DISCUSSION OF:

LOAN-TO-VALUE POLICY AND HOUSING LOANS: EFFECTS ON CONSTRAINED BORROWERS

Araujo, Barroso and Gonzalez (2016)

Manuel Adelino
Duke University
Overview

Look at the impact of LTV on delinquencies and contract terms

- Compare target and non-target segments, before and after the introduction of the LTV regulation
- Great data: credit registry (1.3 million loans) + employment data

Treated borrowers buy more affordable homes, default less and obtain higher interest rates

- Use observables to predict who will be treatment and control households

Comments:

- Interpretation: What changed?
- Pool of borrowers before and after the regulation
- Market-wide effects of the contraction in credit
Institutional details

Segments:
- SFH: Subsidized rates. Limits on house price and leverage (like “conforming” in the US)
- FGTS: Even more subsidized, but limit on household income
- SFI: Private market, higher rates. Akin to jumbo market in the US.
- Caixa Economica Federal has ~70% market share

9/2013 resolution forces SFH loans to have a maximum LTV of 90% for most loans, also affects FGTS segment

Comment: Would be helpful to provide more detail on the functioning of the Brazilian mortgage market (Section 2)

What is happening with SFI loans during this time period?
SFH are larger loans, with higher interest rates and much higher income.
Paper assigns borrowers into treated and control groups based on income.

Regulation also increases maximum price limit, but authors only use transactions below this limit.
Results

- Lower LTV (expected, mechanical)

- (Counter-intuitive?) credit effects:
  - Higher interest rate
  - Shorter maturity

- “Real” effect: smaller homes
  - Loans reduced by more than fall in house price

- Results in SFH and FGTS markets as broadly consistent, with some small differences (e.g., maturity)

- What happened to SFI segment?
  - Did banks respond as well?
  - Do some borrowers show up there? I.e. increase in the share of borrowers that could be in SFH segment before?
What changed?

This is not simply affecting LTV, seems a broader shock
- Central bank resolution Article 1 talks about risk evaluation, information verification (e.g., wrt appraisal, income), etc.
- Interest rate effects may be driven by Caixa Federal decision to contract credit?
- Authors acknowledge that regulation may be signal by the regulator

If there is a more general shock to supervision / attitude towards risk, then the experiment becomes “contaminated”
- Cannot really talk about just the causal effect of changing LTV constraints

Put differently, this is a broader credit supply shock
- In fact, the increase in rates and smaller maturity are part of the “shock”
- Constrained households (low income) more likely to be affected
Pool of borrowers before and after the regulation

Empirical approach uses income to assign borrowers to treatment and control groups, but is always conditional on obtaining a mortgage.

It is likely that some households drop out altogether (are not able to buy). This changes the composition of the pool of borrowers.

This would bias against the result in the paper, because more constrained borrowers should drop out more, and this would mean lower rates, etc.

However, if characteristics of control group change at the same time almost anything could happen to predictions.

Discussion of the composition of the pool of borrowers and some tests for whether this happened would be useful.
Overall effects of regulatory intervention

Paper currently looks at local treatment effects
- Some seem mechanical, or contemporaneous changes on the part of lenders, rather than an effect of the change in LTV

Would be very interesting to look at overall market effects
- What happens to house prices? Can actually identify affected homes (LTV + price limits, as in Adelino, Schoar, and Severino, 2014)
- Are some people not able to buy? Driven out entirely?

And / or other non-housing outcomes
- What happens to other borrowing (credit cards, etc) by the households?
- Are households better off 6, 12, 36 months after the “experiment”? Comparing treated right around the change in the law?
  - House prices dropped a lot, so many households may be in trouble.
- Any effects on employment? Consumption? Other outcomes?