

## **The Establishment History Panel 1975-2005**

**Handbook Version 2.0.0**

*Anja Spengler*



## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>5</b>
<b>2</b>	<b>Changes to Version I of the BHP .....</b>	<b>6</b>
<b>3</b>	<b>Brief Description of the Establishment History Panel 1975-2005 .....</b>	<b>7</b>
<b>4</b>	<b>Description of the Variables.....</b>	<b>8</b>
<b>4.1</b>	<b>Establishment Characteristics.....</b>	<b>8</b>
4.1.1	Identifier: artificial establishment number ( <i>betnr</i> ) .....	8
4.1.2	Year of first appearance ( <i>grd_dat</i> ) .....	8
4.1.3	Year of last appearance ( <i>lzt_dat</i> ) .....	8
4.1.4	Classification of Economic Activities 73 ( <i>w73</i> ) .....	9
4.1.5	Classification of Economic Activities 93 ( <i>w93</i> ) .....	9
4.1.6	Classification of Economic Activities 93 - grouped ( <i>w93_gr</i> ) .....	10
4.1.7	Classification of Economic Activities 03 ( <i>w03</i> ) .....	10
4.1.8	Classification of Economic Activities 03 - grouped ( <i>w03_gr</i> ) .....	11
4.1.9	District code ( <i>ao_kreis</i> ) .....	11
4.1.10	German State (Bundesland) ( <i>bula</i> ) .....	12
4.1.11	East/West allocation by district code ( <i>ow_kreis</i> ) .....	12
4.1.12	East/West allocation by establishment number ( <i>ow_bnr</i> ) .....	12
<b>4.2</b>	<b>Total Number of Employees (<i>az_ges</i>) .....</b>	<b>12</b>
<b>4.3</b>	<b>Number of Full-time Employees (<i>az_ges_vz</i>) .....</b>	<b>13</b>
<b>4.4</b>	<b>Number of Employees by Main Occupation (<i>az_hpt</i>) .....</b>	<b>13</b>
<b>4.5</b>	<b>Number of Unpaid Employees (<i>az_te0</i>) .....</b>	<b>13</b>
<b>4.6</b>	<b>Number of Female Employees (<i>az_f</i>) .....</b>	<b>13</b>
<b>4.7</b>	<b>Number of Employees by Nationality .....</b>	<b>13</b>
4.7.1	Number of Germans ( <i>az_d</i> ) .....	13
4.7.2	Number of Greeks ( <i>az_gr</i> ) .....	14
4.7.3	Number of Italians ( <i>az_it</i> ) .....	14
4.7.4	Number of Yugoslavians ( <i>az_ju</i> ) .....	14
4.7.5	Number of Polish ( <i>az_pl</i> ) .....	14
4.7.6	Number of Spanish/ Portuguese ( <i>az_sp</i> ) .....	14
4.7.7	Number of Turks ( <i>az_tk</i> ) .....	15
4.7.8	Number of employees from the U.S./ Canada/ Australia ( <i>az_us</i> ) .....	15
4.7.9	Number of employees from Eastern Europe ( <i>az_oe</i> ) .....	15
4.7.10	Number of employees from Western Europe ( <i>az_we</i> ) .....	15
<b>4.8</b>	<b>Employee Age Structure .....</b>	<b>15</b>
4.8.1	Total number of employees by age in classes ( <i>az_15_17</i> , <i>az_18_24</i> , <i>az_25_29</i> , <i>az_30_44</i> , <i>az_45_49</i> , <i>az_50_54</i> , <i>az_55_59</i> , <i>az_ab60</i> ) .....	15
4.8.2	Number of full-time employees by age in classes ( <i>az_15_17_vz</i> , <i>az_18_24_vz</i> , <i>az_25_29_vz</i> , <i>az_30_44_vz</i> , <i>az_45_49_vz</i> , <i>az_50_54_vz</i> , <i>az_55_59_vz</i> , <i>az_ab60_vz</i> ) .....	16
4.8.3	Age quartiles of the total of employees ( <i>alter_p25</i> , <i>alter_med</i> , <i>alter_p75</i> ) .....	16
4.8.4	Age quartiles of all full-time employees ( <i>alter_p25_vz</i> , <i>alter_med_vz</i> , <i>alter_p75_vz</i> ) .....	16

