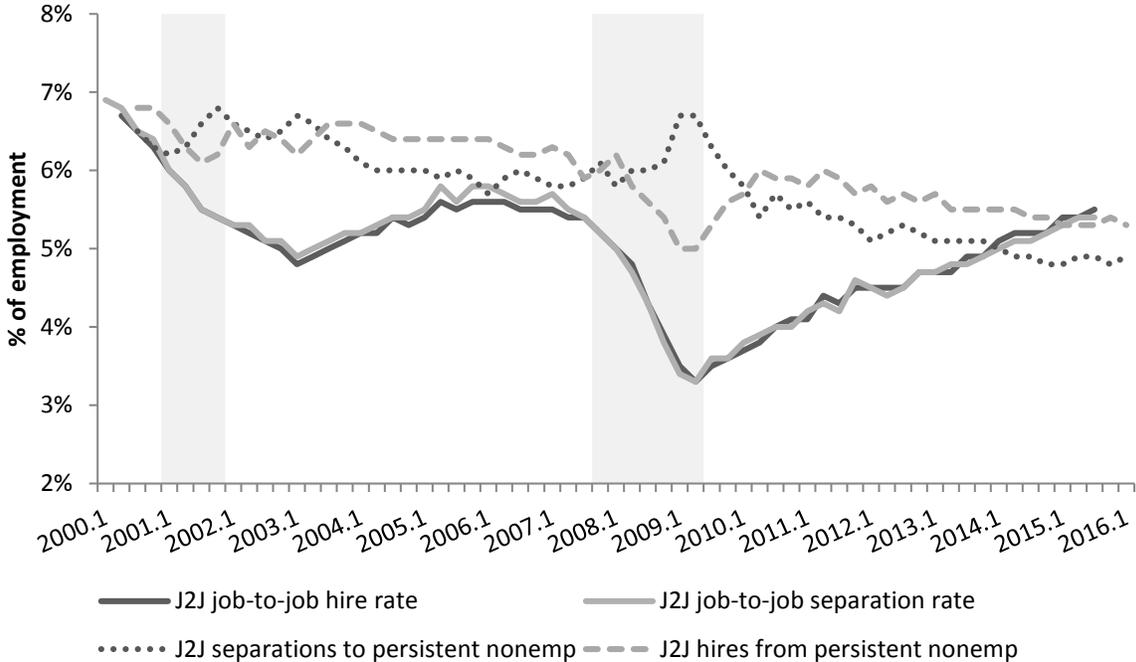


Job-to-Job Flows: New Statistics on Worker Flows across Jobs

Overview

Employment statistics predominately focus on job growth, wages and unemployment. While these headline statistics are undoubtedly important, such figures provide only a partial portrait of the U.S. labor market. Expanding firms are not the only employers hiring workers; there is an enormous churn of workers across firms, with even shrinking employers having vacancies to fill. Firms fill vacancies not only from the pool of unemployed, but also by luring workers away from other firms. At the start of the last decade, approximately one-third to one-half of all hiring consisted of workers moving from one employer to another. These job-to-job moves, concentrated among younger workers, appear to be a primary means of improving job matches between firms and workers, with a typical job-to-job move resulting in an 8% increase in earnings (Hyatt and McEntarfer, 2012; Fallick, Haltiwanger, and McEntarfer, 2012). Such job-to-job moves also increase in economic booms and decline sharply in recessions - in the Great Recession, approximately two-thirds of the fall in hiring came from a decline in hiring workers already employed (see Figure 1).

Figure 1: Hires and Separations Due to Job Change, National Job-to-Job Flows Data



New Job-to-Job Flows (J2J) statistics released by U.S. Census Bureau illuminate this enormous churn of workers across firms. Using longitudinal administrative data on worker job histories, Job-to-Job Flows traces worker movements across industries, geographic labor markets, and to and from employment. These data can be used to decompose employment declines in a particular industry into worker movements into other industries and worker flows into persistent spells of nonemployment. Worker separations to persistent nonemployment spells by worker demographics and origin industry are also available.

