

Business Dynamics of Globally Engaged Firms

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FESAC

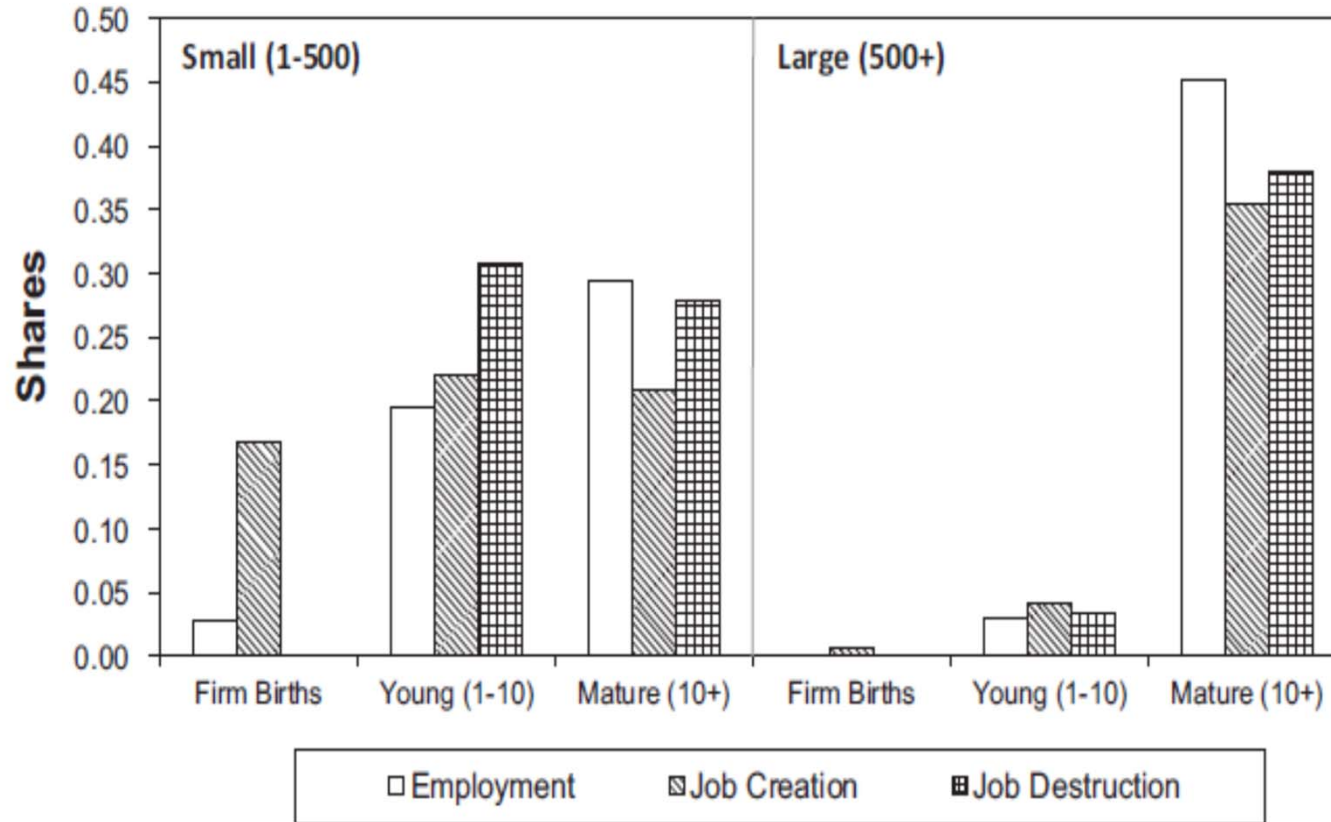
June 9, 2017

Disclaimer

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.

