

# Corporate Finance and the Transmission of Shocks to the Real Economy

BRAEUNING, FILLAT, JOAQUIM

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## SUMMARY

- ▶ *How do changes in credit supply to firms affect the economy?*
- ▶ The literature sheds light on many dimensions that affect this question:
  - ▶ Bank vs. bond financing: [Crouzet \(2018\)](#), ...
  - ▶ Types of credit constraints: [Lian and Ma \(2021\)](#), [Drechsel \(2023\)](#), [Caglio, Darst, and Kalemli-Ozcan \(2021\)](#), ...
  - ▶ Maturity considerations: [Gomes, Jermann, and Schmid \(2016\)](#), [Jungherr, Meier, Reinelt, and Schott \(2022\)](#), ...
  - ▶ Role of credit lines: [Greenwald, Krainer, and Paul \(2021\)](#), ...
  - ▶ Role of trade credit: [Bocola and Bornstein \(2023\)](#), ...
  - ▶ ...
- ▶ This paper opens up another important dimension:
  - ▶ **Intensive + extensive margin choice of different firm financing sources**

## HIGHLIGHTS OF THIS PAPER

- ▶ Ambitious undertaking
- ▶ Structural model, disciplined with “gold standard” data for the US
- ▶ Methodological consequences: Khwaja and Mian (2008)-regressions
- ▶ Very clearly written

## PLAN FOR MY DISCUSSION

1. Distill the contribution relative to the existing literature
2. Role of missing dynamics and other debt characteristics
3. Suggestion to enrich the analysis of Kwhaja-Mian approach
4. Various smaller points

## DISTILLING THE MAIN CONTRIBUTION

- ▶ The empirical facts are fascinating, but not entirely new
  - ▶ Several earlier papers with detailed summary statistics from Y14Q data  
*Caglio et al. (2021), Chodorow-Reich et al. (2022), Greenwald et al. (2021)*
- ▶ Idea that multiple funding sources & ext. margin matter also not new in principle
  - ▶ Some papers need to clear a lower bar for success when idea itself is new
- ▶ Therefore, in my view the success of the paper will come down to:
  1. How well is the key idea captured in the model and what do we give up?
  2. How convincingly are consequences for empirical methodologies drawn out?

## “YOU WIN SOME YOU LOSE SOME”

- ▶ What do we gain?
  - ▶ Different funding sources (bank relationships)
  - ▶ Extensive *and* intensive margin choices
  
- ▶ What do we give up?
  - ▶ **Dynamic decisions**
  - ▶ Maturity choice
  - ▶ Collateral heterogeneity
  
- ▶ Key question: how large is the net gain?

## DYNAMIC DECISIONS AND OTHER LOAN CHARACTERISTICS

- ▶ The authors state “*rates in our model can be interpreted as shadow rates, that is, already including the rate equivalent effect of other loan characteristics.*”
- ▶ Two ways to push back on this statement
  1. In principle, other loan characteristics could exceed the role played by interest rates in the transmission of credit supply shocks
    - ▶ If so, one would want to model these characteristics explicitly
    - ▶ In fact, overall variation in interest rates in cross-section of firms surprisingly low
  2. Shadow rates may endogenously respond to firm choices through other loan features
    - ▶ This is especially important **dynamically**
    - ▶ Let me expand on this point on the next slide

## DYNAMIC DECISIONS AND OTHER LOAN CHARACTERISTICS

- ▶ In the model, variation in interest rates driven by exogenous shocks
- ▶ True shadow rate faced by a firm is endogenous to its **present and past** choices
- ▶ Some examples:
  - ▶ Current choices about maturity affect future shadow rate
  - ▶ Current tangible investment affects future collateral and thus future shadow rate
  - ▶ Current production choices affect future earnings and thus future shadow rate
- ▶ My reading of existing research is that these dimensions are very important
- ▶ In other words, I worry that we have to give up quite a lot



## CONSEQUENCES FOR KWHAJA-MIAN REGRESSIONS

- ▶ In my view, this is the strongest part of the paper
- ▶ Section 5 clarifies how and when within-firm estimation approach fails
- ▶ I suggest providing further experiments, to make this the core part of the paper
- ▶ Main suggestion: contrast with issue that Kwhaja and Mian approach fixes
  - ▶ Being able to control for credit demand!

# RECALL THIS TABLE ...

	Dependent Variable:			
	Credit Growth (%) Full Sample (1)	Credit Growth (%) KM Sample (2)	Credit Growth (%) KM Sample (3)	Firm FE (4)
Shocked Bank (0/1)	-45.88*** (5.79)	-14.66* (8.72)	-21.55*** (4.32)	
Productivity ( $a_j$ )				11.16*** (2.90)
Constant	-17.41*** (5.11)	-17.41*** (6.00)	-14.15*** (2.96)	-32.67*** (10.77)
Unit of Obs.	Bank-Firm Level	Bank-Firm Level	Bank-Firm Level	Firm Level
Firm FE	No	No	Yes	-
Observations	366	154	154	73
R-squared	0.15	0.02	0.87	0.17

## MY RECOMMENDATION: MORE SIMULATION EXPERIMENTS

### ▶ Main suggestion:

- ▶ In current simulation, OLS is the correct approach because no credit demand shocks
- ▶ Why not add credit demand shocks (aggregate and idiosyncratic) to the model?
- ▶ Set up a simulation where the importance of these shocks is seriously calibrated
- ▶ Investigate in regressions what is worse:

*adding FE and creating a bias OR not adding FE and having demand confounders*

### ▶ Additional suggestion:

- ▶ I suspect the direction of the bias created by firm FE is not necessarily negative
- ▶ Seems to depend on whether shocked bank lends to high or low productivity firms
- ▶ Perhaps provide further experiments in which different banks are hit

## SMALLER SUGGESTIONS AND THOUGHTS

- ▶ My sense is that it would help the visibility of the paper to make the title more informative  
*Suggestion: How do credit supply shocks affect the economy? The role of firms' funding choices at the extensive and intensive margin*
- ▶ How big is the problem that non-Y14 banks are non-observable (see footnote 4)? It would help to understand this issue a little bit better.
- ▶ The paper by Chang, Gomez, and Hong (2021) looks very relevant to the discussion in Section 5. But it's only mentioned in the literature review. I would like to know more about how it relates.
- ▶ Clarify number of obs in the regressions with simulated data. Is it two firms simulated for 154 periods? If so, why is that choice made?
- ▶ I'm curious about how the authors would think about trade credit in model and data

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