

Referee Report: - Economics Open Access e-journal

MS-2017-89 "Price competition and limited attention"

Summary of the paper:

Hotelling linear city model of price competition is extended. Consumers may have limited attention. Equilibrium profit depends on the exogenous proportion of consumers with full attention.

Main comments:

The introduction is pretty poor. "The aim of this paper is to develop a basic theoretical model of a market on which

consumers have preferences justified by decision theory" strikes me as if the author claims that nobody ever before this author had ever thought of making IO compatible with decision theory. Of course, nothing could be more wrong. Since the 1950s at least the field of IO and most other fields have worried about individual decision-making and how to aggregate these decisions to find how markets and institutions operates or should operate. What happens is that decision theory itself is evolving. But this evolution does not mean that the past theories are wrong. Most old theories still survive as the best ones in some specific contexts. The fact we discover some behavioral effect does not mean that one must always incorporate this particular type of behavioral effect into all sorts of models.

The introduction could be entirely rewritten from scratch. As it is, the introduction is simply a disconnected collection of facts and personal opinions. It does not describe the contribution as it should, in a clear and precise way, and it is not a particularly good review of the literature. It fails in motivating the reader to continue reading.

I could not find proofs for the many results. While formal proofs should not be hard for this paper, every paper has complete proofs for all new results and references for the proofs of results that are not original.

The model description could improve. It would not hurt to write that "consumers preferences are represented by the following utility function". Also "Firms have no costs and maximize profit choosing own price" could be improved. I suppose the author meant that each firm maximizes its own

profit. And each firm can produce as many units as necessary with no costs. But I suppose my main complain is that the paper mixes the model's description with the analysis. Right after saying that firms maximize profit the paper already has the expressions for the profits. There is no solution concept. There is no calculation of actions. I guess actions are chosen simultaneous. I guess actions are the prices, but those are guesses. The paper never says so.

It is unclear why the profits are the way they are. What is the rationale of the formulas? The ideal presentation should have a discussion about prices and equilibrium first. Only after that we would see the formulas for the equilibrium profits, with the corresponding discussion in words.

Contrary to some other disciplines, minimizing the number of pages is not a good idea when writing a paper in economics. While repetitions should be avoided, structuring well the paper helps a lot the reader. Incomprehensible papers will be poorly cited.

What are the costs of "educating" consumers in this model? Without education costs, it is dangerous, if not entirely wrong, to talk about welfare consequences of educating consumers. If the model does not have variables that measures the effort of each firm in educating consumers, then it probably best to avoid talking about "educating consumers". What the comparative statics does is compare two static equilibria, one for each game, where games differ only by a parameter that measures the attention of consumers (the percentage of consumers with full attention). Of course, a possibility would be to endogenize the choices of attention of consumers; each consumer would face a problem of selecting its optimal level of attention. Firms would anticipate the aggregate decisions of consumers. But this would be a major change in the model; ie, another paper.

Firms choose prices only. If firms have other choices, then the paper is really poorly written. But if firms choose only prices, then I am not sure the following sentence in the abstract is correct for this paper, "Education and obfuscation marketing strategies are studied."

Potentially interesting results are burried deep inside a poorly written draft. One that should not even be a WP, let alone a paper. Much more work is necessary in this potentially interesting research project.

Minor comments:

I miss some classical references about behavioral economics and its fathers. Folks like Daniel Kahneman, Charles Plott, Herbert Simon, Vernon

Smith, Simon, Richard Thaler, and Amos Tversky. On the other extreme, the paper contains some citations of dubious merits, very recent, untested papers. Even more importantly, I miss the citation to Hotelling's original paper. Very selective journals in economics will not publish papers with very poor citations.

"...another pays attention to goods 2." is probably "...another half pays attention to goods 2."

English must improve. For instance, I am not sure about the meaning of "...describe several impacts of limited attention on...". Probably the author tried to say that "...describe several consequences of limited attention on...". I recommend using a professional English editor of high quality. Fixing the spelling is not enough, not even close.