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Take It to the Limit? The Effects of Household Leverage Caps

Sjoerd van Bekkum, **Marc Gabarro**, Rustom Irani, José-Luis Peydró

Discussant: Jason Allen (Bank of Canada)

November, 2022

The views in this paper do not reflect those of the Bank of Canada.

Overview

- Research question: What is the impact of LTV constraints on household behaviour?

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  - (with annual decreases starting in 2013 of 1 ppt)

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  - Renting-to-owning transition;
  - Matched samples of FTHBs pre-constraint vs. post-constraint.

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- Methodology: Event study
  - Renting-to-owning transition;
  - Matched samples of FTHBs pre-constraint vs. post-constraint.

- **Policy take-away:** LTV limits are an effective tool for decreasing FTHBs' exposure to the housing market
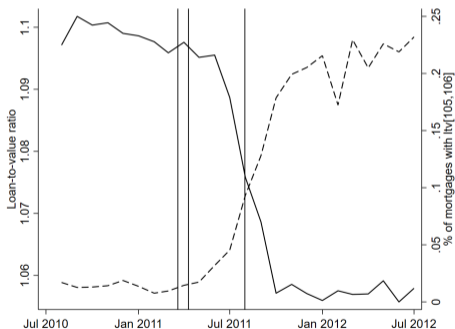
Relevant to the Dutch, Canada and beyond...

Eagles (extended title): **Take it to the Limit, One More Time.**

- Canada and the Netherlands have actively used macroprudential policies to dampen demand/supply of credit
  - Netherlands: LTV, DTI, amortization, interest deductability, risk weights
  - Canada: LTV, GDS, TDS, amortization, insurance, securitization
  - EU database on macroP policies: https://www.ecb.europa.eu/pub/research/working-papers/html/mapped.en.html
  - 2020 special issue of the JFI: Macroprudential policies in the Americas

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Relevant to the Dutch, Canada and beyond...

Impact on average LTV ratios of FTHBs: Tightening in the Netherlands and Loosening in Canada

(a) Netherlands
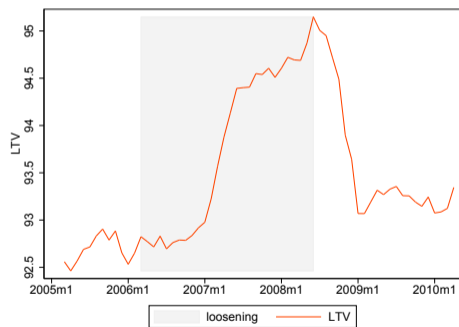
(b) Canada

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Relevant to the Dutch, Canada and beyond...

- **Praise:** Important to conduct retrospective analysis of the efficacy of macroprudential policies

Relevant to the Dutch, Canada and beyond...

- **Praise:** Important to conduct retrospective analysis of the efficacy of macroprudential policies

- **Ask:** Crucial to have models (framework) that allow policy-makers to 'test out' different policies in the controlled environment of our computers
  - IMF FSAP (2017) has a long list of recommendations for the Netherlands ...coming from where???
    https://www.imf.org/-/media/Files/Publications/CR/2017/cr1793.ashx
  - Greenwald (2018), Garriga and Hedlund (2018), Johnson (2018), Grodecka (2019), Justiniano, Primiceri, and Tambalotti (2019).

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Tightening maximum allowable LTV from "up to 120%" to 106%

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Tightening maximum allowable LTV from "up to 120%" to 106%

- Extensive margin
  - Less entry of FTHBs in the housing market: 17% reduction

- Intensive margin
  - FTHBs reduce borrowing (9.4%)
  - FTHBs buy less expensive homes (5.5%)
  - Implies an increase in down-payment
  - Mortgage payment falls (8.9%)

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Tightening maximum allowable LTV from "up to 120%" to 106%

- Extensive margin
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- Households draw down savings (increase in liquidity risk)... but fully recovered in 2 years!

