

Referee Report on:

"On the effects of selective below-cost pricing in a vertical differentiation model"

The author analyses the effects of predation in a vertical differentiation model, where the incumbent faces the entry of a low-quality firm. There is a continuum of consumers indexed by $\theta \in [0,1]$. There is two firms: H and L. There is two period, 1 and 2 in which firms play the following game. First, firm L sets a uniform price and then firm H decides to price aggressively (predation) or to accommodate firm L (duopoly).

He shows that the entrant may adopt an aggressive attitude to make predation unprofitable for the incumbent.

First, I apologize for not reading footnote 5 in my first review.

Main Comments

1. *Reply to author's reply to Main comment 1: Entry Commitment.* The author's reply is correct, but I think that he does not write correctly the timing of the game in the paper, which is confusing. He says:

The timing of the game is the following. At time 0 firm L decides whether to enter the market or stay out. There are no entrance costs. If firm L enters, firms compete for two periods, period 1 and period 2. At the end of period 1 firm L leaves the market if it obtains non-positive profits, while firm H has no such financial constraint⁴. In period 2, firms compete if firm L is still in the market, otherwise firm H acts as a monopolist.

This explains my first comments.

2. Firm L only prices aggressively for avoiding being brought down by firm H (predation). This is very restrictive and unsatisfactory. Moreover this could be an error by the author because it could be profitable by firm L because firm L prices first and it is possible that $c_L < c_H$.

Respect to this point the author says (page 8):

Note that when the threat of predation is absent, there is no need for a fight-to-survive strategy, and all the equilibrium prices would be higher.

I am not so sure about it.

3. A new parameter “ b ” appears in equation (17) but the author does not define it, what is b ?
4. The author assumes that the quality costs functions are convex. However, he only dedicates a paragraph to developing and explaining the consequences of this assumption. Moreover, throughout the paper I have the feeling that the costs of improvement quality are constant. This is confusing because the results obtained from convexity are lightly explained.

Other Comment

1. The author repeats equations (1) and (3). I think that it is unnecessary.
2. In page 6, the author says:

firm H has two possibilities: on one hand it can price aggressively, in order to induce firm L' exit at the end of the period; on the other hand, it can maximize profits in period 1.

I think that firm H looks for maximizing profit, so his second option is *accommodating firm L*.

3. Author refers to v as the size of the market. It is not correct because the size of the market is one. Notice that says that $\theta \in [0,1]$. Moreover, v measures the consumers' basic satisfaction.

Overall Evaluation

The topic of the paper is interesting but I am no convincing that the analysis is correct. Moreover, the paper is badly structured and badly written. Therefore, I decide to reject this paper for being published on *E-conomics*.