Helping Struggling Homeowners During Two Crises

What the Great Recession Can Teach Us About Mortgage Troubles in the Wake of COVID-19.

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Early in the COVID-19 pandemic, the share of mortgage borrowers who had not paid for two or more months rose, exceeding 6 percent in June 2020, the highest level since the aftermath of the Great Recession (Figure 1).[1] Despite the high rates of nonpayment in these two crises, the outcomes for homeowners have thus far been very different. In 2011, roughly 2 percent of all mortgages terminated through a foreclosure or other distressed property sale.[2] By contrast, virtually no foreclosures were initiated in 2020. Instead, up to 9 percent of all loans were in some sort of forbearance program in which the lender agreed to temporarily defer payments.[3] Understanding how and why these two crises—and the policy responses—differ will help us design the best policies to deal with future crises. And to understand these differences and design better policies, we must first understand why borrowers might become delinquent on their mortgage obligations.

Economists have identified two key reasons why homeowners might fail to make their monthly mortgage payments. One is negative equity—that is, the house is worth less than the mortgage. This reduces the incentive for the homeowner

to keep making their monthly payments. It also makes it harder for the homeowner to sell their house to pay off their mortgage. The other is a liquidity shock–that is, the homeowner is unable to make a payment on their mortgage because of a drop in income (say, due to unemployment) or an unexpected expense.

Which is more responsible for the rise in nonpayment during these two episodes: negative equity or liquidity shocks?

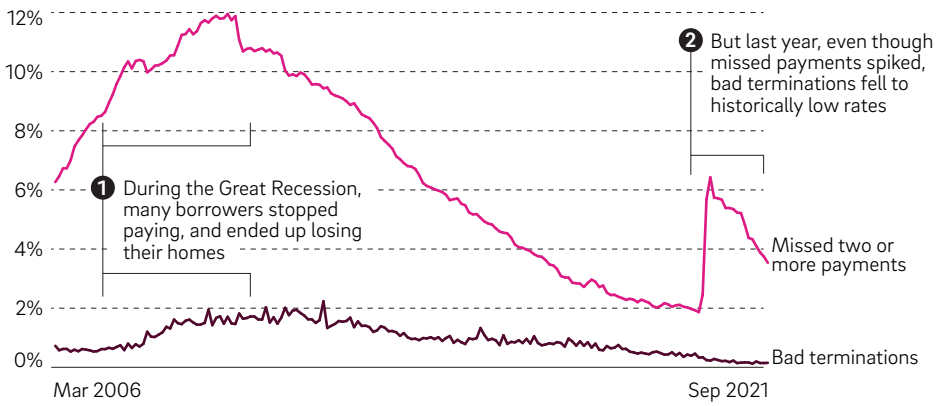
Mortgage Delinquency in the Great Recession

Given its high rates of mortgage default, the experience of the Great Recession has gone a long way in helping us understand why borrowers fail to make their mortgage

FIGURE 1

Until COVID, Missed Payments and Bad Mortgage Terminations Usually Rose and Fell Together

Share of mortgages that didn't make their last two mortgage payments; share of mortgages that terminated due to a foreclosure or distressed sale; annualized, March 2006 to September 2021



Source: Black Knight McDash data.

payments. In previous coauthored work, one of this article's coauthors showed that negative equity and liquidity shocks both matter, and that they interact—when the equity is very low (or has just turned negative), liquidity shocks become more critical in determining mortgage outcomes (Figure 2).[4] The importance of these two channels has also been confirmed by other authors.[5] Because researchers can't observe everything that affects a household, however, identifying liquidity shocks is not always easy.

Subsequent work has used different approaches and data that can better identify when homeowners have experienced liquidity shocks, and much of this work finds that liquidity shocks are the more important cause of a rise in delinquencies. For example, in their Becker Friedman Institute working paper, University of Chicago professors Peter Ganong and Pascal J. Noel argue that nearly all borrowers who defaulted experienced some sort of liquidity shock. Their evidence suggests that negative equity, on its own, does not lead many homeowners to default. Although they find that most defaults are indeed associated with both negative equity and liquidity shocks, which is consistent with the conclusions of the previous literature, they also identify some borrowers who default even in the absence of negative equity.

