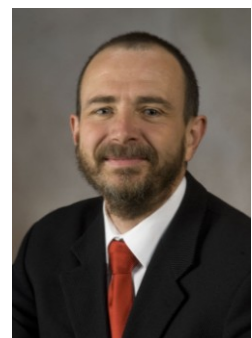


The \$350•10⁹ American housing market

Der amerikanische Häusermarkt – ein 350 Milliarden Dollar Markt

Le marché américain des maisons pèse 350 milliards de dollar

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1. America and wood

North America has a long relationship with wood lasting back to its discovery by Christopher Columbus sailing westwards with wooden boats. For centuries, the North American continent was used to supply wood to the "old continent," Great Britain in particular. However, the United States (U.S.) itself relied heavily on wood for its development and progress (Figure 1).



Figure 1: North America has relied on wood since its discovery.

Today, in the Internet age and with smart phones being the most essential piece of equipment owned by individuals, the reliance on wood by the American society remains unabated, in deference to material science having brought forth many new improved materials. In fact, the overwhelming majority of the U.S. residential structures and a large part of commercial structures are still built using solid wood or engineered wood products (Figure 2).

One reason is the versatility of the wood as a raw material. For example, engineered wood products are mankind's answer to the changing characteristics of the resource available (Figure 3). Innovations such as OSB, I-Joists, Parallam, LVL, CLT, or wood fiber plastic composites, to name a few, have kept wood relevant as a building material today—as in the past (Figure 4).



Figure 2: Engineered wood products used in contemporary residential buildings.



Figure 3: The changing forest resources in the United States.

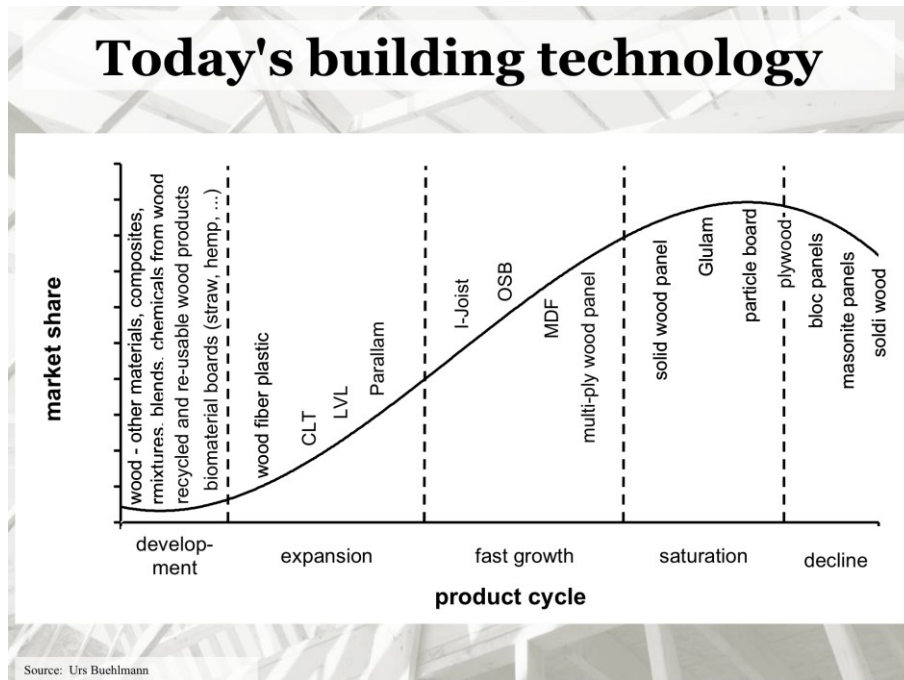


Figure 4: Innovation is keeping wood products relevant.

2. The U.S. residential construction market

The U.S. gross domestic product (GDP) in 2014 was estimated at \$17.6 trillion,¹ whereof an estimated \$699 billion being contributed by private construction, of which \$350 was residential construction (Figure 5).² Consumer spending in the U.S. was 68.5 percent of total GDP spending (Figure 6), more pronounced than in Europe, Russia, or China (<60%, <50%, and <40%, respectively).

