Financial innovation, bank capital and the bank lending channel: A European perspective

Yener Altunbas – *Bangor University*

Leonardo Gambacorta – *BIS*

David Marqués-Ibáñez – *ECB*

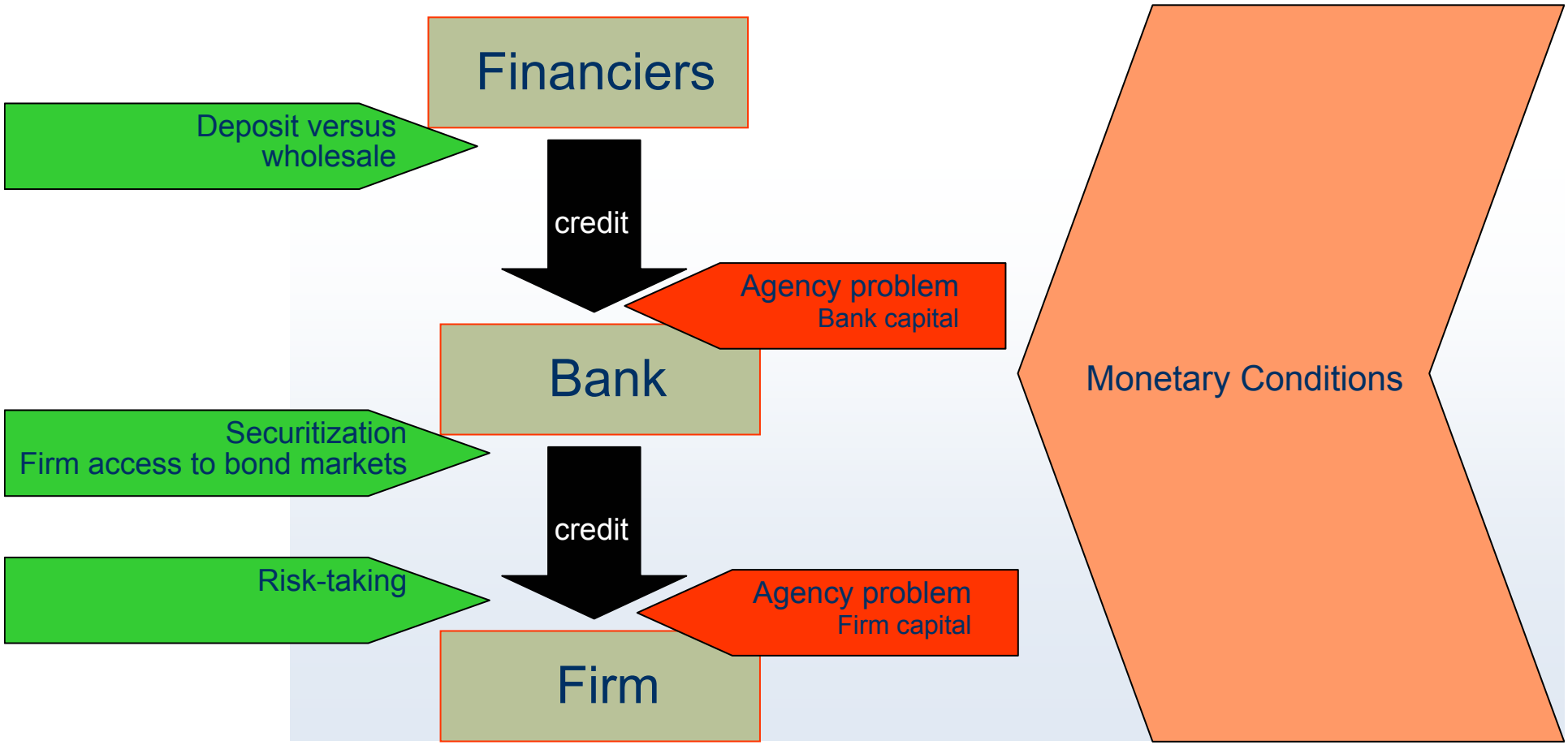
Discussion by

Steven Ongena - *CentER - Tilburg University & CEPR*

Banks

- Banks are “missing” in many macro-models
  - “Meso” level possibly ignored in quest “to underpin macro with micro”
  - Empirical evidence may have pointed in the direction that they didn’t matter that much?
- But banks may matter for monetary transmission

Monetary Conditions and Credit



Empirical Work

- Lang & Nakamura (JME 1995), Bernanke, Gertler & Gilchrist (REStat 1996)
  - Economic and monetary contractions lead to more borrowing by large firms
- Bernanke & Blinder (AER 1992)
  - Monetary contraction cuts bank lending, along
    - Bank capitalization (Kishan & Opiela, JMCB 2000)
    - Core deposits (Jayaratne & Morgan, JMCB 2000)
    - Bank holding company status (Ashcraft, JMCB 2006)
    - Bank business strategies (Black, Hancock & Passmore, 2009)

