## Report on the paper

## Is a "Firm" a Firm?- A Stackelberg Experiment

## by A. Hildenbrand

This paper addresses two important and relevant points in experimental (strategic) decision making exemplified by so called "IO experiments." With good cause the author asks: How can we bring firms into the Lab? He questions the common procedure to model competitive decision situations between firms by purely individual decision making. Two serious problems arise following such a procedure: 1) Individual decision problems in the Lab usually are presented in a neutral frame, whereas IO decision problems are most often formulated within a non-neutral frame in which the agents are called firms etc. and the decision variables are prices and quantities. What an impact will have these formulations on actual decisions? 2) Decision making in most real world firms is a complicated process which is guides by organizational or contractual structures (as it is explicated by supporters of the "Theory of the Firm") which cannot be represented within a simple one-person decision problem.

The author tries to deal with these problems by reproducing and extending the experiments by Huck et al. (2001) on Stackelberg competition. Compared with the design of Huck et al. two additional treatments ("neutral" and "team") are conducted. One original treatment of Huck et al. (STACKRAND) is repeated with a different subject pool..

This paper may have its own merits by pointing out to some crucial points in the current state of IO experiments. However, there are some serious deficiencies in exposition and in the design as well:

- This piece is in quite a good shape, but it could be shortened considerably. The paper by Huck et al. (2001) is a good example how to present a shorter paper on the same topic. More concretely, I wonder why the Treatment STACKRAND (by Huck et al.) is dealt with extensively until it is dropped from page 11 on since its results differ significantly from the author's own Treatment (LOADED). Why not drop these discussions just from the start?
- I agree with the author that loaded formulations may generate difficult experimental results compared with neutral formulations. But is this only a conjecture or do there exist some fairly supported theories explaining this behavior. Moreover, using loaded formulations may end up in another dilemma: It will be extremely difficult to control which associations will arise in the subjects when

reading loaded instructions. How can we avoid biased results based on different associations?

3) Concerning the results on the Treatment TEAM, the author should rather cool down in deriving policy implications. It is difficult to see how this treatment can represent the "organizational aspects" into which firms' decision making usually is embedded. Participants in team experiments should have the opportunity to show more activities. For example, some parts of a firm's decision problem could be delegated to all team members or team decisions should be at least debated among team members (via chats between the team participants). I cannot see how this particular simplistic experimental design in Treatment TEAM could contribute to a better understanding of the organizational aspects of firms' decision making.

The author finds that subjects in TEAM are closer to profit maximization than participants in other treatments. One explanation of this behavior could go as follows: The two firm members in TEAM may feel to belong to an "in-group" whose members may show less inequity aversion with respect to "out-group" members. This explanation need not refer to profit maximizing motives at all.