Nonlinear Pricing in Village Economies

Attanasio and Pastorino (2020), Econometrica

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Motivation

1. Research Question:

- While cash transfer program in Mexico, Progresa, does not alter the average unit price significantly, consistent with the previous literature
- It has substantially intensified the degree of quantity discounts
- How can one modify the standard nonlinear pricing model to explain the above empirical findings?
- 2. Suggestion: nonlinear pricing model with budget/subsistence constraint
 - Unlike the standard nonlinear pricing models, the authors allow consumers can differ not only in their taste, but also in their budget or, equivalently, subsistence constraint
 - From this modification, the model can incorporate environment for developing countries

Findings

- 1. Effect of nonlinear pricing on market participation
 - Nonlinear pricing gives bigger surplus to those consuming small quantities, mostly because of the higher degree of market participation that nonlinear pricing induces
 - Also, those of small quantities, consume above the first best level
- 2. Effect of cash transfer on unit price and consumption
 - Progresa transfer has strengthen the degree of price discrimination
 - Reduced form of the model, in which the size of quantity discounts depends on the hazard rate of the distribution of quantities purchased in a village, explains the change in price schedule above

Comments

1. Strengths:

- Unlike the previous literature about the effect of Progresa, the authors focus on the effect of Progresa on the price schedule
- By proving the equivalence between BC model and Jullien (2000)'s model, extend the standard model to more realistic environment
- 2. Possible future extension and improvement:
 - Other cases for cash transfer program, if data is available: it may be correct only for Progresa, or Mexico
 - Personally, it would have been better if there was more explanation about the intuition of the results of the model