Shown in Figure 1 is the national J2J rates series, which decomposes trends in hires and separations since 2000 into flows from one job to another and flows to and from nonemployment. As can be seen in the figure, there has been a marked decline in the rate of job change in the U.S. since 2000, concentrated in the two recessions. The fall in the rate of job change during the Great Recession was especially steep, and the rate of job change only recovered to 2006 levels in 2016.

Specifically, J2J statistics provide:

- Rates of job change, by worker age, education, race & ethnicity
- Worker separations to persistent nonemployment, by demographics
- Hires from persistent nonemployment, by demographics
- Origin-destination data for workers changing jobs

Brief Overview of the Main J2J Indicators

This section covers the key variables of interest for new users of the Job-to-Job Flows data. Technical definitions and descriptions of the full-set of variables are available in the documentation and schema also available on the J2J release site.

Hires

Main job hires (*MHire*): Employees with the firm on the last day of the quarter hired sometime during the quarter. The new job must be primary source of income for worker.

Main job hires are the sum of hires from job-to-job transitions (*J2JHire*), hires from nonemployment (*NEPersist*), and an unpublished residual of hires where previous main jobs become secondary jobs. These are defined below:

- **Job-to-job hires** (*J2JHire*): Hires that are part of a job-to-job move with little-to-no nonemployment between jobs. Job-to-job hires are the sum of *EEHire* and *AQHire*, defined below:
 - **Within-quarter job-to-job hires** (*EEHire*): Main job hires who separated from their former main job during the same quarter they started the new job.
 - **Adjacent-quarter job-to-job hires** (*AQHire*): Main job hires who separated from their former main job in the quarter prior to starting the new job.

- **Hires from persistent nonemployment** (*NEPersist*): Main job hires not employed on the first day of this quarter or the first day of the previous quarter.

Separations

Main job separations (*MSep*): Employees with the firm on the first day of the quarter who separate sometime during the quarter. The old job must be the primary source of income for the worker.

Main job separations are the sum of separations due to job-to-job transitions (*J2JSep*), separations to nonemployment (*ENPersist*), and an unpublished residual of separations where previous secondary jobs become main jobs. These are defined below:

- **Job-to-job separations** (*J2JSep*): Separations that are part of a job-to-job move with little-to-no observed nonemployment between jobs. Job-to-job hires are the sum of *EESep* and *AQSep*, defined below.
 - **Within-quarter job-to-job separations** (*EESep*): Main job separations who start a new main job during the same quarter they leave the old main job.¹
 - **Adjacent-quarter job-to-job separations** (*AQSep*): Main job separations who start a new main job in the quarter following their job separation.
- **Separations to persistent nonemployment** (*ENPersist*): Main job separations who were not employed on the last day of this quarter or the last day of the subsequent quarter.

Employment

Employment, start of quarter (*MainB*): Employment in primary jobs, first day of the quarter.

Employment, end of quarter (*MainE*): Employment in primary jobs, last day of the quarter.

Rates

The denominator for rates is the average employment over the quarter, or the average of main jobs held at the start and end of the quarter (*MainB* and *MainE*). Rates corresponding to the variables listed above have the same name but end with an *R* (for example, the rate corresponding to job-to-job hires, *J2JHire*, is the job-to-job hiring rate, *J2JHireR*).

Structure of the J2J Data

The [J2J data](#) contain two distinct sets of files. The main files tabulate hires and separations resulting from job change as well as hires and separations to nonemployment. These data are provided at the national level, by firm size and age, by worker education, sex, age, and race/ethnicity. The second set of

¹ At the national level, *EESep* and *EEHire* are equivalent. However, within a particular industry or sub-national geographic area, the wedge between job-to-job hires and separations represents the net inflow (or outflow) of workers from the industry or state due to workers changing jobs.

files contain national and state level, by industry origin-destination job-to-job data for the subset of hires where the worker separated from their previous main job either in that same quarter or the previous quarter (job transitions involving fairly long spells of nonemployment between jobs are not included). These origin-destination data are provided at the origin-state/destination-state, origin-state-industry/destination-state-industry, origin-state/destination-state by worker demographics, origin-state-firm-size/destination-state-firm-size, origin-state-firm-age/destination-state-firm-age. Later releases of the J2J data may include more detailed tabulations and cross-tabulations than those provided in the beta release.

