

## Structural Unemployment: The Mismatch of Skills, Needs, and Geography

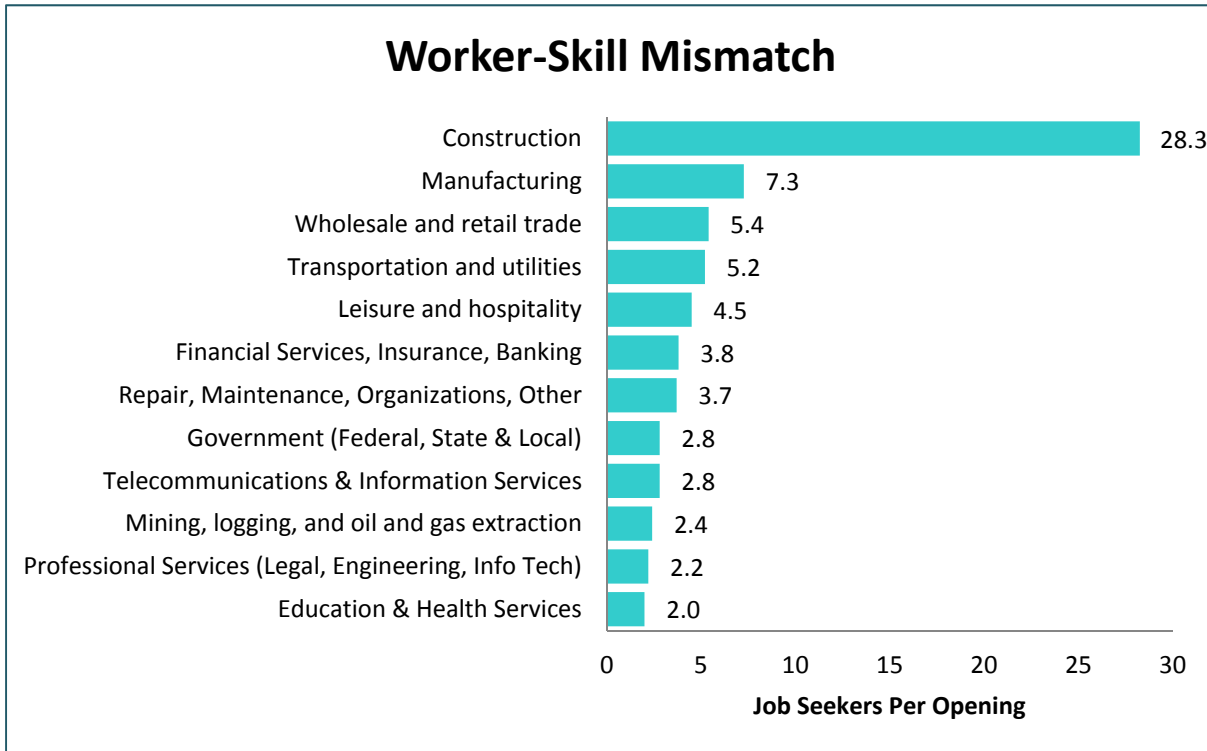
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The recession ended two years ago but the unemployment rate has remained persistently high, currently at 9.1%. There is a fair amount of debate among analysts and economists - even within the Federal Reserve - as to the relative importance of structural unemployment factors that may be contributing to the low rate of job growth. "Structural unemployment" is the type of unemployment that results from a mismatch between the skills of the unemployed and the needs of those companies that are hiring workers. Structural unemployment is entirely different from cyclical unemployment, the latter of which is simply due to the loss of jobs that always occurs during any economic slowdown.

If the current problems with high unemployment are merely cyclical in nature then it's just a matter of time before the economic cycle improves and millions of the unemployed are once again able to find work. Based on this cyclical view of the employment situation, it would be reasonable to believe that the Federal Reserve's policy of low interest rates should help solve the problem by fostering economic growth. However, if the current problems facing the job market are more structural in nature, then the solution isn't so simple. Faced with structural unemployment headwinds, the Federal Reserve's low interest rate policy will do nothing to reduce the unemployment rate. In other words, monetary policy is only useful as a tool to fight cyclical unemployment; the Federal Reserve and its monetary policies have no ability to resolve structural unemployment.

