Collateral Constraints and Macro Asymmetries by Guerrieri and Iacoviello

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Overview

- Matteo and Luca are pioneers in this area
- The topic is important and paper is clearly written
- The technical prowess is impressive
- I have significant reservations
  - Taste
  - A look at who is constrained
  - Re-interpretation of the housing cycle
  - Housing in the Model
- What's wrong with Carlos's explanation?

Taste

- The paper has the feel of a data-fitting exercise
- I think fitting data is important
- The distance between this style of research and the old Klein Models, to my taste, is uncomfortably close
- Part of this is to find some role for monetary policy; some is to fit data
- A good amount of story telling is required

Example of Story Telling

Households supply homogeneous labor services to unions. The unions differentiate labor services as in Smets and Wouters (2007), set wages subject to a Calvo scheme and offer labor services to labor packers who reassemble these services into the homogeneous labor composites n_c and n'_c. Wholesale firms hire labor from these packers. (from page 11)

- What?
- Why would *labor unions* have a policy for differential pay based on patience?
- Labor unions don't mater.
- This is all storytelling for data fitting.

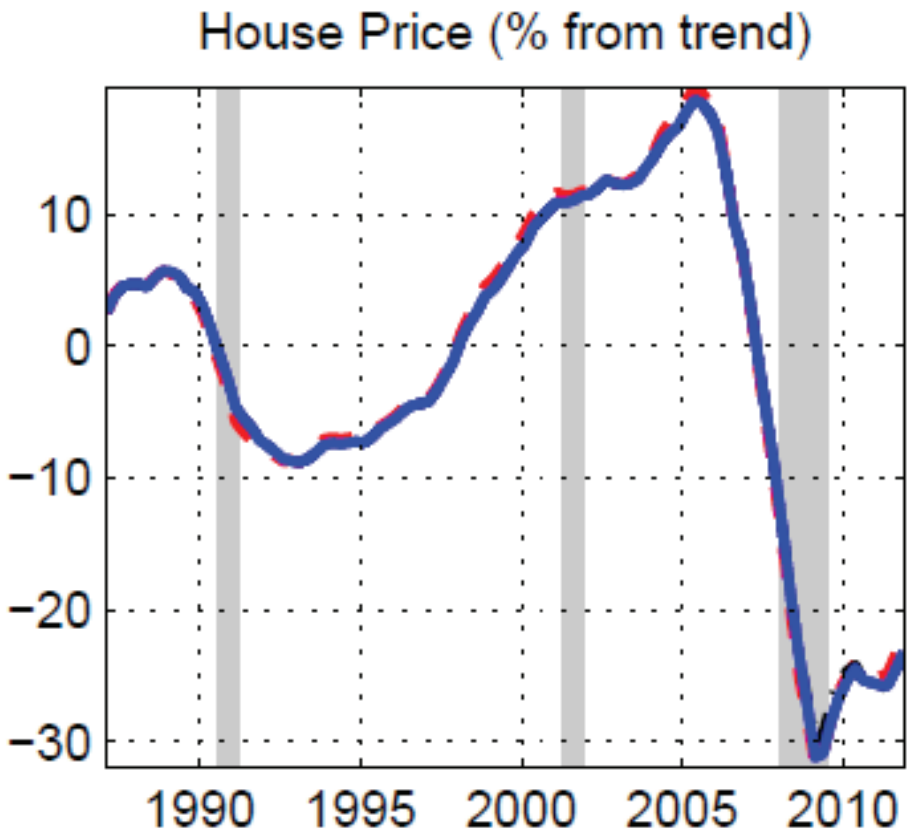
Who is Constrained?

- The model relies critically on heterogeneity
  - 2 different types of agents, patient and impatient
  - Impatient households occasionally reach borrowing limit
- Model-verification: Replicate cross-sectional facts
- My intuition – this model cannot
  - Model: Everyone owner-occupies
  - Data: Bottom 42% do not have enough income to matter

