Research Data Centre (FDZ)

of the German Federal Employment Agency (BA) at the Institute for Employment Research (IAB)

#### Data and Data Access

Research Data Centre (FDZ) of the German Federal Employment Agency (BA) at the Institute for Employment Research (IAB)

#### **CASD**

September 11<sup>th</sup>, 2018

Marie-Christine Laible

#### **Outline**

- 1. The Institutions: BA, IAB and FDZ
- 2. Administrative Data Sources
- 3. Selected Data Products
- 4. Data Access



#### 1. The Institutions

#### **Federal Employment Agency and IAB**

- BA: Federal Employment Agency
  - Job counselling and placement services
  - Unemployment insurance benefits
  - Welfare benefits
  - Active labor market policies
  - Labor market reporting and statistics
  - Collects data on social security contributions, unemployment benefits, ...
- IAB: Institute for Employment Research
  - Research department of the BA
  - Scientifically independent
  - Labor market and occupational research
  - Political consulting
  - Research data for academic purposes



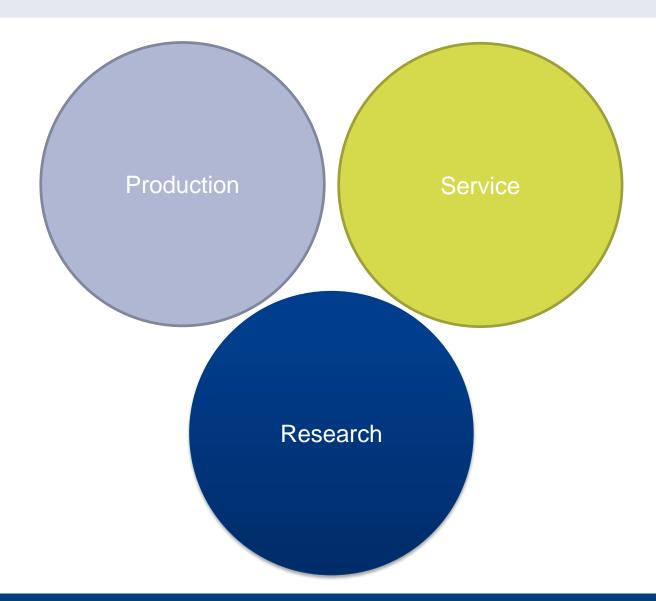


#### The Research Data Centre: FDZ

- Established in 2004 with a funding period of 3 years
  - Permanent department since 2007
- What do we do?
  - Access to confidential micro data of the BA and IAB for academic purposes
  - Standardized data products
  - Advice for data selection and application
  - Documentation
    - Web based metadata information platform coming soon
  - Do research with our data
- Why do we provide data?
  - Legal mandate specified in German Social Code Book



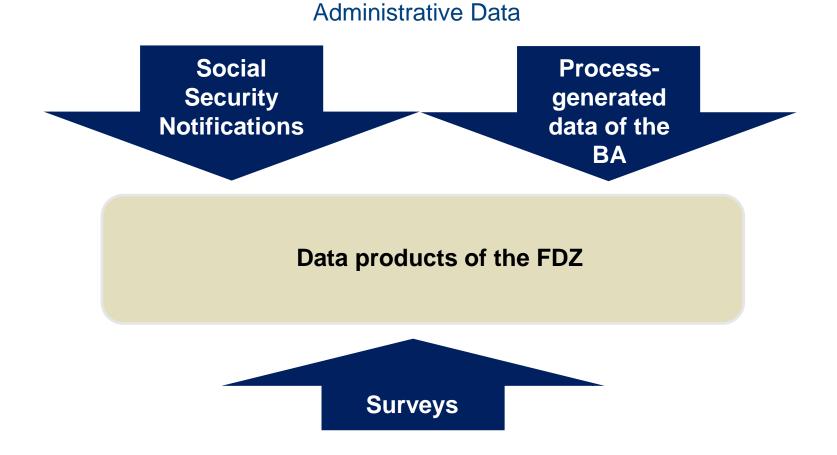
#### **Core Functions of the FDZ**





#### **Data Available at FDZ**

Micro labor market data on individuals, households, and establishments

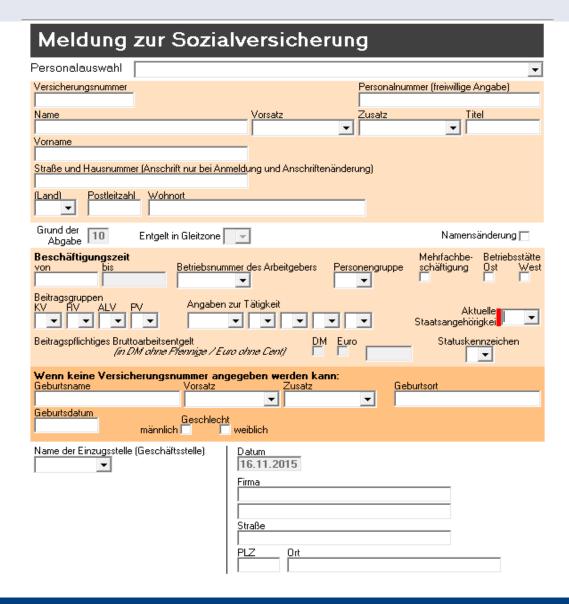




#### 2. Administrative Data Sources



#### **Notification Procedure to the Social Security Institutions**



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



#### **Notification Procedure to the Social Security Institutions**

- 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:

