel agreement:** each will get 160.
- **If you stick to the cartel agreement but your competitor does not, for example by setting his price at 4:** you will get 53; your competitor will get 196.
- **If you deviate by setting a price equal to 5 but your competitor respects the agreement:** you will get 189; your competitor will get 107.
- **If both of you deviate, your competitor sets a price of 4 and you set a price of 5:** he gets 160 and you get 100.

You have 20 seconds maximum to choose your price. After this time, your price will be set to 0 and you will make a profit of 0.

If the collusion has not been stuck to by at least one of you, the cartel in this market will be permanently destroyed. You will not be able to agree to form a new cartel in this market at step 1 in the next periods of the current match. However, *the cartel remains condemnable during this period and the next one*. The consequences will be the same if you did not manage to offer a price in the previous step when you were planning to form a cartel.

Of course, this history is only kept within the current match, *i.e.* with your current competitor. Matches are completely independent of each other. When you start a new match (*i.e.* with a new competitor), the situation in each market is reset.

Step 3: Possible reporting of the cartel

For any cartel in existence at that time in market 2, you and your competitor both choose whether to ***report the cartel to the Authority*** or ***not to report the cartel***. The firm that is reported by its competitor while not reporting it on its side must pay a fine of 186 to the Authority. Thus:

- **If you both choose not to report:** you go to step 4.
- **If you report but your competitor does not:** your competitor alone pays the fine of 186.
- **If you do not report but your competitor reports:** you alone pay the fine of 186.
- **If you both report:** you each pay 50% of the fine, *i.e.* 93 each.

Any cartel that is reported in a market is permanently destroyed and is no longer condemnable. This implies that for all subsequent periods, at step 1, you will no longer be able to agree to form a cartel in any market.

You are informed at the end of this step of the actions chosen by your competitor in steps 2 and 3.

For any existing cartel or any cartel that has been destroyed but can still be detected by the Authority (*i.e.* formed during the period or the previous period), the experiment continues in step 4.

Step 4: Possible detection by the Authority's investigation

The Authority may detect a cartel directly by means of an investigation, which may change your current earnings. In each period, in each market, as long as a cartel has not yet been reported or detected by the Authority, the Authority may carry out an investigation with a probability equal to **26%**. If the investigation takes place and the cartel exists or existed in the previous period, it is systematically detected. Thus:

- If the cartel is not detected by the Authority, no fine is applied and the period ends.
- If the Authority detects the cartel, then you and your competitor pay the fine of 186 each for this second cartel even if the cartel was destroyed but remained condemnable (*i.e.* not yet reported or detected and formed in the previous period). On this market 2 where the Authority has detected the cartel, the cartel is definitively destroyed, is no longer condemnable, and you can no longer communicate in order to form a cartel on both markets at step 1 for all subsequent periods until the end of the current match.