2013 Annual Report



### The Long-Awaited Housing Recovery

# What's Next? Factors Determining the Housing Recovery's Pace

by John V. Duca

The current balance between the number of owner-occupied homes and rental units demanded, along with existing housing supply, favors a continued recovery in house prices and construction even after temporary delays attributable to severe winter weather in 2013-14. Still, the future pace of the housing recovery will reflect important supply and demand influences—the impact of new homes on supply, market developments affecting housing prices and the alternative costs of renting.

Uncertainty arises from hard-to-predict factors influencing the supply of new building lots, lending standards and future mortgage interest rates, as well as circumstances impacting overall household formation and the mix of families that own or rent.

### **Future Supply of Housing**

New housing supply is a function of the need to replace unfit properties, the availability of building lots, the ease with which construction financing is obtained and the incentive to build new homes that mainly arises from any positive gap between existing-house prices and the cost of constructing new units.

Typical geographic and zoning restrictions aren't the only limits on the supply of developed lots for housing. Supply has been unusually affected in recent years by large cuts to local government budgets and community pressure to revive house prices. Additionally, local shortages of skilled workers have constrained construction.

The availability of commercial real estate finance has also played a role. Banks are the primary external credit source for developers of home lots and for financing construction. The housing and financial crisis and subsequent regulatory response have constrained the supply of such credit.

The Federal Reserve's survey of banks illustrates the depth of the constriction of commercial real estate financing. Each quarter, the Fed asks senior loan officers how their institutions have changed their credit standards over the preceding three months. The percentage of banks reporting tightening standards minus those reporting easing for several loan categories is shown in Table 1 (positive numbers denote tightening and negative numbers indicate loosening). Real estate loans include prime mortgages and nonprime mortgages used by homebuyers.[1] The commercial real estate category spans mortgage financing for existing office buildings, factories, retail space and warehouses, as well as for construction and land development to build residential and nonresidential structures.

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Just before the start of the Great Recession, in October 2007, credit standards were tightened on all categories of loans, especially for real estate, where the risk of future loan losses was concentrated. A year later, a large percentage of banks reported increasingly stringent standards for all categories of loans, particularly those involving commercial real estate.

A combination of factors was at play, including fear of a deep national recession—triggered in part by the collapse of Lehman Brothers—and large losses on loans (notably real estate) and on securities (especially mortgage-backed securities and preferred stock in housing finance firms Fannie Mae and Freddie Mac). These losses reduced banks' equity capital, which regulators require be held above certain levels to fund loans and other investments.[2]

The net percentage of banks tightening credit standards progressively abated after late 2008 (*Table 1*). This occurred amid temporary government infusions of capital into weakened institutions, the rebuilding of banks' cash cushions and the economic recovery. For some types of loans, such as consumer, commercial and industrial credits, banks have eased standards in the past two years.

Overall, the survey data demonstrate only a partial reversal of the earlier tightening. Banks remain cautious about relaxing commercial real estate lending standards because of recent negative experience and large declines in the value of real estate loan collateral during the Great Recession (commercial real estate prices fell much more than house prices).

A regulatory response to the financial crisis has been only slowly implemented. For example, it took nearly five years after the subprime-mortgage-related collapse of Lehman before new capital requirements were established. Credit standards for commercial real estate, in particular, were tightened much more than for most other types of loans. Additionally, large bank holding companies are now required to reduce risky investments and hold more capital if regulatory stress tests indicate that potentially adverse economic scenarios unduly threaten an institution's survival or the stability of the nation's financial system.[3] Finally, most of the specific provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) were not issued until early 2013, and many of these rules are so complicated that it may take a while before banks are comfortable making some types of loans.

Anecdotal reports of shortages of building lots in some areas illustrate that banks remain reluctant to make construction and land development loans. Consequently, the recovery in home construction (and employment) has been delayed, allowing increased demand to upwardly pressure house prices. Assessing the extent of lot shortages and how quickly they may abate is difficult. One positive sign is that a small net percentage of banks reported easing credit standards on construction and land development loans in the Fed's July and October 2013 surveys of senior loan officers.

### **Future Demand for Housing**

Short-term demand for housing is affected by the path of mortgage interest rates, unemployment rates and income over the next couple of years. Longer-term demand is driven by the size of units demanded, the mix of rental and owner-occupied properties and the pace of overall household formation.

