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ESSAYS ON ISSUES
THE FEDERAL RESERVE BANK OF CHICAGO
OCTOBER 2006
NUMBER 231a

Chicago Fed Letter

Developments and innovations in real estate markets: A conference summary

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During the last few years, activity in the U.S. housing market has been brisk, and mortgage credit has reached an ever wider circle of borrowers. A recent conference at the Chicago Fed assembled researchers, regulators, and practitioners to discuss the implications of these developments, both for the housing finance system and for the economy as a whole.

Materials presented at the conference are available at www.chicagofed.org/BankStructureConference.

Residential real estate in the U.S. has performed extremely well in recent years. Home prices have appreciated rapidly, sales and construction have been robust, and investors have reaped profits by flipping properties. Helping to spur this growth have been historically low mortgage rates and innovative mortgage products—such as interest only loans and option adjustable rate mortgages—that let borrowers minimize monthly payments during the early years of a loan. These changes have enabled many Americans to afford homes that otherwise might have been out of reach.

Meanwhile, homeowners have taken advantage of their rising property values by extracting equity from their homes, often to fuel spending. Consumer spending, in turn, has helped keep the national economy growing despite corporate frugality and mounting energy prices.

However, the blistering pace of price appreciation and mortgage originations has raised concerns about the possibility of a housing "bubble." Have prices gotten too high to be sustainable? Have too many consumers stretched too far to purchase homes? If such a bubble exists and then "pops," the consequences for financial institutions and for overall economic growth could be serious.

Accordingly, the Chicago Fed's 42nd Annual Conference on Bank Structure & Competition addressed these and other issues. The conference, titled "Innovations in Real Estate Markets: Risks, Rewards, and the Role of Regulation," was held on May 17–19, 2006, and brought together bankers, academics, regulators, and other professionals to discuss the current housing situation and its implications for the financial system. This *Chicago Fed Letter* provides a summary of the relevant research and commentary presented.[1]

Changing landscape of the housing market

Douglas Duncan, Mortgage Bankers Association, kicked off the conference theme panel with an overview of current market trends. Duncan clarified what is unique about recent developments and where potential risks lie. Housing price appreciation has indeed been unusual in recent years, he said. Normally, home prices are rising in some local markets while falling in others. Over the past few years, however, prices have essentially been rising across the board—a situation that is unlikely to be sustained and already appears to be shifting.

Duncan pointed out that the recent high demand for adjustable rate mortgages (ARMs) is not new. The attraction of adjustable rate loans when interest

rates are low—an “affordability play”—fits with historical patterns of borrower behavior. However, fostered by continued innovations in mortgage products, the current upswing has lasted longer than in the past. At the same time, innovations have allowed for a significant expansion of mortgage financing to “credit-blemished” borrowers. Unfortunately, there is little historical experience with how such a large and broad pool of these nontraditional loans will perform over time.

Lender insight on recent innovations

John McMurray of “mortgage supermarket” Countrywide Financial highlighted a recent internal study of mortgage performance. Covering approximately ten million mortgages and examining a wide array of variables, the study focused on pinpointing where lenders’ risks are concentrated, given the rapidly evolving mortgage market. Which types of borrowers and which types of loans are more likely to become seriously delinquent? How might lenders want to change their practices in light of these results?

Much of the study’s findings were not surprising. For instance, larger loan amounts, lower credit scores, and higher loan-to-value ratios were associated with a greater probability of delinquency, all else being equal. Also, when less documentation was tied to loans, delinquencies increased markedly. McMurray pointed out that this finding is particularly worrisome, given the recent popularity of loans that require little to no documentation of borrowers’ income and credit history.

For both fixed and adjustable rate prime mortgages, Countrywide’s study found that the interest only version of the loan had higher odds of becoming delinquent than the standard amortizing version. This result occurred despite the fact that the interest only borrowers had not yet encountered the adjustment period on their loans, suggesting that interest only mortgages may have been extended to borrowers who are not equipped to handle them. Interestingly, however, in the subprime market, interest only loans showed a lower probability of delinquency than traditional amortizing loans, at least at this stage of the credit cycle. This finding implies that the growth of interest only mortgages may indeed have provided a useful tool in expanding opportunities for riskier borrowers to purchase homes.

Regulatory perspective on recent innovations

David Wright, Board of Governors of the Federal Reserve System, offered a regulatory perspective on the proliferation of nontraditional mortgage loans. To begin with, Wright cited some of the factors that have contributed to their growth. Chief among them are increasing linkages between capital markets and the residential mortgage banking system. This deepening interconnection, along with cheap capital and historically high credit quality, has enabled an enormous supply of credit to flow into the mortgage sector and encourage lending activity. Mortgage originators have responded by exploring increasingly exotic new products that minimize initial payments for borrowers, which investors have repeatedly endorsed. The upside is that mortgage credit has reached new customers. The downside, Wright asserted, is that the upsurge in securitization may be contributing to lax underwriting standards and other risky practices, “taking the market into uncharted territory.”

