

Description of the person-related Variables from the Datasets IEBS, IABS and LIAB

Version 1.0

Agnes Dundler

Handbook Version 1.0.0

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Data Availability

All data described in this report are available for use by professional researchers. For further information, see "Data on Individuals" on the website <http://fdz.iab.de/>.

Notes on the Report

The descriptions of variables given in section 6 of this data report constitute an amalgamation of data from the data reports of the IEBS (FDZ Datenreport No. 6/2005), IABS (FDZ Datenreport No. 1/2006) and the LIAB (FDZ Datenreport No. 7/2005). Many thanks go to all those involved in the writing and compilation of these reports. All of these data reports can be found under <http://fdz.iab.de/pageText.asp?PageID=44> for free download. Further thanks go to Peter Jacobebinghaus, Christina Wübbecke, Nils Drews and Holger Alda for their kind help and support in the resolution of inconsistencies.

Introduction

The “Data on Individuals“ from the Institute for Employment Research (IAB) and the Federal Employment Agency (BA) which are available from the Research Data Centre (FDZ) include the following: Integrated Employment Biographies (IEBS), IAB Employment Samples 1975-2001 (IABS 1975-2001), the BA Employment Panel and the Linked Employer-Employee Dataset from the IAB (LIAB). This data report provides a standardized description of the data on individuals from the IEBS, IABS and the LIAB and thus provides a better overview of the data available at the Research Data Centre (FDZ) of the Federal Employment Agency (BA) at the Institute for Employment Research (IAB). The BA Employment Panel will be added to the standardized data description at a later point in time.

The standardized description of IEBS, IABS and LIAB variables given in this data report is possible thanks to the common data basis used for these three datasets. This basis is the Employee and Benefit Recipient History (BLH), which is a combination of the Employee History (BeH) and the Benefit Recipient History (LeH).

The BeH comprises the social security notifications processed by the IAB, which results from the notification procedure for health, pension and unemployment insurance that has existed in West Germany since 1973 and East Germany since 1991. Until the end of 1998, the legal foundation for social security notifications as well as for the acquisition and transmission of notification data for social security agencies and the Federal Employment Agency (BA) were based on the Data Collection Regulation (DEVO) and the Data Transmission Regulation (DÜVO). In 1999 these regulations were replaced by the Data Collection and Transmission Regulation (DEÜV). As the former regulation required employers to give notification of those employees who are liable to social security only, the Employee History (BeH) up to this date only contains data on employees who are liable to social security. According to the new regulation, which came into force on 1 January 1999, employers are now also obliged to give notification of part-time employees who are not liable to social security. Self-employed persons and civil servants, by way of contrast, remain excluded from the BeH dataset.

The Benefit Recipient History (LeH) contains information on persons who received wage substitution from the BA at given periods of time. Here, the different types of benefits are put into the following main categories: Unemployment Benefit, Unemployment Assistance, Maintenance Allowance and Subsidy under Section 166b of the Employment Promotion Act (Arbeitsförderungs-gesetz AFG) or Section 207a of the German Social Code Book III¹.

The purpose of this data report is to provide a clear overview of all data on individuals available at the IAB. The detailed descriptions of the individual variables including values and frequency tables

¹ For further information on those benefits which are/are not included in the LeH, please refer to: Bender et al. 1996: 26f.

can be found in the relevant data reports of IEBS2, IABS3 and LIAB4. Updated information on the datasets can also be found on the website of the FDZ (<http://fdz.iab.de>). The website also features different newsgroups which data users can subscribe to.

1 Integrated Employment Biographies Sample ⁵

The IEBS is a random sample taken from the **Integrated Employment Biographies (IEB)** of the IAB. The IEB is not to be seen as a 'closed' dataset but rather as a means of combining data from four different sources for the purpose of data quality control and random sampling such as the IEBS. The four data sources are:

- The **Employee History (BeH)** incl. spells on employment subject to social security taken from the notifications procedure
- The **Benefit Recipient History (LeH)** incl. spells on the receipt of unemployment benefit, unemployment assistance and maintenance allowance
- The **Participants in Measures Dataset (MTG)** incl. spells on the participation in measures
- The **Applicants Pool Data (BewA)** incl. spells on search for employment.

The IEB was developed and supported by an advisory council from the IAB research departments within the scope of the projectes named *Biographical Data* and *coIAB*.

With regard to data quality, it is important to note that all IEB data are subject to later modifications by the institutions from which the data originate. Both during the notification procedure and in the working data of the BA, corrections may be made even years after the end of a given spell. The number of spells affected by this, however, is relatively low.

Generally speaking, any inconsistencies in the data are rather difficult to correct properly. Often the type of data cleansing depends on the research aim. In the IEB and IEBS, for instance, known inconsistencies are corrected in clear, non-ambiguous cases only, whilst in other cases inconsistencies are merely documented. The time spent on data processing is therefore much greater than in, for example, the IABS, which has undergone extensive processing.

2 IAB Employment Samples 1975-2001 ⁶

The IAB Employment Sample 1975-2001 (IABS 1975-2001) is a 2% random sample of all employees who have been in gainful employment liable to social security at least once during the period of observation. The IABS contains the following information on individuals: a precise (to the day)

² FDZ Datenreport No. 6/2005; http://doku.iab.de/fdz/reporte/2005/DR_6.pdf

³ FDZ Datenreport No. 1/2006; http://doku.iab.de/fdz/reporte/2006/DR_01-06.pdf

⁴ FDZ Datenreport No. 7/2005; http://doku.iab.de/fdz/reporte/2005/DR_7.pdf

⁵ This chapter was adopted largely from the data report *FDZ Datenreport No. 6/2005*.

⁶ This chapter was adopted largely from the data report *FDZ Datenreport No. 1/2006*.

record on employment subject to social security and, applicable as of 1999, a record of all 'marginal' part-time employment, as well as periods of receipt of unemployment benefit, unemployment assistance or maintenance allowance. The period of observation is from 1975 to 2001 for employees in West Germany and from 1992 to 2001 for employees in East Germany. The sources of the IABS 1975-2001 are the BeH and the LeH.

The IABS 1975-2001 includes the employment histories of almost 1.3 million social security contributors and is available in two versions: weakly anonymous version and factually anonymous version. While the weakly anonymous version⁷ (*basic file*) is accessible to researchers for on-site use at the FDZ only and contain predominantly non-aggregate original data, the factually anonymous version (Scientific Use File⁸) contains aggregate data. This aggregate version, which is known as the *regional file*, can – unlike the non-aggregate version – be sent to researchers directly. In both versions identifiers such as social security number and the original establishment number have been replaced by system-independent individual ID's and establishment numbers, respectively. Guest researchers may also receive the original sensitive variables 'nationality', 'place of work: district', 'employment agency at place of work', 'place of residence: district' and 'employment agency at place of residence' on application and subject to specification of reasons for request. All others users will be given these variables in aggregate form only (grouped according to nationality, German federal state and regional directorates (*Regionaldirektionen*)).

3 The Linked Employer-Employee Dataset⁹

The Linked-Employer-Employee Data of the IAB (LIAB) is a dataset containing linked employer-employee data. This dataset comprises establishment data with the annual waves of the IAB Establishment Panel, as well as data from the BeH and LeH. These sources of data are combined to form the Linked Employer-Employee Dataset. The individual characteristics are largely equivalent to the structures and contents in the weakly anonymous version of the IAB Employment Sample.

Establishment data are taken from the IAB Establishment Panel. The IAB Establishment Panel is an annual employer survey which began in 1993, initially in around 4,000 West German enterprises and since 1996 in a further approximately 4,300 East German establishments. Furthermore, since 2000 representative analyses have been possible on virtually every federal state level thanks to financial backing for relevant add-on samples from West German States. In 2001, the final year

⁷ The weakly anonymous IABS 1975-2001 may be transferred to external institutes in exceptional cases only, as provided for under Section 75 SGB X (German Social Code Book X).

⁸ Researchers may obtain the Scientific Use File of the IABS 1975-2001 (known as the IABS-R01) from the Central Archive for Empirical Social Research in Cologne (Central Archive No. 4057) for a limited period of analysis at the given research institute. For further information, refer to the website of the Central Archive at <http://www.gesis.org/Datenservice/IAB/index.htm> (as in August 2005). The IABS 1975-2001 version was preceded by the IABS 1975-1997, the IABS 1975-1995 and the IABS 1975-1990, which are also available as factually anonymous datasets via the Central Archive in Cologne.

⁹ This chapter was adopted largely from the data report *FDZ Datenreport No. 7/2005*.

of observation of the Data on Individuals available at present, more than 15,000 establishments took part in the survey.

Besides information on individuals, this dataset also contains information pertaining to establishments taken from the IAB Establishment Panel¹⁰ - for example number of employees, weekly working hours for full-time employees, the total wages in June of the year of survey, the state of the art of production equipment, the legal form of the establishment and branch of industry, to mention but a few.

4 Summary of Variables from the Individual Datasets

The following table contains a list of all of the variables in the individual datasets. One and the same variable may have different names in the different datasets. The individual ID number, for example, is referred to as “persnr” in the IEBS and the IABS, while in the LIAB it is designated “id”. For this reason, the following table first lists the variable names from all three datasets (IEBS, IABS and LIAB), the page number on which a detailed description of the variable can be found in this report, and, in the fifth column, the full variable designation. The remaining columns indicate in which (sub-)datasets the variables can be found. For instance, the *measure number* can only be found in the MTG-part of the IEBS (i. e. those observations in the IEBS drawing on the MTG), while the *establishment number* occurs in the BeH-parts of IABS, IEBS and LIAB.

¹⁰ For further information on the approach and structure of the LIAB please refer to: Alda et al. 2005; further information can also be found at: <http://fdz.iab.de/pageText.asp?PageID=36>

Table 1: Summary of variables

Variable Name			Page	Description	IEBS				IABS		LIAB-CS*	LIAB-LS*	
IEBS	IABS	LIAB			BeH	LeH	MTG	BewA	BeH	LeH	BeH	BeH	LeH
Identifiers													
persnr	persnr	id	14	Individual ID	avail	avail	avail						
stznr	satznr	-	14	Observation number	avail	avail	avail	avail	avail	avail	-	-	-
masnr	-	-	14	Measure number	-	-	avail	-	-	-	-	-	-
betnr	betnr	idnum	14	Establishment number	avail	-	-	-	avail	-	avail	avail	-
-	bnn	-	15	Establishment counter	-	-	-	-	avail	-	-	-	-
-	-	betr_st	15	Status of establishment no.	-	-	-	-	-	-	-	avail	-
Notification period													
begorig	ajahrorg amonorg atagorg	-	15	Original spell start date	avail	avail	avail	avail	avail	avail	-	-	-
begepi	ejahrorg emonorg etagorg	-	15	Original spell end date	avail	avail	avail	avail	avail	avail	-	-	-
-	dauer	dauer	16	Duration of original spell	-	-	-	-	avail	avail	avail	avail	avail
begepi	ajahr amonat atag	begin	16	Episode start date	avail	avail	avail						
endepi	ejahr emonat etag	ende	16	Episode end date	avail	avail	avail						
Generated technical variables													
quelle	quelle	quelle	16	Data source of spell	avail	avail	avail	avail	avail	avail	-	avail	avail
kom_quel	kom_quel	-	17	Source combination	avail	avail	avail	avail	avail	avail	-	-	-
spell	spell	spell_nr	17	Spell counter per account	avail	avail	avail						
nspell	nspell	-	17	No. of spells per account	avail	avail	avail	avail	avail	avail	-	-	-
level2	level2	-	17	Spell counter per episode	avail	avail	avail	avail	avail	avail	-	-	-
level1	level1	level1	17	Spell counter per episode and source	avail	avail	avail						
nlevel2	nlev2	-	18	No. of spells per episode	avail	avail	avail	avail	avail	avail	-	-	-

* CS = cross section; LS = longitudinal section

Variable Name			Page	Description	IEBS				IABS		LIAB-CS*	LIAB-LS*	
IEBS	IABS	LIAB			BeH	LeH	MTG	BewA	BeH	LeH	BeH	BeH	LeH
nlevel1	-	-	18	No. of spells per episode and source	avail	avail	avail	avail	-	-	-	-	-
-	vsnr_in	-	18	Sampling date of social security number	-	-	-	-	avail	avail	-	-	-
berknz	dat_korr	dat_ber	19	Date correction	-	avail	avail	-	avail	avail	avail	avail	avail
-	stichtag	-	19	State of employment on reference date (June 30 th)	-	-	-	-	avail	-	-	-	-
-	vsnr_ber	-	19	Social security number correction	-	-	-	-	-	avail	-	-	-
stendat	-	-	20	Status of end date	-	avail	avail	avail	-	-	-	-	-
-	kal_tag	-	20	Calendar/ working days	-	-	-	-	-	avail	-	-	-
Individual status prior to, during and after the current spell													
estatvor	-	-	21	Employment status prior to job search	-	-	-	avail	-	-	-	-	-
krankvor	-	-	21	Continued unemployment after period of incapacity	-	-	-	avail	-	-	-	-	-
erwstat	pers_gr	pers_gr	21	Employment status/ person group	avail ³⁾	avail	avail	avail	avail ¹⁾	-	avail ¹⁾	avail ¹⁾	-
-	la1	-	22	Benefit type	-	-	-	-	-	avail	-	-	-
-	la2	leistart	22	Benefit type (grouped)	-	-	-	-	-	avail	-	-	avail
grund	grund	abg_gr	22	Reason for end of spell	avail	avail	-	avail	avail	avail	avail	avail	avail
-	zsf_gr	abm_gr	23	Reason for end of receipt of benefit (grouped)	-	-	-	-	-	avail	-	-	avail
sna	-	-	23	Status after exit	-	-	-	avail	-	-	-	-	-
Individual characteristics													
sex	sex	geschl	24	Gender	avail	avail	avail	avail	avail	avail	avail	avail	avail
gebjahr	gebjahr	-	24	Year of birth	avail	avail	avail	avail	avail	avail	avail	avail	avail
-	alter	alter	24	Age of person	-	-	-	-	avail	avail	avail	avail	avail
nation	nation_gr	-	25	Nationality (grouped)	avail	avail	avail	avail	avail	avail	-	-	-
nation_org	nation	nation	25	Nationality (detailed list) ³⁾	avail	avail	avail	avail	avail	avail	avail	avail	avail
-	nat_kto	-	25	Nationality (account)	-	-	-	-	avail	avail	-	-	-
-	famst	fam	26	Marital status	-	-	-	-	-	avail	-	-	avail
-	kind	kind	26	No. of children	-	-	-	-	-	avail	-	-	avail

³⁾ Sensitive variables, i.e.: For reasons of data protection, these variables are only available to on-site researchers on application and subject to specification of reasons for application.

