



Are Delays to the Foreclosure Process a Good Thing?

Charles Calomiris
Columbia University Graduate School of Business
and
Eric Higgins

Shadow Open Market Committee
March 25, 2011

Policy Briefing: Are Delays to the Foreclosure Process a Good Thing?

by Charles Calomiris and Eric Higgins¹

Introduction

The United States faces a foreclosure crisis. The Mortgage Bankers Association reported that slightly more than four percent of the loans in the United States are in the foreclosure process as of the third quarter of 2010. RealtyTrac reported in January 2011 that nearly three million homes received foreclosure filings in 2010. In addition to the current foreclosures, there exist a substantial number of potential foreclosures that will occur in the next several years. Goodman (2010) estimates that there may be another seven million homes that will face foreclosure. CoreLogic estimated that nearly 23 percent of all mortgages are underwater as of the third quarter of 2010. This number spikes in the areas hardest hit by the mortgage crisis. The sheer volume of actual and pending foreclosures coupled with a slowdown in the foreclosure process to due legal and political wrangling has increased the time that a home is in foreclosure.

The purpose of this policy briefing is to analyze the economics of delaying the resolution of the foreclosure process. We review the literature relating to the macroeconomic effects of delaying foreclosures. We begin by identifying four types of potential costs of delay. *First*, foreclosure delays inject uncertainty in the consumer balance sheet, which leads to unnecessary and economically damaging delays in consumption. This reverse-stimulus alone could dwarf any further plausible price effects of delaying foreclosures at this stage of the business cycle. *Second*, delaying foreclosures could impede new housing construction. Housing construction is predicated upon a positive and consistent upward price gradient in the housing market, which will not be established until the market is cleared of delinquent homes. *Third*, and similar to a consumer's balance sheet, delaying foreclosures creates uncertainty in banks' balance sheets, potentially blocking channels of credit and undermining lending. *Fourth*, delinquent homes that are heading to foreclosure have been shown to aggravate neighborhood blight.

We then present the empirical evidence in support of delaying foreclosure and review current attempts to slow foreclosure through government action. Although there is likely a material price effect from foreclosure and some associated consumption-wealth effect, these are short-term effects that are likely to dissipate over time. If homeowners believe that home prices will rebound in the long term, then long-term consumption-wealth effects are likely to be small. In contrast, foreclosure mitigation strategies can have adverse long-term effects on consumption and investment. Given where we are in the business cycle, the price effects of foreclosure have likely run their course; at the margin, there is little to be spared by delaying foreclosures further. Because the social benefit of delaying foreclosure further is likely to be second-order in magnitude, the net

1. Charles Calomiris is the Henry Kaufman Professor of Financial Institutions at Columbia Business School. Eric Higgins is Associate Professor of Finance, Kansas State University. Funding for this research was provided in part by the financial services industry. The views expressed here are those of the authors, and do not represent the views of the associated institutions.

benefits of delay are likely negative. What the housing market needs now is certainty, which will invigorate investment and consumption.

Economic Costs of Delaying Foreclosure

Cost 1: Consumer Balance-Sheet Effects

As the construction industry requires certainty to spur investment, households require certainty in their spending decisions. In a paper published before he was chairman of the Federal Reserve, Bernanke (1983a) posits that a temporary increase in uncertainty can cause a sudden drop in investment spending. He discusses the trade-off between the benefit of information (that is, knowing that an investment will bring reliable returns) and the cost of delaying investment. Investors will often postpone projects at a cost to wait for a safe time to make a commitment. Using dynamic-inference methodology,² Bernanke shows that even a single unusual event³ can make investors less certain about the nature of the market, and thus cause them to adjust their behavior toward a higher degree of caution.

Romer (1990) applies this logic to explain how uncertainty disrupted consumer spending on durable goods during the Great Depression. Among other evidence, she presents a regression analysis that quantifies the impact of stock market variability on a measure of durable goods consumption. By controlling for the wealth effect of declining stock prices, Romer finds that the variance in stock prices and not the actual decline was responsible for the huge drop in consumption and investment at the onset of the Great Depression. She estimates that a doubling of the average variability of the stock market depresses consumption of durable goods by about seven percent.

