

Surprise: 'Toxic' Mortgages Are the Best

A new study from professors at Columbia and NYU finds that the "optimal" mortgage in a perfect world is an option ARM

by Peter Coy

If you had to name the most toxic, dangerous, foolhardy kind of mortgage loan that exists, you'd very likely pick a pay-option ARM, which lets borrowers get deeper into debt by paying less than the minimum interest they owe each month and adding the unpaid interest to the loan principal. Worse yet, you might say, would be a pay-option ARM with a very high penalty for prepayment so borrowers can't get out of it easily once they're in it. There's a move afoot to ban these worst-of-the-worst loans.

Guess what? **The worst is actually the best.**

Yes, according to a new study by professors from Columbia and New York universities, the "optimal" mortgage in a perfect world is precisely that kind of loan—**an adjustable-rate mortgage with an option for negative amortization and a ban (or at least severe restriction) on prepayment.**

Crazy? Not as crazy as you might think. The key, according to professors Tomasz Piskorski of Columbia Business School and Alexei Tchisty of New York University's Stern School of Business, is that this **kind of mortgage is optimal only in a perfect world—namely, one in which borrowers are fully rational and always do what's in their own best interest.**

In the real world that we are condemned to inhabit, many people who took out option ARMs foolishly believed that they would never have to pay more than the bare minimum monthly payment. They have stuck with that minimum payment month after month, causing their loan principal to go up and up. At some point they have hit (or soon will hit) a ceiling on total permissible mortgage debt, at which point the terms change and their monthly payments soar to unaffordable levels. Next step: default and foreclosure.

The immediate reaction of most non-academics is that these economists have their heads in the clouds, or somewhere else. Former Federal Reserve Chairman **Alan Greenspan has come in for the same kind of criticism for having said during the housing boom that millions of homeowners could save money by switching from fixed-rate to adjustable-rate loans.**

But there's a more positive way to look at the research. If the optimal loan really is better for homeowners who behave rationally, maybe it makes sense to get people to behave rationally through extensive, even expensive, **consumer education.** In an interview, Piskorski told me that by his rough calculation, the benefits of the optimal mortgage vs. a conventional mortgage amount to a least half a percentage point of interest—namely, **\$50 billion or more a year for the U.S. as a whole.** In other words, **you could devote many billions of dollars a year to consumer education about these misused-but-potentially-valuable loans and still come out ahead.**

For those with patience for details and a head for numbers, I can refer you to the [65-page, equation-filled academic paper](#).

Alternatively, here's a quick, intuitive feel for the three parts of the concept:

- **The option to pay less than the minimum monthly interest owed on the loan is valuable for people with good self-control whose income fluctuates a lot.** They can pay just a little in lean months and catch up in fat months. It's good for lenders, too, because they don't have to foreclose on people who fall behind, which is an expensive process. People with steady incomes don't need this feature, but having it doesn't hurt them.
- The fact that the loan is an ARM—namely, its rate fluctuates with market interest rates—is especially valuable to lenders. This is a subtler notion, but the idea is that if there are going to be a certain number of defaults in a pool of mortgages because of random bits of bad luck like a job loss or a divorce, the lender would prefer that they be concentrated during periods of high interest rates. Why? Because when market interest rates are high, the lender that forecloses and gets back (most of) its money can redeploy the cash in high-yielding alternatives. The lender would prefer not to foreclose and get its money back when rates are low and other options are unattractive. An ARM loan achieves what the lender wants. Borrowers, meanwhile, are neutral about whether they default in periods of high or low market interest rates.
- Finally, the economists say the optimal loan contract would outright ban getting a new loan from a different lender. There are no such bans. But they say that the prepayment penalties that are common in subprime loans are a good second best. How could that be? Because lenders will offer more favorable terms if they know that they'll be able to hang onto the loan long enough for it to be profitable. If they fear that the borrower will refinance at the drop of a hat, they'll give less favorable terms.

One neat twist is that the paper demonstrates that an interest-only loan coupled with a home equity line of credit is also optimal because it's the functional equivalent of an option ARM. Think about why: Someone with an IO loan and a line of credit is equally able to tap into home equity (i.e., add to the principal owed) from month to month.

Piskorski says he and Tchisty have received strong support from other professors and are seeking to publish their paper in a major journal.

Says Piskorski: "Obviously people are to some extent irrational. But if you want to ban this type of contract, you should really weigh the benefits and the costs. **How much could you educate people? Make people understand them. Provide them with software. Make a federal law that requires the lender to reveal what this contract is about.**"

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