FDZ·Datenreport

Documentation of labour market data

05/2010

EN

Linked Employer-Employee Data from the IAB: LIAB Cross-sectional Model 2 1993-2008 (LIAB QM2 9308)

This version: 25.05.2012

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Die FDZ-Datenreporte beschreiben die Daten des FDZ im Detail. Diese Reihe hat somit eine doppelte Funktion: zum einen stellen Nutzerinnen und Nutzer fest, ob die angebotenen Daten für das For-schungsvorhaben geeignet sind, zum anderen dienen sie zur Vorbereitung der Auswertungen.

FDZ-Datenreporte (FDZ data reports) describe FDZ data in detail. As a result, this series of reports has a dual function: on the one hand, those using the reports can ascertain whether the data provided is suitable for their research task; on the other hand, the data can be used to prepare evaluations.

Content

Abstract

This data report describes the LIAB Cross-sectional Model 2 1993-2008 of the Linked Employer-Employee Data from the IAB (LIAB QM2 9308).

Data availability

The dataset described in this document is available for use by professional researchers. Further information can be found on the website http://fdz.iab.de.

1   Introduction and outline

1.1 Introduction

This FDZ Datenreport describes the LIAB Cross-sectional Model 2 1993-2008(LIAB QM2 9308), which is one of the linked employer-employee datasets from the Institute for Employment Research (IAB) provided for research analyses by the Research Data Centre (FDZ) of the Federal Employment Agency (BA) at the IAB. The Linked Employer-Employee Data from the IAB (LIAB) contain both establishment data from the annual waves of the IAB Establishment Panel and information on individuals from the process-generated data of the BA. The LIAB data are generated by linking these two data sources.

A comparison of the different LIAB data sets provided by the FDZ including the general linkage possibilities and problems will be given in a separate FDZ Methodenrport. Detailed information on the firm art of the LIAB data, the IAB Establishment Panel, is available on the FDZ website. This Datenreport concentrates on the description of the data on individuals in the LIAB QM2 9308.

The LIAB QM2 is the successor of the LIAB QM1, i.e. the information on individuals relates to the reference day of the survey and the individuals employed at the reference day. New is that the data preparation was made equal to the Sample of Integrated Labour Market Biographies (SIAB). Hence, information on Social Code II and Job search is included.

Data on Individuals were taken from the Integrated Employment Biographies (IEB) of the Institute for Employment Research (Institut für Arbeitsmarkt- und Berufsforschung - IAB). The IEB comprises all individuals who showed one of the following statuses at least once during the observation period:

– employment subject to social security (recorded from 1975 onwards)

– marginal part-time employment (recorded from 1999 onwards)

– receipt of benefits in accordance with Social Code Book III (recorded from 1975 onwards) or Social Code Book II (recorded from 2005 onwards)

– registered with the Federal Employment Agency (Bundesagentur für Arbeit - BA) as a jobseeker (recorded from 2000 onwards)

– planned or actual participation in an employment or training measure (recorded from 2000 onwards)

These data, which come from different sources, are merged in the IEB and the statuses are depicted exact to the day.

Whilst the Employee History (Beschäftigten-Historik - BeH) is the origin of the information on employment subject to social security and marginal part-time employment, the receipt of benefits in accordance with Social Code Book III (SGB III) and Social Code Book II (SGB II) is recorded in the Benefit Recipient History (Leistungsempfänger-Historik - LeH) and the Unemployment Benefit II Recipient History (Leistungs-Historik-Grundsicherung - LHG and XLHG). The Jobseeker Histories (Arbeitsuchenden-Historiken - ASU and X-ASU) are the data source for the periods of job-search recorded by the BA, whilst participation and planned participation in employment and training measures is recorded in the Participation-in-Measures History File (Maßnahme-Teilnahme-Historik - MTH).

With the exception of participation and planned participation in employment and training measures from the MTH, all of the data sources included in the IEB are also contained in the LIAB QM2 9308.

The Datenreport on the LIAB QM2 9308 is structured as follows. Besides the introduction, Chapter 1 contains information on data access as well as an outline of the data, the volume structure and a list of variables. A description of the individual data sources can be found in Chapter 2. Data preparation and data quality are discussed in Chapters 3 and 4, whilst the individual variables are described in Chapter 5.

1.2 Data use

The LIAB data in the weakly anonymous version may only be analysed in the context of a research visit at the FDZ and subsequent remote data access.

In order to be able to use the data, it is first necessary to submit an application to the Research Data Centre (FDZ). The Federal Ministry of Labour and Social Affairs (Bundesministerium für Arbeit und Soziales – BMAS) makes the decision regarding the approval of the research project. When approval has been granted, a data use agreement is concluded with the researcher's institution. Details on applying for the dataset and possibilities for data processing can be found on the FDZ homepage.

The LIAB data have a modular structure and are stored in several files. One module, which is henceforth called the Individual File, contains identifiers (artificial individual IDs and establishment numbers), the personal variables, the information on employment, benefit receipt and job-search activity, the variables regarding place of residence, and technical variables. A second module, the Establishment File, contains the establishment number, the year, and variables regarding the place of work and economic activities in aggregate form as well as other non-sensitive establishment information as of the reference date of 30 June.

Establishment variables and individual variables are therefore organised separately, which makes the structure of the data clear and saves storage space in the data management sys-

tem. The Establishment File and the Individual File are linked via the establishment number and the year of the dataset. The variables which are marked with a "*" in the List of variables are contained in the Establishment File. Please note that the variable which is necessary for linking the two modules, "establishment number", is available in both the Individual File and the Establishment File.

Certain variables which make it possible to identify individuals or establishments are only disclosed in their original form if this is necessary for the analysis objective and is justified explicitly in the application for data access. In the LIAB QM2 9308 the variables which are particularly sensitive from the viewpoint of data protection legislation are:

Individual File:

- nationality (nation)
- health problems (gesund_ein)
- severe disability status (schweb)
- place of residence: employment agency area (wo_aa)
- place of residence: district (Kreis) (wo_kreis)
- place of work: employment agency area (ao_aa)

Establishment File:

- place of work: district (Kreis) (ao_kreis)
- economic activity 93 – sub-class of economic activity (five-digit code) (w93_5)
- economic activity 03 - sub-class of economic activity (five-digit code) (w03_5)
- economic activity 08 - sub-class of economic activity (five-digit code) (w08_5)

IAB Establishment Panel:

- type of local authority (BIK-Gemeindetyp, since 1998)
- district (since 1998)
- economic activity 93 - sub-class of economic activity (waves 2000, 2001, 2003 5-digit, wave 2002 3-digit)
- economic activity 03 - sub-class of economic activity (since wave 2004, 5-digit)

These variables are made available to the user in the relevant files. Following a justified application further establishment variables can be provided from the Establishment History Panel (Betriebs-Historik-Panel - BHP). Further information on the BHP can be found under http://fdz.iab.de/.

1.3 Differences compared to earlier versions

The LIAB QM2 replaces the LIAB QM1. In this section the main differences compared with the predecessor are described.

	LIAB QM2	LIAB QM1
Sources	Employment, benefit receipt, job-search	Employment, benefit receipt
Data basis	IEB	BLH
Age filter	Yes. Data records in which the age is under 13 or over 75 are not contained.	No age filter
Annual notifications with person group 101 and remuneration == 0	Not contained	Contained
New variables	First day in job Number of days in job	

Table 1: Differences between LIAB QM2 and LIAB QM1

1.4 Outline

Current data version	LIAB Cross-sectional Model 2 1993-2008
Type and volume of the data	Information on individuals related to 6 June from the Integrated Employment Biographies (IEB) of the IAB, linkable to the IAB Establishment Panel
Outline of the contents	**Employee History (Beschäftigten-Historik - BeH):** Annual notifications and end-of-employment notifications submitted to the social security agencies for employees covered by social security and employees in marginal part-time employment. **Benefit Recipient History (Leistungsempfänger-Historik - LeH):** Information on benefit receipt in accordance with Social Code Book III (SGB III) for recipients of unemployment benefit, unemployment assistance and maintenance allowance. **Unemployment Benefit II Recipient History drawn from A2LL (Leistungs-Historik-Grundsicherung aus A2LL - LHG):** Data on individuals in receipt of basic social security benefits in accordance with Social Code Book II (SGB II) (co-operations of employment agencies and municipalities – ARGE, and separated responsibilities responsible for the implementation of SGB II) **Unemployment Benefit II Recipient History drawn from XSozial-BA-SGB II (XLHG):** Data on individuals in receipt of basic social security benefits in accordance with SGB II (authorised municipalities and separated responsibilities) **Jobseeker History (Arbeitsuchenden-Historik - ASU):** Information on job-search activity (applicant pool) **Jobseeker History drawn from XSozial-BA-SGB II (XASU):** Information on job-search activity reported via the transmission standard XSozial-BA-SGBII to the BA by authorised municipalities or separated responsibilities. **Sensitive variables:** Nationality (nation) Health problems (gesund_ein) Severe disability status (schweb) Place of residence: employment agency (wo_aa) Place of residence: district (Kreis) (wo_kreis) Place of work: employment agency (ao_aa) Place of work: district (Kreis) (ao_kreis) Economic activity - sub-class of economic activity (five-digit code) (w93_5) Economic activity - sub-class of economic activity (five-digit code) (w03_5) Economic activity - sub-class of economic activity (five-digit code) (w08_5)

	IAB Establishment Panel Development of employment, business policy and development, investments, in-house innovations, government subsidies, personnel structure, vocational training and apprenticeship places, recruitments and dismissals, personnel search, wages, working hours, training programmes, general company information Main focus of each wave: 1994: Contact with the employment agency 1997: Business start-ups; recruitment of skilled labour 1998: Investments abroad 1999: Progressive retirement and pre-retirement; share of turnover in environmentally protective goods; revision of the DM 630 job regulation 2000: Skilled worker demand; elderly employees; financial incentives for employees 2001: Computer and Internet equipment; staff shares and profit-sharing 2002: Elderly employees; health protection; equal opportunities; contact with the employment agency 2003: Operational flexibility 2004: Personnel structure (senior management), working hours 2005: Environmentally protective goods, personnel recruitment 2006: Job security and locational security of industries 2007: Future staffing for qualified employees 2008: Job security and locational security of industries, equal opportunities
Variables with regional relevance	Place of work and place of residence, federal states, districts, regional directorates, employment agency areas. (Some of these variables are not available for all data sources and periods.)
Date of territorial allocation	BeH: 31.12.2008 LeH: 31.12.2008
Type of territorial allocation	BeH, LeH: corrected territorial allocation ASU, XASU, LHG, XLHG: original territorial allocation, no corrections
Period covered	The period covered depends on the data source. BeH 1993 - 2008 (2006, 2007: 18-month file; 2008: 12-month file) LeH 1993 - 2008 ASU 2000 - 2008 LHG 2005 - 2008 XASU 2005 - 2008 XLHG 2006 - 2008
Update frequency	Continuous
Data unit	Establishments, employees covered by social security (including marginal part-time employees from 1999 onwards), benefit recipients, jobseekers
Number of cases	Establishments: 4.114 to 16.280 per year, 46.182 in total Individuals: 1.885.684 to 2.586.048 per year, 9.784.888 in total

Corrections - outline	The LIAB data on individuals are largely taken from the IEB without corrections. Only validation procedures are carried out, e.g. some variables are recoded.
Special features - outline	Like the data in the IEB, the data in the LIAB also undergo an episode splitting procedure. For this, partly overlapping observations within an account are split in such a way that only non-overlapping or completely parallel periods are created.
File organisation	The LIAB data on individuals are stored in one file per year. A file with establishment information taken from the BHP is stored in long format and can be linked to the data on individuals by betnr and year. The IAB Establishment Panel files remain unchanged as one file per wave and can be linked to the data on individuals by idnum.

File format and size	Stata
	Establishment data:
	    IAB Establishment Panel: 2 to 11 Mbyte per year
	    establishment file: 50 Mbyte
	Individual data: 200 to 260 Mbyte per year

Data access	On-site use at the FDZ of the BA at the IAB and subsequent remote data access
Degree of anonymisation	Weakly anonymous
Citation method	Linked Employer-Employee Data from the IAB, Cross-sectional Model 2 1993-2008 (LIAB QM2 9308), Nürnberg 2010

1.5   List of variables

The overview of variables lists the variable names and the longer descriptions of the variables. It also shows which variables are available for which data sources:

	Variable is available for the data source. Degree of completeness always > 0.85
	Variable is available for the data source. Lower or varying degree of completeness, see description of variable and frequency count
	Variable is not available for this data source. Degree of completeness always < 0.05

Example: the school-leaving qualification is only available for ASU and XASU observations; the observations of the other data sources contain ".n" in this variable. Please note, that some variables have different contents depending on the data source. For instance, for BeH observations the employment status variable contains the person group of the employment notification procedure, for LeH observations it contains the type of benefit, for LHG and XLHG observations it contains the SGB II status and for ASU and XASU observations the

job-search status. These differences are not immediately obvious from the variable name for every variable.