Barrell, Davis and Pomerantz (2006) analyze the effect of a financial crisis on consumption. They demonstrate that the macroeconomic effects of a crisis are aggravated by high leverage, especially as an effect of a high debt-income ratio. The researchers empirically test the effects of financial instability on consumption in 19 OECD countries, finding that the loss to consumption due to financial crisis ranges from 4.5 to 9.5 percent annually. They explain that the household balance sheet, especially those that entail high debt-to-income ratios, is a large contributor to this drop in spending. Lax credit constraints will ease falls in consumption in the first year following a crisis, but the effects of high leverage and debt-income ratios will cause a large decline in consumption in subsequent years. The researchers explain that “rapid resolution is often thought better than forbearance which leaves bad loans outstanding and can heighten moral hazard, worsening the eventual costs to the taxpayer while also slowing economic growth.”

In the aggregate, the literature regarding mortgage foreclosure and individual investment decisions points to the need for speedy resolution of the foreclosure crisis. This resolution will eliminate uncertainty, which should spur consumption and help fuel economic recovery.

2. The *dynamic inference model* was established by Howard (1964).

3. An unusual event in this approach is defined as a sudden change to a probabilistic distribution, affecting the prior beliefs that agents may have about the behavior of the economy.

Cost 2: Stalled Construction of New Homes

Until the bottom of the housing market is reached and a consistent and reliable upward trajectory in housing prices is established, new housing construction will not proceed. DiPasquale and Wheaton (1994) explain that residential construction is a linear function of new housing prices. Using data from Commerce Department, Freddie Mac, the Federal Home Loan Bank Board, and the American Housing Survey, the researchers use a two-stage least squares regression to account for endogeneity in the predictors of housing construction, and conclude that the industry is driven by *changes* in housing prices as opposed to price levels.

Blackley (1999) extends this research using aggregate annual data from 1950 to 1994 on new housing starts in the United States. Using a two-stage least squares model, he corroborates the evidence that residential construction is a linear function of housing prices. He determines that in the long-run, new housing supply is price-elastic; an increase in housing prices will lead to an amplified increase in new housing starts.

These findings are also supported by Mayer and Somerville (2000). Using data on national housing starts, they find that increased prices in the housing market lead to an attendant increase in housing stock and a large increase in housing starts. They perform a time-series regression with instrumental variables and an autoregressive process to account for serial correlation. Their findings strengthen the claims that (1) changes in housing market prices, as opposed to levels, lead to new construction, and (2) new housing supply is price-elastic.

By injecting uncertainty over whether the housing market reached the bottom, delaying foreclosures undermines the incentives of construction companies to invest. That postponed investment lowers economic activity in the short run and further weakens the economic recovery that is underway.

Cost 3: Bank Balance-Sheet Effect

The economic literature also supports the notion that delaying the foreclosure process impairs the ability of banks to make loans. It does so in two ways. *First*, delaying foreclosures disrupts credit markets by burdening banks' and investors' balance sheets with illiquidity. *Second*, heightened uncertainty is disruptive to credit markets, resulting in stalled lending growth and reduced economic growth.

Bernanke (1983b) explains why a disruption in the credit markets has protracted negative macroeconomic effects. He cites bank disintermediation as the cause for decreased output during and after the Great Depression, referring to the simultaneous weakening of borrowers' balance sheets and tightening of bank credit supply. He uses a simple regression analysis to show that during the period of 1921 until the bank holiday of March 1933, credit contraction had a large, negative, and statistically significant effect on output. Calomiris and Mason (2003) provide more disaggregated evidence from the Depression that confirms the importance of bank credit contraction for slowing economic growth. Importantly, in addition to his empirical analysis on the depth of the Great Depression, Bernanke infers that the credit effects from bank failures depend on the time it takes to repair disrupted channels of credit and rehabilitate insolvent debtors. Calomiris and Mason show that the effects of credit contraction persisted for years after the shocks of 1930-1933.

Bernanke's hypothesis is further confirmed by Anari, Kolari, and Mason (2005). They extend his research by showing how the slow liquidation of poor assets during the Great Depression exacerbated financial disintermediation, which triggered both transitory and permanent adverse macroeconomic consequences. They use vector autoregression models with the amortized stock of failed national bank deposits as a proxy for the time required to resolve a stock of poor assets. They conclude that the endurance of the Great Depression into the late 1930s can in fact be explained largely by sluggish liquidation of distressed assets.

Given the large number of existing foreclosures and the potential overhang of another seven million foreclosures, it is reasonable to argue that we are facing a situation similar to the one that Bernanke (1983b) discusses. We have already seen that zero interest rates and two rounds of quantitative easing have done little to spur lending by financial institutions. This may be due to the uncertainty in the value of the mortgage assets held by those financial institutions. Thus, it is imperative that there is quick resolution to the foreclosure crisis.