Business Dynamics Statistics

FIGURE 1.—SHARES OF EMPLOYMENT, JOB CREATION, AND DESTRUCTION BY BROAD FIRM (AVERAGE), SIZE AND AGE CLASSES: ANNUAL AVERAGE RATES, 1992–2005



Source: Haltiwanger, Jarmin, Miranda (2013)

Business Dynamics Statistics: Background

- BDS (<https://www.census.gov/ces/dataproducts/bds/>)
 - Provides annual measures of business dynamics (such as job creation and destruction, establishment births and deaths, and firm startups and shutdowns) for the economy and aggregated by establishment and firm characteristics.
- Joint project between Research & Methodology and Economic Programs
 - Currently available: 1976-2014
- Selected research output
 - Decker, Haltiwanger, Miranda (2014; 2016); Haltiwanger, Jarmin, Miranda (2013); Fort, Haltiwanger, Jarmin, Miranda (2013)

Broad Motivating Questions

- Outsized role of globally engaged firms in the U.S. economy
 - Bernard, Jensen, Redding Schott (2007; 2016), Bernard, Jensen, Schott (2009), Antràs & Yeaple (2014)
- Labor market consequences of globalization
 - Import competition: Autor, Dorn, Hanson (2013), Pierce & Schott (2016), Bernard, Jensen, Schott (2006)
 - Offshoring: Harrison & McMillan (2011); Hummels, Jorgensen, Munch, Xiang (2014), Hummels, Munch, Xiang (2016), Mion & Zhu (2013), Panadalai-Nayar, Boehm, Flaaen (2016), Kamal and Lovely (2017)

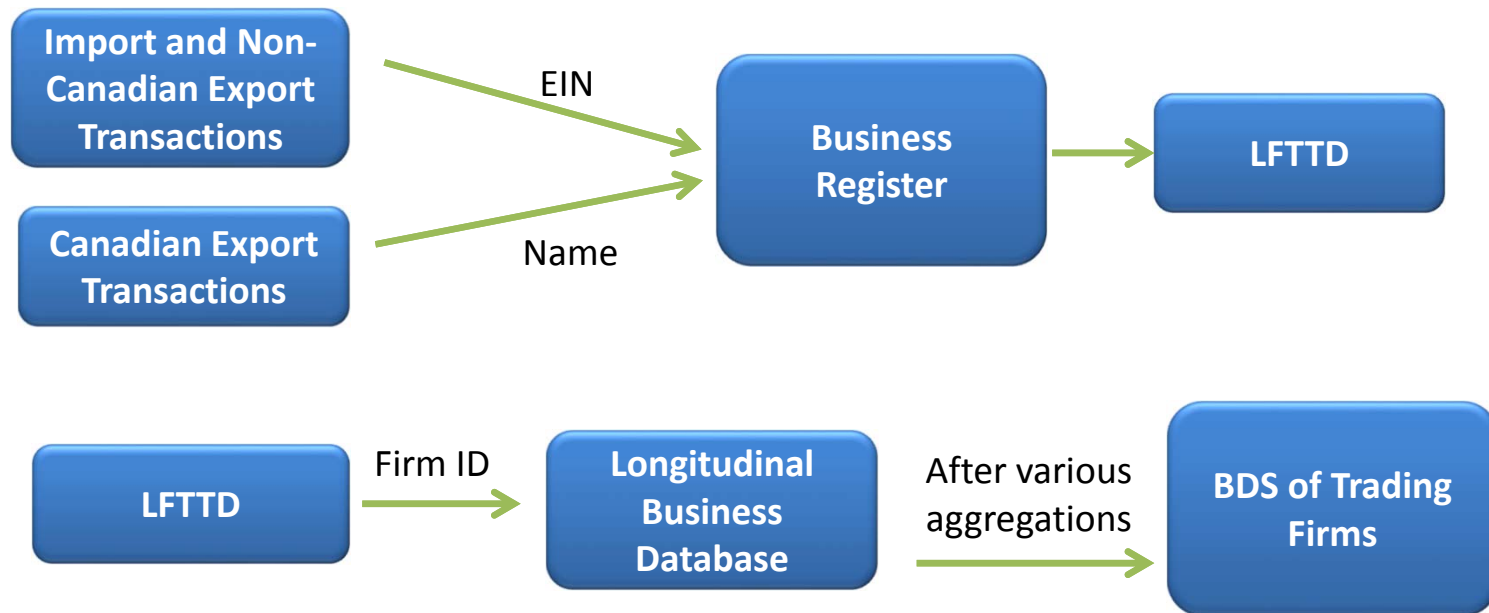
Business Dynamics Statistics of Globally Engaged Firms

