

Modifications and Foreclosures

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Disclaimer

- I am speaking today as a researcher and as a concerned citizen
- not as a representative of:
 - The Boston Fed
 - or the Federal Reserve System



- When I say “we”, I don’t mean Ben and me.

Caveat

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

No one who cannot rejoice in the discovery of his own mistakes deserves to be called a scholar.

–Donald Foster

Today

- “Why Don’t Lenders Renegotiate More Home Mortgages? Redefaults, Self-Cures and Securitization.” Boston Fed PPDP 09-04. With Manuel Adelino and Kris Gerardi. July 2009.
 - Available at <http://sites.google.com/site/paulwillenshomepage/Home>
- Identified modifications in the LPS or McDash dataset.
 - 1 Securitization does not appear to have been a major problem for loan modifications
 - 2 Economics of Renegotiating Loans
 - 3 HAMP.

Loan Renegotiation

- In the period 2005-2008, loan renegotiation was
 - Safe
 - Legal
 - and RARE!
- We look at loans after they became 60 days delinquent:
 - Over the next year, only about 3 percent of the loans got lowered payments.
 - 97% of borrowers paid as much or more after they got into trouble.
- Broader definition of renegotiation shows more help...
 - Over the next year, only about 9 percent of the loans received some form of modifications
 - But all these incremental “renegotiations” involved the same or higher payments.

(1) The role of securitization

- The Role of Securitization
- Unconditional percentages of mortgages that received a modification within 12 months of first 60-day delinquency:
- Sample Size 66,541
- Results stronger for broader definitions of renegotiations

	Concessionary Mods	All Mods	All Mods + Prepayments
Portfolio	3.2%	8.7%	14.7%
Private-label	2.6%	8.4%	15.5%
Marginal Effect (z-stat)	-0.3% -1.69	0.2% 0.58	0.9% 1.95

(2) "Better" versus More Renegotiation

- Differences in manner in which modifications are performed?
 - Not a contract issue – PSAs don't restrict behavior of servicer on intensive margin.
- Look at re-defaults after modification:

Panel A: Payment Reducing Mods					
	All Loans	Subprime	<i>FICO</i> < 620	Non-missing Documentation and DTI	Fully Documented
Portfolio Mean	0.308	0.386	0.332	0.228	0.249
Private-label Mean	0.358	0.392	0.371	0.362	0.359
Marginal effect (Logit)	0.016	-0.001	-0.015	0.03	-0.004
# Mortgages	4,626	2,514	1,562	1,475	1,135

Panel B: All Mods					
	All Loans	Subprime	<i>FICO</i> < 620	Non-missing Documentation and DTI	Fully Documented
Portfolio Mean	0.393	0.53	0.444	0.404	0.403
Private-label Mean	0.449	0.5	0.501	0.482	0.482
Marginal effect (Logit)	0.008	-0.023	-0.009	-0.021	-0.033
# Mortgages	14,796	7,073	5,344	4,594	3,620

OTS/OCC data

- Principal Reducing Mods:

	Portfolio	Private Label
Q2, 2009	14,172	2
Q1, 2009	3,394	3

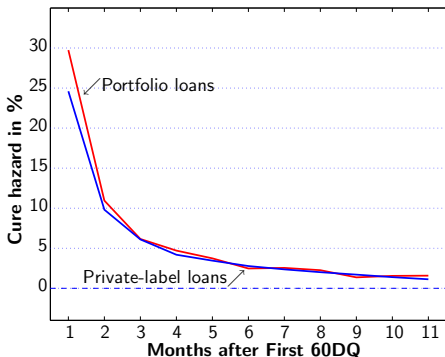
- Not what it seems:
 - Private label servicers do principal reductions (see LP data).
 - According to our data, a difference has emerged lately but...
 - the principal reductions are quite small ($< 10\%$ of principal).
- Some have attributed redefault differences to principal reductions but the gap only emerged recently, whereas the redefault differences been there all along.