Bank Lending

- Other countries in Europe
  - Kashyap, Mojon & Angeloni (2003) for European studies

- Altunbas, Gambacorta & Marques-Ibanez (2009)
  - Multiple countries: US versus EU
  - Other cuts along bank
    - Capital, Liquidity, Risk, Size …

Nice Paper(s)

- Contribution
  - Multiple countries
  - Various bank characteristics
    - Effects of innovation
- Maybe further benchmark economic relevancy

Some easy-to-make comments

Identification Challenges

- Borrower – bank sorting
- Demand from supply
- Monetary from economic conditions

Bank – Borrower Sorting

- Problem: Borrowers may be both balance sheet constrained and bank dependent

  Gertler & Gilchrist (QJE 1994)

  - "Weak firms may borrow from weak banks"

Bank – Borrower Sorting

- Possible Solution:
  - Individual loan level data: Italy, Spain, Bolivia, Belgium, … Jiménez, Ongena, Peydró & Saurina (2009)
- Other partial solutions:
  - Datasets with firm-bank connections for many countries: like Kompass, …
  - Firm composition within countries may vary
  - Priors: for example innovation affects different firms differently
  - Institutional characteristics of the country

Demand from Supply

- Problem:
  - Demand falls: expectations for investment fall and cost of financing is high
  - Supply: agency costs increase

Demand from Supply

- Possible solution: Loan applications
  - Puri, Rocholl & Steffen (2009)
    - Loan applications to one bank
  - Jiménez, Ongena, Peydró & Saurina (2009)
    - Information requests to credit register from multiple banks about key group of borrowers that are new to the banks
  - Other settings: Brown, Kirschenmann & Ongena (2009), Aggarwal and Hauswald (2008), Liberti
    - Loan applications to one bank
    - Requested and granted amounts

Demand from Supply

- Another solution: lending standards
  - Maddaloni & Peydró (2009)

Monetary from Economic Conditions

- Economic conditions may determine changes in short-term interest rates Taylor (CR 2003)

- Some exogeneity to monetary policy needed
  - Hard, but some country settings better than others
    - Possibilities for identification across countries?

Low Interest Rates and Bank Risk

- Altunbas, Gambacorta & Marques-Ibanez (*JFS* 2009)
  - Decreasing interest rates allow banks with higher expected default frequencies to lend relatively more
    - Especially during economic booms
      - Possibly relying on uninsured funding
        - 1999:I-2005:IV; 12 Euro countries; 2,948 banks

Low Interest Rates and Bank Risk

- Altunbas, Gambacorta & Marques-Ibanez (2009)
  - Looser monetary policy precedes higher bank risk, while decreases in the 3-month interest rates precede lower bank risk
    - 1999:I-2008:IV; 14 European countries + US; 634 banks
  - Not sure about the interpretation of the coefficient on the 3-month rate?

Low Interest Rates and Bank Risk-Taking

- Jiménez, Ongena, Peydró & Saurina (2008)
  - Lower overnight rates prior to loan origination lead banks to lend more to borrowers with a worse credit history and to grant more loans with a higher per-period probability of default.
  - Lower overnight rates during the life of the loan reduces this probability
    - 1984:IV-2006:IV; Spain; 23 mln. new bank loans
- Ioannidou, Ongena & Peydró (2009)
  - Plus no pricing of additional risk taken
    - 1999:3-2003:12; Bolivia; 27,007 new bank loans

"Too low for too long?"

How long do interest rate have to be low for …

- Risk-taking to really "kick off"?
  - Project supply: initially bank can still take the "best" projects that pass the lower hurdle rate?
  - Reduction in perception of risk and increase in risk-tolerance may take time?
  - Not clear time plays a major role in all "stories"
    - "Search for yield": contractual period of nominal performance assessment may play only minor role?
- Risk-taking to "pollute" the bank's portfolio to the point that it offsets the reduction in default on existing loans?
- Financial innovation to be worthwhile?

"Too low for too long?"

How low does the interest rate have to be?

- Does the period that risk-taking really takes off gets shorter as rates get lower?
  - Possibly but not necessarily
- Risk-taking to be offset by risk-reduction in bank's portfolio?
- To spur quicker financial innovation?

To Conclude

- More theory is needed to pin down precise mechanism(s) of impact of rates on bank lending and risk-taking through empirical testing
  - Time may play a role?
    - Jointly with level?
- More data is needed: loan level, time series, more countries, …
- More empirical work is needed … ☺