Mortgage Supply and Capital Regulation in a Low-Rate Environment

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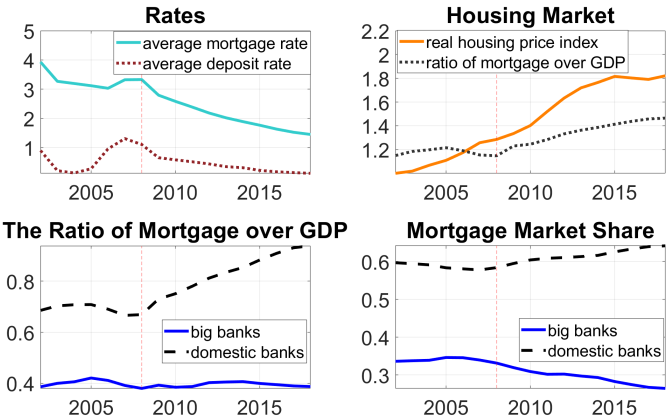
Interest Rates and Housing Market

Banks Cantons



Source: Swiss National Bank (SNB).

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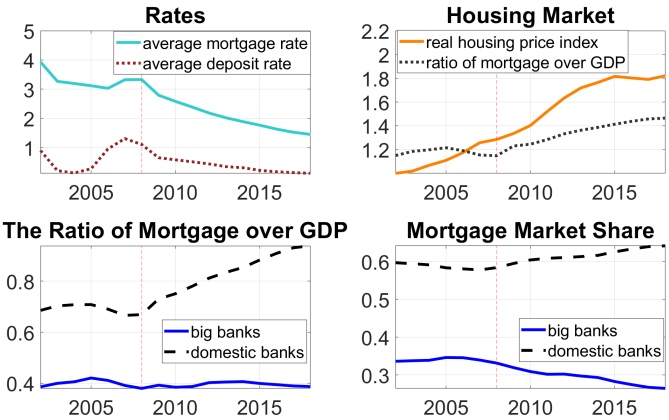


Source: Swiss National Bank (SNB).

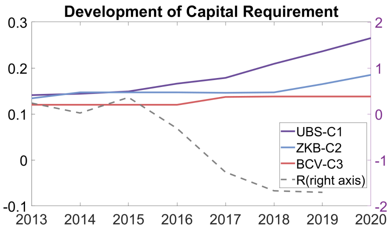
→ What explains banks' different mortgage lending behavior?

Regulatory Development

- Basel 2.5, III & TBTF 1, 2 have strengthened capital requirements.
- Substantial heterogeneity in capital requirements.

Table: 2020 Capital Regulation

Bank Category	Criteria (CHF in billions)	Total Risk-weighted Capital Ratio (%)
1	Total assets $\geq$ 250	26.8
2	Total assets $\geq$ 100	18.8
3	Total assets $\geq$ 15	12
4	Total assets $\geq$ 1	11.2
5	Total assets $<$ 1	10.5



Source: The Basel III framework came into effect in Switzerland in January 2013. Required capital ratio data are taken from banks' annual report.

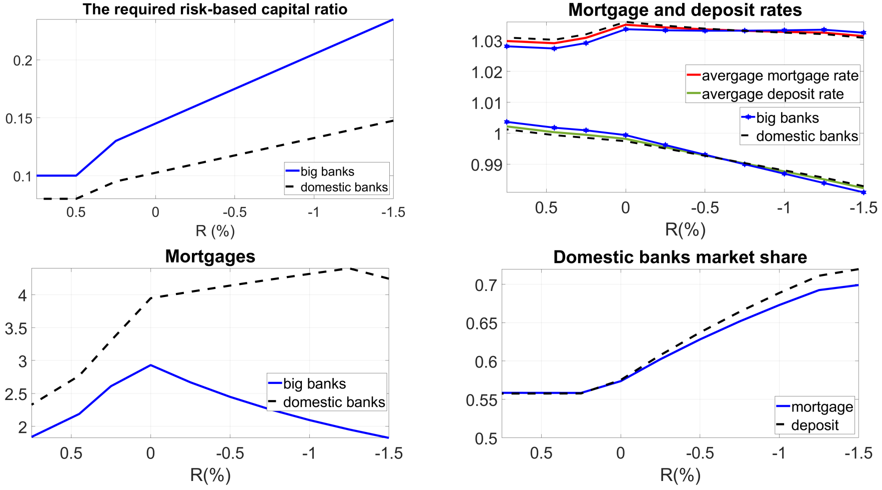
Goal of This Paper

Stylized facts:

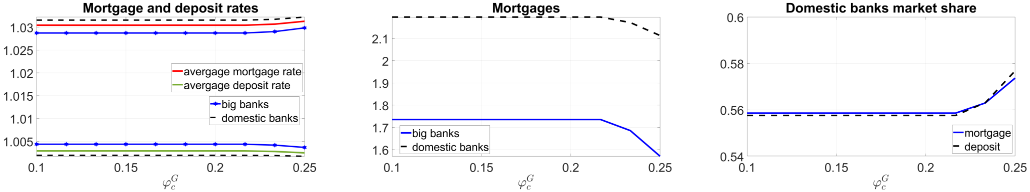
1) An increase in mortgage lending as the policy rate falls;
2) An increase in small banks' market share.

- We present a two-period partial equilibrium model consistent with the stylized facts.
- We use the model to study banks' risk taking and analyze policies (countercyclical capital buffers & negative rate exemption).

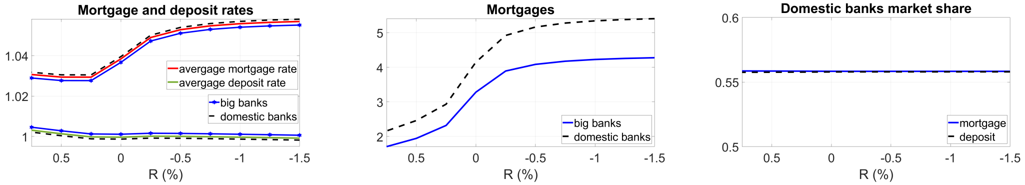
The Impact of Reduction in the Policy Rate and Tightening of Capital Requirements



Counterfactuals:



(1) R Fixed



(2) Constant Capital Requirements

Summary

- Both the decreasing monetary policy rate and the asymmetric tightening of capital requirements are necessary to generate an increase in house prices, a mortgage expansion and market share dispersion as experienced in Switzerland since 2008.
- Comparative statics:
  - Strong cash demand limits banks' lending capacity.
  - Variable market power amplifies domestic banks' mortgage expansion. ▸ market power
  - Default risk concentrated in small domestic banks.
- Policy experiment: CCyB helps in reducing credit growth.

Thank You