Traditionally, overall housing activity in the U.S. (residential fixed investment (RFI) plus housing services) has comprised about 20 percent of GDP, a number which has decreased to approximately 15 percent since the recession in 2008-09 (Figure 7). This reduced activity in the U.S. residential housing market is one of the reasons why the U.S. economic recovery during the past years has been unimpressive.

Yet, U.S. GDP growth is forecast at 2.0 percent for 2015 and 2.4 percent for 2016,³ better than the Euro Area forecast of 1.5 and 1.8 percent for 2015 and 2016,³ respectively. Thus, the expectation is that the U.S. will continue to grow reasonably over the coming years, giving the economy a chance to fully recover from the 2008-09 recession. However, with subdued wage growth and transitory consumer confidence, most economists expect the mediocre growth experienced in the past years to continue.

¹ Source: <http://bea.gov/iTable/iTable.cfm?ReqID=9&step=1#reqid=9&step=3&isuri=1&903=5>

² Source: <https://www.census.gov/const/C30/privsa.pdf>

³ Source: <http://www.worldbank.org/en/publication/global-economic-prospects/summary-table>

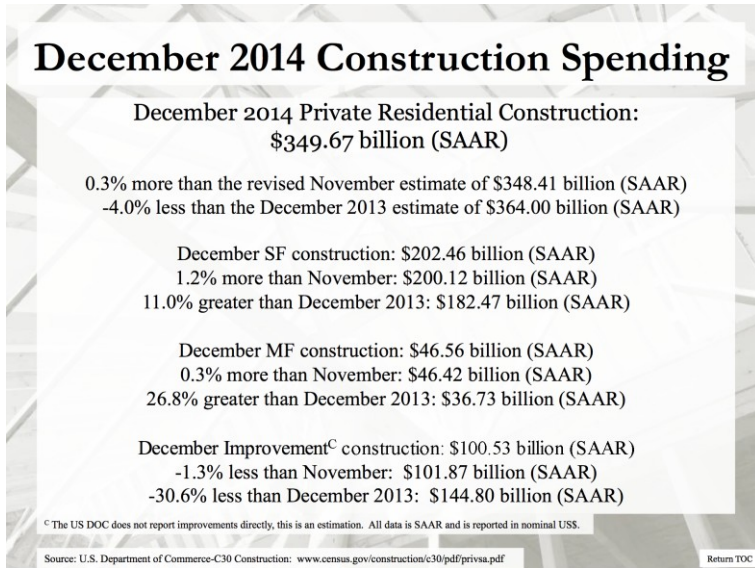


Figure 5: 2014 U.S. private construction spending.²

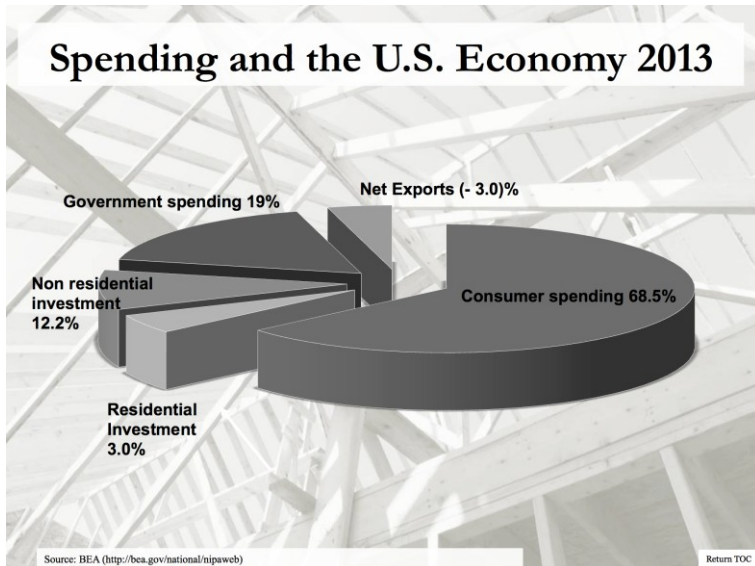


Figure 6: U.S. spending as a percentage of GDP 2013.

