

Using the Economic Census and Business Register

John M. Abowd
February 2005

Outline

- Economic Census (1997 example)
- Business Register (1997 example)
- Record Structure
- Identifiers
- Creating Establishment Analysis Files
- Creating Company (Alpha) Files
- Using Bridges to Other Data

Economic Census (EC) 1997

- Target population:
 - Employer and non-employer establishments in covered industries (essentially everything except agriculture and government)
- Methods:
 - Large employers and a sample of small employers covered by mail questionnaire
 - Remaining establishments estimated from administrative records (mostly tax returns)

Employer Business Register (BR) 1997

- Target Population:
 - Employer establishments in the same industries as are covered by the Economic Census
- Methods:
 - Continuously updated database of establishments divided into multi-unit and single-unit businesses

Record Structure

- Economic Census
 - All establishments whether from mail questionnaire or administrative record
 - Separate files for Construction, Manufactures, Mining, Retail Trade, Services, (Transportation, Communications, and Utilities), Wholesale Trade
 - Example files are from Census of Manufactures

Record Structure

- Employer Business Register Single-units (SU)
 - One record for each single unit establishment
 - One record, called a submaster, for each multiunit company
- Employer Business Register Multi-units (MU)
 - One record for each establishment for each multi-unit

Identifiers

- Entity Identifiers
 - Census File Number (CFN)
 - Employer Identification Number (EC: EI; BR: EIN)
 - Permanent Plant Number (PPN)
 - Census Alpha (EC: EIALPHA; BR: derived)

Census File Number (CFN)

- Used for both the EC and BR as the sort order and main index for the file
- Always Character 10 (\$10.)
- For Single-units
 - First character “0”
 - Last 9 characters Federal Employer Identification Number (EIN)
- For Multi-units
 - First character nonzero
 - First six characters Census Alpha
 - Last four characters establishment ID

Employer Identification Number

- Taxable (legal) entity identifier
- Always Character 9 (\$9.)
- For SUs, equivalent to CFN and unique
- For MUs, applies to the owning entity
 - An Alpha (see below) may be associated with multiple EINs

Permanent Plant Number

- Longitudinal link based on CFN
- Always Character 10 (\$10.)
- Quality improves since inception in 1982
- Longitudinal links in Longitudinal Business Database are preferable

Census Alpha

- Identifies the business that owns (50% or greater interest) the establishment for MUs
- EC and BR-SU
 - Character 6 (\$6.) and never has a leading 0
 - Called EIALPHA
- BR-MU
 - Character 10 (\$10.)
 - Called ALPHA
- Used to construct enterprise-level entities

Identifiers

- Geography Identifiers
 - State identifiers
 - County identifiers
 - City identifiers
 - Full Census geography (BR only)
- Activity Identifiers
 - Industry Codes
 - Product Codes

Geography Identifiers

- EC and BR
 - State (Census and FIPS)
 - County (Census and FIPS)
 - Consolidate Metropolitan Statistical Area (FIPS)
- BR only
 - Census Block
 - Zip
 - County Business Patterns Geography

Activity Identifiers

- NAICS
 - Full U.S. Industry code (Char 6)
 - Derived industry codes
- SIC
 - Full 1987 SIC (6-digits to product class code)
- NAICS to SIC bridge codes

Finding Active Entities

- EC
 - Use sample weight ($WT > 0$)
- BR-SU
 - Exclude submasters ($PDIV = 'M'$)
 - Payroll or employment positive (see example)
- BR-MU
 - Exclude ghosts ($ACT = 'G'$)
 - Payroll or employment positive (see example)

Creating Custom Entities

- Establishment-level files
 - EC: natural organization
 - BR-SU: exclude submaster records
 - BR-MU: exclude ghosts
- Company-level files
 - EC: use EIALPHA to find related establishments
 - BR: create compatible ALPHA10 in SU to get information on submasters to link to establishments on MU
- Pseudo-establishments
 - Combine establishments based on EIN, geography and activity

Examples

- Processing the Census of Manufactures
- Processing the BR SU and MU files