

Did Workers Get Worse at Finding Jobs?

BY RENEE HALTOM

Economists view labor markets as one big matchmaking process: job seekers being matched with jobs. The unemployment rate is the outcome of how well this matching process works. A selling point of the matching framework is that it acknowledges that workers are not identical; they have unique skills, abilities, and preferences. This can help explain a number of labor market phenomena, such as why the overall labor market can be very weak while certain types of workers are doing well, or why there can be many job openings with many still unemployed.

This last issue became a focus after the Great Recession, when both openings and unemployment rose dramatically. This could suggest that high unemployment during the recession resulted not only from the downturn, but also from a decline in “matching efficiency” — that is, that the economy had gotten worse at connecting workers with jobs. But to know the extent to which falling matching efficiency caused the elevated unemployment rates, one would need a detailed model of the factors that influence matches.

A recent article by Robert E. Hall of Stanford University and Sam Schulhofer-Wohl of the Chicago Fed has offered just that. The standard matching model implicitly assumes that the unemployed are the only people looking for work. However, people often transition directly from one job to the next, and individuals whom economists consider to be out of the labor force, such as discouraged workers who would like a job but have stopped actively looking, often find jobs as well. The latter group is large and, predictably, tends to find jobs at slower rates, so ignoring them could make the labor market seem rosier than it is. The authors measured matching efficiency across 16 categories of job seekers: one for current workers, two for those out of the labor force, and a full 13 categories of unemployed based on their durations of and reasons for being jobless (down to specifics such as “on furlough for months,” “lost permanent job months ago,” and “temp job recently ended”).

Another innovation of the researchers is looking at job-finding success over a long period of time. People out of work may take jobs more readily even if the position is brief, which could overstate the labor market’s true matching success. They measured the probability of employment both near term (between one and three months) and long term (after a full 15 months). For each group and timespan, they held personal characteristics constant.

They estimated job-finding probabilities for each of the 16 groups and compared those probabilities in 2003 and 2013, years when the business cycle was at similar points. The likelihood that a given group of job seekers found a new job between one and three months was lower in most cases. The employment probability for the 12- to 15-month period showed no obvious trend across the groups and was not much higher, which the researchers interpreted as showing the importance of relatively short-duration jobs for certain types of job seekers. Finally, the researchers adjusted for each group’s sensitivity to labor market tightness — since tightness should, in principle, boost job finding — to produce a measure of matching efficiency for each category of job finder.

The takeaway from this effort is clear: Matching efficiency for most categories of job finders steadily declined between 2001 and 2013 — but with no special decline from 2007 to 2010 (2010 being roughly when unemployment

peaked). In other words, it does not appear that a decline in matching efficiency is the dominant explanation for the large spike in unemployment during the Great Recession.

But aggregate job finding rates did fall sharply during the recession — so what explains the apparent contradiction? The key is the heterogeneity of workers. Assuming that all job finders locate jobs at the same rate makes matching efficiency look as much as 50 percent worse than it is, the authors calculated. Once one accounts for different job-finding rates among job finders, it becomes clear that it’s not that the labor market got particularly worse at matching, but instead that groups with low job-finding rates simply grew in relative size.

These findings are consistent with research by Richmond Fed economist Andreas Hornstein and San Francisco Fed economist Marianna Kudlyak (formerly of the Richmond Fed). In a 2016 study, they found that in a matching framework that differentiates among a broader array of job seekers and factors in their respective likelihoods of finding work, aggregate matching efficiency steadily declined after 2000. (Using a similar idea, with Fabian Lange of McGill University they developed the “Non-Employment Index” as an alternative to the unemployment rate. An additional analysis allows variations in search *effort* over time across groups.)

The conclusion seems unanimous: Accounting for differences among workers can better help explain episodes of higher unemployment. **EF**

“Measuring Job-Finding Rates and Matching Efficiency with Heterogeneous Jobseekers.” Robert E. Hall and Sam Schulhofer-Wohl. *American Economic Journal: Macroeconomics*, January 2018, vol. 10, no. 1, pp. 1-32.