The Economy Drags Housing Upward
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Chief Economist, Fannie Mae

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Macroeconomic Developments

Private Forces Moved to the Fore, Rebounding Solidly After the Severe Weather Impact

SAAR, Quarterly Annualized % Change

Source: Bureau of Economic Analysis
The Public Is Still Concerned About the Direction of the Economy

Source: Fannie Mae National Housing Survey

Lackluster Consumer Spending in the Current Expansion

Real Personal Consumption Expenditures (SAAR, Index, Recession Trough = 100)

Source: Bureau of Economic Analysis
Core Capital Goods Orders Suggest Slow but Steady Rebound in Business Capital Investment

Manufacturers New Orders of Nondefense Capital Goods ex. Aircraft (NSA, Year-over-Year % Change)

Source: Census Bureau

Industrial Output HasRecovered

(2007 = 100)

Source: Federal Reserve Board
Government Spending Has Been Increasing

Government Consumption Expenditures/Gross Investment

Source: Bureau of Economic Analysis

Petroleum and Other Fuels Falling as a Share of Total U.S. Imports

Mineral Fuels, Lubricants & Related Materials as a Share of Total Nominal U.S. Imports (NSA, %)

Source: Census Bureau
Oil Prices Decline as Dollar Strengthens

Expected Effect of Oil at $40/barrel vs. $84/barrel on GDP Growth in 2015-2016

**Positively Affected**
- Philippines +2.0%
- Slovak Republic +1.25%
- South Africa +1.1%
- Thailand +1.0%
- Hong Kong +1.0%

**Negatively Affected**
- Saudi Arabia -3.9%
- Russia -3.7%
- UAE -1.6%
- Norway -1.2%
- Malaysia -0.6%

Source: Oxford Economics Ltd.
Year-Over-Year Productivity Growth Slower in Current Recovery than Previous Recoveries

- Business Sector: Real Output Per Hour of All Persons (y/y)
- Manufacturing Sector: Real Output Per Hour of All Persons (y/y)

Source: Bureau of Economic Analysis

Hiring Plans of Small Businesses Reached Its Highest Point Post-Recession

Source: The National Federation of Independent Business
Employment Situation

The Drop in the Unemployment Rate Amid a Near 40-Year Low Participation Rate Overstates the Labor Market Improvement

Source: Bureau of Labor Statistics
Diminishing Labor Market Slack Has Not Yet Led to Stronger Wage Growth

Source: Bureau of Labor Statistics

2001-2007 Expansion Average: 2.1

Millennials Without a College Degree Are Much More Likely to Be Unemployed

Unemployment Rate by Age and Education (%)

Source: Census Bureau Current Population Survey
Income Growth Expectations

Source: The Conference Board, NBER

Regional Developments
Regions with High Energy Extraction Employment See Lower Unemployment Rates

Unemployment Rate by State (November 2014, SA, %)

Mining and Natural Resources as a Share of Total Nonfarm Employment (November 2014, %)

Low unemployment correlates with high share of energy extraction employment.

Source: Bureau of Labor Statistics

Plunge in Oil Prices Will Expose Regional Risk

Texas Share of U.S. Crude Oil Production (%; 12-Week Moving Average)

Source: Bureau of Economic Analysis, Oil and Gas Journal
Oil-Related Fall in Headline Inflation Filters Through into a Drop in Core Inflation to a Little Below the Fed’s 2% Target

Source: Bureau of Labor Statistics
The Sharp Rise in Interest Rates in 2013 Sparked by Fed “Tapering” has Reversed

Source: Federal Reserve Board, Freddie Mac, Bloomberg

The Fed Ended the QE Program With Its Balance Sheet Near a Landmark $4.5 Trillion

Source: Federal Reserve Board
The Fed’s Exit May Soon be Felt in the MBS Market

Gross Supply and Fed Purchase

Source: eMBS, New York Federal Reserve, Fannie Mae ESR

Housing
Household Growth Has Been Severely Depressed, However, Racial and Ethnic Minorities Will Account for the Bulk of Net Household Growth in the Second Half of the Decade

Source: Census Bureau, Decennial Census; Fannie Mae, Economic & Strategic Research projections

There is Lull in the Population of Prime First-Time Homebuyers

Source: Census Bureau

Millennials should eventually fill this gap
Recovery in Single-Family Construction is Sluggish

Source: Census Bureau

Home Sales Finish 2014 on a Soft Note Despite Declining Mortgage Rates

Source: National Association of REALTORS®, Census Bureau
Home Price Growth Should Moderate only Modestly...

Source: CoreLogic

...as Tight Supply Will Continue to Support Growth

Source: CoreLogic, National Association of REALTORS®
Number of Married Households Declining in Younger Age Cohorts

- The number of married households is declining in younger age cohorts.
- Common first-time home buying age is between 25 to 29 years old.

The Vast Majority of Younger Renters Still Plan to Buy a Home at Some Point in the Future

- Lifetime intentions to own a home among younger renters:
  - Younger Renters - % Likely To Buy At Some Point
  - Younger Renters - % Likely To Always Rent

Q31. If you were going to move, would you be more likely to: Rent / Buy
Q50. [If Q31 = RENT] In the future, are you more likely to: Always rent / Buy at some point in the future

Younger renters likely to buy at some point: Q31 = Buy or Q50 = Buy at some point in the future
Younger renters likely to always rent: Q50 = Always Rent

Source: Fannie Mae National Housing Survey
Untangling the Student Loan Picture

Homeownership Rates by Education and Student Loan Debt
(Ages 29-31)

Source: Federal Reserve, TransUnion LLC, National Student Clearinghouse

But the Problem is Not Just Student Loans

Homeownership among Young Adults who are “Prime” Buying Candidates*

*Prime homebuyers are defined as upper income households with householders in their early 30s who have college educations and are married with children.