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### The Cost and Availability of Mortgages

At least two major factors will affect mortgage interest rates over the next few years. As part of the Fed's quantitative easing efforts to keep interest rates low and spur the housing sector, the central bank has purchased mortgage-backed securities. Interest rates will likely react to eventual Fed modification of its purchases and normalization of monetary policy. A second factor is potential reform of government-sponsored enterprises Fannie Mae and Freddie Mac and the effect on the types and costs of mortgage financing. Because the mortgage-backed securities created by these two entities fund about half of existing U.S. home mortgages, changes could significantly influence the price and size of new prime mortgages.

### Household Formation and Homeownership

Household formation and the decision whether to own or rent a home help determine demand for owneroccupied and rental housing units. Apart from mortgage-interest-rate changes, unusual shifts in availability of mortgage financing and labor market conditions have also affected household formation and choice of dwelling type.

Variation in the total number of households is a function of not only population growth but also the rate at which people form households—the frequency trended up in the 1970s and 1980s as baby boomers entered adulthood and families became smaller (*Chart 1*). After flattening out between the late 1980s and early 1990s, the rate of household formation rose slightly from the late 1990s to mid-2000s, partly from demographic shifts because of increased longevity and the older age composition of the adult population.

Household formation among the young also rose. Their decision to start a new household is based on whether they earn enough to afford the cost of renting or owning a house if they move out of their parents' homes, and if they have enough savings for a mortgage down payment or a rental deposit.

The formation rates for the 25- to 34-year-old group increased significantly in the 1970s, when housing (owned or rented) was relatively more affordable partly owing to unusually low inflation-adjusted mortgage interest rates that reduced financing costs. Still, much of that period's strong growth among the young was likely met by a surge in apartment construction. The overall homeownership rate was stable.

The most recent decade differed from the 1970s. For example, when low-down-payment, nonprime mortgages were available in the early and mid-2000s, young people did not have to wait long to save for down payments to buy homes.[4] Household formation among the young firmed to levels just short of those in the 1970s. However, in contrast to that earlier decade, homeownership rose notably, especially among the young (*Chart 2*). The 25- to 34-year-old age group has traditionally been the key homebuying group. Borrowing constraints have historically been more binding on this demographic than on others.[5]

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Homeownership and household formation trends reversed markedly in 2008-11 after credit tightened and recession-era job losses mounted in 2008 and 2009.

### Future Mortgage Lending

Looking ahead, it is unclear how mortgage lending will evolve during the next few years. Long and consistently measured historical data on down payments for first-time buyers—a proxy for mortgage lending standards—are only available through mid-2011.[6]

On the one hand, a strengthening economy and the improving health of banks suggest that standards may be relaxed a little and the supply of mortgage credit may rise. Moreover, regulators have drafted and will soon finalize new guidelines regarding the types of mortgages lenders can make that can be securitized (bundled into larger debt instruments) and that limit lender exposure to lawsuits. Reducing regulatory uncertainty regarding such "qualified" mortgages under Dodd-Frank may spur an increase in mortgage lending.

On the other hand, some of the new regulations are quite long—one totals 505 pages—and complex, possibly inhibiting notable easing of mortgage credit standards in the near term.[7] Additionally, potential congressional reform of Fannie Mae and Freddie Mac may reduce the availability and increase the price of prime mortgages. Recent increases in fees and tighter credit standards for Federal Housing Administration mortgages may make them harder for lower-income, first-time homebuyers to obtain.

### Labor Market

The job market collapse, particularly for younger people during the Great Recession, delayed household formation, which has since only partially rebounded.[8] Unemployment rates rose relatively more for teenagers and other young adults than for those age 25 and older during the downturn (*Chart 3*). However, prospects for further labor market improvement imply that household formation will likely continue to rise.

There are concerns, however, that many of the new jobs created as the labor market improves will be low paying.[9] That would induce many newly formed households to rent rather than own. Higher levels of college debt and greater college attendance may also favor renting over homeownership.[10]

Rental housing usually entails less construction per unit than detached housing, which will restrain how much U.S. gross domestic product recovers as the number of housing units constructed rebounds. Additionally, while the share of young people in their own households may return to prerecession levels, the share may still remain below the highs of the 1970s (*Chart 4*). Low pay may be a factor. There has been an increase in the share of adults living with their parents due to rising trends in poverty and income inequality, not just because of temporary, cyclical factors.[11] Nevertheless, between a demographic aging of the population and a likely labor market recovery, overall household formation should eventually recover all of its Great Recession declines and drift higher.[12] The question is when.