Variable Name			Page	Description	IEBS				IABS		LIAB-CS*	LIAB-LS*	
IEBS	IABS	LIAB			BeH	LeH	MTG	BewA	BeH	LeH	BeH	BeH	LeH
schweb	-	-	26	Severe disability status	-	-	avail	avail	-	-	-	-	-
schbild	-	-	26	School leaving qualification	-	-	avail	avail	-	-	-	-	-
bild	bild	ausbild	27	School education and vocational training	avail	-	avail	avail	avail	avail	avail	avail	-
Information on employment and receipt of benefits													
-	-	ein_erw	27	Start date of first gainful employment	-	-	-	-	-	-	avail	-	-
-	-	ein_bet	27	Start date at first establishment	-	-	-	-	-	-	avail	-	-
-	btyp	-	27	Type of employment	-	-	-	-	avail	avail	-	-	-
vstyp	typ_nt	-	28	Pension insurance institution	avail	-	-	-	avail	-	-	-	-
-	gkz	-	28	'Marginal' part-time employment indicator	-	-	-	-	avail ¹⁾	avail ¹⁾	-	-	-
-	entgelt	-	29	Fixed period wage	-	-	-	-	avail	avail	-	-	-
tentgelt	tentgelt	tag_entg	29	Daily wage	avail	avail	-	-	avail	avail	avail	avail	avail
-	whrng	euro	30	Currency indicator	-	-	-	-	avail	avail	avail	avail	avail
gleitz	-	-	30	Transition zone	avail ²⁾	-	-	-	-	-	-	-	-
beruf	beruf	beruf	30	Professional classification	avail	-	avail	avail	avail	avail	avail	avail	avail
stib	stib	berstell	31	Occupational status and working hours	avail	-	-	-	avail	avail	avail	avail	-
-	andauer	-	32	Duration of entitlement to unemployment benefit at start of period of unemployment	-	-	-	-	-	avail	-	-	-
-	art_bew	bew_art	32	Benefit approval reasons	-	-	-	-	-	avail	-	-	avail
begalo daualo	-	-	33	Start and duration of unemployment	-	-	avail	avail	-	-	-	-	-
endplan	-	-	33	Planned end of participation in measure	-	-	avail	-	-	-	-	-	-
beitgr	-	-	33	Contribution group	avail ¹⁾	-	-	-	-	-	-	-	-

* CS = Cross section; LS = Longitudinal section

¹⁾ Available as of 1999

²⁾ Available as of 2003

Variable Name			Page	Description	IEBS				IABS		LIAB-CS*	LIAB-LS*	
IEBS	IABS	LIAB			BeH	LeH	MTG	BewA	BeH	LeH	BeH	BeH	LeH
Establishment information													
-	w73	wz73 ³⁾	34	Classification of Economic Activities Edition 73	-	-	-	-	avail	avail	avail	avail	-
w93	w93_gr	-	35	Classification of Economic Activities Edition 93 (3-digit)	avail ¹⁾	-	-	-	avail ¹⁾	avail ¹⁾	-	-	-
-	w93	wz93	35	Classification of Economic Activities Edition 93 (5-digit) ³⁾					avail ¹⁾	avail ¹⁾	avail ¹⁾	avail ¹⁾	
-	groesse	-	36	Establishment size	-	-	-	-	avail	avail	-	-	-
-	besch1	-	37	Employees without vocational training	-	-	-	-	avail	avail	-	-	-
-	besch2	-	37	Employees with vocational training	-	-	-	-	avail	avail	-	-	-
-	besch3	-	37	Employees with university/higher education qualification	-	-	-	-	avail	avail	-	-	-
-	beschres	-	38	Employees with unknown qualification	-	-	-	-	avail ⁰⁾	avail ⁰⁾	-	-	-
-	btrentg	-	38	Average daily wage	-	-	-	-	avail	avail	-	-	-
-	jahr1	-	38	Year of first appearance in IAB establishment files	-	-	-	-	avail	avail	-	-	-
-	jahr_let	-	39	Year of last appearance in IAB establishment files	-	-	-	-	avail	avail	-	-	-
Location data													
ao_bula	ao_bula	-	40	Place of work: German state	avail	-	-	-	avail	avail	-	-	-
ao_kreis	ao_kreis	arb_kr	40	Place of work: district (Kreis) ³⁾	avail	-	-	-	avail	avail	avail	avail	-
ao_gemei	-	-	40	Place of work: local authority district (Gemeinde) ³⁾	avail	-	-	-	-	-	-	-	-
ao_rd	ao_laa	-	41	Place of work: regional directorate (Regionaldirektion)	avail	-	avail	avail	avail	avail	-	-	-
ao_aa	ao_aa	arb_aa	41	Place of work: employment agency (Arbeitsagentur) ³⁾	avail	-	avail	avail	avail	avail	avail	avail	-
ao_gest	-	-	41	Place of work: local labour office	avail	-	avail	avail	-	-	-	-	-

* CS = Cross section; LS = Longitudinal section

⁰⁾ Available as of 1992

Variable Name			Page	Description	IEBS				IABS		LIAB-CS*	LIAB-LS*	
IEBS	IABS	LIAB			BeH	LeH	MTG	BewA	BeH	LeH	BeH	BeH	LeH
				(Geschäftsstelle) ³⁾									
wo_bula	wo_bula	-	42	Place of residence: German state	avail ¹⁾	–	avail	avail	avail ¹⁾	avail ¹⁾	–	–	–
wo_kreis	wo_kreis	wohn_kr	42	Place of residence: district (Kreis) ³⁾	avail ¹⁾	–	avail	avail	avail ¹⁾				
wo_gemei	-	-	42	Place of residence: local authority district (Gemeinde) ³⁾	avail ¹⁾	–	avail	avail	–	–	–	–	–
wo_rd	wo_laa	-	42	Place of residence: regional directorate (Regionaldirektion)	avail ¹⁾	avail	avail	avail	avail ¹⁾	avail	–	–	–
wo_aa	wo_aa	wohn_aa	42	Place of residence, employment agency (Arbeitsagentur) ³⁾	avail ¹⁾	avail	avail	avail	avail ¹⁾	avail	avail ¹⁾	avail ¹⁾	avail
wo_gest	-	-	42	Place of residence: local labour office (Geschäftsstelle)	avail ¹⁾	avail	avail	avail	–	–	–	–	–
wo_aatyp	-	-	43	Place of residence: regional type of employment agency	avail ¹⁾	avail	avail	avail	–	–	–	–	–
-	ow_knz	ost_west	43	East/ West code (spell)	–	–	–	–	avail	avail	–	avail	avail
-	ow_kto	-	44	East/ West code (account)	–	–	–	–	avail	avail	–	–	–

¹⁾ Available as of 1999

³⁾ Sensitive variables, i.e.: For reasons of data protection, these variables are only available to on-site researchers on application and subject to specification of reasons for access.

* CS = Cross section; LS = Longitudinal section

¹⁾ Available as of 1999

³⁾ Sensitive variables, i.e.: For reasons of data protection, these variables are only available to on-site researchers on application and subject to specification of reasons for access.

5 Detailed Description of Variables from the Individual Datasets

Variables	IEBS	IABS	LIAB
5.1 Identifiers			
5.1.1 Individual ID	persnr	persnr	id
► Detailed description	<p>In order to ensure that the data are anonymous, the social security number and BA client number were replaced by system-independent individual ID numbers.</p> <p>Unlike the social security number, which contains information such as the date of birth, gender and initials of the social security contributor, the system-independent individual ID does not reveal any information on the identity of a person. Similarly, no connection exists between the system-independent individual ID and the social security number.</p> <p>The system-independent individual ID numbers were generated for the IEBS, IABS, and LIAB cross-sectional and longitudinal datasets separately to prevent any connections or associations between them from arising.</p>		
5.1.2 Dataset number	satznr	satznr	–
► Detailed description	<p>The variable ‘Observation number’ assigns a distinct number to every original spell. In this way, further variables from other IAB data sources can be merged. Due to episode splitting, newly formed spells retain the same dataset number as the original spell.</p>		
5.1.3 Measure number	masnr	–	–
► Detailed description	<p>This number provides information on which individuals have participated in the same measure.</p>		
► Notes	<p>It may happen that sequent measures are assigned identical measure numbers, contrary to the given regulations. In addition, the dataset may also contain ‘dummy observations’ which have been created in the course of training schemes by the employment agency staff. For this reason, measures with very large numbers of participants should be considered with care.</p>		
5.1.4 Establishment number	betnr	betnr	idnum
► Detailed description	<p>To ensure that the data are anonymous, the original establishment numbers assigned by the employment agencies¹¹ have been replaced by system-independent establishment identifiers. This allows for establishment changes or re-employment in the same establishment (known as recalls) to be identified.</p> <p>In the LIAB the system-independent identifier idnum was adopted from the IAB Establishment Panel. For data protection reasons, this identifier exists in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
► Notes	<p>As the establishment variables ‘Place of work’ and ‘Economic activity’ are merged via the establishment number, this information</p>		

¹¹ For information on the allocation of establishment numbers refer to *Fritsch und Brix 2004: 183-190*.

Variables	IEBS	IABS	LIAB
	is not included in observations with no establishment number.		
5.1.5 Establishment counter	–	bnn	–
► Detailed description	<p>The establishment counter specifies which establishments a person has been employed in (i.e. notified employment) during his/her working career. For example: if a person has already changed establishment once and then changes establishment once again, the counter would be at the value 3, provided the three establishments in question are different. If, however, the second change constitutes a move back to the original establishment, the counter figure would go back to 1 (for the 1st establishment).</p> <p>In receipt-of-benefit observations the counter is always at 0.</p>		
5.1.6 Status of establishment number	–	–	betr_st
► Detailed description	<p>This variable refers to the status of the establishment number, i.e. whether the establishment has been specifically selected from the IAB Establishment Panel for a version of the LIAB longitudinal data model, whether it is another establishment from the IAB Establishment Panel or whether it is an establishment not in the IAB Establishment Panel.</p>		
► Notes	<p>This variable exists in versions of the LIAB longitudinal data model only.</p>		
5.2 Notification period			
5.2.1 Original spell start date	begorig	ajahrorg, amonorg, atagorg	–
5.2.2 Original spell end date	begepi	ejahrorg, emonorg, etagorg	–
► Detailed description	<p>To create the data file episode splitting is performed. This involves taking spell overlaps within one account and splitting and duplicating these spells to obtain fully parallel spells with no overlaps. This leads to an increase in the number of spells. The starting and finishing dates of the original spell denote the original starting and end dates of a notification. Split observations which were originally contained in one observation will have the same dataset number.</p> <p>In the IABS dates are specified with three different variables: a year, month, and day variable.</p> <p>For reasons of data protection, these variables are contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
► Notes	<p>Attention: Some variables apply to the original spells only and not to spells added through the episode splitting procedure, for example “reason for end of spell“, “continued unemployment after period of incapacity“ or “status of end date“. Other variables, by way of contrast, apply solely to the split spells, for instance “spell counter per account“, “no. of spells per account“, “spell counter per episode“, “no. of spells per episode“, “spell counter per episode and source“.</p>		