- Very reliable and detailed information on emloyment

#### Con:

- No information on civil servants, freelancers, or self-employed
- Data depends on relevance for administration

#### **Process-Generated Data of BA**

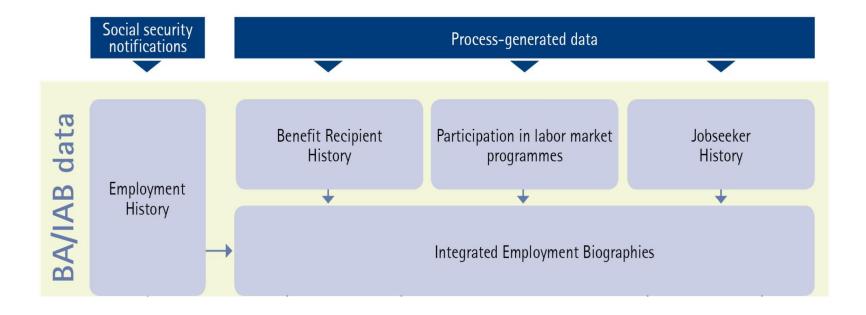
- Data from operative processes of BA:
  - Information on unemployment benefits
  - Participation in labor market programs
  - Registered job search
- Information on benefit receipt and amounts at the individual level
- Social security number or BA customer ID, and several other variables



#### 3. Selected Data Products

### Main Database – The Integrated Employment Biographies (IEB)



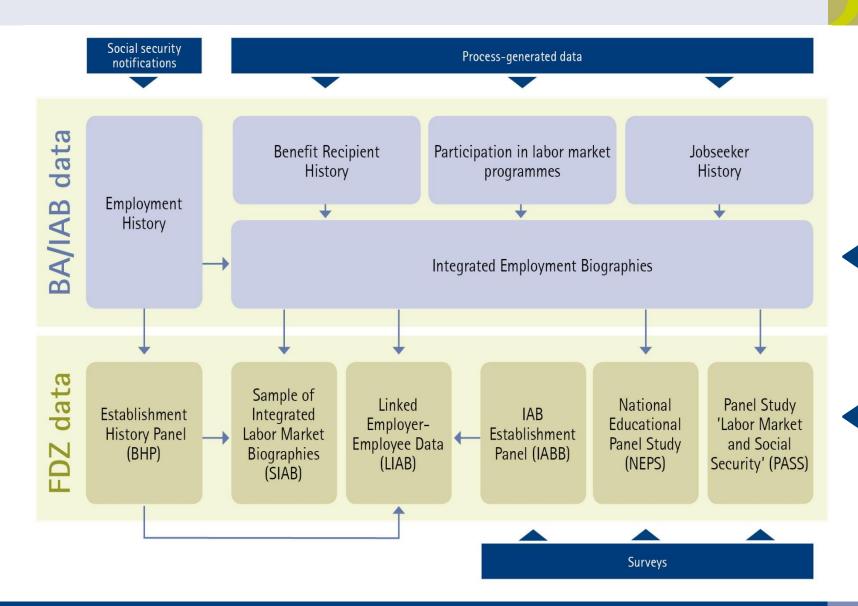




apprenticeship

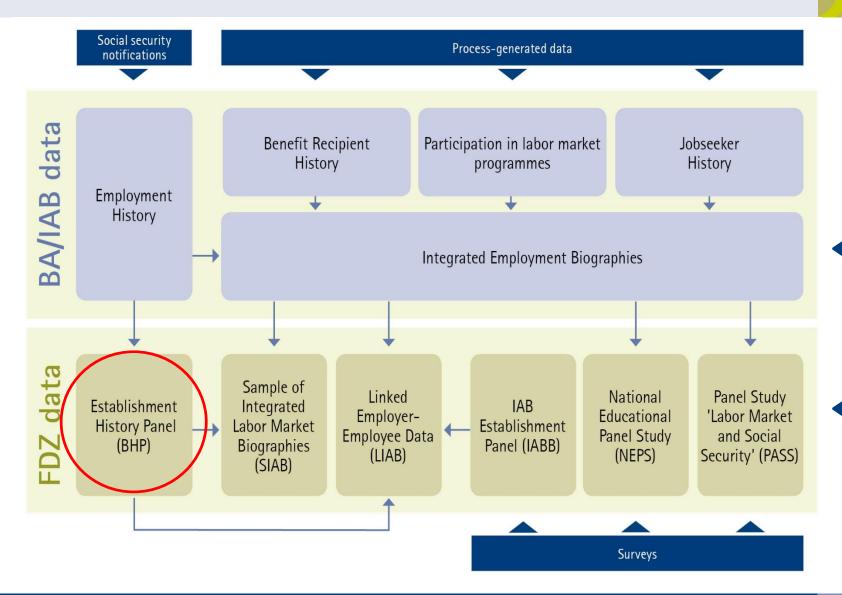
labor market exit or pension system entry

