Data and Data Access at the Research Data Center of the German Federal Employment Agency at the Institute for Employment Research

INFO7470
Understanding Social and Economic Data
Session 8: Census Geography – Restricted Access Data
03 / 21 / 2016
Agenda

1. Administrative Data Sources
2. Administrative Research Data
3. Data Products Available at FDZ (selection)
4. Data Access
1. Administrative Data Sources
The Data Producers (BA, IAB and FDZ)

- **BA: Federal Employment Agency**
  - Labor administration
  - Calculation of social security contributions and unemployment benefits

- **IAB: Institute for Employment Research**
  - Research department of BA
  - Preparation of admin data for academic purposes
  - Linkage to (own) survey data

- **FDZ: Research Data Center of BA at IAB**
  - Established in 2004
  - Provides access to confidential micro data of BA/IAB for academic purposes
  - Standardized data products
  - Since 2011: Remote access centers in Germany and USA
Data Available at FDZ

- Micro labor market data on individuals, households, and establishments

Administrative Data

- Social Security Notifications
- Process-generated data of the BA

Data products of the FDZ

Surveys

External Data
Employers are required by law to notify the social security institutions on:

- Every employee and marginal worker covered by the social security system
- At the beginning or end of employment, employment interruption, change of health insurance, etc.
- At least once a year

**PRO:** Highly reliable and detailed information on employment spells

**CON:** No information on civil servants, freelancers, or self-employed
Notification Procedure to the Social Security Institutions cont’d

- Social Security Number
- Establishment Number
- Last Name
- First Name
- Address
- Reason for Notification
- Period of Employment (on a daily basis)
- Nationality
- School Education
- Vocational Training
- Type of Employment
- Wages
- Occupation (since 2011: new classification)
- Industry code
Process-Generated Data of BA

- Data from operative processes of BA:
  - Information on earnings replacement/unemployment benefit receipt
  - Participation in labor market programs
  - Registered job search

- Daily information on benefit receipt and amounts at the individual level

- Social security number or BA customer ID, and several other variables
2. Administrative Research Data
Main Database – The Integrated Employment Biographies (IEB)

- IAB merges social security records and BA data ⇒ (complete) individual employment biographies

  apprenticeship training  

  exit out of labor market/entry into pension system

  Integrated Employment Biographies (IEB)

  - Employment history covered by social security system (since 1975)
  - Unemployment benefit receipt (SGB III since 1975, SGB II since 2005)
  - Registered job search (since 2000)
  - Participation in labor market programs (since 2000)
  - Current version: Information on 86.090.505 individuals
3. Data Products Available at FDZ
(selection)
Data Available at FDZ - Overview

BA/IAB data
- Employment History
- Benefit Recipient History
- Participation in labor market programmes
- Jobseeker History

FDZ data
- Establishment History Panel (BHP)
- Sample of Integrated Labor Market Biographies (SIAB)
- Linked Employer-Employee Data (LIAB)
- IAB Establishment Panel (IABB)
- Working and Learning in a Changing World (ALWA)
- Panel Study 'Labor Market and Social Security' (PASS)

External Data

Surveys
Establishment History Panel (BHP)

- Repeated cross sectional dataset on all establishments in Germany with
  - at least one employee liable to social security (until 1998)
  - and/or at least one marginal worker (since 1999)

- Aggregation of the individual admin data by establishment IDs and year

- Two versions:
  - 50% random sample
  - Random sample stratified by eight establishment sizes

- Information on
  - employment structure of the establishment
  - worker in- and out-flows
  - indicators of establishment entries and exits
Establishment History Panel (BHP) cont’d

| Period covered         | West-Germany: 1975 - 2010  
                           East-Germany: 1992 – 2010 |
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Time reference</td>
<td>June 30</td>
</tr>
<tr>
<td>Number of cases</td>
<td>Between approx. 650,000 and 1.3 million establishments p.a. (in the samples)</td>
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</tbody>
</table>
| Topics                 | Establishment information (examples):  
                          • Total number of employees  
                          • Number of employees by main occupation  
                          • Employee age structure  
                          • Division of employees by educational and vocational qualifications  
                          • Wage structure of full-time employees  
                          • Branch of industry  
                          • Number of inflows and outflows  
                          • Classification of establishment entry and exit  
                          • Etc. |
Sample of Integrated Labor Market Biographies (SIAB)

- 2 percent random sample drawn from the IEB database
- May be linked to the Establishment History Panel (BHP) data

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<tbody>
<tr>
<td>Time reference</td>
<td>Employment biographies on a day-to-day basis</td>
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<tr>
<td>Number of cases</td>
<td>1,639,325 individuals or 1,594,466 individuals</td>
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<tr>
<td>Topics</td>
<td>Socio-demographic characteristics (examples):</td>
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<tr>
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<td>Gender, year of birth, nationality, marital status, number of children, school leaving qualification, etc.</td>
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Sample of Integrated Labor Market Biographies (SIAB) cont’d

