Detection and prediction of house price bubbles: Discussion

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Peter Norman Sørensen
Department of Economics, University of Copenhagen
Center for Information and Bubbles Studies
Center for Financial Frictions

Bubbles and Crises

- Bubble: Asset is mispriced
  - Say, because future asset price is over-estimated
  - Or, the willingness-to-buy is guided by first-year cost
  - Difficult to prove
- Over-priced owner-occupied homes
  - Recent DNB Quarterly Review compares $\overbrace{\text{price to income}}^{\text{preferences}}$, or $\overbrace{\text{first-year-cost to income}}^{\text{liquidity constraint}}$
  - Some indicators are operational
  - Time series method to detect positive feedback loop in prices
- Economic concerns
  - Bubbles in real estate drive credit boom
  - Some resources are misallocated (over time)
  - May lead into crises
- Which variables predict such crises ahead of time?
  - Must disagree with the credit markets
- Regulation
  - Prudential regulation can lean against excesses
  - Relies on good detection and prediction

Prediction and Action

- Suppose your model estimates the chance of a crisis *N* quarters ahead
  - Does the estimated chance line up with the outcome's frequency (bias)?
  - How often does your model give you high estimates (information)?
- Binary action rule
  - Take action when a red flag is raised
  - Type I and Type II errors summarize informativeness for such action rules
- Continuous action rule, or more alert levels
  - Do more when you are more certain, or when situation is worse
  - Type I and Type II errors are useful, but not the whole story
- Back to bubbles
  - Lean against the bubble to an extent proportional to its predicted size? More?
- Pro-cyclical taxation of real estate dampens price fluctuations
  - True to an extent, also absent bubbles. Effect on bubbles through liquidity constraint?
- Regulate pro-cyclical credit if that's the root of the problem
  - Only in bubbles?
- Communication: Do red flags influence market beliefs?
  - Alert level more visible than a real-valued index?