

Mitchell's Musing 1-9-12: Job Search and the Internet

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Given the current high unemployment rate, it is not surprising that there is a market for job search hints. It is perfectly rational for job searchers to seek advice to put themselves at the head of the queue. But note that what we have is a classic divide between micro and macro. If there are 100 job seekers and 90 jobs, each of the job seekers should try their best to do whatever makes them more attractive to potential employers. But at the end of the day, ten will be left out in the cold. The only question is who will be in the unlucky ten. So in reading the rest of this musing, please keep in mind that job search hints, however fruitful they may be for individuals, are not the answer to the macro problem.

At the margin, however, the overall unemployment rate could be reduced a bit if we could improve the job matching process. That is, at any point in time, there are job seekers looking for work and employers seeking workers. But it takes time for both sides of the labor market to get together. Information is not perfect, nor is it costless. Putting the eventual matches together faster would reduce the stock of unemployed persons at any point in time.

Malcolm Cohen recently sent me a paper he and his daughter, Laura Steiner, are presenting at one of the ASSA sessions in Chicago. (If you are interested in the paper, get in touch with him at info@employmentresearch.com.) The paper deals with damages in legal cases caused by loss of employment and it notes that plaintiffs in such cases have an obligation to mitigate damages by seeking work. So the issue arises as to how long a plaintiff might need to look for new work, an issue which depends on the occupation involved and other factors.

In the course of discussing this issue, the paper reproduces some U.S. Bureau of Labor Statistics (BLS) data on the duration of unemployment. BLS monthly data refer to "interrupted" spells of unemployment. That is, those currently unemployed are asked how long they have been unemployed. We don't know how much longer they will remain unemployed, i.e., how long their "completed" spells will turn out to be.

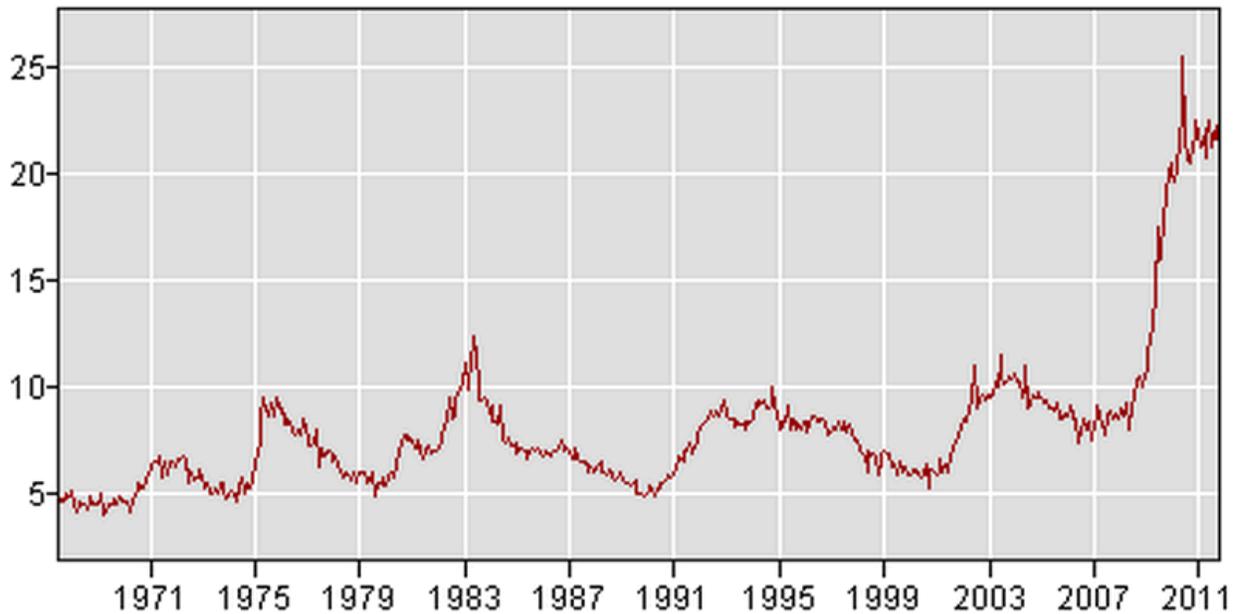
Over the years, various attempts have been made to estimate completed spells but we don't have regular data collection such spells. Note that some people search for new jobs while employed so their durations of search are not going to be picked up by any survey of unemployed job seekers. Note also that some spells of unemployment end by the individual dropping out of the labor force. For example, some job seekers may give up and return to school or training to improve their credentials.

For all these reasons, the job search process is under-researched and perhaps not well defined. But in some back and forth emails, Malcolm Cohen and I discussed whether the Internet might have reduced the duration of job search. If part of the difficulty of search relates to information, it would seem at first glance that the Internet – by providing much more information and reducing the costs of information –

would reduce duration. Presumably, sometime after around 1990 – other things equal – search duration should have declined if the Internet was having an impact.¹

Of course, “other things equal” is a major complication in determining what may have happened. Suppose we use the Cohen-Steiner/BLS indicator of interrupted spells as at least somewhat of a proxy for search (keeping all of the complications noted above in mind). One thing that is evident from the chart below (pulled from the BLS database service) is that a big “other” factor is the business cycle.