These insights into the determinants of default were uncovered by researchers who retrospectively examined the behavior of borrowers during the Great Recession. But how did lenders and policymakers respond at the time of the crisis, when homeowners started to show signs of distress? Do these efforts teach us anything about why homeowners defaulted, or which policies could best address borrower distress?

There were indeed efforts to try to modify mortgage terms to stave off foreclosures. However, mortgage modification programs in the Great Recession were not comprehensive and varied widely in their approach. In the initial stages of the crisis, there was a patchwork of programs by industry groups, individual lenders, and the government.

When New York Fed economists Andrew Haughwout, Ebiere Okah, and Joseph Tracy studied subprime mortgages that became delinquent early in the crisis and were subsequently modified under one of these programs, they found that lowering the monthly payment made it more likely that a modified loan would avoid falling back into default.[6] This is consistent with the idea that liquidity shocks are a more important cause of a rise in delinquencies. However, they also found that modifications that achieved this reduction by lowering the principal balance of the mortgage[7] were more effective than those that solely lowered interest rates, which also confirms the important role of negative equity.

The patchwork of programs was superseded in 2009 with the introduction of the federally sponsored Home Affordable Modification Program (HAMP). Under this program, servicers modified slightly less than 2 million mortgages, about half of which were backed by a government-sponsored enterprise (GSE) or government agency. HAMP provided financial incentives for servicers that successfully modified mortgages,[8] but it also set standards for what modifications were considered sustainable (and thus what modifications qualified for financial incentives). In particular, documentation of income was required, and unemployed homeowners were not eligible for this program.

As its name suggests, HAMP focused on making payments affordable, relative to the borrower's monthly income. In order to do so, it promoted a somewhat complicated mix of modifications: (i) a reduction in the interest rate, (ii) an extension of the mortgage term (because stretching payments over a longer period will lower the monthly payment), and, in some cases, (iii) a write-down of the mortgage principal. When Board of Governors economist Therese Scharlemann and Georgia State University economist Stephen Shore studied the effect of HAMP in 2016, they found that the impact of principal write-downs on reducing subsequent mortgage defaults was very modest. And another study looking at HAMP—the 2020 *American Economic Review* article by Ganong and Noel—found that principal reductions provided no benefit beyond the impact that they had on the size of mortgage payments.

This work confirms the relative importance of liquidity shocks. Why do they arrive at a different conclusion than that of earlier work, such as by Elul and his coauthors and Haughwout and his? One reason may be the design of the HAMP program. On the one hand, HAMP was limited: It did not generally consider reductions in principal balances that would have taken borrowers out of negative equity. And these reductions are the ones that would be expected to have the greatest benefit. On the other hand, as the authors of these papers point out, the precise formulas used to determine the hierarchy of HAMP modifications allows for a more carefully crafted experiment that limits potentially confounding factors.

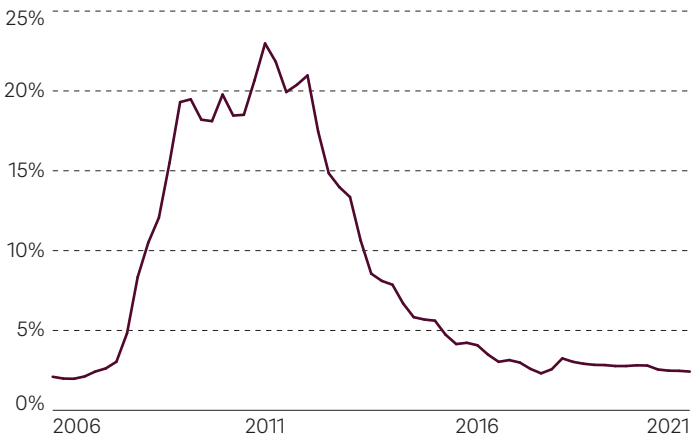
By studying mortgage modification plans in the Great Recession, researchers have learned which types of intervention were most successful. Their research also helps them better understand the determinants of default. However, even when taken together, the modification programs reached only a small fraction of the mortgages that became delinquent during the Great Recession. Why such a small fraction? Duke University professor Manuel Adelino and Fed economists Kristopher Gerardi and Paul Willen

FIGURE 2

Negative Equity Makes It Harder to Keep Troubled Borrowers in Their Homes

Borrowers and lenders had less incentive to modify mortgage terms in the Great Recession.

