Workshop on Competition and Strategies in the Retailing Industry

Comments on

Spatial Competition in the French supermarket Industry

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To sum up the paper…

- Objective: analysis of the competition between large grocery stores in a metropolitan area of south of France

- Tool: structural model of demand and supply introducing the geographical dimension of the retail market (through distance measure)

> 1) two-step procedure in order to model the store choice of consumers: - the consumer chooses a food category in a large grocery store (multivariate probit model)
>
> - the consumer chooses the store (mixed logit model)
>
> 2) Non nested tests between several supply models (Bertrand-Nash competition, horizontal collusion, spatial collusion)
>
> 3) Counterfactual experiments (new store entries)

To sum up the paper…

- Results:

  - on consumers' behavior: disutility for price, disutility for distance reduced when the number of cars in the household increases, positive value for surface with a large heterogeneity

  - on retailers' competition: store level pricing decision

  - the more the number of rivals nearby increases, the lower the price-cost margin of stores is

  - new store entry is beneficial to consumers because it allows to reduce prices

These results suggest that relaxing restrictions on regulation of new store entries could be benefit according to the consumer point of view.

Comments

■ <u>Data</u>:

    - some descriptive statistics on frequency of purchase by retailers (comparison of this metropolitan area and the national french market)

■ <u>Price index</u>:

    - 91 NB and FP products: market shares of these products in each categories?

    - why not to weight price index with market shares of products within categories? (information on TNS WordPanel)

    - uniform pricing assumption on Hard Discounters (may be not true for Fruits and Vegetables, and Meat)

    - some descriptive statistics of price index by food categories and fascias

Comments

- <u>Demand model</u>:

  - modeling only the primary shopping destination is quite restrictive and does not permit some complementarities in consumers' choices. You should mention that this assumption underestimates elasticities and overestimates margins.

  - interaction price with age? (just one age category is significant) I suggest instead: random coefficient (normal or log normal) or interaction with household income or socio-economic groups

  - interaction between surface and type of supermarkets could be interesting

- <u>Supply model</u>:

  - I would test the joint profit maximization of same fascias for Hard Discounters

Comments

- Price endogeneity:

    - fascia fixed effects: some decisions (promotions, advertising, pricing) could vary between fascias for independents (Super U, Intermarche, Leclerc or some Hard discounters).
Some solutions: instruments variables (cost variables or Nevo's intruments)
    store fixed effects (the result that the store level pricing model is the best one is consistent with this suggestion) but they do not allow to implement counterfactual experiment (regression of store fixed effects on store characteristics to estimate the store fixed effect of the new store)

    - random coefficient for price: you argue that the standard deviation is quite low showing that the price endogeneity problem is avoided. But 6.5% of the price distribution have positive values (problem of positive own price elasticities and negative margins). Chintagunta, Dube and Goh (2005) obtain 7.6% of positive values without taking into account price endogeneity and only 0.006% doing it.