In a speech given last year, the President of the Minneapolis Federal Reserve had the following to say: *"Firms have jobs, but can't find appropriate workers. The workers want to work, but can't find appropriate jobs. There are many possible sources of mismatch—geography, skills, demography—and they are probably all at work. Whatever the source, though, it is hard to see how the Fed can do much to cure this problem."*

The chart on the following page demonstrates the current degree of mismatch between the skills of the unemployed people in the labor force and the needs of the companies who are hiring. Specifically the chart shows the number of job seekers for every one job opening, by sector. In the construction industry, for example, there are approximately 28 unemployed persons for each open job. This is no surprise given that the recent recession was led by a bubble and subsequent collapse in real estate development and construction activity. Manufacturing is the second sector on the list with approximately seven unemployed persons for each job opening. This isn't too surprising either, given the secular decline in manufacturing activity within the United States. At the other end of the spectrum we see relatively strong demand in education and health services, with only two unemployed persons for every available job. The healthcare sector faces a shortage of skilled workers so competition for these jobs is much lower than in other sectors.



However, even with such data in hand it’s not possible to know what proportion of our current problems in the job market are due to structural unemployment forces, versus cyclical considerations. One could easily look at the data and conclude that the problem is merely cyclical in nature. After all, construction and manufacturing activity are highly cyclical industries and would recover more strongly if the economy wasn’t so sluggish. Furthermore, many other sectors that are inherently less cyclical appear to have relatively few unemployed persons for each available job.

Nonetheless, I believe there is a strong case to be made that our persistently high unemployment rate is at least partly due to structural factors. The primary reason that any economy can face structural unemployment is because it is difficult to retrain workers so that their capabilities will match the available employment opportunities. For example, it’s not easy to take a carpenter and “retrain” him to be a nurse. Nor is it easy to take someone who previously worked on an automobile assembly line and retrain her to be an accountant. This is why we refer to these unemployment problems as “structural” in nature. If we could simply take two million construction workers and retrain them to be accountants, nurses, engineers, oil field workers, insurance brokers, or computer programmers this would clearly alleviate some of our structural unemployment problem. Easier said than done, of course.

A second reason that an economy can face structural unemployment stems from geographical differences between unemployed persons and available jobs. With millions of homeowners underwater on their mortgages, there is no question that geographical friction is contributing to structural unemployment as well. For example, an unemployed person may live in California, but may be unable to relocate to Texas in order to take a new job because this person may not be able to sell his or her house and make-up for the negative equity.

Finally, there is a strong case to be made that our entire economy has structurally changed: three decades of unsustainable debt-driven construction and consumer spending is over. Millions of jobs that were attached to those sectors have been lost and will not return anytime soon. Even if we return to one million new home constructions per year, this would be half of the 2006 peak level of construction activity. Our economy is simply not returning to the extraordinary levels of debt-financed consumption that was a hallmark of American consumerism in the previous decades.

Furthermore, we continue to face powerful secular trends in certain sectors, such as manufacturing and healthcare. Labor-intensive manufacturing has largely disappeared from the U.S. economy (causing a permanent loss of jobs) while the aging population continues to drive increased consumption of healthcare services. At the intersection of these trends and economic developments is where we find evidence of structural unemployment: millions of construction and manufacturing jobs that have been lost, coupled with shortages of certain scientists, engineers and healthcare practitioners, but with no realistic way to retrain the unemployed and resolve the mismatch between skills and needs.

There are a myriad of investment implications that stem from having such persistent imbalances in the economy, but there are also a couple practical conclusions that almost anyone can take away from the data shown above, particularly those readers who have children. Although the chart above is ranked from top to bottom in terms of excess labor by economic sector (highest excess labor in construction, lowest in healthcare) readers might notice another interesting pattern in the data: excess labor in each sector is inversely related to the level of education necessary to get a job in each sector. Specifically, those sectors at the top of the chart (construction, manufacturing & retail) generally don't require advanced education. Those in the middle of the chart (Hospitality, Insurance, Banking, and Government) typically require some education beyond high school, perhaps a trade school certificate, license, or college degree. Finally, at the bottom of the chart you see the sectors that require the highest educational achievements of all in engineering, science, information technology and healthcare. It is not a coincidence that in the current economic environment these highly educated and trained workers are faring better than those workers in sectors that require less educational achievement.

So, for those of you with children, encourage them to pursue higher education and to study something relevant. Faced with an increasingly globalized labor force (i.e. a more competitive labor force),

education is a clear benefit and is one of the biggest economic advantages that any individual can possess. Engineers, scientists, nurses, dentists, and doctors are likely to find themselves with relatively good job prospects in the future, just as they have today. Workers in these fields will generally be less vulnerable to the adverse effects of change within our economy, regardless of whether our current unemployment problems are cyclical or structural in nature.