<b>4.9</b>	<b>Division of Employees by Educational and Vocational Qualifications .....</b>	<b>17</b>
4.9.1	Total number of employees without educational and vocational qualifications ( <i>az_gq</i> )	17
4.9.2	Number of full-time employees without educational and vocational qualifications ( <i>az_gq_vz</i> ).....	17
4.9.3	Total number of employees with educational or vocational qualifications ( <i>az_mq</i> ).....	17
4.9.4	Number of full-time employees with educational or vocational qualifications ( <i>az_mq_vz</i> ).....	18
4.9.5	Total number of employees with (specialised) higher education qualifications ( <i>az_hq</i> )	19
4.9.6	Number of full-time employees with (specialised) higher education qualifications ( <i>az_hq_vz</i> ).....	19
4.9.7	Total number of employees with unknown qualifications ( <i>az_uq, az_uq_ub</i> ).....	20
4.9.8	Number of full-time employees with unknown qualifications ( <i>az_uq_vz, az_uq_ub_vz</i> ).....	21
<b>4.10</b>	<b>Division of Employees by Occupational Status.....</b>	<b>21</b>
4.10.1	Number of trainees/apprentices ( <i>az_az_stib</i> ) .....	21
4.10.2	Number of non-formally qualified employees ( <i>az_nfq</i> ) .....	21
4.10.3	Number of skilled workers ( <i>az_fa</i> ).....	22
4.10.4	Number of master craftsmen and foremen ( <i>az_mp</i> ) .....	23
4.10.5	Number of white-collar employees ( <i>az_ang</i> ).....	23
4.10.6	Number of home workers and freelance home workers ( <i>az_hh</i> ).....	24
4.10.7	Number of part-time employees in mini part-time employment ( <i>az_ktz</i> ) .....	24
4.10.8	Number of part-time employees in midi part-time employment ( <i>az_gtz</i> ) .....	25
<b>4.11</b>	<b>Division of Employees by Person Group .....</b>	<b>25</b>
4.11.1	Number of trainees/ apprentices by person group ( <i>az_az_pers</i> ).....	25
4.11.2	Number of marginal part-time workers ( <i>az_gf</i> ).....	26
<b>4.12</b>	<b>Wage Structure of Full-Time Employees.....</b>	<b>26</b>
4.12.1	Wage quartiles (gross average daily wage) for all full-time employees ( <i>te_p25, te_med, te_p75</i> ).....	27
4.12.2	Wage quartiles (gross average daily wage) full-time female employees ( <i>te_p25_f, te_med_f, te_p75_f</i> ).....	27
4.12.3	Wage quartiles (gross average daily wage) full-time German employees ( <i>te_p25_d, te_med_d, te_p75_d</i> ).....	27
4.12.4	Wage quartiles (gross average daily wage) full-time foreign employees ( <i>te_p25_a, te_med_a, te_p75_a</i> ).....	27
4.12.5	Wage quartiles (gross average daily wage) full-time employees without educational and vocational qualifications ( <i>te_p25_gq, te_med_gq, te_p75_gq</i> ) .....	28
4.12.6	Wage quartiles (gross average daily wage) full-time employees with educational and vocational qualifications ( <i>te_p25_mq, te_med_mq, te_p75_mq</i> ) .....	28
4.12.7	Wage quartiles (gross average daily wage) full-time employees with (specialised) higher education qualifications ( <i>te_p25_hq, te_med_hq, te_p75_hq</i> ).....	28
4.12.8	Wage quartiles (gross average daily wage) full-time employees with unknown qualifications ( <i>te_p25_uq, te_med_uq, te_p75_uq</i> ).....	29
<b>5</b>	<b>Data Sources .....</b>	<b>29</b>
<b>6</b>	<b>Table of Acronyms .....</b>	<b>30</b>
<b>7</b>	<b>Data Use .....</b>	<b>31</b>
<b>7.1</b>	<b>Data Access .....</b>	<b>31</b>
<b>7.2</b>	<b>Working Tools .....</b>	<b>31</b>
<b>8</b>	<b>References .....</b>	<b>32</b>

<b>9</b>	<b>Appendix</b> .....	<b>33</b>
	<i>Appendix 1: Type of notification in accordance with DEÜV</i> .....	33
	<i>Appendix 2: Employers' notification of employees subject to social security as per 01/04/1999</i> .....	34
	<i>Appendix 3: Earnings and marginal employment limits for contribution assessment</i> <i>between 1975 and 2005</i> .....	36

### **Data Availability**

The dataset described in this document is available for use by professional researchers. For further information, see “Establishment Data” on the website: <http://fdz.iab.de/>.

### **Acknowledgements**

The Data Management Team of the ITM division of the Institute for Employment Research (IAB) furnished the IAB data infrastructure needed to create the Establishment History Panel (BHP). We are very grateful to Mr. Stefan Seth for his data-related advice and support. Our thanks also go to the users of the Establishment History Panel for their comments and suggestions.

---

## 1 Introduction

The Establishment History Panel (BHP) for 1975 to 2005 includes all of the establishments throughout Germany which have at least one employee liable to social security as of the 30<sup>th</sup> of June of a given year or which have also had at least one marginal part-time employee as of 1999. For establishments in West Germany the observation period is the period 1975 to 2005 and for establishments in East Germany 1991 to 2005. The data source for the BHP is the Employee and Benefit Recipient History (BLH) of the IAB. The data on individuals contained in the BLH are aggregated to establishment level using the establishment numbers. The BHP covers between 1.3 and 2.5 million establishments per year.

The individual annual waves can be linked to a panel dataset via the identifier “artificial establishment number”, which can be found in the dataset.<sup>1</sup>

This data report describes the variables of the weakly anonymous version of the 1975-2005 BHP basic dataset, which is available to researchers for on-site use at the Research Data Centre (FDZ) only. These BHP data are predominantly original data, with the sole exception that the original establishment numbers, which are direct identifiers for the different establishments, were replaced by artificial establishment numbers. The sensitive characteristics contained in the dataset, i.e. *German Classification of Economic Activities 93 as 5-digit codes*, *German Classification of Economic Activities 03 as 5-digit codes*, and *Place of Work (District)*, are made available in the original on request and in well-founded cases only; all other users are given these variables in their aggregate forms only (as 3-digit codes or according to German States).

