The last decade has witnessed “the greatest housing bubble” and a global financial crisis.

Macroprudential policies (MPPs) aim to create a buffer in a boom to ensure that “shocks from the housing sector do not spill over and threaten economic and financial stability.” (IMF, 2014)

Are MPPs the way forward?

Urgent need for systematic evidence on the effectiveness of the MPPs.
House Price Indices for the U.S. and Canada

Discussant: Lu Han

Allen, Grieder, Peterson, Roberts (2016)
Four Rounds of Macroprudential Regulation in Canada (July 2008 — July 2012)

- Increasing the minimum down payment for a mortgage (2008, 2010)


- Reducing the maximum amount that can be borrowed during a refinancing (2010, 2011);

- Increasing homeowner credit standards (2010, 2012);

- Limiting government-backed mortgage insurance (MI) to homes with a purchase price of less than $1M (June 2012).
Rich data in an important market for an important episode:
- Loan-level data and household-level survey: 2005 – 2010
- Lending rules: Loosening + Tightening
- Housing market: Boom + Bust + Rebound

Two complementary approaches:
- A data-driven approach:
  - Novel and rich evidence about the impact of MPP
- A structure-driven approach:
  - Innovative and insightful microsimulation model of mortgage demand

Key findings:
- Wealth constraints (e.g. minimum downpayment) are more effective than income constraints (e.g. maximum amortization period).
- Income constraints have a larger impact on high-wealth home buyers.
Suggestion 1: Exploit Data Further

- The policies are used in combination with macroeconomic policies and direct interventions.

- Substantial variations in housing demand over time and across markets.

- It is challenging to attribute observed outcomes to a specific policy.

Suggestions:

- May look at the number of FTHBs before/after these policies
- May add more controls, such as interest rate, house price growth, income change, FSA×year×month, etc.
- May compare the left tail distribution of FTHB’s income or wealth over time.
- May explore heterogeneity in consumer response by including “tight” × income, “tight” × wealth.
- Maybe restrict the event window to focus on a particular policy

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Allen, Grieder, Peterson, Roberts (2016)
Suggestion 2: Microsimulation Model

- A very insightful model of mortgage demand that captures individuals’ optimal behaviour

- But not exactly clear how housing demand is modelled

- “Renters become owners if they have enough income and wealth.”

- This captures constraints but misses optimality. For housing demand,
  - Preference matters.
  - Rents matter.
  - Returns on housing and other financial assets matter.

- Suggestions:
  - Clarify necessary modelling assumptions.
  - More details on the calibration exercise (key parameters, moment equations, functional form, etc.)
Suggestion 3: Other Parts of the Market

- The paper focuses on borrowers’ response to the policies.

- What about other sides of the market?
  - Tightening could reduce the risk of the borrowers (e.g., increased FICO scores), leading to a reduced mortgage rate.
  - Loosening could increase housing demand and hence house price, which affects mortgage demand.

- What’s the fraction of repeated home buyers?
  - Annenberg and Bayer (2013): “internal movement - selling one home and buying another - by existing homeowners within a metropolitan housing market is especially volatile and the main driver of fluctuations in transaction volume over the housing market cycle.”

- Suggestion: Discuss how these unmodelled factors could affect the interpretation of the results particularly policy implications.

Discussant: Lu Han

Allen, Grieder, Peterson, Roberts (2016)
Documents unrecognized mortgage demand dynamics under the recent macroprudential policies in Canada

Provides a first fine-grained look at borrower behaviour before and after a set of loosening and tightening lending regulations.

Presents a structural approach to quantify the impact of the macroprudential tools on mortgage demand

The findings are novel, thought-provoking, and have important policy implications.
Han, Lutz, and Sand (2016) examines how MPP affects home sales.

Use the transaction level data in the Greater Toronto Area from 2011-2013

Focus on sales price, list price, and time on the market.

Exploit a natural experiment arising from the 2012 law change that limits Mortgage Insurance (MI) to homes with a purchase price of less than $1 million.
Four Rounds of Macroprudential Regulation (July 2008 — July 2012)

- Increase the minimum down payment for a mortgage (2008, 2010)
- Reduce the maximum amount that can be borrowed during a refinancing (2010, 2011);
- Increase homeowner credit standards (2010, 2012);
- Limit government-backed mortgage insurance (MI) to homes with a purchase price of less than $1M (June 2012).
  - Announced on June 21 and went into effect on July 9, 2012
  - MI is required on any loan with a LTV higher than 80 percent.
Our Findings

- The MI policy caused a 1.25 percentage point decline in the growth of homes listed above $1M and a 0.29 percentage point decline the growth of homes sold above $1M.

- Significant spillover in the segment listed right below $1M:
  - a spike in houses listed right below $1M.
  - a higher fraction of the sales over asking price
  - a shorter seller time on the market,

- MI policy $\Rightarrow$ sellers price million dollar homes below the $1M
  $\Rightarrow$ the under-listing ignites the bidding wars
  $\Rightarrow$ speed up sales and push sales price above listing.
  $\Rightarrow$ little changes in sales volume around $1M.