List of variables	Module	Page	BeH	LeH	LHG	XLHG	ASU	XASU
Identifiers								
Individual-ID (persnr)		33	■	■	■	■	■	■
Establishment-ID (betnr)	*	33	■					
Establishment-ID acc. to Survey (id-num)		34	■					
Original spell start date (begorig)		34	■	■	■	■	■	■
Original spell end date (endorig)		34	■	■	■	■	■	■
Episode start date (begepi)		35	■	■	■	■	■	■
Episode end date (endepi)		35	■	■	■	■	■	■
Personal information								
Gender (frau)		35	■	■	■	■	■	■
Year of birth (gebjahr)		35	■	■	■	■	■	■
Nationality (nation)		36	■	■	■	■	■	▨
Nationality, grouped (nation_gr)		36	■	■	■	■	■	▨
Marital status (famst)		36		■			■	
Number of children (kind)		37		■			■	
School education and vocational training (bild)		37	■				▨	▨
School-leaving qualification (schbild)		39					▨	▨
Qualification (quali)		39					▨	
Severe disability status (schweb)		39					■	▨
Health status (gesund_ein)		40					■	
Information on employment, benefit receipt and job-search								
Reason for notification (grund)		40	■	■	▨	▨	▨	▨
Daily wage (tentgelt)		42	■	■				
Transition zone (gleitz)		43	▨					
Occupation (beruf)		43	■				▨	
Occupational status and working hours (stib)		44	■					
Employment status (erwstat)		45	■	■			■	■
Employment status prior to job-search (estatvor)		46					■	▨
Benefit type (lart)		46		■				
Person Group (kundengr)		46					▨	
Type of Ending of Previous Employment (art_kuend)		47					▨	

List of variables	Module	Page	BeH	LeH	LHG	XLHG	ASU	XASU
Mobility (mobil)		47					▓	
Working hours of job application (arbzeit)		47					▓	
Residual claim of unemployment benefit (restanspruch)		48		▓				
Type of provider (traeger)		48			▓	▓		▓
Establishment variables								
Classification of economic activities 73 (3-digit code) (w73_3)	*	48	▓					
Classification of economic activities 93, sub-classes (5-digit code) (w93_5)	*	49	▓					
Classification of economic activities 93, groups (3-digit code) (w93_3)	*	49	▓					
Classification of economic activities 03, sub-classes (5-digit code) (w03_5)	*	50	▓					
Classification of economic activities 03, groups (3-digit code) (w03_3)	*	50	▓					
Classification of economic activities 08, sub-classes (5-digit code) (w08_5)	*	51	▓					
Classification of economic activities 08, groups (3-digit code) (w08_3)	*	51	▓					
First appearance of establishment (grd_jahr)	*	52	▓					
Last appearance of establishment (lzt_jahr)	*	52	▓					
Total number of employees (az_ges)	*	53	▓					
Number of full-time employees (az_ges_vz)	*	53	▓					
Number of employees in marginal part-time employment (az_gf)	*	53	▓					
Average daily wage in establishment (te_med)	*	53	▓					
Location data								
Place of residence: district (Kreis) (wo_kreis)		54	▓	▓	▓	▓	▓	
Place of residence: employment agency (wo_aa)		54	▓	▓	▓	▓	▓	▓
Place of residence: regional directorate (wo_rd)		55	▓	▓	▓	▓	▓	▓
Place of residence: federal state (Bundesland) (wo_bula)		56	▓	▓	▓	▓	▓	▓
Place of work: district (Kreis) (ao_kreis)	*	56	▓					

List of variables	Module	Page	BeH	LeH	LHG	XLHG	ASU	XASU
Place of work: employment agency (ao_aa)	*	57	▓				▓	
Place of work: regional directorate (ao_rd)	*	57	▓				▓	
Place of work: German State (Bundesland) (ao_bula)	*	58	▓					
Generated technical variables								
Source of the spell (quelle)		58	▓	▓	▓	▓	▓	▓
Spell counter per person (spell)		58	▓	▓	▓	▓	▓	▓
Spell counter per episode (level2)		58	▓	▓	▓	▓	▓	▓
Spell counter per episode and source (level1)		59	▓	▓	▓	▓	▓	▓
Year (jahr)		60	▓	▓	▓	▓	▓	▓
Status of establishment number (betr_st)		60	▓					
Generated biographical characteristics								
First day in employment (ein_erw)		61	▓	▓	▓	▓	▓	▓
First day in establishment (ein_bet)		61	▓					
Number of days in establishment (tage_bet)		62	▓					
First day in job (ein_job)		62	▓					
Numbers of days in job (tage_job)		63	▓					
Number of benefit receipts (anz_lst)		63	▓	▓	▓	▓	▓	▓
Number of days with benefit receipt (tage_lst)		64	▓	▓	▓	▓	▓	▓
Employment status 5 years after reference day (estat5jn)		64	▓					
Employment status 8 days before first day in establishment (estat8tv)		65	▓					
Daily wage 5 years after reference day (lohn5jn)		66	▓					
Daily wage 8 days before first day in establishment (lohn8tv)		66	▓					

1.6 Volume structure

Jahr	Individuals	Surveyed establishments	Surveyed establishments that can be linked	Establishments including the not-surveyed
1993	2.586.048	4.265	4.188	11.062
1994	2.225.255	4.154	4.041	9.507
1995	1.885.684	4.114	3.934	9.205
1996	2.474.088	8.604	8.293	13.894
1997	2.122.374	8.917	8.386	13.227
1998	2.081.469	9.334	8.787	13.961
1999	2.020.326	9.915	9.433	54.324
2000	2.345.070	14.083	13.462	69.693
2001	2.537.786	15.782	14.981	73.711
2002	2.397.947	15.682	14.699	67.266
2003	2.185.555	16.165	15.061	74.219
2004	2.386.540	16.063	14.832	98.689
2005	2.397.671	16.280	14.870	105.314
2006	2.230.177	15.976	14.461	104.104
2007	2.015.901	16.181	14.580	100.431
2008	1.958.626	16.058	14.333	100.337

Tabelle 2: Volume structure

The number of observations in the data on individuals is higher than the number of individuals because of parallel employment, benefit recipience and job search recorded in separate data lines. Surveyed establishments are those of the IAB Establishment Panel that are marked A, B, C, D, E, and G by the variable ‚Wellenkennzeichen'. Not all of the surveyed establishments can be linked to the individual data. The last row represents the number of establishments that include parallel employment in establishment which were not surveyed.

The number of surveyed establishments nearly quadrupled whereas the number of employees remained on the same level. This is caused by a decline in the share of large establishments in the IAB Establishment Panel.

2 Data sources

The data on individuals in the LIAB were drawn from the Integrated Employment Biographies of the IAB. The IEB in turn unite data from five different data sources, each of which may contain information from different administrative procedures.
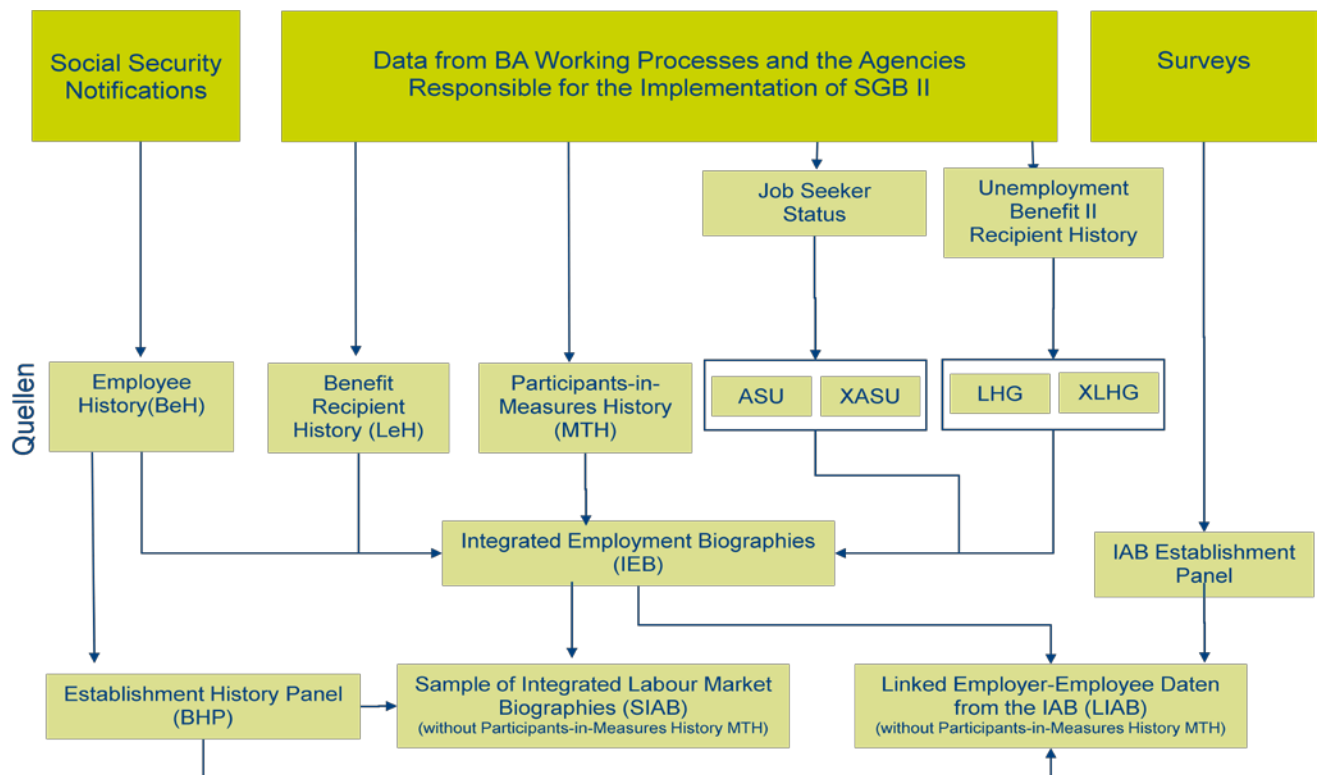
Figure 1: Data sources of the IEB

Observations from all of the data sources shown, with the exception of participation (or planned participation) in employment and training measures (MTH), are incorporated into the LIAB from the IEB.

2.1 Employee History (BeH)

The source of data regarding employment is the Employment History (Beschäftigten-Historik - BeH) of the IAB. The data basis is the integrated notification procedure for health, pension and unemployment insurance, which came into effect as of 1 January 1973 (and was extended to cover eastern Germany as of 1 January 1991) and is known by the abbreviation DEÜV (previously DEVO/DÜVO) (for further details see: Bender et al. 1996, p. 4 ff.; Wermter/Cramer 1988). Under this procedure employers are required to submit notifications to the

responsible social security agencies concerning all of their employees covered by social security. The BeH covers all white- and blue-collar workers as well as apprentices as long as they are not exempt from social security contributions. This means that civil servants, the self-employed and regular students (see Cramer 1985) are in principle not recorded in the BeH. Since the notification procedure was changed on 1 January 1999, employees in marginal part-time employment and unpaid family workers have also been recorded (not contained in the data until 1 April 1999).

Every year in which an individual is in an employment relationship is depicted by at least one notification. The data are recorded by the health insurance companies, collected in a continuous file by the Federal Employment Agency (BA) and subsequently integrated into the History File of the IAB. The current observation period of the BeH extends from 1 January 1975 to 31 December 2009.

Some of the variables in the LIAB Establishment File are taken from the Establishment History Panel (Betriebs-Historik-Panel - BHP), which is also based on the BeH. The LIAB Establishment File includes the following variables:

– Place of work: district (Kreis) (ao_kreis)
– Place of work: federal state (Bundesland) (ao_bula)
– Economic activity 73 (w73_3)
– Economic activity 93 (w93_3 and w93_5)
– Economic activity 03 (w03_3 and w03_5)
– Economic activity 08 (w08_3 and w08_5)
– Total number of employees (az_ges)
– Number of full-time employees (az_ges_vz)
– Number of marginal part-time employees (az_gf)
– Average daily wage in establishment (te_med)
– Year when establishment was founded (grd_jahr)
– Last appearance of the establishment (ltz_jahr)

Two things have to be taken into account when linking individual data with establishment data:

1. The variables in the Establishment File are aggregated on 30 June of a year. Unlike the data on individuals, the establishment variables are therefore not spell data but are only valid on 30 June precisely each year.[1]

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[1] An extreme example: there is an employment notification from 1.1.2006 until 30.5.2006; the establishment goes bankrupt in June 2006. There is then no information about this establishment in the BHP for 2006.

2. Secondly, the BHP is created directly from the BeH, whereas the LIAB Individual File is generated from the IEB (see Figure: Data sources of the IEB), which does not incorporate all BeH observations.

The Establishment File is linked with the Individual File via the program-specific commands of the software packages used for preparing and analysing the data. In Stata, for instance, the two files can be linked using the "merge" command in connection with the relevant paths (see Section 5.7.5).

Not all of the variables in the BHP are contained in the LIAB QM2 9308 as a standard. Following a justified application, individual further variables from the BHP can be merged by the FDZ. Further information about the BHP can be found in the corresponding FDZ-Datenreport under http://fdz.iab.de.

2.2 Benefit Recipient History (LeH)

The Benefit Recipient History (Leistungsempfänger-Historik - LeH) of the IAB covers periods during which individuals receive earnings-replacement benefits from the Federal Employment Agency. The benefits comprise unemployment benefit, unemployment assistance and maintenance allowance, in other words not benefits under the sphere of Social Code Book II (e.g. unemployment benefit II). The entitlement to benefits depends on legal requirements being fulfilled, e.g. not being classed as "in need" in the case of unemployment assistance, non-completion of the qualifying period for unemployment benefit or periods of unemployment during which the requirements were not met. Therefore, periods of unemployment without benefit receipt according to Social Code Book III are not reported in the Benefit Recipient History. The observation period of the Benefit Recipient History extends from 1 January 1975 to 31 December 2008.