This report will begin with a brief description of the sources used for the BHP, as well as the generation and processing of the BHP, followed by individual detailed explanations on the variables of the BHP 1975-2005. This data report contains no frequency tables for the individual variables. These are given in a separate text file that can be found on the FDZ homepage.

To begin with, a brief overview of the changes to the BHP 1975-2005 in relation to the previous version from 1993-2003 is provided. This will help users of this version come to terms with the new version.

---

<sup>1</sup> In addition to the basic version of the BHP, extension files for different subject areas are also in the pipeline. While the basic dataset contains variables on establishment employee, age and wage structures, the upcoming extension files will contain specific variables on a variety of subject areas. On the basis of the identifier “artificial establishment number”, it will be possible to link the extension files with the basic dataset.

## 2 Changes to Version I of the BHP

Version II of the Establishment History Panel now includes a total of 31 cross-sectional waves from the years 1975 to 2005, which can be linked to a panel using the establishment number as an identifier.

The variable spectrum in Version II of the BHP differs essentially from that of the first version. For instance, new variables have been added to the new version of the BHP. In addition, the mean values and standard deviations have been replaced by quartiles. Version II of the BHP now contains the following *additional* variables:

- Total number of full-time employees
  - Number of full-time employees by age in classes
  - Number of full-time employees by level of qualification (with no educational and vocational qualifications, with educational and vocational qualifications, with (specialised) higher education qualifications, with unknown qualifications, with unknown qualifications and not in education/training)
  - Number of home workers/ freelance home workers
  - Number of employees by nationality (Italians, Yugoslavians, Eastern Europeans, Polish, Spanish/ Portuguese, Turks, from the US / Canada / Australia, Western Europeans)
  - Median, p25, p75 Age (total / full-time)
  - Median, p25, p75 Wage (total full-time, foreign full-time, German full-time, female full-time)
  - Median, p25, p75 Wage, full-time by level of qualification (with no educational and vocational qualifications, with educational and vocational qualifications, with (specialised) higher education qualifications, with unknown qualifications, with unknown qualifications and not in education/training)
  - Date of establishment start-up (date of first appearance of establishment)
  - End date (date of last appearance of establishment)
  - German Classification of Economic Activities WZ03
-

### 3 Brief Description of the Establishment History Panel 1975-2005

<b>Content characteristics</b>	
Topics	Establishment characteristics, total number of employees, number of full-time employees, number of employees by main occupation, number of unpaid employees, number of female employees, number of employees by nationality, employee age structure, division of employees by educational and vocational qualifications, division of employees by occupational status, division of employees by person group, wage structure of full-time employees
Data unit	Establishments with at least one employee liable to social security, from 1999 also with at least one marginal part-time employee
Number of cases	Between 1.3 and 2.5 million establishments p.a.
Period covered	Analysis period West: 1975 – 2005 Analysis period East: 1992 – 2005
Time reference	30 June of each year
Regional structure	German State (Bundesland), district (Kreis), East/West allocation by district code, East/West allocation by establishment number
Regional status quo	As per 31 December 2005
<b>Methodological characteristics</b>	
Method of data collection	All German establishments with at least one employee liable to social security or, since 1999, one marginal part-time employee on 30 June of each year.
Frequency of data collection	Permanent data collection
File format and size	STATA (between 300 and 700 MB per year)
File architecture	Files per year
<b>Data access</b>	
Data access	On-site use, remote data access
Degree of anonymisation	Weakly anonymous
Sensitive variables	District (Kreis), classification of economic activities WZ93, 5-digit; classification of economic activities WZ03, 5-digit

## 4 Description of the Variables

Note: All variables contained in the BHP 1975-2005 are numeric.

### 4.1 Establishment Characteristics

#### 4.1.1 Identifier: artificial establishment number (*betnr*)

Variable label	Artificial establishment number
Variable name	betnr
Origin	BeH
Time reference	Constant over time
Detailed description	To make the data anonymous, the original establishment numbers allocated by the employment agencies <sup>2</sup> are replaced by randomly generated, yet unambiguous establishment numbers.

#### 4.1.2 Year of first appearance (*grd\_dat*)

Variable label	Year of first appearance in the BLH files
Variable name	grd_dat
Origin	BeH
Time reference	Constant over time
Detailed description	The variable states in which year the number of the respective establishment first occurs in the dataset. <sup>3</sup> If an establishment number is first indicated after 1975, 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.

#### 4.1.3 Year of last appearance (*lzt\_dat*)

Variable label	Year of last appearance in the BLH files
Variable name	lzt_dat
Origin	BeH
Time reference	Constant over time
Detailed description	The variable states in which year the number of the respective establishment occurs for the last time in the dataset. <sup>4</sup> If the existence of an establishment number in the establishment files ends before 2005, this could be a case of closure of the establishment. However, other possible causes are also a "random change of establish-

<sup>2</sup> For more information on the allocation of establishment numbers see Bender et.al. 1996.

