

Discussion of

Measuring Financial Restrictions of Brazilian Private Firms with Microdata: Did Credit Policies of Banco Central do Brasil During Covid-19 Pandemic Affect Investment Demand?

by Fernando N Oliveira

Discussion by Jennifer Peña[§]

Central Bank of Chile

CEMLA

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[§] The views and conclusions presented do not necessarily reflect the position of the Central Bank of Chile or its Board members

Summary and general remarks

- ▶ An interesting paper that makes an important contribution to understand the role of financial restrictions measures based on microdata related to bank loan contracts of private firms (SMEs).
 - ▶ within the literature that constructs indices of financial restrictions
- ▶ **The author's analysis focuses on two key issues:**
 - ▶ they build Financial Restriction measures with a rich granular dataset.
 - ▶ Assess whether the **Credit policies** undertaken by the Banco Central do Brasil (BCB) during Covid-19 Pandemic had any positive effect in mitigating credit restrictions of these firms.
- ▶ **Main results:**
 - ▶ Their Financial Restrictions measures explain the capacity Brazilian private firms have to access credit for investment
 - ▶ Investment is negatively related to financial restrictions in Brazil.
 - ▶ Credit policies of BCB had positive effect on working capital loans but did not have any effect on investment of private firms in the Covid-19 pandemic.

Data and empirical strategy



Dataset

- ▶ Sample of 5,664 firms.
- ▶ From 2010 to 2020.
- ▶ SMEs (Agriculture, Commerce, Energy, Industry, Services)
- ▶ Links with banks through different financial products (with interest in loan contracts of firms)
- ▶ Purpose of the loan: working capital, financing and investment.



FR Measures

- ▶ **Core categories:** [1] very likely non-financially restricted, [2] likely to be financially restricted, [3] not enough information to classify, [4] likely to be non-financially restricted and [5] very likely to be non-financially restricted.
- ▶ Core FR measures are extended: delinquency, derivatives contracts, performing portfolio and balance sheet information, firm's bank relationships
- ▶ They select the best FR measure (probit panels)



Investment

Determinants of investment (Capital expenditure):

- ▶ They have estimations for FR or NFR firms
- ▶ Profitability (ebitda): a measure of cash-flow (+ and statistically significant for FR firms and for the case non-FR firms is - and statistically significant)
- ▶ While the coefficient of cash-flow measure in Pandemic is not statistically significant.

Comments

Paper:

- ▶ Is it possible to exploit other characteristics of the firms: age, labor, productivity, others? for example, confirm if that smaller and younger firms are more likely to face financial constraints \Rightarrow include a characterization of firms.
- ▶ Representativeness of the firms in each sector with respect to the total in Brazil. There is a bias to the services, is it normal for this to be the case?

To deepen:

- ▶ Why did they include the nominal series? did you test including sales, revenue, capital deflated? \Rightarrow [Cherchye et al. \(2020\)](#)
- ▶ Can there be a role for uncertainty? \Rightarrow [Dejuán and Ghirelli \(2020\)](#) A role for propagation of production networks? \Rightarrow [Alfaro et al. \(2020\)](#)

Additional exercise:

- ▶ Self-financing channel, i.e. the extent to which wealth accumulation enables firms to overcome financial frictions \Rightarrow [Aguirre et al. \(2021\)](#)

Thanks!

Suggested references

-  Aguirre, A. Tapia, M. and L. Villacorta (2021)
“Production, Investment and Wealth Dynamics under Financial Frictions: An Empirical Investigation of the Self-financing Channel”
Central Bank of Chile. Working Papers N° 904 / March 2021.
-  Cherchye, L., Ferrando, A., Muller, K., Verscheld, M., and B. De Rock (2020)
“Identifying financial constraints,”
ECB Working Paper Series No 2420 / June 2020.
-  Dejuán, D. and C. Ghirelli (2018)
“Policy uncertainty and investment in Spain,”
Bank of Spain Working Paper Series No 1848.
-  Alfaro, L., García-Santana, M. and E. Moral-Benito (2021)
“On the Direct and Indirect Real Effects of Credit Supply Shocks,”
Forthcoming, Journal of Financial Economics.

BCB policies in context

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Central Banks' Credit Facilities to Banks (% GDP)**

