Job-to-Job Flows

April 7, 2022

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Longitudinal Employer-Household Dynamics
US Census Bureau
Agenda

1. Our Data Product: Job-to-Job (J2J) Flows
2. Our Application: J2J Explorer
3. Hands-on Exercises
4. Additional Resources
5. Q&A
1. Our Data Product: Job-to-Job (J2J) Flows
Overview

- Job-to-Job Flows (J2J) are national statistics on job mobility in the U.S.
- With these data, users can learn more about workers entering and exiting nonemployment as well as those moving from one job to another.
- It fills an important gap that other available data sources do not currently cover.

Note: Shaded regions indicate NBER recession quarters. All data are seasonally adjusted. These J2J tabulations do not include planned adjustments to the J2J series to account for partially-missing geography early in the time series.
Overview

• Better understand worker turnover
  • Are separations mostly coming from workers changing jobs or workers transitioning into nonemployment?
  • When workers change jobs, are they switching to new industries or moving to new locations?

• See the impact of job ladders
  • Are job moves leading to workers moving ‘up the job ladder’ to better paying industries and larger/older employers? Are workers earning more afterwards?

• Look at economic migration across labor markets
  • Which labor markets are losing workers and to where? What industries in a labor market are importing workers and what do these workers look like?
Important Concepts

- Workers can hold more than one job
- The highest paying job is identified as the main job
- If a worker does not have a main job, that worker is defined as non-employed
- To identify worker movements, we compare employment status and main job between the beginning and end of a quarter
### Important Concepts

<table>
<thead>
<tr>
<th>Employment</th>
<th>Beginning of the quarter</th>
<th>End of the quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job Stayer</strong> <em>(JobStayS)</em></td>
<td>Main Job at Firm A</td>
<td>Main Job at Firm A</td>
</tr>
<tr>
<td><strong>Job Changer</strong> <em>(J2J)</em></td>
<td>Main Job at Firm A</td>
<td>Main Job at Firm B</td>
</tr>
<tr>
<td><strong>Flow from Nonemployment</strong> <em>(NEPersist)</em></td>
<td>None</td>
<td>Main Job at Firm B</td>
</tr>
<tr>
<td><strong>Flow to Nonemployment</strong> <em>(ENPersist)</em></td>
<td>Main Job at Firm A</td>
<td>None</td>
</tr>
</tbody>
</table>
## Important Concepts

<table>
<thead>
<tr>
<th></th>
<th>Earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Beginning of the quarter</strong></td>
</tr>
<tr>
<td>Job Stayer (JobStayS)</td>
<td>Main Job at Firm A (JobStaySEarn_Orig)</td>
</tr>
<tr>
<td>Job Changer (J2J)</td>
<td>Main Job at Firm A (J2JSEarn_Orig)</td>
</tr>
<tr>
<td>Flow from Nonemployment (NEPersist)</td>
<td>None</td>
</tr>
<tr>
<td>Flow to Nonemployment (ENPersist)</td>
<td>Main Job at Firm A (ENSepSEarn_Orig)</td>
</tr>
</tbody>
</table>

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## Data Structure

<table>
<thead>
<tr>
<th>Core measures (J2J)</th>
<th>Rates measures (J2JR)</th>
<th>Origin-destination measures (J2JOD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hires and separations resulting from job change</td>
<td>• Rates calculated by dividing J2J measures by the number of main jobs</td>
<td>• Subset of hires where the worker separated from their previous main job in the same or previous quarter</td>
</tr>
<tr>
<td>• Hires from and separations to nonemployment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Data Structure

#### J2J & J2JR

<table>
<thead>
<tr>
<th>Category</th>
<th>Nationally and by state</th>
<th>By MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>All firms and workers</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>By firm characteristics</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>By worker demographics</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>By industry by firm characteristics</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>By industry by worker demographics</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

