

**Comments on
« Prices and Competition:
Evidence from a Social Program »**

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The issues

- In Uruguay, the poorest people benefit from social benefits consisting of funds for buying first need products in a number of shops selected for participating in this (TUS) program.
- Several questions arise:
 - Do people pay higher prices in those shops than they would for buying the same products in non-participating shops?
 - Do TUS beneficiaries pay higher prices than they would in the closest non-participating store?

The issue

- This issue is quite important and is quite general.
- For example, in France:
 - APL (Aide Personnalisée au Logement): a social subsidy aimed at helping poor people paying their housing rent;
 - Various laws providing tax reductions for people investing in newly built housing for rental.

These two programs are known to induce rents/housing prices increases...

The issues

- Following a survey conducted among « TUS households », the issue possible discrimination arises :

Do TUS beneficiaries pay higher prices than other non-TUS customers in participating stores?

The TUS program

- Cash transfer : US\$ 30 to US\$ 160, around 8.5% of household income on average;
- Between 65,000 and almost 90,000 poor households involved in the program
- Use is limited to buying first need products (food, non-alcoholic beverages and personal care items) in about 800 participating (small) shops
- As from October 2013, big retailers could enter the program but they apparently did not.

The data

First dataset : NON PARTICIPATING STORES

- Daily prices
- 150 products grouped in 50 product categories,
- April 2007 to June 2014
- 333 supermarkets (NO SMALL STORES HERE)

Second dataset : PARTICIPATING STORES

- Monthly average prices from monthly households transactions with the TUS debit card
- 105 products grouped in 29 categories,
- June 2012 to May 2014. In this dataset,
- 800 (?) stores that participate in the program,

The data

The econometric datasets :

- The two datasets are stacked for answering question 1
- The two datasets are matched for answering question 2
- The second dataset is restricted for answering question 3

- Same 89 (common) products?
- December 2012 to May 2014 (why not June?)

The data

Descriptive statistics

Q1 : Average price levels are rather similar between large shops (supermarkets, NP) and smaller (Participating) shops

Q2 : What about price dispersion?

The econometric models and results

Issue 1 : Do TUS stores charge higher prices, on average?

$$p_{islt} = \alpha + \alpha_i + \gamma_l + \lambda_t + \beta_0 D_s + \beta_1 BPH_{lt} D_s + \beta_2 S_{st}^P D_s + \gamma X_{slt} + \varepsilon_{islt} \quad (1)$$

D_s = TUS participation

BPH = eligibility intensity in the population

SP = number of TUS stores within 1 km

Results :

- Results are mixed. Some coefficients related to the program (D) are significant, others are not
- Their magnitude is quite low, especially when accounting for the interactions with other variables

The econometric models and results

Q1 : participating shops are quite different from non participating shops (supermarkets) in terms of size.

=> The coefficients of variables accounting for TUS participation may also capture size effects.

Do you assume the dummy for belonging to retailing chains capture this? The corresponding coefficient is positive.

Q2 : Does SN (within 1 km) account for competition with non TUS stores ?

Q3 : Why competitors within 1 km ? OK for large cities though...

The econometric models and results

Issue 2 : Do TUS participants pay higher prices than they would in the closest non participating stores?

$$p_{i,s,t}^P = \alpha + \eta_s + \beta p_{i,s,t}^N + \rho Dist_{s,t} + \gamma BPH_{lt} + \varphi A_{lt} + \delta S_{st}^P + \tau C_s + \varepsilon_{i,s,t} \quad (2)$$

Q1 : your results show that β is close to 1. Because NP stores are supermarkets, while TUS stores are small stores, we would expect β to be significantly smaller than 1.

However, this is consistent with the descriptive statistics

The econometric models and results

Q2 : We may expect the coefficient of distance in this regression to be positive. It is most often negative in your results. How should we interpret this?

Q3 : Your results table says you included store fixed effects together with variables which may be also not (much) varying over time (e.g. number of cashiers of the store)

Q4 : Why not time fixed effects?

The econometric models and results

Issue 3 : Are TUS participants discriminated, i.e. pay higher prices than other customers in TUS stores?

$$p_{i,s,l,t}^P = \alpha + \alpha_i + \eta_s + \beta p_{i,s,l,t}^N + \varepsilon_{i,s,l,t}$$

Q1 : You mention that for a subset of participating stores, you have information allowing to split their customers into TUS households and « non-TUS » households.

Why do you still compare the prices of TUS stores with those of NP stores ? Maybe a typo...

Q2 : why not time fixed effects ?

Conclusion

« Mais on dit qu'aux auteurs la critique est utile.
La critique est aisée, et l'art est difficile. »

Philippe Destouches
in « *le Glorieux* », 1732