

February 24, 2009

Foreclosure mitigation: What we think we know

One of the most important challenges facing policymakers today is reducing the rate of mortgage foreclosures. It is a goal many think is at the heart of a sustained recovery in the U.S. economy. But as past attempts to reduce financial stress on homeowners have shown, the task is not easy. One of the complicating factors in formulating successful foreclosure mitigation policy is getting at the heart of the relationship between negative equity (the situation where the remaining mortgage balance is greater than the value of the house) and actual foreclosure.

Economic theory poses one categorical prediction about this relationship, which is that negative equity is a necessary condition for default. In other words, if a borrower is not in a position of negative equity, then he or she should never default. This conclusion follows simply from the fact that positive equity implies a borrower can sell the house, pay off the mortgage, and keep the difference—a better outcome under any circumstance compared with stopping payment on the mortgage and leaving the home.

What economic theory does not say is that if a borrower has negative equity, he or she should always default. The reason for this is that the owner could always default in the future, and thus there is value in waiting to see if house prices recover. Now, this value to waiting differs across borrowers and is sensitive to both the depth of negative equity and a borrower's financial situation. Why does a borrower's financial health matter? Well, the cost of waiting includes the monthly mortgage payment the borrower must continue to make. Borrowers who have plenty of wealth and a steady stream of income will be more willing to continue making payments than borrowers who are in financial distress, perhaps related to an unemployment spell or some other adverse financial shock.

So why does all of this matter in terms of thinking about a successful foreclosure mitigation program? Well, the appropriate policy prescription depends on the particular reason a borrower is currently considering default. I think it is useful to break things down in terms of three (not necessarily mutually exclusive) groups of mortgage borrowers:

- those in unaffordable mortgages from the very beginning, who were implicitly relying on increasing house prices to refinance or sell for a profit;
- those who have been hit by an adverse, but temporary, income/financial shock; and
- those who purchased the house for strictly investment purposes and now see little or no hope of making a profit.

Borrowers may find themselves with unaffordable mortgages for many reasons. One might be an unscrupulous mortgage broker, who steered the borrower into an unaffordable subprime loan in order to generate high origination fees. Another, related situation would be an unaffordable interest rate reset on a subprime adjustable-rate mortgage. Finally, some mortgages may be permanently unaffordable because a buyer misrepresented income or assets during the origination process, a situation made easier by the growth of low documentation mortgages.

A large part of the administration's new housing plan—summarized succinctly [by the New York Times](#), with lots of commentary (negative and positive) rounded up [at Economist's View](#)—is reasonably interpreted as being directed squarely at borrowers in the unaffordable-mortgage group. If policy is to be aimed at helping this group, the prescription is to offer the borrower a *permanent* reduction in monthly payments, whether it comes from lowering the interest rate, lengthening the maturity, and/or reducing the outstanding principal balance on the loan. The measuring stick often used in such plans is the debt-to-income ratio (DTI), which is the borrower's monthly mortgage and/or total required debt payments relative to his or her gross monthly income. While the administration's plan would succeed in lowering DTIs, the policy is temporary in nature (five years), and it is unclear what would happen to these borrowers after the plan runs its course—especially if negative equity is still an issue.

Many borrowers might have been able to afford their mortgages while employed but can no longer do so after they have lost their jobs. When housing prices are rising and homeowners enjoy positive equity, then distressed borrowers are able to sell their homes to pay off their mortgages. Alternatively, such borrowers can undertake cash-out refinances to gain some much-needed liquidity. Note that problems can occur for people in this situation even when positive future equity is a realistic hope. If the borrower is unemployed and liquidity constrained, the cost of waiting to default is very high and potential future price gains are of little value. Default in this case is much more likely, even though future prospects might be reasonably good. In this case, foreclosure-prevention policy could simply be used to eliminate the financial friction. In this case a lender would offer "forbearance," in which the borrower pays *significantly* lower payments for some period, with the arrears made up (with interest) later on. In this light, it is notable that the administration's key payment reduction plan has a five-year window.

However, one important concern regarding the plan is that servicers/investors don't have enough incentives to substantially decrease current DTI ratios. For example, if a household has a DTI of 60 or 70 because of a job loss, the servicer is responsible for modifying the loan to get DTI down to 38 and then still has to kick in a 50 percent match to further reduce it to 31. The costs borne by the servicer/investor are much larger than those borne by the government, which may not be such a bad thing in principal but in practice may result in low participation rates.

Note also that while permanent relief is the prescribed course for borrowers in the unaffordable-mortgage group, temporary relief is indicated for those in the temporary economic distress group. This highlights the difficulties in constructing policies when the

underlying sources of stress differ by individual. The existence of a class of borrowers that purchased and financed residential real estate primarily for investment purposes further complicates matters. People in this group are in much different circumstances than those in the other groups and will default much more ruthlessly. A so-called "ruthless defaulter" has given up hope of positive future equity and hence there are no potential price gains to value. Under the theory of ruthless default, one effective policy intervention is to lower the outstanding balance of the mortgage so that positive equity—or even the hope of positive equity in the near future—is restored. Alternatively, the lender could forestall default at least temporarily by cutting the monthly payment below the cost of renting an otherwise observable house.

Aimed as it is at owner-occupied housing, the administration's plan does not offer direct assistance to those in the investment class. That may not be too surprising, as it is hard to generate much political sympathy for a group carrying a label like "ruthless defaulter." In addition, the perverse incentives of government assistance that usually go by the name of moral hazard are arguably more severe for individuals who purchase properties for investment purposes. However, abandoned properties do add to the stock of unsold homes, independent of who owned them or why they owned them. This does not necessarily argue for policy relief for investment buyers, but it is potential issue that bears watching.

Finally, there may be commentators with the view that loan modifications are a failing proposition as a few studies have shown extremely high default rates on modifications performed in early 2008 (for example, see [OCC and OTS Mortgage Metrics Report, Third Quarter 2008](#)). But, according to the table below (based on my calculations), the problem seems to be that the wrong type of modification was being performed. Approximately two-thirds of the modifications performed by servicers in the first two quarters of 2008 had the effect of increasing the principal balance of the mortgage and, as a result, also increased the borrower's monthly mortgage payment. In light of the above discussion, we should not be surprised by high re-default rates on these loans. On the other hand, there is reason to believe that successful implementation of payment reduction programs may indeed help to stem the pace of foreclosures.

	# Loans Modified	Interest Rate Reductions		Principal Balance Reductions		Principal Balance Increases		Term Extensions	
		#	% total	#	% total	#	% total	#	% total
Q107	13,900	200	1.25	600	3.75	13,100	81.88	2,100	13.13
Q207	21,600	700	3.00	200	0.86	20,700	88.84	1,700	7.30
Q307	24,600	700	2.55	300	1.09	23,600	86.13	2,800	10.22
Q407	32,300	3,600	9.65	1,000	2.68	28,000	75.07	4,700	12.60
Q108	33,000	7,100	18.11	400	1.02	25,500	65.05	6,200	15.82
Q208	41,200	10,600	22.36	900	1.90	30,100	63.50	5,800	12.24
Q308	52,600	17,300	28.22	200	0.33	36,000	58.73	7,800	12.72

Source: Lender Processing Services

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