

JOBS AND PRODUCTIVITY: THE IMPACT ON CONSTRUCTION

BY JOHN CROSS, P.E.

Analyzing the economy's influence on building starts is a matter of looking at the right numbers, the right way.

THE UNEMPLOYMENT RATE is decreasing! GDP is rising! Things are looking up!

So why isn't the construction market accelerating?

Conventional economic wisdom argues that as the unemployment rate decreases, more people are earning more money, which increases consumer spending. Increased consumer spending is the engine that drives gross domestic product (GDP) and as GDP increases, so does the demand for homes and buildings. Recent media reports point to an 8.3% unemployment rate compared to a rate of 10.0% just 27 months ago. Real GDP increased by 1.6% in 2011, capped by an annualized fourth-quarter increase of 3%.

Yet despite all these "good" indicators, construction activity only increased by 2% in 2011 compared to 2010, and that was from a record low level of 64% below the peaks of 2006 and 2007. Why isn't construction rebounding?

The answer is actually rather straightforward: Any focus placed on the government-reported unemployment rate is misdirected. Some economists argue that the focus is on the wrong unemployment rate. Rather than track the U3 rate—which includes only those individuals actively pursuing employment—it is the U6 rate that should be the barometer for unemployment. The U3 rate is currently 8.3% while the broader U6 rate is 14.9% (based on February 2012 data). The point is well taken as the U6 rate includes those unemployed individuals who have stopped looking for work or are marginally employed. But the U6 rate is also decreasing.

The problem is that we are focusing on changes in the rate of unemployment rather than looking at the actual level of employment in the U.S. Since peaking at a non-seasonally adjusted employment level of 147 million in 2007, total employment fell to 137 million in early 2010 and has only recovered 3.9 million of the 10 million jobs that were lost; current employment stands at 141 million. At the same time, the average number of weekly work hours per worker decreased by 2%. Also over the same time period, GDP dipped from a peak of \$13.3 trillion to \$12.6 trillion before rebounding to the current \$13.6 trillion.

Propelled by Productivity

The bottom line is that the general economy's recovery has been driven by an increase in productivity, not an increase in

employment. In broad terms, the U.S. economy generates 7.7% more goods and services per reported hour worked today than in 2007 (note that the government productivity figures do not fully capture variations in hours worked by salaried employees). Productivity increases improve the profitability of corporations and make U.S. goods and services more competitive internationally, but improved productivity does not result in an immediate increase in demand for new commercial buildings. At the same time, the lower number of employed workers prolongs the stagnation in the housing market.

So what does this mean for the building construction industry and, more specifically, the structural steel industry?

First, even as economic growth accelerates, the impact on building construction will lag. Significant growth in buildings will not occur until employment levels reach or exceed those at the start of the recession. Growth will occur, but it will be in the single digits rather than the double-digit growth that construction activity typically experiences coming out of a recessionary period. The growth we predict will come from businesses using the profit gained from productivity increases in terms of major capacity and product expansions, rather than growth intended to simply stay ahead of current demand.

Second, as the construction market slowly expands, cost and value will continue to be the major drivers of purchasing decisions. Projects will be financed by current reserves rather than outside financing sources. Dollars spent "out-of-pocket" are always spent more carefully than "borrowed" dollars.

John Cross, P.E., is an AISC vice president.



Third, the expectation of project owners will be that just as they have improved their own productivity levels, improved productivity will also have been achieved in all segments of the

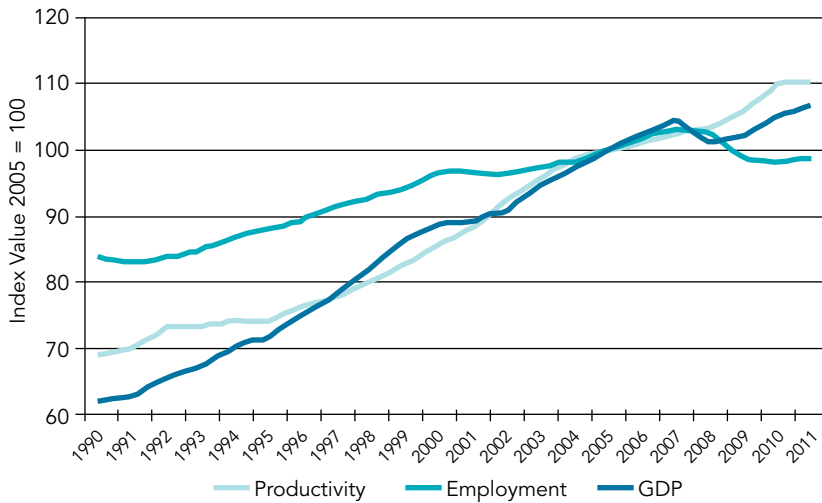
construction industry, including the structural steel industry. Project owners will expect more project for less money.

Employ Efficiency

Is the structural steel industry meeting the challenge of improved productivity? Certainly the growth of collaborative project delivery methods, which enable designers to capture fabrication efficiencies during the design stage; the increasing implementation of BIM, which allows data to flow from the design office to the fabrication shop floor; the growing implementation of robotic systems; and improved quality management programs have all contributed to improved fabricator productivity. At the same time, the economic realities of the past few years have forced every segment of the construction industry to sharpen their pencils and eliminate any possible waste from their production processes. The fact that structural steel fabrication takes place away from the construction site in a controlled shop environment allows the structural steel industry to identify, capture and incorporate those productivity improvements better than the site-based trades.

The bottom line? Keep your eyes on the employment numbers, be patient and aggressively attack inefficiencies while pursuing increased productivity in your operations. **MSC**

Employment, GDP and Productivity Trends



(Note: Actual value in 2005 is assigned index value of 100.)