- *BDS-Exporting* Firms
 - Export merchandise transactions-firm linked microdata (LFTTD)
- *BDS-Importing* Firms
 - Import merchandise transactions-firm linked microdata (LFTTD)
- *BDS-Multinational* Firms
 - Identify multinational firms using BEA surveys (Multinational Crosswalk)

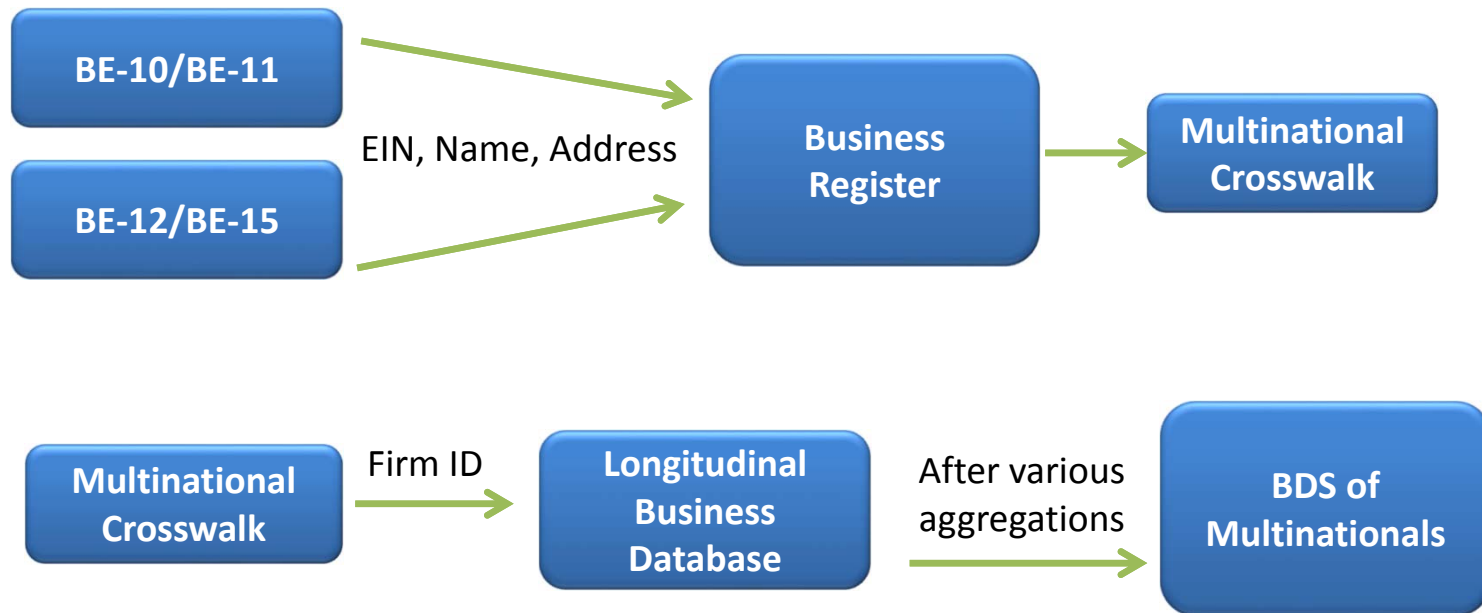
The Business Dynamics Statistics of U.S. **Goods** Trading Firms

- Microdata links
 - Confidential linked firm-trade transactions microdata (LFTTD)
 - Improve upon previous research output (Bernard, Jensen, Schott, 2009)
- Data outputs
 - LFTTD: Accessible through the U.S. Federal Statistical Research Data Center network (currently available: 1992-2014)
 - Planned public use BDS of U.S. Trading Firms
 - Tabulations
 - Visualizations

Merchandise Trade Transaction-Firm Match



MNC-Firm Match



Proposed Statistics:

Counts (total, entrants, exiters)

- Firms
- Establishments
- Employment

Job creation

- Births
- Incumbents

Job destruction

- Deaths
- Incumbents

Proposed Tables:

