Comments on "Search with Adverse Selection" by Stephan Lauermann and Asher Wolinsky

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Set-up

- One buyer and a continuum of potential sellers
- Buyer is privately informed about how much it will cost to supply him (either c_L or c_H)
- Buyer pays s and searches for a trading partner:
  - Seller receives an informative signal about cost, from $[\underline{x}, \overline{x}]$
  - Nature draws a price, then seller then buyer accept or reject it
  - After disagreement, buyer searches again and a new signal is drawn independently

Summary

- When $s = 0$ the types pool, and buyer pays average cost
- Question: As $s \to 0$, does the price aggregate information, in the sense that it is close to full-information benchmark?
  - Necessary condition: there exist signals close to $\underline{x}$ which are exceedingly informative about the buyer being c_L rather than c_H
  - However it's not sufficient - adverse selection problem
  - Seller is much more likely to be searched by a c_H-buyer (who take much longer to get a good signal) - which may overwhelm the (unconditionally) strong evidence generated by a low signal
  - c_L-types only (partially) separate when the informativeness of the signal grows quickly enough, as $x \to \underline{x}$
- Welfare is non-monotonic in the informativeness of signal technology
  - Highest when signal is either very informative or very uninformative

Comments

- Assumptions:
  - Support of x is the same for both c_L and c_H
  - Everybody has strictly positive search cost
  - Prices drawn from a distribution
    - ★ Avoids Diamond Paradox, and equilibrium multiplicity that arises if buyer offers a price
    - ★ Trade fails with high probability even when signal is very favorable
    - ★ Interpret buyer and seller as small players in a larger game? Take price dispersion - conditional on observables like x - as given?
- How well is information aggregated, when s is small but not limiting towards 0?

Comments

- Adverse selection and common value auctions
  - Suppose an auction has (fixed) N bidders, but the buyer can set a secret reservation price. If the price does not fall below the reserve price, buyer pays s and conducts a new auction with new bidders.
  - Adverse selection problem again. Limiting results for both N and s?
- Choice of selling mechanism
  - Should c_L-buyers just commit to an auction (if possible)? Sellers approached sequentially then infer $c = c_H$ automatically.
- Relaxing common values
  - For example $w.p.\ 1/2$ the match is good, and the seller's cost is reduced by $\bar{c}$ (independent of c_L / c_H)
  - Seller receives two signals now
  - Weaker adverse selection problem now? c_L-type searches for low signals in both dimensions, whereas c_H-buyers may settle for one low signal.