Variables	IEBS	IABS	LIAB
5.2.3 Duration of original spell	–	dauer	dauer
► Detailed description	<p>This variable specifies the duration of the notification in calendar days. This variable is calculated from the original end and start date. To calculate this value, one day is added to the difference between the end date and the start dates. For example, employment that begins and ends on the same day would have a duration of one day.</p> <p>For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
► Notes	<p>The following applies to LeH spells:</p> <ul style="list-style-type: none"> • For datasets with end date before 1.1.1998 the spell duration is given in working days. • For datasets with end date after 1.1.1998 the spell duration is given in calendar days. 		
5.2.4 Episode start date	begepi	ajahr, amonat, atag	begin (start date of episode)
5.2.5 Episode end date	endepe	ejahr, emonat, etag	ende (end date of episode)
► Detailed description	<p>These variables denote the start and end date of non-overlapping split episodes. The term 'episode' refers to the period in which a spell occurs. If a spell has to be split into several episodes due to overlapping, the start of the original spell will be the same as the start of the first split episode and the end of the original spells will be the same as the end of the last split episode. All other start and end dates of original spells and split episodes will be different.</p> <p>In the IABS dates are specified with three different variables.</p>		
► Notes	<p>If analyses relate to the unsplit spells, a filter can be set in the IEBS, for example based on the condition <code>begorig = begepi</code>.</p> <p>The episode splitting procedure results in episodes in the IEBS which have ended before the observation period of a source or which do not begin until after the observation period.</p>		
5.3 Generated technical variables			
5.3.1 Spell source	quelle	quelle	quelle
► Detailed description	<p>This variable refers to the data source from which the information comes.</p> <p>In the IABS Regional File the variables <i>quelle</i> (spell data source) and <i>gkz</i> ('marginal' part-time employment characteristic) are combined to form the variable <i>status</i> with the following values:</p> <p>1 = in employment subject to social security 2 = in 'marginal' part-time employment 3 = in receipt of benefit(s)</p>		

Variables	IEBS	IABS	LIAB
► Notes	In the IEBS, participation in measures is further differentiated according to the sub-processes under <i>coSach</i> .		
5.3.2 Source combination	kom_quel	kom_quel	–
► Detailed description	This variable is generated after episode splitting and shows whether overlaps exist between different sources and if so, where. For instance, this variable shows if a person has spells of both employment and receipt of benefit(s) in one and the same episode.		
5.3.3 Spell counter per account	spell	spell	spell_nr
► Detailed description	<p>The spell counter numbers the spells account-wise, beginning with the number 1. Both the original spells and those added after episode splitting are counted. This variable thus shows the chronological order of the individual notifications of a person.</p> <p>Prior to numbering, the data are put in the following order:</p> <ul style="list-style-type: none"> - Individual ID, start date of the split episode and source. <p>BeH spells are also sorted on the following basis:</p> <ul style="list-style-type: none"> - 'Marginal' part-time employment characteristic (in ascending order, in the IABS only) and daily wage/daily benefit rate. 		
5.3.4 Number of spells per account	nspell	nspell	–
► Detailed description	The variable nspell refers to the number of spells in an individual's account, i.e. the following applies: nspell = max (spell) per account. This variable is generated in the episode splitting procedure and counts split observations.		
5.3.5 Spell counter per episode	level2	level2	–
5.3.6 Spell counter per episode and source	level1	level1	level1
► Detailed description	<p>The spell counter per episode level2 numbers the parallel spells of an episode from zero to n. If parallel spells occur in another episode of the account, these are again numbered beginning at zero.</p> <p>The spell counter level1 numbers parallel observations of an episode within one data source from zero to n. If there are parallel spells of another source in the same episode or if there are further parallel observations in another episode of the account within this same source, the spell counter will number once again from zero up.</p> <p>Both level counters (level1 and level2) show whether spells overlap in time within a social security account. This is the case, for example, if several employment relations exist at the same time or in the case of combined receipt of benefits and 'marginal' part-time employment.</p>		

Variables	IEBS	IABS	LIAB
	<p>The decision as to which spell has the value 0 depends on how the data were sorted prior to episode splitting: The dataset is first sorted according to the social security number, the episode start date and the source. Then the spells within the sources are sorted according to the following scheme:</p> <p>BeH</p> <ul style="list-style-type: none"> • 'Marginal' part-time employment characteristic (in ascending order) • Daily wage (in descending order) <p>LeH</p> <ul style="list-style-type: none"> • Type of benefit (in ascending order) • Observation number (if available; in ascending order) <p>MTG</p> <ul style="list-style-type: none"> • Observation number (if available; in ascending order) <p>BewA</p> <ul style="list-style-type: none"> • Observation number (if available; in ascending order) <p>Sorting the data according to this scheme means that, firstly, in the case of temporal overlaps employment notifications come before LeH notifications; secondly, in the case of several jobs at the same time, 'marginal' part-time employment appears at the end; and finally within this order jobs are sorted according to wage (i.e. those with the higher wage come first).</p> <p>In the IEBS the 4 sub-categories of the MTG (source = 4, 8, 16, 32) are regarded as separate sources.</p> <p>The IABS Regional File contains the variable <i>level</i> only, which corresponds to the variable <i>level2</i>.</p>		
5.3.7 Number of spells per episode	nlevel2	nlev2	–
5.3.8 Number of spells per episode and source	nlevel1	–	–
<p>► Detailed description</p>	<p>The variable No. of spells per episode nlevel2 or nlev2 shows how many simultaneous spells there are within the episode, i.e. the following applies:</p> <p>nlevel2 or nlev2 = max (level2) + 1 per episode.</p> <p>The variable No. of spells per episode and source nlevel1 shows how many simultaneous spells there are within the episode per source, i.e. the following applies:</p> <p>nlevel1 = max (level1) + 1 per episode and source.</p> <p>The IABS Regional File contains the variable <i>nlev</i> only, which corresponds to the variable <i>nlev2</i>.</p>		
5.3.9 Sampling date of social security number	–	vsnr_in	–
<p>► Detailed description</p>	<p>This variable shows which sample the social security number was selected from. In the sample IABS 1975-2001 this variable specifies the figure 7501 for all datasets (only relevant for the extrapolation of the sample).</p>		

Variables	IEBS	IABS	LIAB
	For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.		
5.3.10 Date correction	berknz	dat_korr	dat_ber
<p>► Detailed description</p>	<p>Very few initial corrections are carried out in the IEBS and its data sources. This variable refers to corrections which occur when the source data are found to have several spells for presumably the same receipt of benefit or the same participation in measures.</p> <p>In the IABS this variable shows whether the start or end date of a spell was rectified in the correction of overlapping between BeH and LeH notifications.</p> <p>In the LIAB date correction was carried out for LeH notifications by the subsequent notifications.</p> <p><i>Please note:</i> The individual correction steps are different in the different datasets. A standard correction procedure can therefore not be given here. A detailed description for every dataset can be found in the appendix to this report (Tables 2 to 4).</p> <p>For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
5.3.11 State of employment on reference date (June 30th)	–	stichtag	–
<p>► Detailed description</p>	<p>For BeH datasets, this variable shows whether the reference date June 30th falls within the notification period of the spell. This facilitates comparisons with the official statistics, which often comprise cross-sectional figures based on the reference date June 30th.</p> <p>For LeH datasets this variable is assigned the value “missing” (9) as these datasets can extend beyond the end of the year, meaning that several reference dates may lie within one benefit receipt period.</p> <p>For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
5.3.12 Social security number correction	–	vsnr_ber	–
<p>► Detailed description</p>	<p>This variable shows, for LeH observations, if the social security number has been corrected prior to the process of merging LeH and BeH to form the BLH.</p> <p>This variable is not relevant for BeH observations.</p> <p>The correction was performed in order to ensure that as many LeH observations as possible have a correct social security number, which was used as a criterion for interlinking with the employee data. LeH observations with no social security number could</p>		

Variables	IEBS	IABS	LIAB
	<p>not be included in the BLH.</p> <p>Social security numbers have to be corrected if it turns out that (1) the same social security number has been wrongly allocated to several social security contributors, or that (2) a person has received more than one social security number by mistake. In the first of the two cases mentioned above, the numbers that have been allocated more than once are deleted and the affected social security contributors receive a new, non-ambiguous number. The notifications, which have previously been saved in one single account, are distributed to the individual persons accordingly. In the second case – i.e. when one person receives more than one number – the social security numbers in question are nullified and the social security contributor is given a new social security number. The notifications that were previously saved under different social security numbers can now be put into one account under the new social security number.</p> <p>For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
5.3.13 End date status	stendat	–	–
<p>► Detailed description</p>	<p>This variable shows whether the end date has been confirmed by a final notification, whether the date is a planned end date or whether it represents the last updated status (right censoring).</p> <p>For LeH spells this variable has the value 1 if the spell displays ongoing receipt of unemployment benefits. In this case, the end date is the end of the approved payment period. These spells originate from the Central Authentication File (ZND). Otherwise the variable has the value 0.</p> <p>For MTG spells, the variable has the value 1 if no exit observation exists for the measure and only the planned end date has been entered.</p> <p>For BewA spells the variable has the value 1 if the spell is still up to date; in other words if the employment agency has not yet indicated the end of the job search.</p> <p><i>Note:</i> This variable applies to the original spell or the last of several split episodes only.</p>		
5.3.14 Calendar/ Working days	–	kal_tag	–
<p>► Detailed description</p>	<p>This variable shows whether the “duration of entitlement to unemployment benefit at start of period of unemployment” (andauer) is specified in working or calendar days. Generally speaking, data on entitlement from before 1998 was given in working days and after 1998 in calendar days.</p> <p>A general conversion of all entitlement periods into calendar days was not performed, as this would result in rounding errors, and a comparison of entitlement periods with the benefit table would no longer be possible.</p> <p>For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		

Variables	IEBS	IABS	LIAB
5.4 Individual status prior to, during and after the current spell			
5.4.1 Employment status prior to job search	estatvor	–	–
➤ Detailed description	This variable shows the employment status prior to the job search for BewA spells.		
➤ Notes	A clear reduction in the values has been seen as of 12/2002. The values from former observations were re-coded in line with the currently applicable values. <i>Please note:</i> Values are applicable to the original unsplit spell and to the first split episode.		
5.4.2 Continued unemployment after period of incapacity	krankvor	–	–
➤ Detailed description	This values shows whether the person was registered as incapacitated for work prior to the start of the current spell of unemployment.		
➤ Notes	<i>Please note:</i> Values are applicable to the original unsplit spell and to the first split episode.		
5.4.3 Employment status/ person group	erwstat	pers_gr	pers_gr
➤ Detailed description	<p>The person group characteristic is a three-digit number which allows for a very precise differentiation between employees. In addition to employees subject to social security with no particular features, this variable can also be used to identify, for example, trainees/apprentices, interns, 'marginal' part-time employees, family members employed in the agriculture industry, casually employed persons or persons in partial retirement.</p> <p>The person group characteristic was introduced on 1 January 1999 along with the new notification procedure. This characteristic accounts for contribution- or benefit-based employment features. In this respect, the variable supplements the “employment details” in the social security notifications (cf. the variables “vocational training”, “professional classification” and “occupational status”). For notifications received before 1999, an attempt was made to allocate employees to the different person groups on the basis of the variables “vocational training”, “professional classification” and “occupational status” and other information. In many cases, however, appropriate allocations were not possible.</p> <p>In the IABS and the LIAB the variable pers_gr is generated for BeH observations only and contains the person group characteristic only. Also, this characteristic is available in the IABS Regional File in aggregate form only.</p> <p>The variable erwstat in the IEBS contains the person group characteristic for BeH spells, the grouped benefit type for LeH spells, a combination of the variables “type of measure” and “type of benefit” for MTG spells, and the employment search status for BewA spells. Furthermore, the additional status “incapacitated” is generated in the IEBS. Spells are given the employment</p>		

Variables	IEBS	IABS	LIAB
	search status "incapacitated" if a preceding spell with the status "unemployed" follows immediately and has "incapacitated" as the reason for exit <u>and</u> if a subsequent spell with the status "unemployed" also follows immediately and has the value "yes" (krankvor = 1) for the variable "continued unemployment after period of incapacity " and the spell itself does not have the status "unemployed" but "job-seeker".		
5.4.4 Benefit type	–	la1	–
► Detailed description	This variable denotes the type of wage substitution paid by the Federal Employment Agency (BA). For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.		
5.4.5 Benefit type (grouped)	–	la2	leistart
► Detailed description	This variable identifies the different benefit type groups of the Federal Employment Agency (BA). Benefits are put into one of four main categories: <ul style="list-style-type: none"> • Unemployment benefit • Unemployment assistance • Maintenance allowance • Subsidies under Section 166b AFG (Employment Promotion Act) or Section 207a SGB III (German Social Code Book III) The settling-in allowance (EGHI, Code 1036) may have been wrongly allocated in the benefit types grouping. This type of benefit was given the code 2 = unemployment assistance, but presumably it should have been code 1 = unemployment benefit. The value 5 refers to, for example, subsidies for pension insurance, i.e. overlapping with employment notifications can often be found here. <i>Please note:</i> This variable does not exist in the LIAB cross-section model. In the IEBS this characteristic is given in addition to others within the variable erwstat (see previous page). In the IABS Regional File this variable is designated <i>lart_grp</i> .		
5.4.6 Reason for end of spell	grund	grund	abg_gr
► Detailed description	The variable "reason for end of spell" has different significance for the different data sources: BeH: Reason for submission of notification LeH: Reason for end of benefit receipt BewA: Reason for exit from job search (in the IEBS only) In BeH spells this variable indicates the reason why the employer has filed the employment notification with the social security agencies. The reasons for submitting a notification are encoded according to the provisions of the notification procedure effective as of 1.1.1999 (in accordance with DEÜV ¹²). The reasons for submitting a notification are recorded in a more differentiated form		

¹² DEÜV: Data Collection and Transmission Regulation, in force as of 1 January 1999.

