Comments on 'Lending Relationships and Monetary Policy'
by Y. Aksoy, H. Basso and J. Coto-Martinez

Markus Haavio

15.10.2009

Key features of the paper

- The paper analyses the implications of bank-firm relationships for

  - The propagations of shocks and business cycle dynamics

  - Monetary policy

- Departures from a standard New Keynesian model

  - Lending relations, explicit treatment of the banking sector

  - Cost channel of monetary transmission

Lending relationships

- Long-term relationships between a bank and firm (or household)
- Typical motivation: asymmetric information, agency problems
- During a long relationship the bank can learn to know the firm
- The bank has incentives to monitor its clients
- Also: May enable funding
  - to risky start-ups
  - during a recession
  - the bank is compensated when the firm is making profits

- Hold-up problem
  - The bank has ex post monopoly power
  - The borrower tries to switch the source of finance => it is pegged as a 'lemon'

Lending relationships: this paper

- The paper abstracts from asymmetric info
- Focus on the hold-up problem
- Banks have monopoly power vis-à-vis their customers (firms)
- What are the implications of the hold-up problem / monopoly power for
  - spreads
  - amplification of shocks
  - monetary policy

Countercyclical spreads

- Key element in the model
- Also backed by empirical evidence
- Explanations in the literature
  - BGG, financial accelerator
    - Firms' balance sheets
    - Increased bankruptcy costs in a recession
  - Rajan (1992)
    - Hold-up problems, information rents increase with borrower risk

      => in recessions banks can raise interest rates by more than is justified by borrower risk

Countercyclical spreads: This paper

- A bank faces a trade-off. It can
    - (A) exploit existing customers => high spreads

        or

    - (B) try to attract new customers (to be exploited later) => lower spreads

- When the demand for loans is strong (during a boom) ,
    (B) dominates
- When the demand for loans is weak (during a recession),
    (A) dominates

=> Countercyclical spreads

Modeling the hold-up problem

- The model abstracts from issues of asymmetric information

- Hold-up problem <= habit persistence
  - Ravn, Schmitt-Grohe and Uribe (2006): 'Deep habits'
  - Habit persistence ≈ shifting costs

- Cf. IO literature in the 1990s
  - E.g. Beggs and Klemperer (1992): Multiperiod competition with shifting costs
  - Trade-off between (A) exploiting existing customers and (B) attracting new customers

Cost channel of monetary transmission

- Firms have to borrow working capital to finance production

=> nominal interest rate enters the cost function

- Tighter monetary policy

    => lower aggregate demand => lower inflation

    => higher production costs => higher inflation (cost channel)

- Interaction between countercyclical spreads (due to lending relationships) and the cost channel

Results

- Amplification of various shocks
  - Shock => lower output => lower demand for loans => higher spreads => lower output => …
- The central bank should react to spread movements
  - higher spreads => lower policy rate
  - modified Taylor rule => higher social welfare

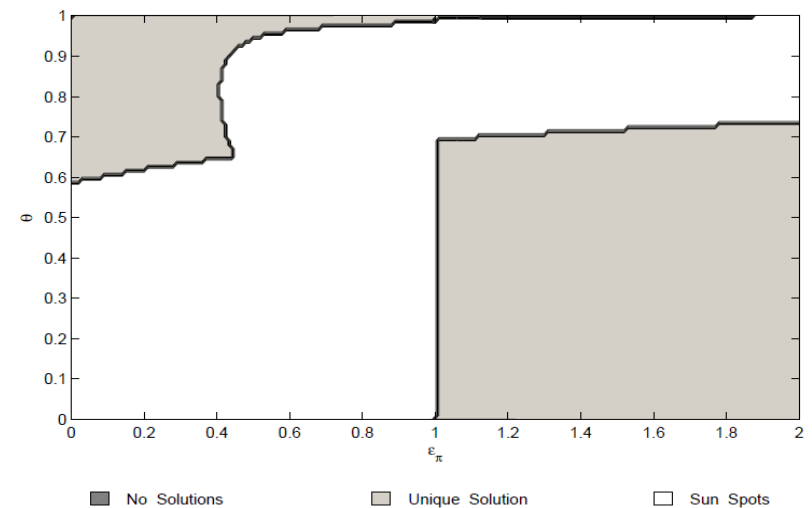•Lending relationships (and the cost channel) may result in indeterminacy of equilibria

•Implications for monetary policy:

•Weak lending relationships
  •Tough reaction to inflation
    => determinacy

•Strong lending relationships
  •Soft reaction to inflation
    => determinacy

No Solutions   Unique Solution   Sun Spots

(d) Varying ϵ_π setting - $\epsilon_y = 0$, $\epsilon_r = 0$

Comments

- Adding financial frictions / informational asymmetries to a DSGE model is a non-trivial task

- Two possible approaches
  - (1) Focus on microfoundations ('Turtle strategy')
  - (2) Use shorts-cuts / reduced forms, focus on macro implications ('Grasshopper strategy')

- The paper at hand follows the second approach

- The approach adopted in the paper produces some very interesting results

- However, there is also a gap between some of the underlying ideas and the modeling strategy

- There is an attempt to provide some microfoundations for hold-up problems in bank-firm relations
  - Monopolistic competition in the banking sector
  - Habit persistence

- The building blocks are probably better suited for modeling goods markets

Three points

Point 1.

- Asymmetric information crucial in lending relationships

- In the model, there are no informational asymmetries

Point 2

- A firm may benefit from having a close relationship with one bank, or a few banks
  - The bank learns to know the firm
  - This also gives rise to hold-up problems

- In the model, each firm borrows from all the banks
  - The financial department of the firm has a Dixit-Stiglitz (love for variety) objective function
  - Why does the hold-up problem arise in this setting?

- Similar issues arise in recent papers, which study a monopolistically competitive banking sector
  - Teranishi (2008), Hülsewig et al (2006)

Point 3 (really minor)

- A hold-up problem arises from a pre-existing relationship between a firm and a bank

- In the model, the strength of the habit depends on the aggregate lending of a bank to *all firms*

The quantitative significance of lending relationships

- Some of impulse responses suggest that lending relations are quantitatively not that important

Standard NK model	Add cost channel	Add lending relationships
	Significant effect	Hardly any effect

- Exceptions: spread, loan rates

- Moreover, a number of studies have concluded that the cost channel is not quantitatively significant
  - In the model lending relationships affect the economy though the cost channel

- Spread adjustment costs
  - Motivation: adverse effects of spread changes on firm-bank relationships
    - Motivation OK, if spreads and raised, but questionable if spreads are cut
  - Why Rotemberg, rather than Calvo?
    - Non-financial firms engage in Calvo pricing
    - Calvo => dispersion in retail interest rates => distortions
      (<= Financial part of the firm has a Dixit-Stiglitz objective function)?
  - Sticky spreads vs. sticky retail interest rates
    - Fixed-rate loan contracts in many countries, imperfect pass-through from money market rates to retail rates
      => sticky retail interest rates

Empirics

- Possible avenues for future research?

- Comparing the model to empirical VARs

- Exploiting information concerning
  - The length of lending relationships
  - The pass-though from policy rates / money market rates to retail rates
  - Could this help in calibrating the strength of the lending relationships (θ)?