Firm-bank relationships: a cross-country comparison

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Firm-bank relationships

- Theory: Firms want to entertain more than one bank relationship for insurance reasons and to increase their bargaining power against banks. At the same time, one firm-bank relationship may lead to a stronger informational advantage. Thus, theory does not predict a clear relationship between number of firm-bank relationships and credit conditions.
- Empirics: Usually evidence from the credit registry of one country

This paper:

- What is the structure of firm-bank relationships across Euro area countries?
- What are the differences in the credit contracts among them?
- Document these using a novel dataset (AnaCredit)

Data

Credit registry of the Euro area – AnaCredit:

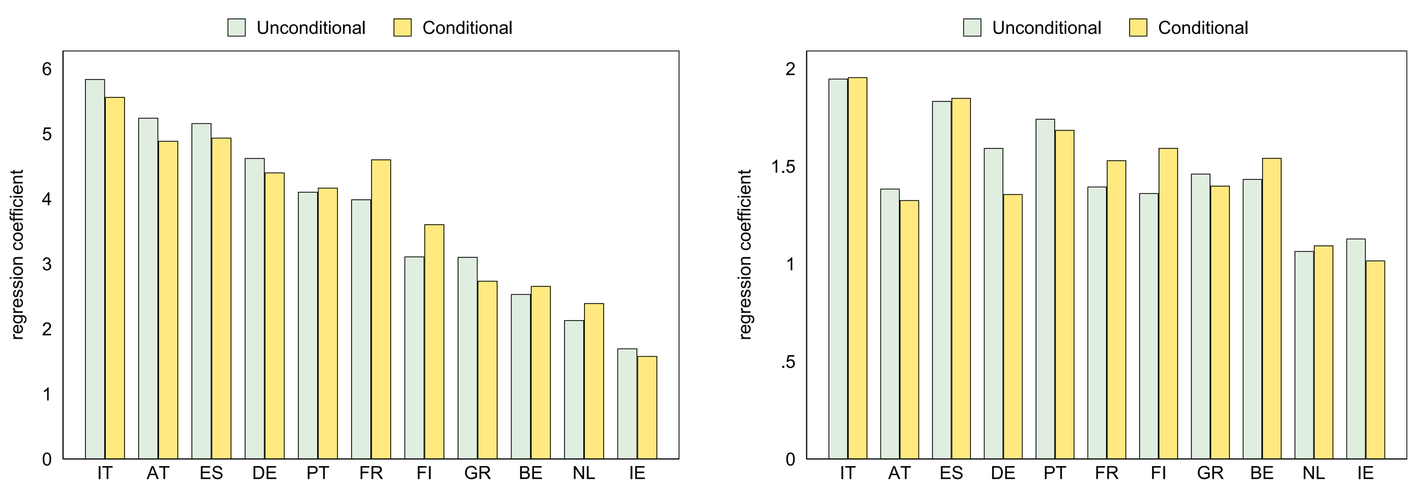
- Confidential loan-by-loan information
- Focus on non-financial corporations in December 2019
- Merged with firm-level information from Orbis
- Analysis for firms in Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, and Spain
- Exclude firms in default as well as syndicated loans
- Final sample includes loans of approximately 3 million firms

Number of firm-bank relationships

- Even though the number of relationships is increasing with firm size in all countries, the absolute number of relationships differs across countries.
- Estimate country coefficients from the following regression:

$$\text{Nrel}_{isgc} = \sum_{c=1}^{11} \alpha_c^N D_c^{\text{Ctry}} + \sum_{g=1}^{4} \beta_s^N D_g^{\text{Size}} + \sum_{l=1}^{20} \gamma_s^N D_s^{\text{Sect}} + \epsilon_{isgc}$$

Average number of bank relationships



(a) weighted (b) unweighted

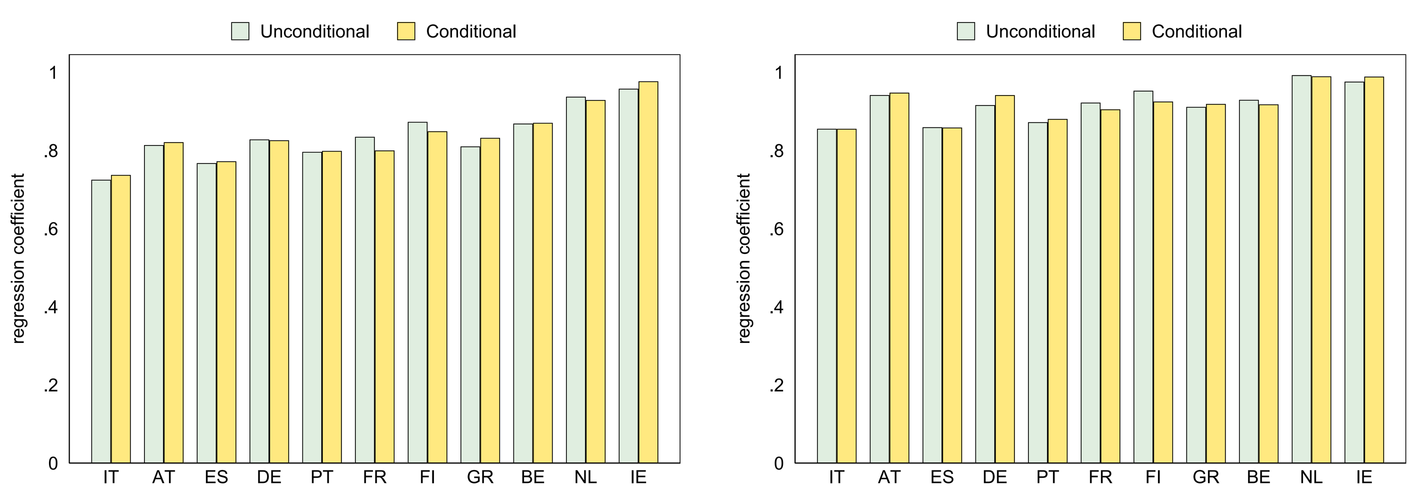
- The average firm in Italy, Spain, and Portugal has at least on more bank relationship than a firm in Ireland and the Netherlands controlling for firm size and industry.

