

Referee Report

”Strategic Behavior between a Bank and a Microfinance Institution: The Role of Psychological Gap and Education Level”

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The authors apply a Hotelling-type model of horizontal product differentiation to analyze duopolistic competition between a bank and a microfinance institution. In particular, they explore the effects of psychological distance and consumer education on the lending rate equilibrium, and on the associated distribution of market shares between the two competing lenders.

This manuscript focuses on an interesting issue. In particular, the authors are correct in pointing out that an analysis focusing on the implications of competition between banks and microfinance institutions could provide a welcome addition to the literature.

Below I express my main comments regarding this study.

Main Comments

1. The institution-specific psychological distance (captured by σ_b and σ_i) is introduced in a way which makes the applied Hotelling-type model formally isomorphic to a conventional Hotelling model with the minor modification of institution-specific reservation values associated with the varieties offered by the rivals. From an analytical perspective this feature seems to offer no significant innovation. Furthermore, the study offers a very weak discussion regarding the interpretation of the psychological distance as it essentially only says that psychological distance “refers to the level of distrust between the lender and the client”. It seems hard to detect any difference between psychological distance and conventional horizontal product differentiation. Further, one could ask: What is the root of the distrust in light of the fact that the consumers in this model have no customer relationship with any of the two credit institutions?

2. Increased education of a consumer makes it more likely that the consumer prefers the bank. Formally, education is introduced into the model in a way which is analogous to a switching cost model where the bank has inherited customer relationships with all the consumers. Furthermore, the model is formally constructed to capture a configuration where all the consumers have a homogeneous level of education, which formally operates as if all the consumers face the same switching cost if they select the microfinance institution. This feature is directly seen in the equilibrium lending rates (10) and (11).

Overall, in the present application it seems hard to justify that all consumers have the same education. If consumers have differentiated education this model leads to a two-dimensional model of horizontal product differentiation. However, in the present version of the model the authors do not at all discuss how a_e is distributed. This is a severe shortcoming given the objectives of the study.

3. This manuscript is not finalized to match the standard of a publishable article. Let me give a selection (not a complete list) of issues in support of such a view.

- p 1: The introduction presents a set of studies which have applied Hotelling or Salop models to analyze bank competition. This selection has not been able to extract the influential studies in this respect, but it seems to reflect a fairly arbitrary selection of studies.

p. 1: The authors introduce their study as a two-stage analysis with the decisions regarding location as the commitment determining the boundary condition for the stage of lending rate competition. The study is not implemented to match such an objective.

p 2, lines 10 – 12: The author state “...but rather to start from Hotelling’s principle of maximal differentiation in order to analyze the sharing of the market between two potential vendors”. What does this mean? At least, this is not a characterization of the analysis undertaken.

p. 3, 2 lines above (4): (4) and (5) characterize the demand, not the market power.

p. 4, lines 1-2 in Section 3: The authors have not presented and discussed the assumptions needed in order to facilitate the conclusion that $0 \leq x_m \leq 1$.

Overall, I do not consider this study to be sufficiently mature to meet the standards of an ambitious journal in Economics, neither in terms of analytical novelty nor in terms of significant economic interpretations. I recommend for the authors to discuss the fundamental differences between a bank and a microfinance institution, and to design the model to capture some dimension of those differences in a more ambitious way.