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Securitized mortgage loan or not, lenders are not restructuring

In a new paper, [Agarwal, Amromin, Ben-David, Chomsisengphet, and Evanoff \(2010\)](#) finally put to rest the widespread belief that securitization massively exacerbated the foreclosure crisis by preventing lenders from renegotiating loans. The authors show that the data do not support the argument articulated by [Paul Krugman and Robin Wells in the New York Review of Books](#):

In a housing market that is now depressed throughout the economy, mortgage holders and troubled borrowers would both be better off if they were able to renegotiate their loans and avoid foreclosure. But when mortgages have been sliced and diced into pools and then sold off internationally so that no investor holds more than a fraction of any one mortgage, such negotiations are impossible.

This post is the first in a three-part series in which we discuss recent studies, including that of Agarwal et al. (2010), providing evidence that the low modification rate has not resulted from an excess of securitized loans, what we call the "institutional view." These studies show, rather, that the low rate comes from lenders having imperfect information. This view—the "information view"—holds that lenders cannot determine whether a delinquent borrower will default even if the lender makes concessions.

While Agarwal et al. (2010) find that lenders fail to renegotiate 93 percent of seriously delinquent securitized mortgages, they also find that the figure drops only to 90 percent for portfolio loans without the supposed problems generated by securitization. Whether that 3-percentage-point difference really reflects securitization frictions is disputable, as we discuss below. But since most renegotiated mortgages fail anyway, it means that the elimination of securitization frictions would at most have reduced the number of foreclosures by less than 2 percent. The authors clearly show that Krugman and Wells and [others who argue that securitization frictions were generating millions of unnecessary foreclosures](#) are way, way off base. Securitization may or may not inhibit renegotiation, but most troubled borrowers cannot blame it for their situation, since their lender probably would not have helped them even if the lender owned the loan free and clear.

The trouble with imperfect information

We mention above the two schools of thought about why lenders are reluctant to renegotiate. Proponents of the institutional view argue that securitization creates perverse incentives for mortgage servicers, the agents that collect monthly mortgage payments from borrowers and who are given the responsibility for renegotiating troubled loans. In short, the institutionalists argue that servicers gain little from successful loan modifications, even though the ultimate owners of the mortgages (that is, the investors in the MBS) gain a lot. They claim that so few modifications take place because the incentives of mortgage servicers and investors were not properly aligned when the MBS was created.

The information view, on the other hand, holds that lenders face a difficult decision whenever they are confronted with a delinquent borrower, and they cannot easily predict which of three groups a delinquent borrower belongs to. One group of delinquent borrowers will "cure" on their own, becoming current on their loans without a modification. Another group will wind up defaulting even if they are given a modification. A third group will default without a modification but will remain current if their loans are modified. In other words, only modifications in the third group are profitable for lenders.

Unfortunately, lenders don't have the perfect information needed to place each borrower in the appropriate group. Lenders' profit-maximizing strategy may well make them stingy with modifications in general. Low modification rates mean that many borrowers in the third group will lose homes that could have been saved with a modification. But the low rates also mean that the lender does not incur losses by awarding modifications to borrowers in the first two groups.

Note that those who hold the information view argue that securitization is not an important issue because both MBS investors and owners of whole mortgages face the same information problems when deciding whether a modification is worthwhile.

Compelling evidence for the information view

Agarwal et al. (2010) do not explicitly aim to distinguish between the institutional and information views, but they do provide what we believe to be compelling evidence in favor of the information view. The researchers used a comprehensive database of troubled mortgages, known as the Mortgage Metrics database, to assess loss mitigation efforts by mortgage servicers in all of 2008 and the first five months of 2009. The Mortgage Metrics database contains detailed information on exactly how servicers handled delinquent loans for a wide range of institutions. (Other data sets force researchers to infer whether a modification was made from auxiliary information such as the interest rate or remaining maturity of the loan.) For example, the authors were able to measure how likely servicers were to offer borrowers repayment plans, in which arrears are tacked on to the remaining balance of the loan, as compared with offering concessionary modifications, such as interest-rate cuts or principal reductions. They were also able to determine whether lenders initiated and completed foreclosures or allowed borrowers such exit strategies as deeds-in-lieu-of-foreclosure, and whether lenders did nothing at all, waiting to see if troubled borrowers eventually cure on their own.