- Mortgage arrears fall: 25% (from a very low base and using 'outside' data)

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#1: Households

- Matched data-set: mortgages, property ownership, income and wealth

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#1: Households

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- Fantastic! More than just looking at credit outcomes. **Data on savings paints a more complete picture**

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- How should we think about households?
  - **Tax-free parental gift**
    - Size of the tax-free gift from parents to kids to purchase a house **appears** to be part of the macroP tool-kit.
  - Benetton, Kudlyak, Mondragon (2022): Parents extract equity from their house to gift to kids—family wealth $\Rightarrow$ household wealth accumulation
  - Allen, Clark, Li, Vincent (202?): In addition to gifts for large down-payments, parents are also taking on income risk by cosigning

#2: What's missing?

- Interest rates
  - Mortgage terms 5-10 years + FTHB/Renewer price discrimination
  - Rates falling over time

- House prices
  - MacroP to reduce household exposure to housing or dampen house prices?
  - Greenwald (2018): Tightening LTV can be counterproductive (when there are also PTI constraints)—collateral value of housing increases and so demand for housing goes up.

Confounding policy change: Interest-only mortgages for the entire purchase changed to max 50% of the market value of the house (increase in mortgage payments).

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House prices and Interest Rates
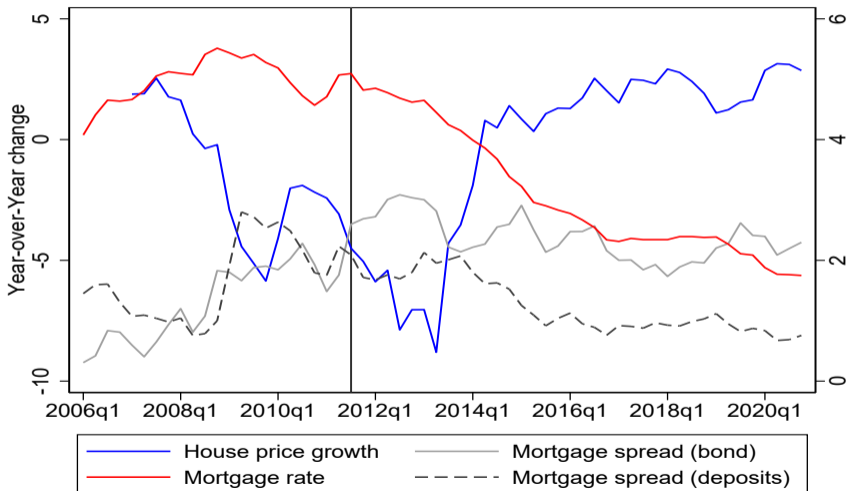
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#3: Begging for a model... supply

- Borrower skin-in-the-game increases
- Arrears fall
- Implies rates should fall: better rates should further lead to lower monthly payments
  - Increase demand for credit

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What happens to mortgage spreads? Given lower credit risk, spreads should fall but unsure if this is the case

- What do spreads look like across the income distribution? House price distribution (given rules about who pays in case of default is tied to house price)?
- Any concerns about competition (Dijkstra et al. (2014))?

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#3: Begging for a model... demand?

- Retrospectively we observe that households in the Netherlands responded to a tighter LTV by either renting or buying smaller homes

- MacroP prolicy in the Netherlands continued lowering the maximum allowable LTV by 1 p.p per year. It is now 100%. IMF recommends 80%

- What would going to 80% mean for the Dutch housing and rental markets?

- **Household static vs. dynamic problem**: with rules changing every year, **expectations** matter a lot.

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Random questions

- Porting
  - Movers can port their high LTV (negative equity) mortgage.
  - Annual fraction of renting-to-FTHB is about 4%.
  - What is fraction of movers?

- Matching of FTHBs is at the 2-digit postal code.
  - This is meant to capture variation across markets in house prices?
  - How much variation is therefore within these markets?
  - Do you not observe house prices on the land registry?