Who Benefits from Relaxing Mortgage Leverage Constraints?

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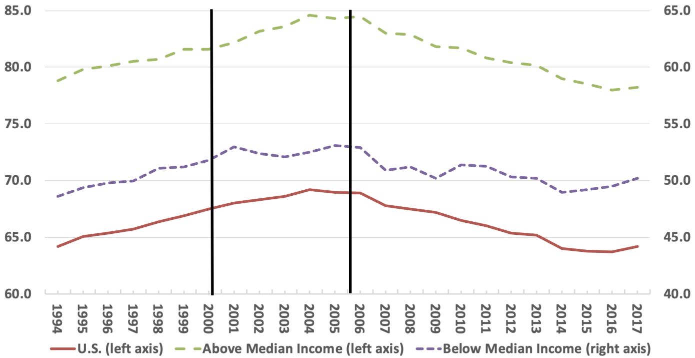
Introduction

- Significant changes in US mortgage credit and home ownership over past two decades
- Causes of 2000-2007 housing boom still not completely understood
- Effects of regulatory tightening in the residential mortgage market during home ownership bust unclear
  - Declines in home ownership hard to disentangle from changes in preferences for home ownership, changes in household formation, etc...

US Home Ownership Rate 1994 - 2017

Aggregate and by Income Category



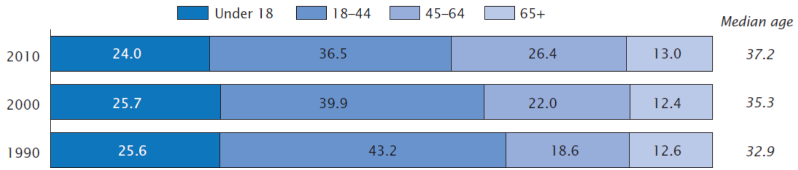
Source: U.S. Census Bureau, Current Population Survey / Housing Vacancy Survey, July 26, 2018.

Small increase in home ownership in aggregate over boom, largely from high-income households

Broad-based decrease in home ownership during bust

Role of Demographics

Population is Getting Older



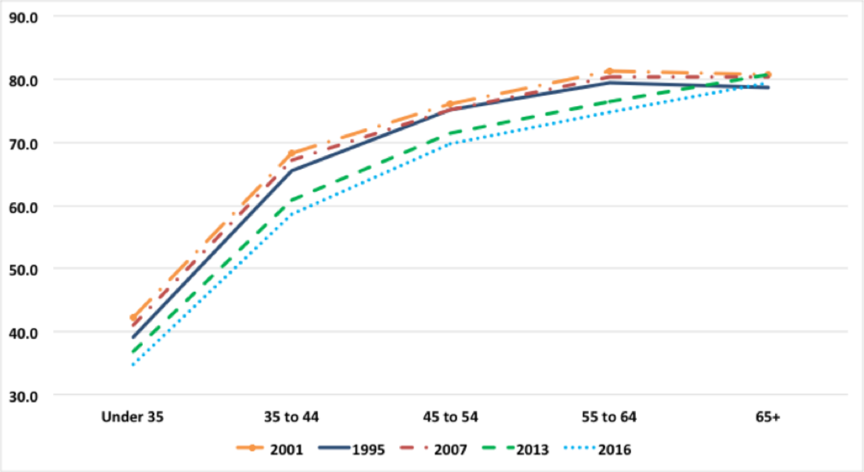
Source: Age and Sex Composition: 2010. 2010 Census Briefs, U.S. Census Bureau.

Older households are much more likely to own than young households

- Households need time to accumulate a down payment

Housing boom period would have seen an increase in US home ownership from demographics alone
$\Rightarrow$ **Need to look at home ownership within age categories!**

US Home Ownership by Age Category



Source: U.S. Census Bureau, Current Population Survey / Housing Vacancy Survey, July 26, 2018.

Adjusted for age composition, home ownership rate actually fell slightly during housing boom and fell a lot during bust

Summary of Home Ownership Patterns

1. Increase in aggregate and age-adjusted home ownership rates 1994-2001
2. Slight **decrease** in age-adjusted home ownership rates 2001-2007
   - Inconsistent with a substantial relaxation in mortgage credit constraints during boom?
3. Significant decrease in aggregate and age-adjusted home ownership rates 2007-2017
   - Consistent with post-crisis tightening of mortgage credit constraints

Effects of Mortgage Leverage Restrictions

Tweaking of Ghent (2015, Real Estate Economics)

Life cycle model of home ownership and mortgage choice

- Incomplete markets in the sense of borrowing constraints on future income
- Utility premium from owning relative to renting
- Broadly captures age-profile of home ownership in the data
  - Need time to accumulate a down payment
- Exogenous, idiosyncratic home prices
- Transactions costs from selling or refinancing
- Compares economies when households have access to no or low down payment mortgages

Steady State Equilibria

Home Ownership Rate	Data			Model Minimum downpayment		
	2001	2007	2016	20%	10%	0%
	68.0%	67.8%	63.7%	71.3%	71.5%	72.5%
Low Income				30%	30%	30%
Mid Income				83%	83%	83%
High Income				92%	92%	98%
Under 35	42%	41%	35%	31%	31%	37%
35-44	68%	67%	59%	70%	71%	70%
45-54	76%	75%	70%	81%	81%	81%
55-65	81%	80%	75%	86%	86%	86%
65+	81%	80%	80%	76%	76%	76%

Notes: 1) Data sources are US Census CPS / Housing Vacancy Survey, Federal Reserve Consumer Finance Survey, and Federal Reserve Bank of St. Louis.

Welfare increases from relaxing leverage constraint results in higher home ownership for young households that anticipate high future income!

Beneficiaries of Relaxing Leverage Constraints: Young, High-Income Households!

Intuition:

- High-income types have steeper life cycle income profiles
- Relaxing leverage constraints allows them to get into home ownership earlier and buy a larger house earlier
- Low-income households tend to rent anyway and face much flatter life cycle income profiles

What about Wealth Accumulation?

Oft-cited argument to encourage home ownership is that it serves as a commitment device

Argument is that encouraging home ownership among low-income households helps them build wealth

- Assumption is that households having some problem following through with savings plans
- Could reduce disparities between wealth in future generations

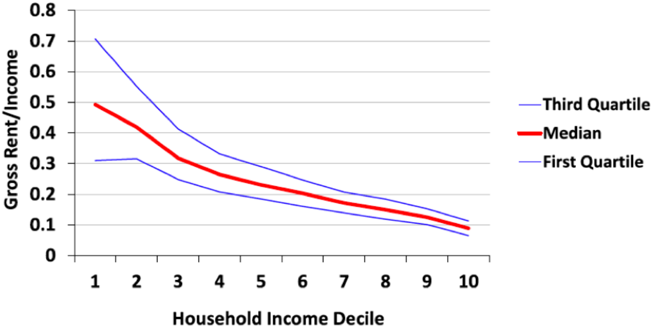
Problem: no evidence in favor of this

- easy to access housing equity via home equity loans, refinancing

What Macroprudential Policies *Should* We Worry About?

Worry less about the distributional effects of policies that restrict consumer mortgage choice than those that affect the rental market

Most low-income households are renters and low-income households spend large fractions of their income on rent



Source: Green and Malpezzi (2003).

What Macroprudential Policies *Should* we Worry About?

We should be especially concerned about any macroprudential policy that reduces the supply of rental housing

- e.g., High-Volatility Commercial Real Estate (HVCRE) bank regulation studied by Reher (2020)

Construction lending come disproportionately from local banks

- Want to be mindful of any regulation that affects them