Credit concentration

- To assess whether firms operate mostly with a single bank, consider the share of credit from the "main bank", defined as the bank that accounts for the largest share of credit.
- Estimate country coefficients from the following regression:

$$\text{Credit Share}_{isgc} = \sum_{c=1}^{11} \alpha_c^N D_c^{\text{Ctry}} + \sum_{g=1}^{4} \beta_s^N D_g^{\text{Size}} + \sum_{l=1}^{20} \gamma_s^N D_s^{\text{Sect}} + \epsilon_{isgc}$$

Average share of credit from the main bank



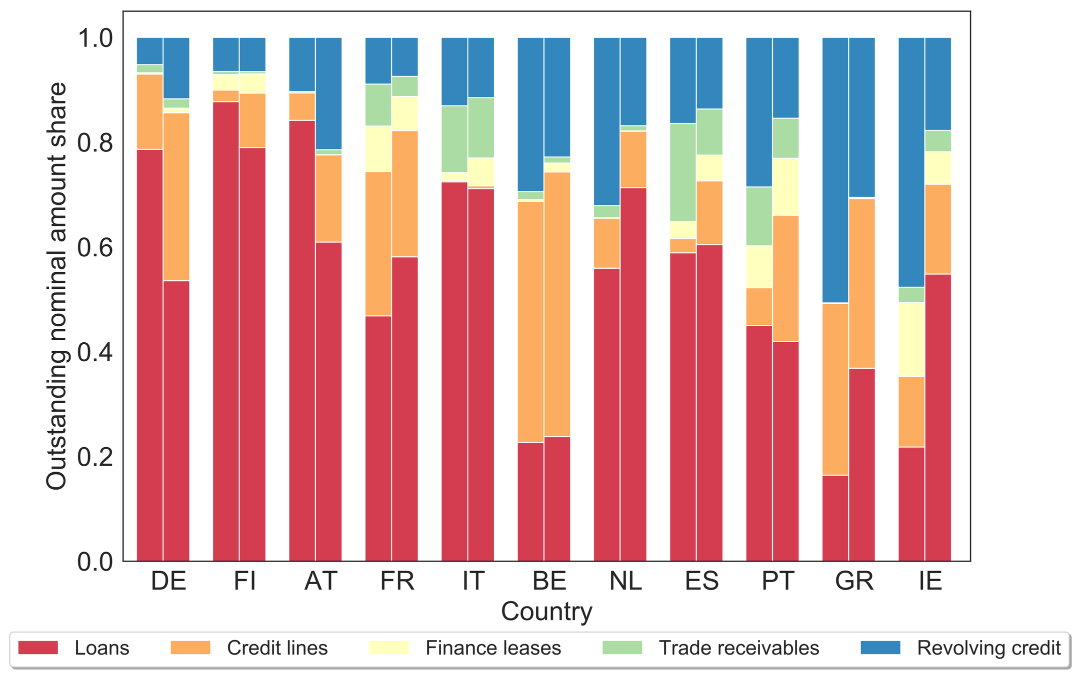
(a) weighted (b) unweighted

- For firms in Italy, Spain, and Portugal the share of credit supplied by the main bank is around 0.7, while for firms in Ireland and the Netherlands it is close to one.

