Discussion of: No Shopping in the U.S. Mortgage Market: Direct and Strategic Effects of Providing Information

Jean-François Houde
Cornell University & NBER

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Supply Chain of the US Mortgage Industry

Freddie Mac
Fannie Mae
FHA

Wells Fargo
JP Morgan
US BANK
PNC
Citi
RBS
TD

Correspondent
Retail

Brokers

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Ps and Qs: Merge three data-sets

- **HMDA**: Market shares (all lenders)
- **CoreLogic**: Financial characteristics of borrowers (17 servicers)
- **Informa**: Retail mortgage price sheets (31 lenders)
Summary of the Data

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  - *HMDA*: Market shares (all lenders)
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- **Search and awareness**:
  - *NSMO*: National survey of mortgage borrowers shopping process and beliefs about price dispersion
  - *SBI*: Financial institution “awareness”
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- This is a lot of work!
Key Takeaways

- **Price dispersion:**
  - Only 4% pay the lowest price (cond. of choosing an Informa lender?)
  - Average potential savings = $300 /year
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  Questions:
  
  ★ Need more descriptive work...
  ★ How much of the dispersion is due to the fact that some lenders are using *national* prices, while other target specific markets?
  ★ What about heterogenous pricing rules across lenders (e.g. different base prices, FICO cutoffs, etc)?
  ★ Do we see more dispersion among low risk or large LTV borrowers?
  ★ Are “correspondents” using comparable price sheets?
  ★ Is it consistent with the CoreLogic “transaction price” measure?
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★ Need more descriptive work...
★ What factors predict search? Awareness?
★ Do searchers pay less?
Summary of the Model

- **Ingredients:** Differentiation + Search cost + Awareness

- **Expected utility:**
  
  *Aware options (≈ 30):* \( u_{ij} = E_{p,i} [\delta_j - \alpha p_j + \epsilon_{it}] \)
  
  *Unaware options (≈ 10K):* \( u_{i0} = \sum_h \rho_h E_{p,h} [\delta_h - \alpha p_j + \epsilon_{it}] \)

- **Two consumer types:**
  
  *Rational:* Use the empirical price distribution of prices (Informa lenders)
  
  *LOP:* Assume that \( p_{ij} = \bar{p}_i \) for all \( j \)

- **Search protocol:**
  
  Reservation utility: \( E_{p,i} [\max\{\delta_j - \alpha p_j + \epsilon_{it} - r_j, 0\}] = c \)
  
  Rank options (incl. 0): \( r_i^{(1)} > r_i^{(2)} > \cdots > r_i^{(J)} \)
  
  Stopping rule: Continue searching if \( u^* < r_i^{(k)} \).
Comments and Suggestions

- This is not a simple model...

  *Thus our model has 1123 parameters. With this parsimonious model we aim to capture elasticity of demand for each Informa lender, as it likely varies across locations and consumer types.*
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- **Question:** Is it a good model for LOP consumers (60%)?
  
  The search protocol for LOP consumers imply that they should pay significantly more than rational consumers. Is it the case?
  An alternative interpretation is that LOP consumers rely on their (informed and caring) real-estate agent to search on their behalf.
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- **Suggested change:**
  
  *Initial quote:* Pre-qualifying lender (e.g. home bank or realtor’ “personal” broker)
  *Choice-set:* Realtor suggest J additional lenders (e.g. max EU)
  *Search:* Consumer decide to investigate J or not.