#### Data Available at the FDZ - Overview



#### Data Available at the FDZ - BHP







#### **Establishment History Panel (BHP)**

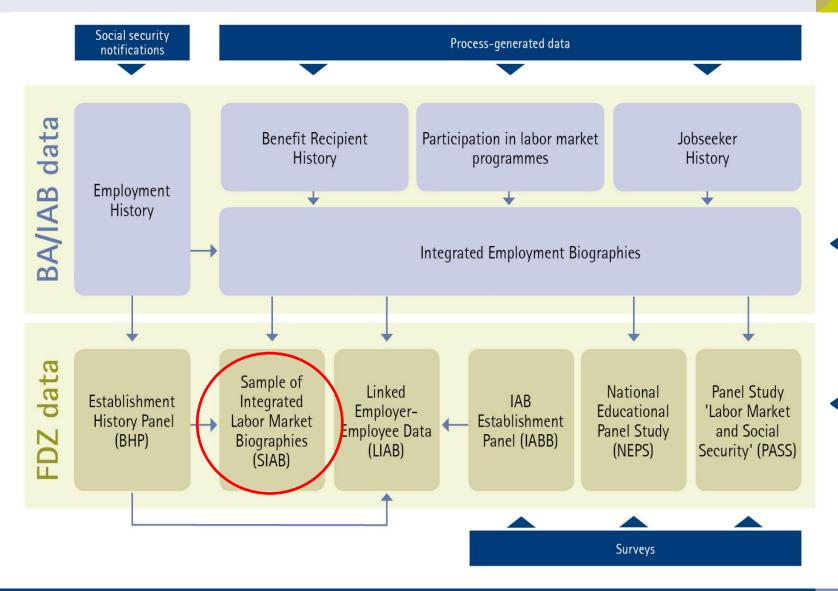
- Repeated cross sectional dataset on all establishments
  - At least one employee liable to social security (until 1998)
  - And/or at least one marginal worker (since 1999)
- Aggregation by establishment IDs and year
- 50% random sample
- Time reference: June 30
- Available years:
  - 1975 2016 in West Germany
  - 1992 2016 in East Germany
- 640,000 1.5 million establishments p.a.

#### **BHP - Topics**

- Establishment characteristics
  - Location
  - Industry
- Employment structure
  - Total
  - Male/female,
  - Full-time/part-time/marginal
  - Skill structure, task requirement structure
  - Age structure
  - Nationality
  - Occupational structure
- Wage structure
- Worker inflows and outflows
- Classification of establishment entry and exit
- Bankruptcies (new!)

#### Data Available at FDZ - SIAB







#### Sample of Integrated Labor Market Biographies (SIAB)

- Individual labor market biographies based on social security records and BA process data
- From apprenticeship training until entry into pension system
- 2% random sample of the full population (based on individuals)
- Time reference: daily
- Available years:
  - 1975-2014 in West Germany
  - 1992-2014 in East Germany
- 1,757,926 individuals
- Information on:
  - Employment since 1975
  - Benefit receipt (SGB III since 1975, SGB II since 2005)
  - Registered job search since 1997
  - Participation in labor market programs since 2000

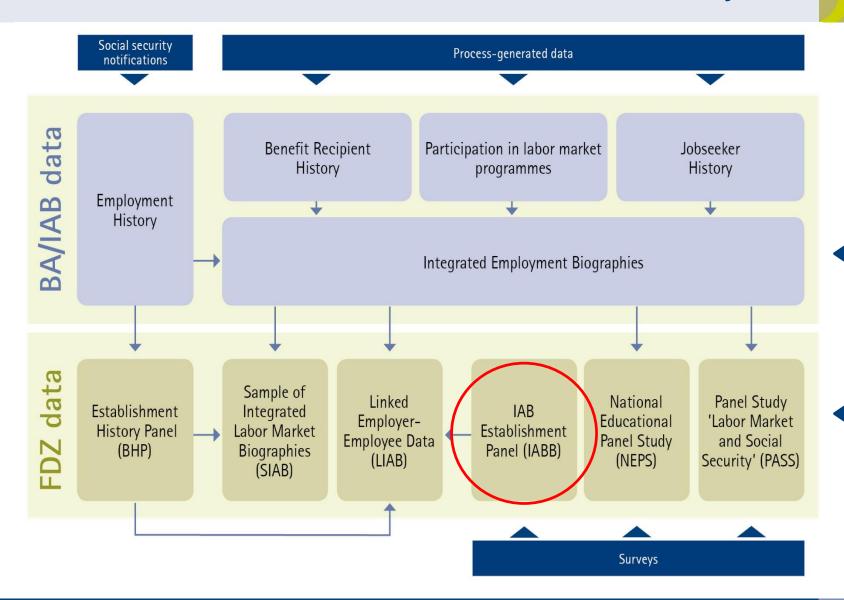
#### SIAB – Topics (I)

- Socio-demographic characteristics
  - Gender
  - Year of birth
  - Nationality
  - Marital status
  - Number of children
  - Schooling and vocational training
- Information on employment, benefit receipt and job search
  - Beginning and end of employment
  - Benefit receipt and job search
  - Daily wage
  - Occupation
  - Full-time/part-time
  - Employment status
  - Beginning/duration of unemployment, etc.

