

Mitchell's Musings 10-29-12: Labor Shortage?

Daniel J.B. Mitchell

We hear from time to time that jobs are going begging because workers don't have the right skills. Somehow, by coincidence, this skill gap just happened to occur at the time we had the Great Recession and financial crisis. Manufacturing, we are told, is especially being held back by a lack of properly-skilled workers available to do the jobs required.¹ It's a great "things-are-not-what-they-seem" story in a period of high unemployment. But it's a dubious proposition.

There are some official data that track such developments, albeit imperfectly, for nonfarm payroll workers. So let's start with some basics. The U.S. Bureau of Labor Statistics (BLS) has surveyed employer-reported vacancies (termed "job openings") on a consistent basis since late 2000. Is the vacancy rate in manufacturing particularly high compared to other sectors? Let's look at the most recent monthly survey.²

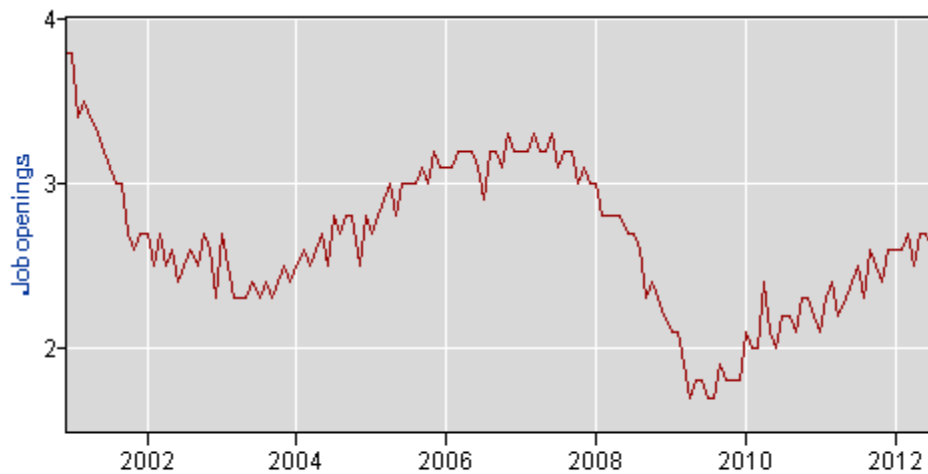
August 2012 Seasonally Adjusted	Job Openings Rate (%)³	Number of Openings (000s)
Total	2.6%	3,561
Total private	2.8	3,192
Construction	1.5	82
Manufacturing	2.1	255
Trade, transportation, utilities	2.3	605
Retail trade	2.3	353
Professional & business services	3.8	708
Education & health services	3.1	657
Health care & social assistance	3.4	596
Leisure & Hospitality	2.9	414
Arts, entertainment, Recreation	2.8	56
Accommodation & food services	3.0	358
Government	1.7	369
State and local govt.	1.6	307

As the table on the prior page indicates, the vacancy rate in manufacturing is *lower* than those of most other sectors. The exceptions are construction, hard hit by the housing/mortgage meltdown, and government, especially state and local, which is declining in employment as a result of budget crises that followed the Great Recession.⁴ Is it really likely that the higher vacancy rates in sectors such as retail trade or accommodations and food service indicate that those sectors had a harder time finding workers with the right skills than manufacturing? Lesson: Anecdotes about spot worker shortages in manufacturing (or elsewhere) do not a macro-story make.

The manufacturing vacancy rate has floated around in the 2.0–2.5% range of late. Thus, even if magically every one of those vacancies could have been filled, manufacturing employment and output would have been only about 2.0-2.5% higher. As the chart below shows, the vacancy rate in manufacturing has not returned to its prior cyclical peak. So it can't be said that, but for some supposed unprecedented labor shortage, manufacturing would be back to its pre-Great Recession level. Manufacturing employment at the time of the August 2012 jobs report was about 16% below where it was when the economy last peaked in 2006-2007.