Variables	IEBS	IABS	LIAB
	<p>than in the former notification procedure (in accordance with DEVO / DÜVO regulations¹³). The previous reasons for submitting a notification were re-coded to bring them in line with the new reasons for submitting a notification.</p> <p>The employee history (BeH) does not contain all possible reasons for submitting a notification that may occur. The BeH only includes notifications that give information on wages (i.e. annual, employment interruption and end of employment notifications), notifications that don't (registration) remain excluded. No loss of information is incurred, however, as data arising from a registration are re-transmitted with subsequent annual, employment interruption or end of employment notifications.</p> <p>For LeH spells this variable refers to the reason for the end of the receipt of unemployment benefit, unemployment assistance or maintenance allowance.</p> <p>In the case of BewA spells, the IEBS contains the deregistration or exit reason. Please note, however, that as of 26.4.2003 a reduction in values has occurred. In the Integrated Employment Biographies (IEB) it is not entirely clear which spells fall into the old and which into the new categories, as the date refers to the date of drawing by the Statistical Office of the BA and not the given spell period. A possible way of re-coding to achieve consistency in terms of the dates is given in the appendix (Table 5). A more precise differentiation of exit reasons even after 26.4.2003 is enabled by the variable "status after exit", which is a combination of the deregistration reason and the promotion measure ID at the moment of exit.</p> <p>This variable is available in the IABS Regional File in aggregate form only.</p>		
► Notes	In the LIAB cross-sectional data model it is not recommended that the notification reason "end of employment" be considered exit from the establishment. Sometimes an exit may be directly followed by re-entry with the same employer. This can be seen in the LIAB longitudinal data model; in the LIAB cross-sectional data model such processes are not evident.		
5.4.7 Reason for end of receipt of benefit (grouped)	–	zsf_gr	abm_gr
► Detailed description	<p>This variable contains the grouped reasons given for the end of benefit receipt under "reason for end of spell" and is thus available for LeH observations only.</p> <p>For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
5.4.8 Status after exit	sna	–	–
► Detailed description	<p>The "status after exit" refers to the status of job-seekers following the end of the BewA spell.</p> <p>This variable shows, among other things, whether employment (subsidized or non-subsidized) has been taken on at the end of the period of unemployment. This information might be particularly useful for most recent data because the associated employ-</p>		

¹³ DEVO: Data Collection Regulation; DÜVO: Data Transmission Regulation; both the 2nd DEVO and the 2nd DÜVO were replaced by the Data Collection and Transmission Regulation, effective as of 1 January 1999.

Variables	IEBS	IABS	LIAB
	ment notification might still be missing (BeH data lag behind BewA data).		
► Notes	Some values are not applicable throughout the entire period. As of 2003 a number of values no longer exist, as the variable value is no longer raised for the variable "reason for exit" (cf. reason for end of spell (grund)). For some spells the change in variable values occurs even before 2003; in other cases, not until after 2003. <i>Please note:</i> Values are applicable to the original unsplit spell and to the last split episode.		
5.5 Individual characteristics			
5.5.1 Gender	sex	sex	geschl
► Detailed description	"Gender" data is taken from the social security number.		
► Notes	In the case of accounts with no social security number, the latest gender data is taken from the BA client history and merged with the data on the basis of the BA client number.		
5.5.2 Year of birth	gebjahr	gebjahr	–
► Detailed description	"Year of birth" data is taken from the social security number. For data protection reasons, the year of birth in the IABS Regional File is censored for all persons who were 61 or over, or 14 or under between 1975 and 2001.		
► Notes	In the case of accounts with no social security number, the latest year of birth data is taken from the BA client history and merged with the data on the basis of the BA client number.		
5.5.3 Age of person	–	alter	alter
► Detailed description	The age is calculated using the year of birth (Source: social security number). <ul style="list-style-type: none"> • In BeH spells the employee's age on 31 December of the year in question is shown. • In LeH spells the age at the start of the respective receipt of benefit is shown. For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.		
► Notes	As the year is given as a 2-digit figure in the social security number, a negative age may occur; for example, the difference between the notification year 1996 and the year of birth 1997 as taken from the social security number is "-1". In cases such as these, in which the start of employment is before the birth, "18" is assumed as the century. In our example, this would mean that the age 99 would be shown. In individual cases, ages of over 100 will occur; here, 100 is subtracted, which explains why there are now also 0-year-old employees. At this point there is nothing much that can be done to rectify this. However, with the help of the variable "year of birth" in the IABS and IEBS, which contains the year of birth from the social security number, the person's		

Variables	IEBS	IABS	LIAB
	age can be calculated.		
5.5.4 Nationality	nation; nation_org	nation_gr; nation	nation
► Detailed description	<p>In the LIAB the variable “nationality” is available in detailed form; in the IABS and the IEBS both a detailed and an aggregate version are available. The detailed version, which is based on the country codes of the German Federal Statistical Office, is available to guest researchers on application only.</p> <p>IEBS: nation => grouped form of nationality (non-sensitive) nation_org => non-grouped form of nationality (sensitive)</p> <p>IABS: nation_gr => grouped form of nationality (non-sensitive) nation => non-grouped form of nationality (sensitive)</p> <p>LIAB nation => non-grouped form of nationality (sensitive)</p>		
► Notes	<p>This variable is not corrected, i.e. in one account different nationalities may appear due to different informations in the sources and not necessarily associated with an actual change in nationality.</p> <p>As the time of data collection is relevant, some countries are included which no longer exist (e.g. the Soviet Union or Yugoslavia).</p> <p>Nationality is not always indicated by employers. Thus, in the IABS gaps are filled using the following algorithm: if the nationality is missing in an observation, a predecessor and successor is looked for in the person’s account. If the predecessor and successor are of identical nationality, the gap is filled with this data entry (nationality).</p> <p>In the IABS, the nationality for LeH observations is adopted from the preceding BeH observation. For reasons of data protection, this variable is available in the IABS Regional File for West Germany only and in aggregate form only (differentiation between Germans and non-Germans).</p>		
5.5.5 Nationality (account)	–	nat_kto	–
► Detailed description	<p>To sub-divide the social security contributors into Germans and non-Germans (e.g. for stratified samples), an account-based nationality code was introduced. This code contains the nationality from the first BeH dataset in the account displaying a valid nationality entry.</p> <p>For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		

Variables	IEBS	IABS	LIAB
5.5.6 Marital status	–	famst	fam
► Detailed description	<p>This variable refers to the marital status, i.e. whether the person is single or married.</p> <p>The marital status is included in LeH observations only; in BeH observations this variable is set to “missing”. This is why information on the marital status is available only for employees who have received unemployment benefit, unemployment assistance or maintenance allowance at one point during the period of observation.</p> <p>This variable is not included in the LIAB cross-sectional data model, as this model contains BeH spells only.</p> <p>For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
5.5.7 Number of children	–	kind	kind
► Detailed description	<p>This variable specifies whether a person has no children or at least one child.</p> <p>This variable is included in LeH datasets only; in BeH datasets this variable is set to “missing”. This is why for employees who have not received unemployment benefit, unemployment assistance or maintenance allowance at any point during the period of observation there are no data on the number of children.</p> <p>The significance of the value “2” in the variable is not fully known. There are very few cases with this value. As with “marital status”, quality checks are very difficult to carry out for this variable as there are no logical links to other variables in the dataset.</p> <p>This variable is not included in the LIAB cross-sectional data model, as this model contains BeH spells only.</p> <p>For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
5.5.8 Severe disability status	schweb	–	–
► Detailed description	<p>This variable comes from the job seekers and applicants pool data (BewA). The severe disability status which is valid on the day prior to the start of participation in measures (MTG spells) or the start of job search (BewA spells) is adopted from the job seekers and applicants pool data (BewA).</p>		
5.5.9 School leaving qualifications	schbild	–	–
► Detailed description	<p>This variable comes from the job seekers and applicants pool data (BewA). Recorded is the school leaving qualifications as valid on the day prior to the start of participation in measures (MTG spells) or the start of job search (BewA spells).</p>		
► Notes	<p>Consistency checks on the education variables (schbild and bild) of Fitzenberger et al. (2005b, p. 36 ff.) revealed a rather large number of inconsistencies, both between the data sources and with regard to the chronology. The data contained in the participants in measures data (MTG) and the applicants pool data (BewA) would appear to be more reliable than the employee history (BeH). The background to this is that the employee history data originate from the notification procedure; as the school leaving qualifications data are not relevant for social security matters they are presumably not dealt with with a high degree of care.</p>		

Variables	IEBS	IABS	LIAB
5.5.10 School education and vocational training	bild	bild	ausbild
<p>► Detailed description</p> <p>Employee school education and vocational training is indicated by the employer as part of the “Employment details”.</p> <p>This variable is a combined indicator. In other words, this variable contains both the school qualification(s) obtained and an indication of whether or not vocational training has been completed. In cases where a university/higher education qualification has been obtained, an additional vocational training is not displayed.</p> <p>In the IABS the variable “school education and vocational training” for the LeH datasets is adopted from the preceding BeH observation.</p> <p>For MTG and BewA spells the completed vocational training variable is taken from the applicants pool data (BewA). For MTG spells the variable is merged at the start of the measure; for BewA spells it is merged at the start of job search.</p>			
<p>► Notes</p>	Fitzenberger et al. (2005a) make concrete suggestions on how to correct the education variable. When using the IEBS, it is recommended that the information from the MTG spells and BewA spells be used in addition.		
5.6 Employment and receipt of benefit			
5.6.1 Start date of first gainful employment	–	–	ein_erw
<p>► Detailed description</p> <p>This variable specifies the date of start of employment subject to social security. As training periods are not included, the beginning of a person’s working life may be earlier than the actual date of start of gainful employment.</p> <p>This variable currently exists in the LIAB cross-sectional data model only up to 2001. This variable can be used as a proxy for the level of work experience that a person has, under the assumption that the person has been continually employed.</p>			
5.6.2 Start date at establishment	–	–	ein_bet
<p>► Detailed description</p> <p>This variable contains the start date of the first employee notification, which might be a notification of trainees/ apprentices, by the notifying establishment.</p> <p>This variable currently exists in the LIAB cross-sectional data model only up to 2001.</p>			
<p>► Notes</p>	This variable can be used to estimate the duration of employment in an establishment (from start till current notification), under the assumption that the person has been continually employed at the establishment.		
5.6.3 Type of employment	–	btyp	–
<p>► Detailed description</p>	This variable specifies whether a person is in receipt of benefit or employed. It is a new variable that was created as part of the		

Variables	IEBS	IABS	LIAB
	<p>so-called "completion procedure". The "completion procedure" involved filling in gaps in employment spells that have clearly come about as a result of employers' failure to submit employment notifications with artificially generated observations.</p> <p>The (different types of) artificially generated observations can be identified through the values of the variable btyp and so be excluded from all analyses. In all completed notifications the wage and the reason for exit were both set to 0 and the episode start and end date set in line with the periods to be completed. The values for the remaining variables were all adopted from the employment notification before the gap.</p> <p>Observations with the value 3 refer to dormant employment. Legally speaking, the employment contract continues to exist during such periods; work is not carried out, however, and no wage is paid (e.g. maternity leave or extended maternity leave, continued incapacity for work at the end of sick leave payment entitlement).</p>		
5.6.4 Pension insurance institution	vstyp	typ; rnt	–
<p>► Detailed description</p>	<p>The variable "pension insurance institution (spell)" that is designated typ relates to BeH spells and specifies whether <i>during the period of notification</i> the <i>employee</i> paid pension insurance contributions into the LVA (pension insurance for blue-collar workers), the BfA (pension insurance for white-collar employees) or Knappschaft (German Miners Pension Insurance). For LVA and BfA a differentiation is made between East and West Germany.</p> <p>The variable rnt "pension insurance institution (account)" specifies the pension insurance institution which was responsible for the social security contributor <i>at the time the social security number was allocated</i>. The information on the pension insurance institution contained in this variable was taken from the first two digits of the social security number. The variable "pension insurance institution (spell)", by way of contrast, specifies the relevant pension insurance institution at the <i>time of employment</i>.</p> <p>LeH notifications lack information on the competent pension insurance institution at the given time.</p> <p>For reasons of data protection, the variable "rnt" is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
5.6.5 'Marginal' part-time employment characteristic	–	gkz	–
<p>► Detailed description</p>	<p>The 'marginal' part-time employment characteristic was formed from the variables "person group" and "source". The person groups 109, 110, 202, 209 and 210 were combined and put into the category "marginal' part-time employment". All other person groups were put into the category "employment subject to social security".</p> <p>In the IABS Regional File the variables <i>quelle</i> "spell source" and <i>gkz</i> "'marginal' part-time employment characteristic" are combined to form the variable <i>status</i>, which has the following values:</p> <p>1 = in employment subject to social security 2 = in 'marginal' part-time employment 3 = in receipt of benefit</p>		