#### SIAB – Topics (II)

- Information on location
  - Place of residence and work
    - Federal state
    - District
- Information on establishment
  - Branch of industry
  - Total number of employees
  - Employment structure
  - Average wage at the establishment
    - →from Establishment History Panel (BHP)

#### Data Available at FDZ – IAB Establishment Panel Survey





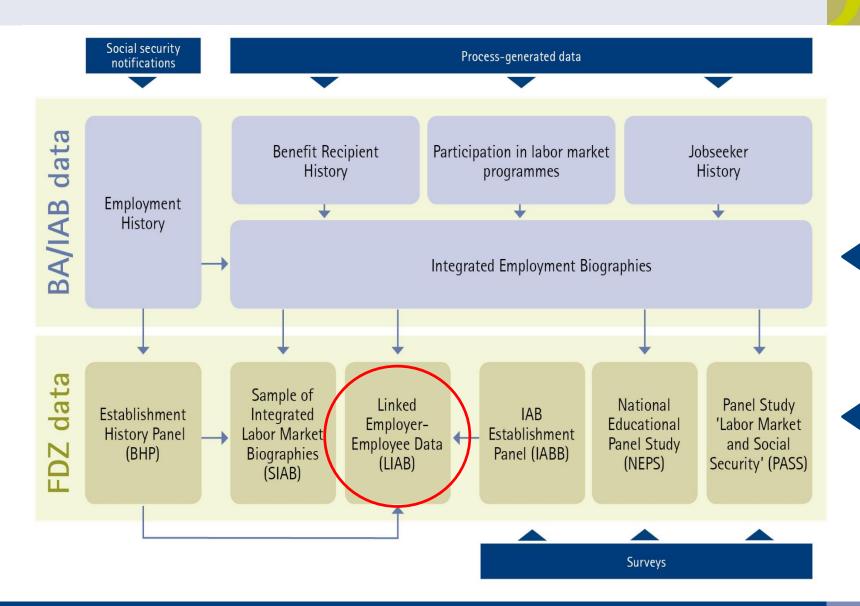
#### IAB Establishment Panel Survey (BP)

- Annual representative survey
  - Since 1993 in West Germany
  - Since 1996 in East Germany
- ~ 16.000 establishments per year
- Establishments with at least one employee liable to social security on June 30<sup>th</sup> of the year before
- Stratified according to establishment size, industry and federal state

#### **BP - Topics**

- Annual topics:
  - General establishment information
  - Employment development
    - Personnel structure
    - Vocational training and apprenticeship places
    - Recruitments and dismissals, personnel search
    - Training
  - Business policy and development
    - Investments
    - Innovations
  - Wages
  - Working hours
- Alternating special focus topics
  - Financial crisis
  - Job security
  - Minimum wage

#### **Data Available at FDZ - LIAB**





#### Linked-Employer-Employee Data (LIAB)

- Worker information from administrative data are linked to the BP
- Two versions of the LIAB are available:

#### 1. Cross-sectional model:

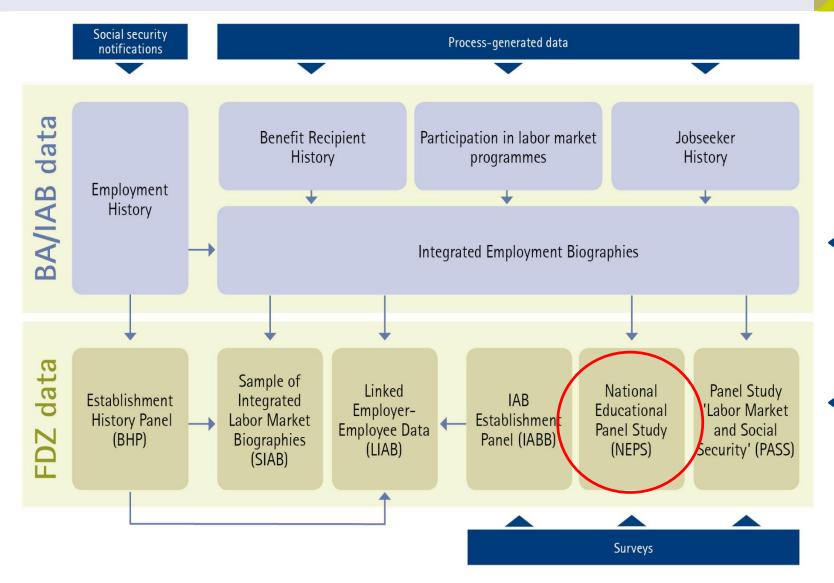
 All establishment surveys from the IAB Establishment Panel combined with administrative worker data from IEB database on June 30<sup>th</sup>

#### 2. Longitudinal model:

Selection of repeatedly interviewed establishments from the IAB
 Establishment Panel combined with longitudinal worker biographies
 from the IEB database