2.3 Unemployment Benefit II Recipient History (LHG/XLHG)

Whereas the LeH contains the benefits in the sphere of Social Code Book III, the Unemployment Benefit II Recipient History (Leistungs-Historik-Grundsicherung - LHG) consists of observations depicting receipt of benefits in accordance with Social Code Book II (SGB II). Benefit receipt in the context of the Unemployment Benefit II Recipient History covers both basic social security benefits (e.g. unemployment benefit II) and supplements to unemployment benefit or additional benefits. Unlike the benefits in the sphere of Social Code Book III, the BA is no longer necessarily the sole institution responsible for administering the benefits.

The data therefore distinguish between the three possible types of institution responsible for implementing SGB II:

- Co-operations of employment agencies and municipalities (Arbeitsgemein-schaften - ARGE) in which the BA and the municipality deal with tasks jointly
- In the case of separated responsibilities (getrennte Trägerschaft) the tasks continue to be divided between the BA and the municipality[2]
- In the case of authorised municipalities (zugelassener kommunaler Träger, op-tierende Kommune, Optionskommune), which are municipalities that have opted to be the sole agency administering benefits under SGB II, the munici-pality takes on the tasks in the field of SGB II independently

The Unemployment Benefit II Recipient History covers two sources that differ in the way in which the data are transmitted: the data of the "Unemployment Benefit II Recipient History drawn from A2LL" (LHG) come from the BA administrative procedure A2LL, whilst the "Un-employment Benefit II Recipient History drawn from XLHG-BA-SGB II" (XLHG) records data which was reported in accordance with the transmission standard X-Sozial-BA-SBG II.

As a rule A2LL is used in all ARGE co-operations, whilst the standard X-Sozial-BA-SBG II is used by the authorised municipalities. Both of the procedures are used by municipalities with separated responsibilities.

A special feature compared with the LHG is that the amount of benefit received is not deter-mined at the level of the individual but at the level of the benefit community (Bedarfsgemein-schaft[3]). It is not possible, however, to link individuals with benefit receipt under SGB II at the level of benefit communities in this dataset. The LHG and the XLHG in principle contain all registered individuals who are entitled to receive benefits in accordance with § 7 SGB II, in other words needy individuals who are capable of work and, if applicable, also the members

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[2] The municipality pays the costs for housing and heating (§ 22 SGB II) and additional one-off benefit payments to cover extra costs (§ 23 (3) SGB II) and the additional benefits to support integration in accordance with §16 (2) clause 2 No. 1 - 4 SGB II. The BA on the other hand covers the costs for regular benefits, social insurance contributions and integration benefits (SGB III and SGB II) and spe-cific benefits excluding the additional benefits to support integration cited above.

[3] A so-called 'Bedarfsgemeinschaft', or 'benefit community', includes all individuals in a household who receive benefits jointly (i.e. as a joint payment). In the majority of cases the 'benefit community' and the household will be the same, which in particular applies in the case of (married or unmarried) couples and parents with children under the age of 25. However, under specific circumstances the 'benefit community' might not include all household members, or a household in which everybody re-ceives benefit payments might be made up of more than one 'benefit community'. An example of the former is if a grown-up child lives with his/her parents and earns just enough to make his/her own liv-ing but has insufficient means to support his/her mother and father – in this case the 'benefit com-munity' will only include the parents. An example of the latter is a three- (or more) generation house-hold: since a 'benefit community' may only consist of two generations, this type of household will be made up of two such 'benefit communities', one consisting of the grandparent(s) and one of the par-ent(s) and child(ren). (Trappmann et al. 2007)

of their benefit community. However, only periods during which a person is capable of work or is under the age of 64 are incorporated.

Each dataset depicts non-overlapping periods of entitlement to benefit of a person in a certain benefit community. However, the observations are split

- on relevant birthdays (14, 15, 18, 25 and 65) of the members of a benefit community,
- if there are changes in the composition of a benefit community (e.g. by members joining or leaving the benefit community),
- if there are changes in the variables of the benefit community client and
- at the beginning and end of a sanction period for observations from 1 April 2006 onwards.

With regard to sanctions it must be taken into account that although the beginning and the end of a sanction period lead to the observations being split, it is not possible to determine from the data either the duration or the type of the sanction or the time when the sanction was imposed or when it began. The reason for this is the lack of a corresponding variable or value that indicates the start, the type or the duration of a sanction.

The data source LHG are available from the time when Unemployment Benefit II was introduced on 1 January 2005 until 14 October 2009. On the other hand, the data source XLHG is available as of 1 November 2009 until 14 October 2009.

2.4 Jobseeker History (ASU/XASU)

Data about jobseekers are stored in the Jobseeker History (Arbeitsuchenden-Historik – ASU). The ASU data source contains information on jobseekers who are registered with employment agencies and from 2005 onwards also includes separated responsibilities responsible for the implementation of SGB II. The XASU data source on the other hand contains the data of jobseekers in receipt of Unemployment Benefit II (ALG-II) from authorised municipalities from 2005 onwards. These data are reported in accordance with the X-Sozial-BA-SBG II standard.

3 Data preparation and sampling procedure

3.1 Corrections and validation procedures

Before the data from the data sources named in Chapter 2 are merged to form the IEB they undergo several correction steps, which are briefly described in the following sections.

All of the correction and validation procedures described below refer to the raw data from the individual data sources or to the aggregate file of the IEB, which constitutes the population for the LIAB data. The LIAB data do not undergo any further corrections and thus (virtually) correspond to the original data of the IEB. A few variables are simply recoded and for reasons of anonymity some of the data are aggregated.

3.1.1 Employee History (BeH)

- Minor corrections were made to dates.
- From 1999 onwards only the person groups 101, 102, 103, 105, 106, 112, 118, 119, 120, 140, 141, 142, 143, 149, 201, 203 and 205 are supplied, as well as the two groups 109 and 209, which indicate people in marginal part-time employment. Groups that are not included from 1999 onwards include people in short-term employment, i.e. person groups 110, 202 and 210.
- Until 1998 observations with no details on the person group are contained in addition to the groups listed above.
- Registrations of employment subject to social security are filtered out as the information about new employment relationships is also available in the annual notifications.
- Cancellations are taken into account and the corresponding observations are deleted. Revision notifications are incorporated.
- Duplicates are removed according to the following criteria: social security number, establishment number, start and end dates, reason for notification, earnings and date created.
- Observations with earnings amounting to zero or with no details on earnings and the value 101 for the person group variable and the value 50 for the reason for notification (annual notification) are not incorporated into the IEB.
- Social security numbers are updated to the status as of 30.06.2008; cancelled social security numbers are deleted.
- Gender and date of birth are taken from the social security number.
- The territorial allocations for place of work and place of residence are updated to the status as of 31.12.2008.

3.1.2 Benefit Recipient History (LeH)

- It must be taken into account that in cases of ongoing receipt the end date corresponds to the end of the period for which the benefit is allowed and not the end of the benefit receipt period. Observations with no end date or an invalid

end date are excluded from further processing, since in these cases it cannot be assumed that a benefit payment was made at all.

- Observations without a valid start date are excluded.
- Observations whose end date precedes the start date are excluded.
- If the end date for unemployment assistance precedes the start date by one day, then the end date is deferred by one year.
- Overlapping LeH observations are corrected for the IEB in accordance with the following rules:
  - All overlaps in which both of the observations involve the same type of benefit and the same amount of benefit are corrected as follows:
    - If one observation is completely embedded within the period of another one, the shorter observation is deleted. If the two observations are of the same length, one (randomly selected) observation is deleted.
    - In cases where observations partially overlap, the end date of the observation that began first is corrected.
  - Overlaps of observations involving **different types of benefit** and/or different amounts of benefit paid are only corrected if the overlap concerns just one day and the original duration of both observations exceeds one day. In these cases the end date of the observation that began first is put back by one day.
- The territorial allocations of LeH data records are corrected to the status as of 31.12.2008.

3.1.3 Unemployment Benefit II Recipient History (LHG/XLHG)

- Only observations of people who are capable of work and people under the age of 64 are read in.

3.1.4 Jobseeker History (ASU/XASU)

- The data from the ASU that are used cover the period from 01/2000 to 09/2009. The registered periods of job-search activity of the individuals are regarded as complete.
- The ASU data basis only distinguishes between observations with the status "unemployed" and "jobseeker". In the IEB, however, a distinction is made between "unemployed", "incapacitated for work" and "jobseeker". The employment status "incapacitated for work" is assigned to IEB observations when in the ASU data basis

- o a preceding observation with the status "unemployed" exists which joins the next observation without a gap and has "incapacitated for work" as the reason for exit and

- o a subsequent observation with the status "unemployed" exists which also follows without a gap and

- o the observation itself does not have the status "unemployed" but "job-seeker".

– Unlike the ASU, the XASU does not take into account periods of incapacity for work as there is no information about illnesses available in the XASU data.

– Observations whose end date precedes the start date are filtered out.

– The territorial allocations are not corrected.

3.1.5 Corrections of the aggregate file

After the raw data have been corrected and combined to form the population of the IEB, the aggregate file of the IEB is corrected across all of the sources. For this the following correction steps are carried out:

– Observations in which the age is under 13 or over 75 are deleted.

– Observations whose end date precedes the start date are deleted.

– Accounts in which the gender or date of birth change are corrected in accordance with priority rules.

3.2 Episode splitting

The LIAB data are available with "split" episodes. If observations overlap within an account these observations are replaced by artificial observations with new dates so that completely parallel periods and non-overlapping periods are created. This increases the number of observations.

persnr	begorig	endorig	level
4711	01.01.98	31.12.98	-
4711	01.10.98	30.06.99	-
4711	01.01.99	31.12.99	-

Episode Splitting
Splitting of the time intervals into "non-overlapping" intervals.

persnr	begepi	endepi	level
4711	01.01.98	30.09.98	0
4711	01.10.98	31.12.98	0
4711	01.10.99	31.12.98	1
4711	01.01.99	30.06.99	0
4711	01.01.99	30.06.99	1
4711	01.07.99	31.12.99	0
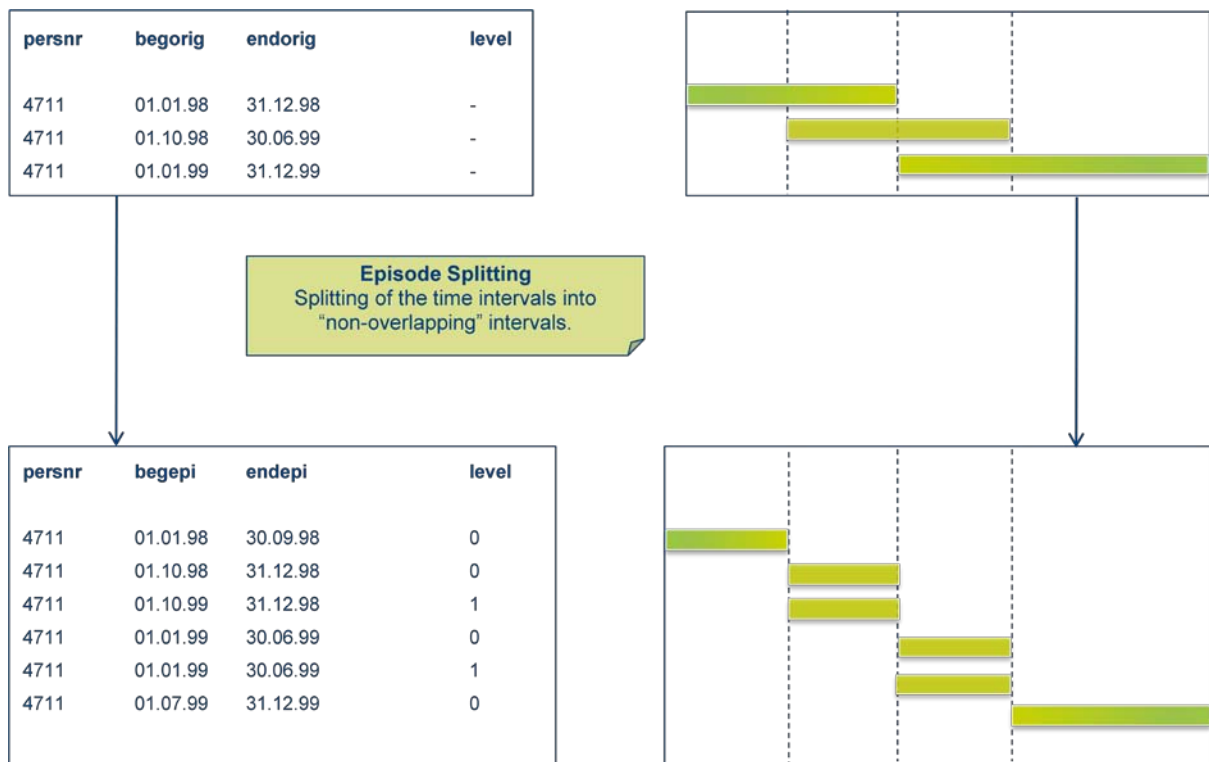
Figure 2: Episode splitting

Episode splitting results in observations being doubled and the period of validity being changed. The original date variables for the beginning and the end of the original observation (begorig and endorig) are retained, the variables 'start date of the split episode' and 'end date of the split episode' (begepi and endepi) mark the beginning and the end of the split episodes. It is possible to establish whether observations have been split by comparing the original period (begorig and endorig) with the episode period (begepi and endepi).