<sup>3</sup> Cf. *ibid.*

<sup>4</sup> For more information on the allocation of establishment numbers see Bender et. al. 1996



	ment number on change of ownership or legal form”, an “outsourcing of parts of the company under a new number” or other administrative changes. <sup>5</sup> For more detailed information, see Bender et al. 1996: 15f. and pp. 27-30.
--	---

4.1.4 Classification of Economic Activities 73 (*w73*)<sup>6</sup>

Variable label	Classification of Economic Activities 73																
Variable name	w73																
Origin	BeH																
Time reference	Constant over time																
Detailed description	<p>This characteristic identifies the economic activity as a 3-digit code in accordance with the WS73 classification and is contained in the data file for the years 1975 to 2002. 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 orientation<sup>7</sup>.</p> <table border="0"> <tr> <td colspan="4">Definition economic activity code 1973</td> </tr> <tr> <td>10</td> <td>economic sectors</td> <td>1-digit code</td> <td></td> </tr> <tr> <td>95</td> <td>economic groups</td> <td>2-digit code</td> <td></td> </tr> <tr> <td>Approx. 293</td> <td>economic classes</td> <td>3-digit code</td> <td></td> </tr> </table> <p>Certain groups of individuals, such as government employees, the self-employed, freelancers or unpaid family members, are not liable to social security in their employment. This can lead to results in the evaluations of individual economic activity classes that do not reflect the conditions in such a way as an evaluation of all those working in a certain branch of the economy. This applies especially to, among others, the economic activities 75 “Public administration, defence, social security”, 80 “Education and teaching” and 85 “Health, veterinary and social activities”<sup>8</sup>.</p>	Definition economic activity code 1973				10	economic sectors	1-digit code		95	economic groups	2-digit code		Approx. 293	economic classes	3-digit code	
Definition economic activity code 1973																	
10	economic sectors	1-digit code															
95	economic groups	2-digit code															
Approx. 293	economic classes	3-digit code															

4.1.5 Classification of Economic Activities 93 (*w93*)<sup>9</sup>

Variable label	Classification of Economic Activities 93
Variable name	w93
Origin	BeH
Time reference	Constant over time
Detailed description	<p>This characteristic identifies the economic activity as a 5-digit code in accordance with the WS93 classification and is contained in the data file for the years 1999 to 2003. WZ93 stands for the “Industrial Classification of</p>

<sup>5</sup> Cf. *ibid.*

<sup>6</sup> Cf. Drews 2007

<sup>7</sup> In contrast to this, for classification according to WZ93 the individual activities pursued by an establishment have to be requested and weighted to allow for the main area of activity to be identified.

<sup>8</sup> Meinken/Koch 2004: p. 73.

<sup>9</sup> Cf. Drews 2007

	<p>Economic Activities for the Statistical Office of the Federal Employment Agency, 1993 Edition”.</p> <p>WZ93 is based on the statistical system of economic activities in the European Community, NACE Rev.1<sup>10</sup>, which has four structural levels and is based in turn on the international standard ISIC Rev.3<sup>11</sup> 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 into sufficient account in the design of NACE Rev.1, the individual countries were granted the right to undertake a further sub-structuring on the basis of national aspects. The three economic classifications mentioned are broken down as follows:</p> <p>Table: Structural levels WZ93</p> <table border="1"> <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>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.</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																															
Economic group																															
Economic class																															
Economic sub-class																															
Notes	<p>Due to its particular data protection sensitivity, this variable is only made available to guest researchers on application, and in non-aggregate form in well-founded cases only. Otherwise the area of economic activity is given as a 3-digit figure only.</p>																														

#### 4.1.6 Classification of Economic Activities 93 - grouped (*w93\_gr*)

Variable label	Classification of Economic Activities 93 - grouped
Variable name	w93_gr
Origin	BeH
Time reference	Constant over time
Detailed description	Grouping of economic activities (3-digit code).

#### 4.1.7 Classification of Economic Activities 03 (*w03*)

Variable label	Classification of Economic Activities 03
Variable name	w03
Origin	BeH
Time reference	Constant over time
Detailed description	This characteristic identifies the economic activity as a 5-digit code in ac-

<sup>10</sup> NACE Rev.1: „Nomenclature générale des activités économiques dans les communautés européennes“, first revised version (1990); the first version is from 1970.

<sup>11</sup> ISIC Rev.3: „International Standard Industrial Classification of All Economic Activities“, third revised version (1990).

	<p>cordance with the WS03 classification and is contained in the data file for the years from 2003. WZ03 stands for the “Industrial Classification of Economic Activities, 2003 Edition”.</p> <p>Both the WZ03 and the WZ93 are based on the Statistical Classification of Economic Activities in the European Community, NACE Rev. 1.1 (2002). The classifications for the areas of economic activity have been updated; the structure of WZ93, however, was retained for the most part.</p> <p>The WZ03 is a hierarchy-based classification of economic activities containing 17 main sections, 31 sub-sections, 60 departments, 222 groups, 513 classes and 1,041 sub-classes:</p> <p>Table: Structural levels WZ03</p> <table border="1"> <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> <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> </table>	Structural level					1	2	3	4	5	Economic group					Economic class					Economic sub-class				
Structural level																										
1	2	3	4	5																						
Economic group																										
Economic class																										
Economic sub-class																										
Notes	<p>Due to its particular data protection sensitivity, this variable is only made available to guest researchers on application, and in non-aggregate form in well-founded cases only. Otherwise the area of economic activity is given as a 3-digit figure.</p>																									

4.1.8 Classification of Economic Activities 03 - grouped (*w03\_gr*)

Variable label	Classification of Economic Activities 03 grouped
Variable name	w03_gr
Origin	BeH
Time reference	Constant over time
Detailed description	Grouping of economic activities (3-digit code).

