

# Thoughts on homeownership and the crisis

Paul Willen

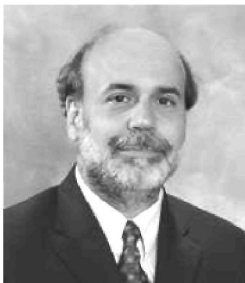
Federal Reserve Bank of Boston

Homeownership Forum

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# Disclaimer

- The views expressed today are mine.
- The do not necessarily reflect the views of
- The Boston Fed
  - or the Federal Reserve System



- When I say “we”, I mean members of the research department.

# Caveat

- Everything I'm about to say could be wrong:

# Overview

- Make the argument
  - Complex products played almost no role in the crisis.
  - House prices.
- Policy conclusions
  - Need to educate borrowers better about prices, not financial contracts.
  - But is that enough?
  - Is a mortgage a bad way to finance shelter?

# The myth of the “safe mortgage”

- Is a fixed rate mortgage an inherently safe product?
- Safety razor



- Is FRM the safety razor of household finance?
  - Payment stays the same for 30 years.
  - Never any payment shock with FRM.
- Payments on ARMs change and cause defaults.

# Payment shocks and the crisis

- Since 2007, we have argued that resets of adjustable rate rate mortgages.
  - were not causing most defaults.
  - and would not be a major problem.
- Large national sample of loans on which lender initiated foreclosure.
  - Completely consistent with National Delinquency Survey

		2007	2008	2009	2010	All
FRM share		38%	48%	62%	74%	59%
Prior to delinquency spell that led to foreclosure...						
% of loans with...	Reset	18%	20%	18%	11%	17%
	Payment increase	12%	17%	11%	9%	12%
	Payment reduction	0%	0%	4%	8%	4%
	No change since orig.	88%	82%	85%	83%	84%
Private Label		68%	54%	37%	23%	41%
# obs in thous.		374	641	874	756	2,646

# House prices

- Most of the loans that defaulted in the worst foreclosure crisis in American history were:
  - "Safe 30-year fixed rate products"
  - Fully documented
  - "Carefully underwritten"
- If house prices fall by 30%
  - We will have lots of foreclosures!

# What does ownership mean?

- In economics, we talk about a mortgage as an option.
- Which makes things much easier...

$$\text{Price} = S_0 \Phi(d_1) - e^{-rT} K \Phi(d_2)$$

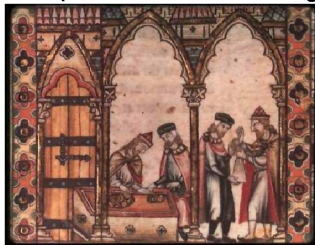
$$\text{where } d_2 = \frac{\ln\left(\frac{S_0}{K}\right) + \left(r - \frac{\sigma^2}{2}\right)T}{\sigma\sqrt{T}}$$

$$\text{and } d_1 = d_2 + \sigma\sqrt{T}$$

- Seriously, we think about a mortgage as a contract where the borrower sells the house to the lender.
  - And gets the right to buy the house back by paying off the outstanding balance of the mortgage.

# The origins of the common law mortgage

- The option story is a good metaphor
- and a literal description of the ur-mortgage



- If borrower didn't repurchase the property on "law day", forfeited right.
- Courts of equity instituted "period of equitable redemption".
- Lender could then "foreclose" period of equitable redemption and extinguish the borrower's right to the property.

## And, actually, of my mortgage too!

- Massachusetts, like 27 other states, is a title theory state.
- When I refinanced my mortgage in December, Provident Funding became the legal owner of my property.

### TRANSFER OF RIGHTS IN THE PROPERTY

This Security Instrument secures to Lender: (i) the repayment of the Loan, and all renewals, extensions and modifications of the Note; and (ii) the performance of Borrower's covenants and agreements under this Security Instrument and the Note. For this purpose, Borrower does hereby mortgage, grant and convey to MERS (solely as nominee for Lender and Lender's successors and assigns) and to the successors and assigns of MERS, with power of sale, the following described property located in the county of NORFOLK :

- My ownership in the property is my “equitable right of redemption” – my right to buy the property back from the lender!
- But the legal owner of the property is the lender, not me.
- Am I a homeowner?

# Lease-purchase

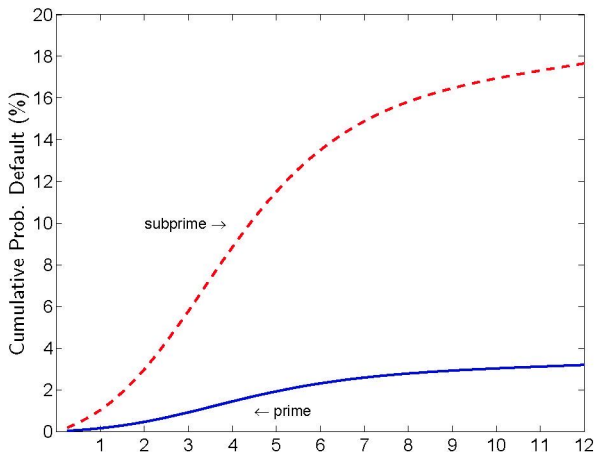
- Family X pays some money every month and gets:
  - A place to live.
  - And an option to buy that place for a fixed sum.
- How is that different from me?
  - Family X can choose not to renew.
  - I can only leave the property by paying off the loan or defaulting.
- I know there are lots of flaws in lease-purchase
  - But we need to get over our view that renting is feudal.



# What is the role of policy makers?

- Prevent unstable homeownerships
- Comprehensive measure of riskiness of homeownership
- Long-run likelihood of foreclosure
  - on this or any subsequent mortgage on this house
- Take a buyer:
  - LTV
  - DTI
  - FICO
  - Subprime borrower?
- What is the probability that this borrower will lose the home to foreclosure?

# The probability of default



# A heavy hand?

- Disclosure?
  - You have a 1 in 5 chance of losing your home!
- Heavy Hand
  - You cannot get this loan or...
  - If you want to buy this house, you must demonstrate that you are ready or...
  - You must work with a community group...

## Disaster and policy



- Many people died because of shortage of lifeboats.
- Proposal: Steamship Company must disclose number of lifeboats.
- Solution: Require ship to have enough lifeboats for everyone.