Bank Specialization and the Design of Loan Contracts

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Objectives

- Study bank specialization in the US corporate loan market.
- Focus on industry dimension.
- Understand implications for financial contracting.
- Investigate possible benefits for firms.
- Shed light on economic rationale: information advantage or risk taking?

Introduction

Motivation

- Diversification plays a key role in theories of financial intermediation.
- Yet, there is evidence of specialization in bank lending.
- Thus, firms might not substitute credit easily across banks [3].

Contribution

- Document **presence of specialization in lending** to specific industrial sector in a large, competitive credit market.
- Leverage **detailed information on loan contracts** to obtain insights on **why** credit from specialized lenders is not easy to substitute for firms.
- Present novel evidence that specialized lenders offer **credit with looser restrictions** (covenants) and **at lower cost** (interest rates).

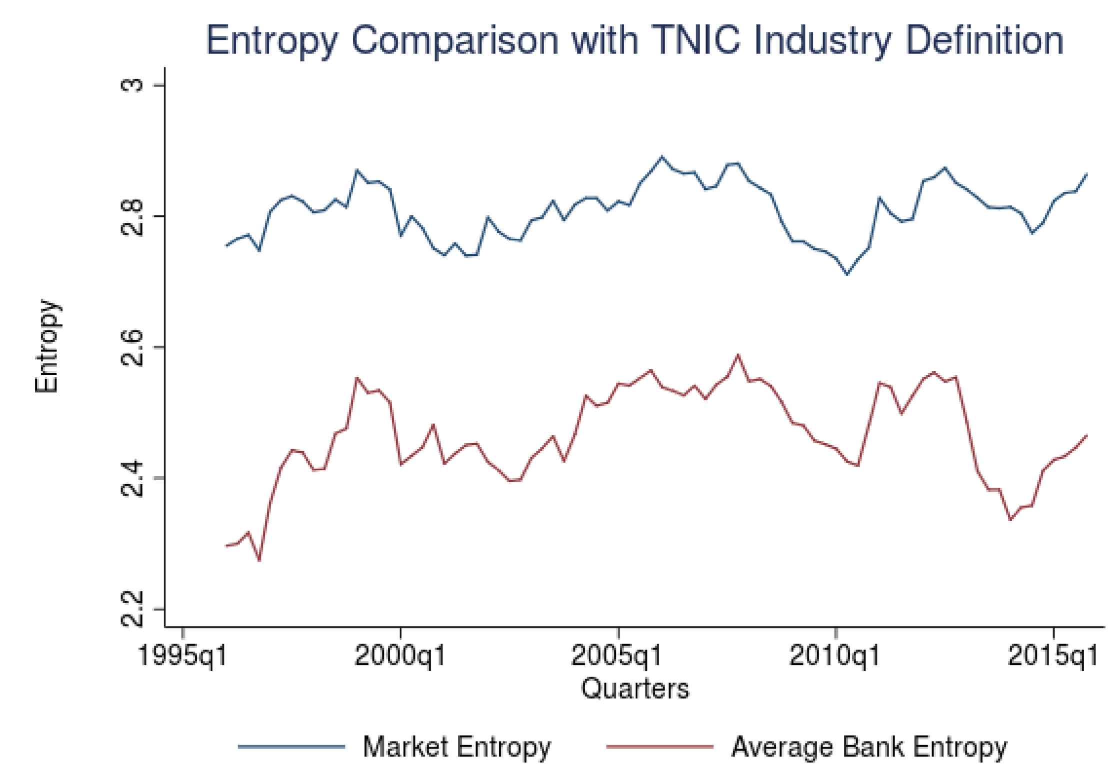
Data Sources & Sample Selection

- Data Sources: Dealscan, Compustat.
- Sample: US non-financial firms & US lead banks.
- Industry definition: TNIC (Hoberg & Phillips).

Since loan origination is infrequent, we create a pseudo credit-register to obtain **time-varying information on bank balance-sheet exposures**.