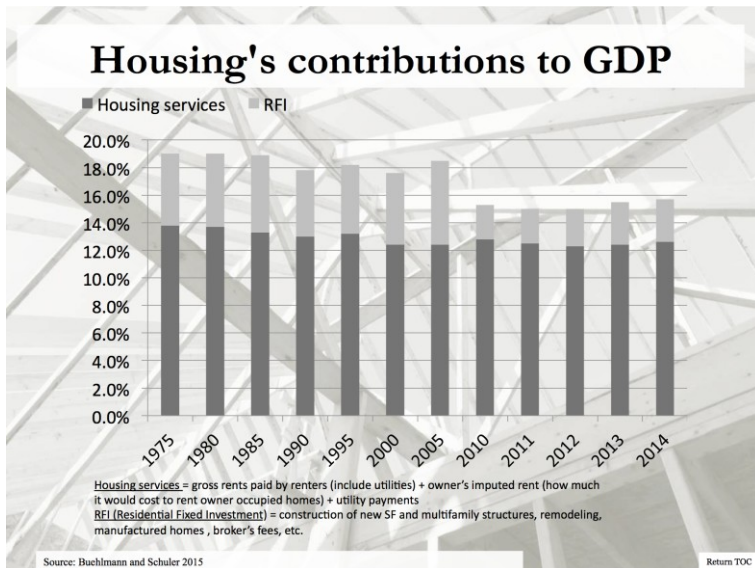


Figure 7: Contribution of housing to U.S. GDP.

3. Current conditions

The housing scorecard for August 2015, published by Buehlmann and Alderman⁴ (Figure 8), displays a mostly positive picture of the U.S. housing market. While housing starts declined month over month, they rose roughly 15 percent year over year. However, one has to keep in mind that the 739,000 single-family housing starts (SAAR) represent less than 50 percent of the 1,710,000 single-family housing starts recorded in 2005 (Figure 9). Thus, while this number still is low by historic standards, it is more than double the numbers seen in 2009 at the nadir of the recession (Figure 9). Based on historic averages, the single-family housing market still has ample room to increase.

Multifamily construction, which has become more important to housing construction as more people rent instead of buy, decreased in August. Yet, multifamily construction is a cornerstone for the construction sector. Given the continued upward trend of rents charged in the U.S., combined with the difficulties for some of the population to obtain mortgages for a house purchase (first time or move-up buyers), suggests that multifamily construction will remain staying strong for some time to come.

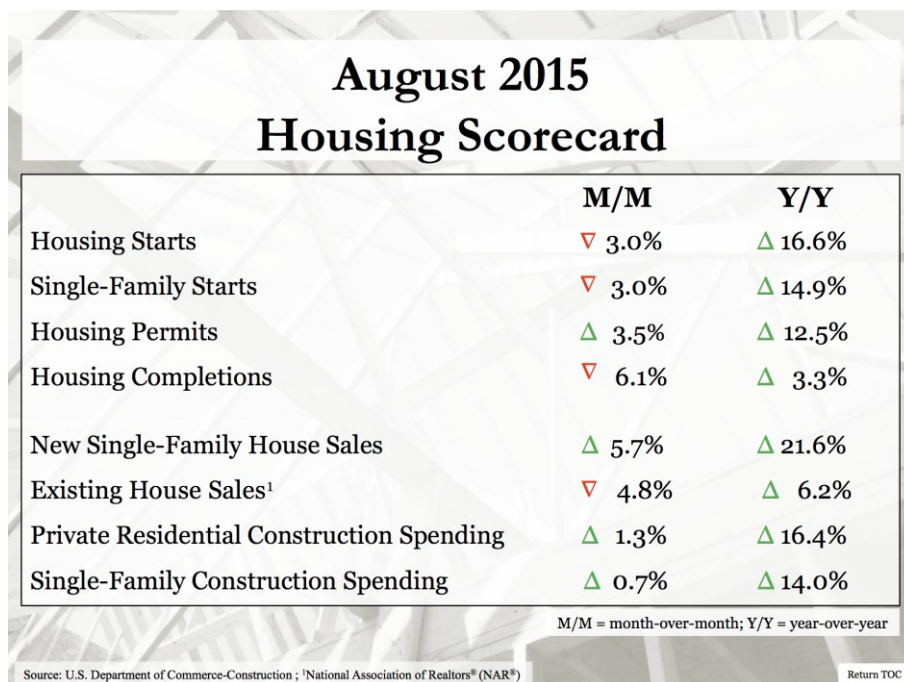


Figure 8: August 2015 Virginia Tech – U.S. Forest Service Housing Scorecard.

