# Monetary Policy, Heterogeneity, and the Housing Channel Discussion

Ludwig Straub, Harvard University

IMF Macro-Financial Research Conference 2021

#### Introduction

- Housing market is a key vehicle of monetary policy transmission
- Potential channels:
  - house prices ↑ ⇒ consumption + investment ↑
     [Berger et al, Greenwald, McKay et al, Mian et al, Kaplan et al, Cloyne et al, ...]
  - redistribution due to inflation and lower rate (especially if ARM)

[Auclert, Wong, Beraja et al, Maxted et al, Eichenbaum et al, Berger et al, ...]

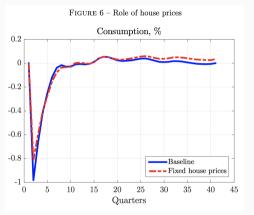
- housing liquidity ↑
- Typically these channels are studied in isolation, and in partial equilibrium
- This paper models these channels in general equilibrium: first heterogeneous-agent NK model with housing & mortgages
- Next: brief summary, then comments

# Summary of model in words

- Households receive idiosyncratic income shocks
- If income realizations are sufficiently high, a household buys a house of fixed size, financed by ARM debt
- As homeowners, households can:
  - prepay or refinance mortgage
  - sell a house subject to search friction: either faster for lower price, or slower for higher price
  - default (because underwater or unable to sell house at price above mortgage balance sufficiently quickly)
- Model is closed in standard NK GE setting
- Feed in 100 bp contractionary monetary shock

### Result 1: Role of house prices

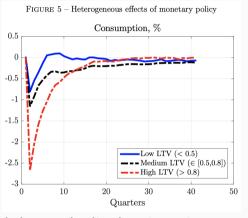
• Fix house prices and resolve model: 20% smaller consumption response



- Which channel is active here? Does search friction matter for this?
- What clears the housing market? How is model solved?

# Result 2: Households with higher LTV respond more

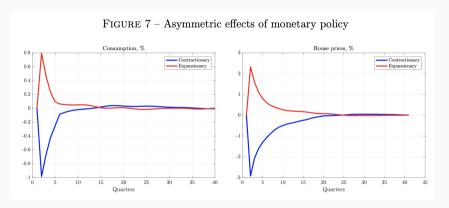
• Track consumption response across LTV distribution



- How much of this is just redistribution through ARMs?
- Would strongly recommend to use FRMs as baseline

## Result 3: Asymmetry

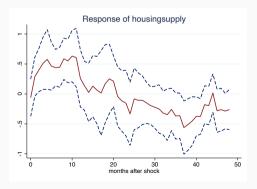
Compare positive and negative monetary policy shocks



• How much of this is related to the borrowing constraint (eg Auclert), vs. features of the housing market?

# Comment 1: Compare to benchmark

- This is a new model, with new moving pieces:
  - foreclosure rates, time on the market, refinancing, ...
- A priori not obvious how strong they respond to monetary policy
- Would be useful to compare the model to the data



## Comment 2: What to use the machinery for?

- Paper builds a powerful hammer
- Only question is: which nail to use it on?
- Invite authors to consider questions beyond monetary policy: e.g.
  - effect of preference shock for housing on demand and inflation?
  - does increase in inflation lead to knock on effect through redistribution?

## Concluding remarks

- Very impressive paper
- Important first step to embed housing + mortgages in modern heterogeneous-agent NK models
- Comments: Compare model to benchmark + consider broader questions