Business Dynamics Statistics

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NARSC
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Any opinions and conclusions expressed herein are those of the authors and do not necessarily represent the views of the U.S. Census Bureau. All results have been reviewed to ensure that no confidential information is disclosed.
Background

• Business dynamics are a fundamental part of
  – Innovation
  – Productivity Growth
  – Job Creation

• Measuring business dynamics in official statistics is relatively new, but critical to our understanding of the economy
Remarks By Federal Reserve Chairman Ben Bernanke

...One leading explanation for the strong U.S. productivity growth is that labor markets in the United States tend to be more flexible and competitive, market characteristics that have allowed the United States to realize greater economic benefits from new technologies. For example, taking full advantage of new information and communication technologies may require extensive reorganization of work practices, the reassignment and retraining of workers, and ultimately some reallocation of labor among firms and industries...

August 31, 2006
Background

• Confidential Micro Datasets – RDC Network
• Public Use Datasets a way to open access to wider set of users
  – Census-SUSB
  – BLS-BED
  – OECD-SBS
• None of these incorporate business age in a systematic way.
• Critical to understanding a changing economy
  – Innovation/Life cycle dynamics/Entrepreneurship
  – The role of young/small old/large producers in dynamic economic processes.
The BDS

• New Census public use files (support from Kauffman Foundation)
  – Coverage 1976-2005
  – Private Non Farm Economy, employers
  – Establishment level with firm characteristics
  – Focus on both business and employment dynamics

• Comparison to CBP
  – Value added from links and longitudinal analysis

• Unique Features
  – Long Time Series
  – Incorporates Firm Characteristics
    • Firm age, firm size
    • Interactions of age and size
The BDS

• Statistics
  – Number of Establishment: Births, Deaths and Continuers
  – Job creation
    • From births and expansions
  – Job destruction
    • From deaths and contractions

• By categories
  – Firm Age
  – Firm Size
  – State
  – Industrial Sector
  – State*Sector*Age …
The BDS

- Other tables planned
  - County (most requested)
  - Metro/Non-Metro
  - NAICS, detail
  - Establishment Age ....
- Planned Improvements
  - Enterprise counts (Firm survival and growth)

We want feedback as to what is useful to you
The BDS: Multiple Databases

Business Dynamics Statistics: Database List

**Economy Wide** (SAS, Excel, CSV)
- Sector
- Firm Size
- Firm Age
- State

**Firm Age by Firm Size** (SAS, Excel, CSV)
- Firm Age by Sector
- Firm Age by State
- Initial Firm Size by Sector
- Initial Firm Size by State

**Firm Age by Initial Firm Size** (SAS, Excel, CSV)
- Firm Age by Sector
- Firm Age by State
- Initial Firm Size by Sector
- Initial Firm Size by State

**Firm Age by Sector** (SAS, Excel, CSV)
- Firm Age by Sector
- Firm Age by Initial Firm Size by Sector
- Firm Age by Initial Firm Size by State
- Firm Age by Firm Size by Sector
- Firm Age by Firm Size by State
# The BDS: Economy Wide

<table>
<thead>
<tr>
<th>Year</th>
<th>Estabs</th>
<th>Emp</th>
<th>Dunam</th>
<th>Estabs Entry</th>
<th>Estabs Exit</th>
<th>Job Creation</th>
<th>Job_Creation_Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>4,163,567</td>
<td>64,248,843</td>
<td>61,951,563</td>
<td>698,356</td>
<td>17.1</td>
<td>52,554</td>
<td>12.8</td>
</tr>
<tr>
<td>1999</td>
<td>4,105,545</td>
<td>64,132,448</td>
<td>61,951,563</td>
<td>698,356</td>
<td>14.6</td>
<td>50,871</td>
<td>11.7</td>
</tr>
<tr>
<td>2000</td>
<td>4,062,091</td>
<td>64,072,590</td>
<td>61,951,563</td>
<td>698,356</td>
<td>12.0</td>
<td>52,114</td>
<td>12.0</td>
</tr>
<tr>
<td>2001</td>
<td>4,045,545</td>
<td>64,045,545</td>
<td>61,951,563</td>
<td>698,356</td>
<td>10.9</td>
<td>53,610</td>
<td>11.5</td>
</tr>
<tr>
<td>2002</td>
<td>4,019,539</td>
<td>64,019,539</td>
<td>61,951,563</td>
<td>698,356</td>
<td>14.3</td>
<td>52,741</td>
<td>11.4</td>
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<tr>
<td>2003</td>
<td>4,064,014</td>
<td>64,064,014</td>
<td>61,951,563</td>
<td>698,356</td>
<td>11.2</td>
<td>50,605</td>
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<tr>
<td>2004</td>
<td>4,101,014</td>
<td>64,101,014</td>
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<td>698,356</td>
<td>10.9</td>
<td>50,832</td>
<td>10.9</td>
</tr>
<tr>
<td>2005</td>
<td>4,168,014</td>
<td>64,168,014</td>
<td>61,951,563</td>
<td>698,356</td>
<td>12.0</td>
<td>50,583</td>
<td>10.9</td>
</tr>
</tbody>
</table>

