DISCUSSION OF

HOUSING FINANCE, BOOM-BUST EPISODES, AND MACROECONOMIC FRAGILITY

BY GARRIGA AND HEDLUND

Soyoung Lee | Bank of Canada

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This paper

Builds an incomplete markets model with housing and mortgages

Shows that lax credit drives a housing boom

- house price rises 45% at a peak

Shows that mortgage features affect house prices, foreclosures, and consumption

- FRM vs ARM
- Refinancing cost
- Loan duration

Studies the effects of LTV and PTI regulations

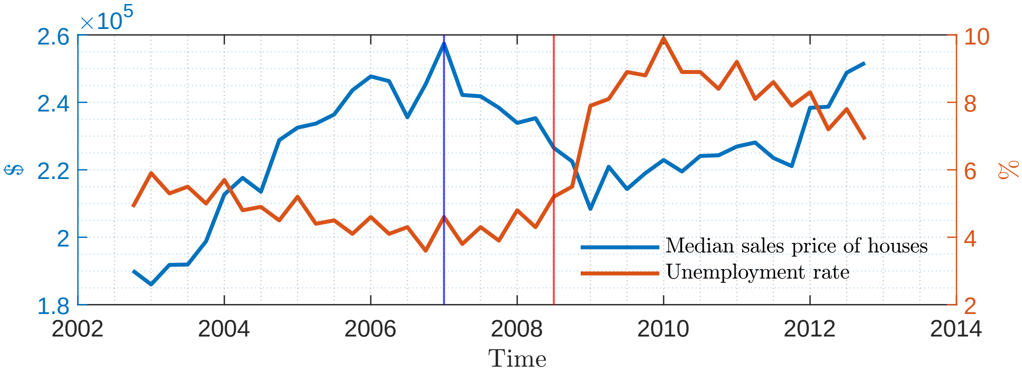
Is this paper really about macroeconomic fragility?

The Great Recession made the term '**macroprudential**' popular as we saw a build-up of financial imbalances in the housing sector *lead to* severe macroeconomic consequences

- increases in mortgage defaults froze interbank lending and credit to consumers and businesses
- led to a large rise in unemployment and fall in output
- the model does not have elements that can generate these dynamics

Is this paper really about macroeconomic fragility?

Unemployment should not be a shock, but it should be a measure of the macro outcome



Source: Census, HUD, BLS

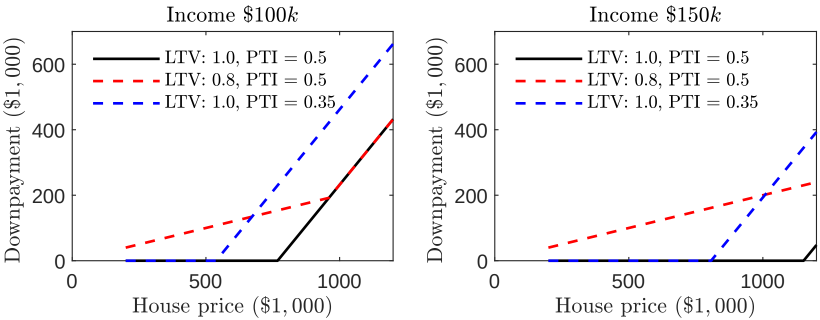
Credit condition and house prices

Effect of credit boom on house prices depends on the rental market setup

- literature's findings range from
  - credit having no effect (Kaplan et al. (2020))
  - credit explaining most of the cycle (Favilukis et al. (2017))
  - partial effect (explaining 32% to 53% of the boom, Greenwald and Guren (2024))
- Greenwald and Guren (2024) argues that these differences come from the rental market setup
- Strong assumptions on the rental market
  - rental price: $\frac{1}{A_a}$
  - quantity limit: $\overline{a} < \underline{h}$

What determines the effects of LTV and PTI regulations?

- Greenwald (2018) argues that a cap on PTI, not LTV is more effective for limiting boom-bust
- PTI tightening tends to restrict buying large/expensive houses, while LTV affects all sizes
- It would be useful to characterize conditions under which each policy is in/effective



How do we leverage the endogenous liquidity of the housing market?

During the bust, illiquidity in the housing market amplifies the fall in house prices

- e.g. subsidizing housing transactions when the market is illiquid
- compare it with other costly policies such as the mortgage rate reduction in Garriga and Hedlund (2020)

Takeaways

- Tell us more about how mortgage design affects foreclosure during a housing bust, and how malfunction in the financial sector affects employment and output
- Robust check on how house prices respond to credit conditions
- Tell us under which condition LTV and PTI can be effective
- Suggest policies that can improve housing market liquidity during a bust

Favilukis, J., S. C. Ludvigson, and S. Van Nieuwerburgh (2017). The macroeconomic effects of housing wealth, housing finance, and limited risk sharing in general equilibrium. *Journal of Political Economy 125*(1), 140–223.

Garriga, C. and A. Hedlund (2020). Mortgage debt, consumption, and illiquid housing markets in the great recession. *American Economic Review 110*(6), 1603–1634.

Greenwald, D. (2018). The mortgage credit channel of macroeconomic transmission.

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Kaplan, G., K. Mitman, and G. L. Violante (2020). The housing boom and bust: Model meets evidence. *Journal of Political Economy 128*(9), 3285–3345.