

The Impact of Foreclosures on the Housing Market

Daniel Hartley

A record number of mortgage loans are either in default or in danger of being defaulted upon. Many of the properties that back these loans will end up going through the foreclosure process. A growing body of research shows that foreclosed homes sell at a discount and that foreclosures have a negative impact on the value of other homes that are nearby. The effect on nearby property values happens for two different reasons, but my recent work suggests that one or the other predominates depending on certain characteristics of the neighborhood where the foreclosures are occurring. This finding implies that different approaches might be required to mitigate the negative effects of foreclosures in different neighborhoods.

About 2 million homes are somewhere in the midst of the foreclosure process, according to RealtyTrac. Most of these have yet to go on the auction block, and nearly a fourth are owned by the lenders who provided or purchased the homes' mortgages. More foreclosures are coming—according to the Mortgage Bankers Association, the number of mortgages in foreclosure or more than 90 days delinquent is at a record high of about 4.2 million.

Such a large supply of homes in or near foreclosure has the potential to have a major impact on home prices. Foreclosed homes typically sell at a discount, perhaps because the homeowners neglected to keep them up or because lenders are willing to mark properties down in hopes of selling them more quickly. Foreclosures also have a tendency to lower the prices of other homes nearby.

Recent studies have estimated the magnitude of these effects—and they're substantial. My own research suggests that the way foreclosures affect housing prices depends on the characteristics of the neighborhood in which they occur. That finding implies we may need to use different strategies to mitigate the problems caused by foreclosure.

Some Evidence on the Size of the Impact

How much of a discount do foreclosed and nearby properties sell for? John Campbell, Stefano Giglio, and Parag Pathak studied home prices in Massachusetts and estimated that foreclosure-related sales have prices about 27 percent lower than comparable properties. They also estimated that each foreclosure lowered the selling price of other (non-foreclosure) properties within a radius of about 260 feet by nearly 1 percent.

In one of the first studies to examine the link between foreclosures and home prices, Dan Immergluck and Geoff Smith found something similar: their data showed that each foreclosure depressed the value of homes within 660 feet by 0.9 percent. Looking at home prices in New York City from 2000 to 2005, Jenny Schuetz, Vicki Been, and Ingrid Gould Ellen measured a somewhat smaller discount.

While a 1 percent drop in housing prices may not seem terribly large, it can become hefty, since this effect increases with the number of foreclosures. If there were five foreclosures in the same vicinity, for instance, the discount would be around 5 percent.

Two Paths to Lower Home Prices

There are two different ways in which foreclosures can impact the prices of nearby homes. The first is that they add to the supply of homes that are currently on the market. A larger number of homes for sale in a particular market may translate into lower prices or a longer waiting time until a sale is realized.

But a wave of foreclosures may have an even bigger effect on nearby home prices than a simple glut of homes for sale would. Typically, after homeowners have been foreclosed upon, they are left with a blemish on their credit history. They may be explicitly prohibited from getting certain types of mortgages for a number of years by the dominant mortgage providers or insurers in the market. The Federal Housing Authority (FHA), for example, typically will not lend to a borrower that has been foreclosed upon in the past three years. Fannie Mae and Freddie Mac have similar exclusions except that they usually last for five to seven years. This

means that the former home-owner will most likely rent or move in with family for a number of years. This is important because unless the foreclosed home is converted to a rental property, the foreclosure will result in an additional home on the market, but no addition to the pool of potential buyers.

This effect could be mitigated if there were arbitrageurs waiting to step into the market and buy formerly owner-occupied homes and quickly convert them to rental housing. However, this may not happen quickly if local ordinances make the conversion costly or if rental tenants have less incentive than owners to care for homes. (Joseph Williams shows that this may be particularly relevant for single-family homes and small multi-family buildings.)

In the absence of quick rental conversion, the addition of a unit of supply to the inventory of houses on the market without the addition of a household to the pool of potential buyers is likely to result in lower prices for nearby homes. I refer to this mechanism as a “supply” effect, although it could just as easily be called a supply-and-negative-demand effect.

The second way by which foreclosures can have negative effects on the values of nearby properties is by causing some kind of “negative externality.” That is, the mere presence of a foreclosed home might diminish the desirability of a neighborhood. Two examples show how it can happen.

First, the condition of a foreclosed home may be much worse than that of the surrounding homes. Homeowners may lack the incentive to maintain their property if they know that they will probably be evicted from it in the near future. Brian Melzer found evidence that homeowners who owe more than their homes are worth (have negative equity) invested, on average, \$215 less per year in home improvements and maintenance than those with positive equity. Chris Foote, Kristopher Gerardi, and Paul Willen showed that negative equity can play a role in the decision to default on a mortgage. Thus, even before foreclosure, and certainly

during the course of a foreclosure, to the extent that deferred maintenance and lack of investment is visible, it is possible that it could diminish the desirability of a neighborhood and exert a negative effect on the prices of properties nearby.