**US Economy**

**Country:** USA

**Unit of Analysis:** Active Establishments

**Source:** Longitudinal Business Database 1977-2005

**Establishment activity is defined by the existence of March 12 employment.**
## The BDS: State Statistics

<table>
<thead>
<tr>
<th>Country</th>
<th>USA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estab</td>
<td>10</td>
</tr>
<tr>
<td>2017</td>
<td>455,145</td>
</tr>
<tr>
<td>2018</td>
<td>457,989</td>
</tr>
<tr>
<td>2019</td>
<td>462,461</td>
</tr>
<tr>
<td>2020</td>
<td>469,651</td>
</tr>
</tbody>
</table>

### Notes
- **Unit of Analysis**: Active Establishments
- **Source**: Longitudinal Business Database 1977-2020
- **Establishment activity is defined by the existence of March 12 employment**
The BDS: Startups and Age

| Year | Firm Age | Estabs | Emp | B | C | D | E | F | G | H | I | J | K | L | M |
|------|----------|--------|-----|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2013 | 503,050  | 1,255,422 | 1,565,711 | 563,050 | 200.0 | 0 | 0.0 | 3,255,422 | 3,255,422 | 6 | 260.0 | 200.0 |
| 2014 | 387,635  | 2,945,535 | 3,075,774 | 900.0 | 82.0 | 115,500 | 28.5 | 2,945,535 | 16,307 | 6 | 260.0 | 200.0 |
| 2015 | 271,657  | 2,075,265 | 2,601,665 | 17,077 | 50.0 | 58,099 | 17.3 | 271,657 | 1,762,210 | 6 | 260.0 | 200.0 |
| 2016 | 257,842  | 2,585,024 | 2,495,971 | 15,803 | 5.0 | 49,354 | 15.7 | 257,842 | 220,820 | 6 | 260.0 | 200.0 |
| 2017 | 267,578  | 2,673,580 | 2,772,862 | 12,385 | 4.6 | 38,265 | 13.7 | 267,578 | 218,930 | 6 | 260.0 | 200.0 |
| 2018 | 271,656  | 2,056,126 | 2,661,242 | 17,267 | 4.7 | 35,999 | 12.9 | 271,656 | 222,222 | 6 | 260.0 | 200.0 |
| 2019 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2020 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2021 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2022 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2023 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2024 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2025 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2026 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2027 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2028 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2029 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2030 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2031 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2032 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2033 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2034 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |
| 2035 | 309,763  | 2,667,720 | 2,637,413 | 41,851 | 4.3 | 167,030 | 10.9 | 309,763 | 208,613 | 6 | 260.0 | 200.0 |

**Notes:**
- BDS: Business Development Services
- Estabs: Establishments
- Emp: Employees

**Source:** U.S. Census Bureau
The BDS: Entrepreneurial Activity Across States

Fraction of Employment Accounted for by Young Firms by State: 2000–2005 Average

Source: Authors’ own calculations from Business Dynamics Statistics.
The BDS: Jobs Created from Business Startups in the U.S.

Figure 3-2.
Percent of Jobs Accounted for by New Firms
(All and selected size classes)

Source: Authors’ own calculations from Business Dynamics Statistics.
The BDS: High Growth and Failure of Young Firms

Figure 3-3.
Employment Dynamics for Survivors and Exiters by Firm Age: 1987–2005
(Percent of employment within age group)

Source: Authors’ own calculations from Business Dynamics Statistics.
Summary

• New research data set
• Easily accessible
• Rich source of information to examine
  – Business demography
  – Creative destruction/innovation
  – Business cycle dynamics
  – Role of cohorts, young/small vs large/old
  – Labor market dynamics
  – Geographic variation
Future Directions

• Extensions
  • County and NAICS

• Synthetic products
  • avoid disclosure problems

• Early indicators of activity and preliminary releases
Future Directions

• **Enterprise Dynamics Statistics**
  • Captures rich life dynamics of firms
    • M&A activity including acquisitions, divestitures,
    • Organic growth including greenfield entry, exit
  – Additional information including
    • Trade status
    • Importer, Exporter...
    • Patent holder...
    • Owner characteristics