Furthermore, the chart below also shows that even at the cyclical trough, there were some vacancies in manufacturing; the vacancy rate never fell below 1.3%. So before the Great Recession, there was a “core” of unfillable vacancies of something over 1%. In other words, if we could today magically fill all *feasible* manufacturing vacancies, employment and output in that sector might be 1.0-1.5% higher, not even the 2.0-2.5% of the prior paragraph.

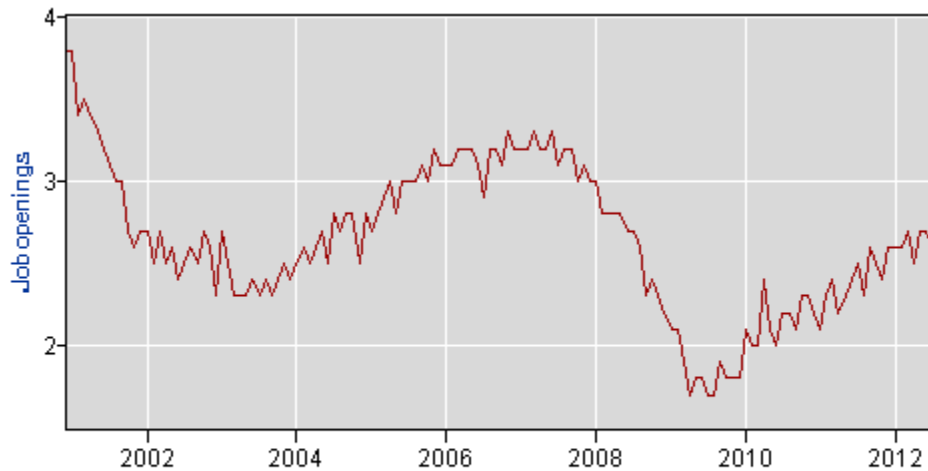
Job Openings Rate: Manufacturing



What about the economy as a whole, not just manufacturing? Is there evidence of some sharp jump in structural labor shortages caused by workers suddenly not having the right skills just when the Great

Recession struck? In fact, the overall picture – which can be seen on the chart on the next page - looks much like the manufacturing story. The total vacancy rate now is about half a percentage point above manufacturing. But its irreducible trough level was also above the manufacturing rate by about the same amount. So if we could have magically matched each feasibly-fillable vacancy with a worker, total employment and output would have been 1.0-1.5% higher economy-wide, i.e., about the same percentage magnitude as we estimated just for manufacturing.

Job Openings Rate: Nonfarm



Economists have another way of looking for signs of a rise in structural mismatch. The so-called Beveridge curve plots the vacancy rate against the unemployment rate. We then look to see if, at a given unemployment rate, when moving from period A to period B, the vacancy rate became higher. In the abstract, that increase would be a sign that greater mismatch between workers and job openings had occurred in the interim.

The problem with that simple interpretation, however, is that the unemployment rate is rarely stagnant. It may be falling or rising, depending on economic conditions at the time. We might well expect that at a given unemployment rate there would be *more* vacancies if the unemployment rate were *falling* than if it were *rising*. In a rising unemployment situation, employers - taken in aggregate - are less likely to be looking to recruit new workers than in a situation of falling unemployment. That is, the outlook employers see for needing more workers depends on the direction of the economy. In recessions, employers are more likely to be thinking about shedding workers than about recruiting. The reverse is true in expansions.

