

# Comment on Michael A. Stegman et al.'s “Preventive Servicing Is Good for Business and Affordable Homeownership Policy”

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## *Abstract*

Stegman et al. show that high-quality servicing can help keep borrowers who would normally be considered subprime from experiencing foreclosure. This comment discusses the results Stegman et al. present and also explains how loan modification helped alleviate past mortgage crises—specifically, how the housing finance crisis during the Great Depression was solved largely by the federal government, using its access to capital markets. The government purchased mortgages that had balloon payments and were in default, reinstated them, and then repackaged them to become long-term, fixed-payment, self-amortizing mortgages. Similarly, after government policy created the S&L problem, government intervention helped alleviate the resulting mortgage crisis.

**Keywords:** Defaults; Federal policy; Mortgage servicing

## **Introduction**

When Stegman et al. began working on their article, they could not have imagined how timely it would be. Their article coincided with the development of the current subprime mortgage crisis: Data from Loan Performance, Inc. (2007), show that 30-day delinquencies on subprime mortgages began to increase in the first quarter of 2005, growing from 10 percent at the beginning of the year to nearly 14 percent by the end of the following year.

While much of the subprime crisis is a function of poor underwriting, it is likely also a result of less than stellar servicing. Therefore, any research that enhances our knowledge of servicing is pertinent. The work of Stegman et al. does just that. Specifically, they present evidence that differences in servicing produce differences in cure rates for delinquent loans. And while it is

not the primary focus of their article, they also show that careful screening and counseling of subprime borrowers can improve loan performance.

My comment is organized as follows: I begin with a review of the article and the results. I then discuss parallels between the current subprime crisis and two previous ones—those arising from the Great Depression and the S&L crisis—before turning to the antecedents of the current problem and their implications for servicing in the future.

### **The results in Stegman et al.**

Stegman and his colleagues make a point that has not previously been sufficiently emphasized: Mortgage servicing matters, and as more low- and moderate-income borrowers become homeowners, it will matter more. These authors also note that mortgage products whose market consists primarily of borrowers in these income brackets are more expensive to service and that automated servicing programs, particularly those that identify potential problems sooner rather than later, can enhance traditional servicing methods and keep more troubled borrowers in their homes.

Stegman et al.'s contribution is to look at the impact of servicing on a targeted group of borrowers—those who not only have low or moderate incomes, but also have one or more of the following characteristics: little or no equity, little financial cushion, high debt-payment-to-income ratios, a spotty or nonexistent credit history, and no private mortgage insurance. Further, the borrowers whom Stegman et al. analyze have a strong commitment to work, but are often among the first to lose their jobs in volatile labor markets.

Neither government-sponsored enterprises nor the Federal Housing Administration (FHA) would normally guarantee or insure such loans, and so they were originated as part of a program developed by Self-Help and underwritten by the Ford Foundation. Specifically, Self-Help, with full recourse to Fannie Mae, assembled and sold mortgages whose borrowers had the characteristics I have just described. This program gives us a unique opportunity to investigate the influence of servicing on the performance of subprime loans.

That said, the sample is surely not representative: As the authors note, the delinquency and default rates on the Self-Help loans are lower than they are on FHA mortgages. The low delinquency rate is particularly revealing, because it means that the Self-Help borrowers have unobserved characteristics that make them better risks than typical FHA borrowers. These unobserved characteristics may be something that Self-Help screens for, or

they may reflect something about the counseling borrowers receive from Self-Help-affiliated originators. But while this means that results must be interpreted with caution, it also suggests that the way Self-help screens and counsels borrowers is worth further study. As I will discuss later, the origination process is part and parcel of the servicing.

The authors do get rather strong results in differentiating servicers. Regardless of how delinquency is measured (either all 30-day delinquencies or initial 30-day delinquencies), four of eight servicers had statistically significantly worse performance in curing delinquencies than a “left-out” category. The authors note, however, that there does not seem to be a common size characteristic across servicers that perform less well. The good servicers comprise two mega-companies, a midsize company, and a small one. The bad servicers comprise a mega-company, a small company, and two large ones. The fact that a relationship between size and performance cannot be discerned suggests one of three things:

1. Something other than size differentiates servicing.
2. Some servicers are statistically different, but this may be an artifact of having a large data set that produces precise coefficient estimates that are not particularly meaningful from an economic standpoint.
3. Unobserved market variables that are correlated with particular servicers, rather than servicing practices, cause different outcomes.

The authors speak directly to the first point and call for more research on characteristics across servicers. As to point 2, table 8 shows that the best servicers have almost half the failure rate of the worst ones. This difference appears to be substantial, but the economic implications of it need to be worked through: Specifically, it would be helpful to know how much the difference in cure rates adds to the cost of the loan.