Share of mortgages with negative equity



Source: Black Knight McDash data and CoreLogic Solutions Home Price Index.

attribute this small fraction to the lenders' reluctance to modify loans that they believed would either restart payment without a modification or end up in default irrespective of lender action. Other authors argue that it was financial market frictions that reduced the number of modified mortgages. For example, in their 2011 article, National University of Singapore economist Sumit Agarwal and his coauthors show that many mortgages were securitized in private mortgage-securitization pools that had unclear restrictions on modifying loans. Many borrowers also had a second mortgage, which made modifying or refinancing the first mortgage more difficult.[9] And finally, in a separate 2017 article, Agarwal and his coauthors demonstrate that a few large servicers had much lower HAMP modification rates than others. They suggest that these servicers had a preexisting organizational design that was less conducive to renegotiating loans.[10]

Mortgage Nonpayment in the COVID Crisis

The policy response to mortgage risk during the COVID-19 crisis was very different. Soon after the start of the COVID crisis, as unemployment rates rose dramatically, the Coronavirus Aid, Relief, and Economic Security (CARES) Act mandated that servicers of government-backed mortgages offer forbearance.[11] (When a mortgage is under forbearance, the borrower can delay or reduce payments for a limited period of time. If borrowers use this time to get their finances back in order, forbearance protects both borrower and lender from a default on the mortgage.)[12] No documentation of hardship was required, and, unlike HAMP in the Great Recession, eligibility did not depend on the homeowner's employment status.

Many lenders who held mortgages in their portfolios followed suit, so that even those homeowners who had not taken out government-backed mortgages benefitted from similar forbearance programs. This was encouraged by regulatory policies that gave lenders "broad discretion to implement prudent modification programs."[13] Policymakers also underscored that modified loans would not necessarily be treated as delinquent for the purposes of regulatory reporting or risk-based capital rules.

The net result of these broad and rapid policy responses was that although nonpayment rates rose, most of these borrowers were in forbearance. The delinquency rate for borrowers outside of forbearance fell dramatically, as did foreclosures.

Stanford economist Susan F. Cherry and her coauthors document several features of mortgage forbearance and its impact in the COVID-19 crisis. First, the policy response was rapid and widespread, in sharp contrast to the experience in the Great Recession. Up to 9 percent of all mortgage borrowers were in forbearance at some point from March to October 2020. About one-third of borrowers who entered into forbearance continued to make payments. They likely viewed forbearance as an option they could use if their finances worsened. However, at least 2 million borrowers chose to take advantage of the opportunity to defer their payments. And while forbearance rates were highest for government-backed mortgages, private lenders also provided substantial relief (both to mortgage borrowers whose "jumbo" loans were too large to qualify for government insurance, and to those with auto and credit-card loans). Their evidence also suggests that forbearance seems to have helped those who needed it most. For instance, counties with high rates of COVID cases and unemployment had more homeowners enter into forbearance. And although homeowners in forbearance were generally wealthier than the average consumer (since by definition they were homeowners), they were more financially constrained than homeowners not in forbearance.

Other research also supports the conclusion that although forbearance was offered broadly and with few conditions, it was primarily used by those who needed it most. Using data from JP Morgan Chase on customers with both a mortgage and a deposit account, JP Morgan's Diana Farrell, Fiona Greig, and Chen Zhao show that borrowers who used forbearance tended to have lower prepandemic income than other homeowners. They were also more likely to have lost income at the start at the pandemic and be collecting unemployment benefits. This was particularly true for borrowers who skipped payments in forbearance. Their liquid asset holdings (in particular, bank deposits) increased, suggesting that they used at least some of the savings from forbearance to build a buffer rather than spending all of it right away.