Cost 4: Neighborhood Blight

Vacated or abandoned houses, including foreclosed houses, have been found to aggravate neighborhood blight. In contrast, houses that are either real-estate owned (REO) or bank-repossessed will clear the market relatively quickly. A June 2010 article in *American Banker* quotes Robert Klein of Safeguard Properties on the impact of delaying foreclosures. According to Klein, moratoriums mean that banks cannot take back properties, leading to vacancies: "By the time the moratorium is over, a vacant property is worth half the price because of vandalism and neighborhood blight."⁴

Kobie and Lee (2010) provide empirical support for this argument. Using data from foreclosures in the Cleveland area, they show that the length of time that a home is in foreclosure has a major impact on neighboring home values. They find that when a home has been in foreclosure for more than one year, homes values in the surrounding area are impacted negatively. When homes are in foreclosure for less than a year, the impact on the surrounding area is negligible. Thus, supporting the industry viewpoint that delays in the foreclosure process lead to decreases in value mainly due to neglect of the foreclosed properties.

Possible Benefits of Foreclosure Delays

Policymakers and the business press share the belief that foreclosure-prevention efforts are needed to reverse the decline in U.S. home prices. In mid 2009, *Moody's* asserted that house prices would continue to decline due to "the slow start to the Obama administration's Home Affordable Modification Program" (HAMP).⁵ HAMP was designed to help homeowners with distressed mortgages avoid foreclosure. But as Neil Barofsky, overseer of the Troubled Asset Relief Program, reported to Congress in late 2010, HAMP was making some borrowers "worse off than before they participated," and not producing much more than "a parade of documentation horrors."⁶ Seemingly

4. Robert Klein, *Slow Pace of Repos Aggravates Problems in Housing*, AMERICAN BANKER, June 14, 2010, at 1.

5. Celia Chen, *U.S. House Price Free Fall Slows, But HAMP Delay Pushes Back Trough*, MOODY'S WEEKLY CREDIT OUTLOOK, Jul. 13, 2009, at 17.

6. Jessica Silver-Greenberg, *Foreclosure Crisis, Part 2: Modifications*, WALL STREET JOURNAL, Nov. 6, 2010, at *1.

unfazed by this criticism, in January 2011, the Federal Housing Finance Agency announced that it would consider changing compensation incentives for servicers of home loans to further discourage foreclosures.⁷ The implicit assumption behind this policy is that foreclosures have a negative and significant impact on home prices; if foreclosure-prevention programs can be ramped up, the argument goes, home prices would reverse their decline. But is this true? The recent foreclosure experience suggests otherwise.

Benefit 1: Preserving Home Prices

The increasingly popular argument in favor of foreclosure delays is that they are necessary to maintain price stability. An implication of this argument is that foreclosed homes have negative price effects on the surrounding neighborhood. Although there is a negative price effect associated with foreclosed homes (the magnitude is in dispute), there are two important caveats to this relationship. *First*, the negative price effects are likely transitory. *Second*, the negative price effects are caused mostly by additional supply to the market, and not by the foreclosures per se.

Hartley (2010) directly addresses the difference in mechanisms causing negative price effects. Using foreclosure and home sales data from Chicago between 1998 and 2008, he performs a regression analysis to estimate the effect of foreclosures on homes in the immediate vicinity, which he calls the “disamenity” effect. He concludes that an extra unit of supply in the housing market will cause a modest price decrease within 250 feet of just 1.6 percent in low-vacancy-rate census tracts. In contrast, he finds a larger disamenity effect in high-vacancy-rate census tracts.

Calomiris, Longhofer and Miles (2011a) also find that the negative effect of housing foreclosures on the price of neighboring homes, though statistically significant, is small. Using a panel vector autoregression model of housing prices, foreclosures, and economic indicators, the researchers show that price shocks explain roughly 30 percent of a 20-quarter forecast variance of foreclosures, while in reverse the effect is much smaller: foreclosures explain only about five percent of the forecast variance in prices. Stated differently, declines in housing prices cause foreclosures much more than foreclosures cause price declines.

