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Where Research and Policy Meet

Banking on Deposit Relationships

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Summary

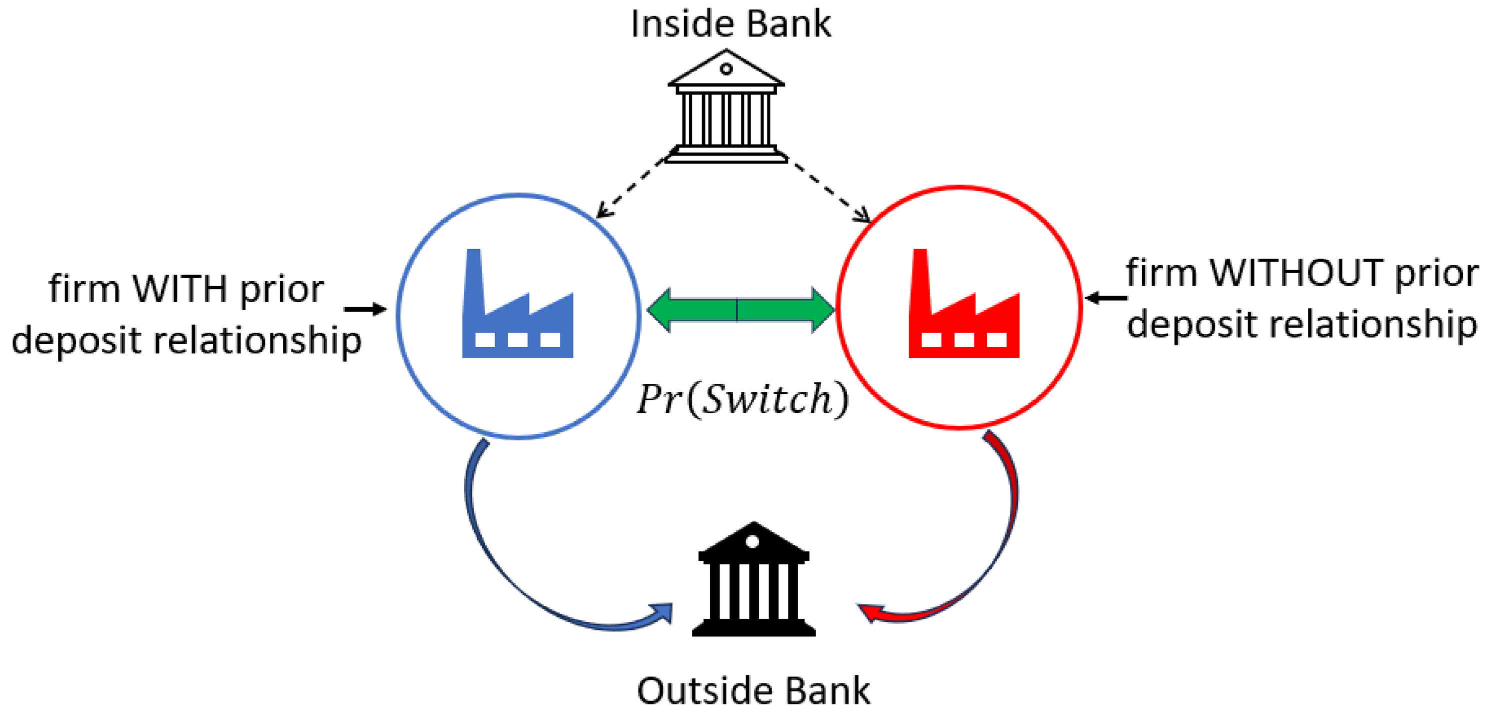
- By lending to a firm, inside banks gain an informational advantage over other outside banks, leading to hold-up problems (Rajan, 1992; Sharpe, 1990)
- Using unique data on all firm-bank deposit and lending relationships in Norway, we show that deposit relationships between firms and outside banks can reduce inside banks' informational advantage, thereby attenuating hold-up in the loan market