(3) Cure rates

- Possible our algorithm is completely missing some renegotiation
 - Forbearance?
 - Repayment Plans?
 - Errors must be substantially biased toward portfolio.
 - PSAs do not limit these!
- Successful renegotiation \Rightarrow Cure
- Broadest possible definition

	All Loans	Subprime	<i>FICO</i> < 620	Non-missing Documentation and DTI	Fully Documented
Portfolio Mean	0.300	0.257	0.320	0.280	0.299
Private-label Mean	0.256	0.289	0.328	0.289	0.324
Marginal effect (Logit)	-0.022 -4.32	0.043 4.31	0.004 0.44	0.022 2.8	0.025 2.43
# Mortgages	66,451	33,719	27,639	25,543	18,097

Understanding the cures



- Most of the cures are “self-cures”
 - 1 85% of cures occur in first two months.
 - 2 Almost certainly self-cures
 - 3 Unobserved heterogeneity.

Why is renegotiation so rare?

- Logic is that foreclosure costs lender a lot
- Wouldn't a concession to borrower cost less
- What's the risk of giving the borrower a chance?
 - Redefault risk: Renegotiate and borrower defaults anyway – house price falls
 - Self-cure risk: Borrower repays with assistance. Lender wastes money helping borrower who doesn't need it.

- Show simple model in the paper.
- Let α_0 be probability of default without a modification.
- Let α_1 be probability of default with a modification.

$$1 - \alpha_0$$

Borrower always repays

Lender loses because
borrower would have paid
in full

“Self-cure risk”
Costly assistance to
borrowers who can pay



$$\alpha_0 - \alpha_1$$

Renegotiation effective

Lender gains because
modified payments worth
more than foreclosure

Successful Renegotiation
Don't help borrowers who
would have defaulted



$$\alpha_1$$

Borrower never repays

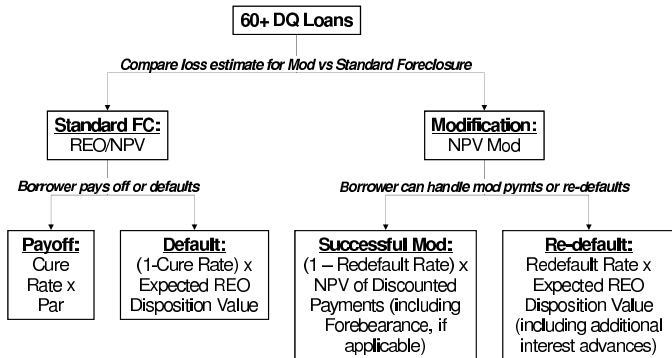
Foreclosure is delayed
May or may not help lender

“Redefault risk”
Lender loses if R is large
or if $P_2 - P_1$ is big



Is this new?

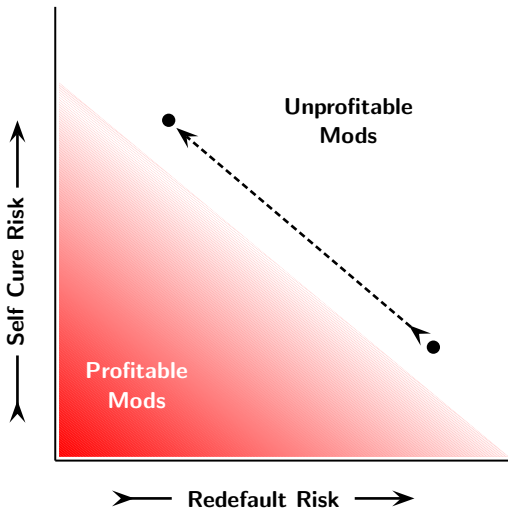
Modification/Foreclosure Decision Tree



But...

- For some reason, this argument *was* new to
 - a lot of reporters who had been covering this story since 2007
- Proponents of renegotiation focus on:
 - Costs of foreclosure
 - Benefits of renegotiation
- Advocates rarely discuss the costs of renegotiation
 - COP Report – Does not mention self-cure in 187 pages!
 - White (2009a,b)
 - Piskorski, Seru and Vig (2009)

What do low redefault rates tell us?