The following simple exercise illustrates the point. According to Stegman et al., 21.2 percent of loans in the Self-Help sample experienced a delinquency. Of the delinquent loans that went into default, the lender was able to recoup 74 percent of the outstanding loan balance. The default probabilities conditional on delinquency were 9.59 percent and 18.06 percent for the best-performing and worst-performing servicers, respectively. In non-present value terms, then, the cost of default for loans for the best servicer was  $0.0959 \times 0.21 \times 0.26$ , or 52 basis points; the cost for loans for the worst servicer was  $0.1806 \times 0.21 \times 0.26$  or 99 basis points. The difference in cost is thus 47 basis points.

This fails to give an annualized cost of the difference between the best and worst servicers. Unfortunately, the data do not allow us to know the vintage of the mortgages that went into default, so let us look at two time horizons for average time to default—three years and five years. Assuming a discount rate of 7 percent and a three-year horizon, the worst-performing servicer added 18 basis points of cost to the loan relative to the best; for a five-year horizon, the difference is 11 basis points. Given that Fannie Mae's and Freddie Mac's guarantee fees are roughly 20 basis points, the difference between the best-performing and worst-performing servicers is substantial (Office of Federal Housing Enterprise Oversight 2006).

As to the correlation between market conditions and servicer performance, the authors' specification raises some concern. First, it is important to note that one of the servicers with worse-than-average performance, Servicer 8, also has loans with an average loan-to-value ratio (LTV) in excess of 100 percent at delinquency. While the authors do control for LTV, they specify it at time of origination. In fact, as long as contemporaneous LTV is less than 100 percent less transaction costs, borrowers have a powerful incentive to cure, because to do otherwise is to give away money. To capture this, the authors could use loan amortization and their estimate of house appreciation rate to develop a contemporaneous LTV at the time of delinquency; this would almost surely be a more powerful predictor and may well explain some of the differences among servicers.<sup>1</sup>

To some extent, these are all quibbles. In light of the past research cited by Stegman et al., a null hypothesis that servicing does matter is a reasonable one, and nothing in their evidence contradicts that. Moreover, in light of current problems in the mortgage market, servicing has become a particularly important issue. Thus, it is probably worth spending a little time looking at the history of mortgage crises in the United States and thinking about some lessons that might be derived from them.

### **Historical parallels**

There have been two other times when the U.S. mortgage market suffered a meltdown; on both occasions, government intervention—the ultimate in modification and redemption—restarted the market. The two times were the Great Depression and the S&L crisis in the 1970s.

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<sup>1</sup>For examples of this procedure, see Green and Lacour-Little (1998) and Deng, Quigley, and Van Order (2000).

Before the Great Depression, the typical mortgage in the United States had some features in common with many current subprime mortgages in the form of a floating interest rate, no amortization, and the possibility of “payment shock,” as well as a feature that was very different—a low LTV. The payment shock arose from the fact that mortgages had balloon payments: Borrowers were forced to refinance regularly. If they could not refinance, they owed a balance roughly equal to half the value of the house.

### *The Great Depression*

This housing finance system worked reasonably well until the Great Depression, when bank illiquidity made lenders call loans when they were due. Households rarely had enough cash to pay off their mortgages and so needed to sell their homes to meet their obligations. The lack of liquidity meant that buyers could not obtain financing, so sellers could not sell. This led to waves of foreclosures; real estate owned by financial institutions, which in turn created more illiquidity; and soaring default rates. The market clearly needed a “servicing” solution.

In response, New Deal housing finance legislation created the FHA to insure long-term mortgages and the Home Owners Loan Corporation (HOLC) and its successor, the Federal National Mortgage Association, to tie mortgage markets to capital markets. HOLC, backed by the full faith and credit of the U.S. government, raised money in the bond market to purchase nonperforming mortgages from depository institutions. HOLC reinstated the loans as 20-year fixed-payment mortgages (Green and Wachter 2005). This can be seen as the first example of mass loan modification. Borrowers were removed from an impossible position (where they had to raise a large amount of cash to pay off a mortgage balance) and placed in a manageable position. At the same time, by changing the terms, the federal government reduced the embedded risk of the loans and therefore increased their value to depositories,<sup>2</sup> which ultimately bought them back from HOLC.

This history underlines an important lesson: Without the full faith and credit of the U.S. government behind both HOLC and FHA, it is unlikely that the new, more consumer-friendly instrument would ever have come into existence. Specifically, because the instrument was new, the marketplace did not know how to price it. The government put the taxpayer on the hook if anything went wrong and as a result was able to raise capital for what was to become an iconic financial product.

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<sup>2</sup>This was particularly true since they were insured by the FHA.