2010 SCF - Data on the Bottom 42

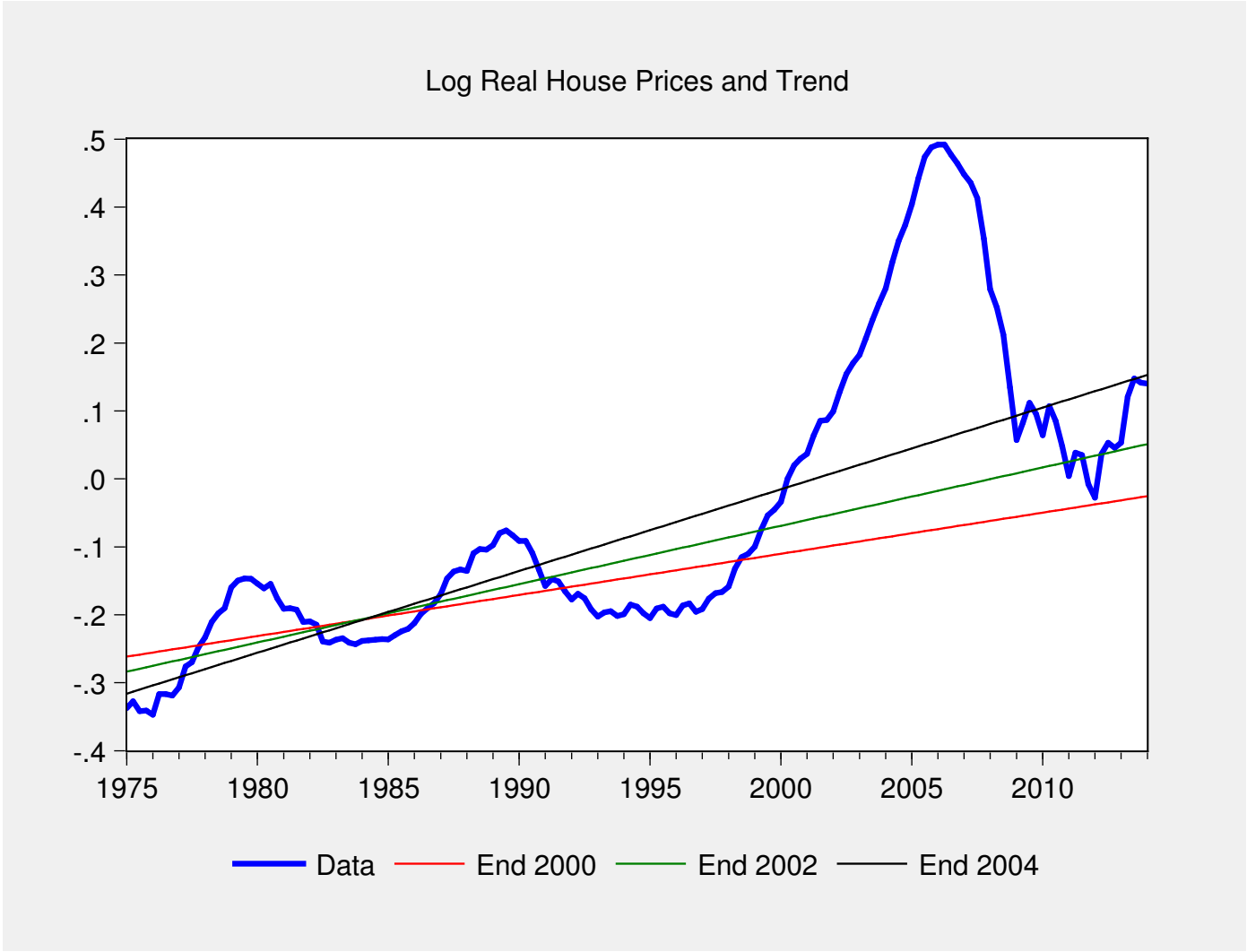
	Sorted by	
	Net Worth	Income
Bottom 42 Avg. Net Worth	$2,384	$126,712
Economywide Avg. Net Worth	$494,916	$494,916
Net Worth Share of bottom 42	**0.2%**	**10.9%**
Bottom 42 Avg. Income	$36,777	$21,348
Economywide Avg. Income	$78,332	$78,332
Income Share of bottom 42	**19.7%**	**11.6%**
Homewonership Rate, bottom 42	**33.6%**	**47.4%**

A Look at the Housing Cycle



House prices were 30% below trend in 2009?

