

## **Mitchell's Musings 12/17/12: The Great Manufacturing Skill-Shift Labor Shortage: Hard to See**

**Daniel J.B. Mitchell**

There are good stories and catchy anecdotes. And then there are facts and data and proper explanations. Sometimes facts and data make good stories. But sometimes they don't provide support for good anecdotes. The Great Manufacturing skill-shift labor shortage seems to be one of the latter cases. As will be explained below, the lost skill seems to be on the employer side, not the worker side.

The prevailing view - until recently - was that U.S. manufacturing had gone to China (or someplace else abroad) and would never come back. Exactly, how we were eventually going to pay for all the manufactured goods we essentially bought on credit from China and elsewhere without at some point producing manufactured goods for (net) export was never clear in such stories. (The U.S. is by far the world's greatest international debtor and continues to run a large trade deficit, adding to its net international debt.) But, then again, the question of eventual repayment has generally not been asked much in the past. Indeed, that question still isn't much asked.

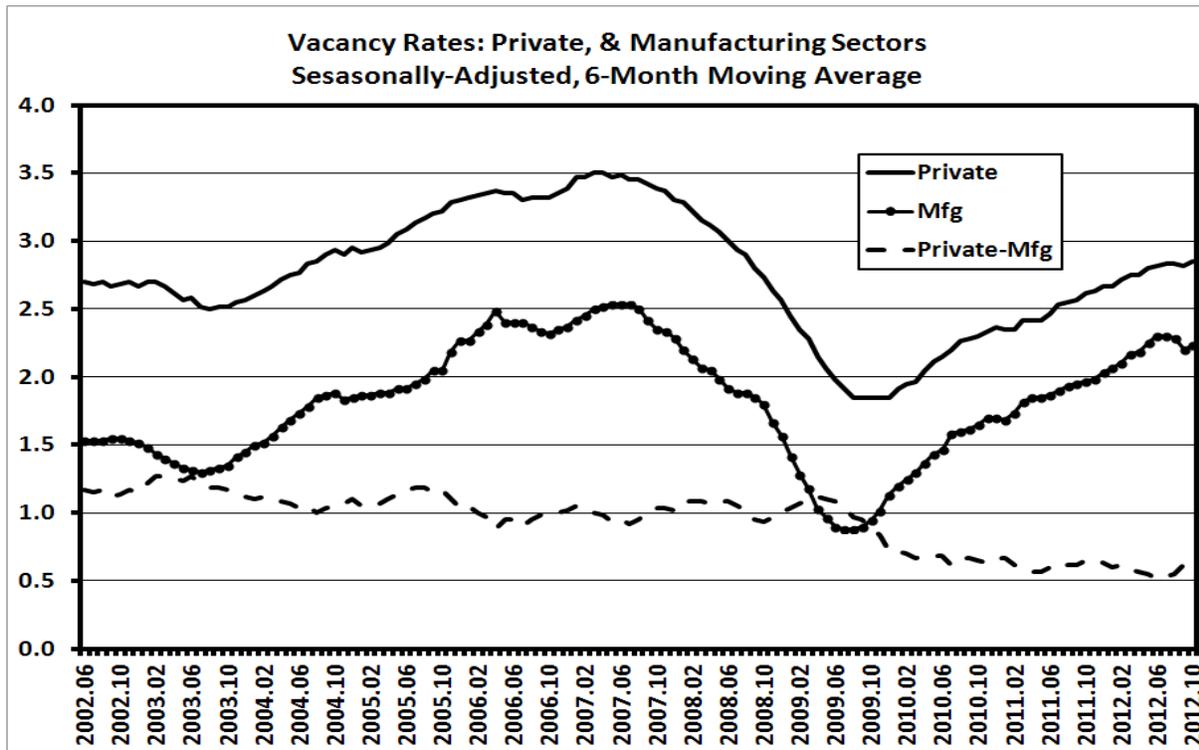
Nonetheless, the current story has shifted. It has begun to be "in-sourcing," i.e., returning manufacturing that was previously outsourced to the world back into the U.S. because of various difficulties in obtaining manufacturing goods abroad (usually from China) for sale domestically. The recent excitement over the announcement by Apple that it would begin to manufacture some products in the U.S. is an example. But wait! Now the story is that we have an in-sourcing problem! We can't find enough workers to produce those goods despite high unemployment!

In this latest tale, the worker skills needed by manufacturers have supposedly drastically changed and that change occurred – apparently and coincidentally – just around the time that the 2008 financial crisis hit. Why exactly then? Don't ask. The story is better if you don't.

But there is a problem for anyone who cares to think through the standard story. Sudden changes in technology and in worker skills needed do not typically characterize broad industry sectors. There are shifts in the job skills needed in the labor market but they occur gradually. So we need to investigate the standard story carefully.