Variables	IEBS	IABS	LIAB
► Notes	'Marginal' part-time employment is being displayed since the introduction of the new notification procedure in 1999.		
5.6.6 Fixed period wage	–	entgelt	–
► Detailed description	<p>In BeH spells this variable shows the gross wage of an employee during the (original) notification period (see date variables). The “fixed period wage” refers to the gross earnings for the entire duration of a notification. As this period might differ in length from one case to the next, a daily wage variable is provided to facilitate comparison (see tentgelt).</p> <p>In LeH spells this variable specifies the calculation basis for benefits.</p> <p>For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
5.6.7 Daily wage	tentgelt	tentgelt	tag_entg
► Detailed description	<p>In BeH spells this variable refers to the gross daily wage of an employee. The value is calculated by dividing the “fixed period wage” by the duration of the (original) notification period in calendar days.</p> <p>In LeH spells this variable denotes the daily benefit rate of unemployment benefit, unemployment assistance or maintenance allowance. It must be borne in mind here that the daily benefit rate for spells with an original start date before 1.1.1998 applies to working days, while for spells with an original start date on or after 1.1.1998 the value applies to calendar days.</p> <p>Daily wages and benefit rates are given in the IEBS in euro (€). In the IABS and the LIAB wages are given in Deutschmarks (DM) for the time before the end of 1998 and in euro (€) as of 1999¹⁴. To establish whether the wage values given are in DM or euro, refer to the variable whrng in the IABS and the variable euro in the LIAB data. The official exchange rate for DM to euro is: 1.95583.</p> <p>In the period 1975-1998 employers generally only gave notification of earnings which were subject to social security, i.e. wages above the part-time income threshold and up to the upper earnings limit for statutory pension insurance. After the inclusion of 'marginal' part-time employment in the notification procedure, effective as 1.1.1999, wages that lie below the 'marginal' part-time income threshold are also shown; the upper earnings limit continues to apply as the upper ceiling. Sometimes the wage entries exceed the upper earnings limit nevertheless. Generally speaking, this might be a result of special annual payments which the employer adds on to the normal wage in the (annual, employment interruption or end of employment) notifications. Here, it is irrelevant whether or not the upper earnings limit for pension insurance is exceeded as a result of this addition. Another possible reason for the wage being higher than the income threshold is erroneous information on employment duration or wage levels, although this seems rather unlikely given the relevance of this information for social security contributions.</p> <p>In 1984 a changeover took place in the notification procedure with regard to special payments (13th monthly salary, holiday pay and Christmas bonus). Prior to 1983 employers did not have to give notification of such special payments; this became manda-</p>		

¹⁴ The only notifications that also had the DM variable for notifications after 1998 were completed notifications (btyp = 2, 4, 5, 6); however, as the wage entries in completed notifications were already set to the value 0, this was of no importance to the analyses.

Variables	IEBS	IABS	LIAB
	<p>tory as of 1984. This led to a discontinuity in wages from 1983 to 1984 (cf. Steiner 1997:635).</p> <p>In contrast to the weakly anonymous version, daily wage entries in the IABS Regional File can be found under the variable named <i>entgelt</i>.</p>		
► Notes	<p>The 'marginal' part-time income threshold and the upper earnings limit for pension insurance differ from year to year and between West and East Germany (the deciding factor is the given establishment location).</p> <p>The <i>FDZ Methodenreport No. 2/2005</i> presents a method how to impute wages above the contribution limit.</p>		
5.6.8 Currency indicator	–	whrng	euro
► Detailed description	<p>The currency indicator shows whether the wage values given are Deutschmark or euro values.</p> <p>What must be borne in mind is that there is no exact date for the changeover from DM to euro in the LeH. A general conversion into euro has not been carried out since this would mean that it would no longer be possible to compare benefit tables for LeH observations.</p> <p>This variable does not exist in the IABS Regional File. The following applies: all wage entries up to and including 1998 are in DM and as of 1999 in euro.</p>		
5.6.9 Transition zone	gleitz	–	–
► Detailed description	<p>This variable shows whether an employment notification relates to employment in the low-earnings bracket within what is known as the transition zone. Jobs in the transition zone carry a gross monthly wage of between € 400 and 800. The employer only has to pay a reduced social security employer contribution for jobs in the transition zone (effective under German law as of 1.4.2003).</p>		
5.6.10 Profession	beruf	beruf	beruf
► Detailed description	<p>The profession variable draws on the classification of professions of the Federal Employment Agency (BA): "Classification of Professions. A Systematic and Alphabetical Directory of Job Titles". This directory contains around 25,000 job titles; the Profession variable is at a 3-digit code aggregation level comprising around 330 values.</p> <p>For BeH spells the job title refers to the current profession of the employee as taken from the data submitted by the employer. If several job titles with different classification codes are applicable to an employee, the employer must choose the job title which best defines the tasks performed by the employee.</p> <p>As is the case for all variables in the BeH, certain groups of employees will not be liable to social security. Thus, the distribution of professions is not representative of all persons in gainful employment.</p> <p>In LeH notifications the variable "classification of professions" is actually meant to indicate the apprenticed profession of the benefit recipient; numerous values occur, however, which do not correspond with any of the existing profession codes. Due to the poor quality of data here, we do not recommend that this variable be evaluated in LeH notifications.</p> <p>In the IABS, profession entries were thus deleted from the LeH notifications and values from the last preceding BeH notification adopted.</p>		

Variables	IEBS	IABS	LIAB
	<p>Note that in datasets which display the profession variable in both LeH and BeH spells, the profession classification is a 3-digit code in BeH spells and a 4-digit code in LeH spells.</p> <p>MTG and BewA spells in the IEBS contain the profession carried out last as taken from the applicants pool data (BewA). MTG spells contain this information in relation to the day before the measure starts; in the BewA spells the information refers to the status at the start of the employment search spell. The large number of missing values in the BewA spells can be partially attributed to the fact that many job-seekers have never been gainfully employed before or have not been gainfully employed for a longer period of time.</p> <p>In the IABS Regional File the profession classification exists in aggregate form (with 130 values).</p>		
► Notes	<p>To standardize the variable for LeH and BeH notifications in the LIAB dataset, a fourth digit - 0 (zero) - was added to the BeH notifications.</p> <p>A small number of profession codes have no equivalent in the BA Profession Classification. However, this misspecification occurs in very few cases only.</p>		
5.6.11 Occupational status and working hours	stib	stib	berstell
► Detailed description	<p>Information on the occupational status by the employee during the notification period is transmitted by the employer within the “employment details”. For full-time employees, a differentiation is made between trainees/apprentices, workers, skilled workers, master craftsmen/ foremen and employed/ freelance homeworkers.</p> <p>The category “employees in vocational training” (value 0) includes not only trainees/apprentices, placement workers and interns, but also semi-skilled trainees, students of health care colleges and participants in subsidized measures for vocational training, re-orientation and industrial induction.</p> <p>The variable “occupational status” first differentiates between full-time and part-time employees; the deciding factor here is the ratio of contract working hours to normal company working hours. The occupational status variable gives information on the occupational position for full-time employees only, while for part-time employees this variable only specifies whether a person’s working hours exceeds a given limit. Up to 1978 this limit was 20 hours per week, between 1979 and 1987 15 hours per week and as of 1988 18 hours per week.</p> <p>The differentiation between blue and white-collar employees is aimed solely at the pension insurance requirements.</p> <p>LeH observations in the IABS contain the information from the preceding BeH notification.</p>		
► Notes	<p>Owing to data collection in the notification procedure, the “occupational status” is available for full-time employees only. For part-time employees, by way of contrast, only the “part-time employment status” is known, but not the occupational status.</p>		

Variables	IEBS	IABS	LIAB
5.6.12 Duration of entitlement to unemployment benefit at start of period of unemployment	–	andauer	–
<p>► Detailed description</p>	<p>The duration of entitlement to unemployment benefit (ALG) at the start of a period of unemployment is calculated for ALG spells on the basis of the receipt duration (B), the remaining entitlement (R) and entitlement remaining from previous ALG observation (RV):</p> <p>Duration of entitlement (in days) = B+R-RV.</p> <p>This figure does not denote the entire duration of entitlement at a start of the period of unemployment, but relates to the duration of entitlement in the last employment relations. The result is compared with the benefit table (Section 127 (2), German Social Code Book III). If the value calculated lies within the range specified in the benefit table, the statutory duration of entitlement given in the table (in calendar or working days) is adopted. If the value calculated does not lie within the range specified in the benefit table, the duration of entitlement is set to "missing".</p> <p>This variable only has valid values for notifications which document the receipt of unemployment benefit (ALG). For all other benefit types and for BeH notifications this variable is "missing" (9999).</p> <p>For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
<p>► Notes</p>	<p>The duration of entitlement at the start of a period of unemployment is defined in the relevant statutory provisions. These provisions are subject to change at all times. In some cases, the person's age is needed to calculate the duration of entitlement. What must be borne in mind here is that the duration of entitlement is sometimes given in calendar and sometimes in working days (changeover to calendar days effective as of 1998). The characteristic kal_tag shows whether a value specified refers to working or calendar days; values can be easily converted on the following basis: calendar days = (working day/6)*7. A general conversion of all entitlement periods into calendar days was not performed, as this would result in rounding errors, and a comparison of entitlement periods with the benefit table would no longer be possible.</p> <p><i>Please note:</i> the duration of entitlement at the start of a given period of unemployment may refer to an earlier point in time than the start date of the given spell.</p>		
5.6.13 Benefit approval reasons	–	art_bew	bew_art
<p>► Detailed description</p>	<p>This variable denotes the reasons why benefit has been granted (approved). This variable exists for LeH spells only.</p> <p>For reasons of data protection, this variable is contained in the weakly anonymous version of the IABS only, and not in the regional file.</p>		
<p>► Notes</p>			

Variables	IEBS	IABS	LIAB
5.6.14 Start and duration of unemployment	begalo, daualo	–	–
► Detailed description	<p>The variables “start of unemployment“ begalo and “duration of unemployment“ daualo are calculated at the beginning of every participants in measures (MTG) and applicants pool data (BewA) spell. The start date refers to the start of a sequence of continuous periods of unemployment. The duration of unemployment is the number of days that have elapsed since the start date.</p> <p>The durations are calculated for the start date of the split episode. For MTG spells this will not necessarily be the start of participation in a measure.</p>		
► Notes	<p>For the variables "start of unemployment“ and “duration of unemployment“, spells with employment status 32 and 33 (erwstat = 32: incapacitated, erwstat = 33: job-seeker) may contain errors if several consecutive split sick or job search spells occur and the duration of 7 days is exceeded as a result thereof. In the first spell the variables are calculated correctly. In subsequent spells, however, these variables may well be calculated incorrectly, i.e. duration 0 is specified although the duration should actually have been calculated. In a subsequent unemployment spell (erwstat = 31: unemployed) the variables are calculated correctly again.</p> <p>This error occurs due to the fact that in split sick or job search spells the variables “continued unemployment after period of incapacity“ krankvor and “employment status prior to job search“ estatvor are not filled as in the unemployment spells. If gaps exist between 7 and 42 days, these variables should not be used. Up till now, however, this problem has not been given due consideration. Unemployment observations (erwstat = 31) are generally not affected by this problem.</p>		
5.6.15 Planned end of participation in measure	endplan	–	–
► Detailed description	<p>In contrast to the results-based data collection in BeH, LeH and BewA, MTG spells are taken monthly from the process data of the Statistical Office of the BA. This includes the registration of entries, stock records and exits. This means that for every participation in a measure there are normally several data records: an entry record, several stock records and an exit record. If individual data – e.g. the start or end of participation in a measure – should change at some point in time, the later records will differ from the entry record. The IEBS contains the information of the last available record (normally the exit record) as this information is assumed to be most approximate to the actual situation. Corrections during the course of measures are taken into account.</p> <p>The variable endplan, by way of contrast, is taken from the entry record. It corresponds to the exit date from the measure, as specified by the employee of the employment agency in the first entry. It is assumed here that this denotes the planned end of participation in a measure at the time of first data entry. If the end date has not changed by the time the last record is collected, this date will correspond to the original spell end date endorig. Changes are a result of participation in a measure being pulled forward, postponed or discontinued.</p>		
5.6.16 Contribution group	beitgr	–	–
► Detailed description	<p>The variable “contribution group“ comprises 4 digits based on the following: Digit 1: Health insurance (KV)</p>		

Variables	IEBS	IABS	LIAB
	<p>Digit 2: Pension insurance (RV) Digit 3: Unemployment insurance (AV) Digit 4: Nursing insurance (PV)</p> <p>Example: the value 1290 denotes:</p> <p>Digit 1 = 1: General health insurance contribution Digit 2 = 2: Full pension insurance contribution Digit 3 = 9: Unknown unemployment insurance contribution Digit 4 = 0: No nursing insurance contribution</p> <p>The contribution group codes in the employment notifications up till 31.12.1998 were 3-digit codes. The code system was adapted, however, to the new notification procedure. As the last digit (PV) was missing in the former data record format, this is assigned the number 9 (missing code). The contribution group codes have included 4 digits since the introduction of the new notification procedure, the Data Collection and Transmission Regulation (DEÜV), on 1.1.1999.</p> <p>'Marginal' part-time employees pay no unemployment or nursing insurance contributions.</p>		
<p>► Notes</p>	<p>This variable should only be used for spells with a start date on or after 1.1.1999. This variable exists for some older observations; it is unclear, however, what level of quality the data have in such cases.</p>		
<p>5.7 Establishment information</p>			
<p>5.7.1 Economic activity 73</p>	<p>–</p>	<p>w73</p>	<p>wz73</p>
<p>► Detailed description</p>	<p>This characteristic identifies the economic activity as a 3-digit code in accordance with the WS73 classification. In contrast to the data on the WZ93 classification, this information is available for the entire observation period. WS73 stands for the "Industrial Classification of Economic Activities for the Statistical Office of the Federal Employment Agency, 1973 Edition". 269 classes of activity are differentiated by means of a 3-digit code, whereby the first digit defines the economic sector, a total of 10, and the first two digits together determine the respective group, from a total of 95. Specific enterprises are assigned to the relevant economic class on the basis of their institutional orientation¹⁵, for example "scaffolding"; the individual economic activity class may frequently be concluded from the name of a company.</p> <p>Certain groups of individuals, such as civil servants, the self-employed, freelancers or unpaid family members, are not liable to social security and remain thus excluded from FDZ datasets. This can lead to distorted results when analyzing certain economic activity classes. This applies to, among others, the economic activities 75 "Public administration, defence, social security", 80 "Education and teaching" and 85 "Health, veterinary and social activities"¹⁶.</p>		

¹⁵ In contrast, the individual activities carried out by an establishment are weighted to identify the main activity for classifications in accordance with WZ93.