HOLC and FHA were, at least within the context of the 1930s, unqualified successes. But they were also able to give financial institutions a guarantee against default without incurring moral hazard because of the unique circumstances at the time. The entire U.S. macroeconomy collapsed in the early 1930s, which in turn led to illiquidity and borrower default. Mortgage borrowers typically made large down payments on their houses; this large equity position meant that their incentives were aligned with those of the lenders, and they had no reason to want to walk away from their obligations. Like homeowners who were victims of Hurricane Katrina, borrowers swept under by the Great Depression found themselves in dire straits because of conditions beyond their control.

### *The S&L crisis*

The second great mortgage crisis in the United States, the S&L debacle, also arose because of circumstances beyond the control of many borrowers, but it was at least in part the result of moral hazard. Once again, loan modification and, indeed, forbearance were important components of getting through the crisis.

A perfect storm hit the mortgage markets in the late 1970s. First, oil price shocks and poorly executed monetary policy created double-digit inflation, which in turn led to very high interest rates. S&Ls, whose interest payments to depositors were limited by Regulation Q, found themselves insolvent as depositors left in droves. This led to a liquidity meltdown in the mortgage market. At the same time, high interest rates reduced the incentives for the U.S. manufacturing sector to invest in plants and equipment, and so that sector shed jobs dramatically. The impact of this decline was particularly pronounced in Ohio and Michigan, where unemployment rates exceeded 20 percent. Workers in the manufacturing sector had a strong incentive to sell their homes and move to more economically hospitable places, but mortgage capital was scarce, making it difficult for people to sell at any price. This did grave damage to the housing market; the value of new residential construction fell by 32 percent between 1978 and 1981, while existing home sales fell by 39 percent (U.S. Bureau of the Census 1983).

In response to this calamity, regulators and Congress did two things, only one of which worked.

What worked was a very specific type of regulatory forbearance. Fannie Mae was in pretty much the same position as the S&L industry in 1979.<sup>3</sup>

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<sup>3</sup>Freddie Mac was not yet a portfolio lender and consequently did not face the same market risk issues as Fannie Mae.

According to Miles (2000), the institution was, by itself, underwater on a mark-to-market basis by \$11 billion in 1981. In the case of Fannie Mae, regulators decided to try to wait out the storm and allowed the agency to fund new mortgages that carried higher interest rates. This could be viewed as the ultimate of all loan modifications, since the implicit creditor (the federal government and U.S. taxpayers) allowed Fannie Mae to live with negative capital (on a mark-to-market basis) for five years and negative earnings between 1980 and 1984.

However, Fannie Mae was not allowed to expand into businesses outside of its core area, and credit losses on mortgages remained manageable. Credit losses peaked at 13 basis points in 1985. It can be inferred that Fannie Mae guarantee fees anticipate an average credit loss of about 7 basis points a year; since losses in most years are well under that, 13 basis points in a peak year is hardly catastrophic. (Data come from Office of Federal Housing Enterprise Oversight 2006.)

But Fannie Mae, like the S&Ls, did not manage its interest rate risk well and therefore got into serious trouble (Miles 2000). The question is whether anyone managing an institution with long-term fixed-income assets would have performed any better. After all, there had been no double-digit short-term interest rates for more than 100 years (Girola 2005); anticipating double-digit Treasury rates before the 1970s would have required astonishing prescience. Moreover, Fannie Mae managers were the victims of extraordinary macroeconomic conditions.<sup>4</sup> Under these circumstances, regulatory forbearance may not have been an unreasonable reaction, and in the end, when interest rates fell in the mid-1980s, Fannie Mae again became solvent on a mark-to-market basis. Conversely, had it been shut down around 1980, housing market conditions might well have gotten much worse, and recovery might have taken much longer.

Congress, however, made things worse with the passage of the Garn-St Germain Depository Institutions Act of 1982. This act eliminated the ceiling on the interest that S&Ls were permitted to pay on deposits, while allowing them to get into new businesses and increasing deposit insurance limits. Garn-St Germain created substantial moral hazard: Institutions that effectively had no capital and whose investors (depositors) were protected from any downside risk had every incentive to take on risky loans. And so they did, lending money to developers to build office buildings that had no ten-

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<sup>4</sup>This contrasts with more recent history, where troubles were the result of poor executive decision making at Freddie Mac and Fannie Mae. In fact, their inadequate accounting may well have been the result of perverse incentives.

ants. Lincoln Savings and Loan, notorious for being run by Charles Keating, even invested in junk bonds. The consequences were predictably disastrous: The risky loans failed, and the S&Ls ultimately had to be shut down at a higher-than-necessary cost.

Intervention proved effective when it helped institutions that were victims of a bad draw and did not create a moral hazard. It proved worse than ineffective when it exacerbated a moral hazard. These are important lessons as we think about servicing today.

