Problem Markets: The Demand Side

Joseph Farrell

CCP Conference, June 2014

Customer Choice

- Customer chooses the best deal available
  - In competition policy, usually just assumed
  - What else would customer do?!
    - Maybe even definitional
- Evolutionary/incentive pressure to improve/optimize deals…
- Theme: This can go systematically wrong
  - Problem markets result
  - Different from “standard” competition concerns

Mechanisms of failure

- “Behavioral” consumer choice
- Agency problems among parties that constitute a compound “customer”
- Problems observing/evaluating complex pricing or products

Behavioral Choice: Mini-Model

- Welfare-relevant consumer value u(x)
  - Efficient/competitive x* max u(x) – c(x)
- Choice instead max u(x) + b(x)
  - Competitive x’ max u(x) + b(x) – c(x)

$$u(x^*)-c(x^*)\geq u(x')-c(x')\geq u(x^*)-c(x^*)-[b(x')-b(x^*)]$$

Behavioral Choice: Mini-Model (2)

- Welfare-relevant consumer value $u(x)$
  - Efficient/competitive x^* max $u(x) - c(x)$
- Choice instead max $u(x) + b(x)$
  - Competitive x' max $[u(x) + b(x)] - c(x)$

$$u(x^*) - c(x^*) \geq u(x') - c(x')$$

$$\geq u(x^*) - c(x^*) - [b(x') - b(x^*)]$$

Agency Problems in Compound Customer

- Who chooses and who is affected?
- Bribes
- Advisor/broker financial products
  - Mortgages
  - College loans
  - Car loans
- Broker incentives—is transparency enough?
- Two-sided markets
  - Terminating access problem (e.g. CPP)

Credit cards/payment instruments

- Consumer largely chooses, but “customer” is consumer and merchant jointly
- Transactions gravitate to those who serve <u>part of</u> customer welfare
- High interchange fee benefits consumer, at cost to merchant
- If payment instruments otherwise compete effectively, might calibrate “harm” as above

Co-pay Coupons

- Pharma-co sells branded drug X at $100
  - Marginal cost $20
- Rivals sell imperfect substitute Y at $30
- Should insurer “cover” X?
  - Co-pay: patient pays (extra) $10 for X vs Y

Co-pay Coupons

- Pharma-co sells branded drug X at $100
  - Marginal cost $20
- Rivals sell imperfect substitute Y at $30
- Should insurer “cover” X?
  - Co-pay: patient pays (extra) $10 for X vs Y
- Pharma-co offers to rebate the $10
  - Or $20?

Choice with Inadequate Information

- When choosing, customer can’t see/evaluate all significant aspects of the product/deal
- Does this weaken/distort competition, or “just” funnel competition into the up-front observable dimensions?
- Switching-cost literature has an answer…

Switching-cost view

- Consumer sees initial payoff offer, u_1
- Knows that his true u is $u_1 + u_2$
- Knows future will be different (worse), $u_2 < u_1$
  - He'll be locked in and gouged
  - u_2 not affected by today's choice

How to Shop

- Rational consumers shop on $u_1 + E[u_2|\ldots]$
- Surprisingly often in models, this is tantamount to shopping based on u_1
  - Best deal today will be best deal overall, though worse than it would look naïvely
- $E[u_2]$ equal across competing sellers
- Even if unequal, should shop decisively based on u_1, perhaps with offset

Decisively myopic shopping

- Firms then compete on u_1, often with below-cost offers
- Bargain-then-ripoff dynamics; perhaps little inherent harm
  - In terms above, $b(x') - b(x^*)$ zero or small, not because b is small but because it's constant

Is That Right?

- Those models don’t capture/predict lower cross-elasticities
- Slow responses in liberalized consumer markets
- Advice to consumers: be skeptical and cautious

Wary Customers

- Expectation that u_2 is negatively correlated with u_1;
  - If that's overblown, firms may have no way to communicate a better deal. But if it's accurate, consumers could effectively shop on $u_1 + E[u_2|u_1]$
- Procrastination and indecisiveness
  - May make sense if valuable information will arrive (let someone else try out the new seller)
- Prefer the known devil
  - Prefer the Quaker or still regulated incumbent?
  - But if a customer/offer overcomes that, then competitive advantage to the unusually ruthless

Does price uncertainty decrease cross-elasticity?

- More variation among customers in comparisons across firms of

  $u_1 + E[u_2|u_1]$ than in comparisons of $u_1 + u_2$
- With homogeneous products, conjecture that variation in price forecasts is enough
- With differentiated products, conjecture that variation in price forecasts uncorrelated with taste differences is enough

Focusing the Switching-Cost Literature

- Most business people believe switching costs predictably soften competition
  - At least some empirical support
  - Many antitrust lawyers also believe this
- The SC (theory) literature has stressed how that view can fail
  - Always a helpful contribution but…
  - Does the literature focus on anomalies?

Conclusion

- Wary customers can undermine cross-elasticity
  - Can enable bad deals to retain substantial share, or discourage anyone from offering good deals
  - Unwary customers risk other harms, but wariness is not a great solution for society
- A form of demand-side “problem market”
- Economics literature slightly off-key here?