Types of credit contract

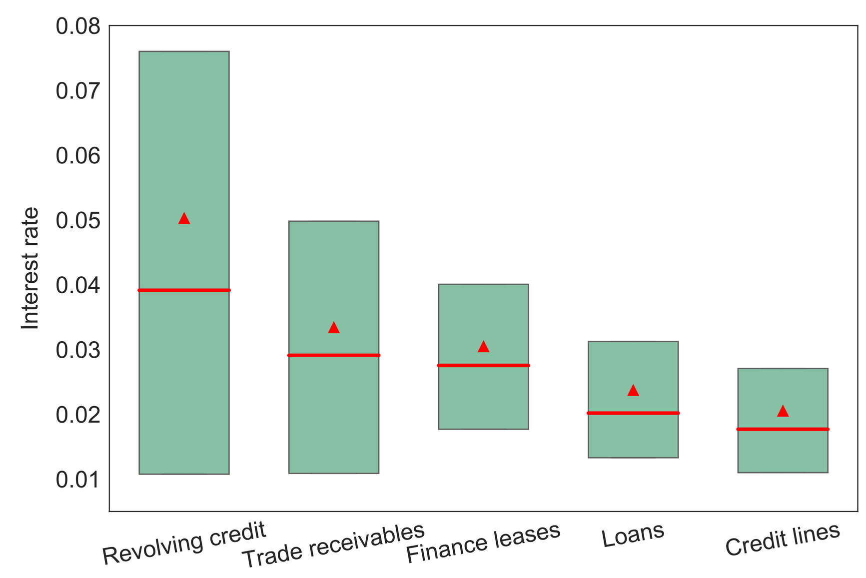
- Instruments differ in terms of maturity, collateral, and revolving nature.
- Loans and non-revolving credit lines are classified as long term credit, trade receivables and financial leases as medium to short, and revolving credit, which can be recalled by the bank without previous notice, as short term.

Share of credit by instrument type



- In Germany, Finland, and Austria, firms rely more on long term credit with almost 90% of credit is loans and non-revolving credit lines.
- In Greece and Ireland, almost half of their total credit is revolving credit.

Interest rates by types of credit contract



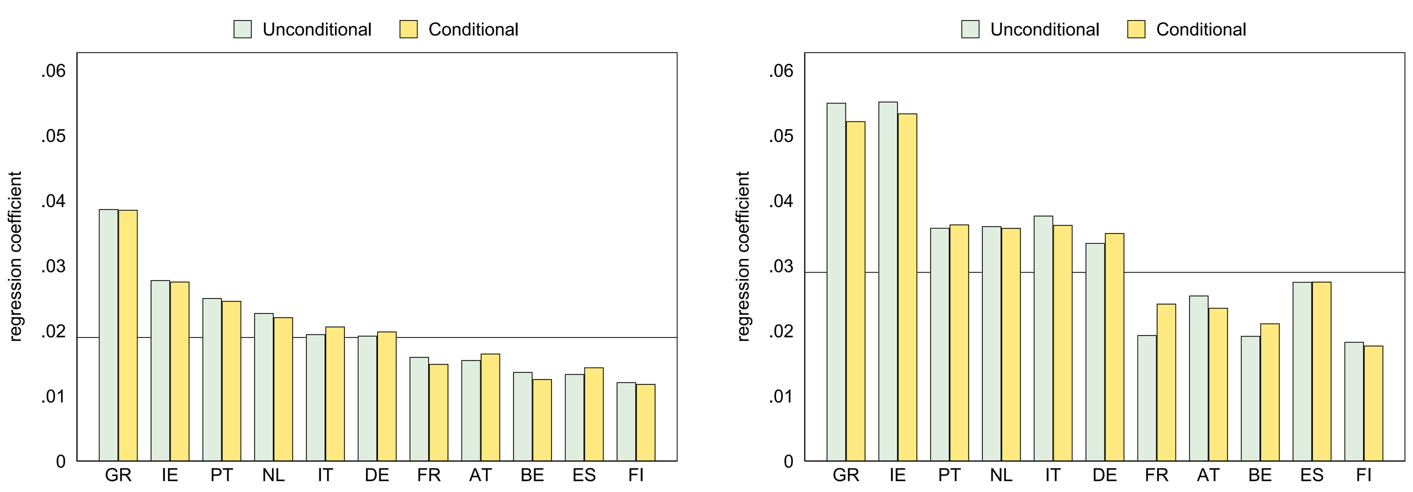
- Different instruments have different interest rates.
- Revolving credit costs on average twice as much as loans and non-revolving credit lines.

Interest rates across countries

- Estimate country coefficients from the following regression:

$$r_{isgjc} = \sum_{c=1}^{11} \alpha_c^r D_c^{\text{Ctry}} + \sum_{g=1}^{4} \beta_s^r D_g^{\text{Size}} + \sum_{s=1}^{20} \gamma_s^r D_s^{\text{Sect}} + \sum_{j=1}^{5} \theta_j^r D_j^{\text{Instr}} + \eta_{isgjc}$$

Average interest rate



(a) weighted (b) unweighted

- Firms in Greece and Ireland have on average more than two times higher interest rates compared to Belgium and Finland, controlling for instrument type, firm size, and sector characteristics.

Overall findings

- Highlight that significant cross-country differences in the credit conditions persist across Euro area countries, arising mainly from structural differences.
- Differences in the number of bank relationships are attributable more to country specificities than to firm characteristics.
- Firms in Northern European countries rely heavily on one bank, while in Southern European do not concentrate their credit demand on one bank.
- Countries differ substantially in terms of the instrument used to obtain credit.
- Similar firms pay different rates in different countries suggesting that a country effect (e.g. competitiveness of the banking sector or cost of funding for banks passed over to firms) explains rates.