4.1.9 District code (*ao\_kreis*)<sup>12</sup>

Variable label	Place of work: district (Kreis)
Variable name	ao_kreis
Origin	BeH
Time reference	Variable over time
Detailed description	<p>The district code for the workplace originates from the BeH. Here, the district (county or district-independent town/city) in which the establishment is located is specified. The 5-digit district code contains the following: the first two digits refer to the code for the German federal state, the first to third digit refers to the administrative district and the first to fifth digit the district. In states with no administrative district, the third digit is 0.</p> <p>To ensure consistent regional allocations across the entire observation period, the district data were recoded to the district definitions as of 31.12.2005, i.e. the allocation of an establishment location to a district in all calendar years is based on the existing boundaries as of 31.12.2005. As the district borders changed, without location definition updates cases would arise in which the district code of the establishment location</p>

<sup>12</sup> Cf. Drews, 2007

	changes without the establishment having relocated.
Notes	Due to their particular data protection sensitivity, this variable is only made available to guest researchers on application, and in non-aggregate form only in well-founded cases.

#### 4.1.10 German State (Bundesland) (*bula*)

Variable label	German State (Bundesland)
Variable name	bula
Origin	BeH
Time reference	Variable over time
Detailed description	The place of work districts (Kreise) have been grouped by German States. The first two digits of the district code on which this variable is based refer to the German State.
Notes	With this variable missing values have the value 7: "Not specified".

#### 4.1.11 East/West allocation by district code (*ow\_kreis*)

Variable label	East/West allocation by district code
Variable name	ow_kreis
Origin	BeH
Time reference	Variable over time
Detailed description	The variable ow_kreis states the current location of the establishment as of the respective date in question. It is formed from the district code number. The first two digits of the district code, which identify the German State (Bundesland), are used to form this variable.
Notes	With this variable missing values have the value 9: "Allocation not possible".

#### 4.1.12 East/West allocation by establishment number (*ow\_bnr*)

Variable label	East/West allocation by establishment number
Variable name	ow_bnr
Origin	BeH
Time reference	Variable over time
Detailed description	The variable ow_bnr states the current location of the establishment as of the date of allocation of the establishment number. It is formed on the basis of the establishment numbers.

### 4.2 Total Number of Employees (*az\_ges*)

Variable label	Total number of employees
Variable name	az_ges
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains all employees of an establishment for whom a notification for social security exists on 30 June of each year. Since the introduction of the new notification regulations in 1999, marginal part-time employees have also been included. The variable also includes part-time and dormant employment (average daily wage = 0).

**4.3 Number of Full-time Employees (az\_ges\_vz)**

Variable label	Number of full-time employees
Variable name	az_ges_vz
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the total number of full-time employees of an establishment. It does not contain marginal part-time and dormant employment (average daily wage = 0).

**4.4 Number of Employees by Main Occupation (az\_hpt)**

Variable label	Number of employees by main occupation
Variable name	az_hpt
Origin	BeH
Time reference	Variable over time
Detailed description	This characteristic provides the number of employees whose main occupation was in a particular establishment. The main occupation is defined as that with the highest daily wage rate. Should one person have several employment notifications at the same wage rate as of 30 June of any year, the occupation with the longest employment length is counted as the main occupation. A marginal part-time employment can only be counted as a main occupation, if the person has no employment subject to social security.

**4.5 Number of Unpaid Employees (az\_te0)**

Variable label	Number of unpaid employees
Variable name	az_te0
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of dormant employment relationships. Dormant employment includes e.g. maternity leave periods, periods of sickness longer than 42 days, or sabbaticals.

**4.6 Number of Female Employees (az\_f)**

Variable label	Number of female employees
Variable name	az_f
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of female employees in an establishment.

**4.7 Number of Employees by Nationality****4.7.1 Number of Germans (az\_d)**

Variable label	Number of German employees
Variable name	az_d
Origin	BeH

Time reference	Variable over time
Detailed description	This variable contains the number of employees in an establishment with German nationality.

#### 4.7.2 Number of Greeks (*az\_gr*)

Variable label	Number of Greek employees
Variable name	az_gr
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of employees in an establishment with Greek nationality.

#### 4.7.3 Number of Italians (*az\_it*)

Variable label	Number of Italian employees
Variable name	az_it
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of employees in an establishment with Italian nationality.

#### 4.7.4 Number of Yugoslavians (*az\_ju*)

Variable label	Number of employees from former Yugoslavia
Variable name	az_ju
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of employees in an establishment with (former) Yugoslavian nationality including Bosnia and Herzegovina, Croatia, Slovenia, Serbia and Montenegro, Yugoslavia and Macedonia.

#### 4.7.5 Number of Polish (*az\_pl*)

Variable label	Number of Polish employees
Variable name	az_pl
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of employees in an establishment with Polish nationality.

#### 4.7.6 Number of Spanish/ Portuguese (*az\_sp*)

Variable label	Number of Spanish/ Portuguese employees
Variable name	az_sp
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of employees in an establishment with Spanish or Portuguese nationality.