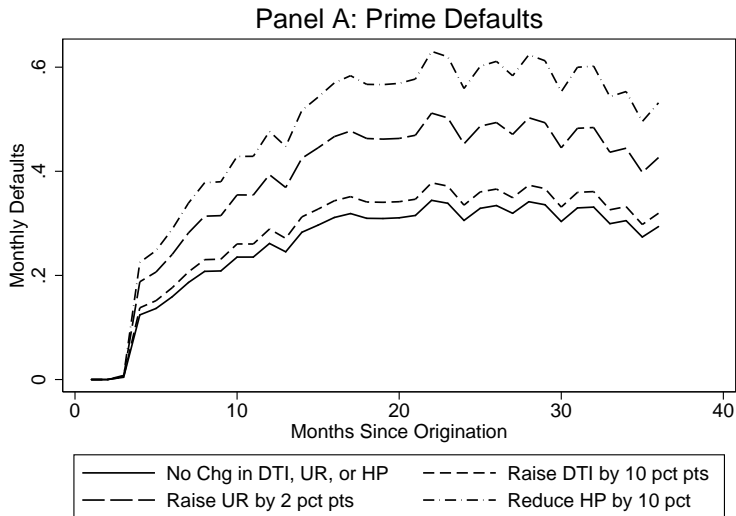
Econometric Issues

- We can think of delinquency as an illness and modification as a remedy.
- Does it work?
- What would the FDA do?
 - a controlled experiment.
- Unless you randomly assign the treatment, sample selection could result in
 - High cure rates (low redefault rates) among the treatment group (i.e. those who received mods)
 - Low cure rates among the control group (i.e. those who didn't).
- No current data can truly answer the question of whether modifications are cost effective

Unaffordable payments?

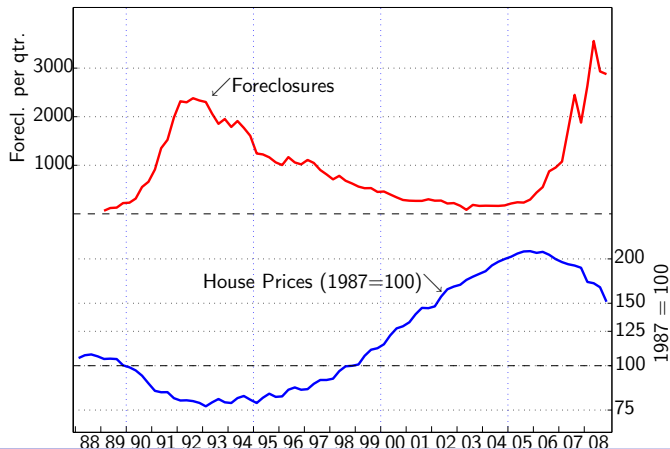
- “Unaffordable” payments are not the most important reason people are defaulting
 - Much public policy based on the idea that relatively small changes in DTI have big effects on foreclosure.
 - MHA subsidizes reducing payments from 38 to 31 percent of income
 - No support for this in the data.
 - Borrowers default when $DTI = 100\%$ or 1000% or $\infty\%$.
 - Income mismeasurement means that we are overstating even the small measured effect of 10 percentage point change in DTI.

Predicted Prime Defaults



Foreclosure Dynamics

Figure: Foreclosures and house prices in Mass., 1989-present. Source: Boston Fed and The Warren Group.



A Proposal to Help Distressed Homeowners: A Government Payment-Sharing Plan

- Chris Foote, Jeff Fuhrer and Paul Willen (Boston Fed) and Eileen Mauskopf (Board of Governors).
- A government payment-sharing arrangement that works with the homeowner's existing mortgage:
 - 1 A loan or...
 - 2 A grant.
- Homeowners who participate must provide evidence that
 - Home equity position is negative,
 - Have suffered a job loss or other income disruption.
- Payment is temporary.
- Requires only minimal assistance from servicer.
- Cost: \$25 billion.

The political economy of foreclosure prevention

- Who gains?
 - Buyers vs. renters.
 - Zero down vs. high down payment.
 - Investors in ABS, MBS, CDOs
 - Job losers vs. job keepers.
- Who loses?
 - Taxpayers...
- But if the economy recovers more quickly...
- We can prevent foreclosures!
- The problem is fairness.
 - A person smokes in bed...
 - Do firefighters let the house burn down.

The slide you've all been waiting for...

- The end.