Referee's Report on MS 3323

Oligopoly Price Discrimination, Competitive Pressure and Total Output

This paper should be published. It is a competent extension of results in a small but fairly well established literature on the topic of whether, in particular, 3<sup>rd</sup> degree price discrimination is or is not output-increasing overall. The author has already contributed to this literature, including with a well known joint-authored 2010 AER paper.

Having made my recommendation, however, I will say that I find this literature uncompelling. I think Pigou and Robinson would be startled to learn that, ninety years or more after their clever little puzzles with concave vs convex demand curves, economists were still playing games to fine-tune the models without lifting their eyes to the real world around them and asking if there is any empirical significance to the results.

The essential feature of the model is that markets are truly separated, meaning no links between customer demands across the markets (no cross elasticities). You could wipe out one demand curve, and the other would be unchanged.

But in this setting, the counterfactual that drives the analysis -- 'uniform pricing' -- is almost totally empirically implausible. Why ever would firms be constrained to, say, set the same price for airline tickets for one city-pair journey as for another? Or set the same retail prices in one urban market as another? So who cares whether outputs in the natural (but misnamed) 'price discrimination' case total to a larger or smaller number than in the totally hypothetical uniform pricing case?

(It is true that some national retailers, such as Amazon, do use at least f.o.b uniform pricing, in most instances, at least within a country. But they are constrained by transaction cost and other considerations which do not appear in the models under review here).

The really interesting case — theoretically and empirically — is what Pigou would call 2<sup>nd</sup> degree price discrimination, whereby firms (monopolists or oligopolists) figure out how to discriminate between customers in the <u>same</u> market, based on their perceived willingness to pay. For example, airlines cleverly sort high-value business travellers from low-value leisure travellers *on the same city-pair route* by raising airfares for a given flight as the day of travel approaches. Some of the papers on this situation are cited by the author, but not with any sense of the difficulty they pose for a focus solely on so-called 3<sup>rd</sup> degree PD, after Joan Robinson.