Report from the President

Detecting and Preventing House Price Bubbles

The United States is emerging from a great recession whose major hallmark has been the collapse of national housing prices, which grew by 59 percent from 2000 to 2006 and then fell 41 percent by 2011, all in constant dollars. Nationally, real house prices in 2011 were 6 percent below levels in 2000. The housing price collapse had unanticipated contagion effects that helped produce the accompanying financial crisis and the most



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severe economic downturn since the Great Depression. The share of U.S. mortgages that were delinquent by 90 days or more rose from about 1 percent in 2006 to over 8 percent in 2010. The economic and social costs of this house price bubble and subsequent collapse have been immense.

The benefits of preventing future house price bubbles is obviously great, but realizing such benefits will require that policy makers learn to detect price bubbles as they are forming and then implement policies that will attenuate or mitigate them. A recent Lincoln Institute policy focus report, *Preventing House Price Bubbles: Lessons from the 2006– 2012 Bust*, by James Follain and Seth Giertz, addresses the challenges of diagnosing and treating price bubbles in the real estate market. Their report builds on extensive statistical analysis available in several Lincoln Institute working papers.

While it is common to summarize the recent housing market bust using national indicators (as in the first paragraph above), these national indicators don't account for great variations in both the levels and changes in housing prices across metropolitan areas. For example, from 1978 to 2011, constant dollar housing prices in Dallas, Texas and Omaha, Nebraska varied by less than 20 percent from their 1978 levels; those in Stockton, California nearly tripled from 1978 to 2006, but by 2011 fell back to their 1978 levels. Local housing markets are all influenced by national economic and financial policies and conditions, but these large differences across metropolitan markets indicate that local conditions play a very important role as well.

A key element of the statistical work by Follain and Giertz is to use metropolitan housing markets as the unit of observation for their analyses, which are based on annual data (for 1980 to 2010) and quarterly data (for 1990 to 2010) for up to 380 metropolitan areas. Their econometric work indicates that house price bubbles can be detected across metropolitan areas and that price changes and the accompanying credit risk vary greatly in size. Stress tests, such as those used to evaluate mortgage credit risk, can be useful indicators of potential price bubbles at the metropolitan level.

Because the levels and changes in housing prices vary greatly across metropolitan areas-with bubble-like price increases in some and essentially stable prices in others-Follain and Giertz conclude that policy measures to mitigate housing bubbles should be tailored to target metropolitan areas or regions rather than be applied uniformly across all metropolitan areas at the national level. Thus monetary policy would be an unattractive intervention to counter house price increases in a few metropolitan areas, because it would affect financing terms across both frothy and stable housing markets. Instead, Follain and Giertz favor policy interventions that would target those metropolitan areas with high price increases. The policy they advance would raise the capital reserve ratio that banks are required to hold against mortgages that they finance in those areas. Such countercyclical capital policies would both dampen house price increases and strengthen the reserves of the issuing banks, improving their ability to withstand any unexpected financial shocks.

Applying prudential housing market policies at the metropolitan level seems to be an obvious thing to do; so why has it not been done before? A major part of the answer is that housing market analysis is benefitting from a revolution in the availability of spatially disaggregated data at the metropolitan, county, and even zip code level. The data required to inform policy interventions targeted at the metropolitan level have only recently become widely available, and such data underpin the empirical work carried out by Follain and Giertz. For more information on their analysis, see *http:// www.lincolninst.edu/pubs/2245_Preventing-House-Price-Bubbles.*