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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- Evidence for demand-side frictions (e.g. Keys et al 2016, Andersen et al 2020)
- 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: \uparrow with local mortgage market competition
 - External refinance: ↑ with additional bank relationships

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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

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 - 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])
 - Stage 2: Bank B offers r_1 , borrower accepts if value net of C is positive
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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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 - Difficult to imagine that lenders could outright refuse to offer market rates given same observables (any regulatory interventions in Belgium?)
- 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)
- \rightarrow 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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- 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!