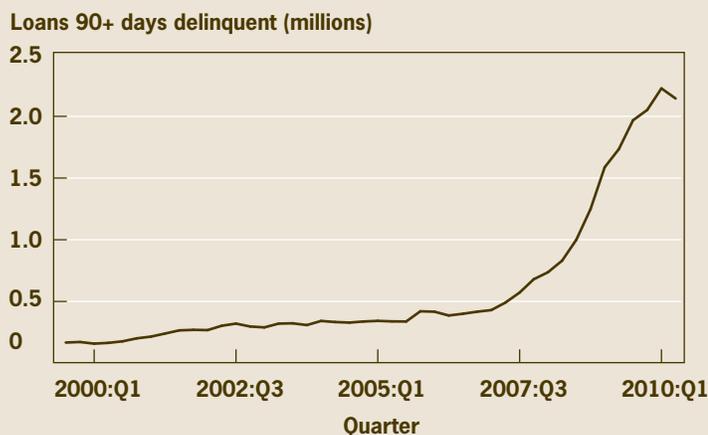
Homes may also sit vacant for a period following a foreclosure, possibly providing a haven for criminal activity. In another study of Chicago, Dan Immergluck and Geoff Smith looked at neighborhoods (using census tracts to define them) and found that foreclosure rates were positively correlated with violent crime rates, even after controlling for a large number of neighborhood characteristics.

Economists often refer to desirable conditions like good weather and great schools, which exert positive effects on housing values, as “amenities.” In like fashion, I refer to conditions like a poorly maintained home or one attracting criminals, which exert a negative effect on housing values, as “disamenities.”

The size of the potential problem is suggested by figures 1 and 2. Figure 1 shows how much the supply of potential nuisance properties (those in foreclosure or more than 90 days delinquent) has grown. Figure 2 shows data from Equifax credit reports, published by the Federal Reserve Bank of New York. Currently, almost half a million more people each quarter are receiving a flag in their credit history, indicating a new foreclosure.

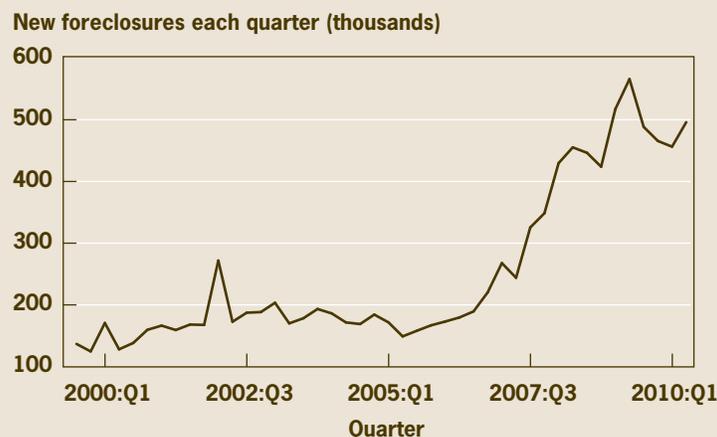
To grasp the significance of these figures, we can crudely estimate the amount of time it might take to work through the current foreclosure inventory of 2 million homes. A Census study issued in 1996 projected that the number of households living in the United States would rise to about 115 million by 2010, growing by about 1.2 million households per year around that time. The projections from 1996 give an idea of what one would have expected the household formation rate to be had there been no housing boom and bust.

Figure 1. Number of Loans 90 Days or More Delinquent or in Foreclosure



Source: Mortgage Bankers Association.

Figure 2. Number of New Households with Foreclosure on Credit Report



Source: Federal Reserve Bank of New York from Equifax credit report data.

The Foreclosure Process

The foreclosure process may vary significantly across states and even across counties, but the following description is general enough that it should be applicable to most of the United States.

Delinquency and foreclosure. After a homeowner with a mortgage loan has missed three monthly payments, he or she is considered to be “90 days delinquent,” and the servicer of the mortgage (the company to which the mortgage payments are made) can initiate foreclosure proceedings.

Auction. At some point, the borrower will be asked to vacate the home, and if necessary, at some later point the borrower will be compelled to vacate the home by local authorities. The home will then go up for auction.

REO. If the auction bids do not reach a high enough level to cover the outstanding balance of the loan, the lender can take ownership of the property. Once the lender owns the property (referred to as real-estate-owned or REO), it will typically remain vacant until the lender is able to sell it.

