Discussion of: “The Impact of Organizational Structure and Lending Technology on Bank Competition
by Degryse, Laeven and Ongena

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This is an interesting and useful paper because....... 

- A model illustrates how the geographical reach and loan pricing of a bank (set of branches) depends on both 
  a) borrowers’ distance from a lender and its competitors 
  b) the lending/organizational technology of a lender and its competitors 
- The model dictates the construction of empirical measures 
- Testing is conducted on a very rich dataset 
- My comments focus on: 
  A) The Model 
  B) Empirics
The Model (1)

- Straightforward Hotelling-type set up with two branches competing for borrowers that only differ by “location”, and incur different transportation costs to contact each branch.

- **Under the assumptions of perfect price discrimination (no communication among borrowers)** each bank prices loans extracting the maximum feasible rent from each borrower, given a similar pricing strategy of the competitor.

- Such rent is a function of the distance of the borrower from its competitor.

- Hence, the rent that can be extracted by branch A is larger the larger is the distance of a borrower from branch B.
The Model (2)

- In the version of the model with differential marginal costs (section 3), these assumptions yield the following implications:

  A) **Branch A’s geographical reach** (or market size) increases with Branch B’s transportation and marginal costs and decreases with its own transportation cost.

  B) **Branch A’s lending rate** increases with Branch B’s marginal and transportation costs and its own transportation cost.

- This is good: it is what you would expect to find by modeling strategic interactions among heterogeneous agents.
The Model (3)

- In fact, in a (non-spatial) model with heterogeneous banks, strategic interactions imply that equilibrium prices, quantities and risk profiles of each bank depend on the entire distribution of banks’ characteristics (De Nicolò and Loukoianova, 2007).
- For simplicity, the current model assumes loans are risk free.
- However, the authors observe that marginal costs could capture to some extent differential risks of lenders’ portfolios (p.11).
The Model (4)

- Appendix I version of the model shows that differences in borrower-specific “transportation” costs affect both geographical reach and pricing.
- Thus, borrower-specific differences in these costs may be also due to their different risk.
- To identify the separate impact of organizational form and borrower’s risk, the model dictates that differences in borrowers’ risk should be taken into account.
The Model (5)

Suggestions for the Model part:

A) Make Appendix I model + marginal costs the benchmark model

B) Retain the simplified version with different marginal costs for illustrative purposes.

C) Discuss the possible interpretation of parameters as indexing borrowers’ risk
Empirics (1)

- Impressive dataset
- Measures of geographical reach (Quartile Reach, Max Reach and # of Loans) carefully constructed
- Loan Rate also carefully constructed accounting for maturity
- All banks’ and branches’ organizational technology measures carefully constructed
- Straightforward regressions
Empirics (2)

- **Results for Geographical Reach**
  a) Significant impact of organizational variables (Tables 3-5, models VI-VIII)
  b) Endogeneity of organizational structure is addressed by IV methods, OK

- But, **can we say more** about the relationship between measures of organizational structure and market characteristics? (perhaps this may be a separate paper....)
Empirics (3)

- Results for Loan Rate
  a) Lower for more distant borrowers, larger for borrowers farther away from competitors (consistent with the model in all specification except Table 6, VII ???)
  b) Interaction terms with organizational variables seem important in some specifications
  c) Why not IV tests also in this case?
Empirics (4)

Suggestions for the Empirics part:

a) Construct measures of loan risk to the extent feasible

b) Rerun with these measures both in levels and with interactions

c) Run IV estimation for the Loan Rate regressions