¹⁶ Meinken and Koch 2004: 73.

Variables	IEBS	IABS	LIAB																														
	<p>In the IABS, the economic activity in accordance with the WS73 classification was, for LeH observations, taken over from the previous BeH observation.</p> <p>Economic activity 73 is only available in a strongly aggregate version in the IABS regional file.</p>																																
► Notes	<p><i>Please note:</i> The WS73 economic activities classification is a sensitive characteristic in the LIAB, but not in the IABS. Sensitive characteristics are only available to guest researchers under certain conditions.</p>																																
5.7.2 Economic activity 93	w93	w93_gr; w93	wz93																														
► Detailed description	<p>WZ93 stands for the “Industrial Classification of Economic Activities for the Statistical Office of the Federal Employment Agency, 1993 Edition”. The variables w93 in the IEBS and w93_gr in the IABS contain the 3-digit economic activity group. The economic sub-class on the 5-digit level is contained in the variable w93 in the IABS and wz93 in the LIAB datasets. This 5-digit figure is only available to guest researchers and only on application.</p> <table border="1" data-bbox="548 683 1447 874"> <thead> <tr> <th colspan="5">Structural level</th> </tr> <tr> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> </tr> </thead> <tbody> <tr> <td colspan="2">Economic sector</td> <td colspan="3"></td> </tr> <tr> <td colspan="3">Economic group</td> <td colspan="2"></td> </tr> <tr> <td colspan="4">Economic class</td> <td></td> </tr> <tr> <td colspan="5">Economic sub-class</td> </tr> </tbody> </table> <p>The economic activity in accordance with the 93 classification is only available from 1999 on (since the introduction of the new DEÜV notification procedure).</p> <p>WZ93 is based on the statistical system of economic activities in the European Community, NACE Rev.1¹⁷, which has four structural levels and is based in turn on the international standard ISIC Rev.3¹⁸ concerning the first two levels. This basic structure was adopted to ensure comparability of statistical data between the member states. As national differences could not be taken</p>			Structural level					1	2	3	4	5	Economic sector					Economic group					Economic class					Economic sub-class				
Structural level																																	
1	2	3	4	5																													
Economic sector																																	
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Economic class																																	
Economic sub-class																																	

¹⁷ NACE Rev.1: “Nomenclature générale des activités économiques dans les communautés européennes”, first revised version (1990); the first version is from 1970.

¹⁸ ISIC Rev.3: “International Standard Industrial Classification of All Economic Activities”, third revised version (1990).

Variables	IEBS	IABS	LIAB
	<p>structuring on the basis of national aspects. The classification gathers the economic activities of statistical or geographical units called “establishments”¹⁹. A geographical unit denotes a company or part of a company²⁰ in a fixed location²¹ where economic activities are practiced.</p> <p>Only one code may be allocated to each establishment; the classification can be used thereby in its full depth structure, or in a shorted form as necessary. If an establishment operates in various different economic areas, the main economic activity, i.e. the economic focus, has to be established. This is done either by orientation towards the gross value creation at factoring costs or by means of a suitable alternative volume, such as the number of employees. In its practical work, the BA has to rely on the establishments’ own assessments for allocation.</p> <p>The economic activity is merged via the establishment number and is not available when this number is invalid.</p> <p>Certain groups of individuals, such as civil servants, the self-employed, freelancers or unpaid family members, are not liable to social security and remain thus excluded from FDZ datasets. This can lead to distorted results when analyzing certain economic activity classes. This applies to, among others, the economic activities 75 “Public administration, defence, social security”, 80 “Education and teaching” and 85 “Health, veterinary and social activities”²².</p> <p>In the IABS, the economic activity in accordance with the WZ93 classification for LeH datasets was taken over from the previous BeH dataset.</p> <p>This variable is only contained in the weakly anonymous version of the IABS and not in the regional file.</p>		
	<p><i>Please note:</i> Whereas even the 3-digit economic activity classification is identified as a sensitive characteristic in the LIAB, only the 5-digit classification is sensitive in the IEBS and IABS, and is thus only available for guest researchers under certain conditions.</p>		
5.7.3 Establishment size	–	groesse	–
► Detailed description	<p>This variable contains the number of employees subject to social security in the establishment in question. This is calculated from the sum of the characteristics besch1, besch2, besch3 and beschres, which each represent the number of employees with specific educational and vocational qualification levels in the establishment.</p> <p>The characteristic is sourced from the IAB establishment files, which start with the year 1977. The IAB establishment files each cover one calendar year. They are produced on the basis of all notifications from the BA employee statistics, for which the notification period contains the 30 June of the year in question. These notifications are then aggregated on the establishment level by means of the establishment number, and the variables groesse, besch1, besch2, besch3, beschres, btrentg, jahr1 and jahr_let are formed. These variables are subsequently added, via the establishment number, to the IABS person-related spells</p>		

¹⁹ The unit used in the BA is principally the DEVO/DÜVO establishment defined in the establishment data processing “co-Ber-coStat”, and the specialist establishment derived from it.

²⁰ Workshop, factory, sales outlet, office, mine, warehouse, etc.

²¹ The concept of the geographically fixed location is narrowly defined: two production units of the same company located in different places are regarded as two local units – even if both places are in the same local authority.

²² Meinken and Koch 2004: 73.

Variables	IEBS	IABS	LIAB
	<p>1975-2001 (cf. Bender et al. 1996: 15f., 27-30 and 66f., and Fritsch and Brixy 2004). As the IAB establishment files start with the year 1977, these variables are not available in the IABS for the years 1975 and 1976.</p> <p>In LeH notifications, the variable value was taken over from the most recent previous BeH notification in each case.</p> <p>For data protection reasons, this variable is contained in the IABS weakly anonymous version only, and not in the regional file.</p>		
5.7.4 Employees without vocational training	–	besch1	–
► Detailed description	<p>Number of employees subject to social security who have not completed vocational training and who worked in the establishment in question as of 30 June of the respective year.</p> <p>This characteristic, as grosse, besch2, besch3, beschres, btrentg, jahr1 and jahr_let, is sourced from the IAB establishment files. As the IAB establishment files start with the year 1977, these variables are not available in the IABS for the years 1975 and 1976.</p> <p>Employees with no vocational training are overrepresented up to 1991, as persons with unknown qualifications were falsely allocated to this category up to that point.</p> <p>In LeH notifications, the variable value was taken over from the most recent previous BeH notification in each case.</p> <p>For data protection reasons, this variable is contained in the IABS weakly anonymous version only, and not in the regional file.</p>		
5.7.5 Employees with vocational training	–	besch2	–
► Detailed description	<p>Number of employees subject to social security and with completed vocational training, who worked in the establishment in question as of 30 June of the respective year.</p> <p>This characteristic, as grosse, besch1, besch3, beschres, btrentg, jahr1 and jahr_let, is sourced from the IAB establishment files. As the IAB establishment files start with the year 1977, these variables are not available in the IABS for the years 1975 and 1976.</p> <p>In LeH notifications, the variable value was taken over from the most recent previous BeH notification in each case.</p> <p>For data protection reasons, this variable is contained in the IABS weakly anonymous version only, and not in the regional file.</p>		
5.7.6 Employees with university/higher education qualification	–	besch3	–
► Detailed description	<p>Number of employees subject to social security and with a higher education qualification, who worked in the establishment in</p>		

Variables	IEBS	IABS	LIAB
	<p>question as of 30 June of the respective year.</p> <p>This characteristic, as groesse, besch1, besch2, beschres, btrentg, jahr1 and jahr_let, is sourced from the IAB establishment files. As the IAB establishment files start with the year 1977, these variables are not available in the IABS for the years 1975 and 1976.</p> <p>In LeH notifications, the variable value was taken over from the most recent previous BeH notification in each case.</p> <p>For data protection reasons, this variable is contained in the IABS weakly anonymous version only, and not in the regional file.</p>		
5.7.7 Employees with unknown qualification	–	beschres	–
► Detailed description	<p>Number of employees subject to social security and with unknown qualification, who worked in the establishment in question as of 30 June of the respective year. This category only exists for the years from 1992 on. Before this date, employees with unknown qualifications were falsely allocated to the category besch1 (employees without completed vocational training).</p> <p>The characteristic, as groesse, besch1, besch2, besch3, btrentg, jahr1 and jahr_let, is sourced from the IAB establishment files. As the IAB establishment files start with the year 1977, these variables are not available in the IABS for the years 1975 and 1976.</p> <p>In LeH notifications, the variable value was taken over from the most recent previous BeH notification in each case.</p> <p>For data protection reasons, this variable is contained in the IABS weakly anonymous version only, and not in the regional file.</p>		
5.7.8 Average daily wage	–	btrentg	–
► Detailed description	<p>This variable contains the arithmetical mean of the daily wages of employees subject to social security (including part-time staff) in each establishment. As no differentiation is made between full and part-time employees in the calculation, a comparatively low average daily wage in an establishment can be an indicator of a high part-time rate and/or low pay. The establishment wage is rounded to whole DM/euro, and indicated in DM up to 1998 and in euro from 1999.</p> <p>This characteristic, as groesse, besch1, besch2, besch3, beschres, jahr1 and jahr_let, is sourced from the IAB establishment files. As the IAB establishment files start with the year 1977, these variables are not available in the IABS for the years 1975 and 1976.</p> <p>In LeH notifications, the variable value was taken over from the most recent previous BeH notification in each case.</p> <p>For data protection reasons, this variable is contained in the IABS weakly anonymous version only, and not in the regional file.</p>		
5.7.9 Year of first appearance in IAB establishment files	–	jahr1	–
► Detailed description	<p>This characteristic, as groesse, besch1, besch2, besch3, beschres, btrentg und jahr_let, is sourced from the IAB establish-</p>		

Variables	IEBS	IABS	LIAB
	<p>ment files.</p> <p>The variable jahr1 states in which year the number of the respective establishment first occurs in the IAB establishment files, whereby the observation period of these files as of date of the creation of the IABS covers the years 1977 to 2001 (former East German states: 1992-2001).</p> <p>If an establishment number only shows up after the year 1977, it can be presumed that the characteristic represents the year of founding of the establishment in question. However, it could be an older establishment that has been allocated a new establishment number after a change of ownership or legal form; unfortunately, the employment agencies do not follow a standard procedure in this matter. The employment agencies also allocate new establishment numbers in some cases of outsourcing of parts of companies. For more information on these and further specifics of establishment number allocation, see Fritsch and Brix (2004).</p> <p>In LeH notifications, the variable value was taken over from the most recent previous BeH notification in each case.</p> <p>For data protection reasons, this variable is contained in the IABS weakly anonymous version only, and not in the regional file.</p>		
5.7.10 Year of last appearance in IAB establishment files	–	jahr_let	–
► Detailed description	<p>This characteristic, as grosse, besch1, besch2, besch3, beschres, btrentg and jahr1, is sourced from the IAB establishment files.</p> <p>The variable jahr_let states in which year the number of the respective establishment occurs for the last time in the IAB establishment files, whereby the observation period of these files as of date of the creation of the IABS covers the years 1977 to 2001 (former East German states: 1992-2001).</p> <p>If an establishment number disappears from the establishment files before 2001, this could be a case of closure of the establishment. However, other possible causes are also a “random change of establishment number on change of ownership or legal form”, an “outsourcing of parts of the company under a new number” or other administrative changes. For more detailed information, see Fritsch and Brix (2004).</p> <p>In LeH notifications, the variable value was taken over from the most recent previous BeH notification in each case.</p> <p>For data protection reasons, this variable is contained in the IABS weakly anonymous version only, and not in the regional file.</p>		