### Data available at FDZ – NEPS-ADIAB







#### **National Educational Panel Study (NEPS)**

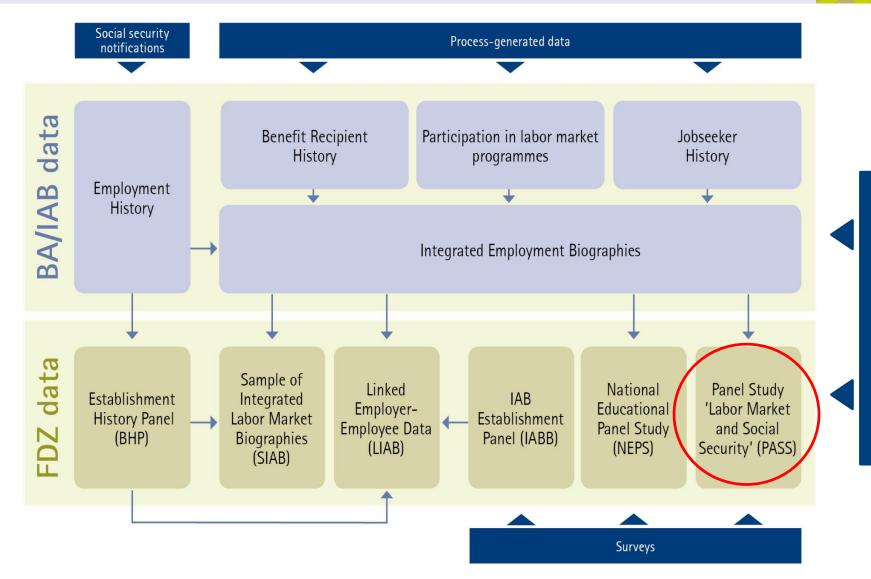
- Longitudinal survey
- Educational trajectories in different contexts and development of competencies throughout the life course
- Multi-cohort-sequence study (six cohorts)
- Starting Cohort 6 (SC6)
  - Adult Education and Lifelong Learning
  - Biography
    - Educational and occupational
    - Family
  - Education
  - Further education and training
  - Competency tests

#### **NEPS-SC6-ADIAB**

- Currently 8 waves between 2007 and 2016
  - ~ 7 000 to 14 000 respondents per wave
- Target population:
  - Born between 1944 and 1986
- Linkage between NEPS SC6 survey and administrative data
  - Record linkage based on name, address, sex and birthdate
  - 92% linkage consent rate for waves 1-5
  - 90% successful linkage (12,660 cases)
  - Administrative biographies: 1975-2014
- Survey-information combined with
  - Establishment data from Establishment History Panel
  - Individual long-run labor market biographies

#### Data available at FDZ - PASS





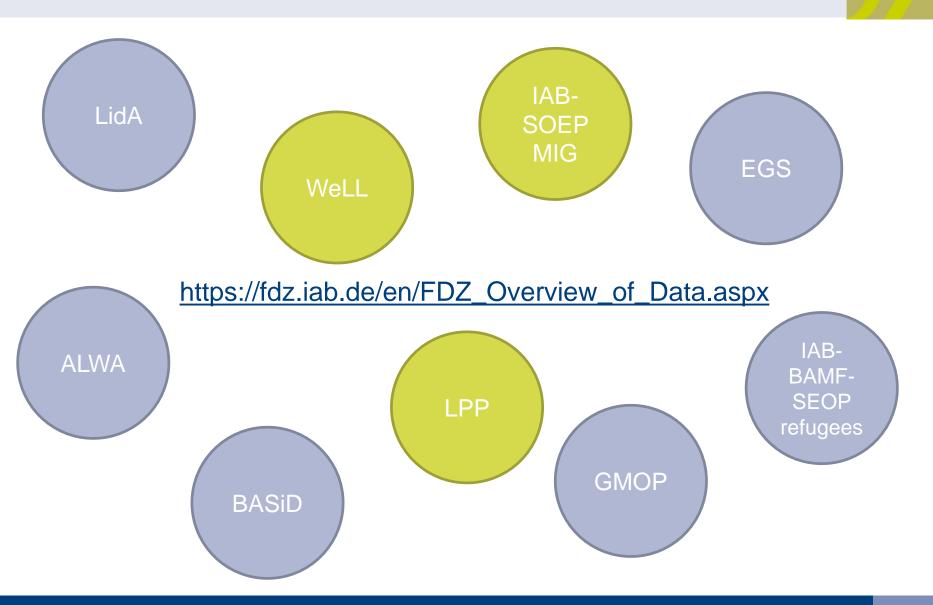


#### Panel 'Labor Market and Social Security' (PASS)

- Annual household survey since 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
- 10 waves are currently available
- Combined data: PASS-ADIAB