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### Whither the U.S. Housing Recovery?

Thus, while the U.S. housing recovery will probably continue for some time, its pace and composition will be affected by the nature of the labor market recovery, the movement of mortgage interest rates and the difficult-to-predict evolution of credit availability to prospective homebuyers and to homebuilders and developers.

#### Notes

- 1. Prime mortgages refer to those loans that meet the down-payment, debt-burden and other credit standards of "conventional" mortgages, which can be packaged by Fannie Mae and Freddie Mac into regular mortgage-backed securities. Nonprime mortgages refer to either loans whose size exceeds those guidelines or to subprime and other loans that do not conform to those standards.
- 2. Capital requirements give banks an incentive to limit risk because capital absorbs the first losses on investments. Preferred stock in Fannie Mae and Freddie Mac had been counted as bank capital until these government-sponsored enterprises were taken over by the federal government.
- 3. Banks can increase their capital by issuing new stock or retaining more profits, sometimes by cutting dividends.
- 4. See "House Prices and Credit Constraints: Making Sense of the U.S. Experience," by John V. Duca, John Muellbauer and Anthony Murphy, *Economic Journal*, vol. 121, no. 552, 2011, pp. 533-51; and "Shifting Credit Standards and the Boom and Bust in U.S. House Prices: Time Series Evidence from the Past Three Decades," by John V. Duca, John Muellbauer and Anthony Murphy, unpublished paper, June 2013.
- 5. See "Borrowing Constraints and Access to Owner-Occupied Housing," by John V. Duca and Stuart S. Rosenthal, *Regional Science and Urban Economics*, vol. 24, no 3, 1994, pp. 301-22.
- 6. See "Shifting Credit Standards and the Boom and Bust in U.S. House Prices: Time Series Evidence from the Past Three Decades," by John V. Duca, John Muellbauer and Anthony Murphy, unpublished paper, June 2013.
- 7. See "Eased Mortgage-Risk Rule to Be Proposed by U.S. Agencies," by Clea Benson, Bloomberg News, Aug. 28, 2013, www.bloomberg.com/news/2013-08-28/eased-mortgage-risk-rule-to-be-proposed-by-u-s-agencies-today.html.
- 8. See "Household Formation and the Great Recession," by Timothy Dunne, *Economic Commentary*, Federal Reserve Bank of Cleveland, Aug. 23, 2012, www.clevelandfed.org/research/commentary/2012/2012-12.cfm; and "The Long and the Short of Household Formation," by Andrew Paciorek, Federal Reserve Board, Finance and Economics Discussion Series Working Paper no. 2013-26, April 2013, www.federalreserve.gov/pubs /feds/2013/201326/201326abs.html.
- 9. See "U.S. Job Worries Include Quality," by Andrew Davis, Moody's Analytics, Sept. 10, 2013, www.economy.com/dismal/pro/article.asp?cid=242507.
- See "Young Student Loan Borrowers Retreat From Housing and Auto Markets," by Meta Brown and Sydnee Caldwell, Federal Reserve Bank of New York, *Liberty Street Economics* (blog), April 17, 2013, http://libertystreeteconomics.newyorkfed.org/2013/04/young-student-loan-borrowers-retreat-from-housingand-auto-markets.html.

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- See "Will the Kids Move Out?" by John V. Duca, Federal Reserve Bank of Dallas, unpublished paper, 2013; and "The State of the Nation's Housing 2013," by the Joint Center for Housing Studies of Harvard University, 2013, p. 15.
- 12. See "The Long and the Short of Household Formation," by Andrew Paciorek, Federal Reserve Board, Finance and Economics Discussion Series Working Paper no. 2013-26, April 2013, www.federalreserve.gov/pubs /feds/2013/201326/201326abs.html.

#### About the Author

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# Table 1: After Tightening Credit Standards, Banks Begin Easing (blot Demonstrate Tightening Credit Standards, Days Dravisure)

(Net Percentage Tightening Credit Standards Over Previous 3 Months)

Type of loan	Oct. 2007	Oct. 2008	Oct. 2010	Oct. 2012	Oct. 2013
Real estate					
Prime mortgages	41	70	9	-2	-9
Subprime mortgages	56	100	n/a	0	n/a
Commercial real estate	50	87	4	-9	-7 (nonresidential)
Business loans					(nom esidentiat)
Large/medium firms	19	84	-11	-8	-8
Small firms	10	75	-7	-8	-7
Consumer loans					
Non-credit card	26	64	-6	-10	-12 (only auto)

NOTE: Positive numbers (red) denote net tightening and negative numbers (green) denote loosening of lending standards.

