

Assortment Choice and Market Power under Uniform Pricing

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Discussion by
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Summary

- The paper investigates whether food supermarkets strategically use product assortment to respond to local market conditions when prices are set at a national level.
- Relies on an extensive store-level data (grocery purchases from one retail group in March 2018 & store-level turnover and profit information for all stores in Norway in years 2010-2021).
- Estimates structural demand and supply model of store competition and conducts a few counterfactual simulations.
- Finds that uniform assortment would benefit most consumers, as compared to current situation with limited assortment of products in some areas.
- Additional counterfactuals provide insights into the implications of different policies on local assortment and consumer welfare.

Questions for clarification

- The main question is whether supermarket chains exercise market power by limiting product assortment and providing more expensive products in areas with less competition → There is no discussion and comparison of profits for different scenarios. The analysis is focused on demand side and consumer welfare.
- Demand model:
 3. In demand model you consider 30km radius from the centroid of the basic unit to define choice set. Hence, by assumption all consumers in basic unit are in the centroid. Any robustness tests?
 4. Multinomial logit model is estimated but some stores are closer substitutes than others. What are the price elasticities? Are they reasonable?
 3. Prices and variety data are for a single retail group? How other retail groups and chains are considered in the discrete choice model if there is no information on prices and variety?
 4. Different types of chain belong to one retail group: convenience store, discount store and supermarket and compete in the model?
 5. Revenues of all types of products are considered to determine market shares of shops in defined 30km radius markets. They are influenced by prices of composite good, which uses only selected products. What share of revenues is accounted for by products included in composite good? Can there be large variation across shops?

Questions for clarification

- You mention exploring how local market power affects assortment decisions based on a merger in Norwegian grocery industry in 2015, but this is not done so far it seems.`
- Why the composite good price is simple average of prices of 9 categories, and not weighted by share of expenditure on category as the category-level price are?
- Table 4 reports SPU price and average store price/variety regressions.
 - Why SKU price regression includes chain-time-SKU fixed effects with 5427 observations? What is the time dimension in the data if it is from March 2018 only?
 - Average store price corresponds to composite good price? Only chain fixed effects are included with 1510 observations (and similar for average store variety).
 - The results of regressions shown in Table 4 are not discussed in detail.

Questions for clarification

- The fixed proportion of income which is spent on groceries φ is derived based on info from Statistics Norway. Can it have different values for regions with different income levels? You suggest this is the case.
- You say that “The spatial model employed in this study overcomes this limitation by defining markets based on consumers and their choice sets rather than solely relying on firm locations.” But the assumptions on 30km radius, location of consumers and share of expenditure on groceries φ have an impact on HHI.
- In the maximization problem given by equation (10) chains which belong to the same retail group maximize profits independently?
- Why is there maximization with respect to price, if national price is set in the first stage, and hence store prices depend on variety?
- Technically, Equation (13) could be estimated after plugging in Equation (15) in it.
- The demand and supply side instruments are not discussed in detail.
- Location and rental cost as determinant of costs? Number of employees per area as a cost shifter?
- Concluding section is missing.

Typos

- Page 15, last paragraph, should be $\{\alpha, \gamma, \beta\}$