The transmission of real estate shocks through multinational banks

By: Ata Can Bertay

Discussed by: Nicholas Coleman, Federal Reserve Board

* These slides and associated remarks represent only the author's current opinions, not those of the Board of Governors of the Federal Reserve System or of any other person associated with the Federal Reserve System.

Question:

- Investigates the credit supply of banks in response to domestic and foreign real estate price changes.
 - In other words, if real estate prices fall in the country of the parent, does this impact the amount of credit provided by a foreign subsidiary?
- <u>Finding</u>: 1 percentage point decrease in real estate prices in the parent country leads to a decrease in credit of about 0.2-0.3 percentage points.
- Further findings:
 - Only present for decreases in real estate price.
 - Stricter regulations of activities of parent bank decreases this impact.

Specification:

Gross credit growth i,j,m,t

$$= \alpha_i + \gamma_t + \beta_1 Real \ estate \ price \ _{m,t-1} + \beta_2 Home \ real \ estate \ price \ _{n,t-1}$$

$$+ \ \delta_1 Bank \ _{i,j,m,t-1} + \theta_1 Host \ country_{m,t} + \delta_2 Parent \ bank_{j,t-1} + \theta_2 Home \ country_{n,t}$$

$$+ \ \varepsilon_{i,j,m,t}$$

where the subscripts i, j, and t denote the bank, the parent bank, and the year; m and n denote host and home countries. α_i and γ_t are bank and year fixed effects.

Thoughts: Selling the paper

- Well-executed, sensible empirical paper. Seems close to being ready for submission (if it hasn't been already).
- Asks an important question given the recent financial crisis.
 - How should I think about the results given the time frame (1999-2011)? Are the results a consequence of the details of this crisis -- a large part of the cause was a real estate bust?
 - If so, then this paper could be cast broader and be more of a "contagion" paper than just a real estate paper. Could have broader policy implications than just restrictions on real estate.

Thoughts: Selling the paper

- These effects, I would guess, will differ greatly given initial exposure of the parent to the home real estate sector.
- The magnitude that I'd be interested in knowing is not just the connection between the home country real estate and subsidiary credit, but the interactive effect of exposure to real estate and real estate price changes.
- For example, if Citi has a 10 percentage point smaller exposure to the US housing market, given the decrease in housing prices, what would lending by Citi in Brazil look like?
 - On page 25, it says that "This is because strictly regulated banks [are] less exposed to real estate markets and thus do not have to cut back credit abroad..." Why not first document that this is true and then show that fluctuations in prices affect more exposed banks, more.

Thoughts: Impact on subsidiary funding

- Ideally would want to show the impact that home real estate prices have on subsidiary funding first, then show how that funding impacts lending.
- While getting data on the net due to/due from positions from parents to subs is difficult (if not impossible for many banks), I would push the funding channels analysis and discussion to much earlier in the paper.
 - Perhaps something with loans/deposits for subsidiary.
- Paper currently goes from changes in home real estate prices to changes in lending in host countries. But it seems like there is a step missing connecting prices and lending, until the table at the end of the paper.

Other Thoughts:

- Control for size of subsidiary relative to parent, but why not relative to other subsidiaries?
- Control for international trade?
- Quality of government/regulatory bodies across countries?
 - Make a distinction between restrictions on real estate activities but no distinction between the quality of enforcement.
- I'm not the identification police, but I am not exactly sure why the instruments used are "valid" ... could provide a bit of color.
 - Also, would you want to use the change in regulations instead of the "level" to get a stronger correlation with the growth in real estate prices?
- Glancy (2015) is a paper using US data that may be useful.
- Lots of tables, could find preferred specification and then consolidate.

Conclusion:

- Solid paper, interesting question. I think it could be sold more broadly.
- I believe the results, but I suggested a few things that may add some more color.
- Would recommend reading perhaps soon in its published version.