A Standard Look at the Housing Cycle



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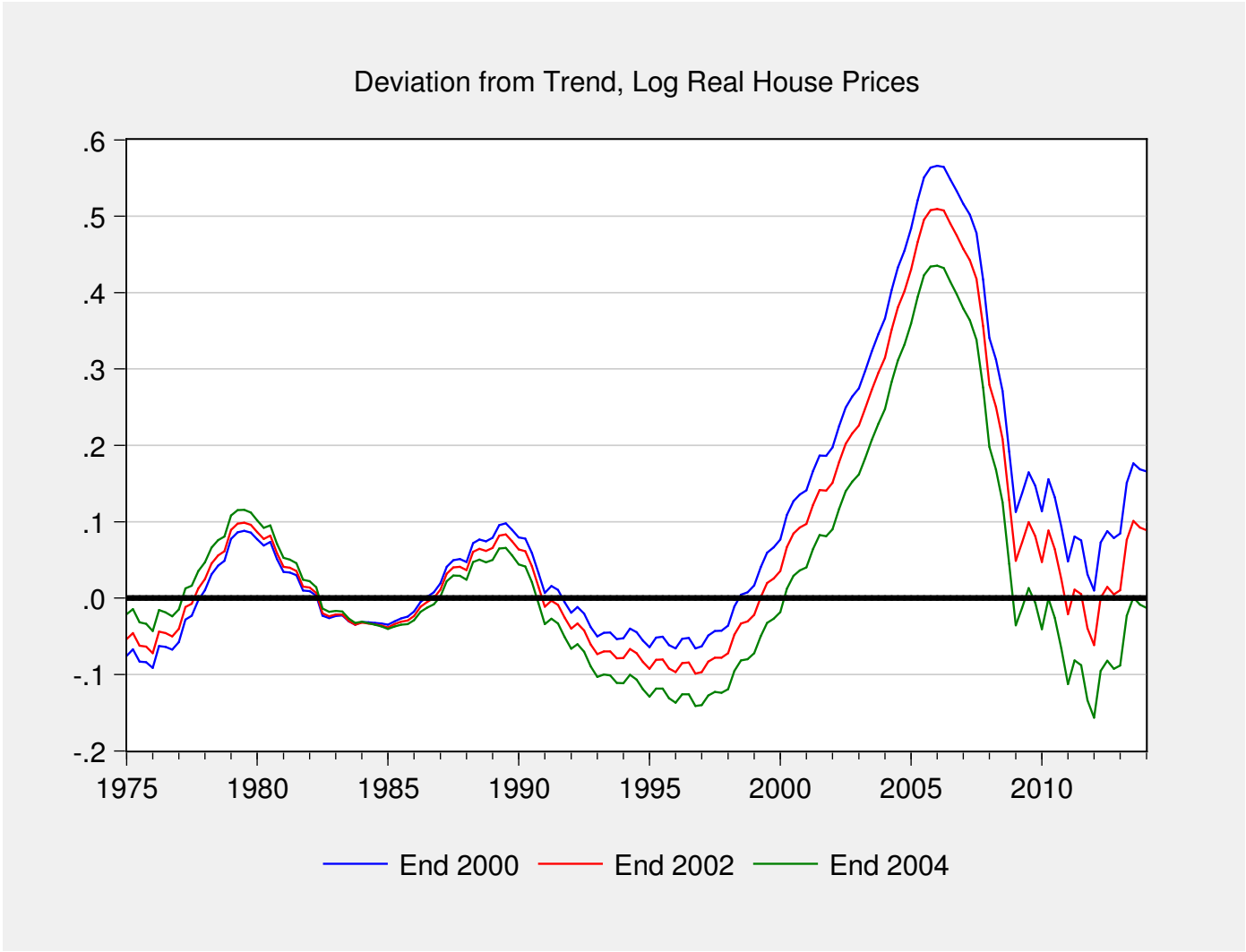

