Mortgage Design, Monetary Policy, and Financial Stability

John Y. Campbell

FRBNY Mortgage Design Conference

May 21, 2015

ARMs, FRMs and Monetary Policy

- ARMs allow interest rate shocks to affect budgets of all mortgage borrowers.
  – Hence big impact on consumption spending.
- Non-refinanceable FRMs concentrate impact on current homebuyers.
  – Impact on home construction, less on consumption.
- Refinancing option creates asymmetry: FRMs are more like ARMs when rates decline.
  – But this no longer works when house prices fall (given US rules – Danish system fixes this).
  – And it depends on households exercising their option.

Recent US Evidence

- Two recent papers, Di Maggio, Kermani, and Ramcharan (2015) and Keys, Piskorski, Seru, and Yao (2015) study the effects of ARM resets on household consumption and deleveraging.
- These papers also present evidence on geographical variation in ARM share within the US.
  - Much of this results from conforming loan limit and GSE subsidies to FRMs.
  - More rapid recovery from Great Recession in areas with a higher ARM share.
- Suggests that the high ARM default rate in the Great Recession was driven by borrower selection, not inherent riskiness of ARMs (Campbell and Cocco 2015).

The Dark Side of ARMs

- There may be circumstances where an ARM system can destabilize the economy.
- In a currency crisis, short-term rates spike and we may not want such strong transmission to household budgets.
- Similar to the argument against foreign-currency mortgage borrowing (Iceland and some Eastern European countries before 2008).

What Drives ARM/FRM Choice?

- The ARM/FRM composition of mortgages may be hard for policymakers to control.
  - Variation in mortgage choice with current interest rate spread and expected cost difference over mortgage life (Koijen, Van Hemert, and Van Nieuwerburgh 2009, Badarinza, Campbell, and Ramadorai 2015).
  - Inertia from households' biases towards familiar mortgage forms, possibly also lender preferences (Foa et al 2015).
- Countries with ARM systems often have had volatile inflation histories.
  - Volatile inflation makes non-refinanceable FRMs too risky and refinanceable FRMs too expensive.

What Drives ARM/FRM Choice?

MORTGAGE MARKET DESIGN 21

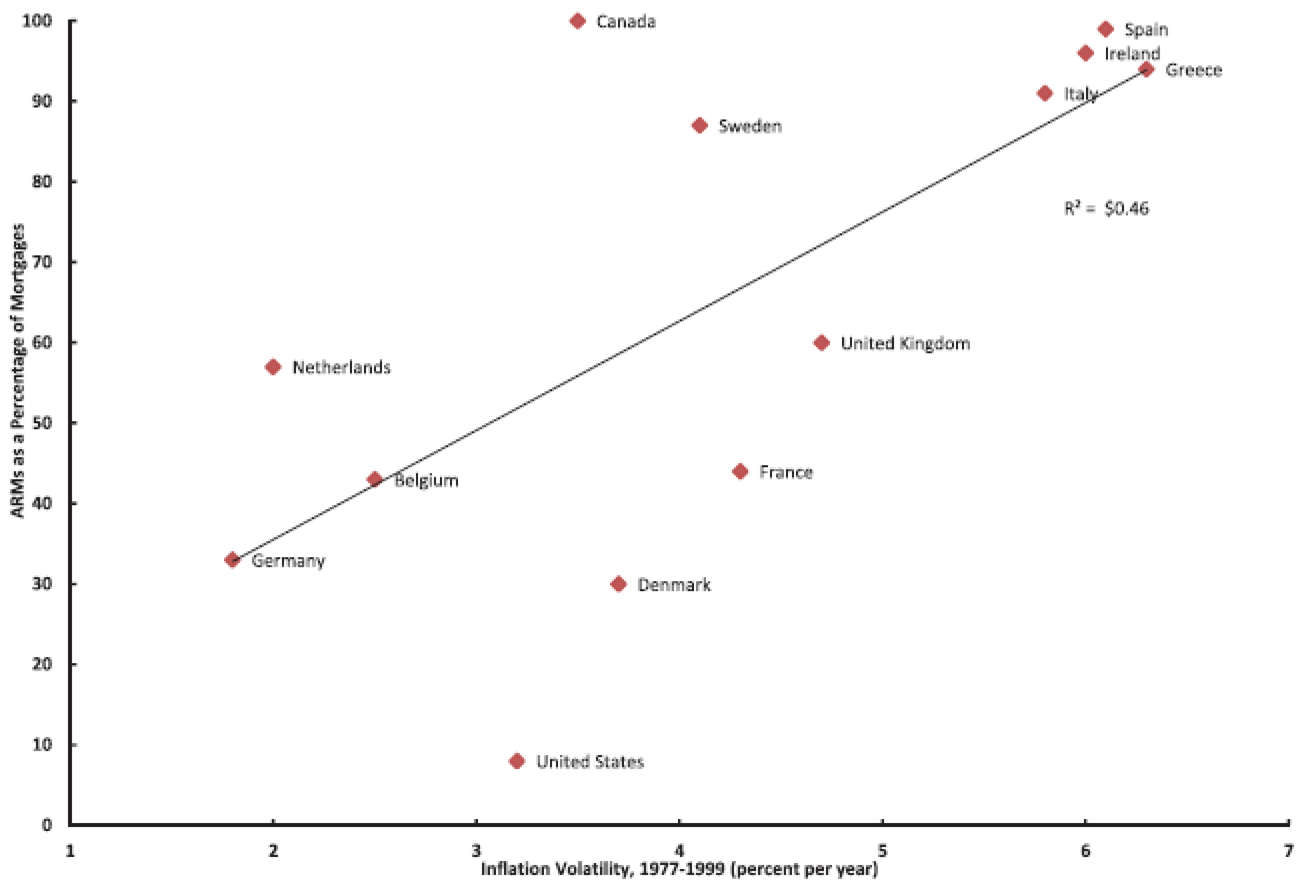

Figure 5. ARM share and historical inflation volatility.

Campbell, RoF 2013

Mortgages and Financial Stability

- Mortgage contract form needs to be aligned with funding arrangements.
- Maturity transformation implied by funding FRMs with deposits is asking for trouble (S&L crisis).
- Modern US solution is securitization, but this can erode underwriting standards (Keys, Mukherjee, Seru, and Vig 2012).
- European solution: covered bonds that keep credit risk with originators, transfer interest rate risk to long-term investors (e.g. pension funds).