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Bank geographic diversification and financial stability

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From insight to impact.

Overview

Research Question: How does the geographic diversification of a bank's deposit base affect its funding stability, funding costs, and real economic outcomes?

Key findings

- **Impact of greater geographic diversification**
  - Geographic diversification reduces deposit volatility and enhances funding stability
  - Diversification lowers funding costs by enabling a shift in liability structure
  - Diversification boosts liquidity creation, lending, and real economic activity

- **Economic mechanism**
  - Banks are less exposed to localized deposit withdrawals shocks
  - Banks can reduce reliance on costlier time deposits
  - More stable funding enables cheaper and more efficient liability structure

Contribution

- The paper tackles a central question in banking and financial stability: how geographic diversification of deposit bases influences funding stability and real economic outcomes
  - Identifies a distinct channel through which diversification improves funding stability, via lower deposit volatility and liability structure shifts, which had not been emphasized in the literature
  - It is especially timely considering recent banking crises (2023 U.S. bank failures) where unstable deposits played a critical role

- Significant policy relevance
  - The analysis informs how branch network structures affect funding stability, which can influence banking regulation and stress testing frameworks
  - Offers insights for bank management on liability strategies and for regulators on deposit insurance design

Contribution

- Carefully constructed empirical design to address endogeneity
  - Gravity model predictions use exogenous factors like geographic distance
  - Deregulation indices offer plausibly exogenous shocks to banks' expansion abilities
  - Clear attention to causal inference, not just correlation

- Extensive robustness checks: controls for bank characteristics, market power, IT adoption, asset diversification, rate-setting behavior, and macroeconomic volatility; multiple alternative specifications and datasets (e.g., branch-level, bank-county data)

Overall, rigorous and impactful paper that makes a significant and novel contribution to the banking and financial intermediation literature

What is the theoretical mechanism?

- Theoretical narrative is somewhat fragmented—especially how liability-side diversification interacts with bank risk and liquidity creation

- "the same factors that contribute to resilience under certain conditions may function as significant sources of systemic risk under others", Acemoglu et al., AER 2015

- Suggestion: **Introduce a conceptual framework or stylized model** early in the paper to clearly differentiate the funding stability channel from the asset-side credit risk channel, which dominates prior literature

Trade-Off Between Stability and Liquidity Risk

- Banks substitute time with demand deposits as demand deposits become more stable
  - but this may also increase run risk in extreme conditions

- Broadly, the question is about the cost, in terms of dollar costs and risk, of funding
  - Diversification reduces the risk and allows to shift to more flighty/risky sources of funding at a lower dollar cost
  - But there are several characteristics of the risk distribution that are at play

- Suggestions
  - Provide more discussion of this trade-off, maybe also in the context of a model
  - Empirically test whether banks' overall liquidity buffers or capital ratios change with deposit structure shifts

What are the limits of diversification?

- The paper assumes a linear relationship between diversification and outcomes
    - But beyond a point, further diversification may yield diminishing or negative returns (e.g., due to governance frictions)
    - Related additional questions:
        - Why is there heterogeneity across banks in terms of the degree of diversification?
        - Other sources of diversification besides the geography? Corporate vs households, online vs traditional, etc.?
        - Why do some banks diversify their deposit base more than others, in terms of bank business models or strategic choices?

- Suggestion Test for nonlinearities (e.g., piecewise linear models or quadratic terms), particularly in:
    - Volatility reduction
    - Funding cost
    - Lending capacity

Policy implications

- Several timely and novel regulatory implications but the paper doesn't develop them fully
- Suggestion More explicitly discuss what regulators should do
    - Should they encourage geographic diversification?
    - Should deposit insurance pricing differentiate by diversification?
    - Could be moved into a standalone policy discussion section to enhance clarity