J2J and J2JR tabulations are also available by additional interactions of the characteristics listed above. For a full list of interactions, see section 6.19 in the schema.
### Data Structure

#### J2JOD

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Nationally and by state</th>
<th>By MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>All firms and workers</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>By origin firm characteristics by destination firm characteristics</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>By worker demographics</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>By origin industry by destination industry by origin firm age/size by destination firm age/size</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>By origin industry by destination industry by worker demographics</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

J2JOD tabulations are also available by additional interactions of the characteristics listed above. For a full list of interactions, see section 6.19 in the schema.
**Data Availability**

- Released quarterly
- J2J and J2JR
  - *National data*: 2000Q2 to the latest available quarter (currently, 2021Q1)
  - *State data*: Varies; see table for the latest available quarter
  - *MSA data*: See the METRO metadata file on the LEHD website
- J2JOD
  - *National and state data*: Availability may be outside of the ranges shown in the table
  - *MSA data*: See the METRO metadata file on the LEHD website

<table>
<thead>
<tr>
<th>Region</th>
<th>Latest Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>Latest Available</td>
</tr>
<tr>
<td><em>Most States + DC</em></td>
<td>Latest Available</td>
</tr>
<tr>
<td>Alaska</td>
<td>2016Q1</td>
</tr>
<tr>
<td>Arkansas</td>
<td>2018Q1</td>
</tr>
<tr>
<td>Colorado</td>
<td>2020Q2</td>
</tr>
<tr>
<td>Kansas</td>
<td>2020Q3</td>
</tr>
<tr>
<td>Louisiana</td>
<td>2020Q3</td>
</tr>
<tr>
<td>Mississippi</td>
<td>2018Q3</td>
</tr>
<tr>
<td>Missouri</td>
<td>2020Q3</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>2020Q3</td>
</tr>
<tr>
<td>Tennessee</td>
<td>2018Q1</td>
</tr>
</tbody>
</table>
How to Access J2J Data

- Explore the data, answer questions, or get visualizations
- Bulk data for use in analysis process/software
- Live queries for building web applications

- J2J Explorer
- Raw Data Download
- Future Development
How to Access J2J Data

Longitudinal Employer-Household Dynamics

Applications
- J2J Explorer
- LED Extraction Tool
- OnTheMap
- OnTheMap for Emergency Management
- LODES Explorer
- QWI Explorer
- VEO Explorer

Useful Links
- Center for Economic Studies
- J2J Data
- LODES Data
- PSEOE Data
- QWI Data
- VEO Data
- LED Workshop

Veteran Outcomes Experimental Data Released
The U.S. Census Bureau announces the release of experimental Veteran Employment Outcomes (VEO) statistics. These tabulations show earnings and employment outcomes for U.S. Army veterans one, five, and 10 years after discharge, by military occupation, rank, demographics, industry and geography of employment. VEO data can be accessed via VEO Explorer, an interactive data tool.

View VEO Data
Start VEO Explorer

What's New?
- 03/24/22: Meeting Links for the 2022 LED Partnership Annual Workshop, April 5-7, 2022
2. Our Application: J2J Explorer
J2J Explorer

- 6 visualization modules with a flexible dashboard interface
- 67 employment and earnings indicators (11 recommended indicators shown by default)
- Ranking and normalization functionalities in addition to detailed filter options
J2J Explorer

- Analyze/report by origin and destination geographies at the national, state, and MSA level
- Analyze/report by origin and destination firm characteristics (i.e. industry, firm age, and firm size)
- Analyze/report by worker demographics: age, earnings, race, ethnicity, educational attainment, and sex
- Ability to cross worker demographics with firm characteristics
J2J Explorer

- Unique, shareable links
- Export reports to Excel or CSV
- Data updated quarterly

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3. Hands-on Exercises
Exercise 1

Imagine you’re working on labor & workforce development issues.

You want to see where workers are going when they leave jobs in a particular MSA.