Mian, Sufi, and Trebbi (2011) examine the impact of U.S. foreclosures on house prices, housing investment, and durable goods consumption. Using zip code-level data and accounting for state-to-state differences in judicial foreclosure laws, they estimate a two-stage least squares model of home prices. They find that a one standard deviation increase in foreclosures per homeowner is associated with an eight-to-twelve percent drop in house price growth in 2008 and 2009. They also find that an increase in foreclosures leads to a large and statistically significant decrease in consumption and investment. The authors attempt to address the issue of causality by using judicial foreclosure laws as an instrumental variable to explain variation in foreclosures. While this approach acknowledges that foreclosures depend on state laws, it does not fully resolve the issue of causality. As Calomiris, Longhofer and Miles point out, the results of Mian, Sufi and Trebbi may be driven by the presence of a few housing bubble states in the group of non-judicial foreclosure states. Furthermore, the Mian, Sufi and Trebbi results do not control for the effects of macroeconomic shocks to both housing prices and foreclosures. The researchers concede that feedback effects

7. Zachary A. Goldfarb, *Officials looking at ways to protect housing market*, WASHINGTON POST, Jan. 11, 2011, at A10.

among consumption, investment, and housing price variables are not taken into account. They also concede that the delays in housing price decline created by delaying foreclosures may be transitory.

It is often argued that higher house prices would boost consumption through a wealth effect. Calomiris, Longhofer and Miles (2011b) review the literature on house price wealth effects and find evidence for a substantial wealth effect. But those results do not imply that a *transitory* increase in house prices, resulting from a temporary reduction in supply (for example, as the result of delays in foreclosures), would produce a significant increase in consumption. If the transitory reduction in supply were predictably transitory, then it should have little effect on expectations of future house values, and therefore, little effect on consumption. Thus, it is likely that foreclosure mitigation would have a minimal positive effect on consumption through the house price wealth effect.

Benefit 2: Keeping People in Their Homes

Experience has shown that foreclosure prevention efforts are neither a necessary nor a sufficient condition for keeping people in their homes. Adelino, Gerardi and Willen (2009) analyzed early results from the recent crisis and found that about one third of delinquent homeowners “self-cure” and eventually resume making payments (suggesting lenders would have taken losses had they re-negotiated), while about half of homeowners who renegotiate again become delinquent within six months (suggesting higher losses for lenders who renegotiate when home prices are falling).

Moreover, the likelihood of a delinquent homeowner averting foreclosure is remarkably small, making programs that attempt broad mitigation mostly futile. Using transition rate data from the Mortgage Brokers’ Association from 2005-2009, Goodman (2010) finds that the cure rate—that is, the amount of loans that do not default—is almost zero percent for loans already in foreclosure, one percent for loans that are more than ninety days delinquent, seven percent for loans that are sixty days delinquent, and only 33 percent for loans that are thirty days delinquent.

One reason why government programs to mitigate foreclosures through restructuring have not worked very well is the poor design of mitigation efforts, which have focused mainly on rescheduling payments and not on the primary drivers of default. This failure has led many to believe that to be effective, modification needs to include some reasonable prospect of restored equity position. To be sure, extending that approach beyond those in distress could lead to a moral hazard problem.

For example, in Mexico in 1999, the “Punto Final” program, instituted by the government, responded to a five-year paralysis of credit markets with a government loss-sharing program in which the government agreed to bear 50 percent of the costs of writing down principal of loan contracts if those contractual write downs were agreed between creditors and debtors within six months of the propagation of the program. This was a highly successful initiative, as it encouraged creditors to selectively reduce debt to a sustainable level in exchange for government loss sharing. This program was successful because it relied upon private market decisions to target borrowers receiving assistance, and thus allocated funds effectively to help resolve those cases in which a moderate principal reduction produced a substantial increase in the probability that the restructured loan would be repaid. For borrowers whose high debt and low income mean that foreclosure would still be likely even after a substantial reduction in principal, creditors would prefer not to offer write downs of principal, but to proceed with liquidation of commercial assets or foreclosure.

Conclusion

There are demonstrable advantages to the economy—via increased investment, consumption, and credit supply—from resolving uncertainties in the housing market and encouraging housing prices to “find their bottom.” The resolution of those uncertainties, particularly at the current phase of the business cycle, would likely have a large net positive effect on the economy, even after taking into account the short-term negative effects on house prices on consumption. The short-term negative effects from allowing foreclosures to clear the housing market are likely to be small at this phase of the business cycle (given that economic recovery has begun, and that the recognition of losses on mortgages is already factored into expectations). A short-term house price decline reflecting short-term selling pressure in the market would be expected to be reversed, and would therefore have little effect on household’s expected wealth, and thus, would have little effect on consumption.