4.7.7 Number of Turks (*az\_tk*)

Variable label	Number of Turk employees
Variable name	az_tk
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of employees in an establishment with Turk nationality.

4.7.8 Number of employees from the U.S./ Canada/ Australia (*az\_us*)

Variable label	Number of employees from the U.S./ Canada/ Australia
Variable name	az_us
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of employees in an establishment with American, Canadian or Australian nationality.

4.7.9 Number of employees from Eastern Europe (*az\_oe*)

Variable label	Number of employees from Eastern Europe
Variable name	az_us
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of employees in an establishment from Eastern European countries including Albania, Bulgaria, Estonia, Latvia, Lithuania, Moldova, Poland, Romania, Slovakia, Soviet Union, Russian Federation, Czechoslovakia, Czech Republic, Hungary, the Ukraine, Belarus and the rest of Europe.

4.7.10 Number of employees from Western Europe (*az\_we*)

Variable label	Number of employees from Western Europe
Variable name	az_we
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of employees in an establishment from Western European countries including Andorra, Belgium, Denmark (incl. Faroe Islands), Finland, France (incl. Corsica), Ireland, Iceland, Liechtenstein, Luxembourg, Malta, Monaco, the Netherlands, Norway (incl. Bear Island, Spitsberg, Svalbard), Portugal, San Marino, Sweden, Switzerland, Vatican City, Great Britain and Northern Ireland and Cyprus.

**4.8 Employee Age Structure**4.8.1 Total number of employees by age in classes (*az\_15\_17*, *az\_18\_24*, *az\_25\_29*, *az\_30\_44*, *az\_45\_49*, *az\_50\_54*, *az\_55\_59*, *az\_ab60*)

Variable label	Number of employees by age in classes
Variable name	az_15_17, az_18_24, az_25_29, az_30_44, az_45_49, az_50_54, az_55_59, az_ab60
Origin	BeH

Time reference	Variable over time
Detailed description	The age has been re-calculated for every cross section as per the reference date June 30 of the given year. This re-calculation was performed on the basis of the social security number, which contains the date of birth of the social security contributor. The basis of the calculation, i.e. the social security number, is one of the mandatory fields in the BLH, meaning that the characteristic "date of birth" and, consequently, the characteristic "age" will never contain missing values. Each of the variables specified here includes <i>all</i> employees.

4.8.2 Number of full-time employees by age in classes (az\_15\_17\_vz, az\_18\_24\_vz, az\_25\_29\_vz, az\_30\_44\_vz, az\_45\_49\_vz, az\_50\_54\_vz, az\_55\_59\_vz, az\_ab60\_vz)

Variable label	Number of full-time employees by age in classes
Variable name	az_15_17_vz, az_18_24_vz, az_25_29_vz, az_30_44_vz, az_45_49_vz, az_50_54_vz, az_55_59_vz, az_ab60_vz
Origin	BeH
Time reference	Variable over time
Detailed description	The age has been re-calculated for every cross section as per the reference date June 30 of the given year. This re-calculation was performed on the basis of the social security number, which contains the date of birth of the social security contributor. The basis of the calculation, i.e. the social security number, is one of the mandatory fields in the BLH, meaning that the characteristic "date of birth" and, consequently, the characteristic "age" will never contain missing values. Each of the variables specified here includes <i>full-time</i> employees only.

4.8.3 Age quartiles of the total of employees (alter\_p25, alter\_med, alter\_p75)

Variable label	Age quartiles of the total of employees
Variable name	alter_p25, alter_med, alter_p75
Origin	BeH
Time reference	Variable over time
Detailed description	These variables contain the age quartiles (p25, Median, p75) of all employees.

4.8.4 Age quartiles of all full-time employees (alter\_p25\_vz, alter\_med\_vz, alter\_p75\_vz)

Variable label	Age quartiles of all full-time employees
Variable name	alter_p25_vz, alter_med_vz, alter_p75_vz
Origin	BeH
Time reference	Variable over time
Detailed description	These variables contain the age quartiles (p25, Median, p75) of all <i>full-time</i> employees.



