

MULTI-PRODUCT SUPPLY FUNCTION EQUILIBRIA

Discussion

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What should we take away?

- 1 Very clear and precise theoretical analysis of multi-product (multiunit) auctions.
- 2 Useful for the design of wholesale power markets.
- 3 Extension of the Klemperer Meyer framework: their methodology extends to the multidimensional case (products, uncertainties, bundling, private information)
- 4 Generalization of the Klemperer Meyer results: the ODE characterization holds in duopolistic separate markets or non-separated but with linear structures
- 5 Beyond these settings, the Bayesian SF equilibrium is characterized by a general system of PDE

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- Klemperer-Meyer compare their ODE with respect to Cournot/Bertrand outcomes.
- * Doing the same with your fundamental implicit PDE (Eq. (15) in the text)? Using for instance results in Johnson and Myatt (Rand JE, 2006) & Cabral and Villas-Boas (Mgmt Sc, 2005).

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Questions

- The "Bidding Format" assumption seems important for the result to hold.
 - However due to convexity of costs, could we have any "chance" to see negative slope for cross price effects i.e.
 $\partial s_{k,i}(p_i, p_{-i}) / \partial p_{-i} < 0$?
 - * Realistic bidding formats seem to be more constrained so that $s_{k,i}$ is explicitly demanded by the market operator to be a function of (p_i) *only*, so BF assumption would be unnecessary at the equilibrium.
- Bundling and singularity of A : why the bundling weights should be different for each firms (bidders)? They are determined by the market operator (auctioneer).
- What about negative prices that are observed on wholesale power markets? How are they dealt with in the model?

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