Comments on “Dynamics of Consumer Demand for New Durable Goods”
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Motivation

How do consumer expectations of future price and quality changes affect demand?

Only highest value consumers purchase goods early on, others wait.

Short term price changes have little long-term consumption effects.

Why does this matter?

Static demand estimates give misleading results.

Cost of living indexes overestimate welfare gains from durable goods several years after introduction.

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Estimation

Paper uses (mainly) aggregate market-level data

▶ Nests BLP-style random coefficients logit model in a dynamic framework

▶ Important reduction of the state space due to “inclusive value sufficiency”: Consumers only care about how good the category is in the future

  ▶ Could be because of lots of OK options
  ▶ Could be because of one excellent option

Results:

▶ Substantial (and reasonable) differences from static model
▶ Market level data misses repeat purchases adding micro moment does a lot.
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Comments

Basic idea of paper is very general

- Broader data on consumer electronics industry?
- Some out of sample predictions?
  - Other camcorder data?
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Use Utility vs. purchase utility

- Model, estimation conflates idiosyncratic demand shocks, permanent utility
- Are many camcorders purchased due to temporary shocks, never used again?
If this were a development paper, what would the bibliography be?

▶ Dupas (2012): Short Run Subsidies and Long-Run Adoption of New Health Products...
  ▶ How do low early prices affect future demand for mosquito nets?

▶ Ashraf, Berry, Shapiro (2010): Can Higher Prices Stimulate Product Use?...
  ▶ Households offered one price for chlorine treatments, purchased at another - separates selection vs. price effects

▶ Cohen, Dupas, Schaner (2011): Price Subsidies, Diagnostic Tests, and Targeting of Malaria Treatment
  ▶ Households given 3 vouchers for cheap antimalarials—price subsequently returns to normal.
Dynamics Everywhere?

Common feature of most development demand interventions:

- New (to some people) goods
- Temporary price changes

Could the dynamics of demand (partially) explain other puzzling development results?

Miguel, Kremer (2007): The Illusion of Sustainability. Finds very high short term elasticity to increasing prices of deworming because households expect price to go back to zero.

General development result:

- Very high elasticity of demand for health products around $0
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Demand for Health
Why incorporate dynamic demand?

Randomized evaluations often differ from true policy changes on dynamic dimension

- Can use these techniques to estimate better counterfactuals
- Can design better policies to incorporate dynamics
  - Incorporate the fact that least health sensitive individuals buy mosquito nets last.

Key example: Technology adoption (dynamic demand for technology)

- Broad assumption: value of technology increases as adoption increases
- HYV crops (Foster, Rosenzweig 1996)
- Video conferencing (Ryan, Tucker 2011)
- Micronance (Banerjee, Chandrasekhar, Duflo, Jackson)

Currently no dynamic structural model of technology adoption in development (that I know of...), yet
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Dynamic Demand and Microenterprise growth

Why don’t small firms in developing countries expand faster?

▶ Lumpy investment often suggested as a factor for manufacturing.

▶ Not as clear for retail firms—why no expansion into new products?
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Dynamic demand maybe a key part of the story

- Short term deviations into new products maybe always unprofitable
  - Consumers don’t know store carries product
  - Consumers don’t know they like product
- Poor, credit constrained retailers unwilling to invest in short term discount pricing to generate long term profits