Discussion of "Shopping, Demand Composition, and Equilibrium Prices"

by Lukas Nord

Thijs van Rens

University of Warwick

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Shopping, Demand Composition, and Equilibrium Prices

- Expenditure ineq $\neq$ consumption ineq

$$Ineq\left(X_{it}\right) = Ineq\left(P_{it}C_{it}\right) \neq Ineq\left(C_{it}\right)$$

  - Poor and rich households pay different prices (Aguiar and Hurst)
  - Matters for welfare (and other things)
- What determines prices? (This paper)
  - Equilibrium theory of price dispersion
  - Endogenise shopping effort
- Mechanism
  - Poor HHs search more (higher MU of consumption)
  - Retailers charge higher prices to rich HHs

The model (in words)

- Consumers
  - Optimal choice of shopping effort

$$\text{MDU of shopping} = \text{MU buying more stuff}$$

  - $s(x_i)$ = probability i observes two prices
  - $\bar{s}_j$ = average search effort for good j
- Retailers
  - Indifference between all posted prices

$$\underbrace{\text{Benefit higher revenue } p \uparrow}_{\text{depends on } 1-F_j(p)=P[\text{not underbid}]} = \underbrace{\text{Cost loss in sales } p \uparrow}_{\text{depends on } f_j(p)}$$

  - ODE in price distribution (boundary condition $\bar{p}_j$)
  - Closed-form solution $F_j(p) \Rightarrow$ 1st, 2nd, 3d moments

Results

- Consumption ineq 80 – 20%-tile lower due to
  - Price difference same products: 2% (direct effect)
  - Difference posted margins across products: 2.5% (GE effect)
- Additional implications
  - Cyclicality aggregate prices mostly due to markups
  - Redistributive policies less painful for rich

Discussion

- A beautiful paper
  - Important question, plausible results
  - Hard to find fault with the analysis!
- Comments
  - Testing the mechanism
  - Expenditure ineq $\neq$ consumption ineq $\neq$ welfare ineq

Testing the mechanism

Plausible mechanism! But is it true?

1. Shopping effort varies with expenditure/income ✓
   - Heterogeneity prices same products
   - Number of stores visited
2. Shopping effort affects posted prices

Testing the mechanism

Plausible mechanism! But is it true?

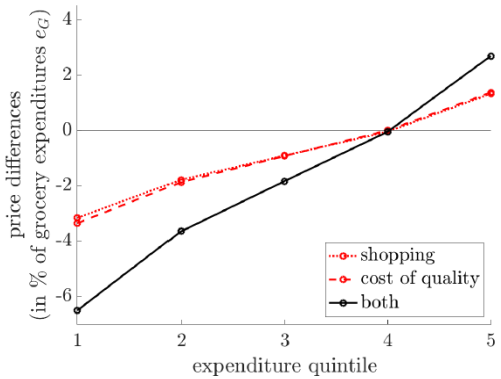
1. Shopping effort varies with expenditure/income ✓
2. Shopping effort affects posted prices ?
   - "Skewness test"
     - Skewness *posted* prices strictly increasing in effort
     - *"A price distribution consists of all transactions observed ..."*

       $\Rightarrow$ Mechanically skewed because of underbidding?
   - Model fit
     - Fit well the expenditure distribution (but: non-homothetic preferences)
     - *"The differences in skewness generate by the model can account for one third of the difference predicted by the (empirical) differences ... based on the model implied demand composition."* (p.28)

Welfare inequality

Expenditure ineq $\neq$ consumption ineq $\neq$ welfare ineq

- Disutility from search effort
  - *"The cost of higher prices is offset by reducing the disutility of effort to zero"* (p.35)
  - Depends on utility function? (envelope theorem)
- Cost of quality: prices differences across products
  - Different margins (lowers welfare ineq)
  - Different quality (optimal choice)



  - What identifies this decomposition under the model?

Minor comments

- Does it matter if correlation price dispersion with expenditures is driven by income or not?
  - Result clearly survives without control variables (Table 1)
  - Coefficient on log(expenditure) may very well be driven by variation income within broad categories.
- Do we really want to control for FEs in Table 1? Story is about composition! Do results survive if take out FEs?