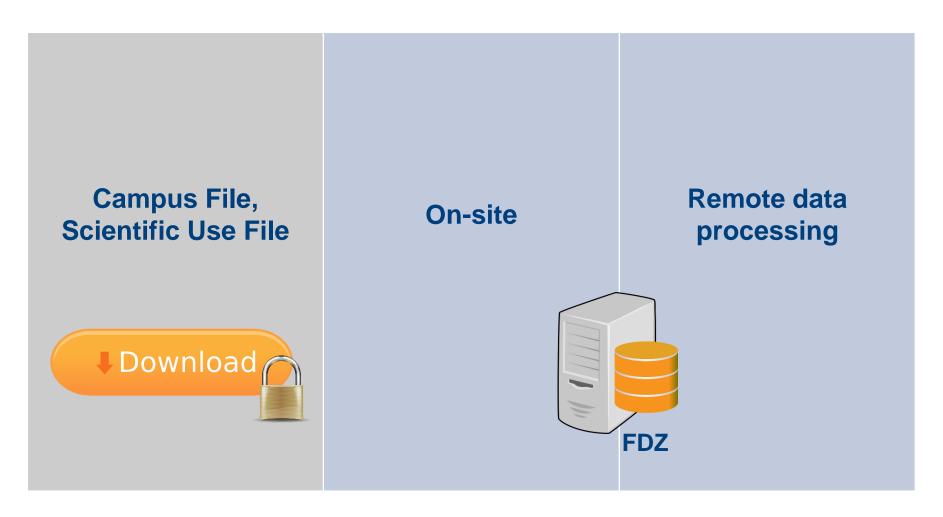
#### **Other Research Datasets**



#### 4. Data Access

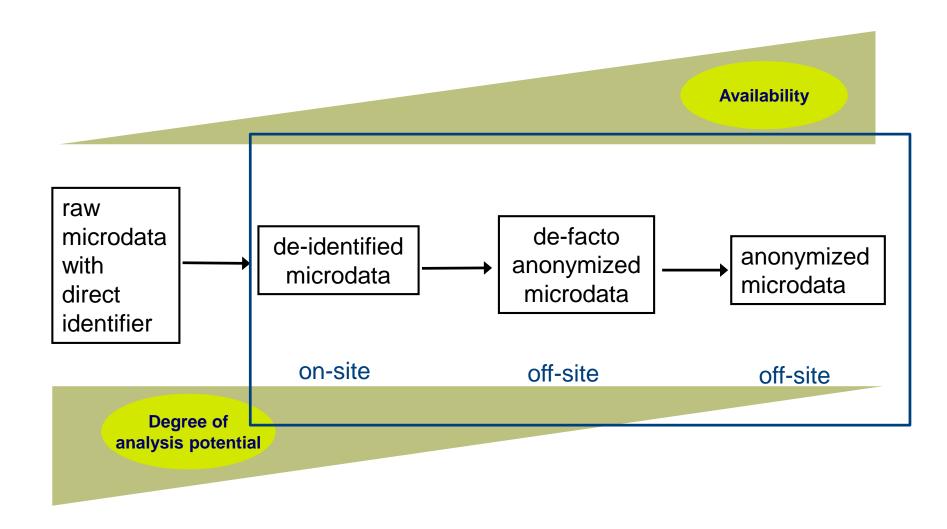








#### **Types of Data Access**





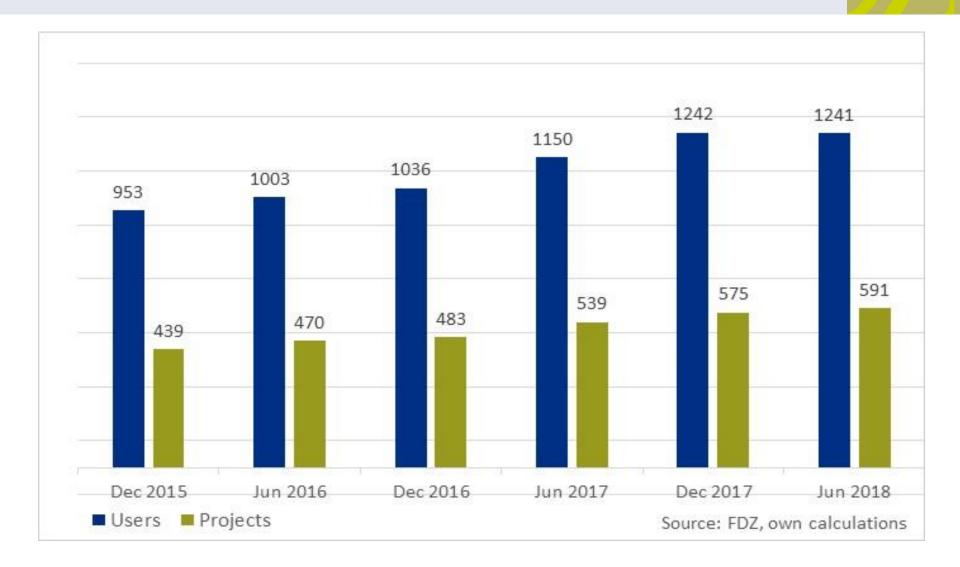
#### **Data Access Steps**

- 1. Non-technical project proposal (<a href="http://fdz.iab.de/en.aspx">http://fdz.iab.de/en.aspx</a>)
  - Important advice:
    - One research question
    - One research goal
    - Choose **one** dataset
- 2. Approval by FDZ
- 3. Use agreement with the institution of the researcher
  - No fees
  - Duration depends on demand and clarity of research proposal
- 4. On-site use
  - Make appointment well in advance
  - Availability depends on demand