Economy-wide

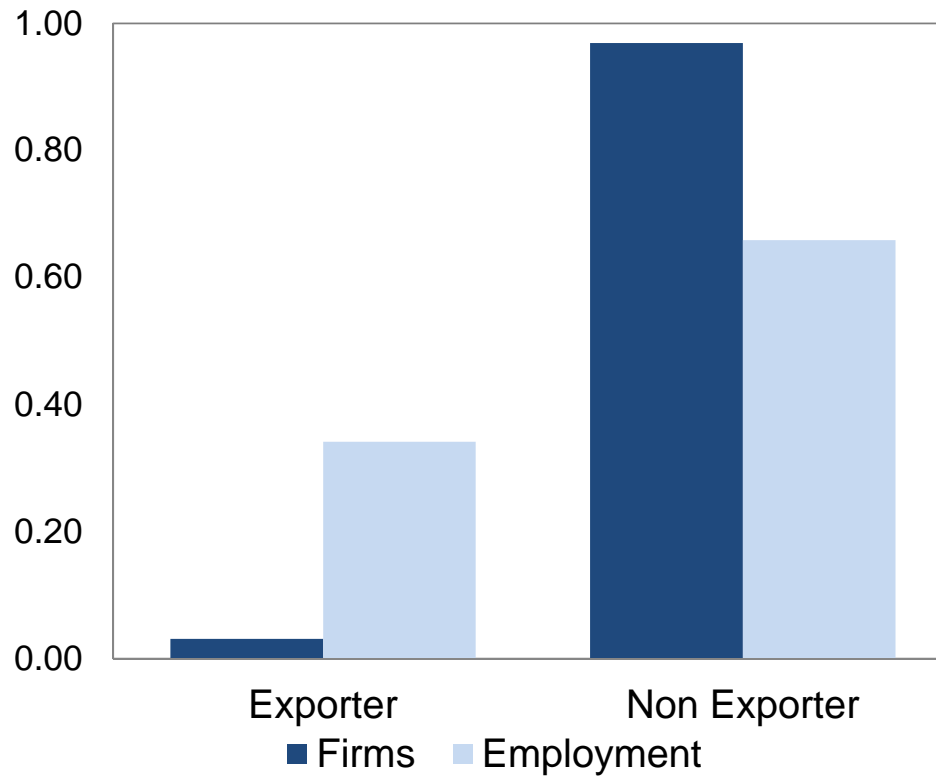
- Firm age
- Firm size
- Sector
- State

By Exporter, Importer, Multinational

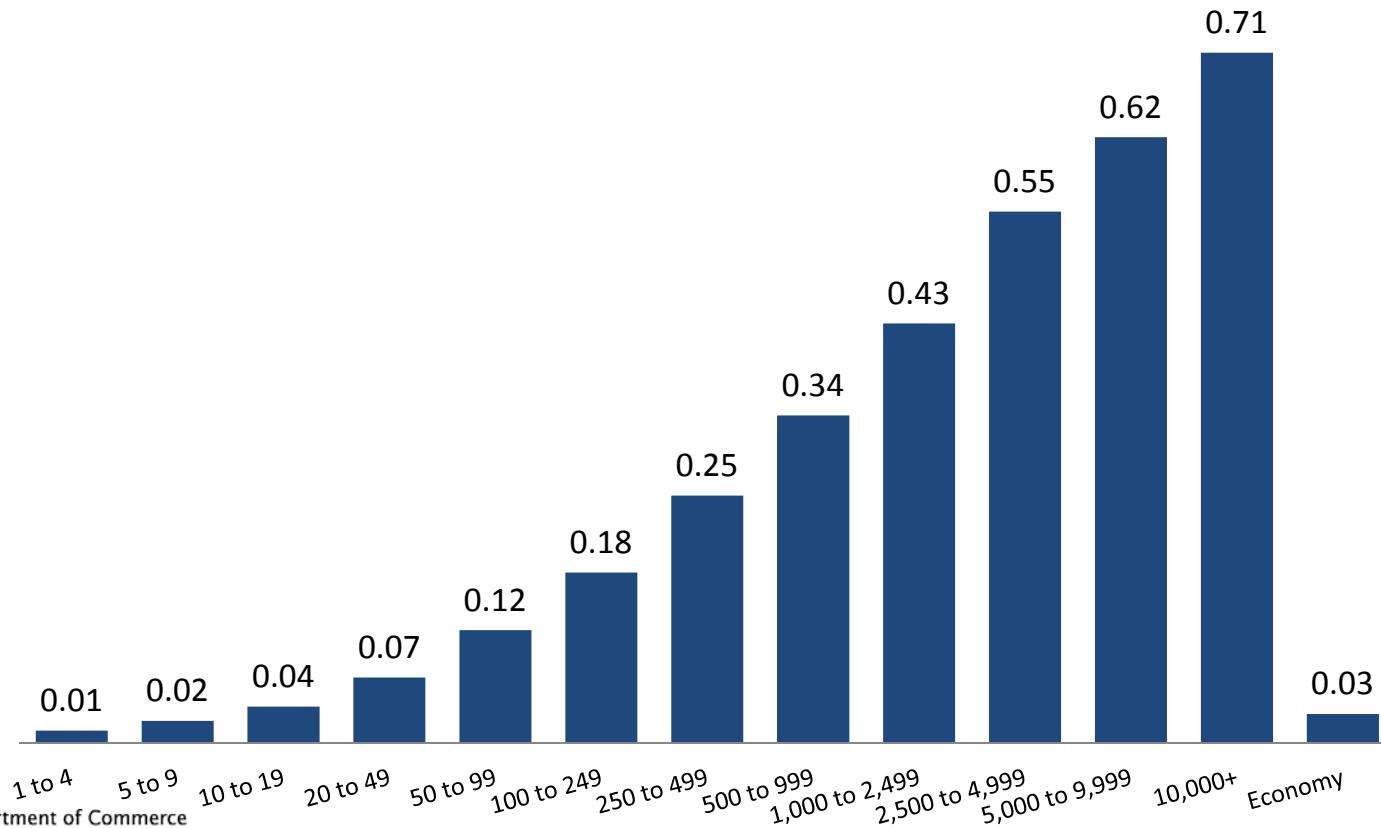
Selected Statistics for **Goods** Exporters