Also, the Philadelphia Fed's Lauren Lambie-Hanson, James Vickery, and Tom Akana find that three-quarters of those using forbearances reported experiencing a job disruption or income loss. In addition, the Philadelphia Fed's Xudong An, Larry Cordell, Liang Geng, and Keyoung Lee show that forbearances provided substantial relief to lower-income and minority borrowers. And finally, the Fed's You Suk Kim, Donghoon Lee, Tess Scharlemann, and James Vickery demonstrate that consumers who skipped payments in forbearance paid down high-rate credit card debt. (Borrowers with this high-rate debt tend to have fewer resources and thus need more assistance.)

Did the COVID Response Reflect Lessons Learned?

Having seen that the policy response in the COVID crisis was much more robust than during the Great Recession, can we conclude, as do Cherry and her coauthors, that the response reflected lessons learned from the Great Recession regarding the significant social costs of widespread defaults and foreclosures? They note that the response during the COVID crisis was much quicker, more coordinated, and more effective in preventing mortgage defaults. The response may also have reflected lessons learned regarding the importance of reducing mortgage payments to stave off defaults, as it focused on the deferral of payments through forbearance.

However, several key differences between the Great Recession and the COVID crisis likely made it easier to address the problems during the latter crisis. Most importantly, the Great Recession originated in the housing sector, and at its peak nearly one-quarter of all mortgages had negative equity. By contrast, a virus, not the housing sector, caused the COVID crisis. Fewer than 3 percent of mortgages at the start of 2020 had negative equity, and house prices continued to rise throughout 2020 and early 2021. The continued strength of the housing sector during the COVID crisis had four consequences. First, it increased the incentive for borrowers to remain in their homes and thus made forbearance

less risky for the lender. Second, even if the borrower did not resume making payments in the future, a foreclosure would likely lead to little or no loss for the lender. Third, robust housing values also made it feasible for borrowers to refinance at a lower interest rate (thus obviating the need for measures such as the Home Affordable Refinancing Program that were undertaken during the Great Recession). The availability of this refinancing option also likely encouraged borrowers to continue making payments even while in forbearance, so as to qualify for a new mortgage. And fourth, the fact that most borrowers had positive equity made it clearer to policymakers that their response should simply focus on mortgage payments, unlike the wide-ranging and sometimes complex approaches taken during the Great Recession.

Other differences also made the policy response easier during the COVID crisis. The fact that the disruption caused by the virus was expected to be temporary meant that the focus could be on the temporary postponement of these payments, without anyone having to worry about the sustainability of the modifications. In addition, at the start of 2020, nearly two-thirds of all mortgages were government backed (Figure 3), either by the GSEs or by the Federal Housing Administration and Veterans Administration.[14] This made a coordinated policy response much easier, as it meant that, from the start of the crisis, uniform policies applied to the preponderance of outstanding mortgages. Furthermore, since the government, as the insurer of these mortgages, bore the credit risk, servicers did not have much to lose by going along with the government guidance.[15] (By contrast, at the end of 2006, just before the start of the Great Recession, only about 40 percent of mortgages were government backed.) A final reason is that lenders tightened underwriting standards after 2009, so most mortgages were more sustainable during the COVID crisis than in the Great Recession.

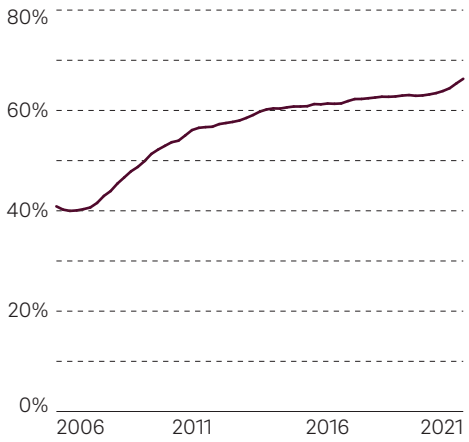
See ***The Role of Credit History.***

FIGURE 3

Large Share of Government-Backed Mortgages Eased Policymaking

It was easier to coordinate a policy response in 2020 than during the housing bust.

Percent of all mortgages insured by the Federal Housing Administration, Veterans Administration, Fannie Mae, or Freddie Mac, 2006–2021



Source: Financial Accounts of the United States.