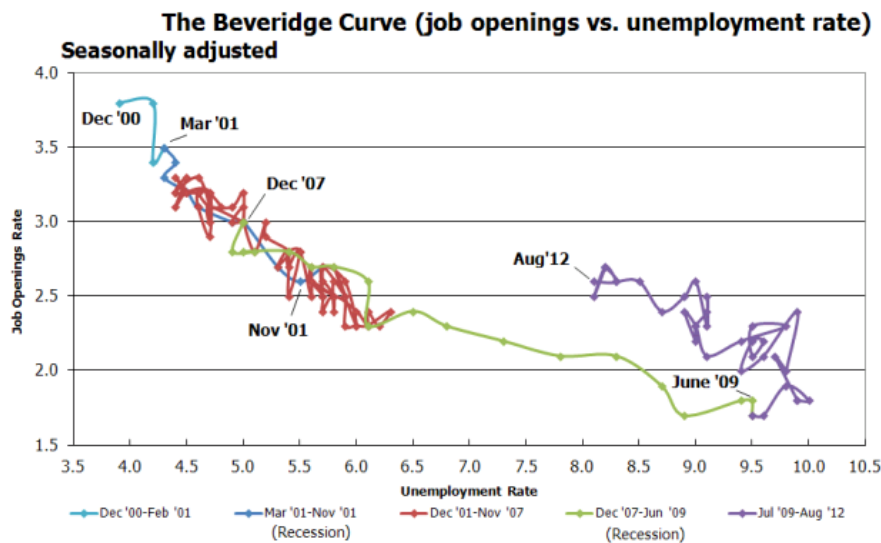
BLS conveniently has plotted out a Beveridge curve which is reproduced on the next page.⁵ The unemployment rate for August 2012 was a little over 8%. As the chart shows, at the last time the unemployment rate was at that level, vacancy rates were lower by about 0.4 percentage points. But, as

noted above, the last time we hit 8%, the unemployment rate was on the way *up* (recession). In August 2012, it was on the way *down* (expansion). So we might well expect more vacancies in the recent period relative to what was occurring as the Great Recession unfolded.

Despite that important proviso, let's take a conservative position and assume that the *entire* 0.4 percentage point gap at around 8% unemployment was due to a rising structural worker/job mismatch. Under that assumption – if we could magically have undone that hypothetical rise in mismatch – the unemployment rate in August would *at most* have been something like 7.7%.⁶ Employment and output economy-wide would have been higher by something like that margin.

Now an unemployment rate a bit below 8% is clearly better than one a bit above 8%. And it would be nice to have 0.4% more jobs and output than we actually do. But none of these imaginary gains would have put us near full employment. At the prior cyclical peak, by way of comparison, unemployment was about 5%, not a bit below 8%. The obvious point by now (I hope) is that our current problem is lack of demand, not a sudden jump in structural mismatch in the labor market.

None of this analysis means that improved job training and retraining opportunities through vocational programs at community colleges and other institutions would be futile. Community colleges in particular have been hurt by the Great Recession and its impact on state and local budgets. If you were a governor or mayor, you might well understand that the overall lack of demand was largely a macro challenge which, for better or worse, needed attention at the national level. So what is left for state and local policy is precisely tasks such as providing vocational education opportunities. The problem with circulation of the *can't-find-any-qualified-workers* stories arises at the national level. At that level, mismatch anecdotes and loose figures on supposedly widespread labor shortages are too-often used to blunt efforts to deal with deficient demand.



Endnotes

¹ For example, http://www.washingtonpost.com/business/economy/us-manufacturing-sees-shortage-of-skilled-factory-workers/2012/02/17/gIQAo0MLOR_story.html. Some stories are more cautious and say the shortage is going to happen but isn't quite here yet, e.g., <http://www.businessweek.com/articles/2012-10-14/there-will-be-a-factory-skills-shortage-dot-just-not-yet>.

² The data on the table are preliminary estimates by BLS.

³ 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.

⁴Source of the table: <http://www.bls.gov/news.release/pdf/jolts.pdf>. August data are preliminary.

⁵ Source: http://www.bls.gov/web/jolts/jlt_labstatgraphs.pdf.

⁶ The August 2012 unemployment rate was 8.1%. Labor market experts reading this musing will know that if you raise employment, the increase in jobs does not come one-for-one from the ranks of the unemployed. Some new workers will be drawn in from outside the labor force. So the drop in the unemployment rate would be less than what is stated in the text. The drop in the unemployment rate would be less than 0.4 percentage points.