The Digital Banking Revolution: Effects on Competition and Stability

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Very Ambitious Paper

- Digital Technology allows *branchless* competition

- Digital Technology reduces bank loan losses overall, but increases them for low-income borrowers

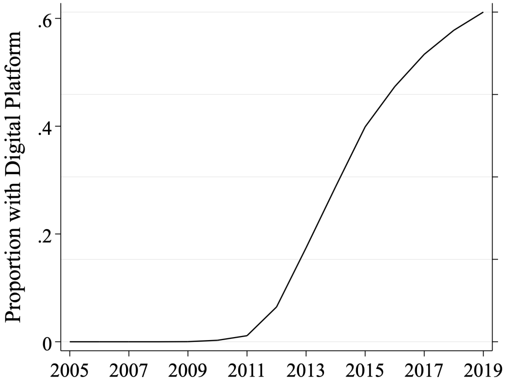
- Digital Technology makes deposit funding less stable

Broad Concern about Empirical Design

- Main endogenous variable = 1 if bank has adopted digital technology (Fg. 1)
- The instrument varies only across banks, not over time
- This would be correct if:
  - Effect of technology on *adoption* were time invariant
  - Bank and customer *use of technology* were time invariant
- **Suggestion: Show us dynamic diff-in-diff style results (graphs)**

Digital Banking Revolution

- Rise of websites and mobile apps are transforming business models across many industries
- Leading way to access banking services (Source: FDIC)
- Widespread adoption by banks



Branchless Competition

- Major change in banking

- Branching has had massive effect on:
  - Bank competition
  - Information
  - Movement of capital across markets
  - Market openness

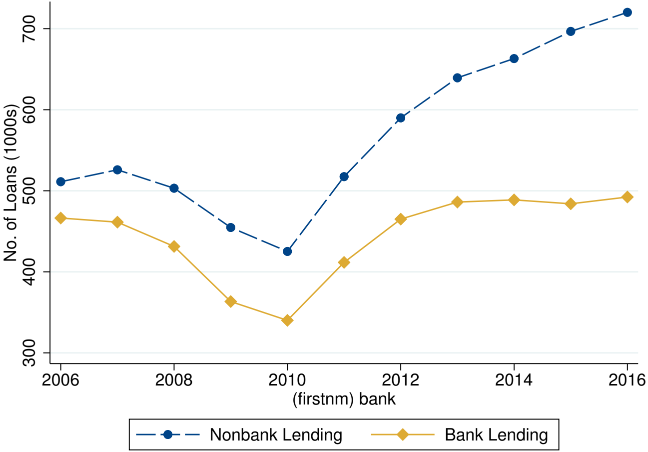
Implications of Branchless Competition

- Greater Capital Mobility
  - Improved allocation of capital (efficiency enhancing)
  - But greater risk of capital ‘flightiness’
- Greater market contestability
  - More efficiency, greater supply of intermediation services, lower prices for customers
- Policy approach needs to change for both antitrust and CRA

Branchless Competition
Role of non-banks

- Most of the branchless competition comes from non-banks
  - True in small business lending & mortgage lending
  - (Figures)