To restore the original data without the split episodes or to delete the episodes that were created artificially by means of episode splitting it is necessary to select all observations for which the start of the original observation is the same as the start of the split episode (`begepi == begorig`).

3.3 Sampling procedure

The IAB Establishment Panel is an annually conducted survey. The sample is drawn from the population of all German establishments with at least one employee liable to social security. The sample is stratified according to industry, firm size, and federal state.

The data on individuals in the LIAB QM2 9308 are taken from the IEB. For all surveyed establishments of a year all observations of employees on 30 June are drawn that are valid on 30 June, i.e. all episodes that start on or before 30 June and end on or after 30 June.

3.4 Missing values

In the LIAB QM2 9308 missing values are coded as follows:

Term	Value	Description
No (valid) details available	.z	Values of a variable which are not systematically missing, i.e. the variable is available in principle for the data source, but no details are available for the value considered or no allocation is possible.
Systematically not available	.n	A variable is not available in principle for a data source (dark grey cells in the overview of variables in Section 1.5) or is not available for a certain period.

4 Data quality and problems

4.1 Employee History (BeH)

– Due to the introduction of the employment notification procedure in the federal states of eastern Germany, the notifications for BeH observations for eastern Germany can only be assumed to be sufficiently complete from 1993 onwards. The increase in the number of BeH observations from 1999 onwards is due to the introduction of the obligation to submit employment notifications for people in marginal part-time employment from 1 April 1999 onwards.

– Within the employment notification procedure a certain time lag is unavoidable. Although changes in employment relationships have to be reported immediately and existing employment relationships have to be confirmed annually by April of the following year, some notifications actually arrive years later. The History File of the IAB is not updated continuously, however, but at certain intervals. This is done using files of employment notifications for one particular year which were submitted 36, 18, 12 or 6 months after the end of the reporting year (e.g. the 18-month file for 2007 can be created in July 2009 at the earliest). Notifications submitted more than three years late are not taken into account at the IAB, which means that a 36-month file shows a 100 % degree of completeness by definition.

– In the version of the IEB on which the LIAB QM2 9308 are based the degree of completeness of the BeH observations last stood at 100 % in 2005. 18-month files were used for 2006 and 2007, and the observations for 2008 come from a 12-month file. It can therefore be assumed that the BeH observations for 2006, 2007 and in particular for 2008 are slightly under-reported in the LIAB QM2 9308. However, this should not reduce the ability to analyse the data at individual level. The missing notifications occur more frequently in a few establishments, however. This means that in individual cases the establishment data, e.g. establishment size, are grossly incorrect and will change considerably in subsequent versions of the LIAB QM2.

– Owing to the introduction of the new employment notification procedure in 1999 only the person groups 101, 102, 103, 105, 106, 112, 118, 119, 120, 140, 141, 142, 143, 201, 203 and 205 are supplied, as well as the two groups 109 and 209, which indicate people in marginal part-time employment. Groups that are not supplied include people in short-term employment, i.e. person groups 110, 202 and 210. Exception: prior to 1999 observations with no (valid) details on the person group are also recorded, which is of importance in particular for 1991 because a great many employees were registered in this way in eastern Germany.

– In a few cases the BeH observations may be in the incorrect order within an episode. It may occur that a BeH observation with the value "z" for the variable "employment status" is shown in a lower position although this observation shows the highest remuneration.

4.2 Benefit Recipient History (LeH)

– In principle it must be taken into account that in cases of ongoing receipt the end date corresponds to the end of the period for which the benefit is allowed and not the end of the benefit receipt period. LeH observations which go beyond 14.09.2009 thus depict the period for which the benefit is allowed and are available in the LIAB data, though this concerns only a very small proportion (less than 1%).

4.3 Unemployment Benefit II Recipient History (LHG/XLHG)

– The degree of completeness of the variable "reason for discontinuation of unemployment benefit II" ("grund", see 5.4.1) is comparatively low. However, it must be taken into consideration here that the "reason for discontinuation of unemployment benefit II" is a purely person-related variable. Thus if an observation of an individual in receipt of Unemployment Benefit II is split due to a change in the structure of his/her benefit community, the variable "reason for discontinuation of unemployment benefit II" shows the value "missing" (.z).

– Although the beginning and the end of a benefit sanction lead to the observations being split, it is not possible to determine from the data either the duration or the type of the sanction or the time when the sanction was imposed or when it began.

– Changes in the type of institution or in district territories generally appear in the data somewhat later. One exception to this is the first six months of 2005, as the planned formation of co-operations of employment agencies and municipalities (ARGE) already appears in the data here. The change in the type of institution in legal terms did not occur until somewhat later, however.

4.4 Jobseeker History (ASU/XASU)

4.4.1 ASU

– The registered periods of job-search activity from the ending year 2000 for the individual persons are regarded as complete.

- Older observations are only contained for jobseekers who could be identified in the BA systems from 2000 or before. Observations with start dates before 1990 or end dates after 2008 are, however, likely to be mainly input errors.

- Owing to problems that occurred during data preparation in the BA and IAB procedures, it is not possible to allocate ASU observations clearly to one of the types of institution responsible for the sphere of SGB III (BA) or SGB II (co-operation, authorised municipality, separated responsibilities). The variable "institution responsible for SGB II" can therefore not be analysed statistically for any of the ASU observations and was thus set to "missing" (.z) for all ASU observations.

- From mid-2005 until mid-2006 the coArb procedure, from which the jobseeker and applicant pool data originate, was superseded by the VerBIS procedure at the Federal Employment Agency. In July 2005 the coArb operative system was first replaced by VerBIS in the employment agency in Wiesbaden as a pilot project. From December 2005 onwards it was then gradually replaced by VerBIS in several stages in all employment agencies. The information for many of the variables recorded was gathered with different levels of differentiation and different qualitative weighting in the two systems. It is therefore very difficult to integrate these variables into the IEB, which is only possible using a special procedure (mapping). Unfortunately a full conversion of the affected variables from coArb to VerBIS cannot be achieved by means of mapping, so for some variables there is an unusually large number of the values "no details available", "other" or "missing". Moreover, striking differences may occur in frequency counts, depending on whether the original source of the data was coArb or VerBIS. The values of the following variables which are available for the ASU data source are affected by the conversion to VerBIS:
    - Type of institution
    - Severe disability status
    - Nationality
    - School education and vocational training
    - Occupational classification

- The territorial allocations are not updated.

4.4.2 XASU

- In contrast to the job-search notifications from the co-operations of employment agencies and municipalities (ARGE) and the separated responsibilities, systematic cases of under-recording have emerged for the 69 authorised municipalities since

01.01.2005. In principle, the XASU observations can only be assumed to be complete in the IEB and thus also in the LIAB data from June 2006 onwards.

– A variety of variables sometimes have only a very low degree of completeness for the XASU. Variables in the LIAB which are affected by this include "school-leaving qualification", "severe disability status", "nationality", "reason for notification", "employment status prior to job-search" and the data on the place of residence. The degree of completeness of these variables improves over time. The variable "occupational classification" is not available in the XASU for almost the entire period available. In general it is to be taken into account that the degrees of completeness sometimes vary depending on the institution supplying the data.

– It remains unclear whether the institutions – as intended - only report periods in which they themselves are responsible for the jobseekers or whether preceding periods of support from the BA in accordance with Social Code Book III are reported as continuous episodes if the job-search status does not change.

– For a number of institutions the proportion of registered recipients of unemployment benefit II who are also registered jobseekers is implausibly large at times or continuously in the IEB. One possible reason for this could be an incorrect determination of the status "not unemployed but seeking work" by these institutions.

– The institution-related and period-related plausibility of the XASU data should be examined by the user before use, taking the research question into account.

5 Description of variables

Frequency counts and overviews of the individual values and labels of the variables can be found in separate files under http://fdz.iab.de.

5.1 Identifiers

5.1.1 Individual-ID (persnr)

Variable label	individual-ID
Variable name	persnr
Category	identifiers
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	none
Detailed description	The artificial individual ID indicates which observations belong to the same person. Artificial means that it is not possible to infer any of the person's characteristics or any original identifiers from this individual ID. As there is no uniform individual indicator across the BA, the allocation of (BA) data from different data sources (e.g. employment and benefits) to individuals is not always clear. The formation of the individual identifier which spans all data sources is based on a heuristic developed by the BA.

5.1.2 Establishment-ID (betnr)

Variable label	establishment-ID
Variable name	betnr
Category	identifiers
Origin	BeH
Data type	numerical
Hierarchy	none
Detailed description	The artificial establishment number indicates which observations belong to the same establishment. It is based on the establishment number allocated by the BA, which was replaced by an artificial number. Further information on the allocation of establishment numbers by the BA can be found in Bender et al. 1996: p. 15 f. and pp. 27-30. This variable is also contained in the Establishment File with a different variable label. In the Establishment File the variable label is: btr-id bhp 7508
Notes on quality	The establishment number is missing in a few BeH observations. Most of these observations are notifications for the person group "205" (earnings notifications for casual workers). As establishment variables (place of work, economic activity, establishment size etc.) are merged via the original establishment number, the establishment information is missing in these observations.

5.1.3 Establishment-ID acc. to Survey (idnum)

Variable label	establishment-ID acc. to Survey
Variable name	idnum
Category	identifiers
Origin	IAB Establihment Panel
Data type	numerical
Hierarchy	none
Detailed description	If available, the system-independent idnum was adopted from the IAB Establishment Panel. The variable "Status of the Establishment-ID" (betr_st) indicates whether a BeH record is related to an establishment in the Establishment Panel and whether the establishment was surveyed at that point of time.

5.2 Period of validity

5.2.1 Original spell start date (begorig)

Variable label	original spell start date
Variable name	begorig
Category	period of validity
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	date
Hierarchy	none
Detailed description	The original start date of the observation corresponds to the original start date of the notification. This can differ from the start date of the episodes (begepi). Because of the rules of the notification procedure, in BeH observations the starting and ending year are always identical (obligation of the employer to submit annual employment notifications).

5.2.2 Original spell end date (endorig)

Variable label	original end date of observation
Variable name	endorig
Category	period of validity
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	date
Hierarchy	none
Detailed description	The original end date of the observation corresponds to the original end date of the notification. This can differ from the end date of the relevant line of data, the so-called end date of the split episode. The reason for this is the so-called episode splitting procedure. Because of the rules of the notification procedure, in BeH observations the starting and ending year are always identical (obligation of the employer to submit annual employment notifications).

5.2.3 Episode start date (begepi)

Variable label	episode start date
Variable name	begepi
Category	generated period of validity
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	date
Hierarchy	none
Detailed description	Start date of the split episode. The term "episode" means the period of an observation. This period can differ from the period of the original notification.

5.2.4 Episode end date (endepi)

Variable label	episode end date
Variable name	endepi
Category	generated period of validity
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	date
Hierarchy	none
Detailed description	End date of the split episode. The term "episode" means the period of an observation. This period can differ from the period of the original notification.

5.3 Personal information

5.3.1 Gender (frau)

Variable label	gender
Variable name	frau
Category	personal variable
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	none
Detailed description	Gender dummy (0 - man, 1 - women). The gender information is constant per account.
Notes on quality	In the original data it may happen that the gender changes. This is corrected during the data preparation process. Details from data sources regarding benefit payment (LeH, (X)LHG) are given highest priority here.

5.3.2 Year of birth (gebjahr)

Variable label	year of birth
Variable name	gebjahr
Category	personal variables
Origin	BeH, LeH, LHG, XLHG, ASU, XASU

Data type	numerical
Hierarchy	none
Detailed description	The year of birth is constant per account.
Notes on quality	In the original data it may happen that the year of birth changes between the data sources. This is corrected during the data preparation process. The information from the social security number is given highest priority here.

5.3.3 Nationality (nation)

Variable label	nationality
Variable name	nation
Category	personal variables
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	none
Detailed description	This variable contains the nation code used by the Federal Statistical Office (Statistisches Bundesamt).
Notes	Owing to its particular sensitivity with regard to data protection legislation, this variable is only made available in non-aggregated form on application and only in well-founded cases.

5.3.4 Nationality, grouped (nation_gr)

Variable label	nationality, grouped
Variable name	nation_gr
Category	personal variables
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	none
Detailed description	This variable combines the nation codes used by the Federal Statistical Office into groups.

5.3.5 Marital status (famst)

Variable label	marital status
Variable name	famst
Category	personal variables
Origin	LeH, ASU
Data type	numerical
Hierarchy	none

Detailed description	This variable describes the marital status. Marital status includes categories of living in a joint household with children or a partner. However, it is not possible to distinguish clearly whether • a married person / person living in a joint household is bringing up children, • a married person / person living in a joint household / person living alone has any children at all, • a lone parent / person living in a joint household / person living alone is married In the LeH data source the variable covers only two values (0 – not married, 1 - married), whereas the ASU data source distinguishes between four values. No comparison of the information from the two data sources was made.