Thus, while home buyers have benefited from more stable and cost-effective sources of financing, product innovation and lender competition have also created potential systemic risks that regulators must address. On loan terms and underwriting standards, Wright emphasized consistency and vigilance: Lenders must fully evaluate the potential for payment shocks. Next, financial institutions must maintain strong portfolio and risk-management practices, with a focus on internal controls. Finally, consumer protection is vital. Borrowers need to fully understand the terms of their loans before entering into an agreement they are not prepared to handle.

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Role of government-sponsored enterprises

Wayne Passmore, Board of Governors of the Federal Reserve System, summarized recent research by a group of Board economists on the government-sponsored enterprises Fannie Mae and Freddie Mac (collectively referred to as housing GSEs) and how these firms’ activities affect the mortgage market.[2]

To begin with, Passmore highlighted the funding advantage that the housing GSEs enjoy: Because investors believe that GSE debt carries an implicit government guarantee, Fannie Mae and Freddie Mac are able to borrow at reduced interest rates relative to private corporations. Over the last decade, Passmore and his colleagues estimate that the GSEs enjoyed an average rate advantage of about 28 basis points.

However, the housing GSEs’ reduced cost of funds is not necessarily passed on to mortgage borrowers. By analyzing a host of factors that determine the rate spread between the private “jumbo” mortgage market and the conforming market in which GSEs operate, the researchers determined that, on average, GSE mortgage market activity reduces rates by a mere 2 basis points.

So, if the housing GSEs enjoy privileged access to funds, but this access does not translate into lower rates for home buyers, who benefits? The Board economists calculated that more than half of the “GSE subsidy” is retained by the companies’ shareholders, with a much smaller portion benefiting homeowners and taxpayers. In short, Fannie Mae and Freddie Mac are able to issue debt cheaply, buy and hold higher yielding

mortgage-backed securities (MBS), and thereby reap significant profits.

Passmore pointed out that this pattern is not necessary in order for the GSEs to meet their statutory goal of promoting affordable housing. Mortgage securitization by these entities provides valuable liquidity for lenders, of course. However, subsequent purchase of mortgage securities by the GSEs has not been found to benefit the mortgage market; in fact, changes to their portfolios do not appear to affect mortgage rates at all. Thus, Passmore argued that little public benefit exists to offset the worrisome concentration of interest rate risk inherent in the GSEs' huge mortgage security portfolios.

Impact of innovations on homeownership

The recent expansion of consumer access to the housing market is illustrated vividly by the U.S. homeownership rate, which climbed from about 64% of households in 1994 to 69% in 2004. John Weicher of the Hudson Institute and formerly of the U.S. Department of Housing and Urban Development discussed the dynamics of this transformation, which he characterized as both large and unique. Indeed, for the 30 years preceding 1995, the homeownership rate fluctuated within a narrow range. Ownership increases during that period were linked to inflation: When inflation was high, owning a home provided a hedge against rising prices; but once prices stabilized, homeownership rates dropped. In contrast, the rapid, broad-based increase in homeownership over the last ten years has occurred in a low-inflation environment and has dwarfed the previous upsurge.

Accompanying this ownership growth has been a remarkable and unprecedented "disappearance" of renters. Despite rising population, the total number of renters in the U.S. has actually declined in the past decade. High vacancy rates prevail at all rent levels.

Why has this shift occurred and why now? Like many of the panelists, Weicher credited the impact of the information revolution on the housing market. Thanks to technological change, the housing industry now has access to vital tools that have enabled it to better measure risk. For instance, the Federal Housing Administration's Technology Open to Approved Lenders (TOTAL) scorecard lets the agency distinguish between "good" and "bad" high-risk borrowers. This insight contributes to an expansion of credit further down the risk spectrum and income distribution. Weicher also pointed to increased financial literacy as helping spur homeownership. Research shows that homeownership counseling reduces mortgage defaults.

Whither housing prices?

Conference attendees could easily agree that, on average, home prices have risen markedly in recent years; but where are they headed from here? First offering his insight was Richard Rosen, Federal Reserve Bank of Chicago.

Rosen noted that while home prices have increased rapidly, mortgage rates, for one, have been very low. If home buyers determine the price they are willing to pay based on the amount of their mortgage payment, lower mortgage rates could lead to higher home prices. Thus, his analysis incorporated fluctuations in income and interest rates in order to determine if today's prices are truly "out of whack."

Rosen created what he calls a mortgage-servicing index (MSI), which estimates the percentage of income needed to service the mortgage on an average home. Lower values of the MSI signal that housing is more affordable. Rosen found that on a national basis, the index remained roughly constant for 15 years, but jumped up in the last two. That being said, local markets vary considerably. Many metropolitan areas, such as Houston and Philadelphia, remain relatively affordable, while boom towns, such as Miami, San Diego, New York, and Las Vegas, have seen affordability plummet.

