Discussion of

The Bank Lending Channel and Corporate Innovation

(Spyridon Lagaras)

Geraldo Cerqueiro
Catolica Lisbon School of Business and Economics

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THE PAPER

- How do credit supply shocks affect corporate innovation?
  - Uses as laboratory the 2007-2009 financial crisis and Lehman's bankruptcy

- Main finding:
  - Sharper drop in patent counts and citations for firms that suffered a stronger reduction in credit supply

STORYLINE (1)

- In Sep/2008 Lehman had about $30 billion committed in the syndicated loan market
- Lehman's bankruptcy "forced" the remaining members of the syndicate to fill the void
  - Reputation concerns (Ivashina & Sun, 2013 JFE)
  - Important for revolving lines of credit
- Liquidity shock of these banks amplified by the massive draw-downs on existing lines of credit

STORYLINE (2)

- Credit supply instrument
  - Fraction of a bank's syndicated loan portfolio outstanding in Sep/2008 in which Lehman was involved and which is
- To address endogenous firm-bank matching
  - Look at firms borrow from the same bank before and after Lehman's bankruptcy
- Empirical methodology
  - Diff-in-diff regressions with continuous treatment

GENERAL OVERVIEW

- Important research question
- Identification is reasonably clean

- Paper hard to read (many relevant details omitted)
- Structure needs to be revised
- Occasional far-stretched argumentation
- Some comments about the results (or lack thereof)

(1) ARE WE THERE YET?

- Reader has to wait until page 21 (out of 24) to see the main tables and results
- Too many preliminaries and anticipated robustness checks (Section 5)
- Suggestion:
  - Start with a strong specification (Lehman shock, within-relationship analysis, include borrower FEs)
  - Spend the rest of the paper beating it up and extending your analysis

(2) IN TABLE 8, PANEL A

	Extensive Margin Results	
Variables	(1) Patents	(2) Citations
Post	-0.26***	-0.95***
	(0.029)	(0.053)
$\Delta\tilde{L}_{i,s}$	-0.53***	-0.15
	(0.120)	(0.127)
$Post \times \Delta\tilde{L}_{i,s}$	0.22***	0.29***
	(0.052)	(0.094)
Industry Fixed Effects	Yes	Yes
Year Fixed Effects	Yes	Yes
Borrower Controls	Yes	Yes
Observations	26,832	26,832
R^2	0.11	0.26

(3) MECHANISM

- A reduction in credit supply reduces corporate innovation
- Can you say something about the underlying mechanism?
  - A reduction in R&D investment?
  - A reduction in (skilled) employment?

(4) INNOVATIVE EFFICIENCY

- Measured as Patents / R&D investment
  - How do you account for the lag between the innovative input (R&D) and output (patents)?
- Result in Table 9: Reduction in credit supply increases innovative efficiency
- Could this reflect a quicker drop in R&D investment?
  - Maybe look at industries separately

(5) NOT QUITE ALONE

- Introduction goes as follows:

Innovation is considered to be a driving force of firm growth allowing a means of differentiation from competition and of establishing a dominant role in an industry. As innovative activity is facilitated by the well-functioning of financial systems, the purpose of the paper is to investigate the potential link between frictions in credit supply and corporate innovation. Indeed, the causal effect of credit supply shocks on firms' innovative activity has escaped research attention, and the paper intends to complement the literature

- What about the banking deregulation papers?
  - Amore et al. (2013 JFE), Chava et al. (2013 JFE); Cornaggia et al. (forthc. JFE); Hombert & Matray (2014)

(6) POLICY IMPLICATIONS

- In the Introduction (page 5):

The results of the paper suggest that government policies that aim at bailing-out financial institutions and providing aggregate liquidity in the lending market may lead to positive spillovers in the economy by boosting innovative activity and, thereby, nurturing long-term economic growth.

- Why not argue then about capital requirements?
- Many good reasons to avoid this alley…
  - No concrete evidence, welfare considerations, etc.