5.3.6 Number of children (kind)

Variable label	number of children
Variable name	kind
Category	personal variables
Origin	LeH, ASU
Data type	numerical
Hierarchy	none
Detailed description	This variable has a different meaning depending on the data source. It indicates the children aged under 16 living in the household at the time when the benefit application was made. **1) LeH** The LeH only distinguishes between whether the number of children is zero or at least one. The following values are therefore available: 0 no children 100 at least one child **2) ASU** Here the value of the variable corresponds to the number of children. The variable is not updated when there are changes in the type of benefit or the approval of benefits, but only when a new case of benefit receipt occurs after a period of employment.

5.3.7 School education and vocational training (bild)

Variable label	school education and vocational training
Variable name	bild
Category	personal variables
Origin	BeH, ASU, XASU
Data type	numerical
Hierarchy	none

Detailed description	It must be taken onto account that this variable has a different meaning depending on the data source: **1) BeH** For BeH observations the variable contains the school education / vocational training reported by the employers in the employment notification procedure. The indicator 'school education and vocational training' is a combined variable which is used to gather information on both the employee's school education and his/her vocational qualifications (the highest qualification gained in each case). Here the school qualifications are to be established first and then the vocational qualifications. Only in the case of the values 5 (degree from a university of applied sciences) and 6 (university degree) are no other vocational qualifications determined (see BA 2005, p. IX.). The following values exist: 1 Primary school/lower secondary school/intermediate school leaving certificate or equivalent school education, without a vocational qualification 2 Primary school/lower secondary school/intermediate school leaving certificate or equivalent school education with a vocational qualification 3 With upper secondary school leaving certificate (Abitur), without a vocational qualification 4 With upper secondary school leaving certificate (Abitur) and a vocational qualification 5 Degree from a university of applied sciences (Fachhochschule) 6 University degree It cannot be inferred from the data whether the individual completed school education or not, both cases can occur in the values "1" and "2". **2) ASU/XASU** ASU and XASU observations contain the completed vocational training at the beginning of the job-search activity. The following values exist: 21 no completed vocational training 22 in-firm training 23 external training 24 full-time vocational school (Berufsfachschule) 25 technical college (Fachschule) 26 university of applied sciences (Fachhochschule) 27 university "Changes in the vocational training status frequently occur at the same time as a change of establishment. This is because the notification data are compiled anew in the new firm. If, for example, an employee has gained a higher qualification via a part-time further training course while still working then this change of status is probably not recorded until s/he joins a new firm. It can generally be assumed that when a person is employed in a firm for a longer period, the personal data that they reported when they joined the firm is simply continued." (Meinken/Koch 2004, p. 63).

	A method for correcting missing values or temporal inconsistencies in the education and training data in the predecessor sample, the IABS, can be found in Fitzenberger et al. (2006) and in Drews (2006). Only the BeH data source is used for this, however, as this was the only data source with information on education and training in the IABS.
Notes on quality	"For certain sub-groups there is a large proportion of missing data because this variable is not of importance as regards social security (this affects people in marginal part-time employment, for example)." (Meinken/Koch 2004, p. 63).

5.3.8 School-leaving qualification (schbild)

Variable label	school-leaving qualification
Variable name	schbild
Category	personal variables
Origin	ASU, XASU
Data type	numerical
Hierarchy	none
Detailed description	This variable contains the school-leaving qualification held by the individual at the beginning of the period of unemployment or job-search.
Notes on quality	Although the degree of completeness in the XASU increases continuously over the years, it remains comparatively low (partially under 50%).

5.3.9 Qualification (quali)

Variable label	qualification
Variable name	quali
Category	personal variables
Origin	ASU
Data type	numerical
Hierarchy	none
Detailed description	This variable takes into account not only vocational training but also occupational experience. In the case of equivalent competence as a result of educational background, performance or experience, a skills level can also be entered when the applicant does not hold a corresponding qualification.

5.3.10 Severe disability status (schweb)

Variable label	severe disability status
Variable name	schweb
Category	personal variables
Origin	ASU, XASU
Data type	numerical
Hierarchy	none

Detailed description	A severe disability status is recognised from a level of disability of over 50 %. Equal status to severely disabled is granted on application in accordance with §2 of the Severely Disabled Persons Act (Schwerbe-hindertengesetz – SchwbG) when the level of disability is between 30 % and 50 %.
	The variable refers to the start date of the period of unemployment or the job-search status.
Notes	Owing to its particular sensitivity with regard to data protection legisla-tion, this variable is only made available in non-aggregated form on application and only in well-founded cases.
Note on quality	The degree of completeness of this variable is poor in the XASU in 2005 and 2006.

5.3.11 Health status (gesund_ein)

Variable label	health status
Variable name	gesund_ein
Category	personal variables
Origin	ASU
Data type	numerical
Hierarchy	none
Detailed description	This variable provides information about whether health problems ex-ist.
Notes	Owing to its particular sensitivity with regard to data protection legisla-tion, this variable is only made available in non-aggregated form on application and only in well-founded cases.
Notes on quality	This variable is affected by the changeover to the VerBIS procedure (see Section 4.4.1). The data quality of the variable can be described as good.

5.4 Information on employment, benefit receipt and job-search

5.4.1   Reason for notification (grund)

Variable label	reason for notification
Variable name	grund
Category	information on employment, benefit receipt and job-search
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	none

Detailed description	**1) BeH** In BeH observations the 'reason for notification' variable indicates the reason why the employer submitted the employment notification in question to the social security agencies. However, not all of the possible reasons for submitting a notification that may occur in the context of the notification procedure are available in the IEB. For instance, the IEB only includes notifications that have information on earnings (i.e. annual, employment interruption and end of employment notifications), whilst initial registrations are not contained as they contain no information on earnings. However, this does not involve a loss of information as the details from a registration are transmitted again with the following annual, employment interruption or end of employment notification. The reasons for submitting employment notifications are encoded according to the regulations of the notification procedure which has been in effect since 01.01.1999 (in accordance with DEÜV). **2) LeH** In LeH observations the variable indicates the reason for the end of receipt of unemployment benefit, unemployment assistance or maintenance allowance. In contrast, the LeH does not contain information about the reasons for the start of benefit receipt, as the information for the LeH comes from the notifications submitted by the employment agencies to the health insurance institutions regarding finished periods of benefit receipt **3) LHG/XLHG** The LHG and XLHG datasets contain the 'reason for discontinuation of Unemployment Benefit II' and indicates the reason why current benefits have been discontinued. The 'reason for discontinuation of Unemployment Benefit II' variable **refers to the individual**, not to the benefit community. The variable is valid exactly at the end of the observation. If the value of the variable changes, the data record is split. It must be taken into account that the 'reason for discontinuation of Unemployment Benefit II' is a person-related variable. If the Unemployment Benefit II receipt of a different member of the benefit community is discontinued, all observations of the members of the benefit community are split on this date, but the reason for discontinuation of Unemployment Benefit II is only available for the individual whose benefit is discontinued. **4) ASU/XASU** In the case of ASU records the variable contains the deregistration or exit reason. It must be taken into account here that the number of values of the variable was reduced from 26.04.2003 onwards. The old values were recoded to the new values as far as this was possible.

Note on quality	Proportion of valid values (degree of completeness) for the reason for notification in the data sources LHG, XLHG, ASU and XASU:
	
	<pre> q2
		2005 2006 2007 2008
		----------+-------------------------
		   LHG
			0.178 0.129 0.180 0.153
			  XLHG
				0.108 0.109 0.108
				   ASU
					0.535 0.963 0.935 0.840
					  XASU
						0.050 0.325 0.336 0.294</pre>

	In the LIAB Cross-sectional Model it is not recommended that the notification reason "end of employment" is considered an exit from the establishment. Sometimes an exit may be directly followed by a re-entry with the same employer.

5.4.2 Daily wage (tentgelt)

Variable label	daily wage
Variable name	tentgelt
Category	information on employment, benefit receipt and job-search
Origin	BeH, LeH
Data type	numerical
Hierarchy	none
Detailed description	**1) BeH** In BeH observations this variable shows the employee's gross daily wage. It was calculated from the fixed-period wages reported by the employer and the duration of the unsplit original notification period in calendar days. The daily wage is shown in Euros for the entire period. Until 1998 employers in principle only reported the earnings which were subject to social security contributions. Earnings below the marginal part-time income threshold were not reported. Earnings exceeding the upper earnings limit for statutory pension insurance were only reported up to this limit. It must be taken into account here that there are two upper earnings limits in the statutory pension insurance scheme: the earnings limit of the pension insurance for wage and salary earners and that of the miners' pension insurance, which is generally higher. Since the inclusion of marginal part-time employees in the employment notification procedure as of 01.04.1999, earnings below the marginal part-time income threshold have also been recorded; the upper earnings limit still applies as the upper ceiling. In some cases, however, the reported earnings nonetheless exceed the upper earnings limit. Generally this can probably be attributed to the payment of annual bonuses which the employer can add to the regular earnings in the annual, employment interruption or end of employment notifications. In this case it is irrelevant whether the upper earnings limit in the statutory pension insurance which is decisive for the notification period is exceeded as a result of this addition. However, such earnings notifications could also be due to incorrect details in the employment period or the amount of wages paid, though this is likely to be seldom the case given the relevance of this information for social security contributions. The marginal part-time income threshold and the upper earnings limit for statutory pension insurance differ from year to year as well as between eastern and western Germany (the decisive factor is the location of the establishment). An overview of these limits and thresholds can be found under http://fdz.iab.de. A daily wage reported as 0 Euros can be put down to "employment interruption notifications". During these periods the employment relationship continues to exist in legal terms, but without pay. This is the case for periods of illness after the end of continued payment of wages, for periods of maternity leave and for sabbaticals.

	The daily wage is shown with two decimal places. All values greater than 0 and smaller than 0.01 were rounded up to 0.01. This makes it possible to identify the above-mentioned employment interruption notifications, in other words observations with (fixed-period) wages = 0, with the condition daily wage = 0.
	2) LeH
	For LeH observations the variable shows the daily benefit rate, converted into Euros in each case. It must be taken into account that for observations with an original start date prior to 01.01.1998 the daily benefit rate applies to working days, while for observations with an original start date from 01.01.1998 onwards it applies to calendar days.
	Since 01.01.2005, a daily benefit rate reported as 0 Euros can be put down to benefit suspension periods or interruptions of benefit payments. If a reason for deregistration / reason of end of benefit / reason for notification is reported for an observation with a daily benefit rate equal to 0, then it is a notification of interruption of benefit payments. In the case of observations that reflect a period of benefit suspension, the entitlement is the same as before the start of the benefit suspension period.

5.4.3 Transition zone (gleitz)

Variable label	transition zone
Variable name	gleitz
Category	information on employment, benefit receipt and job-search
Origin	BeH
Data type	numerical
Hierarchy	none
Detailed description	This variable is only available from 2003 onwards and only for BeH observations. It indicates whether the employment notification relates to employment in the low-wage sector, within the so-called transition zone. Jobs in the transition zone have a gross monthly wage of € 400.01 to € 800.00 (so-called midi-jobs) for which the employee only has to pay a reduced overall social security contribution. As employees with earnings in the transition zone can voluntarily pay the "regular" social security contribution, not all employees with corresponding earnings are automatically classed as being in the transition zone. The corresponding legislation has been in force since 01.04.2003.

5.4.4 Occupation (beruf)

Variable label	occupation
Variable name	beruf
Category	employment/ benefit receipt
Origin	BeH, ASU
Data type	numerical
Hierarchy	none

Detailed description	**1) BeH**
	The occupational title of the job performed by the employee during the notification period is a component of the 'employment details' submitted by the employer.
	For this the employer encodes the employee's job in accordance with the "Classification of Occupations. Systematic and Alphabetical Directory of Job Titles" (published by the Federal Employment Agency, Nuremberg, 1988), which contains approx. 25,000 job titles. The occupational classification consists of a 3-digit code and comprises about 330 values.
	If more than one job title with different classification codes applies for one employee, the employer is required to select the job title that best defines the main activity performed (see BA 2005, p. V).
	2) ASU/XASU
	For ASU and XASU observations this variable contains the occupation of the last activity performed. The variable refers to the status at the beginning of the job-search observation.

5.4.5 Occupational status and working hours (stib)

Variable label	occupational status and working hours
Variable name	stib
Category	information on employment, benefit receipt and job-search
Origin	BeH
Data type	numerical
Hierarchy	none
Detailed description	The employee's occupational status during the notification period is reported by the employer in the "employment details".
	The variable "occupational status" first distinguishes between full-time and part-time employees; the decisive factor here is the ratio between the contracted hours and the usual working hours in the establishment. The variable only actually provides details about the occupational status for full-time employees, whilst for part-time employees it only records whether their working hours exceed a certain limit or not. This limit was 20 hours of work per week until 1978, between 1979 and 1987 it was 15 hours per week and since 1988 it has been 18 hours per week.
	The distinction between blue-collar employees in full-time employment (1,2) and white-collar employees centres solely on the type of pension-insurance institution (Federal Social Insurance Office for Salaried Employees – BfA – for white-collar workers, and Land Social Insurance Office – LVA – for blue-collar workers). The category "employees in vocational training" (value 0) covers not only trainees/apprentices, placement workers and interns but also semi-skilled trainees, students at colleges for health occupations and participants in subsidized further vocational training, retraining and induction training.
	If more than one code is possible for an employee, the employer is required to classify the job according to the activity which is performed most. If this cannot be ascertained clearly, the code of the higher occupational status is to be entered (see BA (2005): p. VI).