Most importantly, the database contains an extensive list of attributes of the troubled loans, which permitted the authors to look at the relationship between the likelihood of modification and such loan-level attributes as the borrower's credit history, and whether the loan was held in an MBS or in a lender's individual portfolio.

As we noted above, lenders sometimes offer delinquent borrowers repayment plans, giving them the chance to repay the loan under the original terms of the mortgage. Significantly, the repayment plan requires borrowers to pay back any arrears, usually with interest. Lenders may also offer troubled borrowers forbearance, which means the borrowers pay lower payments for some time and then make up the arrears at the end of the forbearance period. These two types of mortgage help are temporary measures aimed to help the troubled borrower through a difficult period. By contrast, loan modifications are specific, permanent changes to the terms of a mortgage after origination.

Among other things, the Agarwal et al. (2010) paper invalidates the argument that a focus on modifications is too narrow, proposed by [Piskorski, Seru, and Vig \(2010\)](#) and [Mayer \(2010: 18\)](#), and that other methods, like repayment plans and forbearance, were important forms of loan renegotiation. Table 2 in the paper shows quite definitively that loan modifications accounted for the vast majority of the resolutions of troubled loans that did not involve foreclosure proceedings during the crisis period.

"One message is quite clear: Lenders rarely renegotiate"

The paper has three additional major findings, one of them that loan modifications are indeed rare. According to Table 1.A, fewer than 10 percent of borrowers received a loan modification in the first six months after becoming 60-days delinquent (missing two mortgage payments). In other words, 90 percent of borrowers who became delinquent received no substantive assistance from the lender. This finding mirrors [Adelino, Gerardi, and Willen \(2010\)](#), who calculated the frequency of modification using a different data set over a slightly different time period. The Adelino, Gerardi, and Willen (2010) paper also reports a modification frequency

under 10 percent, and concludes, "No matter which definition of renegotiation we use, one message is quite clear: lenders rarely renegotiate."

Another finding of the Agarwal et al. (2010) paper sheds some light on the debate between institutional and information explanations for the infrequency of modifications. Although securitization seems to have had some effect on the likelihood of modification in their data, the effects are economically small and difficult to interpret. Table 3 shows that loans securitized either by the government-sponsored enterprises (GSE), such as Fannie Mae and Freddie Mac, or by private institutions, which often handled subprime or jumbo loans, were between 3 and 6 percent less likely to receive a modification than were whole loans held in the portfolios of banks.

In some sense, this finding is evidence for the institutional school, since loans in MBSs were less likely to receive modifications. But while the 3- to 6-percentage-point difference is large relative to the overall modification rate, it is still small relative to the total number of troubled loans. Essentially, servicers do nothing to help 90 percent of delinquent private-label borrowers, compared to 87 percent of portfolio loans. Even if we assume that the entire 3-percentage-point difference between portfolio and private-label loans is a treatment effect related to problematic incentives in private securitization contracts (pooling and servicing agreements), it is still just 3 percent of delinquent mortgages. Moreover, given the extremely high redefault rates that have characterized modifications during this period, this difference translates into a reduction in foreclosure frequency of less than 2 percent. In other words, under this (extreme) assumption, if we solved all of the issues with private securitization contracts, we could prevent 2 percent of the foreclosures.

No evidence for causal link between securitization and modification

Even this measure of the effect of poor institutional incentives may be too big. There are at least two good reasons to doubt a truly causal relationship between private securitization contracts and the frequency of renegotiation. The first reason is that, as the Agarwal et al. (2010) paper finds, loans securitized by the GSEs were actually much *less* likely to receive a modification than even the privately securitized loans. The conventional wisdom on the link between securitization and renegotiation (see Piskorski, Seru, and Vig 2010) pointed the finger at specific details in private securitization contracts that failed to align the incentives of servicers and investors. But this story applies only to privately securitized loans, not to agency loans. None of the institutional "facts" that the Piskorski, Seru, and Vig (2010) paper proposes apply to the GSEs, since the GSEs retain all of the credit risk when they securitize a loan. When a GSE loan becomes delinquent, it effectively turns into a portfolio loan. The GSEs have full discretion to modify any loan at any time for any reason and stand to enjoy all of the benefits. Agarwal et al. (2010) point out that the "precarious financial position of the GSEs in 2008 prior to their conservatorship may have made it difficult for them to engage in modifications and the attendant loss recognition," but this argument applies to only half of the period under study. After conservatorship started in September of 2008, capital was no longer a concern for the GSEs.

