Effects of Macroprudential Policies on Bank Lending and Credit Risks

Stefanie Behncke

Discussant: Carsten Sprenger

New Economic School

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Overview

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- The paper studies the effects of two macroprudential policy measures of the Swiss National Bank (SNB):
  - the activation of the countercyclical capital buffer (CCyB) and
  - a cap on LTV ratios, i.e. a limit on household leverage in financing real estate purchases.
- Both policies are found to have the intended consequences using a bank-level diff-in-diff setup for 25 banks:
  - less mortgage loans with high LTV ratios,
  - the CCyB also reduces growth in mortgage lending.
- No unintended risk-shifting (to high loan-to-income borrowers or other credit growth) is found.

Comments

What is a treated bank?

- CCyB treatment intensity = $\frac{\text{CCyB required capital}}{\text{Excess capital}}$.
  Required capital is driven by mortgage risk (RWA). Treated banks are those beyond the 80th percentile of intensity – four banks. So the results are based on a very small number of observations.
- The CCyB treatment is different from Auer and Ongena (2019) who define treatment based on $\frac{\text{Residential RWA}}{\text{Total assets}}$.
- The author's definition is based on the underlying assumption that banks prefer to work at zero excess capital, while Auer and Ongena's definition is based on the assumption that banks work at their target excess capital that does not necessarily have to be zero (due to risk aversion, costs of raising additional capital etc.)

What is a treated bank? (cont'd)

- The author provides a nice discussion of the different approaches but it would be nice to see tabulated results on both.
- Treatment for the LTV cap: Banks with share of high-LTV loans greater than 5% before the regulation (half of the 25 banks).
- One could study also the effects of double treatment (banks exposed to the CCyB and the LTV cap).

Other adjustments triggered by the policies

1. It would be interesting to see whether the adjustments of the LTV distribution of new mortgage loans goes along with changes in the geography of mortgage lending (urban vs rural, most expensive cities vs less expensive areas).
2. Instead of reducing the RWA (e.g., granting less high-LTV mortgages), banks could also charge higher mortgage rates and raise additional capital. It would be nice to see whether treated banks did so to a larger extent.
3. Also, I would be curious to know why banks do not securitize their mortgage loans.

Unintended consequences

- The author does not observe increased lending to high loan-to-income (LTI) clients in treated banks. But she reports that overall, lending to high LTI clients increased. How can this be explained then?
- There is no increase in non-mortgage credit growth. This category seems a bit too broad.
- The question is whether banks engage in other risky lending when they are forced to reduce LTV risks. What about corporate lending to companies with low credit ratings, small firms, firms in commercial real estate and shifts in the security holdings of banks towards more risky assets?

Estimation methodology

$$
\begin{aligned}
y_{it} =\ & \beta_1 TREAT_{LTV} \times POST_{2012Q3} \\
& + \beta_2 TREAT_{CCyB} \times POST_{2013Q1} + \gamma_i + \delta_t + \varepsilon_{it}
\end{aligned}
$$

- It is a distinguishing feature of the paper that it estimates the joint effect of the two policy measures.
- To compare with the results of Auer and Ongena (2019) it might be interesting to include the two treatment variables one by one.
- Tests on differences of the γ_i between treated and non-treated banks, well as on differences of the δ_t before and after treatment can be performed in order to test for general differences between the two samples and for overall changes in the outcome variables around the introduction of the policies.

Estimation methodology (cont'd)

- Can we distinguish between announcement effects and effects of the actual implementation of the policies?
- The formal tests of the parallel trends assumption should be tabulated (in the appendix).
- For a small number of groups, computing standard errors by the wild bootstrap method is not the only option. Two alternatives should be implemented as well: bias-corrected standard errors proposed by Imbens and Kolesár (2016) or aggregation type methods proposed by Donald and Lang (2007).

Conclusion

- An interesting, well-written and polished paper.
- Try to market it better by stressing the distinguishing features:
  - observe the risk features of new mortgage loans (in particular, LTV and LTI ratios),
  - jointly estimate the effects of the two most important macroprudential policy measures of the SNB (perhaps add extra effects from double treatment),
- Add more detail on how banks adjust to the regulation in other dimensions (geography of mortgage lending, mortgage pricing, raising capital, risk shifting).