First, did *anything* happen in manufacturing sometime around, or just after, the financial crisis? Second, if there was a shift in regime in that period, might there be an explanation other than a

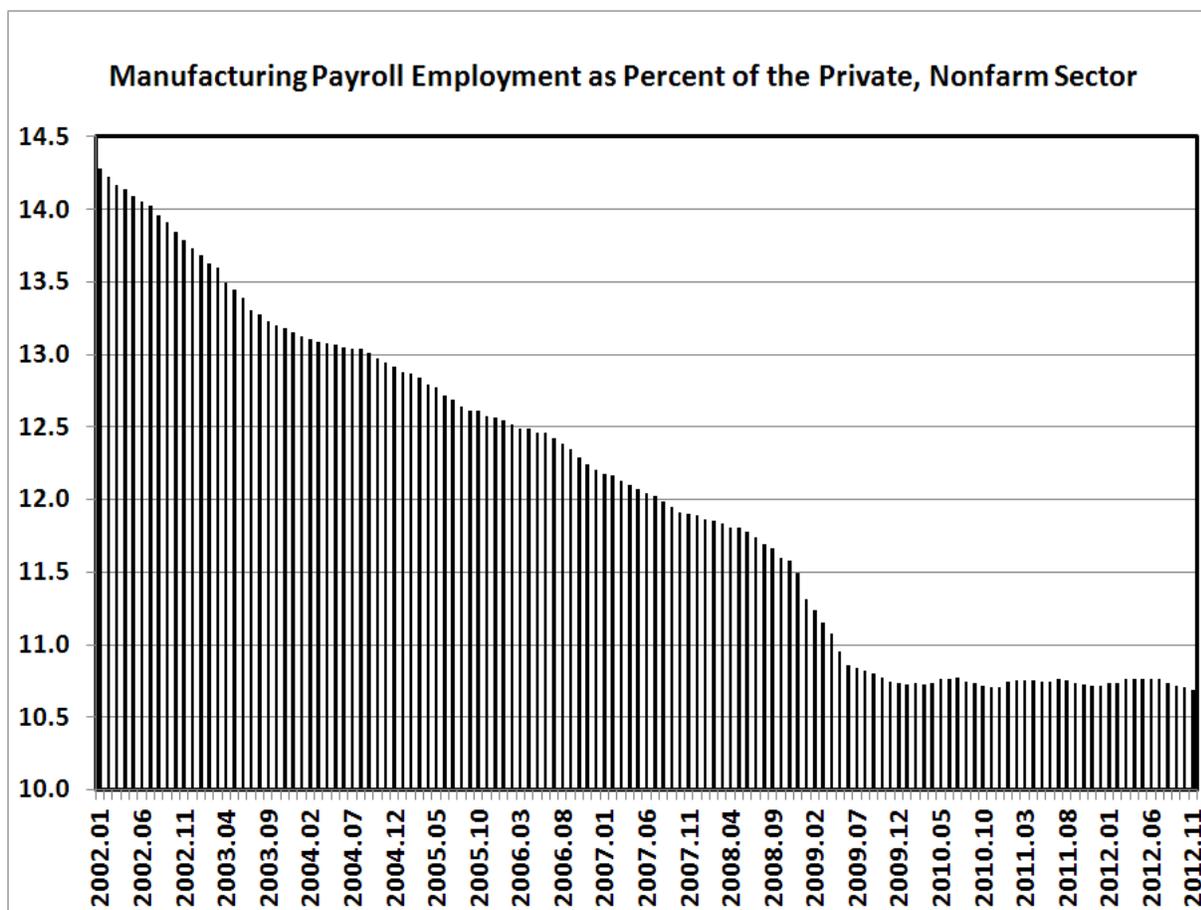
sudden alteration in technology and in worker skills needed? So let's look at what vacancy data from the U.S. Bureau of Labor Statistics tell us.<sup>1</sup>



The chart above shows us the job vacancy rate for the entire private sector and the same rate for just manufacturing. It also shows us the gap between the two rates (private rate minus manufacturing rate) as the dashed line. The private sector rate is always higher than for manufacturing during the period shown. So if there is a labor shortage, it is more prominent in sectors *outside* manufacturing than within manufacturing. That observation does not accord with the standard story.

But, although the gap is always positive, there *is* a shift around early 2009. Before then, the private rate was higher than the manufacturing rate by about one percentage point. After that period, the gap narrows to about 0.6 percentage points. So “something” happened at that point. But the chart doesn't tell us what it was.

<sup>1</sup> Vacancy data come from the Jobs Opening and Labor Turnover Survey (JOLTS), currently available through October 2012. What we are calling the vacancy rate is termed in official releases as the jobs opening rate. The job openings rate is computed by dividing the number of job openings by the sum of employment and job openings and multiplying that quotient by 100.

