The Role of Government and Private Institutions in Credit Cycles in the U.S. Mortgage Market

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Drivers of Housing Boom During the 2000s

- Large literature arguing that housing boom and bust in the 2000s affected macro economic conditions.
  - → Consumption, employment, investment, bank balance sheets, etc.
- Continued debate regarding the potential drivers of house price growth and changes in mortgage activity during the 2000s.
  - → Credit supply, house price expectations, both...
- Understanding what drove mortgage credit and house prices in the boom and bust of the 2000s may help dig into welfare consequences and guide policy responses in future crises.

Explaining Mortgage Credit Growth: Supply?

→ **Supply Explanations:** lenders expanded credit (e.g., looser lending constraints, changes in lenders' marginal costs, etc.)

Credit Expansion



Housing Boom



Real Economic Activity



- Mian and Sufi (2009, 2016), Keys et al. (2012), Justiniano et al. (2019), Favilukis et al (2017), among many others...

Explaining Mortgage Credit Growth: Demand?

→ **Demand Explanations:** borrowers wanted more and/or bigger houses (e.g., looser borrowing constraints due to changes in collateral values, changes in expectations, etc.)



- Burnside et al. (2016), DeFusco et al. (2018), Berger et al. (2016) , Kaplan et al. (forthcoming), Adelino et al. (2016), among many others...

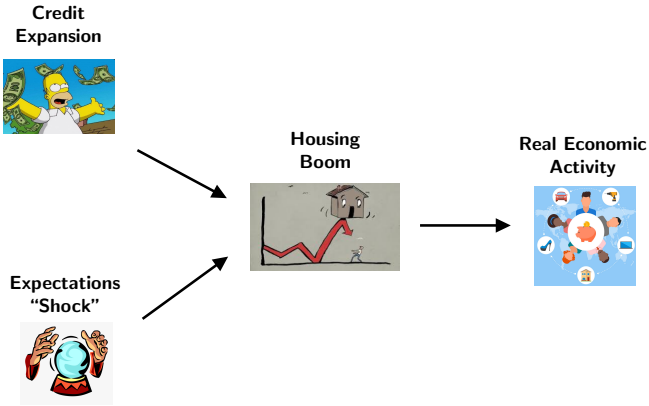
Supply vs. Demand

- **Explaining mortgage credit growth**:
  - → Supply Explanations: looser lending constraints
  - → Demand Explanations: looser borrowing constraints/change in expectations

Supply vs. Demand, Housing vs. Mortgages

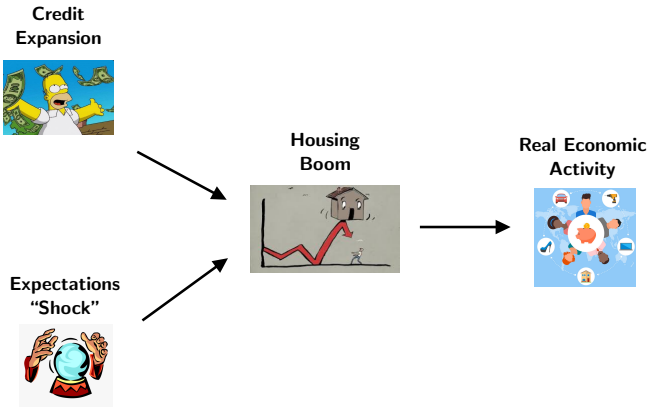
- **Explaining mortgage credit growth**:
  - → Supply Explanations: looser lending constraints
  - → Demand Explanations: looser borrowing constraints/change in expectations
- **Explaining house price growth**:
  - → Supply Explanations: differences in zoning or other restrictions on building, etc.
  - → Demand Explanations: ↑ incomes, house price expectations, ↑ credit, ↓ interest rates, etc.

What Separates What?

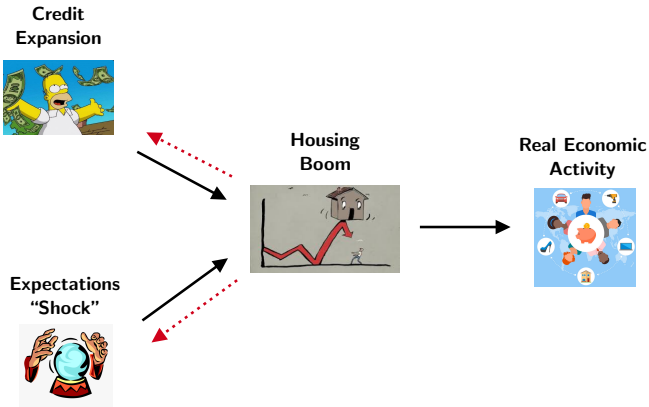


- Can we distinguish between a **credit expansion** and an **expectation shock** as being the main drivers of recent housing and mortgage cycle?

