Discussion of

"Mortgage Loans, the Decline of the Housing Saving Rate and the Increase in Risk Sharing"

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Motivation: US 1980 vs. 2000

- Decline in savings rate (increase in consumption share of income)
- Increase in mortgage debt to income ratio
- Increase in home ownership rate
- Improvement in risk sharing(?)

Motivation: US 1980 vs. 2000

Variable	1980	2000
c/y	87.7%	93.2%
d/y	123%	160%
hor	64%	69%
σ_c	???	down (!?)

This Paper

- Builds a quantitative OLG model with housing tenure and mortgage choice

- Quantifies the effects on $s, d/y, hor, \sigma_C$ of two specific innovations in mortgage markets

  1. Introduction of "home equity line of credit"

  2. Relaxation of down payment constraint

- Innovations in mortgage market (especially 1.) account for substantial part of $\Delta s, d/y, hor, \sigma_C$

Key Model Ingredients

- Preferences

$$
\begin{aligned}
& u(c, h^s) \\
h^s &= \mathbf{1}_h h + (1 - \mathbf{1}_h) f
\end{aligned}
$$

- Housing frictions

$$
\begin{aligned}
d' &\leq (1 - \phi_1) h' \\
tr(h, h) &= \tau_s h + \tau_b h' \\
h' &\geq \underline{h}
\end{aligned}
$$

Key Model Ingredients

- Why do people own? User cost of owning smaller than rent: $r + \delta_o < r + \delta_r$

- 1980's mortgage regime imposes additional restriction **R** of constant mortgage repayment over contract length T

$$\begin{aligned} d' &= (1+r)d - m \\ \text{where } m &= \frac{(1-\phi_1)h_0 r}{\left[1-(1+r)^{-T}\right]} \end{aligned}$$

Thought Experiments

- Comparison of steady states, holding interest rates and house prices fixed (by appropriate assumptions)
  - Lower ϕ_1
  - Removal of restriction **R**

- Both changes expand choice set of household and weaken frictions in housing market.

Results

	1980		2000		
	Model	Data	Model	ϕ_{1980}	Data
c/y	92.6%	87.7%	94.9%	93.8%	93.2%
d/y	26%	123%	56%	47%	160%
hor	64%	64%	75%	70%	69%
σ_c	0.608	???	0.593	0.594	???

- Blundell et al. (AER 2008) “We find little evidence that the degree of [consumption] insurance with respect to [earnings] shocks of different durability changes over this period [Late 70s to early 90’s]”

Main Comments I

- Missing transition: perhaps overstating magnitudes

- Partial equilibrium 1 (call it small open economy): massive expansion of credit without adjustment in interest rates: perhaps overstating magnitudes.

- Partial equilibrium 2 (call it perfectly elastic supply of houses): increased demand for owner-occupied houses (and falling demand for rentals) without adjustment of house prices.

Main Comments II: What is missing?

- Changes in house prices

- Changes in interest rates

- Changes in productivity growth

- Changes in demographics

- Really need to hope: no interaction of these changes with mortgage innovation. Note: not clear which way the bias goes. Need quantitative analysis to assess this.

