Business Start-Ups, Survival, and Growth: Data Resources and Research Findings from the Bureau of Census Business Dynamics Statistics Program

Association of Public Data Users
September 2012

Findings reported in this briefing draw from research conducted by

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Javier Miranda, U.S. Census Bureau

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Understanding Job Creation

• Firms are heterogeneous responding differently to different types of shocks
  – Need large datasets capturing more dynamic parts of the economy (small, young and large)
  – If interest in changes then also need higher frequency data
• Economies experience underlying secular trends as well as business cycles
  – Need long time series
• Significant variation across industries and geographies
  – Need detailed industry and geography
• But there are also significant data gaps. For example:
  – Financial information (DD-SS)
  – Business owner demographics
  – Timeliness
  – Disclosure limitations (detailed levels of industry and geography needed to understand state and local issues)
Longitudinal Business Database (LBD)

- Universe database of US non-farm private sector employer businesses
  - Administrative data enhanced with Census collections
  - Long time series 1976-2010
  - Longitudinal linkages of both firms and establishments
  - Complete sectoral coverage
  - Detailed geography and industry

- Basic backbone to which all other Census business data can be linked

- Firm and establishment characteristics
  - Firm size and firm age. Age is critical to understanding firm growth dynamics, entrepreneurial activity and job creation
LBD: Public Use Products

• Business Dynamics Statistics
  – Basic data by firm size and age across sectors, states and time.
  
  Expansions to more detailed industry and geography coming soon!
  – Data visualizations available (currently down)
  – http://www.census.gov/ces/dataproducts/bds/index.html

• Synthetic LBD (ver. 1) – public use microdata
  – Deployed via the Cornell Virtual RDC
    (http://www.vrdc.cornell.edu/news/data/lbd-synthetic-data/),
    information at
    http://www.census.gov/ces/dataproducts/synlbd/index.html

• Sister program: ILBD
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Job Creation and Destruction in the US Economy: Cycles

![Net Growth Rates by Firm Age and Firm Size](image-url)
Up or Out dynamics of young business

Up or Out Dynamics of Young U.S. Private Sector Firms (1992-2005)

Net Employment Growth (Continuing Firms) / Job Destruction from Exit
Small vs Young

Net Employment Growth by Base Year Firm Size

- Base Year Size
- Base Year Size with Age Controls
High Growth/Declining Firms

69% of creation accounted for by establishments with annual growth rates > 30 percent.

71% of destruction accounted for by establishments with annual growth rates < -30 percent.

Productivity Growth

(Economic Census Data)

Productivity Relative to Mature Surviving Incumbents

-32%  -27%  3%  5%

Young Exits  Mature Exits  Young Survivors  Young Survivors Five Years Later
Job Creation and Destruction in the US Economy: Cycles
Job Creation and Destruction in the US Economy: Cycles

Response of Difference of Young/Small with Large/Old Net Annual Levels VAR(2) Model, Year Effects

St_Chg UR shock

GR_HPrice St shock
Job Creation and Destruction in the US Economy: Cycles

Response of Difference of Old/Small with Large/Old Net Annual Levels VAR(2) Model, Year Effects

St_Chg UR shock

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-0.0050
0 1 2 3 4 5 6

GR_HPrice_St shock

0.0050
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0 1 2 3 4 5 6

United States Census Bureau
Economic Statistics
Job Creation and Destruction in the US Economy: Cycles

Change in Diff_Net_Rate_11 from 2007 to 2009
Actual and Due to State-Specific Housing Price Growth

Change

CA
FL
ND

Chg Diff_Net_11
Due to Housing Prices
Ongoing Research and New Products

- **Business cycles**: Business dynamics of young/small/large firms (project underway)
- **Supply chains**: Coexistence of large/small/young (project underway)
- **Linking the financial and real economy**
  - Fed Banks? Treasury?
- **Timely indicators of economic activity**
  - National
  - Local level
  - CEA, NEC, Fed Banks…
- **Innovation and growth** (project underway)
  - USPTO
- **Trade and growth** (project underway)
  - Census Bureau trade statistics
Summary

• Very rich resource of data to help answer critical questions about entrepreneurship and functioning of US economy
• Need to push on timely and local data
• Additional outside data
  – IRS
  – Treasury
  – Fed Banks
  – USPTO
• Private/Public Partnerships?
  – Kauffman Foundation model
  – Other?