Rosen supplemented this index with a model of how local housing prices respond to a host of variables, including economic conditions, demographic factors, and construction costs. In doing so, he questioned whether prices in many "superstar" markets today are justified by fundamentals. Clearly, some sort of correction may be in order, he surmised, but it will likely concentrate in those markets that have gotten furthest out of line.

Robert Shiller, Yale University, offered a somewhat more pessimistic view of home price appreciation. Using a 110-year index of U.S. real home prices that he created, Shiller argued that real price appreciation since 2000 has been huge by historical standards; it far exceeds the only other sustained increase in the series, that of the 1940s post-war boom. Like Rosen, Shiller suggested that such a sharp jump does not appear justified by fundamentals.

For his part, Shiller attributed recent outsized price appreciation to a pervasive "speculative mentality." He argued that people have been bidding up home prices based on a mistaken but persistent expectation that they will continue to climb. In fact, it is unclear whether real home prices rise at all in the long run. In Amsterdam, Shiller noted, real prices have remained essentially flat for 350 years.

Shiller echoed Rosen's concerns about "superstar" cities. If these cities really offered unique and superior qualities that justified higher prices, he said, rents should have increased along with home prices. This is not the case, however.

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Chicago Fed Letter is published monthly by the Research Department of the Federal Reserve Bank of Chicago. The views expressed are the authors' and are not necessarily those of the Federal Reserve Bank of Chicago or the Federal Reserve System.

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ISSN 0895-0164

Meanwhile, record housing construction is likely sowing the seeds of market decline. Thus, Shiller contended that eventually, as the housing supply increases, people will stop paying for the top cities and spread out (much like they have in the past), bringing real prices down to earth. Fortunately, he said, housing price derivatives markets are developing that could allow homeowners to hedge against this downside risk in the future.

Housing and the economy

Given the contribution of residential investment to economic growth in recent years, a housing slowdown could seriously impact the macroeconomy. Former Fed Governor Lyle Gramley of the Stanford Washington Research Group was the first panelist to address this relationship. If price appreciation ground to a halt, would consumer spending and U.S. economic growth soon follow?

Gramley highlighted the two main theories of how housing activity relates to the overall economy. One theory, the traditional wealth effect view, asserts that changes in housing wealth influence consumer spending much like changes in stock market wealth: Consumers feel richer and therefore spend more. This model estimates that for each additional dollar of housing wealth, consumers spend about five to six cents. Hence, a 10% drop in housing prices—the bursting bubble scenario—would shave about $100 billion off consumer spending. As Gramley put it, such a decrease "wouldn't be insignificant," but it "isn't going to send the economy into the tank."

The alternative approach, known as the mortgage equity withdrawal (MEW) view, holds that housing affects consumer spending not through wealth but through actual equity extraction. In this model, consumers are liquidity constrained—they would spend more if they could raise more cash. Refinancing a mortgage or obtaining a home equity loan provides a way to do that. As a result, the MEW view estimates a 66-cent impact on consumer spending for every additional dollar of housing wealth extracted. Under this scenario, equity withdrawal has significantly helped consumer spending in recent years as home prices have appreciated; therefore, a 10% drop in housing prices would have "blockbuster" negative effects.

Which view is correct? Jonathan McCarthy and Charles Steindel, both of the Federal Reserve Bank of New York, noted a number of reasons why increases in housing wealth might affect spending more than increases in stock market wealth—that is, more than a few cents on the dollar. Homeownership is more ubiquitous, for one. Also, home price gains may be more "permanent" than stock price gains. Finally, housing has become more liquid: Thanks to financial innovations, homeowners may be able to tap into their housing wealth to fuel new spending in a way never before possible. However, the authors reported little evidence that growth in housing wealth disproportionately boosts spending. Although surveys have implied some additional spending increases due to home equity withdrawal, this evidence remains problematic. Moreover, it is difficult to determine how much *new* spending has been generated by easy refinancing and the like. Consumers may simply be tapping into their housing wealth to finance spending they had already planned. Indeed, higher growth in home mortgage debt generally corresponds with lower growth in consumer credit debt, suggesting a substitution away from other forms of financing.

Ultimately, McCarthy and Steindel as well as Gramley remained cautiously optimistic about the fate of the economy in the event of a housing slowdown. Even so, Gramley reminded attendees that residential real estate has been subject to blows in the past when least expected, and all three emphasized the vulnerability of the sector should conditions in other areas of the economy and in financial markets worsen unexpectedly.

[1] The 2007 Conference on Bank Structure & Competition will be held May 16–18 at the Westin Hotel in Chicago. Information will be posted at www.chicagofed.org.

[2] The other researchers are Gillian Burgess, Diana Hancock, Andreas Lehnert, and Shane Sherlund.