MORTGAGE CONTRACT DESIGN AND HOMEOWNERSHIP

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Why homeownership?

• **Owner-occupied housing as a hedge against rent risk (Sinai and Souleles 2007):** “Homeownership provides a hedge against fluctuations in future rent payments, (which increase) with a household's expected length of stay in its home, as the cumulative rent volatility rises and with the correlation in housing costs in future locations.”

• **Option to stay:** Households may not want to stay in their neighborhood but if they do they will value a hedge. Even with mobility, correlated home prices create a hedge (prepayable option mortgage design assists).

• **Social benefits:** Neighborhood involvement (DiPasquale & Glaeser 1999), alignment of interest with neighborhood improvement; children benefits (Green & White 1997), wealth building over the life cycle (Dietz & Haurin 2003; Lusardi & Mitchell 2007), tenure duration matters. Wealth inequality intergeneration.
Mortgage contract design for long term homeownership

- **Homeownership, mortgage debt and household balance sheet:**
  - Long term FRM matches assets and liabilities of household: enables smoothing of consumption over life-cycle while supporting function of homeownership as hedge, providing stability, ability to retain housing with appreciation. Requires long term matching of housing costs with household revenue—wages with low/limited correlation to local rent. The short term mortgage with mortgage payment risk undoes this hedge. Campbell (2012).
  - ARM for shorter term duration.
  - ARM ex post preferable in times of decreasing interest rates even with option to refinance FRM.
Mortgage instrument design, macro-instability, from the perspective of the borrower

• Optimal mortgage contract design for household balance sheet needs to take into account macro effects
  – Real Estate booms and financial busts frequently associated (Herring & Wachter 1999; Reinhart & Rogoff 2008)
  – Why: financial accelerators (Abraham & Hendershoot 1996; Bernanke 2007); household balance sheet’s impact on consumption (Mian & Sufi 2009; Mian, Rao and Sufi 2013)
• Avoiding mortgage payment shock and price effects from pro-cyclical shifts in reserving and constraints
Historical Crises: What have we learned?

• Great Recession: not caused by reset due to mortgage design but by repricing of risk => resulting credit crunch made PLS no longer fundable
  – Why interest rates did not serve as smoking gun? Fed’s action to decrease interest rates prevented this from happening

• Other crises:
  – Denmark’s move from FRM to interest only mortgages: movement to affordable product can set in motion unsustainable house price rise => financial accelerator

• Paradise lost, paradise regained?
  – SIFI must be capitalized to sustain financial crisis: limit affordability of all products
  – Build stability into design: trade-off stability vs. affordability
Foreclosure by Market Segment

% of loans going into foreclosure per quarter

Note: ARM = Adjustable Rate Mortgage, FRM = Fixed Rate Mortgage

Prime: FRM
Prime: ARM
Sub prime: FRM
Sub prime: ARM

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KNOWLEDGE FOR ACTION
Stability for affordability

- SIFI must be capitalized to sustain Great Recession: limits affordability of all products
- Costly to have private sector ensure for catastrophic risk: (Parrott and Zandi 2015)
- Build stability into mortgage contract design: decreases need for capital reserve => ultimately decreases cost of mortgages and increases availability
Stable credit availability and affordability necessary for homeownership access

- Since 2006:
  +6M renter households
  -500K homeowner household

Source: CPS/HVS
Thank you

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