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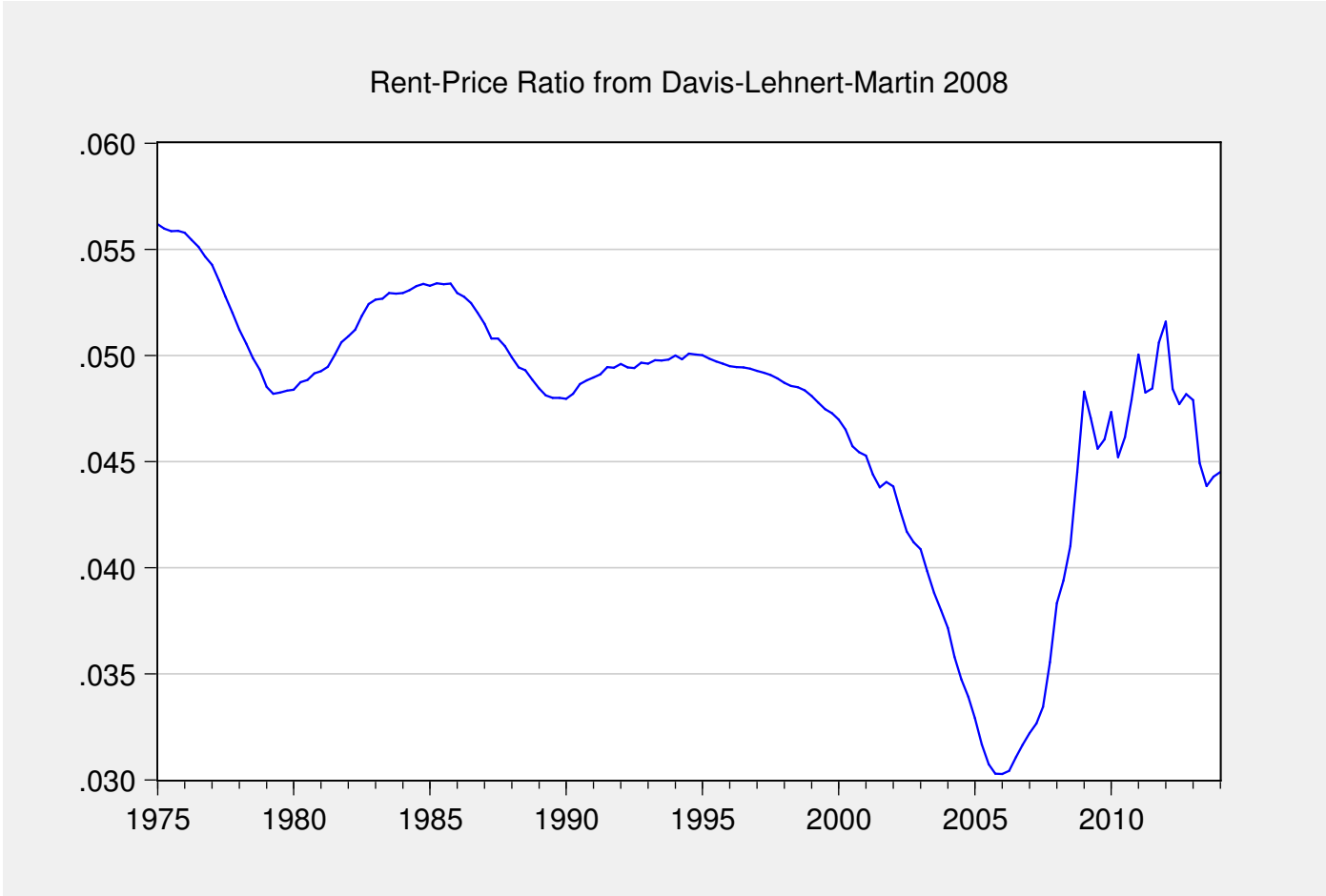
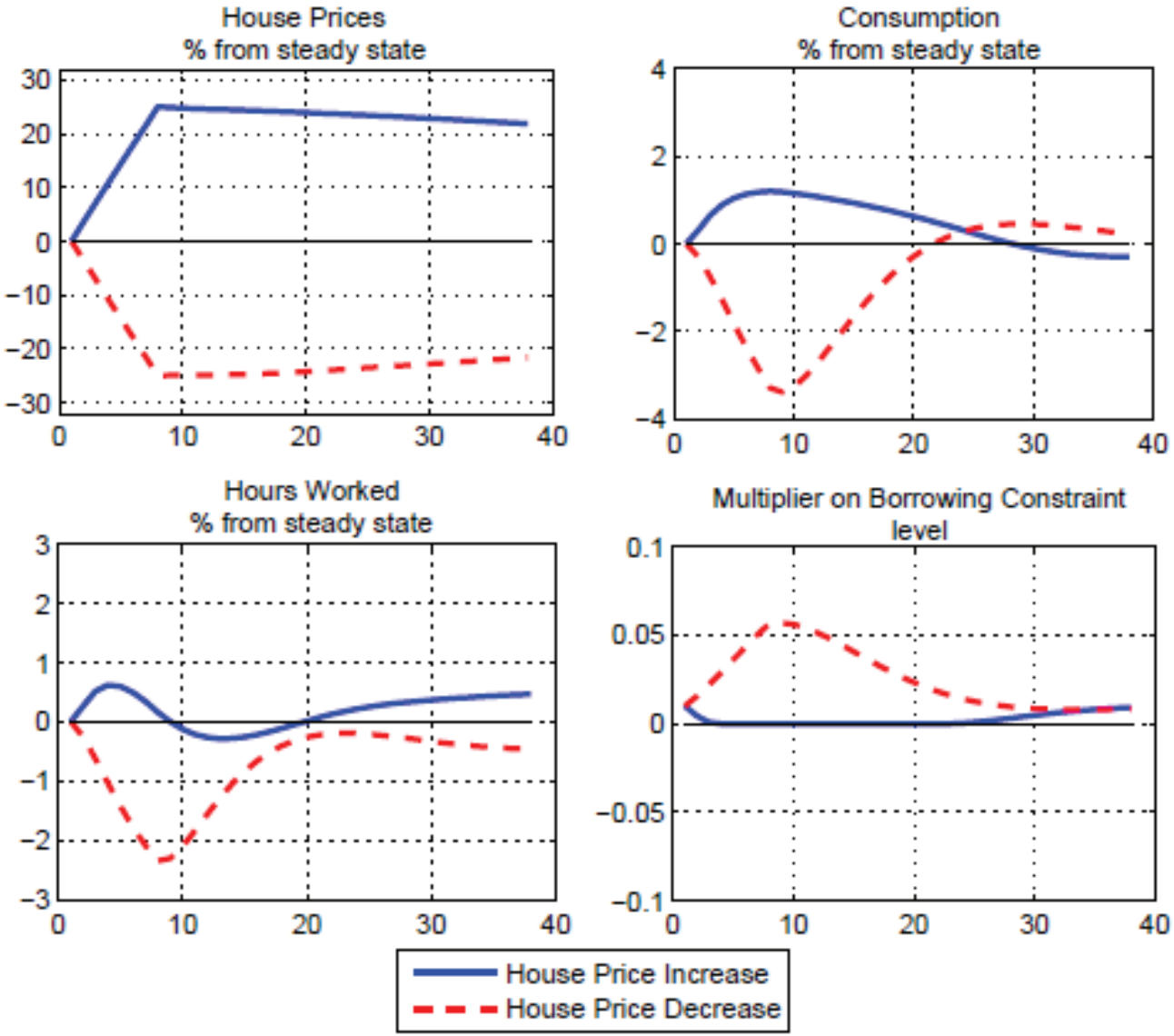


Why Does This Matter?

- Stationary Model: house prices have a known mean
- Was the bust a negative shock driving prices below mean? (Current paper)
- Or was the bust just mean reversion? (Standard analysis)
- Conjecture: if bust was just mean reversion, expected to occur, it should not have had significant macro implications

What if it was Mean Reversion?



Housing in the Model

- The action in house prices comes from taste shocks to housing (shocks to the MU from housing)
- + Taste shock: rents rise by more than prices?
  (not true in data)
- − Taste shocks → credit constraints → financial crisis?
  Weird explanation for the financial crisis

Garriga et al

- Households borrow ϕ of home value, earn spread $r_d - r_m$
- Price of a house p satisfies (steady state)

$$p = \frac{q}{1+r^d} + \frac{\phi p\left(r^d - r^m\right)}{1+r^d} + \frac{p}{1+r^d}$$

$$\log p = \underbrace{\log\left(\frac{q}{r^d}\right)}_{\text{fundamentals}} - \underbrace{\log\left[1 - \frac{\phi\left(r^d - r^m\right)}{r^d}\right]}_{\text{collateral}}$$

- Unanticipated changes to ϕ change prices/rents and can have real effects on macro aggregates that look like the data