All calculations based on beta version; Revisions expected.

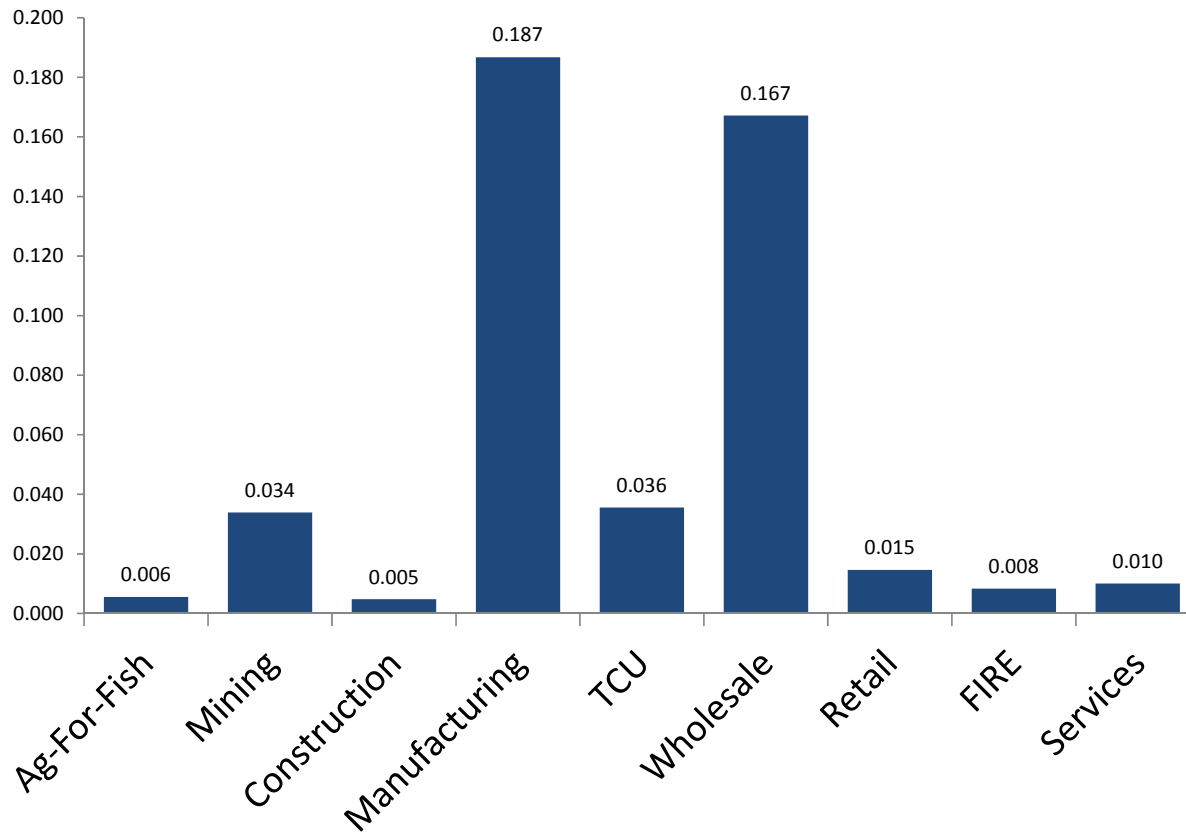
Share of Firms and Employment Average 2001-2011



