FRBNY MORTGAGE CONTRACT DESIGN CONFERENCE

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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.

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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**

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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

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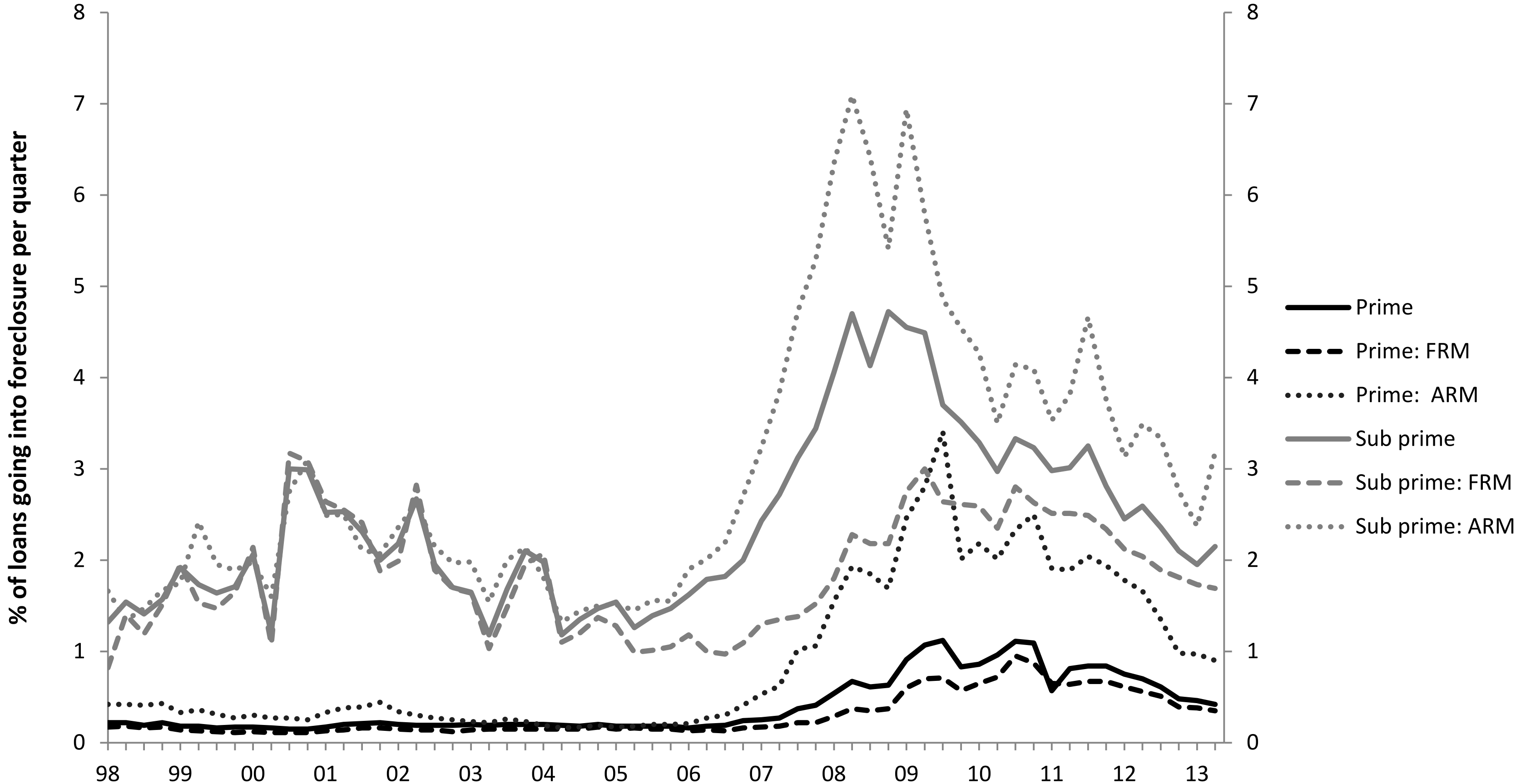
Foreclosure by Market Segment



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

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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

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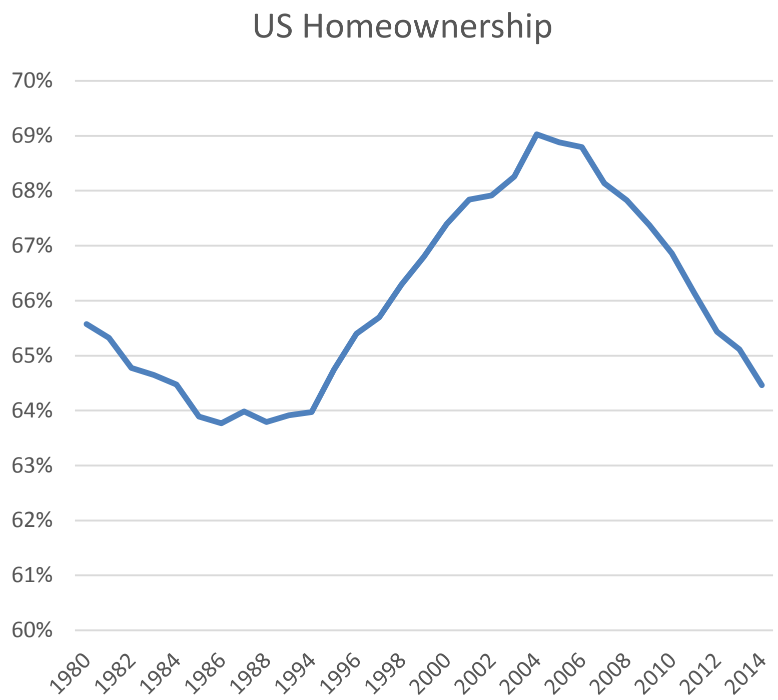
Stable credit availability and affordability necessary for homeownership access



Source: CPS/HVS

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

Thank you

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