

Discussion of Javier ANDRES and Oscar ARCE:  
'Banking Competition, Housing Prices and  
Macroeconomic Stability'

by Robert Kollmann (ECARES, ULB and CEPR)

ECB, Sept 29 2009

Great paper !

Very topical

Novel and thought provoking model

Motivation: financial liberalization has increased competition in financial sector

What are effects on cyclical properties of economy?

Has increased competition contributed to financial crisis?

Large literature on macro models with imperfect competition in GOODS markets

That literature suggests:

**Cyclical effect of imperfect competition is small, unless:  
markups are cyclical**

If markups are countercyclical, then imperfect competition raises aggregate volatility

Are markups pro- or countercyclical?

A great deal of theoretical and empirical research on markups in goods markets --- no consensus on cyclical nature

Theory:

Harrod (1934), Green-Porter: models with pro-cyclical markups

Kalecki, Keynes, Rotemberg-Saloner: models with counter-cyclical markups

Empirical evidence on cyclical properties of markups in goods markets is controversial; e.g. Kollmann (1997)

Problem: measurement of marginal costs

A novel mechanism explores in the paper here:

Imperfect competition may also affect aggregate fluctuations if degree of imperfect competition not uniform across sectors, e.g. when less competitive sectors happen to be more exposed to exogenous disturbances

Paper here:

- Focus on imperfect competition in credit markets

DSGE model with:

- patient households who work, accumulate physical capital, buy houses and make bank deposits
- impatient entrepreneurs who rent capital and labor services, and borrow from banks, using houses as collateral
- Salop (1979) circular city model applied to lending behavior of banks, exogenous FIXED number of banks

- paper assumes that market for bank deposits is competitive: deposit rate equals policy rate set by central banks
- Imperfect competition in credit market implies that lending rates exceed deposit rate

## TWO MAIN EFFECTS:

- Salop-type set up implies that lending-deposit rate spread is COUNTER-CYCLICAL (which tends to increase aggregate volatility)
- BUT: imperfect competition in credit market implies that entrepreneurs face higher interest rates, they thus accumulate less real estate, and have lower collateral.

When credit markets more competitive:

- relative position of entrepreneurs improves
- entrepreneurs become more leveraged
- economy reacts more strongly to shocks

Quantitatively, the second effect (more competition → greater leverage) dominates:

thus, greater competition leads to MORE volatility

## COMMENTS/SUGGESTIONS/QUESTIONS:

- ROBUSTNESS OF THE KEY PREDICTION ?

- Is dominance of the leverage channel a robust prediction of the model? need more sensitivity analysis

- Authors use a very particular model of imperfect competition in credit markets—other models may generate pro-cyclical markups

- Does imperfect competition matter QUANTITATIVELY?

responses of key variables are VERY similar across full competition and imperfect competition; there are differences in the long run, but simulated BUSINESS CYCLE statistics (HP filtered) are likely to be VERY similar.

Future versions of paper should report SIMULATED  
MOMENTS

- Seems plausible that there is imperfect competition in DEPOSIT markets too (perhaps even more relevant than for credit markets).

If initially DEPOSIT markets are monopolistic, then competition would improve relative position of households and WORSEN relative position of entrepreneurs; this would LOWER LEVERAGE and hence might make the economy LESS volatile. This would OVERTURN the main result of paper.

- Authors make important and impressive theoretical contribution by extending the Salop model to a dynamic setting—a ‘tour de force’.

But, if the idea is just to investigate the consequences of cyclical markups, an much simpler and more flexible set-up would suffice: could e.g. assume monopolistic competition in credit markets and assume that the elasticity of credit demand is a function of aggregate output

- Empirical question: what is cyclical nature of markups in credit markets?

Difficult to measure empirically, not sufficient to look at lending-deposit rate spread (as marginal cost of loans includes labor, physical capital etc.)

Mandelman (2006) provides empirical estimates of markups, but his approach seems very crude

- There are other potential channels through which increased competition might affect aggregate volatility

e.g.

- when the number of banks rises, banking supervision might become more difficult and thus more lax

- competition might induce greater risk taking by banks

# FINAL COMMENTS

This is a fascinating paper

Ambitious and novel model

But: need more evidence to show that effects matter quantitatively

Look forward to reading future papers from this research programme

THANK YOU!