5.4.6 Employment status (erwstat)

Variable label	employment status
Variable name	erwstat
Category	personal variables
Origin	BeH, LeH, ASU, XASU
Data type	numerical
Hierarchy	none
Detailed description	This variable assumes different values with different meanings for each data source. **1) BeH** For BeH observations the variable contains the person group of the employment notification, which was introduced along with the new notification procedure as of 01.01.1999. It indicates contribution- or benefit-related particularities of the employment relationship which concern at least one social security agency, differentiated according to the institutions submitting the notifications. Employees covered by social security whose employment relationship does not show any particularities are given the code 101. If more than one code applies then the smallest is to be indicated. Employees in marginal part-time employment can be distinguished in the LIAB as the person groups 109 and 209. The person group variable has only been a component of the social security notifications since the introduction of the new notification procedure on 01.01.1999. The person group can be contained in notifications that refer to the years prior to 1999 but were not received until 1999 or later. For notifications which were received before 1999 an attempt is made to allocate the notifications to the person groups on the basis of certain rules and with the aid of the variables 'school education and vocational training', 'occupational status and working hours' and 'occupation' as well as other information. In many cases, however, appropriate allocations are not possible. The obligation to submit employment notifications for people in marginal part-time employment has been in force since 01.04.1999. Before this date the variable contains no data about people in marginal part-time employment. **2) LeH** For LeH observations the grouped benefit type is reported, i.e. it states whether unemployment benefit, unemployment assistance or maintenance allowance is received or whether contributions to private long-term care insurance are paid by the BA. The values of this variable were generated by combining the values of the "type of benefit" variable. **3) ASU** The ASU contains the job-search status. Recipients of unemployment benefits (Unemployment Benefit I or II) over the age of 58 who receive benefits under the relaxed conditions according to §428 of Social Code Book III (or §65 para. 4 of Social Code Book II) and individuals aged over 58 who are not benefit recipients and are not willing to be placed in employment in the sense of § 252 para. 8 Social Code Book VI are recorded as individuals seeking advice.

	4) XASU
	In the XASU to date only episodes with the status
	• "not unemployed, but seeking work"
	• "seeking work and simultaneously unemployed"
	are reported or calculated.

5.4.7 Employment status prior to job-search (estatvor)

Variable label	employment status prior to job-search
Variable name	estatvor
Category	information on employment, benefit receipt and job-search
Origin	ASU, XASU
Data type	numerical
Hierarchy	none
Detailed description	For ASU and XASU observations this variable shows the employment status prior to the job-search activity. From 12/2002 onwards the values of the variable were reduced substantially. The values of older observations were recoded to the currently valid values, which are thus valid for the entire period. As the variable is created before the episode splitting procedure, the details apply to the unsplit original observation and the first of the split episodes.
Note on quality	The proportion of valid values (degree of completeness) is very small for XASU observations: ``` q2 | 2005 2006 2007 2008 ----------+------------------------- ASU | 0.988 0.935 0.995 0.998 XASU | 0.007 0.029 0.131 0.179 ```

5.4.8 Benefit type (lart)

Variable label	benefit type
Variable name	lart
Category	information on employment, benefit receipt and job-search
Origin	LeH
Data type	numerical
Hierarchy	none
Detailed description	Type of earnings replacement benefit paid by the BA. (In the "employment status" variable this variable is combined for the LeH data source.

5.4.9 Person Group (kundengr)

Variable label	person group
Variable name	kundengr
Category	information on employment, benefit receipt and job-search
Origin	ASU

Data type	numerical
Hierarchy	none
Detailed description	This variable contains the classification of the BA clients into different types, such as market client, client to be activated, client to be supported and counselling client. This differentiation takes into account the need for action with regard to the individual's potential obstacles to integration.

5.4.10 Type of Ending of Previous Employment (art_kuend)

Variable label	type of ending of previous employment
Variable name	art_kuend
Category	information on employment, benefit receipt and job-search
Origin	ASU
Data type	numerical
Hierarchy	none
Detailed description	This variable describes how the last employment or training relationship was terminated before a new period of job-search. It can therefore be used to identify job-to-job placements.

5.4.11 Mobility (mobil)

Variable label	mobility
Variable name	mobil
Category	information on employment, benefit receipt and job-search
Origin	ASU
Data type	numerical
Hierarchy	none
Detailed description	This variable describes a person's potential regional mobility. When registering job-search the jobseeker has to indicate whether s/he is seeking work anywhere in Germany or whether s/he is restricted to certain regions. If only selected regions are indicated, the individual is then asked whether other regions could nevertheless be considered. If this is the case, a person is regarded as "regionally mobile", and otherwise they are not. If a person indicates that they are seeking work across Germany s/he is automatically regarded as "mobile".

5.4.12 Working hours of job application (arbzeit)

Variable label	working hours of job application
Variable name	arbzeit
Category	information on employment, benefit receipt and job-search
Origin	ASU
Data type	numerical
Hierarchy	none
Detailed description	During the placement procedure jobseekers indicate how many working hours the job they are seeking should have.

5.4.13 Residual claim of unemployment benefit (restanspruch)

Variable label	residual claim of unemployment benefit
Variable name	restanspruch
Category	information on employment, benefit receipt and job-search
Origin	LeH
Data type	numerical
Hierarchy	none
Detailed description	Remaining entitlement is the entitlement that remains after the end of the current period of benefit receipt. Remaining entitlement continues for 7 years. If the end date of the benefit receipt is before 01.01.1998, the remaining entitlement is reported in working days, after this date it is reported in calendar days. This entitlement counts up to a maximum of the longest possible duration for the individual's respective age.

5.4.14 Type of provider (traeger)

Variable label	type of provider
Variable name	traeger
Category	information on employment, benefit receipt and job-search
Origin	LHG, XLHG, XASU
Data type	numerical
Hierarchy	none
Detailed description	This variable shows the three possible types of institution responsible for the sphere of Social Code Book II (co-operations of employment agencies and municipalities (ARGE), authorised municipalities, separated responsibilities) and the type of institution for the sphere of Social Code Book III (Federal Employment Agency). Co-operations of employment agencies and municipalities (ARGE) are formed by the Federal Employment Agency and municipalities dealing with tasks jointly. In the case of authorised municipalities the relevant municipality takes on the tasks in the field of SGB II independently. In the case of separated responsibilities the tasks continue to be divided between the BA and the municipality. It must be taken into account that the district territories covered by the institutions are not clear and thus may not necessarily correspond to the boundaries of the districts. XASU observations contain the type of institution that holds the records of the Applicant Pool Data. The information is merged from the Applicant Pool Data at the start of the unsplit observation.

5.5 Establishment variables

5.5.1 Classification of economic activities 73 (3-digit code) (w73_3)

Variable label	classification of economic activities 73
Variable name	w73_3
Category	establishment variables

Origin	BeH
Data type	numerical
Hierarchy	section | division | group (3-digit code) of economic activity
Detailed description	This variable indicates the economic activity as a 3-digit code in accordance with the WS73 classification. The economic activity W73 is available from 1975 up to and including 2002. WS73 stands for the "Classification of Economic Activities for the Statistics of the Federal Employment Services, edition 1973" ("Klassifikation der Wirtschaftszweige für die Statistik der Bundesanstalt für Arbeit, Ausgabe 1973"). Using a 3-digit code the classification distinguishes between 269 classes of economic activity, whereby the first digit of the code defines the division of economic activity, of a total of 10, and the first two digits together define the particular group of economic activity, of a total of 95. Each establishment may only be assigned one code. If an establishment is active in different economic sectors, the main economic activity must be determined.

5.5.2 Classification of economic activities 93, sub-classes (5-digit code) (w93_5)

Variable label	classification of economic activities 93, sub-classes
Variable name	w93_5
Category	establishment variables
Origin	BeH
Data type	numerical
Hierarchy	section | division | group (3-digit code) | class | sub-class (5 digit code) of economic activity
Detailed description	This variable indicates the economic activity as a 5-digit code in accordance with the WZ93 classification. WZ93 stands for the "Classification of Economic Activities for the Statistics of the Federal Employment Services, edition 1993" ("Klassifikation der Wirtschaftszweige für die Statistik der Bundesanstalt für Arbeit, Ausgabe 1993"). The economic activity in accordance with the 1993 classification is included from 1999 until 2003. Each establishment may only be assigned one code. If an establishment is active in different economic sectors, the main economic activity must be determined.
Notes	Owing to its particular sensitivity with regard to data protection legislation, this variable is only made available in non-aggregated form on application and only in well-founded cases. Otherwise the economic activity is only shown as the 3-digit code.

5.5.3 Classification of economic activities 93, groups (3-digit code) (w93_3)

Variable label	classification of economic activities 93, groups
Variable name	w93_3
Category	establishment variables
Origin	BeH
Data type	numerical

Hierarchy	section	division	group (3-digit code) of economic activity
Detailed description	This variable indicates the economic activity as a 3-digit code in accordance with the WZ93 classification. WZ93 stands for the "Classification of Economic Activities for the Statistics of the Federal Employment Services, edition 1993" ("Klassifikation der Wirtschaftszweige für die Statistik der Bundesanstalt für Arbeit, Ausgabe 1993"). The economic activity in accordance with the 1993 classification is included from 1999 until 2003. Each establishment may only be assigned one code. If an establishment is active in different economic sectors, the main economic activity must be determined.

5.5.4 Classification of economic activities 03, sub-classes (5-digit code) (w03_5)

Variable label	classification of economic activities 03, sub-classes
Variable name	w03_5
Category	establishment variables
Origin	BeH
Data type	numerical
Hierarchy	section	division	group (3-digit code)	class	sub-class (5 digit code) of economic activity
Detailed description	This variable indicates the economic activity as a 5-digit code in accordance with the WZ03 classification. WZ03 stands for the "Classification of Economic Activities, Edition 2003" ("Klassifikation der Wirtschaftszweige Ausgabe 2003") of the Federal Statistical Office (eds.). The economic activity in accordance with the 2003 classification has only been available since 2003. Each establishment may only be assigned one code. If an establishment is active in different economic sectors, the main economic activity must be determined.
Notes	Owing to its particular sensitivity with regard to data protection legislation, this variable is only made available in non-aggregated form on application and only in well-founded cases. Otherwise the economic activity is only shown as the 3-digit code.

5.5.5 Classification of economic activities 03, groups (3-digit code) (w03_3)

Variable label	classification of economic activities 03, groups
Variable name	w03_3
Category	establishment variables
Origin	BeH
Data type	numerical
Hierarchy	section	division	group (3-digit code) of economic activity

Detailed description	This variable indicates the economic activity as a 3-digit code in accordance with the WZ03 classification. WZ03 stands for the "Classification of Economic Activities, Edition 2003" ("Klassifikation der Wirtschaftszweige Ausgabe 2003") of the Federal Statistical Office (eds.). The economic activity in accordance with the 2003 classification has only been available since 2003. Each establishment may only be assigned one code. If an establishment is active in different economic sectors, the main economic activity must be determined.

5.5.6 Classification of economic activities 08, sub-classes (5-digit code) (w08_5)

Variable label	classification of economic activities 08, sub-classes
Variable name	w08_5
Category	establishment variables
Origin	BeH
Data type	numerical
Hierarchy	section | division | group (3-digit code) | class | sub-class (5 digit code) of economic activity
Detailed description	This variable indicates the economic activity as a 5-digit code in accordance with the WZ08 classification. WZ08 stands for the "Classification of Economic Activities, Edition 2008" ("Klassifikation der Wirtschaftszweige Ausgabe 2008") of the Federal Statistical Office (eds.). The economic activity in accordance with the 2008 classification has only been available since 2008. Each establishment may only be assigned one code. If an establishment is active in different economic sectors, the main economic activity must be determined.
Notes	Owing to its particular sensitivity with regard to data protection legislation, this variable is only made available in non-aggregated form on application and only in well-founded cases. Otherwise the economic activity is only shown as the 3-digit code.

5.5.7 Classification of economic activities 08, groups (3-digit code) (w08_3)

Variable label	classification of economic activities 08, groups
Variable name	w08_3
Category	establishment variables
Origin	BeH
Data type	numerical
Hierarchy	section | division | group (3-digit code) of economic activity

Detailed description	This variable indicates the economic activity as a 3-digit code in accordance with the WZ08 classification. WZ08 stands for the "Classification of Economic Activities, Edition 2008" ("Klassifikation der Wirtschaftszweige Ausgabe 2008") of the Federal Statistical Office (eds.).
	The economic activity in accordance with the 2008 classification has only been available since 2008.
	Each establishment may only be assigned one code. If an establishment is active in different economic sectors, the main economic activity must be determined.

5.5.8 First appearance of establishment (grd_jahr)

Variable label	first appearance of est.
Variable name	grd_jahr
Category	establishment variables
Origin	BeH
Hierarchy	none
Detailed description	This variable indicates the first appearance of the establishment number in the dataset.
	If an establishment number is only detected for the first time after 1975 this variable could indicate the date when the respective establishment was founded. However, it could also be an establishment that has been in existence for a longer time but has been allocated a new establishment number following a change of owner or a change in the legal form of the establishment. The employment offices do not follow a standard procedure in these cases, however. The employment offices also sometimes allocate new establishment numbers when parts of a firm are outsourced.