Bibliography

Manuel Adelino, Kristopher Gerardi & Paul Willen, *Why Don’t Lenders Renegotiate More Home Mortgages? Redefaults, Self-Cures and Securitization*, NBER WORKING PAPER (2009).

Ali Anari, James Kolari & Joseph Mason, *Bank Asset Liquidation and the Propagation of the U.S. Great Depression*, 37:4 JOURNAL OF MONEY, CREDIT, AND BANKING, 753-773 (2005).

Ray Barrell, E. Philip Davis & Olga Pomerantz, *Costs of Financial Instability, Household-Sector Balance Sheets and Consumption*, 2:2 JOURNAL OF FINANCIAL STABILITY, 194-216 (2006).

Ben S. Bernanke, *Irreversibility, Uncertainty, and Cyclical Investment*, 98:1 QUARTERLY JOURNAL OF ECONOMICS, 85-106 (1983a).

Ben S. Bernanke, *Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression*, 73:3 THE AMERICAN ECONOMIC REVIEW, 257-276 (1983b).

Neil Bhutta, Jane Dokko & Hui Shan, *The Depth of Negative Equity and Mortgage Default Decisions*, FINANCE AND ECONOMICS DISCUSSION SERIES, DIVISIONS OF RESEARCH & STATISTICS AND MONETARY AFFAIRS, FEDERAL RESERVE BOARD, Washington, D.C. (2010).

Dixie M. Blackley, *The Long-Run Elasticity of New Housing Supply in the United States: Empirical Evidence for 1950 to 1994*, 18:1 JOURNAL OF REAL ESTATE FINANCE AND ECONOMICS, 25-42 (1999).

Charles W. Calomiris, Stanley D. Longhofer & William Miles, *The Foreclosure-House Price Nexus: Lessons from the 2007-2009 Housing Turmoil* (2011a).

Charles W. Calomiris, Stanley D. Longhofer & William Miles, *The (Mythical?) House Price Wealth Effect* (2011b).

Charles W. Calomiris and Joseph R. Mason, *Consequences of Bank Distress During the Great Depression*, 93:3 American Economic Review, 937-47 (2003).

Karl E. Case & John M. Quigley, *How Housing Booms Unwind: Income Effects, Wealth Effects, and Feedbacks through Financial Markets*, 8:2 EUROPEAN JOURNAL OF HOUSING POLICY, 161-180 (2008).

Denise DiPasquale & William C. Wheaton, *Housing Market Dynamics and the Future of Housing Prices*, 35 JOURNAL OF URBAN ECONOMICS 1-27 (1994).

W. Scott Frame, *Estimating the Effect of Mortgage Foreclosures on Nearby Property Values: A Critical Review of the Literature*, 95:3 FEDERAL RESERVE BANK OF ATLANTA ECONOMIC REVIEW, (2010).

Laurie S. Goodman, *Dimensioning the Housing Crisis*, 66:3 FINANCIAL ANALYSTS JOURNAL, 26-37 (2010).

Daniel Hartley, *The Effect of Foreclosures on Nearby Housing Prices: Supply or Disamenity?*, Working Paper, FEDERAL RESERVE BANK OF CLEVELAND, (2010).

Creola Johnson, *Fight Blight: Cities Sue to Hold Lenders Responsible for the Rise in Foreclosures and Abandoned Properties*, 2008:3 UTAH LAW REVIEW, 1170-1252 (2008).

Tammy Leonard & James C. Murdoch, *The Neighborhood Effects of Foreclosure*, 11:4 JOURNAL OF GEOGRAPHICAL SYSTEMS, 317-332 (2009).

Christopher Mayer & Craig Tsurriel Somerville, *Residential Construction: Using the Urban Growth Model to Estimate Housing Supply*, 48:1 JOURNAL OF URBAN ECONOMICS, 85-109 (2000).

David J. McKenzie, *The Consumer Response to the Mexican Peso Crisis*, DEVELOPMENT RESEARCH GROUP WORKING PAPER, THE WORLD BANK, (2006).

Atif Mian, Amir Sufi & Francesco Trebbi, *Foreclosures, House Prices, and the Real Economy*, NBER WORKING PAPER, (2011).

Christina D. Romer, *The Great Crash and the Onset of the Great Depression*, 105:3 QUARTERLY JOURNAL OF ECONOMICS, 597-624 (1990).