<table>
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<tr>
<th>Topics (continued)</th>
<th>Information on employment, benefit receipt, job search (examples): Beginning and end of employment, benefit receipt and job search, daily wage, daily benefit rate, occupation, termination of last job, etc.</th>
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<td><strong>Information on location (examples):</strong> Place of residence, place of work (federal state, county, regional directorate, employment agency)</td>
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<td><strong>Information on establishments (examples):</strong> Branch of industry, total number of employees, median wage of the establishment, etc. ⇒ Establishment History Panel</td>
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Linked-Employer-Employee Data (LIAB)

- Worker information from the IEB database are linked to the IAB Establishment Panel survey data
- IAB Establishment Panel:
  - Annual establishment survey
  - West-Germany since 1993, East-Germany since 1996
- Two versions of the LIAB data are available:
  - **Cross-sectional model**: all establishment surveys from the IAB Establishment Panel combined with administrative worker data from IEB database on June 30th (linked establishments: 4,188 – 14,981 per year; workers: 1,629,542 – 2,584,520 per year)
  - **Longitudinal model**: selection of repeatedly interviewed establishments from the IAB Establishment Panel combined with longitudinal worker biographies from the IEB database (linked establishments: 2,702 – 11,117 per year; workers: 1,090,728 – 1,536,665 per year)
Panel ‘Labor Market and Social Security’ (PASS)

- Annual household survey started in 2006/2007: Labor market and poverty situation in Germany
- Situation of recipients of benefits in accordance with SGB II (recipients of Unemployment Benefit II (“Hartz IV”))
- Two random samples from two partial populations:
  - Persons and households in receipt of Unemployment II Benefits
  - All households with persons registered as residents of Germany
- 7 waves are currently available
- Combined data: PASS – IEB (PASS-ADIAB)
Biographical data of selected Insurance Agencies in Germany (BASiD)

- 1% sample of the population of the German Pension insurance related to the sample of insured persons and their insurance accounts 2007 (Versichertenkontenstichprobe - VSKT)
  - Employment liable to social security (in the data since 1951)
  - Marginal employment (in the data since 1999)
  - Self-employment with voluntary pension insurance
  - Receipt of unemployment benefits according to the German Social Code Book III (in the data since 1975) or German Social Code Book II (in the data since 2005)

- Further information from the IEB database are added:
  - Times of job-seeking registered at BA (in the data since 2000)
  - (planned) participation in labor market programs
IAB-SOEP Migration Sample (IAB-SOEP MIG)

- Household survey conducted by IAB and German Socio-Economic Panel (SOEP) at DIW Berlin
- First wave 2013: direct interviews with 4,964 persons in 2,723 households
- Individual and household questionnaire
- Survey address various aspects of immigration including
  - Migration history
  - Education history
  - Employment history
  - Labor market background
- Combination of IAB-SOEP MIG with IEB data will be published in the near future
New Data Developments (further examples)

Most recent examples:

- Geocoded data
- Patent data
- Commercial business data dating back to 2006 (source: Bureau van Dijk, BvD): Combined BvD-IEB data
4. Data Access
Data Access - Types of Data

- **Complete microdata**
- **Weakly anonymized microdata**
- **De-facto anonymized microdata**
- **Fully anonymized microdata**

**Degree of analysis potential**
- On-site: delete direct identifier
- Off-site: anonymization method

**Availability**

- Available at FDZ
## Access Modes

<table>
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<tr>
<th>Off-Site Access</th>
<th>On-Site Access</th>
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| ![Download icon](image)  
Download (Scientific Use File) | ![Remote Execution icon](image)  
Remote Execution with JoSuA | ![Visit icon](image)  
Visit to FDZ or Remote Access Centers |
| De-facto anonymized data | Weakly anonymized data |
Remote Access Centers of FDZ

Just opened/will open soon:
University of California
Los Angeles
UK Data Archive

USA
- Berkeley, CA
- Ithaca, NY
- Ann Arbor, MI
- Cambridge, MA
- Princeton, NJ

Germany
- Bremen
- Hanover
- Berlin
- Duesseldorf
- Dresden
- Mannheim
- Nuremberg
On-site Access

Guest-RDC (external site)

Interface to establish a communication link

Admission control/Identity check

Secure internet connection

FDZ in Nuremberg

Server with FDZ data

Applications, contracts, disclosure review, IT
Remote Execution with JoSuA

- JoSuA is a *Job Submission Application* developed by the Institute for the Study of Labor (IZA).

- Users upload programs in JoSuA from outside the FDZ online.

- These programs must follow the guidelines for the remote data access and must have been tested in advance using the test data (“Blacklist”).

- The results are available in JoSuA after verification of compliance with data protection legislation.

- Two types of output:
  - „internal use“: output automatically reviewed; appears directly on your screen; **must** not be extracted.
  - „publication/presentation“: output is reviewed by FDZ staff; can be extracted after review.
Easy, Quick and Cheap Access

- **Easy**
  - Approval by FDZ (off-site access) or BMAS (on-site access)
  - Use agreement with the institution of the researcher

- **Quick**
  - (Estimated) Time until user/institution receives agreement:
    - 2 weeks for off-site access (scientific use file)
    - 6 to 8 weeks for on-site access

- **Cheap**
  - Access to standard FDZ data is free of charge
  - No lab fees
  - No restrictions on hours/visits of on-site use facilities or runs of remote executions
Thank you!

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