To do this, let’s start with the Guided Entry.
Exercise 1

1. Start Here
   • Change to Separations from
   • Select Cincinnati, OH-KY-IN
   • Leave All NAICS Sector

2. Then Choose an Analysis
   • Under Analysis of Job-to-Job Flows, go to To (Destination Job) side and select Which Metro Areas?
Exercise 1

• Change to other visualizations:
  • Look at the table and sort to get a list of the most common destination MSAs
  • Look at the bar chart and use the *Ranking* function to see the top ten destination MSAs
  • Look at the line chart to get a time series of the top ten destination MSAs
    • Notice the *Ranking* function needs to be reset

• Play with the filters
  • Look at female workers
  • Look at female prime-aged workers
  • Reset sex and age group filters and look at other worker demographic groups
  • Look at an origin or a destination industry of your choice
Opinion: The Great Resignation is also the Great Retirement of the baby boomers. That’s a problem.

The Great Retirement: Who Are the Retirees?

January 04, 2022

By William M. Rodgers III, Lowell Ricketts

This Institute for Economic Equity spotlight on the labor market focuses on the continued exit from the labor force of workers, primarily those age 65 and older. Our estimates from the monthly Current Population Survey indicates that there are 3.3 million or 7% more retirees as of October 2021 than in January 2020.
Exercise 2

**ECONOMIC SYNOPSIS**

**The COVID Retirement Boom**

by Miguel Faria e Castro

The labor force participation rate\(^1\) registered its largest drop on record in 2020, falling from 63.2 percent in the fourth quarter of 2019 to 60.8 percent in the second quarter of 2020.\(^2\) By the second quarter of 2021, the rate had recovered slightly, to 61.6 percent, but was still 1.6 percentage points below its pre-pandemic level—indicating that as of that quarter, roughly 4.2 million people had left the labor force.
Exercise 2

1. Start Here
   • Change to *Separations from*
   • Select *National (50 States + DC)*
   • Leave *All NAICS Sector*

2. Then Choose an Analysis
   • Under *Analysis of Separations Over Time*, select the first link
Exercise 2

- Go to the bar chart
- Change Group to None
- Change Indicator to ENFullQ
- Change X-axis to Sex
- Change Year/Quarter to 2020Q1

- Change X-axis to Origin NAICS Sector
- Change Group to Sex
- Use Ranking function to show the top ten, first by male then by female
Exercise 2

• Go to the line chart
• Change Indicator to J2J
• Select all years and quarters
• Change Origin NAICS Sector to the Accommodations sector
• Change Origin State to Illinois (National data is currently N/A)
• Use Ranking function to show the top ten destination NAICS sectors for 2020Q1
Exercise 2

• Go to the bar chart
• Change Group to *Earnings OD Indicators*
  - Select J2JSEarn_Orig and J2JSEarn_Dest
• Change Year/Quarter to a *Quarter 1 Series* for the past five years
• BONUS: Change Destination NAICS Sector to an industry of your choice
Exercise 3
Exercise 3

1. Start Here
   • Change to Separations from
   • Select National (50 States + DC)
   • Select Educational Services

2. Then Choose an Analysis
   • Under Analysis of Separations Over Time, select the first link
Exercise 3

• Use the link under Group to change the indicators to:
  • Hires
  • Job-to-Job Hires
  • Hires from Persistent Nonemployment
Exercise 3

Separations

Hires
4. Additional Resources
Help and Documentation

• J2J Data Product
  • Job-to-Job Flows Data Notices
  • Job-to-Job Flows: Quick Start Guide
  • J2J 101
  • Job-to-Job Flows: New Statistics on Worker Reallocation and Job Turnover
  • Job-to-Job Flows: Data Dictionary and Schema
  • Job-to-Job Flows Variable Relatedness

• J2J Explorer
  • LEHD J2J Explorer Help and Documentation - Longitudinal Employer-Household Dynamics (census.gov)
5. Q&A
Email:
ces.j2j.feedback@census.gov