Jobs, Entrepreneurship and Firm-Level Analysis

Carol Caldwell
US Census Bureau

Ken Robertson
US Bureau of Labor Statistics
Business Dynamic Statistics

Job Creation Rate

- Construction
- Manufacturing
- All sectors
Longitudinal Employer Household Dynamics

The Employer-Employee Linked LEHD Data

- Firm Data
  - Quarterly Census of Employment and Wages
  - Longitudinal Business Database

- Jobs Data
  - Wage data from state UI
  - OPM federal worker data

- Household Data
  - Decennial Census
  - Residential address data
  - American Community Survey
  - Census Numident

U.S. Department of Commerce
Economics and Statistics Administration
U.S. CENSUS BUREAU
census.gov
LEHD: Job to Job Flows

Maryland: 2015 Q2

Source: US Census Bureau, J2J
LEHD: Job to Job Flows

Maryland: 2015 Q2

Source: US Census Bureau, J2J
Number of New Hires, Ages 22 to 24, in Maryland, 2017 2Q
Business Formation Statistics

- Business Applications
  - High-Propensity Business Applications
    - Business Applications with Planned Wages
    - Business Applications from Corporations
Business Applications (BA), seasonally adjusted

Source: US Census Bureau, Business Formation Statistics
Business Formations within 4 Quarters (BF4Q) by State - Per 1,000 People

2006

2010

2017

The number of business formations per 1,000 people:

- < 0.25
- 0.25 - 0.27
- 0.27 - 0.29
- 0.29 - 0.31
- 0.31 - 0.33
- 0.33 - 0.50
- > 0.50

Source: US Census Bureau: Business Formation Statistics
Annual Business Survey

• Combines three Census Bureau surveys:
  • Five-year Survey of Business Owners for employer businesses
  • Annual Survey of Entrepreneurs
  • Business Research & Development and Innovation Survey for microbusinesses

• Measures:
  • Owner and business demographics
  • Financing activities
  • Innovation practices

• Will rotate content to cover different relevant business topics
Access to Microlevel Data

• Synthetic Longitudinal Business Dynamics Dataset (experimental)

• 29 Federal Statistical Research Data Centers across the US
  • Partners with over 50 different universities, non-research organizations, and government agencies
  • Access to data from different agencies
    • Census Bureau
    • Bureau of Labor Statistics
    • National Center for Health Statistics
US Bureau of Labor Statistics
Jobs, Entrepreneurship, and Firms

- Business register
- Consistency between short-term and macroeconomic data
- Consistency across sectors
- Transparency and consistency in concepts and definitions
- Jobs, entrepreneurship, and firms
US Bureau of Labor Statistics
Consistency: short-term and macro

- Consistency between short-term or survey data and census data is achieved by:
  - Using the QCEW as a sampling frame for most BLS business surveys
  - ...and for post-survey / post-stratification alignment
US Bureau of Labor Statistics
Business Register

- Quarterly Census of Employment and Wages
  - Report of number of employees and total wages paid for each worksite reporting to the mandatory state unemployment insurance program
  - A quarterly census covering 97 percent of employment in the US
  - Approaching 10 million worksite reports per quarter
  - Serves as a source of cross-sectional and longitudinal published data, and as a sampling frame for BLS business surveys
Consistency across sectors is achieved by most BLS surveys – by covering the full US nonfarm economy. For example:

- BLS’ Current Employment Statistics survey utilizes a stratified probability sampling design with strata defined by:
  - State, Industry groupings, Employment size class

- BLS’ Job Openings and Labor Turnover Survey utilizes a stratified probability sampling design with strata defined by:
  - Region, Industry groupings, Employment size class
US Bureau of Labor Statistics

Transparency

- BLS strives for transparency of methodology and results
- Many resources on the BLS website to explore methods
- Every program has a help line, either phone, web form, or both to assist data users in obtaining data or in better understanding the data
US Bureau of Labor Statistics

About Jobs

- Quarterly Census of Employment and Wages – employment, quarterly wages
- Current Employment Statistics – employment, hours, earnings
- Job Openings and Labor Turnover – openings, hires, separations, quits, layoffs and other discharges
US Bureau of Labor Statistics

And more about jobs

- Current population survey – unemployment, labor force, demographics
- Occupational Employment Statistics – employment, wages by detailed occupation
- National Compensation Survey – employment, wages, benefits
- Labor Productivity and Costs
One measure of entrepreneurship is the creation of new firms

- And the employment and wages associated with that creation
- And the survival rates of those firms
- The Quarterly Census of Employment and Wages data can be used to measure these
US Bureau of Labor Statistics

Firms

BLS’ Quarterly Census of Employment and Wages can produce data both at the worksite level and at the firm level

- Firm here is defined as a group of establishments with the same federal Employer Identification Number (EIN)
US Bureau of Labor Statistics
Matching

BLS’ Quarterly Census of Employment and Wages can be matched against other datasets that include appropriate identifiers – again creating consistency across data products

- Past example is matching to IRS public dataset of nonprofit firms, allowing BLS to publish data by state and industry by for-profit and not-for-profit comparison

- Current work includes matching to Bureau of Economic Analysis’ data on Foreign Direct Investment, to produce additional detailed industry and occupational data on firms with foreign investment