REPORT ON SATOH AND TANAKA: "RELATIVE PROFIT MAXIMIZATION AND BERTRAND EQUILIBRIUM WITH CONVEX COST FUNCTIONS"

SUMMARY

The paper derives pure strategy Bertrand equilibria in a duopoly with convex cost functions, a general downward-sloaping demand, and firms that care about absolute and relative profits. The paper generalizes Dastidar (1995) and Satoh and Tanaka (2013). The paper shows that there is a range of Bertrand equilibrium prices, which is smaller than the range of Bertrand equilibrium prices when firms only care about absolute profits. The range is decreasing in the weight firms attach to the relative profit component in their objective function. The analysis is correct and the result is interesting, potentially important, and worth publishing.

MAIN COMMENT

My main concern with the paper is that it doesn't make much of an effort not to leave the reader with the question of "So what?" I would like to see more discussion of the Economics implied by both the assumptions and the results in the paper. I would like to know why I should care. For example, the authors give examples for why individuals sometimes care about relative utility. But why do firms care about relative profits? How frequent is this phenomenon? Are there good reasons why all firms in a given industry should care equally about the relative profit component? What if they do not? What is the economic intuition for the shrinking of the range of equilibrium prices? Is it worth mentioning that the equilibrium price associated with the highest industry profits is lower with than without the relative profit component, but the equilibrium price associated with the lowest industry profits is not? Is it worth mentioning why that is so?

MINOR POINTS

- The proofs of Lemma 1, 2 and 3 should be in an appendix.
- The paper needs to be proof-read.

REFERENCES

[1] Dastidar, K.G., 1995. On the existence of pure strategy Bertrand equilibrium. Economic Theory 5, 19–32.
[2] Satoh, A., Tanaka, Y., 2013. Relative profit maximization and Bertrand equilibrium with quadratic cost functions. Economics and Business Letters 2, 134-139.