Discussion of
Retail Competition and the Dynamics of
Consumer Demand for Tied Goods

A. Yesim Orhun

The University of Chicago, Graduate School of Business
Research Question

Observations:

- **Product**: One-way complementarity
- **Channel coordination**: Incentives not aligned (manufacturer vs. downstream)
- **Asymmetry of competition**: Internalization depends on the extent of market power
  - Manufacturer versus retailers
  - Yet another form of asymmetry across downstream firms within the same market

Aim: Calibrating the differences in incentives in razor/blade pricing of retailers/manufacturers by looking at differential quantity responses to a price change.

- Change in quantities in each channel and total in the long run; externality measurement
- Break down of changes: to competitor, to the outside good, switching between stores
Demand Model

The Structure

Estimated parameters of interest: $\alpha, \gamma, \lambda, \phi, c$

- Partial lock-in; choice set is dependent on state
- Choice of which store to accumulate inventory
- Heterogeneity
- $\phi$ incorporates market power of a store, drives price expectations, stock-out expectations and the decision of when/how much to purchase
  - $\phi$ independent of prices at stores or blade inventory
  - Estimated, corr. with other demand parameters
- Choice over package size: Some consumers stock up more than others, due to heterogeneity in $\alpha$ and $c$
  - No heterogenous storage costs
  - Disposable $>$ Mach3?
Demand Model - some thoughts

Switching

- Table of switches, how many for each type of switch. What is it mostly out of?
- If switch, \( u_{rj}(\rho, b, p_k) = \gamma_r - \alpha p_{rjk} + \lambda \rho b + \varepsilon_{rj} \)
  - A way to deal with blades left over from old technology.
- Higher stock of previous blades: more likely to switch.
  - Are any of the reasons that induce switching likely to be correlated with (potentially unobservable/misspecified) factors that result in high stock of blades?
  - Does the identity of blades matter in the magnitude of salvage value beyond price differences?

Switching Costs Beyond Expenditure?

\[ u_{rj}(\rho, b, p_k) = \gamma_r - \alpha p_{rjk} - \Delta_r + \sum(\text{left-over consumption value of } b_\rho) + \varepsilon_{rj} \]
Give metering another chance

**Metering**

Preliminary results:

- \( \text{Corr}(c_i, \gamma_{ir}) < 0 \) High usage, less blade utils
- \( \text{Corr}(\alpha_i, c_i) < 0 \) High usage, more sensitivity to price

- Investigate correlation of WTP for technology and usage
- Look at *marginal versus the average* consumer *that has chosen* the technology
- Investigate metering and lock-in
Looking into the Second Type of Asymmetry

**CALIBRATION**
- Second Asymmetry:
  - How does the incentive difference change with distribution of $\phi$ of a given store type? (separating "selection" of consumers)
  - If Costco has higher blade prices, how much less is the misalignment of Safeway's incentives with the manufacturer?

**PRICE DISCRIMINATION BEYOND METERING**
- Store visit probabilities determine market power for retailer
- Store visits correlate with consumer preference parameters
- Manufacturer can price discriminate: bulk in Costco
- Preference over bulk buying is incorporated already
- Measure quantity response to changing the price in different stores; identify the difference that is due to heterogeneity in WTP of consumers who shop at given stores more often.
- How much of bulk-selling at Costco is a "problem" inducing Safeway to distort prices more, versus a "tool"? Would be great to tradeoff benefits of price discrimination across stores with increased incentive misalignment.