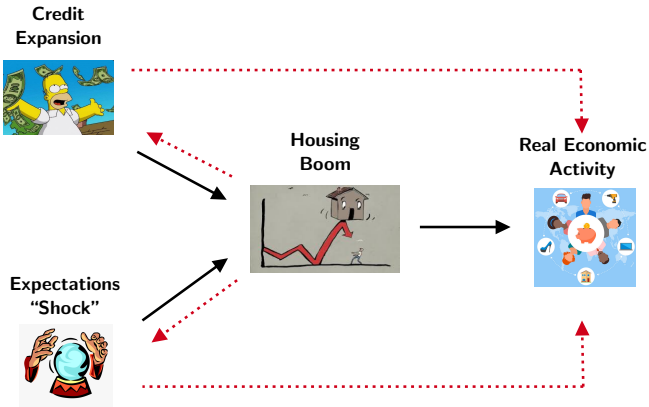
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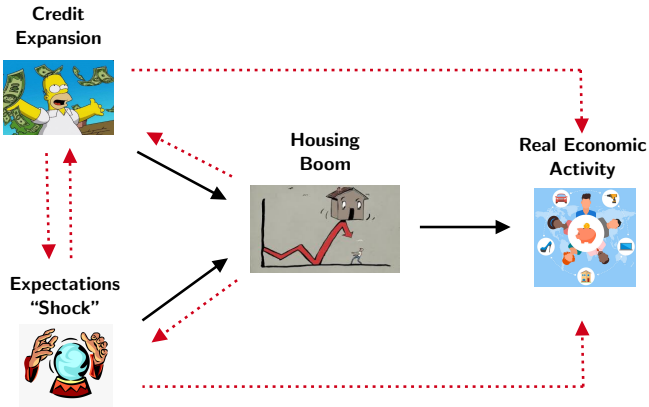
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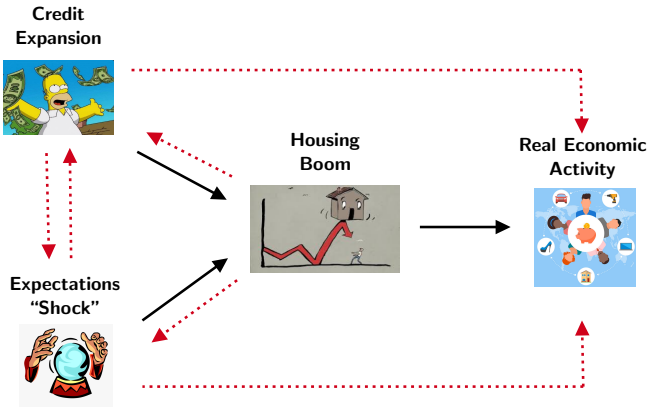
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Easy to Disentangle? Not Really



- **Credit expansions and expectations are endogeneous variables.**
- Hard to asses different stories without some structure (especially if thinking about welfare).

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- Paper concludes that these findings favor models that rely on changes in collateral values or broad changes in house price expectations.

Discussion Today

Comment #1: Can these facts rule out the importance of credit supply shocks?

- → What do we learn from constant CLTV ratios?
- → Aggregate vs. Distributional Effects

Comment #2: What is driving the shift from FHA/VA to private and back?

- → Lender-driven: Technological changes?
- → Regulation-driven?
- → Borrower-driven: Is demand changing?

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- **What about other measures of leverage?**
  - → Overall dollar amount and number of loans did go up for the entire distribution (Figure A.3).
  - → Loan-to-income and payment-to-income ratios went up (Greenwald, 2018).

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  - → Changes in LTV ratios in the refinancing market.
- **Households:** some borrowers more fragile → greater amplification effects to shocks.
- **Intermediaries:** heterogeneous exposure to different types of borrowers and assets → real effects?

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- **After** the bust, shift from private to FHA/VA.
  - → Post-fraud regulation and rise of shadow banks (Buchak et al., 2018)
  - → Prices? Products?

#2. Shift from FHA/VA to Private and Back (II)

Could it be a demand-side, borrower-driven shift?

- **Are private and FHA/VA loans comparable products?**
  - → Differences across other margins besides CLTV.
  - → Underwriting requirements, balloon payments, prices, fees, use of brokers, etc.
- Differences in product characteristics can matter if there is a **change in demand composition** driven by differences in expectations across borrower types.
  - → Average homeowner vs. Speculating investor (Chinco and Meyer, 2015; Mian and Sufi, 2019)

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Mechanism driving the different shifts matters for policy and welfare.

Going Forward: Relative Contributions of Drivers for Welfare

- Going forward, we need more work to quantify relative contributions and implications for welfare of different narratives.
  - → The (macro-finance) literature is making progress in that direction (Kaplan et al., 2016)
- Use stylized facts, such as those in this paper, as micro-moments to discipline some of the macro models.
  - → Other moments: home-ownership and house price expectations by demographics, young vs. old...

Bottom Line

- Paper provides new interesting facts to the debate. More discussion/analysis...
  - → ... whether facts rule out credit supply from other explanations
  - → ... on why composition changing from FHA to private (in boom) and back (in bust)
- Literature needs more structure to interpret these facts.
  - → Facts in this paper can serve as micro-moments can help discipline and guide modeling.
- Model and structure can allow for discussion on welfare amongst different explanations.