Productivity's role in housing booms and busts

Financial analysts and market observers across the globe have attributed the recent economic downturn to a housing bubble brought on by negligent lending standards and the belief that housing prices would continue to increase indefinitely. But in a recent study, "Productivity Swings and Housing Prices," James A. Kahn of the Federal Reserve Bank of New York indicates that this view is incomplete and that it unjustly exaggerates the role that interest rate changes and credit market irregularities played in the growth and decline of housing prices. Kahn believes that a primary element of the housing boom and bust has been previously ignored by analysts: the role that changing economic fundamentals—specifically, swings in labor productivity, or output per hour of work—play in the movement of housing prices. The author explains that "productivity swings helped determine the price of housing through their effects on income growth and long-term income expectations—factors that directly influence what consumers are ready to pay for housing and what mortgage providers are willing to lend." While not discounting the influence that other factors had on housing price movements, Kahn's interpretation is one in which the scope of the effects of the credit condition in the United States is less far-reaching; he considers the credit market irregularities "to have exacerbated the situation caused in large measure by the decline in productivity growth." In other words, it was primarily changing economic fundamentals that led to the financial distress which resulted in consumers being pummeled by higher interest rates and unable to pay their mortgages; that is, economic fundamentals affected the housing market more than the housing market affected economic fundamentals.

Kahn's data are derived from a model based on productivity data and on estimates of the relationships among income, housing prices, and demand from 1963 through 2008. In the recent housing boom of the late 1990s, there was a period of rebounding productivity growth and a return to a high growth rate, and there also was a noticeably sharp increase in housing prices during the period. The recent downturn in housing prices corresponds to a deceleration in productivity. This trend is observable throughout recent history. During the late 1960s and early 1970s when the productivity rate was trending up, there was a steady upswing in housing prices of 3 percent per year. Then, housing prices declined in the late 1970s as productivity slowed to less than 1.5 percent per year.

How do productivity trends influence housing prices? Productivity growth is the most important determinant of long-term trends in household income. As productivity growth increases, so do income and the prospect of future income. As Kahn explains, "A sustained rise in income will significantly strengthen the current and future demand for housing. The increase in demand will drive up the price of land and hence…the market price of services that owners derive from living in this home." Housing prices are determined by a number of factors, including current income and expectations of future income. If borrowers believe that productivity rates will remain strong, they have reason to suppose their income will continue to increase and are therefore willing to pay higher prices for a house. Similarly, lenders have increased confidence in the ability of the borrowers to pay for the higher expenditure and thus view mortgages as less of a risk.

Further, housing demand is considered relatively inelastic; high prices usually are not enough to dissuade prospective house buyers from purchasing a home. Kahn explains that price-inelastic demand results in home prices growing faster than income during housing booms and declining more rapidly than income during housing busts. Many market analysts interpret these events as merely indicating a housing bubble, but Kahn believes that these price swings "can arise naturally from productivity shifts affecting the demand for housing."

Kahn places a strong emphasis on the importance of the public's perception of productivity. Usually, there is a lag between an actual increase or decrease in productivity and the public recognition of a shift in productivity growth. For example, according to recent estimates productivity growth had begun to slow in 2004, yet there was little public recognition of such a decline until 2007. The recognition of a long-coming slowdown in productivity growth corresponds with a considerable drop in housing prices. The lax lending conditions of the 2000s resulted from an understandable—albeit false—confidence in continued productivity growth. When consumers realized that their faith in continued productivity growth was misplaced, there came a swift decline in economic conditions. □