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#### **Number of Users**





## **On-site in Nuremberg and Palaiseau**





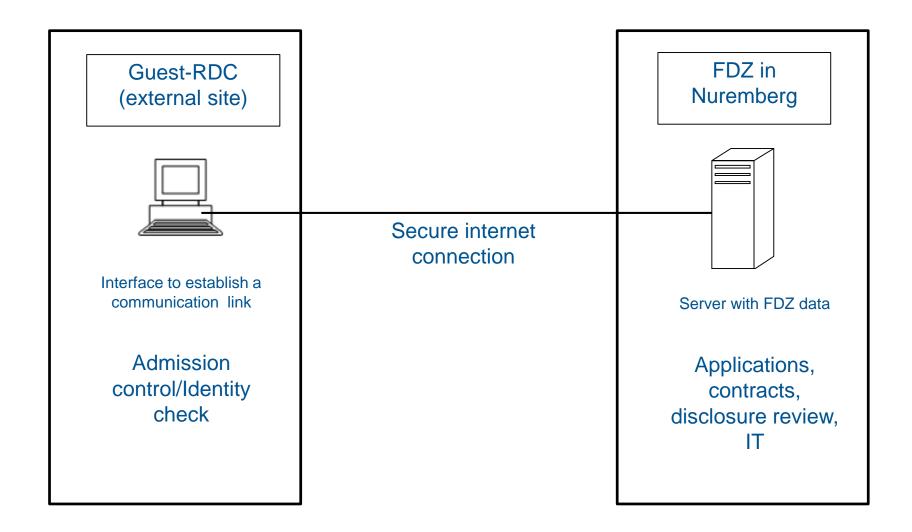


#### **Remote Access Centers**





#### **On-site at a Remote Access Center**









Login		
	Username: Password:	
© 2015 <u>Josua</u> by <u>I</u>	DSC of IZA	Login

https://josua.iab.de

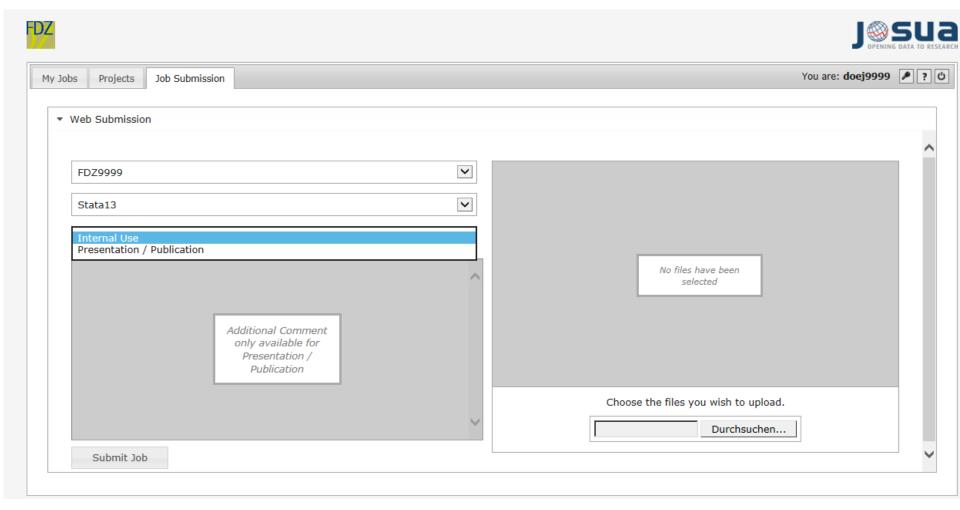
# FDZ

## JoSuA: Job Submission Application

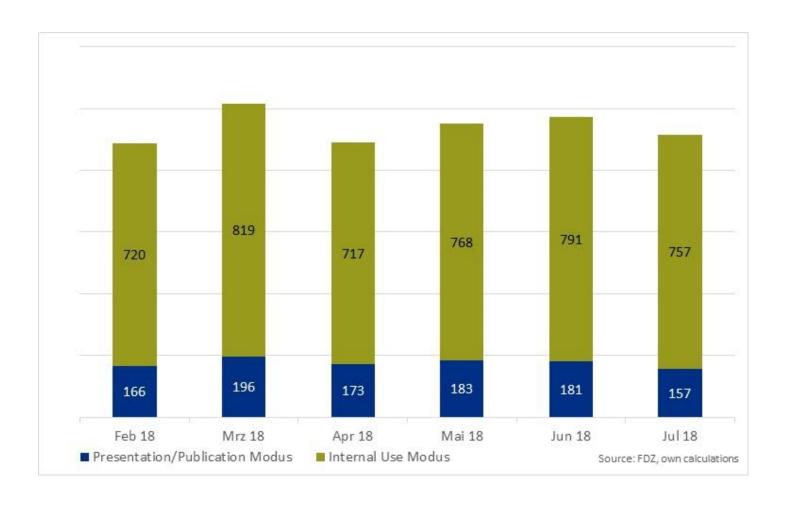
- Application to automate remote data processing
  - Developed by the Institute for the Study of Labor (IZA)
  - Adapted version implemented at FDZ in April 2015
- Remote data processing with JoSuA:
  - Researchers submit jobs via web interface
  - Jobs are automatically picked up and processed using statistical software (Stata)
  - Verified results are transferred back to the web interface
- Two modes available:
  - Internal use
  - Presentation publication