The second reason to doubt a causal link between securitization and modification is that the financial crisis triggered by the failure of Lehman Brothers and the ensuing heavy intervention by the federal government make it problematic to view behavior after September 2008 as "market-based approaches to stem mounting mortgage losses" (Agarwal et al. 2010, 1) By October 2008, the Troubled Asset Relief Program (TARP) had become law, and the government effectively owned stakes in many of the major commercial and investment banks. These banks also happened to be the largest mortgage servicers. In fact, TARP explicitly linked the provision of assistance to banks on their willingness to assist borrowers. That JP Morgan [announced in February 2009 a foreclosure moratorium](#) in a letter to Congressman Barney Frank, the head of the congressional committee tasked with overhauling regulation of their industry, illustrates the political considerations in dealing with troubled mortgages. Thus, by the end of 2008, political considerations played a central role in any calculation of the relative merits of renegotiating or foreclosing on a loan. For this reason, Adelino, Gerardi, and Willen (2010) focus on the period prior to September 2008. They find that, while the overall likelihood of modification is roughly the same, the difference in modification activity attributable to private-label mortgages is much smaller: only 1 percentage point.

Finally, Agarwal et al. (2010) show that information asymmetries matter, which is the third main finding of the paper. A key impediment to renegotiation is the self-cure risk, or the possibility that a delinquent borrower will resume repayment and eventually cover the balance of the loan in full. Any concession the lender made to such a borrower would thus be wasted. The authors show evidence of precisely this mechanism at work, finding

...much lower rates of modification for troubled borrowers with higher FICO scores and lower LTV ratios, which is the group with ex ante greatest likelihood of self-curing their delinquency.

The growing literature disputing the institutional argument

In showing that information, not institutions, is at the heart of the renegotiation issue, the authors build on an increasingly large body of evidence, which includes the Adelino, Gerardi, and Willen (2010) paper mentioned above. They are further supported by [Ghent \(2010\)](#) and [Rose \(2010\)](#), who both debunk the myth that the absence of securitization facilitated widespread renegotiation during the Depression (more on this topic in upcoming posts). In fact, Wechsler (1984)¹ shows that many of today's anti-deficiency laws, which limit the ability of lenders to pursue borrowers for the difference between the loan balance and the amount recovered in foreclosure, originated as a policy response to the particularly harsh treatment of defaulting mortgagors during the Depression. Moreover, [Hunt \(2010\)](#) exhaustively studied securitization contracts and found little to support for the claim that private securitization explicitly distorts the incentives of servicers of securitized loans as compared to portfolio loans, writing that:

Certain general standards are extremely common [in private securitization contracts]: Servicers typically must...act in the interests of investors, and service loans in the same manner as they service their own loans.

Finally, we note the work of [Mayer, Morrison, Piskorski, and Gupta \(2010\)](#), which perfectly illustrates the difficulty in identifying borrowers who are truly in financial distress and thus suitable for a loan modification. The authors find that the announcement of a generous loan modification program caused borrowers to default on their mortgages.

It is our hope that the Agarwal et al. (2010) paper will put an end to three years of misguided public policy. The appeal of renegotiations was that they appeared to allow policymakers to prevent foreclosures at little cost to investors, lenders, or taxpayers and without unfairly helping anyone. The reality is that preventing foreclosures costs money, and it's time we had a debate about how or whether we want to spend money rather than trying to convince ourselves that we can prevent millions of foreclosures by tweaking the incentives of financial intermediaries.

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¹ Wechsler, S., 1984. "Through the Looking Glass: Foreclosure by Sale as De Facto Strict Foreclosure-An Empirical Study of Mortgage Foreclosure and Subsequent Resale." *Cornell Law Review*, 70: 850

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