Joseph Fluster Co-Editor, AER Dept. of Economics University of Panama

Dear Joseph:

I read the paper "XXX." It does not fall neatly into the accept or reject category, although perhaps the result is obvious enough when explained well to fall into the reject category. I've detailed my views on the substance of the paper, on the proof which I can't follow, and on the horrible exposition in the report.

[Remark: you should try to be polite in the anonymous report – although I am pretty harsh below. It isn't so essential in the cover letter. This is a minimal cover letter. Any comments you don't want the author to see should go here. Don't put anything that can identify you in the anonymous report.]

Regards,

David Levine

## Report on "XXX"

This paper attempts to show that in a reputational model it is possible for information to be sufficiently garbled that a long-run player facing a single opponent can do no better than without a reputation, while a long-run player facing enough opponents can do as well as with perfect information. The paper is horribly and tediously written, about which more below. The basic idea ought to be easy enough to show (provided I am guessing correctly about some unstated assumptions of the model): with lots of opponents drawing independently from the same distribution, each able to observe the draw of the other short-run players, the amount of informational imperfection due do garbling can essentially be eliminated due to the law of large numbers: by observing the entire distribution of y's it ought to be possible to infer reliably what the long-run player did, while of course with enough garbling, and a single short-run player the garbling of information makes it very costly for the long-run player to develop a reputation.

I think that this is a clever and interesting point, conceivably worthy of a clear well written note in the *AER*. I certainly do not think it deserves a huge overblown introduction and conclusion indicating how all conclusions about reputation in IO are turned on their head.

My main reservation about the paper as it stands now, is that while I think that the main result is probably true, I do not understand the proposed proof. A key element of the proof is Lemma A.1 which is proven in a "supplement." Here the first step of the inductive proof begins with the observation that the rate at which the likelihood ratio drops is bounded below by the probability the actual mixed strategy plays  $a^+$ . This is certainly true if  $a^+$  is observed, but I do not see why it should be true for every realization of y, which is what is needed.

As to the exposition, it is hard to give detailed advice about an exposition that is flawed in so many ways. Basically the author needs to take some time to think about what is important and what is not. As it stands assumptions, discussion, theorems and so forth are jumbled together in a hopelessly confusing way. A short, to the point, introduction should be followed by a succinct but complete description of the stage game, followed by a succinct but complete description of the dynamic setting and equilibrium. Less attention should be paid to rationalizing specialized assumptions, and more attention should be paid to explaining what the assumptions are. A statement and hopefully proof of the main theorem would follow, finishing with a concluding section outlining in less detail some of the *more important and significant* applications.

## Some smaller comments.

The statement that reputation improves the quality of information seems highly misleading: it seems that the increased number of opponents improves the quality of the information.

In what sense is N the frequency of transactions? this would seem to be d. The notation  $d_1, d_2$  seems redundant? Why not just say that d has two parts.

p. 10 repeated transaction model

(1) what is q?

(2) there are implicitly  $y_n$ 's for different agents: are these drawn independently? who gets to see them? There is a statement that seems to indicate that the draw's are independent, and I do not see how the many agents can help if only agent *n* gets to see  $y_n$ , so I assume everyone see's  $y_n$ . This ought to be made explicit and discussed.

p. 12 "In an isolated transaction..." I have no idea what this means. Is 4.1 an assumption, a definition, a theorem or what? 4.2 is equally confusing. Make a clear statement of what is assumed about the one shot game, and put it at the beginning of the paper

Abstract: If and only if future streams of returns are evaluated using a fixed discount factor...Surely even if the discount factor varied over time the result would remain true, so I'm not sure what this is supposed to mean.