Share of Exporting Firms By Firm Size, Average 2001 - 2011



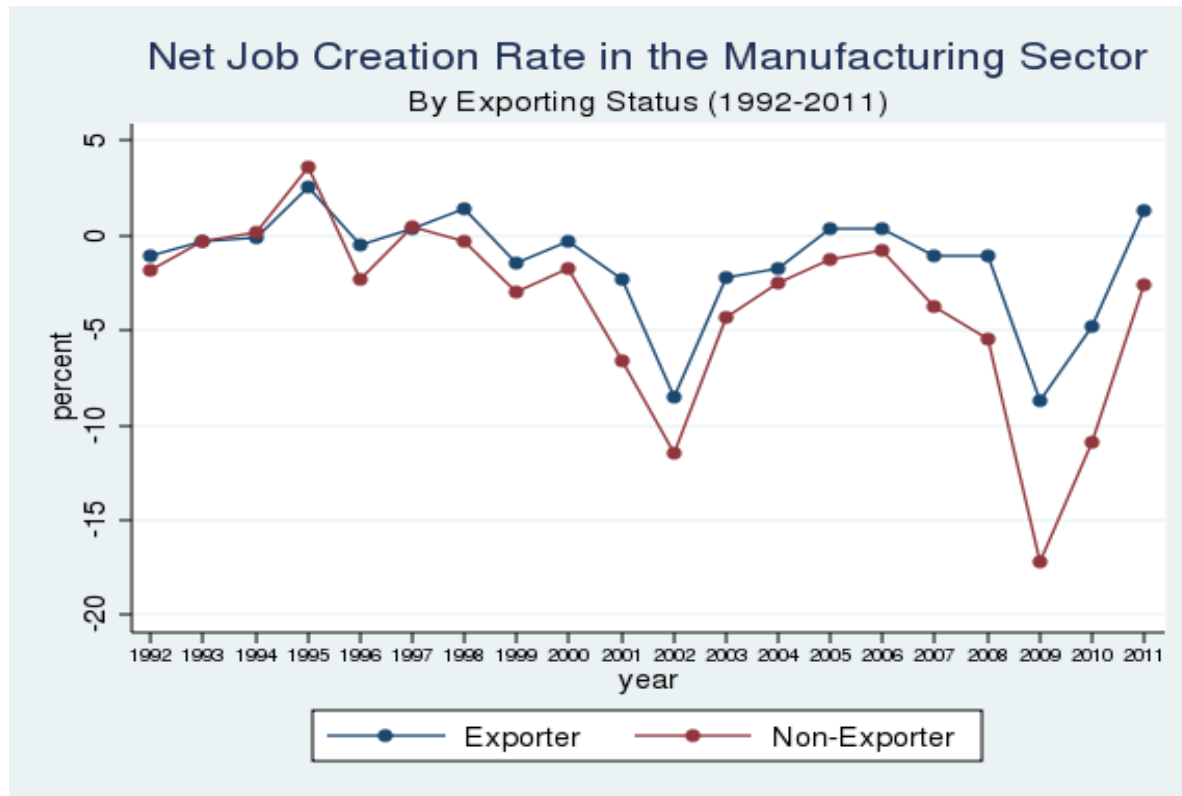
Percent of Exporting Establishments By SIC, Average 2001-2011



Gross Job Creation and Destruction By Exporting Status and Firm Age, Average 2001-2011



