Discussion of Arslan, Guler and Taskin (2013) 
Joint Dynamics of House Prices and Foreclosures

Paul Willen, Federal Reserve Bank of Boston

Dallas Fed Housing and Macro Conference
November 14, 2013
Disclaimer

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  - The Boston Fed
  - or the Federal Reserve System

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Motivation

House Prices (Case-Shiller Comp. 20)
Motivation

House Prices, 2003=100

Foreclosure Starts (MBA)

% of mortgages

House Prices (Case-Shiller Comp. 20)
This paper
How is this useful?
Economists suck at asset pricing

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Unemployment rate
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Dow Jones Industrial Index

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House Prices, 2003=100

% of mortgages

in 1000's of points

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Authors construct a dynamic general equilibrium model with exogenous:

1. risk free rate (2% versus 3%)
2. minimum down payment requirement (0% versus 20%)
3. unemployment rate (5% versus 6.5%)

1. Solve for steady state equilibrium under different scenarios
   - constant unemployment rate:
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2. Consider transition from one steady state to another.
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General Equilibrium

- The value of general equilibrium analysis is that
  - General equilibrium effects often confound partial equilibrium.
  - Financial innovation (like relaxing borrowing constraints) allows two agents to share risk (PE insight). How can that reduce welfare?
    - If households do less precautionary savings, then asset prices fall and interest rates go up.
    - Borrowers are worse off.
    - and all households do less consumption smoothing.
  - This paper asks what happens to default when the hazard of unemployment goes up.
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Consider the down payment requirement.

Equilibrium 1: Down Payment requirement = 0%
- All market participants believe that down payment is 0%
- And will be forever.

Transition to Equilibrium 2: Down Payment requirement = 20%
- All market participants believe that down payment is 20%
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What’s the problem?
- People believe that probability of change is 0
- But it obviously isn’t!
- “Failure of Rational Expectations”

This is not just a technical problem.
- All the transition dynamics result from the fact that the change is completely unanticipated.
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- To get big changes in asset prices in GE models
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- Macroeconomic variables change very slowly
  - Worst Recession in 75 years: C falls 3%.
- So to explain wild swings in asset prices we need big changes
- Policy?
- Problem is that large, unanticipated changes in policy are very, very rare.

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History of no down payment loans

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Economists suck at asset pricing

- Most house price variation over time is unforecastable.
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  - Boom in the late 90s-00s
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Forecasts of 2012 House Prices

- Evolution of median forecast for 2012.
- Throughout 2011, became more pessimistic...
- Except for the pessimists...
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- More “Adaptive Expectations”
The challenge for asset pricing

- “What have they been thinking? Home buyer behavior in hot and cold markets”
- *Brookings Papers on Economic Activity, Fall 2012*
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This paper
How is this useful?
Economists suck at asset pricing

The slide you’ve all been waiting for...

The end.
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