A Guide to the Proposal Process and Using and RDC

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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.
Agenda

- Process for accessing restricted-use data
  - Research Data Center (RDC)
  - Using an RDC
  - Proposal Process
  - Research Examples
Research Data Center (RDC)

- Census Bureau – university partnerships
  - RDC fees
- Secure access to confidential microdata
  - Thin client access to Census linux servers
  - Census Bureau and other Federal statistical data
- Authorized researchers on approved projects
  - Proposal
  - RDC analysis
  - Statistical estimates disclosure
Why Restrict Microdata Access?

Titles 13 (Census) /26 (IRS) U.S.C. and CIPSEA protect confidentiality
- respondent cannot be identified
- only Census employees and temporary staff can access microdata
- use limited to statistical purpose
- access must potentially provide legitimate benefits to Census Bureau programs
Proposal Process

• Preliminary proposal
  – www.ces.census.gov
• Proposal development
  – Involve RDC staff
• Census Review
  – Feasibility
  – Requirement of benefits to Census
  – Scientific merit
  – Statistical purpose
  – Need for non-public data
  – Risk of disclosure
  – Availability of resources
• Other Agency Review
• Special Sworn Status application
Example Proposal Outline

• Overview
• Benefits to Census
• Methodology
  – Estimating equations
• Required Data
• Expected Output
• Duration and Funding
9 Criteria for Benefits

• Understanding/improving the quality of data
• Leading to new or improved methodology to collect, measure, or tabulate
• Enhancing the data collected (e.g. improving imputations for non-response, developing links across time or entities)
• Identifying limitations/improving the Business Register
• Documenting new data collection needs
• Constructing, verifying, improving sampling frames
• Preparing estimates/characteristics of population
• Developing methodology for estimating non-response
• Developing statistical weights for a survey
Data Availability

Census Bureau Data
- Economic Data
  - establishment or firm level
- Demographic Data
  - household or individual level
- Combined Econ/Demo Data
  - Longitudinal Employer-Household Dynamics (LEHD)

Other Agency Data
- National Center for Health Statistics (NCHS)
- Agency for Healthcare Research and Quality (AHRQ)
RDC Economic Data Advantages

• No publicly-available microdata
  – Internal data at establishment and firm level
  – Universal scope
  – Detailed industry and geography

• Linking Data
  – Consistent identifiers
  – Business register
    • External data
Economic Research Examples

• Bernard, Redding, Schott

• Census of Manufacturers, Longitudinal Business Database, Business Register

• One half of firms alter their mix of products every five years

• Firms exporting many products also serve many export destinations and export more of a given product to a given destination
Economic Research Examples

  - Economic Census and LBD
  - Construct pairwise coagglomeration indices for US manufacturing industries
  - Relate coagglomeration levels to the degree to which industry pairs share goods, labor, or ideas
Economic Research Examples

  - Economic Census and LBD
  - Winning and losing counties have similar trends in incumbents’ TFP prior to a large new plant opening.
  - Five years after the opening, incumbent plants’ TFP is 12 percent higher in winning counties.
Economic Research Examples

  – Longitudinal Business Database (LBD), Census of Manufacturers, Annual Survey of Manufacturers
  – A private firm’s characteristics (e.g. TFP, sales growth) significantly affect its likelihood of going public after controlling for its access to private financing
  – IPOs of firms occur at the peak of their productivity cycle
Conclusions

• Start the process early
• Use standard data sets if time-constrained
• Write proposals geared towards multiple papers
• Use proposal development as research time
  – Understand the data & data limitations
  – Read on-line documentation
    • CES Working Papers
    • Sampling Methodology/Survey Forms
    • History of the Economic Census
• Time and data requests are crucial components – adding data and/or time is difficult for Census projects once underway
• Remember that the Predominant Purpose is to benefit Census
• www.ces.census.gov