#### 4.9 Division of Employees by Educational and Vocational Qualifications

##### 4.9.1 Total number of employees without educational and vocational qualifications (*az\_gq*)

Variable label	Total number of unskilled employees																		
Variable name	az_gq																		
Origin	BeH																		
Time reference	Variable over time																		
Detailed description	<p>This variable identifies an establishment's employees who do not possess either an upper secondary school leaving certificate as highest qualification or vocational training. It is formed from the <i>B2 code</i>, which is included in the activity code.</p> <p>The educational and vocational qualification of an employee is specified in the information on activities provided by the employer in the employment notifications. The <i>activity code</i> consists of 5 digits and contains the following information:</p> <p>Digit 1-3: current occupation                  Digit 4 (B1 code): occupational status                  Digit 5 (B2 code): qualification</p> <p>Values and value labels of the B2 code:</p> <table border="1"> <thead> <tr> <th>Values</th> <th>Value labels</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Lower/intermediate secondary school leaving certificate or equivalent school education without completed vocational training</td> </tr> <tr> <td>2</td> <td>Lower/intermediate secondary school leaving certificate or equivalent school education with completed vocational training</td> </tr> <tr> <td>3</td> <td>Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) without vocational training</td> </tr> <tr> <td>4</td> <td>Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) with vocational training</td> </tr> <tr> <td>5</td> <td>Completion of a specialised college of higher education</td> </tr> <tr> <td>6</td> <td>College/university degree</td> </tr> <tr> <td>7</td> <td>Education and training unknown, no statement possible</td> </tr> <tr> <td>9</td> <td>No response</td> </tr> </tbody> </table> <p>During the aggregation of the data from the employee to the establishment level, the number of unskilled employees per establishment was calculated by totalling the employees with a "1" in the B2 code.</p>	Values	Value labels	1	Lower/intermediate secondary school leaving certificate or equivalent school education without completed vocational training	2	Lower/intermediate secondary school leaving certificate or equivalent school education with completed vocational training	3	Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) without vocational training	4	Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) with vocational training	5	Completion of a specialised college of higher education	6	College/university degree	7	Education and training unknown, no statement possible	9	No response
Values	Value labels																		
1	Lower/intermediate secondary school leaving certificate or equivalent school education without completed vocational training																		
2	Lower/intermediate secondary school leaving certificate or equivalent school education with completed vocational training																		
3	Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) without vocational training																		
4	Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) with vocational training																		
5	Completion of a specialised college of higher education																		
6	College/university degree																		
7	Education and training unknown, no statement possible																		
9	No response																		

##### 4.9.2 Number of full-time employees without educational and vocational qualifications (*az\_gq\_vz*)

Variable label	Number of unskilled full-time employees
Variable name	az_gq_vz
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of unskilled employees (value 1 in the B2 code) who are employed <i>full-time</i> .

##### 4.9.3 Total number of employees with educational or vocational qualifications (*az\_mq*)

Variable label	Total number of qualified employees
Variable name	az_mq
Origin	BeH

Time reference	Variable over time																		
Detailed description	<p>This variable indicates the number of employees in an establishment with either upper secondary school leaving certificate or vocational qualifications as highest qualification.</p> <p>Values and value labels of the B2 code:</p>																		
	<table border="1"> <thead> <tr> <th>Values</th> <th>Value labels</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Lower/intermediate secondary school leaving certificate or equivalent school education without completed vocational training</td> </tr> <tr> <td>2</td> <td><i>Lower/intermediate secondary school leaving certificate or equivalent school education with completed vocational training</i></td> </tr> <tr> <td>3</td> <td><i>Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) without vocational training</i></td> </tr> <tr> <td>4</td> <td><i>Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) with vocational training</i></td> </tr> <tr> <td>5</td> <td>Completion of a specialised college of higher education</td> </tr> <tr> <td>6</td> <td>College/university degree</td> </tr> <tr> <td>7</td> <td>Education and training unknown, no statement possible</td> </tr> <tr> <td>9</td> <td>No response</td> </tr> </tbody> </table>	Values	Value labels	1	Lower/intermediate secondary school leaving certificate or equivalent school education without completed vocational training	2	<i>Lower/intermediate secondary school leaving certificate or equivalent school education with completed vocational training</i>	3	<i>Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) without vocational training</i>	4	<i>Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) with vocational training</i>	5	Completion of a specialised college of higher education	6	College/university degree	7	Education and training unknown, no statement possible	9	No response
	Values	Value labels																	
	1	Lower/intermediate secondary school leaving certificate or equivalent school education without completed vocational training																	
	2	<i>Lower/intermediate secondary school leaving certificate or equivalent school education with completed vocational training</i>																	
	3	<i>Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) without vocational training</i>																	
	4	<i>Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) with vocational training</i>																	
	5	Completion of a specialised college of higher education																	
	6	College/university degree																	
	7	Education and training unknown, no statement possible																	
9	No response																		
<p>During the aggregation of the data from the employee to the establishment level, the number of qualified employees per establishment was calculated by totalling the employees with a "2", "3" or "4" in the B2 code.</p>																			

#### 4.9.4 Number of full-time employees with educational or vocational qualifications (az\_mq\_vz)

Variable label	Number of qualified full-time employees
Variable name	az_mq_vz
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of qualified employees (values 2, 3 or 4 in the B2 code) who are employed <i>full-time</i> .