Assuming that each consumer in the Equifax data lives in either a one- or two-adult household, the data imply that about 1-2 million households per year will be excluded from the owner-occupied housing market for at least three years. Assuming, again conservatively, that 1 million of the 1.2 million new households per year are owner-occupiers, then the size of new demand for homes going forward will be 2-3 million (new households plus borrowers with expiring foreclosure flags). Even if the flow of consumers receiving foreclosure flags were to stop immediately, it would still take more than a half year for this level of demand to deplete the current inventory of foreclosures. This estimate makes a number of conservative assumptions, so the amount of time is likely to be longer.

How Much Does Each Effect Contribute to Falling Home Prices?

It is clear from the evidence that foreclosures have a negative effect on the value of nearby property. How much of this effect is due to “supply” and how much is due to “disamenity”?

One clue comes from a study by John Harding, Eric Rosenblatt, and Vincent Yao. They discovered that the timing of the negative impact of foreclosures is different for homes that are closer to the foreclosed property than for those that are farther away. Homes within 300 feet take the hit just before the foreclosure auction, while the impact for homes 300 feet to 500 feet away peaks much later, when the lender sells the property after it has become REO (after the foreclosure auction). They interpret this pattern as suggestive evidence that foreclosures within 300 feet depress property values by way of the disamenity effect, while foreclosures that are between 300 and 500 feet away pull down prices by way of the supply effect.

In a recent study, I took a different approach to determining the extent of these two effects (“The Effect of Foreclosures on Nearby Housing Prices: Supply or Disamenity?”). I investigated whether foreclosures of rental buildings have different effects on nearby single-family home prices than foreclosures of single-family homes. One would expect foreclosures on rental buildings and single-family homes to be similar in that they both create a disamenity for nearby property. But they should differ in that the foreclosure of a rental building does not add to the supply of owner-occupied housing and it will not remove a household from the pool of potential owner-occupiers like the foreclosure of a single-family home will. So, foreclosures of rental buildings should have only a disamenity

effect, while single-family home foreclosures should have both a disamenity and a supply effect.

Using data covering a decade of housing transactions and foreclosures in Chicago, I found that the size of the supply and disamenity effects varies by the “tightness” of the housing market in the surrounding neighborhood. In neighborhoods with low vacancy rates (tight markets), foreclosures lower the prices of nearby single-family houses by way of the supply effect. I estimate that housing prices within 250 feet of a foreclosure are lowered by about 1.6 percent per foreclosure through the supply effect, while the disamenity effect is about zero. In contrast, in neighborhoods with high vacancy rates (“looser” markets), foreclosures lower prices of nearby single-family houses by way of the disamenity effect. I estimate that housing prices within 250 feet of a foreclosure are lowered by about 2 percent per foreclosure through the disamenity effect, while the supply effect is about zero.

Implications for Housing Policy

Foreclosures affect housing markets in a number of ways. Those ways appear to differ depending on the characteristics of the neighborhood in which the foreclosures occur. While the size of the total effect is similar in low-vacancy-rate and high-vacancy-rate neighborhoods, the fact that it is operating through different mechanisms suggests that different policy prescriptions may be appropriate in different neighborhoods.

In low-vacancy-rate neighborhoods, where foreclosures affect nearby property values through the supply effect, the best strategy may be to meter out the foreclosed properties at a rate slow enough to avoid flooding the market. In contrast, in high-vacancy-rate neighborhoods, where foreclosures affect nearby property values through the disamenity effect, the most important issue is making sure that properties are kept up and do not sit vacant. This suggests that it is important to make sure that owners have an equity stake in their homes, which can be achieved through principal write-downs or by a quick foreclosure process and sale of the property at the current market price to a buyer who will live in the home.

Finally, it is important to realize that even if the current elevated foreclosure rate fell back to its historical average, it would take several years to transition the stock of households that have recently defaulted back to potential home buyers. Because of disamenities and the reduction of the pool of households that are eligible to get mortgages, the fact that

Federal Reserve Bank of Cleveland
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1.5 percent of all housing units are in foreclosure has a bigger effect on housing prices than if 1.5 percent of households were to suddenly sell their homes and buy other homes.

The results presented here highlight the fact that foreclosures may have differing impacts depending upon the characteristics of the neighborhood in which they occur.

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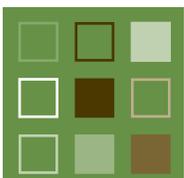
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Daniel Hartley is a research economist at the Federal Reserve Bank of Cleveland. The views he expresses here are his and not necessarily those of the Federal Reserve Bank of Cleveland, the Board of Governors of the Federal Reserve System, or Board staff.

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