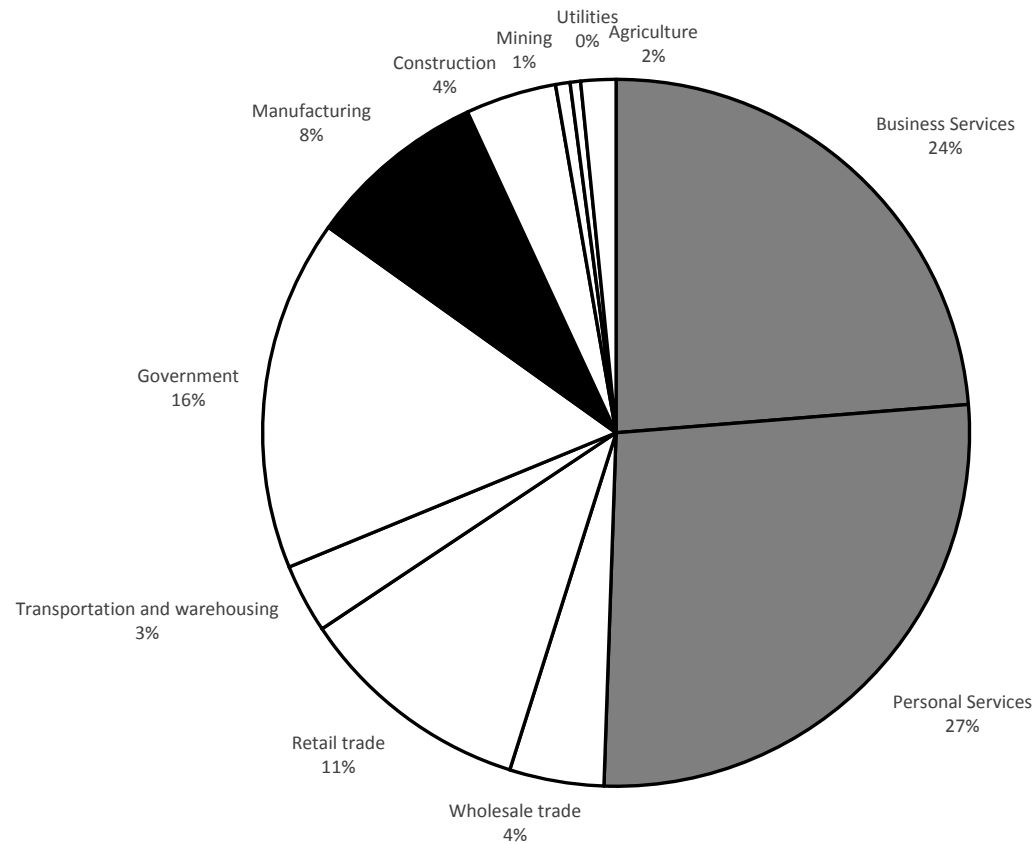
Net Job Creation By Exporting Status, Manufacturing



Important Challenges

- Representativeness
 - Unmatched transactions
 - Improve coverage of low-value merchandise traders
- Identification of all traders
 - Trade in services

Composition of U.S. Labor Force, 2012



Service Sector: Overview

- Service sector historically relatively poorly measured
 - Historically under-classified
 - No measure of capital stock
 - No measure similar to production/non-production workers