Conclusion

The policy efforts devoted to stabilizing the mortgage market in the COVID crisis were much more robust and effective than those undertaken in the Great Recession. This improved response reflects important lessons learned from the previous episode, but the unique features of the COVID crisis may have also played a role. Given that any future crisis will almost certainly be unique, what broader lessons can we apply going forward? And while the robust policy responses were effective in staving off foreclosures, are there any hidden costs? Will borrowers be less prudent in their borrowing or less diligent in repaying, anticipating that they will receive assistance? And will suppressing from their credit records the payment record of those in forbearance allow well-meaning borrowers to get back on their feet, or will it make lenders more cautious about lending in the face of this murkier information? These questions are important topics for future research.

The Role of Credit History

Another important difference between the Great Recession and the COVID crisis is the way in which borrowers who missed payments were reported to credit bureaus. The CARES Act prohibits servicers from reporting to credit bureaus those payments skipped through a forbearance plan. This prohibition likely encourages borrowers to take up forbearance. Almost no borrowers reported that concern over damaging their credit history influenced their decision to seek a forbearance.[16] One result was that credit bureau scores rose during this period, even for those in forbearance.[17] This stands in sharp contrast to the Great Recession, when borrowers who defaulted on their mortgage saw their scores drop and also experienced difficulty in using credit to finance consumption.[18] The longer-term impact of this policy is uncertain, however, as lenders may respond to the COVID crisis by tightening lending standards or by using other information (such as employment records and information on bank deposits) to identify risky borrowers.[19] This may have unexpected effects on future access to credit, and economist Allen N. Berger and his coauthors show that this may have already begun: Safer borrowers received relatively less-favorable terms on credit cards during the COVID crisis.

Notes

1 A borrower who misses a mortgage payment may do so in violation of their mortgage contract, in which case the borrower is delinquent. A borrower who misses a set number of payments is in default. Usually, when a borrower misses four or more payments, the servicer may initiate a legal proceeding known as foreclosure to take possession of the property. (A servicer collects payments and communicates with the borrower on behalf of the lender. In some cases, the lender is also the servicer of the loan.) By contrast, if the borrower is in forbearance, these missed payments are contractually permitted and do not result in a delinquency per se.

2 Typically, a "distressed sale" means foreclosure, although it can also manifest as a short sale, in which the borrower sold the property and the lender agreed to take the proceeds and forego any outstanding additional liability. Short sales were also common in this period.

3 Calculations by the Risk Assessment, Data Analysis, and Research (RADAR) group at the Federal Reserve Bank of Philadelphia, using data from Black Knight Data & Analytics LLC.

4 See Elul et al. (2010).

5 See, for example, Gerardi et al. (2018).

6 A loan is subprime when it is made to a less creditworthy borrower.

7 Writing down the principal balance of a mortgage can reduce the monthly payments by lowering the amount to which interest payments are applied.

8 Borrowers received additional financial incentives (on top of their loan modification) for consistently making the required payments under their modification plan.

9 See, for example, Bond et al. (2017).

10 Mortgage modifications were not the only policy effort undertaken to reduce defaults by homeowners and support their consumption during the Great Recession. The federal government also devoted considerable effort to facilitating the refinancing of underwater mortgages through the Home Affordable Refinance Program (HARP). As we discuss below, the government did not make similar efforts during the COVID crisis.

11 We use "government-backed mortgages" to refer to loans that are guaranteed directly by the U.S. government (most notably those insured by the Federal Housing Administration and Veterans Administration) as well as those backed by the GSEs (Fannie Mae and Freddie Mac), which are currently under government administration.

12 Forbearance was also used for other types of consumer debt. Government-backed student loans were automatically placed into forbearance. Forbearance for other types of consumer debt varied. A large fraction of auto loans was also placed in forbearance, albeit for much shorter periods (typically just three months), whereas the forbearance rate for credit cards was very low, perhaps because borrowers already had the option to make only the minimum payment.

13 See Board of Governors (2020).

14 These figures are from the Financial Accounts of the United States and include single-family mortgages guaranteed by these agencies and enterprises, either in mortgage-backed securities or held directly in their portfolios.

15 Although in some cases the servicers were required to temporarily advance payments for securitized mortgages. See Kim et al. (2021).

16 See Lambie-Hanson et al. (2021).

17 See, for example, Cherry et al. (2021).

18 See Aruoba et al. (2019).

19 See Andriotis (2020).

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