## TESTIMONY OF

Paul S. Willen
Senior Economist and Policy Advisor
Federal Reserve Bank of Boston

## BEFORE

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Chairman Johnson, Ranking Member Shelby, and distinguished members of the Committee, I thank you for your invitation to testify today. My name is Paul Willen, and I am a Senior Economist and Policy Advisor at the Federal Reserve Bank of Boston. I come to you today, however, as a researcher and not as a representative of the Boston Fed, the other Reserve Banks, or the Board of Governors.

My main objective today is to lay out some basic facts about long-term fixed-rate mortgages. The main benefit of fixed-rate mortgages, according to proponents, is that they eliminate the possibility of "payment shocks" and thus would have prevented many of the foreclosures we have seen in the last five years. I will explain that, contrary to popular belief, payment shocks played little role in the crisis and, in fact, most borrowers who lost their homes in the last five years had long-term fixed-rate mortgages. I will also discuss how long-term fixed-rate mortgages have been widely used throughout American history, including the years immediately preceding the Great Depression, and were as ineffective at preventing foreclosures in the 1930s as they are now.

## "Payment Shocks" Did Not Cause the Crisis

One popular theory places mortgage payment shocks at the heart of the crisis. According to this theory, the explosion of foreclosures that started in 2007 occurred because borrowers took out complex mortgages with fluctuating payments. Borrowers who took the loans either did not realize the payments could increase, did not expect the payments to increase, or thought they could sell or refinance before the payments increased. The theory suggests that, when payments went up, borrowers found themselves facing unaffordable increases in monthly mortgage costs, the aforementioned payment shocks, for which foreclosure was the unfortunate outcome.

According to the theory, long-term fixed-rate mortgages would have largely mitigated the crisis because long-term fixed-rate mortgages guarantee a fixed payment for the life of the loan.

But the data refute that theory. The data say that payment shocks played, at most, a minor role in the crisis. As you can see in Table ??, we studied 2.6 million foreclosures and, for 88 percent of them, the payment when the borrower defaulted was the same or lower than the initial payment.<sup>1</sup> In other words, in only 12 percent of foreclosures—less than one out of eight—did the borrower suffer any payment shock at all prior to defaulting. Why didn't payments go up? It turns out that almost 60 percent of the borrowers who lost their homes had fixed-rate mortgages. This fact alone should dispel the misconception that a fixed-rate mortgage is inherently safe. But even borrowers who had adjustable-rate mortgages saw payments stay the same or go down. Why? Because contrary to popular belief, adjustable-rate mortgages do not only adjust up; if interest rates fall, payments either fall or stay the same. Starting in 2007, as in most recessions, interest rates fell. Indeed, in 2010, borrowers who lost their homes were almost as likely to have seen a payment reduction as a payment increase.

If payment shocks don't cause foreclosures, what does? Our research has shown that life events such as job loss, illness, and divorce have been at the heart of this crisis all along, even before unemployment surged in the fall of 2008. It may seem counter-intuitive that life events can explain the surge in defaults in 2007, because there was no underlying surge in unemployment or illness that year. To better understand, one needs to know how falling house prices and life events interact to cause default. Foreclosures rarely, if ever, occur when borrowers have positive

<sup>&</sup>lt;sup>1</sup> "Defaulted" here refers to the first default in the delinquency spell that led to the foreclosure.

equity, for the simple reason that a borrower is almost always better off selling the house than defaulting. Thus, detrimental life events have no effect on foreclosures when prices are rising. Consider that in 2001, after six years of rising house prices, Massachusetts suffered a fairly severe recession which led to a large increase in delinquencies, but the number of foreclosures fell to a record low. You can see this evidence in Figure 1. On the other hand, when house prices fall, some borrowers can no longer profitably sell. It is then that disruptive life events—which are always present, even in normal times—take a toll. Thus we do not need to have a surge in life events to get a surge in foreclosures. Rather, a fall in house prices, as we have seen, will trigger a foreclosure surge. The problem is only amplified by rising job loss and other disruptive life events.

It does turn out that fixed-rate mortgages default less often than adjustable-rate mortgages, but that fact reflects the selection of borrowers into fixed-rate products, not any characteristics of the mortgages themselves. In 2008, my colleagues and I showed that even accounting for observable characteristics of the loans—such as credit score, loan-to-value ratio, payment-to-income ratio, change in house prices, and change in payment—borrowers were more likely to default on adjustable-rate mortgages than on otherwise similar fixed-rate mortgages.<sup>2</sup> The difference in default rates existed even for pools of loans where adjustable interest rates *fell*, further confirming that it was unobservable characteristics of borrowers, not of mortgages, that caused the difference. One possible explanation is that borrowers who intended to sell did not value the long-term certainty of fixed rates, gravitated to adjustable-rate loans, and those borrowers were the ones most likely to default when prices fell.

<sup>&</sup>lt;sup>2</sup> "Just the Facts: An Initial Analysis of the Subprime Crisis." With Chris Foote, Kris Gerardi and Lorenz Goette. 2008. *Journal of Housing Economics*, 17(4):291–305.

Long-term Fixed-rate Mortgages Were Widely Used Before the Great Depression

The misconception that long-term fixed-rate mortgages are inherently safe has a long history. It is widely believed that the absence of long-term fixed-rate mortgages prior to the Great Depression was a major contributor to the ensuing foreclosure crisis. Again, the facts do not bear this out. As you can see in Table 2, building and loan societies accounted for 40 percent of U.S. residential lending during the Depression. Almost all loans from building and loan societies were long-term fixed-rate mortgages that provided for full amortization. As with the most recent crisis, it was the *combination* of falling house prices and massive economic dislocation that caused the foreclosures, something a fixed-rate mortgage is powerless to stop.

The facts also disprove a closely related narrative about the Depression, which is that policymakers invented long-term fixed-rate mortgages, or were the first to use them widely. In fact, building and loan societies, the first of which began lending in 1831, always originated long-term fixed-rate mortgages and were, for much of the pre-depression era, the largest single source of funding for residential mortgages.

I hope these findings add insight to your work as policymakers. Thank you again for the opportunity to appear today; I would be happy to address any questions.

Table 1: Loans Prior to the Delinquency Spell that Led to Foreclosure

Percent of loans with	2007	2008	2009	2010	All Years
payment increase	12%	17%	11%	9%	12%
payment reduction	0%	0%	4%	8%	4%
no change	88%	82%	85%	83%	84%
fixed rate	38%	48%	62%	74%	59%
adjustable rate, prior to reset	44%	32%	20%	15%	24%
adjustable rate, payment reset same or lower	6%	2%	7%	2%	5%
Observations (thousands)	374	641	874	756	2,646

Source: Lender Processing Services and author's calculations.

Note: Sample is all first-lien mortgages originated after 2005 on which lenders initiated foreclosure proceedings from 2007 to 2010.

Table 2: Mortgage Market on the Eve of the Great Depression

Type of Loan (1925–1929)	Mutual Savings Banks	Life Insurers	Building and Loan Societies	Commercial Banks	Individuals and Other
fully amortizing partially amortizing non-amortizing		14.3 61.5 24.1	94.6 0 5.1	10.1 38.3 50.3	
Percentage of Market (1929)	10.5	11.8	40.3	12.1	25.2

Source: Grebler, Blank and Winnick (1956).

*Note:* Market percentage is dollar-weighted. Building and loan societies were the main source of funds for residential mortgages and almost exclusively used long-term, fixed-rate, fully amortizing instruments.

Figure 1: Massachusetts House Price Growth, Foreclosures, and Delinquencies (January 1989 to December 2008)