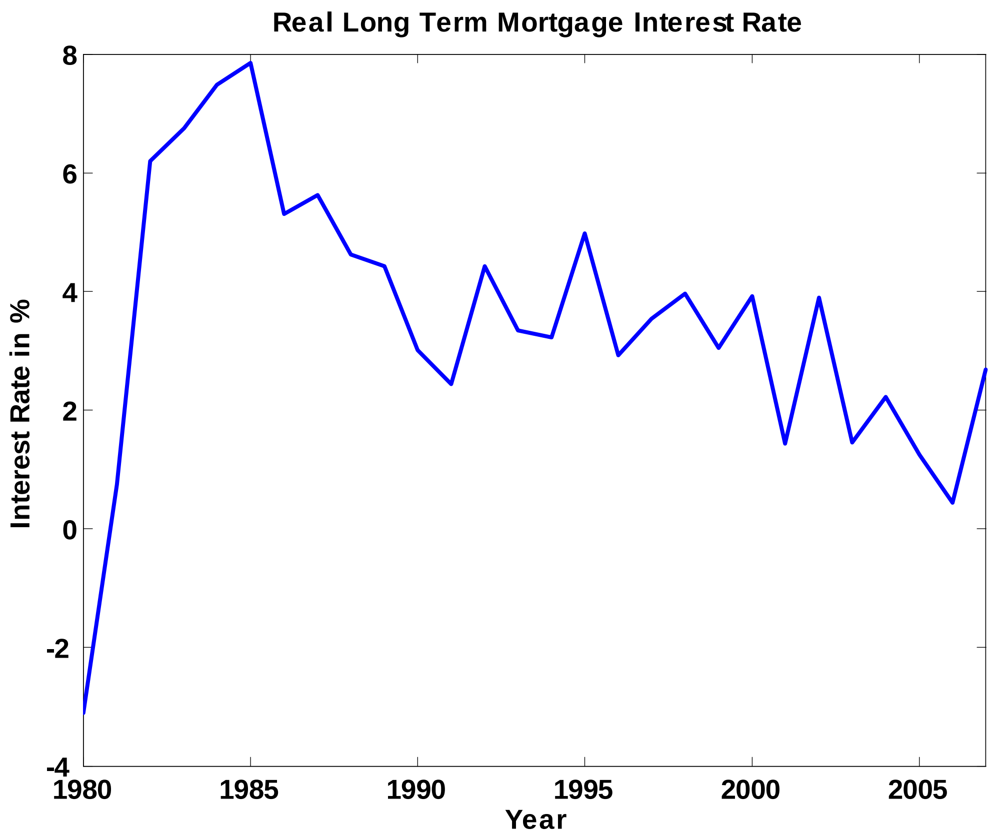
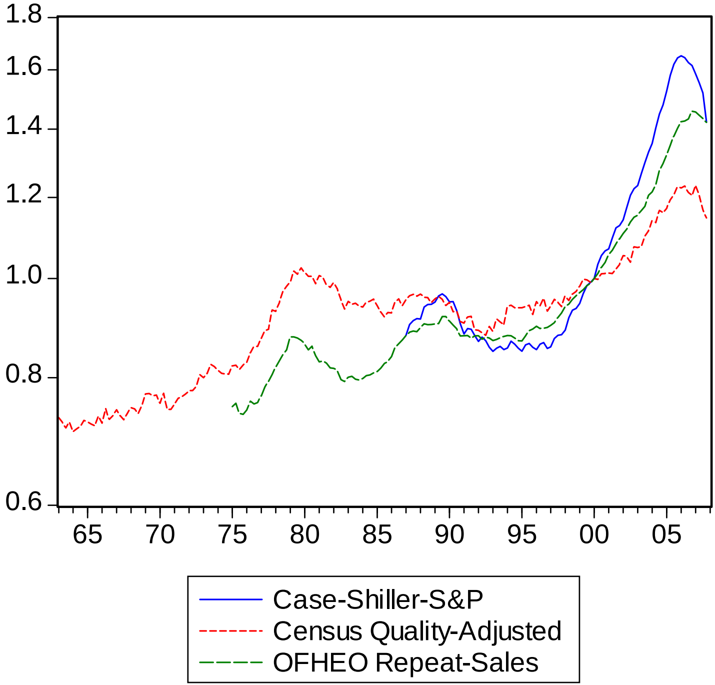
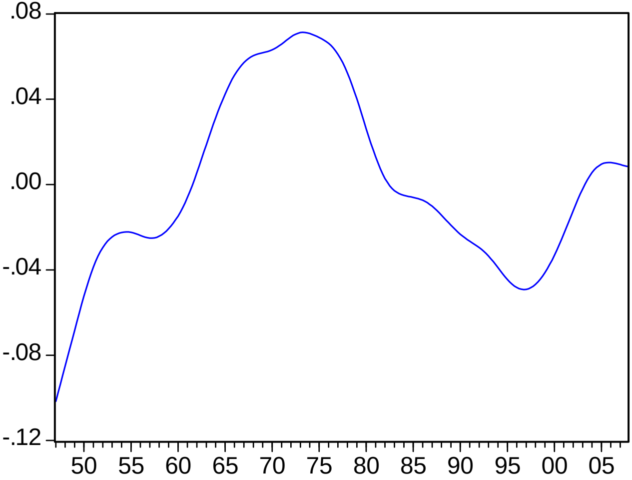

Real Long Term Mortgage Interest Rate
Interest Rate in %
8
6
4
2
0
-2
-4
1980
1985
1990
1995
2000
2005
Year

Figure 1: Alternative Home Price Indexes (Inflation-Adjusted)



Note: Logarithmic scale, 2000:Q1 = 1.00

Figure 4: Non-Farm Productivity
(HP-smoothed, relative to linear trend)



Source: BLS