

# Inside Outcomes of Insider Lending

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# Summary

**Research Question:** Is insider lending driven by [agency conflicts](#) or [informational advantages](#)?

## Identification Strategy:

- Exploit variation in external credit conditions leveraging state-level average loan growth as an instrument.
- Examine effectiveness of regulation by exploiting variation in regulatory scrutiny intensity around bank distress.

## Data:

1. **Bank-level dataset:** Quarterly Call Reports data for U.S. banks (2005-2019).
2. **Loan-level dataset** (failed banks only): FDIC administrative data (loss-share program, 2008-2013).

## Main Findings:

- Insider lending increases when external credit supply weakens.
- Insider loans do not perform worse (often better) than comparable outsider loans (at failing banks).
- Regulatory oversight reduces (risky) insider lending and mitigates agency conflicts.

## Agency or Information Theory? 5 Hypotheses

#	Hypothesis		Agency	Information
1	<i>“The change in proportion of insider loans is not related to the lending environment (loan growth).”</i>	<b>Rejected</b>	No	Yes
2	<i>“Bank capitalization is not associated with changes in insider lending nor affects its relationship with loan growth.”</i>	<b>Not Rejected</b>	No	Yes
3	<i>“Bank risk is unrelated to changes in the proportion of insider lending.”</i>	<b>Not Rejected</b>	No	Yes
4	<i>“Ex-ante loan terms are comparable between insider borrowers and other borrowers.”</i>	<b>Rejected</b>	Yes (partial)	Yes
5	<i>“Ex-post loan outcomes are comparable for insider borrowers relative to other borrowers conditional on loan terms.”</i>	<b>Rejected</b>	No	Yes

## **Main Comments and Suggestions**

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# 1. Instrumental Variable and Identification

## Issue:

- Instrument: **Average loan growth at other banks in the same state (excluding bank A).**
- Unusually high F-statistic ( $\approx 10,000$ ) raises concerns.
- Possible violation of exclusion restriction (instrument directly affects insider lending):
  - **Competitive interactions among insiders:** Insiders might choose insider loans strategically depending on state-wide lending conditions to maintain competitive advantage or avoid attention.
  - **Common regulatory pressure:** Strong statewide credit growth might directly trigger regulatory scrutiny or market discipline across all banks in the region, affecting insider lending directly through tightened or relaxed regulatory monitoring.

## Suggestions for alternative instruments:

- **Bank Mergers and Acquisitions in Local Markets** affecting lending competition (Erel, 2011)
- **Bank's Exposure to Natural Disasters** causing exogenous lending shocks (Cortés and Strahan, 2017)
- In addition, explicitly justify the validity of the exclusion restriction.

## 2. Loan-Level Analysis

### Issue:

- Only **30 banks** with insider lending (**181 insider loans**), but analysis uses loans from **all 219 banks** as controls.
- Loans from banks without insider lending might differ systematically, potentially biasing results.
- Number of observations in Table 11 varies across specifications, not allowing direct comparisons.

### Suggestions for improvement:

- Consistently employ **Propensity Score Matching** to select comparable loans from other banks.
- Use matched loans explicitly across *all* loan-level analyses (consistency).
- Alternatively, demonstrate similarity of loan characteristics between insider-loan banks and control banks.
- Ensure consistent, **balanced samples** across specifications to clearly test different hypotheses.

### 3. Direct Testing of Insider Lending and Bank Failures

#### Issue:

- **Methodological concerns:** using OLS to regress binary outcomes (e.g., loan delinquency dummy) on binary explanatory variables might be problematic (Table 11).
- The paper currently lacks a direct test of whether insider lending ratios explicitly predict bank failures or bank distress (Table 10).

#### Suggestions for improvement:

- Consider appropriate binary-outcome models explicitly (e.g., Probit or Logit).
- Explicitly test the predictive power of insider lending on bank failures which would substantially enhance policy relevance.
- Possibly following Correia, Luck, and Verner (2025) for methodology on predicting bank failure.

## Minor Comments

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## Minor Comments

- Ensure consistent definition and notation for insider lending (ratios, changes, dummy variables).
- Explain clearly why insider lending is measured as ratios instead of log growth like bank loans.
- Clarify explicitly reference categories in Table 11 regressions (CRE, C&I, Consumer vs. other).
- List control variables explicitly and consistently across specifications (table notes).
- Consider plotting Figure 1a with a fixed sample composition: clarify break post-2012.
- Reconsider Hypothesis placement: present before introductory text to enhance readability.
- Explain clearly if/when differences in the number of observations across tables affect hypothesis interpretations.
- Table 2: column with t-test needed.
- Table 14: Missing variable Term.
- Table 15: Wrong notation in row 4; it should be  $\Delta CAMELS_{t-1,t}$ .

**Thank you!**