Referee report on "Endogenous unrestricted locations in markets with network effects"

Summary

This paper provides an analysis of an Hotelling model with network effects and extends two results of the literature by allowing firms to locate outside the consumer segment.

The first part of the paper extends the analysis of location choice by Serfes and Zacharias (2012). When the (quadratic) consumer transportation cost is low, both firms have an incentive to locate outside the market segment. When it is in a middle range, both firms locate inside the market segment, while only one firm operates in the market and serves consumers when it is large (tipping equilibrium).

The second part of the paper extends the analysis of penetration pricing strategy in a market with network effects by Gabszewicz and Wauthy (2012). The research question is the following: Can an entrant overcome network effects and capture a positive share of demand in a market where two incumbent firms set prices as in the first part of the paper? The author confirms the intuitive results that such entry is sustainable only when network effects are small.

Main issue:

The motivation of the paper is not clear. This raises concerns regarding the contribution of the paper with respect to the literature, as well as its economic sense. The author mentions the example of night clubs but does not explicitly explain why this is a good example for the research questions tackled here, nor why this analysis or the results are of interest. It also remains unclear what are the novel results with respect to the literature that are driven by the unconstrained location choice.

The author does not explain why he chooses to extend the two papers cited above, and what is the relationship between both research questions. The author should work on finding a precise motivation and research question and try to tackle this issue, instead of investigating (apparently) unrelated problems. If the author's main interest lies in the penetration pricing strategy with network effects and the first part of the paper simply is a way to obtain the equilibrium before entry, then this should be put forward.

Minor points:

The paper is too often unclear and needs some editing in order to match academic standards.

First, the writing is sometimes unclear. An example is that of Lemma 1 where the author states that firms' profit is U-shaped, but not in which variable. Other examples can be found in the text ("the fact that accommodates" page 1, "the ex-ante product space (...) is clearly lower" page 3, etc).

Second, the author should number propositions and lemmas accordingly to their category, and not across categories. Proposition 2 (respectively, 4) should be Proposition 1 (resp., 2) and Lemma 3 should be Lemma 2.

Finally, the literature should be updated and working paper versions of Serfes and Zacharias (2012) do not need to be cited here — the author mentions them when referring to a proof which is apparently also available in the published version.