Discussions on "Dynamic Impact of Housing Bubbles on the US Macroeconomy"

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The housing rent-price ratio puzzle

- US data indicate that
  - The rent of house does not fluctuate significantly to justify large movements in house or land prices
  - A large part of fluctuations of rent-price ratios is due to that of housing prices.
- This paper formally argue that the fluctuation of housing prices is mainly due to the bubble part(speculative trading motives) of housing prices, not due to the fluctuations of rents.

Main contributions of this paper

- Housing bubbles
- Estimation exercises
- Comovement of housing prices and macroeconomy

Producing housing bubbles

- The housing bubble is defined as the difference between the housing price and the fundamental price determined by the rents.
- Producing housing bubbles in an infinite-horizon model by incorporating loan values(collateral effects) of housing.
- In Liu, Wang, and Zha (2013), there is no housing bubbles. The fluctuations of rent-price ratio is counterfactual.
- This paper matches the rent-price ratio data.

Elegant estimation exercises

- The housing bubble shock(sentiment)
- The housing preference shock(using the house rent data to help identify)
- The TFP shocks
- The leverage shock

Comovement

- Generating comovement of housing prices and macro variables through a new channel of endogenous TFP.
  - The cutoff of idiosyncratic productivity shocks of final goods.

$$Y_t = A_t \left(u_t K_t\right)^{\alpha} N_t^{1-\alpha} \left[\frac{1}{1-F(a_t^*)} \int_{a_t^*}^{\infty} af(a)da\right]$$

Discussions-housing as a collateral

- The loan mechanism is the key to generate the bubbles and comovement in the paper.
  - The positive housing bubble shock relaxes the entrepreneur's borrowing constraint on working capital
- Need more data to show the relationship between housing price and working capital.
- In the paper the rent is home rent.

Discussions-investment collateral

- Most of literatures use investment collateral, i.e. borrowing constraints on investment expenditure.
- More work on relative importance between investment borrowing constraint and working capital borrowing constraint.

Discussions-international data

- More data in other developed and developing countries to support this story.