# Unfair Commercial Practices in a Pit Market: Evidence from an Artefactual Field Experiment

# Online Appendix

Francesco Bogliacino, Rafael Charris, Cristiano Codagnone, Frans Folkvord, Felipe Montealegre, Francisco Lupiáñez-Villanueva

**Section I. Supplementary Materials**

The full report with recruitment and details is available at this link: <https://op.europa.eu/s/ovv3>.

Data are property of the European Commission, we can provide the dofile to replicate the analyses.

**Section II. Non parametric tests**

Although the reference analysis is the regression to better deal with dependence in the data, we also report nonparametric analysis.

Price posted: Non-parametric tests (Kruskal Wallis), performed separately by round, suggest that most of the price differences across treatments is concentrated in the second round (round one χ^2=1.78,p=0.77, round two χ^2=7.64,p=0.10, round three χ^2=1.75,p=0.78, round four χ^2=1.00,p=0.90, round five χ^2=2.89,p=0.57) and driven by the treatment with commercial practices (Mann-Whitney-Wilcoxon test, Commercial Practices versus control, r. one z=-2.75,p<0.01, r. two z=-11.00,p<0.01, r. three z=-4.12,p<0.01, r. four z=-6.87,p<0.01, r. five z=-4.12,p<0.01).

Willingness to acquire information: Non-parametric tests (Kruskal Wallis), performed separately by round to control for the dependence in the data, suggest that most of the price differences across treatments is concentrated in the second round (round one χ^2=1.78,p=0.77, round two χ^2=7.64,p=0.10, round three χ^2=1.75,p=0.78, round four χ^2=1.00,p=0.90, round five χ^2=2.89,p=0.57) and driven by the treatment with commercial practices (Mann-Whitney-Wilcoxon test, Commercial Practices versus control, r. one z=-2.75,p<0.01, r. two z=-11.00,p<0.01, r. three z=-4.12,p<0.01, r. four z=-6.87,p<0.01, r. five z=-4.12,p<0.01).

Willingness to buy: it is different across treatments in three out of five rounds according to Kruskal Wallis tests (round one $χ^{2}=32.46, p=0.00$, round two $χ^{2}=17.92, p<0.01$, round three $χ^{2}=3.55, p=0.46$, round four $χ^{2}=4.10, p=0.39$, round five $χ^{2}=12.24, p=0.01$).

Likelihood to use practices: Non-parametric tests (Kruskall Wallis) show that the use of practices is not statistically different across rounds, confirming the main conclusions that composition more than total use is shaped by the treatments (r. one $χ^{2}=3.56, p=0.31$, r. two $χ^{2}=4.95, p=0.17$, r. three $χ^{2}=0.71, p=0.86$, r. four $χ^{2}=3.18, p=0.36$, r. five $χ^{2}=4.18, p=0.24$).

 Cheating: The differences in cheating across experimental conditions is also robust to the use of non-parametric tests, in three out five rounds (Kruskall Wallis, round one $χ^{2}=7.1, p=0.06$, r. two $χ^{2}=2.56, p=0.46$, r. three $χ^{2}=6.89, p=0.07$, r. four $χ^{2}=6.92, p=0.07$, r. five $χ^{2}=2.18, p=0.53$).

**Section III. Additional results.**

Table A1 Equilibrium properties of different treatments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Market Mean Price | Transaction Closed | Gross Profit | Net Sellers Profits |
|  | (1) | (2) | (3) | (4) |
| Commercial Practices | 2.735 | -0.048 | 1.492 | 1.508 |
|  | (4.290) | (0.030) | (2.312) | (2.182) |
| Formal Sanctions | 2.733 | -0.013 | 4.232 | -4.736\* |
|  | (3.696) | (0.036) | (2.955) | (2.544) |
| Informal Sanctions | 4.628 | -0.073\* | 1.304 | 1.149 |
|  | (3.612) | (0.040) | (2.291) | (2.282) |
| Regret | 2.000 | -0.048 | 0.533 | 0.502 |
|  | (3.749) | (0.034) | (2.036) | (1.988) |
| Constant | 43.667\*\*\* | 0.289\*\* | 7.610\*\* | 5.426 |
|  | (4.505) | (0.140) | (2.997) | (3.321) |
| Controls | Yes | Yes | Yes | Yes |
| Observations | 100 | 1,000 | 1,000 | 1,000 |
| R2 | 0.063 | 0.025 | 0.022 | 0.038 |

Note: \*p<0.1 \*\*p<0.05 \*\*\*p<0.01. We use clustered standard errors by session. (1) controls for country, Controls in columns (2), (3), and (4) includes round, gender, age, income, civil status, country, rounds, and education.

In column 1, there are the estimated treatment effects on the average price by round for sealed transaction. Differences are not statistically significant. Average price increases by 2.73 (t=0.64, p=0.531) when sellers have access to commercial practices, by 2.73 (t=0.74 p=0.469) in the treatment with formal sanction, by 4.62 (t= 1.28, p= 0.21) with informal sanction, and by 1.99 (t= 0.53, p= 0.60) with regret.

 In column 2, the outcome variable is the likelihood to close a transaction (i.e. the actual quantity exchanged). In all treatments the quantity is slightly lower than in the control condition, coherently with the higher prices reported in the previous paragraph, but the effects are not statistically significant. In equilibrium, the likelihood to close a transaction is slashed by 0.48 (t=-0.16, p= 0.127) when sellers have access to commercial practices, it decreases by -0.013 (t= -0.37, p= 0.71) in the treatment with formal sanctions, by -.073 (t= -1.82, p= 0.08) with informal sanctions, and by -.047 (t= -1.41, p= 0.175) with regret.

In column 3, where the outcome variable is the gross profits, i.e. the payoff from transactions, the profit increases on average by 1.49 (t= 0.65, p= 0.526) when sellers have access to commercial practices, by 4.23 (t= 1.43 p= 0.16) in the treatment with formal sanctions, by 1.30 (t= 0.57, p= 0.576) with informal sanctions, and by 0.53 (t= 0.26, p= 0.79) in the treatment with regret.

In column 4, the net profit increases on average by 1.50 (t= 0.69, p= 0.498) when sellers have access to commercial practices, but net profits are indeed lower than in control condition in the treatment with formal sanctions (-4.73, t= -1.86, p= 0.078). Profits are higher by 1.149 (t= 0.50, p= 0.620) in the treatment with informal sanctions, and by 0.502 (t= 0.25, p= 0.803) in the treatment with regret.