

Using Administrative Records Data to Produce Business Statistics: The Nonemployer Statistics by Demographics Series (NES-D)

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What is the Nonemployer Statistics by Demographic Series (NES-D)?

- New data series with first release in December 2020
- Leverages existing administrative records and Census data
- Assigns demographic characteristics to the nonemployer universe
 - Approximately 25 million nonemployer businesses

What is the nonemployer universe?

- **2016 Nonemployer Universe: ~25,000,000**
- Businesses with no paid employment, subject to federal income taxes, & w/ annual receipts of \$1,000 or more (\$1 or more for Construction sector)

- Sole Proprietorships (1 owner): 87%

- Partnerships (>1 owner): 7%

- S-corporations (>=1 owner): 4%

- C-corporations & other LFOs (>=1 owner): 2%

21st Century Challenges to Business Surveys

In response to declining response rates, increasing operational costs ...

- SBO employers
- ASE (employers)
- BRDIS-M (employers)



- Annual Business Survey (ABS)
- Only employers

- SBO nonemployers



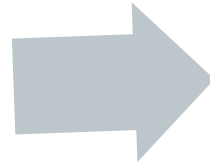
- Nonemployer Statistics by Demographics (NES-D)

Longer-term goal: Annual Total Business Ownership
Integration of Nonemployers + Employers

Nonemployer Demographics – Past & Present

Previously:
Collected as Part of SBO

- Survey (2012) – sample size approx. 800,000 nonemployer firms & 940,000 employer firms
- Every five years
- 3-year dissemination lag from reference year
- High respondent burden
- Low response rate => high imputation rate & costs



Currently:
Blended Data Approach (NES-D)

- **Not a survey** - Nonemployer universe (approx. 25 million as of 2016)
- Leverages administrative records (AR) & Census data to assign demographics to business owners
- Annual – **higher frequency**
- Aims to shorten dissemination lag to 2 years (from reference year) – **more timely**
- **No additional respondent burden**
- Reduces imputation & costs => **higher quality**
- First release in 2020 with 2017 reference year (when 2017 SBO would be released)

NES-D Content – First Release December 2020 with 2017 Data

| | | |
|-----------------|---|---|
| Tabulations of: | • Number of businesses | |
| | • Business receipts | |
| | • Number of business owners | |
| Dimensions. By: | • Demographic characteristics of business owner: | <ul style="list-style-type: none"> • Sex, race, Hispanic origin, veteran status, age, place of birth, citizenship • Future releases: additional characteristics |
| | • Legal Form of Organization (LFO) – Sole Proprietorship, Partnership, S-Corp | |
| | • Receipt-size class | |
| | • Geography | |
| | • NAICS industry | |
| | • Cross-tabulations | |

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| | • North American Industry Classification System (NAICS) |
| | • Cross-tabulations |

What data sources are used for NES-D?

| Variables | Data Sources |
|--|---|
| Receipts, industry, geographic location | Nonemployers database from Business Register |
| Race (core demographic in SBO/ABS) Hispanic origin (core demographic in SBO/ABS) Sex (core demographic in SBO/ABS) Age of owner Place of birth Citizenship status | Decennial Census Data, American Community Survey (ACS), & Numident (from SSA) |
| Veteran-status (core demographic in SBO/ABS) | Department of Veterans Affairs (VA) AR data (USVETS). Also exploring Department of Defense data. |

How are demographics linked to business owners?

- Unique person identifiers called Protected Identification Keys (PIKs) facilitate linkage of records across data sources
- Source of PIKs
 - Sole proprietors – Tax form 1040
 - Partnerships & S-corporations – Schedule K1 (Forms 1065 & 1022S)
- Owners of U.S. nonemployer C-corporations cannot be identified with tax or AR data (only 2% of nonemployers & 4% of receipts)
 - Evaluating feasibility of imputation
- Missing demographics are imputed

How well does NES-D cover nonemployers?

- Consistent coverage over time (2014-2016 nonemployers)
- PIK information available for approximately 99 percent of nonemployer firms in each year – not including C-corps
- Availability of sex, age, place of birth & citizenship for approximately 98-99 percent of owners (w/ PIKs) in each year
- Availability of race and ethnicity data for approximately 90-95 percent of owners (w/ PIKs) in each year
- Approximately 90-95 percent of owners (w/ PIKs) are not missing any demographics
 - Only about 1 percent are missing 3 or more demographics