It is recommended that you use seasonally adjusted data when available, as the hires and separations data is highly seasonal.

A longer document describing the Job-to-Job Flows data and the methodology used to derive the statistics is [Job-to-Job Flows: New Statistics on Worker Reallocation and Job Turnover](#), available on the LEHD website. A [schema](#) is also provided on the website, which provides a full list of variable names, flags, and value labels for the tabulation levels.

Availability of the J2J Data

The available quarters of J2J data vary by geography. The table below provides the starting quarter that data is available for each region, and the ending quarter if the state is not in active production.

Region	Initial Quarter	Latest Quarter
United States	2000Q2	Latest available
Alabama	2001Q2	Latest available
Alaska	2000Q2	Latest available
Arkansas	2002Q4	Latest available
Arizona	2004Q2	Latest available
California	2000Q2	Latest available
Colorado	2001Q2	Latest available
Connecticut	2010Q2	Latest available
Delaware	2000Q2	Latest available
District of Columbia	2005Q3	Latest available
Florida	2000Q2	Latest available
Georgia	2001Q2	Latest available
Hawaii	2000Q2	Latest available
Idaho	2000Q2	2015Q3
Illinois	2000Q2	Latest available
Indiana	2001Q2	Latest available
Iowa	2000Q2	Latest available

Region	Initial Quarter	Latest Quarter
Kansas	2000Q2	Latest available
Kentucky	2001Q2	Latest available
Louisiana	2002Q4	Latest available
Maine	2004Q2	Latest available
Maryland	2005Q3	Latest available
Massachusetts	2010Q2	Latest available
Michigan	2000Q4	Latest available
Minnesota	2000Q2	Latest available
Mississippi	2003Q4	Latest available
Missouri	2000Q2	Latest available
Montana	2001Q2	2015Q3
Nebraska	2000Q2	Latest available
Nevada	2001Q2	Latest available
New Hampshire	2010Q2	Latest available
New Jersey	2000Q2	Latest available
New Mexico	2004Q2	Latest available
New York	2000Q2	Latest available
North Carolina	2000Q2	Latest available
North Dakota	2001Q2	2015Q3
Ohio	2001Q2	Latest available
Oklahoma	2000Q2	Latest available
Oregon	2000Q2	Latest available
Pennsylvania	2000Q2	Latest available
Rhode Island	2010Q2	Latest available
South Carolina	2000Q2	Latest available
South Dakota	2000Q2	Latest available
Tennessee	2002Q4	Latest available
Texas	2000Q2	Latest available
Utah	2001Q2	Latest available
Vermont	2010Q2	Latest available
Virginia	2005Q3	Latest available
Washington	2000Q2	Latest available
West Virginia	2001Q2	Latest available
Wisconsin	2000Q2	Latest available
Wyoming	2001Q2	2014Q3

Beta Release

This is a beta release from the U.S. Census Bureau of new national statistics on worker reallocation. We welcome your feedback and comments during this beta release to help us further develop the product, the documentation, and accompanying data applications.

References

Fallick, Bruce, John Haltiwanger, and Erika McEntarfer “Job-to-Job Flows and the Consequences of Job Separations.” FEDS Working Paper 2012-73. Available at

<http://www.federalreserve.gov/pubs/feds/2012/201273/201273pap.pdf>  (463 KB).

Hyatt, Henry and Erika McEntarfer. 2012. “Job-to-Job Flows in the Great Recession.” American Economic Review, 102(3): 580-83.

Links

LEHD Website: <https://lehd.ces.census.gov/>

J2J Data: https://lehd.ces.census.gov/data/j2j_beta.html

J2J Explorer: <https://j2jexplorer.ces.census.gov/index.html>

Send feedback and comments to CES.J2J.Feedback@census.gov