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# Geographic Diversification in Banking and its Implications for Bank Portfolio Choice and Performance

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# Overview

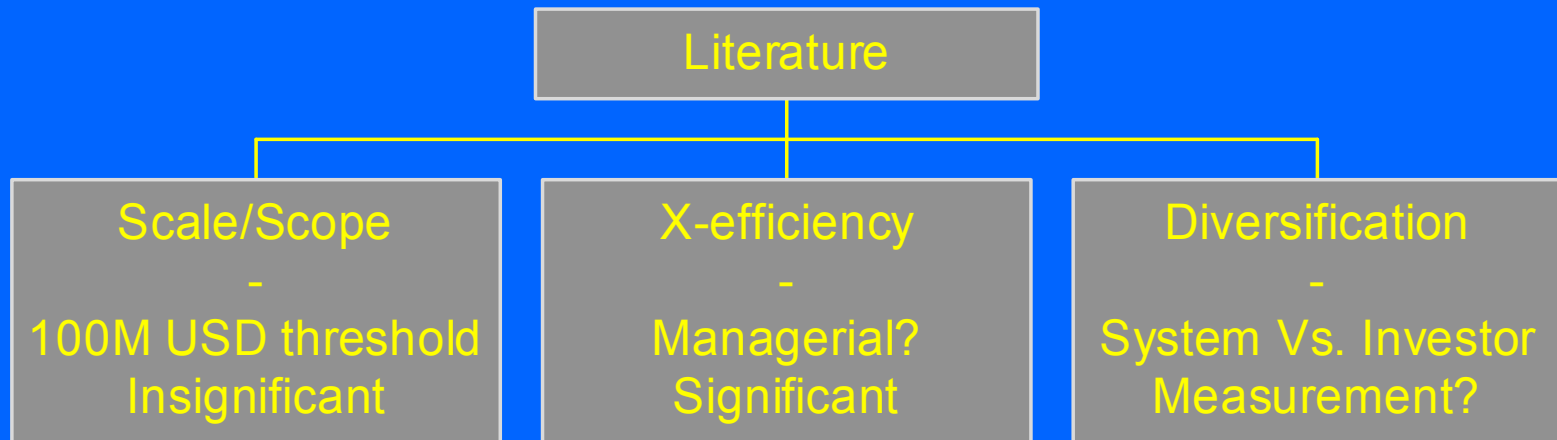
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- Literature
- Methodology
- Data
- Recommendations

# Literature

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## Bank Performance



# Literature (cont.)

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- Scale/scope: not bank-specific
- X-efficiency: Berger and DeYoung (2001)
- Markov view: Robertson (1995, 2003)

# Methodology

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- What is diversification?
  - Correlation
  - Distance
  - Inter-state Vs. Intra-State
  
- What is a BHC?
  - Organizational Vs Legal
  - Portfolio *choice* (abstract)

# Data

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- Riegle-Neal Interstate Banking and Branching Efficiency Act
  - Section 109
- Mergers/Takeovers
  - Loan portfolio quality (“for example, not all banks in Texas failed”)

# Data (cont.)

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- Riegle-Neal (& GLBA, section 106):
  - “Section 109 prohibits any bank from establishing or acquiring a branch or branches outside of its home State under the Interstate Act primarily for the purpose of deposit production, and provides guidelines for determining whether such a bank is reasonably helping to meet the credit needs of the communities served by these branches”
  - [DOCID: fr06jn02, Fed. Register 67 (109)]

# Data (cont.)

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- Joint final rule:

“beginning no earlier than one year after a bank establishes or acquires a covered interstate branch, the appropriate agency will determine whether the bank satisfies a loan-to-deposit ratio screen [...] that has been established by section 109. [idem]



# Data (Cont.)

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Geographic diversification:

$$GEODIV_i = 1 - \sum_j \left( \frac{\text{market } j \text{ deposits}}{\text{total deposits}_i} \right)^2 = [0, 1)$$

Screen (for bank  $i$  in market  $j$  with  $N$  banks):

$$L2D = \left( \frac{\text{loans}_i}{\text{deposits}_i} \right) \geq 0.5 * \sum_{n=1}^N \left( \frac{\text{loans}_n}{\text{deposits}_n} \right) / N$$

# Recommendations

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- Be more specific w.r.t. your hypotheses
- Limit the number of tables
- Compare inter-state vs intra-state results
- Refine your diversification measure
- Formalize (and control for) the relationship between loans and deposits
- Control for loan loss reserves