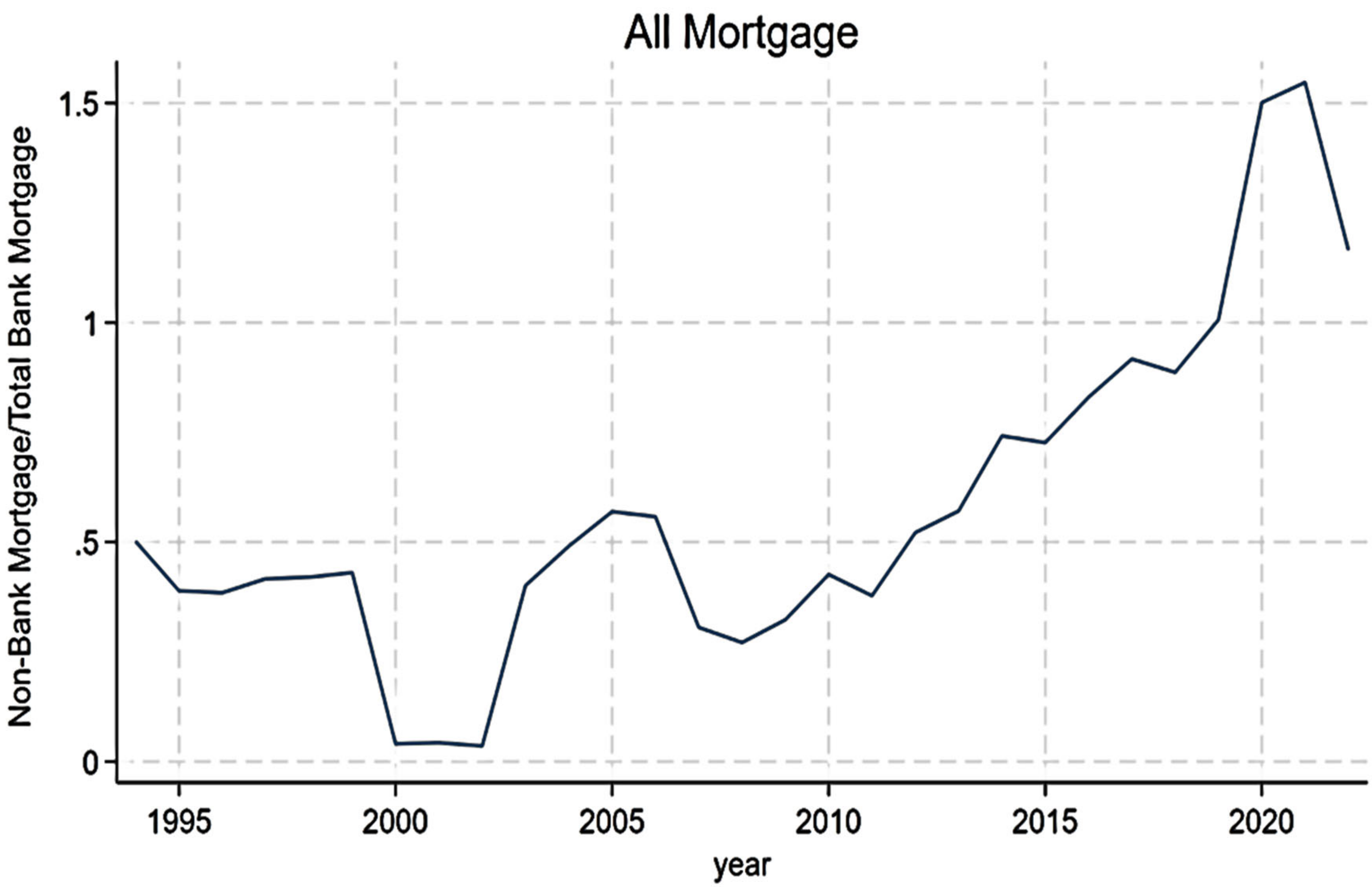
Result I: Rise of Nonbank lending



Non-bank share reaches 70% by 2020

1. Nonbank lenders provide more loans than banks to small businesses
2. Large increase in nonbank lending starting in 2010