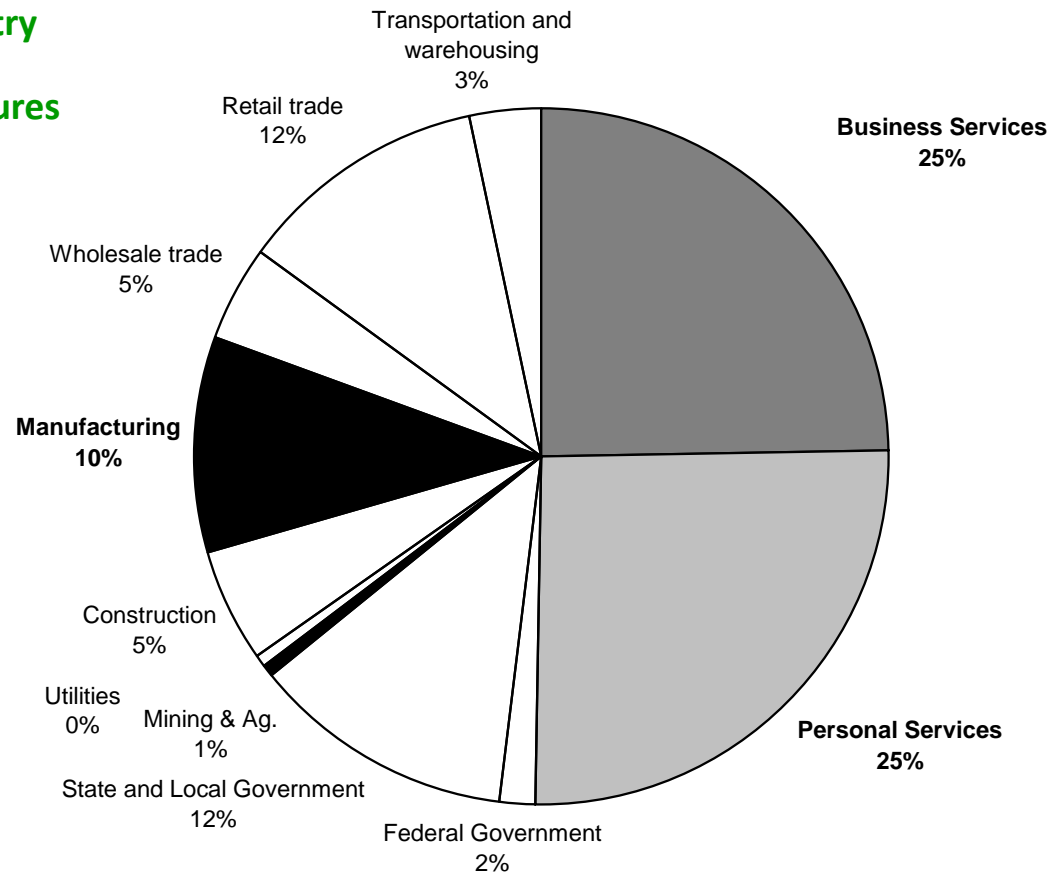
470 6-digit NAICS codes
28,000 workers/industry

Capital and skill measures
at establishment level

FY 2009 \$17.8M
\$60/establishment

10,000 HS categories

\$38M at Census
\$10M at DHS



325 6-digit NAICS Codes
208,000 workers/industry

No measures of inputs at
establishment level

FY 2009 \$39.9M
\$9/establishment

47 Services categories

\$14M at BEA

Trade in Services: Coverage

- Service sector trade relatively poorly measured
 - 10,000 HS codes vs. 47 service trade categories
 - Administrative system (transaction) vs. survey collection (firm)
 - Higher exemption levels
 - Cut-off for goods transactions: \$2,500
 - Cut-off for trade in services reporting: If total transactions in any of the categories exceeded \$2 million for receipts or \$1 million for payments, the U.S. person is required to provide detailed information by type of service and by country.

Trade in Services: Collection System

- Multiple collection systems for services trade data
 - BEA Trade in Services (2006 – on-going)
 - Firm level, measure of service activity traded, imports and exports
 - Economic Census (1992 – on-going)
 - Select industries, establishment level, industry exporting, no imports
 - Company Organization Survey (2006)
 - Enterprise level exporting and importing

Trade in Services: Collaborative Efforts

- Joint BEA-Census project to investigate feasibility of combining various measures of services trade to incorporate in *BDS-Exporting Firms* and *BDS-Importing Firms*
 - BEA trade in services surveys 2007
 - Economic Census 2007
 - Company Organization Survey (2006 special supplement)

Trade in Services: Suggestions

- Collect capital data for service industries at establishment level in Economic Census
- Collect exempt/non-exempt break-outs of employment at establishment level in Economic Census
- Collect imports and exports of services at establishment level across all industries in Economic Census
- Explore expanded coordination between BEA and Census on trade in services collection

Representativeness

- Unmatched transactions
 - Probabilistic matching methods being explored
- Coverage of “Small” Traders
 - Low value transactions are not covered in customs records
 - Potential collaborators: Small package courier companies (e.g. FedEx, UPS)
 - Variables to be collected: mailing addresses (domestic and foreign)

Questions for FESAC

- How to improve representativeness?
 - Unmatched transactions
 - Improve coverage of low-value merchandise traders
- How to improve identification of all traders?
 - Using existing trade in services data
 - Future trade in services data collection efforts