Emiris, Koulischer, and Spaenjers: Bank Competition and Bargaining over Refinancing

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Motivation: Monetary Policy Transmission To Households

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- **Mortgage refinancing**
  - Fixed-rate mortgages: requires household action to refinance into new rate
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- **Refinancing frictions coming from the supply side?**
  - Refinancing criteria, lending standards (e.g. DeFusco–Mondragon 2020)
  - Loan modification incentives (e.g. Agarwal et al. 2017)
  - This paper: Role of (local) competition where incumbent banks can refuse to refinance

This Paper

- Build bargaining model of refinancing + test predictions using Belgian mortgage data
- **Key findings:**
  - Household refinancing: ↑ with local mortgage market competition
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- **Discussion points:**
  - Interesting setting, more institutional detail needed - is the mechanism plausible?
  - Data limitations
  - Link to banking literature: relationship lending/incumbent information asymmetries

Model of Bargaining Over Refinancing

- Setting
  - Refi incentive is positive: $r_0 > r_1$
  - Switching cost for external refi: C
  - Probability of successful switch: β
  - Full information
  - No default, variation in creditworthiness

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- Three-stage bargaining process, solved backwards
  - Stage 3: Bank A offers borrower r_A, where $r_0 > r_A > r_1$ (equal to E[net switching benefit])
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- Outcomes
  - Group 1: Captive borrowers (high C), get r_0
  - Group 2: Internal refinancers, get r_A
  - Group 3: External refinancers, get r_1 and pay C
- Comparative statics w.r.t C and β

Comment 1: What Is The Mechanism?

- Model suggests that there is lack of refinancing despite household action, but lenders can refuse to refinance at prevailing market rates
- UK mortgage market:
  - FCA study found similar rates for internal vs. external refis (conditional on observables)
  - Difficult to imagine that lenders could outright refuse to offer market rates given same observables (any regulatory interventions in Belgium?)

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- Relatively coarse mapping from model to data
  - Both empirical findings (role of local competition and existing bank relationships) would be consistent with, e.g. unobserved marketing/advertising effort
  - Sharper tests likely require data on interest rates (see e.g. Ongena et al 2021 using Norwegian data)
- Institutional detail:
  - Prepayment penalties?
  - Variation in fixation length?
  - Role of brokers?

Some Auxiliary Questions On Model And Data

- What determines internal refi vs switch in the model – are households just indifferent? Invoke heterogeneity across banks, costs?
- Why have C and β? Difficult to tell apart in data
- What happens if there is free entry? (comparative statics w.r.t. competition?)
- Predictions are more straightforward for prices, only indirectly about quantities?

Comment 2: Are External Refinancers Selected?

- Adverse selection: "searching for approval" (Agarwal et al. 2022) (less likely for refis)
- Advantageous selection: households with better fundamentals leave
  - Unsecured credit markets: repricing based on info learned through borrower behavior, can lead to dynamic market unravelling (Nelson 2018)
  - Secured credit markets: selection alleviated by observable collateral (LTV)? (Liu 2022)
  - Internal refinancing as repricing based on new information?
- Home equity extraction more likely with external refinance in the UK (Belgibayeva et al. 2022)

→ Further empirical investigation, will help inform emphasis for model extensions

Comment 3: Link To Banking Literature

- Could interpret C as information advantage of the incumbent, relationship lending (e.g. Rajan 1992)
- Leads to further tests:
  - Do incumbents have an information advantage?
  - Do they charge higher rates in response to (unobservably) higher probability of default, e.g. based on (internally observed) repayment behavior?
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  - Requires data on mortgage rates and outcomes/loan performance
- Literature on competition and asymmetric information (e.g. Broecker 1990)
  - Adverse selection/winner's curse leads to some monopoly power, not alleviated by entry

Conclusion

- **To what extent does competition alleviate refinancing inertia?**
  To what extent do information asymmetries prevent competition?

- Interesting paper and promising extensions
  (but may require data on mortgage rates and creditworthiness/default outcomes)

- Look forward to future iterations!