SOURCE: Federal Reserve Senior Loan Officer Survey.

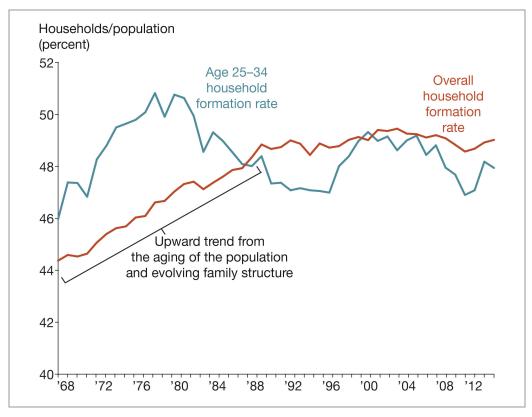
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### Chart 1: Overall Household Formation Sags During the Great Recession



SOURCES: Author's calculations using the IPUM-CPS (Integrated Public Use Microdata Series-Current Population Survey) data set.

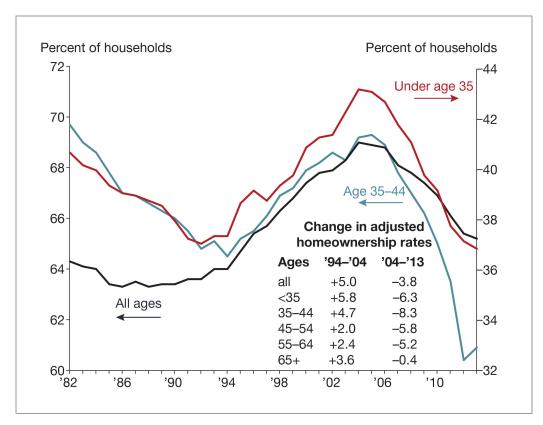
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### Chart 2: The Rise and Fall of Homeownership Rates Very Pronounced Among Younger Families



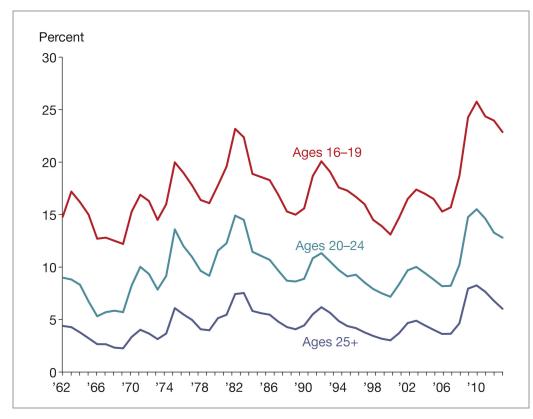
SOURCES: Census Bureau and author's calculations of adjustments for changes in decennial census-related survey procedures to make data more consistent over time.

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### Chart 3: Unemployment Rates More Elevated Among the Young



SOURCE: Bureau of Labor Statistics.

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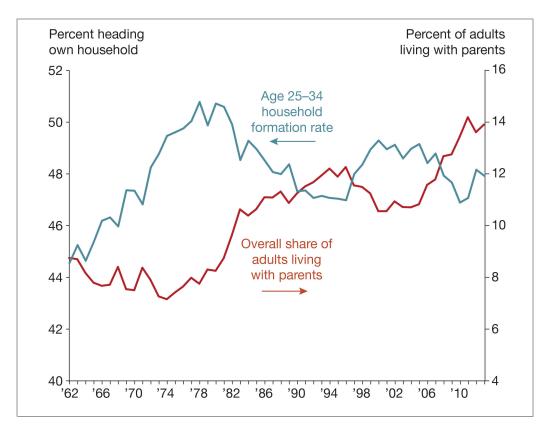
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### Chart 4:

# Household Formation Among Young Recovering; Share of Adults Living With Parents Up From 1970s



SOURCES: Author's calculation using the IPUM-CPS (Integrated Public Use Microdata Series-Current Population Survey) data set.

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### Video: Education Debt Stalls Household Formation



College and education debt incurred during recessionary times defers household formation, keeping grads at home with parents.

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