### **Servicing and the current subprime debacle**

The rapid rise in subprime market delinquencies from 10 percent of loans in the first quarter of 2005 to nearly 14 percent in the fourth quarter of 2006 (Loan Performance, Inc. 2007) has led some in Congress to call for lenders to forbear and others, such as the National Association for the Advancement of Colored People and the National Council of La Raza, to call for a six-month moratorium on foreclosures (Center for Responsible Lending 2007). The basis for these calls is largely the view that some members of the lending industry were predatory and that victimized borrowers should not be punished by losing their homes. One basic argument here is that the disclosure requirements under the Fair Lending Practices Act, the Truth in Lending Act, and Federal Reserve Regulation Z are not stringent enough to leave borrowers sufficiently informed about their loan obligations, with the result that some of them agreed to loans they have no hope of repaying. Advocates are particularly concerned about payment shock in the form of borrowers who have low initial payments because of heavily discounted or teaser rates and then see rates rapidly reset upward as the teasers expire. Sometimes these loans also feature prepayment penalties whose purpose is to allow lenders to enjoy the benefits of the rate reset. The fact that these terms were not sustainable for a large class of borrowers did not seem to bother investors who purchased securities containing such loans.

Doubtless there are victims of predatory lending behavior, but not all borrowers in the subprime market are victims. In fact, according to Staten (2007), more than 6 percent of the subprime borrowers who obtained loans in 2006 defaulted within 90 days of origination. Presumably, many of them were speculating on the housing market: They put no equity into a house, and if its value goes up, they make their mortgage payments. If it falls, they default. They are basically buying an option with minimal cost, and there is no reason to show them any consideration. Similarly, when borrowers are not forthcoming about income or assets, it is hard to make the case that they

deserve to have their loan terms modified. However, there are also documented cases of fraud by mortgage originators, where unscrupulous brokers changed loan terms without informing the borrower or changed the information on mortgage applications to make them more attractive to underwriters.

The existence of loans that fail so quickly begs the question of how they got originated in the first place. While the Self-Help loans went to borrowers who would be classified as subprime, they performed well, almost certainly in part because of the effort by Self-Help-affiliated originators when the loans were made. But Self-Help had a stake in the game after it purchased the mortgages—it was liable for credit losses. Mortgage brokers typically do not have a strong incentive to make sure that loans perform well—their fees are generally paid up-front. This means that they could originate loans that cannot be cured by good servicing.

At the same time, the way mortgage-backed-securities are structured also makes it difficult to modify and reinstate troubled loans. Because such securities are sliced into different credit tranches, investors have different incentives with respect to modification. Those investors holding the senior credit tranche might wish to foreclose and get repaid, because their losses would then be small or nonexistent. Investors with junior tranches, however, whose holdings have little or no value, might desire modification on the grounds that it would be better to get something rather than nothing. The fact that mortgages have more than one investor makes negotiation far more difficult than it was in the days when each borrower had a well-identified lender/investor with whom he or she could negotiate.

To some extent, Fannie Mae and Freddie Mac have stepped into the breach by offering to refinance some subprime mortgages (Hagerty and Palotta 2007). They can do this in part because of their special relationship with the government; they are in a position to take some measured risks without being punished by investors in the capital markets. To the extent that they can move borrowers out of mortgages with very high, variable interest rates into mortgages with lower, fixed rates, they should reduce the riskiness of the loans to investors and reduce the probability that borrowers will lose their homes. Particularly helpful is the fact that in 2007, the yield curve is slightly inverted, meaning that fixed-rate mortgages have relatively low coupons (U.S. Department of the Treasury 2007).

A problem arises, however, from prepayment penalties. On the one hand, this was a feature that many troubled borrowers presumably entered into freely, and so relieving them of the provision could set the sort of bad precedent that creates moral hazard problems. On the other hand, a loan modification that eliminates the prepayment penalty could allow unsustainable

loans to be refinanced into stable mortgages that perform well. Whether the benefits of refinancing are worth the long-term costs of not enforcing mortgage terms is a judgment call.

## Conclusion

Robert Van Order, for many years the Chief Economist at Freddie Mac, has said on several occasions that to make it easy to lend money for housing, it must be easy for lenders to take houses away from nonperforming borrowers.<sup>5</sup> The reason is usually that it is the principal method lenders can use to keep moral hazard out of the mortgage system.

The quandary is what to do when bad things happen to good borrowers. It is under these circumstances that smart servicing can produce better outcomes for both borrowers and lenders. Stegman et al. give us additional evidence that this is true; they also implicitly show how important it is to take care to identify good borrowers in the first place. We may hope that their article is the first of many that lead us toward best practices for servicing and originating loans for low- and moderate-income borrowers.

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<sup>5</sup>I have heard him say this many times in many different venues.

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