5.5.9 Last appearance of establishment (lzt_jahr)

Variable label	last appearance of est.
Variable name	lzt_jahr
Category	establishment variables
Origin	BeH
Hierarchy	none
Detailed description	This variable indicates the last appearance of the establishment number in the dataset. See also Bender et. al. 1996 regarding the allocation of establishment numbers.
	If the existence of an establishment number in the BHP already ends before 2008, it could indicate the closure of the establishment. However, other possible reasons for this are an "arbitrary change of the establishment number following a change of owner or a change in the legal form of the establishment", the "outsourcing of parts of the firm under a new establishment number" or other administrative changes (see Bender et. al. 1996.).

5.5.10 Total number of employees (az_ges)

Variable label	no. employees
Variable name	az_ges
Category	generated establishment variables
Origin	BeH
Detailed description	This variable contains the total number of an establishment's employees reported to the social security agencies as of 30 June of a year. Since the introduction of the new notification regulations in 1999 people in marginal part-time employment have also been recorded. Part-time employees and dormant employment relationships (daily wage of zero) are also included.

5.5.11 Number of full-time employees (az_ges_vz)

Variable label	no. full-time employees
Variable name	az_ges_vz
Category	generated establishment variables
Origin	BeH
Hierarchy	none
Detailed description	This variable contains the number of an establishment's full-time employees. People in marginal part-time employment and dormant employment relationships (daily wage of zero) are not included here.

5.5.12 Number of employees in marginal part-time employment (az_gf)

Variable label	no. marginal part-time workers
Variable name	az_gf
Category	generated establishment variables
Origin	BeH
Hierarchy	none
Detailed description	The number of employees in marginal part-time employment is generated using the person group code – values 109 and 209. This variable has only been contained in the dataset since 1999 as it has only been included in the social security notification procedure since that year.

5.5.13 Average daily wage in establishment (te_med)

Variable label	median wage all full-time employees
Variable name	te_med
Category	generated establishment variables
Origin	BeH
Data type	numerical
Hierarchy	none
Detailed description	This variable indicates the median daily wage of the employees covered by social security (excluding part-time employees, marginal part-time employees, employees with wages equal to zero) of the respective establishment as of 30.06. The average daily wage is always re-

	ported in Euros.

5.6 Location data

5.6.1 Place of residence: district (Kreis) (wo_kreis)

Variable label	place of residence: district (Kreis)
Variable name	wo_kreis
Category	location data
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	federal state | district
Detailed description	In BeH and LeH observations the place of residence at district level is only available for the years from 1999 onwards. The variable indicates the district (urban district or rural district) in which the social security contributor lives. The first two digits of the 5-digit district code (Kreisschlüssel) show the code for the federal state (Bundesland), positions 1-3 indicate the regional authority (Regierungsbezirk), and positions 1-5 show the district authority (Kreis). Federal states without a regional authority have a 0 in the third position. In order to guarantee consistent regional allocations across the entire observation period, the information on the district was recoded to the territorial allocation of 31.12.2008 in the BeH and the LeH, i.e. in all calendar years a place of residence is assigned to a district in accordance with the boundaries that the district had on 31.12.2008. As the district boundaries have changed over time, cases would occur in which the district code changes without the individual concerned having relocated, if the territorial allocations of the districts were not updated. For data sources other than the BeH and the LeH the territorial allocations were not updated. For LHG observations the variable is only available from January 2005, for XLHG observations from November 2005 onwards.
Notes	Owing to its particular sensitivity with regard to data protection legislation, this variable is only made available to guest researchers in non-aggregated form on application and only in well-founded cases.

5.6.2 Place of residence: employment agency (wo_aa)

Variable label	place of residence: employment agency
Variable name	wo_aa
Category	location data
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	regional directorate | employment agency

	This variable contains the employment agency of the BA client's place of residence. For the LHG and XLHG data sources the place of residence is valid for the period of the observation. A change of place of residence (already at the level of local employment office (Geschäftsstelle) or local authority district (Gemeinde)) causes the observation to be split. In the case of the ASU and the XASU the variable contains the place of residence at the start of the period of unemployment or the jobseeker status. The variable is available for the BeH and the LeH from 1999 onwards, for the LHG, the XLHG and the XASU from 2005 onwards. For ASU observations the variable is already available before 1999.
Detailed description	**1) BeH, LeH**
	In BeH observations the employment agency area of the place of residence is only shown from 1999 onwards. In order to guarantee consistent regional allocations across the entire observation period, the information on the employment agency was recoded to the territorial allocation of 31.12.2008 for the BeH and LeH observations, i.e. in all calendar years a place of residence is assigned to an employment agency area in accordance with the boundaries that the employment agency area had on 31.12.2008. As the boundaries of the employment agency areas have changed over time, cases would occur in which a person's employment agency area changes without he/she having relocated, if the territorial allocations were not updated. Berlin constitutes a problematic case with regard to updating territorial allocations, however: the boundaries of Berlin's employment agency areas have been changed repeatedly over the years, which could not be fully corrected even by recoding the territorial allocations. It must also be taken into account that until about 1989 there was no allocation to different employment agencies in Berlin, instead in most cases the code AA 901 (= Berlin regional directorate) was entered for Berlin.
	2) LHG, XLHG, ASU, XASU
	For these data sources the territorial allocations were not corrected.
Notes	Owing to its particular sensitivity with regard to data protection legislation, this variable is only made available in non-aggregated form on application and only in well-founded cases. Otherwise only the area of the regional directorate in which the social security contributor's place of residence is located is shown.

5.6.3 Place of residence: regional directorate (wo_rd)

Variable label	place of residence: regional directorate
Variable name	wo_rd
Category	location data
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	regional directorate	employment agency

Detailed description	This variable contains the regional directorate of the BA client's place of residence. For the LHG and XLHG data sources the place of residence is valid for the period of the observation. A change of place of residence (already at the level of local employment office (Geschäftsstelle) or local authority district (Gemeinde)) causes the observation to be split. In the case of the ASU and the XASU the variable contains the place of residence at the start of the period of unemployment or the jobseeker status. The variable is available for the BeH and the LeH from 1999 onwards, for the LHG, the XLHG and the XASU from 2005 onwards. For ASU observations the variable is already available before 1999. **1) BeH** For the BeH and LeH data sources the territorial allocations were corrected. **2) LHG, XLHG, ASU, XASU** For these data sources the territorial allocations were not corrected.

5.6.4 Place of residence: federal state (Bundesland) (wo_bula)

Variable label	place of residence: federal state (Bundesland)
Variable name	wo_bula
Category	location data
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	federal state | district
Detailed description	This variable is an aggregation of the variable "district" to the 16 German federal states. In BeH observations the federal state of the place of residence is only available for the years from 1999 onwards. Further information on the district of the place of residence can be found under Place of residence: district (Kreis) (wo_kreis).

5.6.5 Place of work: district (Kreis) (ao_kreis)

Variable label	district code
Variable name	ao_kreis
Category	location data
Origin	BeH
Data type	numerical
Hierarchy	federal state | district
Detailed description	The variable indicates the district (urban district or rural district) in which the employee's establishment is located. The first two digits of the 5-digit district code (Kreisschlüssel) show the code for the federal state (Bundesland), positions 1-3 indicate the regional authority (Regierungsbezirk), and positions 1-5 show the district authority (Kreis). Federal states without a regional authority have a 0 in the third position. In order to guarantee consistent regional allocations across the entire observation period, the information on the district was recoded to the

	territorial allocation of 31.12.2008, i.e. in all calendar years a place of work is assigned to a district in accordance with the boundaries that the district had on 31.12.2008. As the district boundaries have changed over time, cases would occur in which the district code of the location of the establishment would change without the establishment concerned having relocated, if the territorial allocations were not updated.
Notes	Owing to its particular sensitivity with regard to data protection legislation, this variable is only made available in non-aggregated form on application and only in well-founded cases.

5.6.6 Place of work: employment agency (ao_aa)

Variable label	place of work: employment agency
Variable name	ao_aa
Category	location data
Origin	BeH, ASU
Data type	numerical
Hierarchy	regional directorate | employment agency
Detailed description	This variable contains the employment agency of the place of work. In contrast to the variable "place of residence: employment agency", the variable is available for BeH observations from 1975 onwards and for ASU observations from 2000 onwards. The territorial allocations of the variable are corrected to the status of 31.12.2008 only for the BeH data source.
Notes	Owing to its particular sensitivity with regard to data protection legislation, this variable is only made available in non-aggregated form on application and only in well-founded cases. Otherwise only the area of the regional directorate in which the social security contributor's place of residence is located is shown. The territorial allocations of the variable are corrected to the status of 31.12.2008 only for the BeH data source.

5.6.7 Place of work: regional directorate (ao_rd)

Variable label	place of work: regional directorate
Variable name	ao_rd
Category	location data
Origin	BeH, ASU
Data type	numerical
Hierarchy	regional directorate | employment agency
Detailed description	The variable indicates the regional directorate of the BA client's place of work. In contrast to the variable "place of residence: regional directorate", the variable is available for BeH observations from 1975 onwards and for ASU observations from 2000 onwards. The territorial allocations of the variable are corrected to the status of 31.12.2008 only for the BeH data source.

5.6.8 Place of work: German State (Bundesland) (ao_bula)

Variable label	german state
Variable name	ao_bula
Category	location data
Origin	BeH
Data type	numerical
Hierarchy	federal state | district
Detailed description	This variable is an aggregation of the variable "district" to the 16 German federal states.

5.7 Generated technical variables

5.7.1 Source of the spell (quelle)

Variable label	source of spell
Variable name	quelle
Category	generated technical variables
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	none
Detailed description	The variable indicates the data source.

5.7.2 Spell counter per person (spell)

Variable label	spell counter per person
Variable name	spell
Category	generated technical variables
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	none
Detailed description	The observation counter per person counts a person's observations, beginning with 1. The variable is generated during the episode splitting procedure and refers to the split observations. Using the variable "observation counter per person" it is easy to restore the original sorting order. The observations are sorted first by the start date of the split episode and then by the data source. The LIAB Cross-sectional Model only contains observations which overlap 30 June. Therefore, the numbering is not consecutive.

5.7.3 Spell counter per episode (level2)

Variable label	spell counter per episode
Variable name	level2
Category	generated technical variables

Origin	BeH, LeH , LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	none
Detailed description	A counter that counts parallel observations. The variable is generated during the episode splitting procedure and refers to the split observations. This level counter indicates whether observations overlap temporally within one account. This is the case, for example, when a person has more than one employment relationship at one time or when benefit receipt and marginal part-time employment coincide. The "level2" variable numbers the observations of such an episode, starting with 0. Within the episode the observations are first sorted by data source (BeH, LeH, LHG, ASU, XLHG, XASU). Within the BeH data source non-marginal observations come before marginal ones, then the observations are sorted by daily wages, starting with the highest wage. Within the LeH data source the observations are sorted by type of benefit; within the other data sources the sorting process is random.

5.7.4 Spell counter per episode and source (level1)

Variable label	spell counter per episode and source
Variable name	Level1
Category	generated technical variables
Origin	BeH, LeH , LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	none
Detailed description	With the aid of this level variable (simultaneous) observations per episode and source are counted. The variable is generated during the episode splitting procedure and refers to the split observations. This level counter indicates whether observations overlap temporally within one account. Level1 differentiates in a different way to Level2, as it counts parallel observations additionally according to the data source from which the observations come. In each case the "level1" variable thus assumes the value 0 for the first observation available per episode and data source. Further parallel observations for the same episode and source are then counted upwards from there. Within the BeH data source non-marginal observations come before marginal ones, then the observations are sorted by daily wages, starting with the highest wage. Within the LeH data source the observations are sorted by type of benefit; within the other data sources the sorting process is random. (For each data source the following applies: $level2 - level1 \equiv const$; for the BeH data source, $const = 0$.) The variable is used among other things to identify the main job. The main job has always the value zero. All the other observations have a value greater than zero.

5.7.5 Year (jahr)

Variable label	year (30 June)
Variable name	jahr
Category	generated technical variables
Origin	BeH, LeH, LHG, XLHG, ASU, XASU
Data type	numerical
Hierarchy	none

Detailed description	This variable is only included in the Establishment File. It indicates the year of validity of the establishment data as of the reference date of 30 June.
	
	This variable can be used together with the establishment number to link the Individual File and the Establishment File.
	`use liab_qm2_9308_v1_1993.dta`
	`gen jahr = year(begepi)`
	`sort betnr jahr`
	`merge m:1 betnr jahr using ///`
	`    liab_qm2_9308_v1_btr_basis.dta`

5.7.6 Status of establishment number (betr_st)

Variable label	status of establishment number
Variable name	betr_st
Category	generated technical variables
Origin	BeH
Data type	numerical
Hierarchy	none
Detailed description	This variable indicates if information from the IAB Establishment Panel can be merged to this employment observation. 1 - Establishment of IABPanel, in this LIAB version, this year 2 - Establishment of IABPanel, in this LIAB version, other year 3 - Establishment of IABPanel, not in this LIAB version 4 - No establishment of IABPanel

5.8 Generated biographical variables

5.8.1 First day in employment (ein_erw)

Variable label	first day in employment
Variable name	ein_erw
Category	Generated biographical variables
Origin	Generated from BeH
Data type	Date
Hierarchy	none
Detailed description	This variable specifies the date of start of employment subject to social security in the IEB. Training periods are not included (occupational status = 0). Persons have a missing value if they pass a training period in the IEB but do not have an employment covered by the social security system. The start date of first employment (ein_erw) can occur a long time after the first day in establishment (ein_bet) and the first day in job (ein_job) because in the latter cases training periods are included.
Notes of quality	For West Germans the variable is left censored on 1.1.1975. For East Germans the censoring is not so clear. Entries on 1.1.1990 are censored for sure, but often also entries on 1.1.1991 and 1.1.1992 may be affected because in 1990 and 1991 many employment notifications are missing.