Variables	IEBS	IABS	LIAB
5.8 Location data			
5.8.1 Place of work: German state (Bundesland), district (Kreis) and local authority district (Gemeinde)	ao_bula; ao_kreis; ao_gemei	ao_bula; ao_kreis	arb_kr
<p>► Detailed description</p>	<p>This variable contains the location of the establishment and is only collected in employee notifications. The coding is based on a Federal Statistical Office 8-digit local authority code. This contains the German state in digits 1-2 (ao_bula), the district in digits 1-5 (ao_kreis, arb_kr) and the local authority in digits 1-8 (ao_gemei). The government region of the location is not explicitly stated as a variable, but can be identified using digits 1-3 of the local authority code. In states without government regions, the third digit is 0.</p> <p>In the IABS, these characteristics were taken over for LeH observations from the most recent previous BeH observation in each case.</p> <p>As the district borders change regularly, without location definition updates cases would arise in which the local authority code changed without the establishment having relocated. To ensure consistent regional allocations across the entire observation period, the BeH data were recoded to the district definitions as of 31.12.2001 in the IABS and the LIAB datasets, and as of 31.12.2004 in the IEBS.</p> <p>In 1991, the variable exhibits many missing values. This is due to the fact that false local authority codes are contained in the BeH for the new German states for 1991, which were recoded to a missing value.</p> <p>The place of work is merged via the establishment number, and is unavailable if this number is invalid.</p> <p>For data protection reasons, this variable is available in the IABS regional file in a slightly aggregate form as <i>region</i>. However, it is still extensively equivalent to the variable <i>ao_kreis</i>.</p>		
<p>► Notes</p>	<p><i>Please note:</i> Due to their particular data protection sensitivity, the variables ao_kreis, arb_kr and ao_gemei are only made available to guest researchers on application, and in non-aggregate form only in well-founded cases. In all other cases, only the German state (ao_bula) in which the establishment is located is identified.</p>		

Variables	IEBS	IABS	LIAB
5.8.2 Place of work: regional directorate (employment agency, local labour office)	ao_rd; ao_aa; ao_gest	ao_laa; ao_aa	arb_aa
<p>► Detailed description</p>	<p>The Federal Employment Agency is currently structured as below:</p> <ul style="list-style-type: none"> • 10 regional directorates (Regionaldirektionen)²³ (ao_rd; ao_laa), • 178 employment agencies (Agenturen für Arbeit)²⁴ (ao_aa; arb_aa) and • approximately 660 local labour offices (Geschäftsstellen) (ao_gest). <p>The content of this variable for BeH spells is the local labour office of the place of work, for MTG spells the local labour office of the place of the measure and for BewA spells the statistical local labour office, i.e. that which deals with the applicants pool in question.</p> <p>In the IABS these characteristics were taken over from the most recent previous BeH observation for LeH spells.</p> <p>To ensure consistent regional allocations across the entire observation period, the data on the employment agencies in the IABS and LIAB have been re-coded to the district definitions as of 31.12.2001 and in the IEBS as of 31.12.2004.</p> <p>As the boundaries of the employment agency districts have changed over time, this district definition update prevents cases in which the employment agency district changes without the establishment in question having relocated. However, Berlin presents particular problems in this context: the Berlin employment agency districts have been continually changed, which even the district definition re-coding could not fully iron out. Please note in addition that there was no allocation to individual labour offices in Berlin until approx. 1989. In most cases, AA 901 (= state labour office Berlin (<i>Landesarbeitsamt Berlin</i>)) was used for Berlin.</p> <p>For data protection reasons, this variable is only contained in the IABS in the weakly anonymous version, and not in the regional file.</p>		
<p>► Notes</p>	<p><i>Please note:</i> Due to their particular data protection sensitivity, the variables ao_aa, arb_aa and ao_gest are only made available to guest researchers on application, and in non-aggregate form only in well-founded cases.</p> <p>The place of work is merged via the establishment number, and is unavailable if this number is invalid.</p>		

²³ Up to 31.12.2003 Landesarbeitsämter

²⁴ Up to 31.12.2003 Arbeitsämter

Variables	IEBS	IABS	LIAB
5.8.3 Place of residence: German state (Bundesland), district (Kreis) and local authority district (Gemeinde)	wo_bula; wo_kreis; wo_gemei	wo_bula; wo_kreis	wohn_kr
► Detailed description	<p>This variable contains the person's place of residence. The coding is based on a Federal Statistical Office 8-digit local authority code. This contains the German state in digits 1-2 (wo_bula), the district in digits 1-5 (wo_kreis, wohn_kr) and the local authority in digits 1-8 (wo_gemei). The government region of the location is not explicitly stated as a variable, but can be identified using digits 1-3 of the local authority code. In states without government regions, the third digit is 0.</p> <p>In the IABS these characteristics were taken over from the most recent previous BeH observation for LeH spells.</p> <p>In employment data of the IEBS and in employment and benefit data of the IABS and the LIAB, this characteristic is available from the year 1999 on.</p> <p>As the district borders change regularly, without district definition updates cases would arise in which the local authority code changed without the person having changed address. To ensure consistent regional allocations across the entire observation period, the BeH spells data were re-coded to the district definitions as of 31.12.2001 in the IABS and the LIAB dataset, and as of 31.12.2004 in the IEBS.</p> <p>For data protection reasons, this variable is only contained in the IABS in the weakly anonymous version, and not in the regional file.</p>		
► Notes	<p><i>Please note:</i> Due to its particular data protection sensitivity, the place of residence on the district level (wo_kreis, wohn_kr) and local authority level (wo_gemei) is only made available on application and only in well founded cases. In other cases, only the German state of the place of residence is contained in the data.</p>		
5.8.4 Place of residence: regional directorate (employment agency, local labour office)	wo_rd; wo_aa; wo_gest	wo_laa; wo_aa	wohn_aa
► Detailed description	<p>The Federal Employment Agency is currently structured as below:</p> <ul style="list-style-type: none"> • 10 regional directorates (Regionaldirektionen)²⁵ (wo_rd, wo_laa), • 178 employment agencies (Agenturen für Arbeit)²⁶ (wo_aa; wohn_aa) and • approximately 660 local labour offices (Geschäftsstellen) (wo_gest). 		

²⁵ Up to 31.12.2003 Landesarbeitsämter

²⁶ Up to 31.12. 2003 Arbeitsämter

Variables	IEBS	IABS	LIAB
	<p>The content of this variable for the BeH spells is the local labour office of the place of residence, for LeH spells the employment agency responsible for benefits, for MTG spells the local labour office of the place of residence from the BewA on the date before the start of the measure and for BewA spells the local labour office of the place of residence at the start of the job-search.</p> <p>In BeH spells, these characteristics are only identified from 1999 on. In LeH spells the place of residence by responsible employment agency is available for all years.</p> <p>To ensure consistent regional allocations across the entire observation period, the employment agency data have been re-coded to the district definitions as of 31.12.2001 (IABS and LIAB) or as of 31.12.2004 (IEBS).</p> <p>As the employment agency district borders change regularly, without district definition updates cases would arise in which the employment agency district changed without the person having changed address. However, Berlin presents particular problems in this context: the Berlin employment agency districts have been continually changed, which even the district definition recoding could not fully iron out. Please note in addition that there was no allocation to individual labour offices in Berlin until approx. 1989. In most cases, AA 901 (= state labour office Berlin) was used for Berlin.</p> <p>For data protection reasons, this variable is only contained in the IABS in the weakly anonymous version, and not in the regional file.</p>		
► Notes	<p><i>Please note:</i> Due to their particular data protection sensitivity, the variables wo_aa, wohn_aa and wo_gest are made available to guest researchers on application and in non-aggregate form only in well founded cases.</p>		
5.8.5 Place of residence: regional type of employment agency	wo_aatyp	–	–
► Detailed description	<p>This variable contains the classification of employment agency districts by the dominant local labour market situation developed by Blien et al. (2004) (see Table 6 in the Appendix). The 12 comparative types can be aggregated to 5 strategy types. The allocation is based on place of residence.</p>		
5.8.6 East/ West code (spell)	–	ow_knz	ost_west
► Detailed description	<p>For BeH observations, this code refers to the establishment location.</p> <p>In LeH observations, the code refers to the place of residence of the benefit recipient. This information is gathered from the employment agency numbers of the place of residence. In the case of employment agencies in Berlin, only an imprecise representation is possible.</p> <p>This information is taken from the legal district codes of the establishment number. It is possible that the characteristics “place of work employment agency” and “place of work district” refer to a district in West Germany, but ow_knz contains the legal district East, and vice versa. The reason for such apparent anomalies is that the two place of work variables always state the current establishment location, whereas the characteristic “East/West code” is based on the establishment number and may contain “outdated” information; this is the case when an establishment relocates from West to East or vice versa, without receiving a new</p>		

Variables	IEBS	IABS	LIAB
	<p>establishment number.</p> <p>In the first version of the LIAB longitudinal data model, persons who are represented with a personal account in both datasets (East and West) can also be identified, by means of the variable ost_west. When merging the datasets for East and West, one of these personal accounts must be deleted.</p>		
5.8.7 East/ West code (account)	–	ow_kto	–
<p>➤ Detailed description</p>	<p>The account-based East-West characteristic ow_kto states whether the first employment of a person took place in an establishment in East or West Germany. This information was taken from the first BeH observation in the person's account with a valid value for the characteristic "East/ West code" (ow_knz). In the case of accounts containing only LeH data, the value was taken over from the first LeH observation.</p> <p>If persons have their first employment in an establishment in East Germany but further employment spells in establishments in the west, the values in the account-based and the spell-based characteristics differ (see ow_knz). This difference can be taken as an initial rough indicator of East-West mobility. Please bear in mind that there are apparent anomalies between the two characteristics in some cases. For example, it is possible that the characteristic "ow_knz" has the legal district West for a person in the first employment included in the sample, but the legal district for ow_kto is stated as East. This is due to the fact that a mobility event took place before the observation period, which only begins for East Germans in 1992, for reasons of data reliability. Despite left censoring, the relevant information on first employment is thus retained.</p>		

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Appendix

Table 2: Correction characteristic in the IEBS

Variable name	berknz																												
Available for	Benefit Recipient History (LeH) and Participants in Measures Dataset (MTG)																												
Origin	Generated																												
Time reference	Variable within the individual ID, constant within the dataset number																												
Detailed description	<p>Few preliminary corrections are made in the Integrated Employment Biographies Sample (IEBS) and its data sources. The correction characteristic indicates corrections made if there are several spells in the source data when presumably the same benefit is received and/or the same measure is participated in.</p> <p>For Benefit Recipient History (LeH) spells the variable is available in the form of a bit map, i.e. the value in the spell is the sum of the applicable values from the following table.</p> <p>Example: the value of berknz is 27:</p> <table border="1"> <tr> <td>The highest value in</td> <td>27</td> <td>is</td> <td>16:</td> <td>$27 - 16$</td> <td>=</td> <td>11</td> </tr> <tr> <td>The highest value in</td> <td>11</td> <td>is</td> <td>8:</td> <td>$11 - 8$</td> <td>=</td> <td>3</td> </tr> <tr> <td>The highest value in</td> <td>3</td> <td>is</td> <td>2:</td> <td>$3 - 2$</td> <td>=</td> <td>1</td> </tr> <tr> <td>The highest value in</td> <td>1</td> <td>is</td> <td>1:</td> <td>$1 - 1$</td> <td>=</td> <td>0</td> </tr> </table> <p>Therefore, 16, 8, 2 and 1 are included under the value 27. These conditions were thus corrected for the relevant spell.</p> <p>Filing as a bit map minimizes memory requirements. However, it can easily be converted to indicator variables which show whether the spells have been corrected in a particular way.</p> <p>Examples of syntax in Stata:</p> <pre>generate ber1 = mod(kom_quel .2)~=0 generate ber2 = mod(int(kom_quel/ 2).2)~=0 generate ber4 = mod(int(kom_quel/ 4).2)~=0 generate ber8 = mod(int(kom_quel/ 8).2)~=0 generate ber16 = mod(int(kom_quel/16).2)~=0 mod(x,y) = x - y*int(x/y) (modulo function) int: cuts off digits after the decimal point</pre> <p>For MTG spells it is indicated whether there is a unique access spell for participation in the measure, or whether there are several access spells. The following numbers are used:</p> <p>1 = unique access spell, 2 = several access spells.</p> <p>In the event of several access spells for the same measure, the most recent one is assumed to be valid and adopted in the Integrated Employment Biographies Sample (IEBS). Since there is no measure number for training measures, only the most recent spell is adopted if there are overlaps. If the training measures do not overlap, it is assumed that different measures were participated in and consequently both datasets are adopted.</p>	The highest value in	27	is	16:	$27 - 16$	=	11	The highest value in	11	is	8:	$11 - 8$	=	3	The highest value in	3	is	2:	$3 - 2$	=	1	The highest value in	1	is	1:	$1 - 1$	=	0
The highest value in	27	is	16:	$27 - 16$	=	11																							
The highest value in	11	is	8:	$11 - 8$	=	3																							
The highest value in	3	is	2:	$3 - 2$	=	1																							
The highest value in	1	is	1:	$1 - 1$	=	0																							

Reference: FDZ Datenreport No. 6/2005: 27

Table 3: Date correction for overlap of Employee History (BeH) and Benefit Recipient History (LeH) in the IAB Employment Samples (IABS)