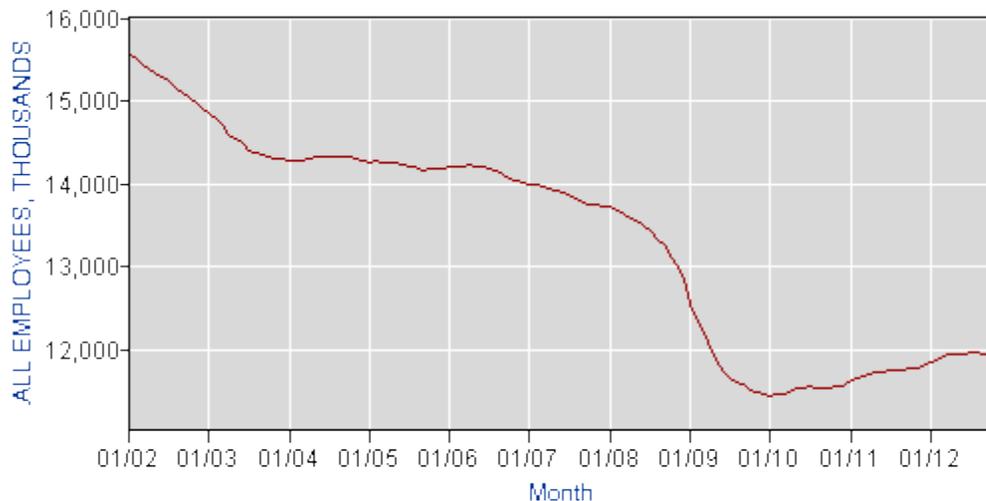


The chart above – like the one on the previous page - also shows “something” happening in 2009. Up to that point, jobs in manufacturing had been declining as a proportion of employment in the nonfarm private sector. In fact, as the chart on the next page demonstrates, they had been declining *absolutely*, even during the mid-2000s when the economy as a whole was in a boom/expansion mode.

Then came the Great Recession in late 2007 and 2008 which hit manufacturing especially hard. By the end of 2009, however, the private economy as a whole went into a jobs recovery (an employment expansion) and manufacturing expanded in employment at roughly the same pace. So the regime shift that occurred was a change from manufacturing jobs being in relative and absolute decline to a manufacturing jobs expansion paralleling the rest of the economy. Although the jobs recovery has not been robust, unlike in the expansion after the recession of the early 2000s, manufacturing after 2009 was sharing in the general recovery.

-----

### Payroll employment in manufacturing



-----

That type of shift meant that manufacturing employers suddenly faced a different kind of labor market. Before 2009, and generally during the 2000s, they were shedding labor so – to the extent that hiring occurred – there were always many recently-shed workers around. After 2009, manufacturing employers became more similar to other employers. That is, they had to recruit workers – albeit in a high unemployment labor market. And they were not used to the change to a need to recruit actively. So it’s not surprising that their first reaction was “where are all the workers?” Other (non-manufacturing) employers, in contrast, were used to active recruiting and went about finding the workers they needed.<sup>2</sup>

Offering premium pay is one way to recruit. But since 2009, manufacturing pay rates have been rising at about the same pace as in the private sector as a whole according to the Employment Cost Index (ECI). They have not shot up as might be expected if aggressive recruitment efforts in manufacturing were being made. On a total compensation basis (with benefits), the manufacturing pace of pay increases during 2010-2012 has been a bit faster than

---

<sup>2</sup> Indeed, other employers, if they faced recruitment challenges, innovated to find workers that matched their needs. See, for example, Caleb Garling, “Tech companies use tech to hire the best,” *San Francisco Chronicle*, December 8, 2012. Available at <http://www.sfgate.com/news/article/Tech-companies-use-tech-to-hire-the-best-4102888.php>.

the private sector as a whole (which may reflect such factors as a pension catch-up for those still with defined-benefit plans and for rising health care premiums, neither of which raises take-home pay). There just isn't anything in the ECI data, however, to suggest that extraordinary efforts are being made to attract manufacturing hires with premium pay.<sup>3</sup>

In short, the great manufacturing skill-based labor shortage seems instead to be the early stage of a process in which manufacturing employers are going to have to (re)learn to do what other employers routinely do: recruit new workers. Active recruitment is something manufacturers didn't have to do very much for almost a decade. In the short term, how to recruit is the missing skill in the manufacturing labor market. As manufacturing employers develop that skill, the stories about a great skill deficiency on the part of workers will fade.

---

<sup>3</sup> For example, on a total compensation basis, the ECI rose 2.0% for the entire private sector during the year ending September 2012. For manufacturing, the figure was 1.6%. On a wage-only basis, private pay went up 1.8% in that period compared with 1.9% in manufacturing. Source: <http://www.bls.gov/web/eci/echistrynaics.pdf>