#### **Job Submission Window**



#### **Number of Jobs via JoSuA**



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# **Guidelines Remote Data Access and On-Site Use**



- First Steps
- Structure of the Program Files
- Data Usage
- Results & Publication of Results
  - Make sure you test all programs before submitting them
    - Use test data
    - Use internal mode
    - Use external mode only for presentation and publications!
- Special Arrangements for Other Software
- JoSuA Manual

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#### **Result Window for Internal Use Mode**

					Search:	
Name	_	Status	<b>\$</b>	Size	<b>\$</b>	Options
1 descriptives.log				7.2 KB	£	
2 analyses.log				1.7 KB	£	
aster.log				452 B	£	
owing 1 to 3 of 3 entries						





#### **Result Window for Internal Use Mode**

```
OUTPUT CREATED BY DoeJ9999 ON 2016-09-07 13:19:48 FOR PROJECT FDZ9999
    . sysuse lifeexp, clear
    (Life expectancy, 1998)
   . tabulate region, gen(d_region)
        Region | Freq. Percent
   Eur & C.Asia | 44 64.71
          N.A. I
          S.A.
         Total | 68 100.00
   . summarize d_region*
       Variable |
      d_region1 |
      d_region2 |
      d_region3 |
    58
   10%
                                     Sum of Wgt.
   25%
   50%
                                      Mean
                                      Std. Dev.
                                                    4.715315
                         Largest
   75%
   90%
                                                   22.2342
                                      Variance
   95%
                                      Skewness
                                                  -.9080208
   998
                                      Kurtosis
                                                   4.783111
   . log close
         name: <unnamed>
         log: C:\Josua\Output\51061\logfile.log
     log type: text
    closed on: 7 Sep 2016, 13:19:19
logfile.log-1.png
```



#### **Research Process**

weeks

DATA: BY THE NUMBERS











#### Your contact in Palaiseau

Groupe des Ecoles Nationales d'Economie et Statistique (GENES) Centre d'Accès Sécurisé aux Données (CASD) 5, avenue Le Chatelier 91120 Palaiseau, France

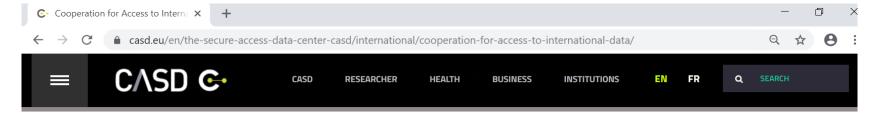
Marine Seilles

Phone: +33 1 70 26 69 33 E-Mail: <u>service@casd.eu</u>

Internet: <a href="https://www.casd.eu/">https://www.casd.eu/</a>

Opening hours with appointments only: Monday to Friday: 9:00 - 12:00 & 13:00 - 17:00

#### **More Information**



HOME > THE SECURE ACCESS DATA CENTER (CASD) > INTERNATIONAL > COOPERATION FOR ACCESS TO INTERNATIONAL DATA



## COOPERATION FOR ACCESS TO INTERNATIONAL DATA



Access to the data of the Institute for Employment Research (IAB) available via its secure Research Data Centre, FDZ

Following the signing of the **agreement between CASD and** IAB, access points were set up in their respective institutions in Palaiseau and Nuremberg in order to facilitate partnerships and comparative work using French and German data sources.

The access point recently installed at CASD in Palaiseau is today the only point of access in France for consulting German data on the topics of social security and employment at the same level of detail as the

#### Save the Date !!!



HOME > NEWS > SAVE THE DATE ADVANCES IN SOCIAL SCIENCES USING ADMINISTRATIVE AND SURVEY DATA

## SAVE THE DATE Advances in Social Sciences Using Administrative and Survey Data

#### First French-German conference on research based on confidential administrative and survey data

#### March 28-29, 2019, Paris, France

We are very pleased to announce the first CASD / IAB Conference on the advances in social sciences using administrative and survey data. The CASD and the IAB have recently established cross-country access to confidential administrative data in France and Germany. The aim is to foster and facilitate the use of rich register datasets – which can be partly combined with detailed survey data – from both countries and to improve the data sources for comparative research in social sciences.

The conference aims to bring together researchers using confidential administrative data in France and Germany and also welcomes researchers using similar data from other countries.

The program committee invites submissions in the field of economics and sociology related to labour markets, demography, trade and firms, migration and industrial relations. One session of the conference will present the comparable French and German datasets potentials for conducting comparative research for France and Germany and practical issues like how to access the data.

Two keynote lectures will be delivered by Christian Dustmann and Olivier Godechot.

Together with further information on the conference, submissions will be open in September preferably for full paper or an extended abstract (3-4 pages).

Program Committee members



### Thank you!

Forschungsdatenzentrum (FDZ) der Bundesagentur für Arbeit (BA) im Institut für Arbeitsmarkt- und Berufsforschung (IAB)

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