⁴ Buehlmann and Alderman. 2015. The Virginia Tech – U.S. Forest Service August 2015 Housing Commentary. Virginia Tech, Blacksburg, VA. 55 pp.

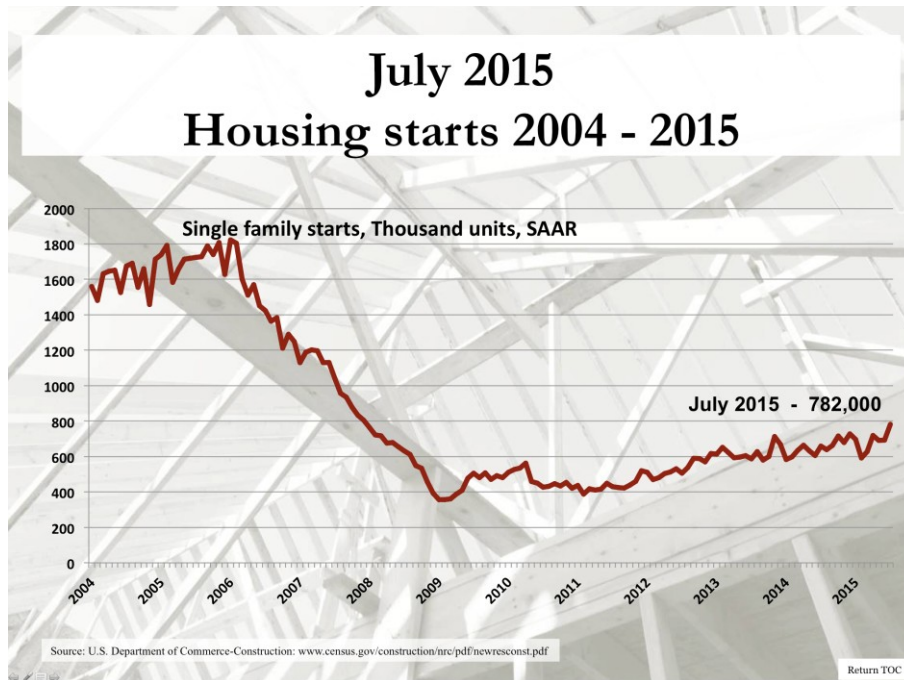


Figure 9: U.S. single family housing starts 2004 – 2015 (SAAR).

With about 16 million people in the U.S. still looking for a desirable job, the U.S. economy could use a strong world economy to boost its output and to place its tepid recovery on a stronger footing. However, recent global events may be contra-productive to such wants. The recent slowdown of China's economy (the world's second largest economy by GDP) may negatively influence the U.S. economy. Europe's debt problems also are a drag on the world economy. And combined with the recent plunge in commodity prices, this may create problems for countries that rely on commodity exports. Thus, it appears that world demand may be constrained and this may impact several sectors of the U.S. economy. First and foremost to be affected may be parties that export products or services to foreign countries; however other sectors of the economy may not be spared either as the ripple effects may diminish aggregate demand.

Overall, the near-term outlook for the U.S. housing market is challenging as it faces some potentially negative macro-factors that may obfuscate a robust housing recovery (based on historical long-term averages). These challenges include:

- a constrained quantity of well-paying jobs being created;
- a tepid economy;
- declining year over year real median annual household incomes, though increasing for the past two-months;
- home loan lending standards (a few new programs loosen standards and the recently employed TILA-RESPA Integrated Disclosure guidelines may restrict lending – a true conundrum); and
- global uncertainty.

Urs Buehlmann, Delton Alderman, and Al Schuler publish monthly updates on the U.S. housing market to provide industry partners with timely information to gauge market opportunities. All past housing reports can be viewed at:

<http://woodproducts.sbio.vt.edu/housing-report/>

To be added to the mailing list for this free monthly housing reports email to: buehlmann@gmail.com.