Variable label	Date correction for overlaps of Employee History (BeH) and Benefit Recipient History (LeH)
Variable name	dat_korr
Origin	IAB Employment Samples (IABS) 1975-2001
Time reference	Variable in time
Detailed description	<p>The variable indicates whether the start or end date of a spell was corrected when overlaps of BeH and LeH notifications were adjusted.</p> <p>Correction of overlaps of BeH and LeH notifications</p> <p>As in earlier samples, overlaps in time between employment subject to social security and receipt of unemployment benefit, unemployment assistance or maintenance allowance were also corrected in the IABS 1975-2001, since such overlaps are not permissible by law, with a few exceptions²⁷. Conversely, 'marginal' part-time employment and receipt of benefits are not mutually exclusive; accordingly, these overlaps are not included in the IABS. There is only one exception: if notification of 'marginal' part-time employment overlapped not only with a spell of receipt of benefit, but also with notification of main employment subject to social security and if the latter was "beaten" by the LeH notification according to the correction rules (see below), the spell of 'marginal' part-time employment was also deleted or reduced by the period of overlap, analogous to the main employment dataset.</p> <p>For correction of overlaps between employment subject to social security and receipt of benefits, the following procedure was used:</p> <p>1. Fundamentals</p> <p>As a rule, the BeH notification "beats" the LeH notification, unless the wage recorded in the BeH notification has a value of "0" or "missing" or the entire BeH spell is in the notification period of the LeH spell. In sample previous to the IABS 1975-1997, it was also checked whether the end date of the LeH notification in the original dataset was valid or whether it was replaced by the entry in the field "expected end date". In the latter case, a BeH dataset with wage "0" or "missing" was not changed either. This was checked using the field "status", which is however no longer available in the employee and benefit recipient history (BLH), which is why it was no longer possible to use this procedure for the new IABS 1975-2001.</p> <p>2. Deletion of datasets</p> <p>Complete datasets were deleted <i>if their entire period of notification was within another period of notification</i>. A different procedure was used for BeH and LeH datasets:</p> <p>LeH datasets were deleted when the following criteria were fulfilled:</p> <ul style="list-style-type: none"> • The period of notification of the LeH notification was within the period of notification of a BeH notification or the periods of notification were identical and • the wage of the BeH notification was in each case neither "0" nor "missing". <p>BeH notifications with wage "0" or "missing" were deleted when the following</p>

²⁷ One exception is the partial unemployment benefit for partially unemployed insured persons introduced on 1 January 1998. In accordance with Section 150 of the German Social Code Book III, partially unemployed means a person who has lost employment subject to social security which was carried out in addition to other employment subject to social security and is seeking employment subject to social security.

	<p>criteria were fulfilled:</p> <ul style="list-style-type: none"> • The period of notification of the BeH notification was within the period of notification of a LeH notification or the periods of notification were identical. <p>BeH notifications with wage above "0" and not "missing" were deleted when the following criteria were fulfilled:</p> <ul style="list-style-type: none"> • The entire period of notification of the BeH notification was in the period of notification of an LeH notification, where both notifications had different start and end dates. This is the only case in which a notification with a valid wage is deleted. <p>In other words, the rules for deletion were as follows:</p> <p>1) If the entire period of notification of a notification was within the period of notification of another notification, the shorter spell was always deleted. However, in this case, BeH spells with a valid wage value were only deleted if they fell in the middle of the period of notification of the LeH spell, that is, neither began nor ended at the same time as the LeH spell.</p> <p>Exception to this rule: if the longer notification was a BeH notification with wage "0" or "missing", as an exception the shorter LeH spell was not deleted but was kept and only the part of the BeH spell parallel to the LeH spell was deleted.</p> <p>2) If the periods of notification of the two notifications were identical ...</p> <ol style="list-style-type: none"> a) ...and the wage for the BeH spell was "0" or "missing", the BeH spell was deleted. b) ...and the wage for the BeH spell was above "0", the LeH spell was deleted. <p>The following principle applied: if a dataset was deleted, all other datasets of the same episode and source were also deleted.</p> <p>In brief: BeH spells with wage "0" or "missing" were always deleted; BeH spells with valid wage were always kept, unless the entire BeH spell was within the period of notification of the LeH spell.</p> <p>3. Change of date</p> <p>In the event of <i>overlaps of notification periods</i>, details of dates were changed so that there was no more overlap (for example, by shifting the end date to the start date of the next dataset).</p> <p>Rules:</p> <ul style="list-style-type: none"> ➤ If the wage recorded in the BeH dataset was not "0" and not "missing", the date of the LeH dataset was changed and the BeH notification period remained unchanged. ➤ If the wage recorded in the BeH dataset was "0" or "missing" and the end date of the LeH notification was valid, the date of the BeH dataset was changed.
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Reference: FDZ Datenreport No. 1/2006: 78f.

Table 4: Date correction in the Linked Employer-Employee Dataset from the IAB (LIAB)

Variable label	Date correction characteristic for overlaps of Employee History (BeH) and Benefit Recipient History (LeH)
Variable name	dat_ber
Origin	Employee History (BeH) and Benefit Recipient History (LeH)
Time reference	Variable in time
Detailed description	The variable indicates whether the episode date of notification for the correction of overlaps of Employee History (BeH) and Benefit Recipient History (LeH) notifications has been corrected.
Notes	Provided that users accept the episode splitting, the variable is of little significance. In the LIAB cross-sectional data model, it is virtually worthless, since there is no means of checking how the date correction was carried out in a specific case. In the longitudinal data model, this can often be reconstructed and if necessary corrected and/or changed. This will not be necessary in the majority of applications.

Reference: FDZ Datenreport No. 7/2005: 44f.

Table 5: Re-coding of the reason for no longer being registered with the applicants pool data (BewA)

Old	New	Applicants pool data (BewA): reason for exit		Frequencies	Percentage
-9	-9	No allocation possible		26	0.00
-7	-7	No details available		652,061	35.67
41	41	Not in gainful employment	Sick (incapacity to work, health cure, course of treatment, maternity protection)	241,266	13.20
29, 30, 32, 33, 34, 35, 60	60	Exit into gainful employment	Found through the Federal Employment Agency (BA) or employment agencies in cooperation with local authorities (ARGE)	124,565	6.81
31, 36, 61	61		Through job creation measures, general structural adjustment measures, development of job-creating infrastructural measures	44,345	2.43
62	62		Through personnel service agency	2,187	0.12
63	63		Found by commissioned third party	2,884	0.16
64	64		Selected by employer in Employer Information Service (AIS)	160	0.01
42	65		Re-employment with the same employer	58,796	3.22
37, 38, 66	66		Found by the job seeker	201,521	11.02
46, 47, 67	67		Self-employed	25,851	1.41
53, 68	68		Military/ civilian service	11,092	0.61
40, 49, 69	69	Education	School education	29,415	1.61
43, 70	70		Vocational training	6,112	0.33
39, 70	71		Promotion of vocational training and retraining or German language course	65,431	3.58
73	73	Not in gainful employment	Non-renewal of notification	37,528	2.05
47, 51, 74	74		Lack of availability/ cooperation	159,794	8.74
50, 75	75		Special regulations (e.g. Sections 125, 428, 429 of the German Social Code Book III)	20,189	1.10
52, 76	76		Withdrawal from working life	21,620	1.18
45, 77	77		Relocated to an area covered by another employment agency	18,234	1.00
48, 54, 78	78	Other	Other reasons or unknown	70,154	3.84
79	79		Other active labour policy measures	31,224	1.71
80	80		Found through employment agencies in cooperation with local authorities (ARGE) (from the end of 2004)	11	0.00
81	81		Taken care of by municipalities opting to be the sole agency administering the basic income for jobseekers (from the end of 2004)	3,800	0.21
Total				1,828,266	100.00

Note: Frequencies and proportions of the episodes refer to unsplit spells.

Reference: FDZ Datenreport No. 6/2005: 94

Table 6: Classification of employment agency areas according to the prevailing employment situation

Type (value)	Category	Summary	Employment agencies	Number
I	Areas in East Germany with dominant job deficit			33
I a (11)	Areas in East Germany with poorest labour market conditions	Highest underemployment Below average population density Least movement on the labour market	Neubrandenburg, Merseburg, Altenburg, Bautzen, Sangerhausen	5
I b (12)	Areas in East Germany with poor labour market conditions (typical employment agencies in East Germany)	Very high underemployment Little movement on the labour market	Cottbus, Dessau, Halberstadt, Halle, Stendal, Wittenberge, Oschatz, Riesa, Gera, Nordhausen, Rostock, Stralsund, Eberswalde, Frankfurt/O., Neuruppin, Plauen, Erfurt, Zwickau, Chemnitz, Magdeburg, Pirna, Leipzig, Annaberg	23
I c (13)	Areas in East Germany with high unemployment, some of them close to West Germany	High underemployment Moderate movement on the labour market	Schwerin, Jena, Potsdam, Gotha, Suhl	5
II	Urbanized areas predominantly in West Germany with high unemployment			22
II a (21)	Urbanized areas with high unemployment	High underemployment Highest population density Moderate movement on the labour market High proportion of recipients of social security benefits/ problem groups Above average degree of tertiarization	Berlin, Bochum, Duisburg, Dortmund, Gelsenkirchen, Dresden	6
II b (22)	Predominantly urbanized areas with moderately high unemployment	Average underemployment (above average by western standards) High population density Above average movement on the labour market High proportion of recipients of social security benefits/ problem groups	Hamburg, Cologne, Moenchengladbach, Aachen, Krefeld, Hagen, Oberhausen, Hamm, Bremen, Saarbruecken, Recklinghausen, Hanover, Essen, Solingen, Bielefeld, Wuppertal	16
III	Medium-sized towns and rural areas in West Germany with average unemployment			63
III a (31)	Medium-sized towns and rural areas with above average unemployment, but moderate dynamics	Above average underemployment (high by western standards) Moderate movement on the labour market Above average proportion of recipients of social security benefits/ problem groups Low population density	Flensburg, Heide, Leer, Hameln, Luebeck, Uelzen, Emden, Goettingen, Wilhelmshaven, Goslar, Bremerhaven, Kiel, Brunswick, Kassel, Hof	15
III b (32)	Rural areas with average unemployment	Average underemployment (above average by western standards) Little movement on the labour market Low population density	Lueneburg, Celle, Neumuenster, Oldenburg, Helmstedt, Hildesheim, Kaiserslautern, Bad Hersfeld, Pirmasens, Paderborn, Bad Kreuznach, Bayreuth, Coburg, Detmold	14

Type (value)	Category	Summary	Employment agencies	Number
III c (33)	Predominantly rural areas with below average unemployment and low dynamics	Below average underemployment (average by western standards) Little movement on the labour market Below average population density	Coesfeld, Hanau, Mayen, Bruehl, Bad Oldesloe, Giessen, Neuwied, Wesel, Dueren, Limburg, Landau, Verden, Bamberg, Elmshorn, Wetzlar, Trier, Fulda, Nienburg, Ludwigshafen, Stade, Marburg, Korbach, Neuenkirchen, Saarlouis, Ahlen, Nordhorn, Osnabrueck, Bergisch-Gladbach, Schweinfurt, Herford, Soest, Siegen, Meschede, Iserlohn	34
IV	Centres in West Germany with a favourable employment situation and high dynamics			10
IV (40)	Centres with a favourable employment situation and high dynamics	Below average underemployment High population density Highest level of movement on the labour market High degree of tertiarization Little seasonal employment Above average proportion of recipients of social security benefits/ problem groups	Bonn, Wiesbaden, Offenbach, Munich, Stuttgart, Frankfurt/M., Muenster, Nuremberg, Duesseldorf, Mannheim	10
V	Areas in West Germany with a good employment situation and high dynamics			48
V a (42)	Rural areas with a favourable employment situation and high seasonal dynamics	Below average underemployment Lowest population density Below average proportion of recipients of social security benefits/ problem groups Highest seasonal spread	Ansbach, Weissenburg, Pfarrkirchen, Weiden, Traunstein, Vechta, Deggendorf, Schwandorf, Passau	9
V b (41)	Predominantly middle-class areas with a favourable employment situation	Low underemployment Below average population density Below average proportion of recipients of social security benefits/ problem groups Above average quota of job vacancies registered	Darmstadt, Montabaur, Rheine, Mainz, Konstanz, Koblenz, Ulm, Aschaffenburg, Augsburg, Ludwigsburg, Goepingen, Reutlingen, Waiblingen, Offenburg, Rastatt, V,-Schwenningen, Loerrach, Heidelberg, Heilbronn, Karlsruhe, Freiburg, Pforzheim, Aalen, Balingen	24
V c (43)	Areas with a favourable employment situation and high dynamics	Lowest underemployment rate Below average population density High level of movement on the labour market Lowest proportion of recipients of social security benefits/ problem groups High seasonal spread	Donauwoerth, Nagold, Freising, Weilheim, Rosenheim, Landshut, Ingolstadt, Wuerzburg, Kempten, Memmingen, Regensburg, Ravensburg, Rottweil, Schwaebisch Hall, Tauberbischofsheim	15

Reference: Blien et al. 2004: 156 ff.

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Corresponding authors

LIAB: Dr. Peter Jacobebbinghaus

Tel.: +49 (0) 911/179-1765

E-Mail: peter.jacobebbinghaus@iab.de

IABS: Nils Drews

Tel.: +49 (0) 911/179-1770

E-Mail: nils.drews@iab.de

IEBS: Dirk Oberschachtsiek

Tel.: +49 (0) 911/179-1615

E-Mail: dirk.oberschachtsiek@iab.de