Bank Capital Requirements and Asset Prices: Evidence from the Swiss Real Estate Market

Christoph Basten 1,2,3, Olga Briukhova 1,2, Michele Pelli 1,2
1 Department of Banking and Finance, University of Zurich, 2 Swiss Finance Institute, 3 CESifo

Summary

We investigate the effects of the globally first activation of the Basel III countercyclical capital buffer (CCyB) on the Swiss real estate market. The CCyB applies to the sectoral measure. Since the Swiss National Bank (SNB)’s implementation of the CCyB applies to residential mortgages only, we investigate the intended and unintended consequences of this intervention for the Swiss real estate market.

Methods

We empirically analyze the activation of the countercyclical capital buffer (CCyB) using a difference-in-differences framework exploiting heterogeneous treatment intensity across cantons. Bank treatment intensity measured as Mortgages/Total Assets in 2012. Treated canton: above the median weighted average treatment intensity of banks active in the canton.

Hypotheses

H1. More overheated cantons are more affected by the SNB’s intervention.

H2. The CCyB activation leads to a slowdown of the residential property price growth.

H3. The market for single-family houses is more affected by the CCyB activation than the one for condominiums.

Results

H1

Figure 1 shows a core-periphery structure: many small banks grant mortgages in few cantons whereas few big banks are active in many cantons. Small peripheral banks are more mortgage-oriented, therefore more affected by the CCyB activation. More affected cantons tend to exhibit less real estate market overheating (Figure 2).

H2

The intervention induced an extra 59bps average price growth rate slowdown within the treated cantons’ market for SFHs (considerable economic significance relative to the 97bps average quarterly growth rate).

H3

Mitigated price growth for SFHs but not for condominiums. Condominiums are less dependent on mortgage financing than the 6% average share of bank financing.

Conclusion

The CCyB’s effectiveness in stabilizing asset prices crucially depends on the market’s underlying financing structure. Our results suggest that the cantons with a more overheated real estate market were less affected by the macroprudential measure under study. Moreover, we show that a higher exposure to the CCyB treatment led to an additional reduction of the SFH price growth.

Our work raises important policy implications by shedding light on the intended and unintended effects of a novel regulatory tool. For instance, in the presence of heterogeneous developments of real estate prices across regions, CCyB requirements could be calibrated accordingly.

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Contacts

Olga Briukhova: olga.briukhova@bf.uzh.ch
Michele Pelli: michele.pelli@bf.uzh.ch

Introduction

We empirically analyze the activation of the countercyclical capital buffer (CCyB), a post-crisis macroprudential measure. Since the Swiss National Bank (SNB)’s sectoral implementation of the CCyB applies to residential mortgages only, we investigate the intended and unintended consequences of this intervention for the Swiss real estate market.

CCyB in Switzerland

- Globally first activation of the CCyB motivated by the imbalances in the real estate market.
- Only example of a sectoral CCyB.
- Activation, February 2013: extra CET1 capital worth 1% of bank’s outstanding risk-weighted domestic residential mortgages.
- Subsequent increase, January 2014: 2% CET1 capital.

Data

Bank data:
- Composition of mortgage lending supply in each canton matched with banks’ accounting data.
- 145 banks: 99.76% of the Swiss residential mortgage market financed by banks.

Real estate data:
- Cantonal quarterly (2012Q1 - 2014Q4) price indexes for both condominiums and single-family houses (SFHs).

Methods

- Difference-in-differences framework exploiting heterogeneous treatment intensity across cantons.
- Bank treatment intensity measured as Mortgages/Total Assets in 2012.
- Treated canton: above the median weighted average treatment intensity of banks active in the canton.

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