Firm-bank relationships: New insights

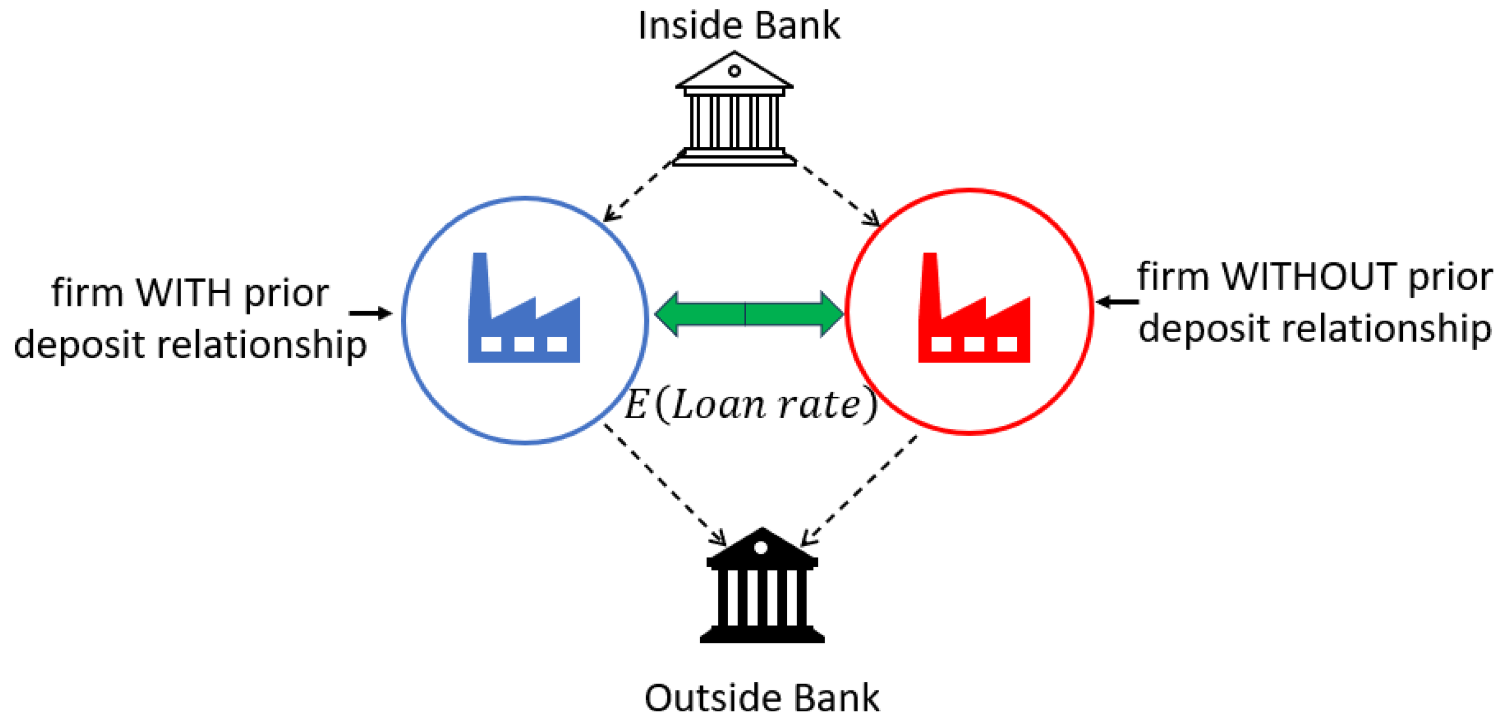
1. 20% of firms have a deposit relationship with (non-lender) outside banks
2. 40% of firms switching lenders have a pre-existing deposit relationship with their new (outside) lender

Empirical approach

a) Are firms that have an outside deposit relationship more likely to switch lenders?



b) Upon switching, do outside lenders offer better loan conditions to firms with prior deposit relationship?



Results

a) Firms that have an outside deposit relationship are more likely to switch lenders

	I P{Switch}	II P{Switch}	III P{Switch}
Outside deposit relationship$_{t-1}$	0.045*** (0.0026)	0.080*** (0.0039)	0.080*** (0.0039)
Observations	320,484	307,300	307,297
Adjusted R-squared	0.026	0.215	0.219
Firm & loan controls	Yes	Yes	Yes
Firm FE	No	Yes	Yes
Time FE	No	Yes	No
Bank FE	No	Yes	No
Bank × Time FE	No	No	Yes

$$Switch_{f,t} = \beta\, Outside\ deposit\ relationship_{f,t-1} + \delta\, Controls_{b,f,t} + \lambda_f + \lambda_{b,t} + \epsilon_{f,t}$$

where $Switch_{f,t}$ equals 1 if firm f switched to an outside lender in year t and $Outside\ deposit\ relationship_{f,t-1}$ equals 1 if firm f had deposits with at least one (non-lender) outside bank in year $t-1$

b) Outside lenders offer better loan conditions to switching firms with a prior deposit relationship

Matching variables	I Loan rate	II Loan rate
Comparison group	Similar switchers without deposit rel before switching	Similar switchers with deposit rel after switching
# switching loans with prior deposit rel	74	39
# switching loans w/o prior deposit rel	72	31
Number of observations	87	40
Constant	-0.573** (0.278)	-0.623** (0.280)

$$Loan\ rate_{\text{switcher with prior deposit rel}} - Loan\ rate_{\text{switcher without prior deposit rel}} = \alpha + \epsilon$$

where we match the two types of switchers using coarsened exact matching based on the following variables: firm size, industry, region, legal structure, bank identifier, loan amount, loan collateralization, loan type, and credit rating

Consistent with informational hold-up theory:

- Our results are stronger for deposit relationships that promote information flow
- Deposit relationships are more important in case outside banks' informational disadvantage is larger
- Deposit relationships improve outside banks' screening capabilities

Our results hold using exogenous variation in deposit relationships induced by the corporate deposit insurance threshold and are not driven by other channels (such as cross-selling)

Conclusion and implications

- We show that deposit relationships impact lender competition by reducing outside banks' informational disadvantage vis-à-vis inside banks
- Our findings provide a novel perspective on the two-sidedness of the banking sector, and have implications for deposit market reforms and open banking initiatives