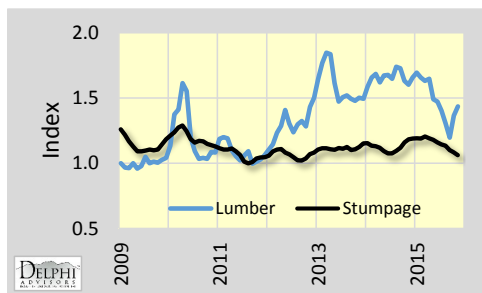


## Seventy-eight Months and Counting....

Turning the calendar to 2016 will mark 6½ years since the end of the Great Recession (GR) in June 2009. As an illuminating graph by [Lance Roberts](#) indicates, that is nearly twice the average duration of expansions since the 1870s. That the expansion is the [fourth longest](#) since WWII is certainly heartening but, regrettably, it is also the weakest. [Gross domestic product](#) has grown since June 2009 at a compound annual growth rate (CAGR) of only about 2%, less than half the average CAGR of 4.5% among all previous post-WWII expansions. While current growth is above the median of the past 10 years, the trend is down (see dashboard chart below right). What can other indicators tell us about the strength of the economy?

- **Industrial production** – Since the end of the GR, total IP has grown at a trend CAGR of 2.9%, a little shy of the 3.1% seen on trend between January 1986 and December 2007 (as the dashboard chart shows, current total IP is also below the median of the past 10 years). The score for manufacturing: 2.7% post-GR growth versus 3.7% pre-GR. For NAICS 321: 3.9% post-GR versus 1.5% pre-GR; one reason for the greater post-GR CAGR in solid-wood is that output is expanding from a much lower base – having shrunk by nearly one-third during the GR. For NAICS 322: 0.1% post-GR versus 0.2% pre-GR; the pulp sector continues to struggle after a 16% contraction during the GR.

- **Housing starts** – Post-GR total starts have grown at a trend CAGR of 14.7%. That sounds impressive, but total starts remain below the long-term annual average of 1.5 million units. In fact, November 2015 starts of 1.173 million units (SAAR) are only 17% higher than the average of *recessionary low points* from 1960 through 2001. Although still slightly above the median of the past 10 years (see dashboard chart), the recent trend is weakening.

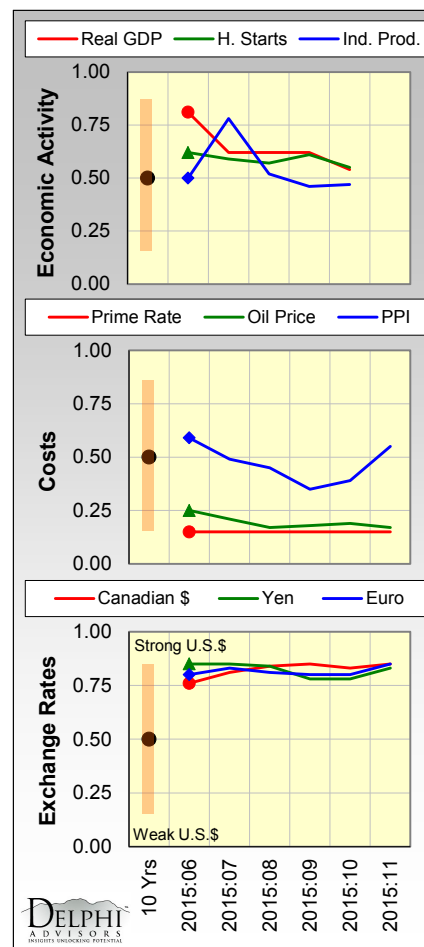


We explore the housing start discussion in greater depth in [Whatever Happened to the Southern Pine Sawtimber Stumpage Price Recovery?](#) In that post we provide insight into factors that together explain why the pine log stumpage price recovery has been so muted in the face of a more robust pine lumber price increase.

- **Federal Funds Rate (FFR)** – The long-awaited FFR hike finally occurred this month, marking the second longest interval during the expansion phase of a business cycle before the FFR was raised above the minimum rate of the immediately prior recession. Our research shows that the length of time required for the FFR to exceed the minimum of the prior recession is negatively correlated with the number of months until the next recession; i.e., the longer the Fed waits to raise the FFR, the quicker a recession follows on the heels of the rate hike.

Taken together, these indicators suggest the economy is trading water instead of strongly swimming; moreover, they provide little indication the picture is likely to significantly improve in the future. ■

*This report is typically a compilation of articles posted on our [website](#); those articles relate in greater detail recent economic developments to the U.S. forest products sector.*



**Previous six months' behavior of macroeconomic variables indexed relative to their historical 10-year min, max and average (lower and upper ends of the orange bars, and black dots, respectively)**