Measure of Bank Specialization I

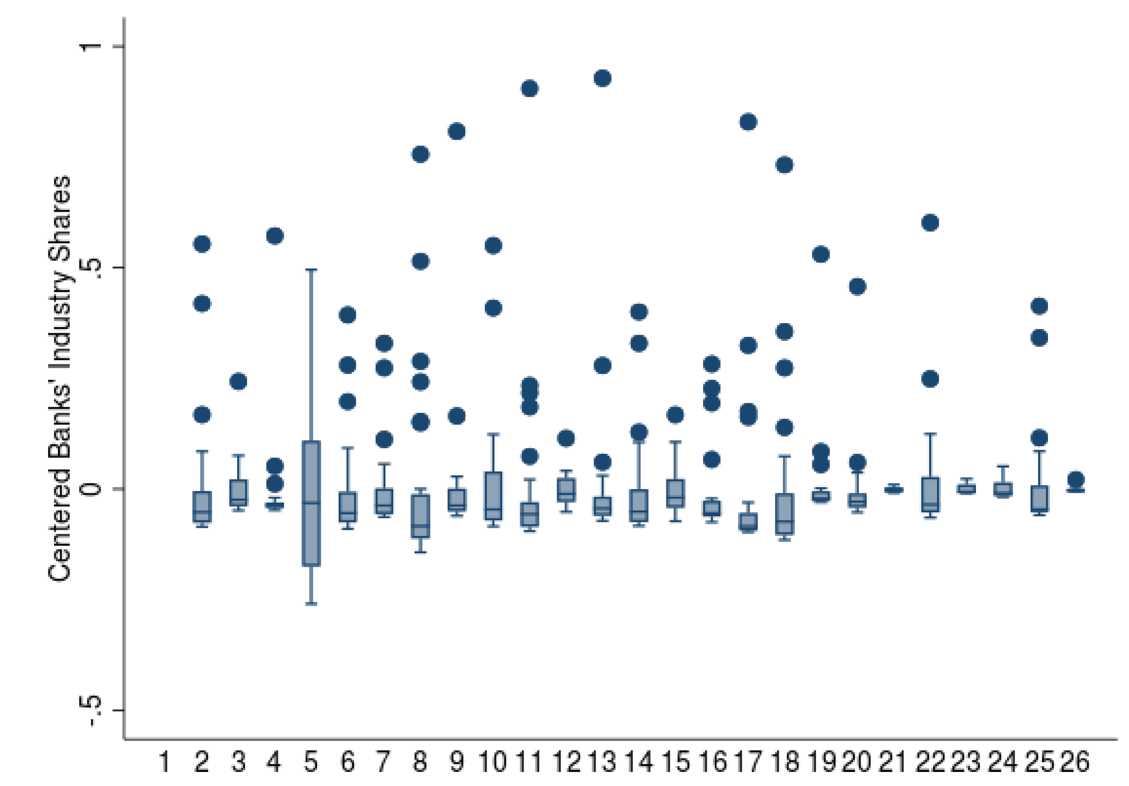
Entropy: average dispersion of bank's portfolio shares across industries.



Take-away I: Average bank is **more concentrated than the market** over a 20 years horizon.

Measure of Bank Specialization II

Box-Plot Outlier: abnormally large portfolio share in a given industry, *relative* to other banks.



Take-away II: Specialization is **common across industries and time**.

Punchline

US banks specialize in lending to specific industries.
These banks offer credit with looser covenants.
We suggest that banks specialize because of monitoring advantages.

Empirical Framework

Strategy. Compare loan terms between loans:

- made by the **same bank in the same year**,
- to **different industries**,
- controlling for firm observed & unobserved heterogeneity.

$$\mathit{LoanTerm}_{f,b,t} = \alpha_{b,t} + \alpha_f + \Gamma \cdot X_{f,b,t-1} + \beta \cdot \mathit{Specialization}_{f,b,t-1} + \varepsilon_{f,b,t}$$

We also control for:

- Relationship strength between firms and banks;
- Geographical proximity;
- Banks' industry market (not portfolio) shares.

Main Result

- Specialized banks offer credit with looser covenants.
- This reflects **lower information asymmetry** between lenders and industry of specialization [1].

Loan Term: Covenant Strictness		
Specialization	**-7.48****	**-8.32****
Obs.	5,484	4,740
Loan Term: All-In Drawn Spread		
Specialization	**-18.66****	**-1.144**
Obs.	5,283	4,549
Firm & Loan Controls	✓	✓
Bank × Year FE	✓	✓
Firm & Rating FE		✓

Further Evidence

- Employ **defaults on lenders' portfolios** as shocks to lenders' screening ability assessment [2].

Underlying Idea:

- Shocks in industry of specialization should drive greater **revision in lenders' assessment**,
- independently of sector-exposure.

Covenant Strictness	(1)	(2)	(3)
Default (spec) × Special.	**4.25*****		**4.63****
Default (other) × Special.		-.274	-.681
Specialization	-4.10	-5.83	-4.58
FEs & Controls	✓	✓	✓
Adj. R^2	.24	.24	.24
Obs.	4,472	4,472	4,472

Conclusions

- Banks specialize in lending to specific industries.
- Our evidence supports a monitoring-advantage explanation of specialization [3].
- Firms obtain looser covenants when borrowing from banks specialized in their industry, which could explain non-substitutability of credit.

References

[1] Garleanu, Nicolae and Jeffrey Zwiebel. 2008. "Design and renegotiation of debt covenants." *The Review of Financial Studies* 22 (2):749–781.

[2] Murfin, Justin. 2012. "The supply-side determinants of loan contract strictness." *The Journal of Finance* 67 (5):1565–1601.

[3] Paravisini, Daniel, Veronica Rappoport, and Philipp Schnabl. 2015. "Specialization in bank lending: Evidence from exporting firms." Tech. rep.

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