

Edward Hunter CHRISTIE
Research Partner, Pan-European Institute, Turku School of Economics
Senior Economic Adviser, Community of European Railway and Infrastructure Companies

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Referee report on the dissertation
“Boundedly Rational Consumers and Complex Pricing Schemes”
submitted by Natalia Shestakova

General assessment

The dissertation contains a highly useful combination of well-executed experimental microeconomic research and of relevant explorations of implications for pricing schemes and consumer behaviour. This work has direct relevance for both commercial and regulatory purposes. It warrants a dissertation defence and the subsequent award of a doctoral degree.

I also hope that the candidate will be able and willing to pursue further activities in this (general) direction.

A brief comment with respect to policy applications which may interest the candidate: in Papers 1 and 2 the general approach of the European Commission is briefly mentioned. Of course political documents reflect what institutions feel they can achieve. It may be the case that (some) Commission officials realise (to some extent) how consumers actually behave – but that deeper intervention into how corporations may define pricing schemes is seen as too difficult (politically, legally, technically etc.) If the candidate is interested in this type of question then the best way forward is to talk with the relevant officials directly.

Paper 1: “Pricing Scheme Choice: How Process Affects Outcome”

The heart of the paper is the attempt to find out which of the comparative vs. evaluative approaches, if any, is applied by consumers of different types (high-demand vs. low-demand) in different cases (they know their demand or they do not). The extent and type of sub-optimal consumer decisions that arise are assessed in order to respond to those questions. From that perspective the experimental framework is carefully designed so as to allow meaningful conclusions and the results are clearly spelt out. The only criticism I would bring forth is that the crucial Section 3.2 should be written in starker terms, e.g. by listing numbered hypotheses that match the results that are listed in Section 5. This is mostly an issue of presentation in order to make the paper easier to read. A (very brief) clarification about why one needs to test high-demand versus low-demand consumers would also be useful – this point is not immediately obvious from the text ex ante (i.e. before the results are presented). This being said, the approach used by the candidate leads to a well-focused research paper which should be accepted as it stands for this dissertation.

A more general point – perhaps to be mentioned somewhere in the text or for the candidate to bear in mind for future work – is the extent to which carefully-designed structured interviews of subjects (e.g. the same subjects, after the experiment; or another group of individuals) could help to gain some corroborative insights into the thought processes involved. For further (complementary) research, another approach would be the ‘focus group’ approach, as this is likely to be what commercial entities actually use to help design their pricing schemes.

(Verifying that this is indeed the case and how this is done could be achieved by interviewing marketing executives from the relevant industries.)

Paper 2: “Understanding Consumers’ Choice of Pricing Schemes”

Paper 2 focuses on three possible heuristics of consumer choice, the “expected demand heuristic”, the “minimum-maximum heuristic”, and the “match heuristic”, in a context of uncertain demand and taking into consideration different levels of risk aversion. The paper starts with a theoretical section that shows the outcomes from applying these heuristics as compared to optimal choice. An experimental approach is then presented. The candidate clearly made significant efforts in the design of the experimental part and this allows for a large number of insightful research results.

Only two minor comments come to mind. The first is that the abstract should be clear in naming the three heuristic approaches that are considered and also briefly (one line) mention the theoretical part before stating the main conclusions of the paper. The second is that the conclusions could be very slightly extended by underscoring some of the practical implications of the results.

Paper 3: “Price-Discrimination with Boundedly Rational Consumers: When Do Dominated Offers Pay Off?”

The dissertation is rounded off with a theoretical contribution. In particular, the candidate recalls the classical problem of the price-discriminating monopolist in the presence of two types of consumers, and then develops an alternative solution where consumers have bounded rationality in the sense of considering only a sub-set of available bundles. The candidate develops two procedures. The first, C(1), refers to the assumption that the consumer can consider only one bundle, and accepts it or rejects it depending on whether its net surplus is positive, respectively negative. The second, C(2), allows for consumers to compare two bundles, and chooses the one with the higher net surplus if the latter is positive, or chooses none otherwise.

What should be concluded from the results could be perhaps better developed. Of course, in the context of the candidate’s dissertation, it is natural to refer to Paper 2 for corroboration. In terms of a stand-alone paper however – that is, if the candidate is to submit Paper 3 for publication – then the concluding remarks section would require some amendments. The key conclusions are already stated in the last paragraph and on that basis the candidate may choose to slightly expand. For the case of mobile phone subscriptions, it is an observed behaviour of mobile phone shop sales staff that they will highlight different sub-groups of subscription packages to a customer after having asked a few standardised questions.

Beyond these essentially presentational remarks Paper 3 also comes out as a solid paper to be accepted as it stands along with Papers 1 and 2.