5.8.2 First day in establishment (ein_bet)

Variable label	first day in establishment
Variable name	ein_bet
Category	Generated biographical variables
Origin	Generated from BeH
Datatype	date
Hierarchy	none
Detailed description	This variable contains the start date of the first employment notification in the current establishment. This might also be a training period. An interruption of the employment in the establishment does not change the start date, i.e. it is constant for each combination of person number and establishment number. The start date of first employment (ein_erw) can occur a long time after the first day in establishment (ein_bet) and the first day in job (ein_job) because in the latter cases training periods are included.
Notes of quality	For West Germans the variable is left censored on 1.1.1975. For East Germans the censoring is not so clear. Entries on 1.1.1990 are censored for sure, but often also entries on 1.1.1991 and 1.1.1992 may be affected because in 1990 and 1991 many employment notifications are missing.

5.8.3 Numbers of days in establishment (tage_bet)

Variable label	number of days in establishment
Variable name	tage_bet
Category	Generated biographical variables
Origin	Generated from BeH
Datatype	numeric
Hierarchy	none
Detailed description	The variable counts how many days a person has been working in the establishment. In the Cross-sectional Model this duration relates to 30 June of the year, in all other LIAB data it relates to the end of the episode. Training periods in the establishment are included, employment gaps not. If the number of days in the establishment is alternatively calculated with the first day in establishment variable (ein_bet), gen tage_bet_neu = {d(30.6.2005), endepi} - ein_bet + 1 the values obtained are larger or eqal than tage_bet because tage_bet does not include interruptions of employment.
Notes of quality	For West Germans the variable is left censored on 1.1.1975. For East Germans the censoring is not so clear. Entries on 1.1.1990 are censored for sure, but often also entries on 1.1.1991 and 1.1.1992 may be affected because in 1990 and 1991 many employment notifications are missing.

5.8.4 First day in job (ein_job)

Variable label	first day in job
Variable name	ein_job
Category	Generated biographical variables
Origin	Generated from BeH
Datatype	numeric
Hierarchy	none
Detailed description	This variable contains the start date of the first employment notification in the current job. Training periods (stib = 0) in the same establishment are treated as separate jobs, even if they follow directly or are followed directly by a job in the same establishment. An employment in the same establishment after a gap is considered a new job if - the reason for notification of the last employment record before the gap indicates the end of the last job (grund = 30, 34, 40, 0r 49) and the gap is longer than 92 days or - the reason for notification of the last employment record before the gap does not indicate the end of the last job and the gap is longer than 366 days. The first day in new job (ein_job) can not occur before first day in

	establishment (ein_bet), but it can occur before first day in employment (ein_erw).
Notes of quality	For West Germans the variable is left censored on 1.1.1975. For East Germans the censoring is not so clear. Entries on 1.1.1990 are censored for sure, but often also entries on 1.1.1991 and 1.1.1992 may be affected because in 1990 and 1991 many employment notifications are missing.

5.8.5   Numbers of days in job (tage_job)

Variable label	numbers of days in job
Variable name	tage_job
Category	Generated biographical variables
Origin	Generated from BeH
Datatype	numeric
Hierarchy	none
Detailed description	The variable counts how many days a person has been working in the current job. Training periods (stib = 0) in the same establishment are treated as separate jobs, even if they follow directly or are followed directly by a job in the same establishment. An employment in the same establishment after a gap is considered a new job if - the reason for notification of the last employment record before the gap indicates the end of the last job (grund = 30, 34, 40, 0r 49) and the gap is longer than 92 days or - the reason for notification of the last employment record before the gap does not indicate the end of the last job and the gap is longer than 366 days. In the Cross-sectional Model this duration relates to 30 June of the year, in all other LIAB data it relates to the end of the episode. Training periods in the establishment are included, employment gaps not. If the number of days in the current job is alternatively calculated with the first day in job variable (ein_job), gen tage_ job _neu = {d(30.6.2005), endepi} - ein_ job + 1 the values obtained are larger or eqal than tage_ job because tage_ job does not include interruptions of employment.
Notes of quality	For West Germans the variable is left censored on 1.1.1975. For East Germans the censoring is not so clear. Entries on 1.1.1990 are censored for sure, but often also entries on 1.1.1991 and 1.1.1992 may be affected because in 1990 and 1991 many employment notifications are missing.

5.8.6   Number of benefit receipts (anz_lst)

Variable label	number of beneft reciepts
Variable name	anz_lst

Category	Generated biographical variables
Origin	Generated from LEH/LHG/XLHG
Datatype	numeric
Hierarchy	none
Detailed description	The variable contains the number of periods of benefit receipts of a person up to 30 June of each year. Social Code II and Social Code II benefits are treated the same. Hence, the meaning of the variable changes in 2005. Gaps of less than 10 days between two spells of the benefit receipt are ignored, i.e. the benefit spells before and after the gap are treated as one period of benefit receipt. Changes in the type of benefit are not counted as a new benefit receipt.
Notes of quality	For West Germans the variable is left censored on 1.1.1975. For East Germans the censoring is not so clear. Entries on 1.1.1990 are censored for sure, but often also entries on 1.1.1991 and 1.1.1992 may be affected because in 1990 and 1991 many employment notifications are missing.

5.8.7 Number of days with benefit receipt (tage_lst)

Variable label	number of days with benefit reciept
Variable name	tage_lst
Category	Generated biographical variables
Origin	Generated from LEH/LHG/XLHG
Datatype	numeric
Hierarchy	none
Detailed description	The variable contains the number of days of benefit receipt of a person up to 30 June of each year. Social Code II and Social Code II benefits are treated the same. Hence, the meaning of the variable changes in 2005. Gaps are not added.
Notes	For West Germans the variable is left censored on 1.1.1975. For East Germans the censoring is not so clear. Entries on 1.1.1990 are censored for sure, but often also entries on 1.1.1991 and 1.1.1992 may be affected because in 1990 and 1991 many employment notifications are missing.

5.8.8 Employment status 5 years after reference day (estat5jn)

Variable label	employment status 5 years after reference day
Variable name	estat5jn
Category	Generated biographical variables
Origin	Generated from BeH/LEH/LHG/XLHG
Datatype	numeric
Hierarchy	none
Detailed description	The variable contains information on the employment status of a person 5 years after the refernce date 30 June. This is relevant in the Cross-sectional Model if the person is no longer employed at an es-

	tablishment of the IAB Establishment Panel at that time.
	The employment status was generated from the variables: Occupational status (stib): full-time, part-time, apprentice, missing Person group: normal, 'marginal' part-time workers, others Establishment number: same or different from the current Type of benefit: ALG, ALH, UHG, subsidy § 166b AFG/§ 207a SGB III. Source of the spell: LHG, XLHG, ASU, XASU
	If there is more than one record in the IEB that is valid on 30 June 5 years ahead, one record is selected according to the following rule: regular employment dominates marginal employment which dominates benefit receipt which dominates job search.

5.8.9   Employment status 8 days before first day in establishment (estat8tv)

Variable label	employment status 8 days before first day in establishment
Variable name	estat8tv
Category	Generated biographical variables
Origin	Generated from BeH/LEH/LHG/XLHG
Datatype	numeric
Hierarchy	none
Detailed description	The variable contains information on the employment status of a person 8 days before the first day in the current establishment (ein_bet). This is relevant in the Cross-sectional Model if the person is not yet employed at an establishment of the IAB Establishment Panel at that time. The employment status was generated from the variables: Occupational status (stib): full-time, part-time, apprentice, missing Person group: normal, 'marginal' part-time workers, others Establishment number: same or different from the current Type of benefit: ALG, ALH, UHG, subsidy § 166b AFG/§ 207a SGB III. Source of the spell: LHG, XLHG, ASU, XASU If there is more than one record in the IEB that is valid 8 days before the first day in the current establishment, one record is selected according to the following rule: regular employment dominates marginal employment which dominates benefit receipt which dominates job search. By definition, preceding employment indicated by estat8tv has to occur in another establishment.
Notes	For West Germans the variable is left censored on 1.1.1975. For East Germans the censoring is not so clear. Entries on 1.1.1990 are censored for sure, but often also entries on 1.1.1991 and 1.1.1992 may be affected because in 1990 and 1991 many employment notifications are missing.

5.8.10 Daily wage 5 years after reference day (lohn5jn)

Variable label	daily wage 5 years after reference day
Variable name	lohn5jn
Category	Generated biographical variables
Origin	Generated from BeH/LEH
Datatype	numeric
Hierarchy	none
Detailed description	The variable contains the daily wage of a person 5 years after 30 June. Details on the daily wage are given in the description of the variable Daily wage (tentgelt). If there is more than one employment record 5 years ahead, one record is selected according to the following rule: regular employment dominates marginal employment, in case of more than one regular job, the record with the highest daily wage is selected.

5.8.11 Daily wage 8 days before first day in establishment (lohn8tv)

Variable label	daily wage 8 days before first day in establishment
Variable name	lohn8tv
Category	Generated biographical variables
Origin	Generated from BeH/LEH
Datatype	numeric
Hierarchy	none
Detailed description	The variable contains the daily wage of a person 8 days before the first day in the current establishment (ein_bet). Details on the daily wage are given in the description of the variable Daily wage (tentgelt). If there is more than one record in the IEB that is valid 8 days before the first day in the current establishment, one record is selected according to the following rule: regular employment dominates marginal employment, in case of more than one regular job the record with the highest daily wage is selected.
Notes	For West Germans the variable is left censored on 1.1.1975. For East Germans the censoring is not so clear. Entries on 1.1.1990 are censored for sure, but often also entries on 1.1.1991 and 1.1.1992 may be affected because in 1990 and 1991 many employment notifications are missing.

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7 Appendix

7.1 Frequency tables

Frequency tables and overviews of the individual values and labels of the variables can be found in separate files under http://fdz.iab.de.

8　List of abbreviations

AA	Agentur für Arbeit/ Arbeitsamt	employment agency / employment office
ALG	Arbeitslosengeld	unemployment benefit
ARGE	Arbeitsgemeinschaft	co-operation of employment agencies and municipalities
ASU	Arbeitsuchende-Historik	Jobseeker History
BA	Bundesagentur für Arbeit	Federal Employment Agency
BeH	Beschäftigten-Historik	Employee History
BfA	Bundesversicherungsanstalt für Angestellte	Federal Social Insurance Office for Salaried Employees
BHP	Betriebs-Historik-Panel	Establishment History Panel
BMAS	Bundesministerium für Arbeit und Soziales	Federal Ministry of Labour and Social Affairs
coArb	Computerunterstützte Arbeitsvermittlung (operatives Verfahren zur Verwaltung der Vermittlung (Altverfahren))	computer-aided job placement (procedure for the administration of job placements – old procedure)
DEÜV	Verordnung über die Erfassung und Übermittlung von Daten für die Träger der Sozialversicherung – Datenerfassungs- und –übermittlungsverordnung	Data Collection and Transmission Regulation - regulation on the collection and transmission of data for the social security agencies
DEVO	Zweite VO über die Erfassung von Daten für die Träger der Sozialversicherung und für die BA – Datenerfassungs-Verordnung –	Data Collection Regulation - second regulation on the collection of data for the social security agencies and for the Federal Employment Agency
DÜVO	Zweite VO über die Datenübermittlung auf maschinell verwertbaren Datenträgern im Bereich der Sozialversicherung und der BA – Datenübermittlungs-Verordnung –	Data Transmission Regulation - second regulation on the transfer of data on machine-readable data media in the field of social security and the BA
FDZ	Forschungsdatenzentrum	Research Data Centre
IAB	Institut für Arbeitsmarkt- und Berufsforschung	Institute for Employment Research
IABS	IAB-Beschäftigtenstichprobe	IAB Employment Samples
IEB	Integrierte Erwerbsbiographien	Integrated Employment Biographies
IEBS	Stichprobe der Integrierten Erwerbsbiographien	Integrated Employment Biographies Sample
LeH	Leistungsempfänger-Historik	Benefit Recipient History
LHG	Leistungs-Historik Grundsicherung	Unemployment Benefit II Recipient History
LVA	Landesversicherungsanstalt	Land Social Insurance Office
MTH	Maßnahmeteilnehmer-Historik	Participants-in-Measures History File
SchwbG	Gesetz zur Sicherung der Eingliede-	law to guarantee the integration of per-

	rung Schwerbehinderter in Arbeit, Beruf und Gesellschaft – Schwerbehindertengesetz-	sons with severe disabilities into employment and society – Severely Disabled Persons Act
SGB	Sozialgesetzbuch	German Social Code
SIAB	Stichprobe der Integrierten Arbeitsmarktbiographien	Sample of Integrated Labour Market Biographies
VerBIS	Vermittlungs- und Beratungsinformationssystems	Information System for Placement and Counselling
XASU	Arbeitsuchenden-Historik aus XSozial-BA-SGB II	Jobseeker History from XSozial-BA-SGB II
XLHG	Leistungsempfänger-Historik Grundsicherung aus XSozial-BA-SGB II	Unemployment Benefit II Recipient History from XSozial-BA-SGB II

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