U.S. Census Bureau Programs measuring Business Births and Deaths

Brandy Yarbrough, Economic Statistical Methods Division
Martha Stinson, Center for Economic Studies
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Purpose: Provide target populations of active businesses at points in time.

Rules:

- An employer unit is associated with one or more payroll tax EINs. A payroll tax EIN is used by businesses for filing IRS Form 941, 943, or 944.
- BR establishments are “covered” to the payroll tax data.
- Generally:
  - “Birth”: First presence of payroll tax data for an EIN.
  - “Active”: One or more EINs has non-zero payroll for the reference period.
  - “Inactive”: All EINs have no payroll for the reference period.
  - “Dead”: Inactive for 8 consecutive quarters (or 2 consecutive years for annual filers).

Timing: Payroll tax data are generally 95% complete on the BR about 3-4 months after the reference quarter.
Business Register: Unit Coverage & Status

Challenges: Still active but the payroll tax link is missing...
• Reorganizations: Is the business really “dead” or is it just using different EINs?
• Co-employment: Are the payroll taxes being filed under the EIN of a Professional Employer Organization?
• Nonemployment: Has the business continued but without any paid employees?

Mitigation:
• Surveys:
  • Annual Report of Organization ✓ Ownership and affiliation
  • Economic Census ✓ Operational Status and new locations
  • Quarterly Birth Survey ✓ EIN Changes
• Internal Research and Edits:
  • Large SU birth analysis: Is it really “new” or should it be linked to an existing company?
  • Large MU death analysis: Did it “die” or was it acquired?
  • Small SU processing: Links old - new EINs by name and address to identify re-orgs
• Other administrative data sources:
  • BLS PEO client list
  • IRS certified PEO client list: Form 941 Schedule R (potential)
  • IRS business income tax data (Forms 1120, 1065, 990, 1040C)
Current Measurement of Births and Deaths in the Business Dynamics Statistics (BDS)

Establishments may re-activate up to 7 years after an exit
Firm death – all establishments associated with the firm die
Time series revised each year; re-release BDS years

<table>
<thead>
<tr>
<th>Challenges</th>
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<tbody>
<tr>
<td>Births relatively easy to identify (&quot;NEW&quot;) but deaths take time (&quot;NEVER AGAIN&quot;)</td>
</tr>
<tr>
<td>BDS released with 2 year lag; revisions require even longer lag</td>
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<td>Establishment Exits/Deaths and Entrants/Births spike in Economic Census years</td>
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</tbody>
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<table>
<thead>
<tr>
<th>BDS Definitions</th>
<th>Year=2016</th>
<th>Year=2017</th>
<th>Year=2018</th>
<th>Year=2019</th>
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</thead>
<tbody>
<tr>
<td>Entrant</td>
<td></td>
<td>Emp Q1 = 0</td>
<td>Emp Q1 &gt; 0</td>
<td></td>
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<tr>
<td>Reactivation</td>
<td>Emp Q1 &gt; 0</td>
<td>Emp Q1 = 0</td>
<td>Emp Q1 &gt; 0</td>
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<tr>
<td>Birth</td>
<td>Emp Q1 = 0</td>
<td>Emp Q1 = 0</td>
<td>Emp Q1 &gt; 0</td>
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<tr>
<td>Exit</td>
<td>Emp Q1 &gt; 0</td>
<td>Emp Q1 = 0</td>
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<tr>
<td>Death</td>
<td>Emp Q1 &gt; 0</td>
<td>Emp Q1 = 0</td>
<td>Emp Q1 = 0</td>
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</tbody>
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age ≥ 2
age = 0
Use of Sub-Annual BR data in LBD-BDS

- **Births**
  - New EIN filings (monthly) with some modeling toward Business Formation Statistics (BFS)

- **Deaths**
  - Use quarterly BR employment data (2004-present) to improve measurement of deaths
  - Research underway
    - Produce BDS Q2 time series 2005-2020 (planned release summer 2022)
      - More timely release of information about the beginning of the pandemic
      - Investigate quality of quarterly employment data; build into BDS production system
    - Dynamics across quarters within a year to track births and deaths more accurately

- **Challenges**
  - Quarterly reports are at the EIN-level
  - Allocation of employment to estabs within multi-units relies on the Report of Organization – only ask about Q1 employment
  - The BDS Q2 time series will only be for single unit firms
On-going and potential research to measure deaths

- **Internal Census data**
  - BR quarterly data flow
    - Benefits: timely, expansion of existing system
    - Challenge: multi-units
  - LEHD infrastructure files: state-level reports about establishment openings and closings
    - Benefits: timely, establishment-level
    - Challenge: linking across different business frames
- **Worker data (W-2 or UI)**
  - Benefits: help identify re-organizations, verify deaths (no workers and no 941 filing)
  - Challenge: long lag in data availability, W-2: annual, UI: linking

- **Evaluate use of external data**
  - Economic Tracker (Womply, PayChex, Earnin)
  - SafeGraph
  - Other payroll providers (ADP)
  - Other suggestions?
Thank you!

Contact Information:

Brandy.L.Yarbrough@census.gov
Martha.Stinson@census.gov