Sharp Trend in Non-banks' Share

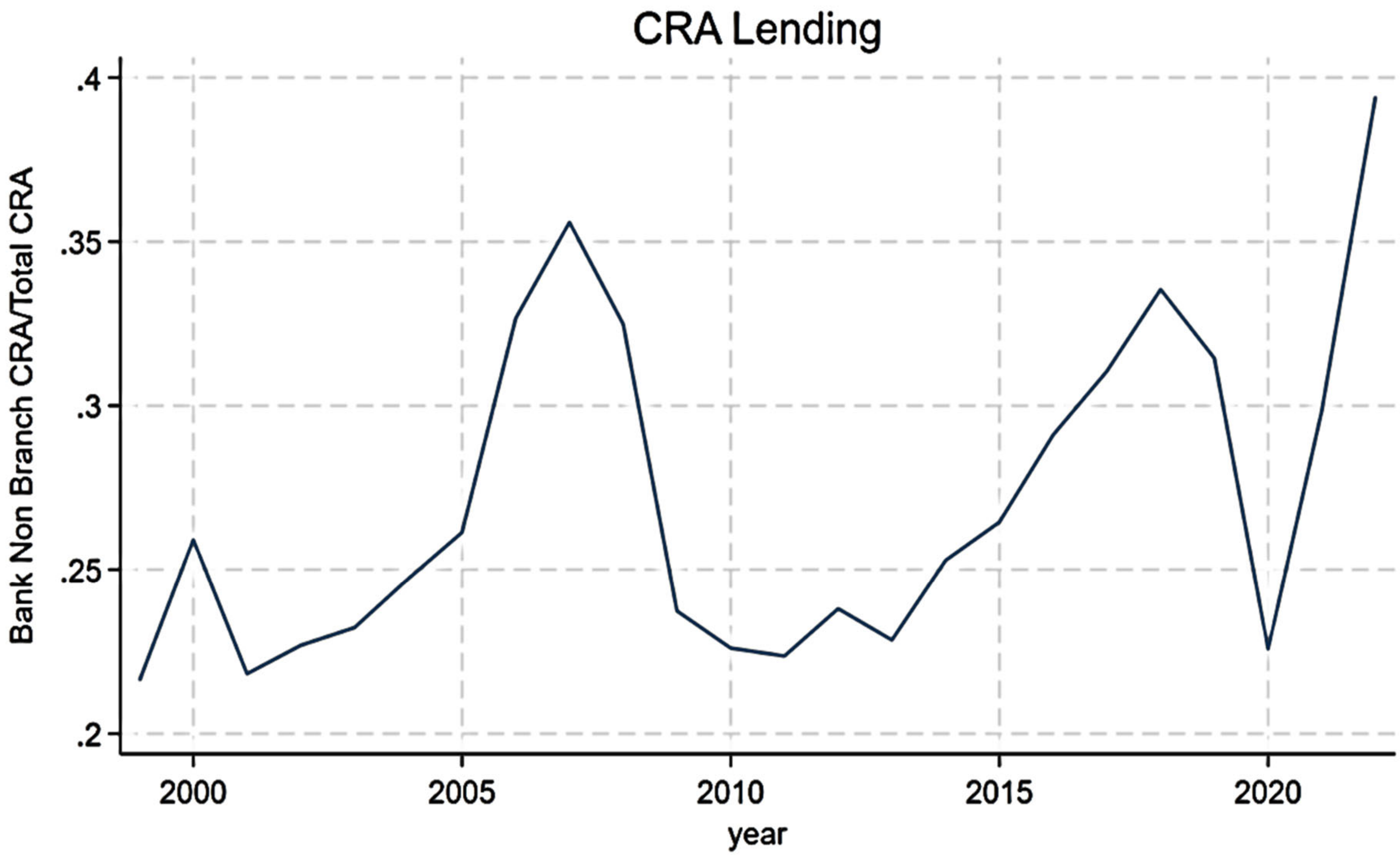


Source: HMDA

Branchless Competition
Branches still Matter

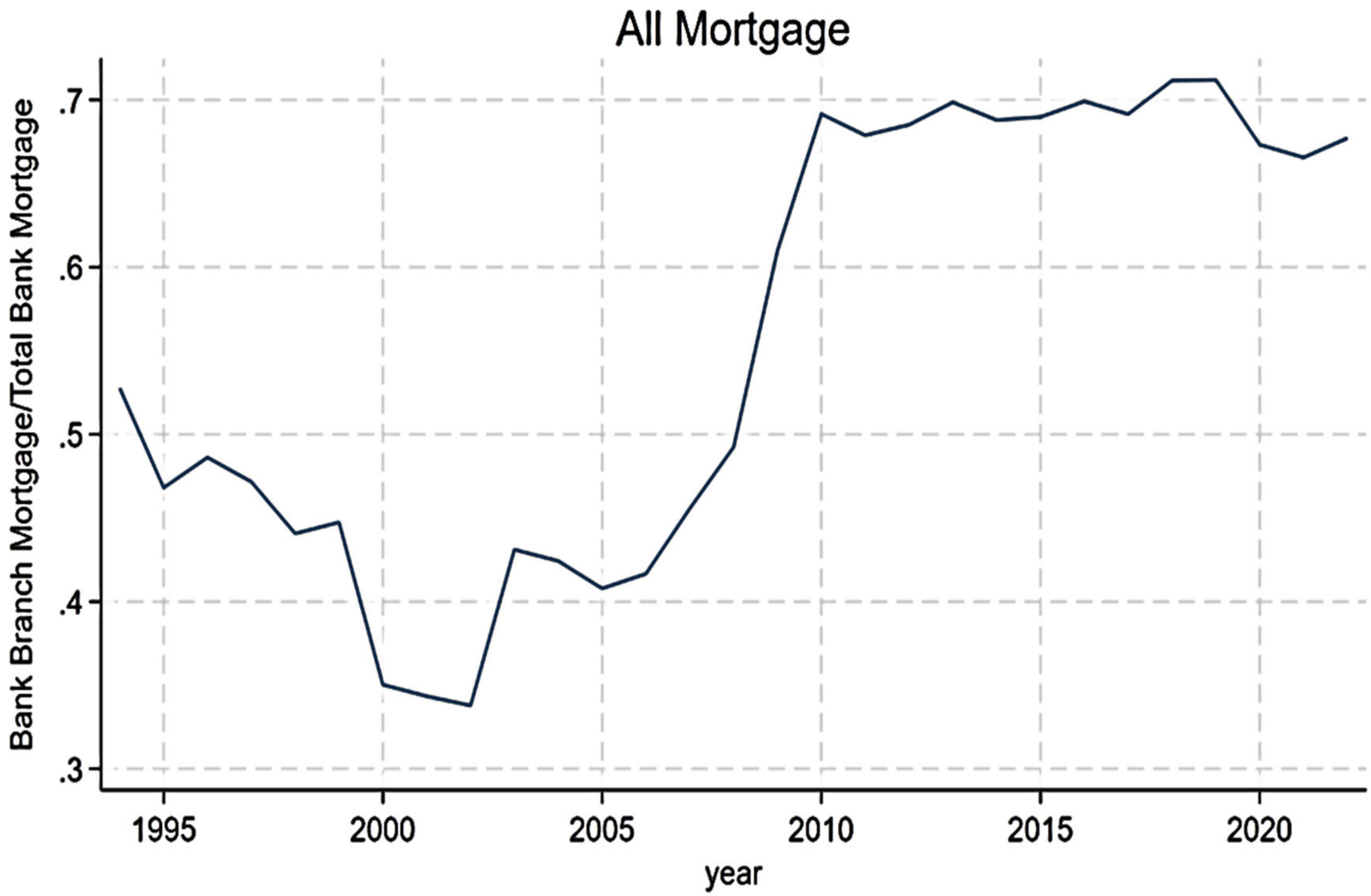
- Within banking, however, simple (time-series) metrics *do not* support the story
  - Figures

Bank Distance to Small Borrowers (Cyclical, but no Trend)



See Granja, Leuz and Rajan, *JF*, 2022

No Trend (since 2010) in Bank Distance to Mortgage Borrowers



Source: HMDA

Digital Technology and Credit Risk

- Paper argues that expected losses decrease by 38% due to advent of digital technology, but more than doubles for low-income borrwers
  - Huge effect. Driven by model parameterization
  - 16 estimated parameters go into the model: Standard errors?

- **Suggestion: Add reduced form evidence on loan losses**

Digital Technology and Deposit Instability

- Much discussion about runs in context of SVB Failure (2023)
  - Direct effect: easy to move money
  - Indirect effect (this paper): more uninsured deposits

- Bright side: 2023 Gross deposit flows were twice as large as Net flows
  - Large ***reshuffling*** of funds from low-loan-return to high-return banks (Maingi, 2024).

Assessment

- Paper makes three super-impactful claims

- I believe 2 of them, but the evidence could be constructed more transparently
  - (Not convinced regarding credit risk)

- Thank you!