(Seas) Median Weeks Unemployed
Unemployed
Number of weeks
16 years and over



Thus, with the advent Great Recession, the median duration of interrupted unemployment spells has gone way up.²

¹ The first easy-to-use web browsers became available in the mid-1990s.

² BLS also provides data on average spells. However, there is a “top-coding” problem because long spells are left open ended. Moreover, BLS recently changed its top-coding procedure. For details, see <http://www.bls.gov/cps/duration.htm>.

A crude approach to adjusting the data is to look just at the peaks of the business cycle. On the chart on the previous page, they would be 1969, 1973, 1979, 1990, 2000, and 2007.³ Up through 1990, the peak median interrupted spell was about five weeks. If the Internet was having a major impact in dropping duration, we might expect a decline in 2000 and 2006 relative to 1990. But the trend at the peaks goes the other way; duration goes up, not down. A possible explanation of this counterintuitive result could be that even in 2000, not enough job seekers used the Internet to counteract other unidentified forces.⁴ But presumably, by 2006, we might expect to see some effect.

Of course, the idea that more and cheaper information should inevitably make the labor market more efficient may be incorrect. My colleague Robert Jensen did find that in India, the spread of cell phones (another form of electronic communication) made the market for fish more efficient in the sense that price differentials could be quickly known – allowing supply to flow toward areas of highest demand.⁵ And much the same effect seemed to occur in commodity markets in the U.S. as the telegraph spread in the mid-19th century. (<http://www.youtube.com/watch?v=DmolT6pl8el>) So why shouldn't the same be true in the labor market of today?

One answer might be that labor isn't a homogeneous commodity where all you need to know is a market price. Individuals and their qualifications differ. Employers may have special needs. That's why we have CVs, job interviews, job tests, etc. In a sense, looking at this issue from the demand side of the labor market, the Internet could be providing an information overload. It is essentially costless for job seekers to send CVs to many employers, even long-shot employers that probably are not interested. Employers then have to sift through a downpour of applicants that comes raining in, a task that could make the job matching process more costly and slower. The story might be something similar to anecdotal tales about the Internet making employees *less* productive by constantly interrupting them with emails and non-work-related activities.

Malcolm Cohen did locate a recent research paper that suggests that the Internet has now (at least as of 2008-2009) speeded up successful job search for those workers who used the Internet as opposed to others.⁶ That is not quite the same question as to whether overall job search duration – controlling for

³ There was a double-dip recession after 1979, so the technical next peak is omitted from the list in the text.

⁴ Fifteen percent of unemployed job seekers were found to have used the Internet in 1998. See Peter Kuhn and Mikal Skuteru, "Job search methods: Internet versus traditional," *Monthly Labor Review*, October 2000, pp. 3-11. Available at <http://bls.gov/opub/mlr/2000/10/art1full.pdf>. For the entire labor force in 2003 (which would include employed job seekers as well as unemployed – *and those who were not seeking jobs*), 11.5% indicated use of the Internet for job search between January and October of that year. Not surprisingly, younger people were more likely to be users than older workers. See <http://www.bls.gov/news.release/ciuaw.t05.htm>.

⁵ Robert Jensen, "The Digital Provide: Information (Technology), Market Performance and Welfare in the South Indian Fisheries Sector," *Quarterly Journal of Economics*, (2007), 122(3), pp. 879-924.

⁶ Peter Kuhn and Hani Mansou, "Is Internet Job Search Still Ineffective?," IZA Discussion Paper 595, September 2011. Available at <http://ftp.iza.org/dp5955.pdf>.

other factors – has gone down. It could be that Internet users are displacing less tech-savvy job seekers in the queue. As in our starting numerical illustration with 90 jobs and 100 job seekers, the Internet users may be keeping themselves out of the unlucky ten. But an unlucky ten of others nonetheless remains.

Even the seeming advantage of Internet users could vanish in the future. As noted, employers – if they are deluged with CVs – are forced to sift through them. Employers may come to be favorably impressed with job applicants who use other methods of approach. A recent “Marketplace” public radio story profiled a job applicant who personally delivered her CV to potential employers. She made such a favorable impression by doing so that she was hired by an employer who was not, at the time, looking for a new employee. He took her on because he was impressed by someone who used what used to be the norm for job seekers, i.e., “pounding the pavement.” In today’s labor market, the old approach was seen to be a clever innovation! (Read or listen to the story at [http://www.marketplace.org/topics/economy/whats-behind-job-hunt-success.](http://www.marketplace.org/topics/economy/whats-behind-job-hunt-success))

In any event, the effect of the Internet on the duration of job search is a worthy topic for future ongoing research. The Internet impact, positive or negative, could turn out to be fluid over time.