Source: U.S. Census Bureau, American Community Survey
Younger Renters With Student Loans Cite Affording the Down Payment as Their Biggest Obstacle to Getting a Mortgage, While Those Without Student Loans Cite Insufficient Credit

What would be your biggest obstacle to getting a mortgage to purchase or refinance a home today? SELECT UP TO 3 – Q3 – 2014

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>Younger Renters with Student Loans</th>
<th>Younger Renters without Student Loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affording the down payment or closing cost</td>
<td>47%</td>
<td>49%</td>
</tr>
<tr>
<td>Insufficient credit score or credit history</td>
<td>50%</td>
<td>52%</td>
</tr>
<tr>
<td>Too much existing debt</td>
<td>24%</td>
<td>23%</td>
</tr>
<tr>
<td>Insufficient income for monthly payments</td>
<td>19%</td>
<td>12%</td>
</tr>
<tr>
<td>Lack of job security or stability</td>
<td>5%</td>
<td>15%</td>
</tr>
<tr>
<td>The process is too complicated</td>
<td>9%</td>
<td>16%</td>
</tr>
<tr>
<td>Others</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>None/No obstacles</td>
<td>3%</td>
<td>0%</td>
</tr>
</tbody>
</table>

* Denotes a statistically significant difference between younger renters with and without student loans at the 95% confidence level.

Source: Fannie Mae National Housing Survey

Trouble Accessing Credit is Not the Primary Consideration in the Decision to Continue Renting

What is your primary reason for renting now?

<table>
<thead>
<tr>
<th>Reason</th>
<th>Q3 2012 Younger Renters</th>
<th>Q3 2013 Younger Renters</th>
<th>Q3 2014 Younger Renters</th>
</tr>
</thead>
<tbody>
<tr>
<td>You are making yourself financially ready to own</td>
<td>40%</td>
<td>45%*</td>
<td>45%*</td>
</tr>
<tr>
<td>Renting is a more affordable option</td>
<td>29%</td>
<td>25%</td>
<td>19%</td>
</tr>
<tr>
<td>Renting gives you more flexibility in your future choices</td>
<td>19%</td>
<td>13%*</td>
<td>12%</td>
</tr>
<tr>
<td>You cannot obtain a mortgage</td>
<td>11%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Living in a rental home is less hassle and stress</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Renting allows you to live in a better neighborhood</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Renting protects against declines in housing prices</td>
<td>2%</td>
<td>1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

* Denotes a statistically significant difference between younger renters in Q3 2013 and Q3 2014 at the 95% confidence level.

Source: Fannie Mae National Housing Survey
Housing Activity Mixed in 2014, but Measured Recovery Continues

<table>
<thead>
<tr>
<th></th>
<th>2013 (Thousands of Units)</th>
<th>2014 Forecast</th>
<th>2015 Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Home Sales</td>
<td>5,090</td>
<td>4,928</td>
<td>5,138</td>
</tr>
<tr>
<td>New Home Sales</td>
<td>429</td>
<td>441</td>
<td>523</td>
</tr>
<tr>
<td>Single-Family Housing Starts</td>
<td>618</td>
<td>640</td>
<td>783</td>
</tr>
<tr>
<td>Multifamily Housing Starts</td>
<td>307</td>
<td>356</td>
<td>388</td>
</tr>
</tbody>
</table>

Source: National Association of REALTORS®, Census Bureau, Fannie Mae December Forecast

We Expect Mortgage Production to Increase Only Modestly in 2015 Amid Declining Refinance Share

Mortgage Originations (1-4 Unit, Trillions of $)

Source: Fannie Mae ESR Forecast
Speaker Biography

Douglas G. Duncan is Fannie Mae’s Senior Vice President and Chief Economist. He is responsible for managing Fannie Mae’s Economic & Strategic Research Group and oversees corporate strategy. In this leadership role, Duncan provides all economic, housing, and mortgage market forecasts and analyses, and serves as the company’s thought leader and spokesperson on economic and mortgage market issues.

Prior to joining Fannie Mae, Duncan was Senior Vice President and Chief Economist at the Mortgage Bankers Association. His experience also includes service as a LEGIS Fellow and staff member with the Committee on Banking, Finance, and Urban Affairs for Congressman Bill McCollum in the U.S. House of Representatives, and work on the Financial Institutions Project at the U.S. Department of Agriculture. He has been elected to the Board of Directors for the National Association of Business Economists, is a member of the American Economics Association and the American Real Estate and Urban Economics Association, and is past president of the Housing Statistics Users Group.

Named one of Bloomberg / BusinessWeek’s 50 Most Powerful People in Real Estate and one of Inman News’ 100 Most Influential Real Estate Leaders for 2013, Duncan is a frequent speaker on national and state economic, housing, and mortgage market conditions.

Duncan received his Ph. D. in Agricultural Economics from Texas A&M University and his B.S. and M.S. in Agricultural Economics from North Dakota State University.

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