Research question
Does government involvement in credit markets affect monetary policy transmission in the private credit market, and if so, through what channel?

Policy relevance
• Government ownership of banks (La Porta et al. 2002) and government-sponsored or guaranteed credit programs (Beck et al. 2011) are prevalent around the world.
• Many countries have implemented credit programs in response to COVID-19, which could have legacy implications for monetary policy transmission.

Empirical Setting
We study the pass-through of monetary policy rates to loan interest rates in Brazil, where government has a large presence through both public banks and special “earmarked” credit.

Earmarked credit are loans through government programs designed to stimulate investment, export, or agriculture among other objectives. They can be directly granted by government-owned banks or intermediated through private banks. Interest rates on earmarked loans are regulated and tend to be lower than non-earmarked loans. These below-market interest rates for earmarked loans are subsidized by the government.

Data
We use an administrative dataset from the Central Bank of Brazil that contains loan-level information and bank-firm credit relationships.

Ability to observe bank-firm relationships allows us to identify the credit supply channel in an empirical specification fully saturated with fixed effects.

Frequency and coverage
Data is at monthly frequency and the unit of observation is a loan extended by a given bank to a given firm at a given time.

The database includes detailed information on all loans granted by financial institutions operating in Brazil, including government banks, private domestic banks, and foreign banks.

All loans larger than 5,000 reais (equivalent to 3,000 USD in Jan 2011) are included.

Sample period
Our sample period is September 2011 to August 2015. This is a period with a significant expansion of government credit. Monetary policy loosened till end-2012 and started to tighten afterwards, allowing us study two sub-periods.

Subsample period 1: Monetary policy loosening (Sep 2011 – Nov 2012)
Subsample period 2: Monetary policy tightening (Dec 2012 to Aug 2015)

Conclusions
We examine the role of government credit in monetary policy transmission, using a comprehensive dataset from Brazil and an empirical specification that allows the identification of the credit supply channel.

We find that earmarked lending affects the monetary policy transmission to non-earmarked loans. Our evidence is consistent with a rent-seeking interpretation: banks lock in clients with low-cost earmarked loans and then they pass on monetary policy loosening less to non-earmarked loans while they pass on monetary policy tightening more. As a result, the transmission of monetary policy through private bank lending may differ in the presence of significant government involvement in credit markets.

Additional interesting questions to be addressed include how the credit supply channel we identified depends on bank characteristics and the indexation of loan interest rates.

Motivation

Empirical Setting

Data

Regression specification

\[ y_{lct} = \alpha + \gamma_1 \text{SHARE}_{E}_{lct-1} + \gamma_2 \text{SHARE}_{I}_{lct-1} + \gamma_3 \text{SHARE}_{E}_{lct-1} \times \text{SHARE}_{I}_{lct-1} + \epsilon_{lct} \]

\( y \): loan interest rate. \( l_{ct-1} \): one-period lagged policy rate in country. \( l_{ct} \): dummy variable for the bank’s country of origin. \( c_{BR} \): dummy variable for non-earmarked loans. \( S_{E_{lct}} \): earmarked exposure, measured by the share of earmarked loans. \( S_{I_{lct}} \): loan characteristics (log loan amount, rating, maturity, and a dummy variable for collateralized loans). \( \phi_{lct} \): firm-bank fixed effects. \( \epsilon_{lct} \): firm-time fixed effects.

Main findings
• Earmarked exposure affects monetary policy transmission to non-earmarked loans. The effect is asymmetric during periods of monetary policy tightening and loosening.
• Specifically, the monetary policy pass-through to non-earmarked loans’ interest rate is weaker (stronger) when the firm’s earmarked exposure is higher during the period of monetary policy loosening (tightening).
• In other words, the higher the firm’s exposure to the earmarked market, the less its non-earmarked loan interest rate falls when policy rate falls and the more its non-earmarked loan interest rate rises when policy rate rises.
• These results are present among large firm but not SMEs.
• Overall, this evidence is consistent with a rent-seeking interpretation in which a bank locks in a client with low-cost earmarked loans but is compensated through the ability to charge higher interest rates on non-earmarked loans.

References

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