4.9.5 Total number of employees with (specialised) higher education qualifications (*az\_hq*)

Variable label	Total number of highly qualified employees																		
Variable name	az_hq																		
Origin	BeH																		
Time reference	Variable over time																		
Detailed description	The variable contains the number of employees per establishment who have completed a specialised college of higher education or who have a college/ university degree. Values and value labels of the B2 code:																		
	<table border="1"> <thead> <tr> <th>Values</th> <th>Value labels</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Lower/intermediate secondary school leaving certificate or equivalent school education without completed vocational training</td> </tr> <tr> <td>2</td> <td>Lower/intermediate secondary school leaving certificate or equivalent school education with completed vocational training</td> </tr> <tr> <td>3</td> <td>Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) without vocational training</td> </tr> <tr> <td>4</td> <td>Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) with vocational training</td> </tr> <tr> <td>5</td> <td><i>Completion of a specialised college of higher education</i></td> </tr> <tr> <td>6</td> <td><i>College/university degree</i></td> </tr> <tr> <td>7</td> <td>Education and training unknown, no statement possible</td> </tr> <tr> <td>9</td> <td>No response</td> </tr> </tbody> </table>	Values	Value labels	1	Lower/intermediate secondary school leaving certificate or equivalent school education without completed vocational training	2	Lower/intermediate secondary school leaving certificate or equivalent school education with completed vocational training	3	Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) without vocational training	4	Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) with vocational training	5	<i>Completion of a specialised college of higher education</i>	6	<i>College/university degree</i>	7	Education and training unknown, no statement possible	9	No response
	Values	Value labels																	
	1	Lower/intermediate secondary school leaving certificate or equivalent school education without completed vocational training																	
	2	Lower/intermediate secondary school leaving certificate or equivalent school education with completed vocational training																	
	3	Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) without vocational training																	
	4	Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) with vocational training																	
	5	<i>Completion of a specialised college of higher education</i>																	
	6	<i>College/university degree</i>																	
	7	Education and training unknown, no statement possible																	
9	No response																		
During the aggregation of the data from the employee to the establishment level, the number of highly qualified employees per establishment was calculated by totalling the employees with a "5" or "6" in the B2 code.																			

4.9.6 Number of full-time employees with (specialised) higher education qualifications (*az\_hq\_vz*)

Variable label	Number of full-time highly qualified employees
Variable name	az_hq_vz
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of highly qualified employees (values 5 or 6 in the B2 code) who are employed <i>full-time</i> .

4.9.7 Total number of employees with unknown qualifications (*az\_uq*, *az\_uq\_ub*)

Variable label	Total number of employees with unknown qualifications Total number of employees with unknown qualifications and who are not in training																																						
Variable name	<i>az_uq</i> , <i>az_uq_ub</i>																																						
Origin	BeH																																						
Time reference	Variable over time																																						
Detailed description	<p>The variables <i>az_uq</i> and <i>az_uq_ub</i> contain the number of employees per establishment whose qualifications are not known. They were calculated in two different ways.</p> <p>Values and value labels of the <b>B2 code</b>:</p> <table border="1"> <thead> <tr> <th>Values</th> <th>Value labels</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Lower/intermediate secondary school leaving certificate or equivalent school education without completed vocational training</td> </tr> <tr> <td>2</td> <td>Lower/intermediate secondary school leaving certificate or equivalent school education with completed vocational training</td> </tr> <tr> <td>3</td> <td>Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) without vocational training</td> </tr> <tr> <td>4</td> <td>Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) with vocational training</td> </tr> <tr> <td>5</td> <td>Completion of a specialised college of higher education</td> </tr> <tr> <td>6</td> <td>College/university degree</td> </tr> <tr> <td>7</td> <td><i>Education and training unknown, no statement possible</i></td> </tr> <tr> <td>9</td> <td><i>No response</i></td> </tr> </tbody> </table> <p>The variable <i>az_uq</i> contains the number of employees with a "7" or "9" in the B2 code.</p> <p>The variable <i>az_uq_ub</i> contains the number of employees with a "7" or "9" in the B2 code and for which the value in the information on the occupational status (<i>B1 code</i>) is not "0".</p> <p>Values and value labels of the <b>B1 code</b>:</p> <table border="1"> <thead> <tr> <th>Values</th> <th>Value labels</th> </tr> </thead> <tbody> <tr> <td>0</td> <td><i>Employees in vocational training (trainees, apprentices, interns)</i></td> </tr> <tr> <td>1</td> <td><u>Unskilled</u> workers</td> </tr> <tr> <td>2</td> <td><u>Skilled</u> workers</td> </tr> <tr> <td>3</td> <td>Master craftsmen, foremen (regardless of whether blue or white-collar)</td> </tr> <tr> <td>4</td> <td>White-collar employees (not including white-collar master craftsmen)</td> </tr> <tr> <td>5 and 6</td> <td>Currently unassigned so not to be used</td> </tr> <tr> <td>7</td> <td>Home workers, freelance home workers</td> </tr> <tr> <td>8</td> <td>Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)</td> </tr> <tr> <td>9</td> <td>Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988) and over, but still below full-time hours</td> </tr> </tbody> </table>	Values	Value labels	1	Lower/intermediate secondary school leaving certificate or equivalent school education without completed vocational training	2	Lower/intermediate secondary school leaving certificate or equivalent school education with completed vocational training	3	Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) without vocational training	4	Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) with vocational training	5	Completion of a specialised college of higher education	6	College/university degree	7	<i>Education and training unknown, no statement possible</i>	9	<i>No response</i>	Values	Value labels	0	<i>Employees in vocational training (trainees, apprentices, interns)</i>	1	<u>Unskilled</u> workers	2	<u>Skilled</u> workers	3	Master craftsmen, foremen (regardless of whether blue or white-collar)	4	White-collar employees (not including white-collar master craftsmen)	5 and 6	Currently unassigned so not to be used	7	Home workers, freelance home workers	8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)	9	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988) and over, but still below full-time hours
Values	Value labels																																						
1	Lower/intermediate secondary school leaving certificate or equivalent school education without completed vocational training																																						
2	Lower/intermediate secondary school leaving certificate or equivalent school education with completed vocational training																																						
3	Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) without vocational training																																						
4	Upper secondary school leaving certificate (general or subject-specific aptitude for higher education) with vocational training																																						
5	Completion of a specialised college of higher education																																						
6	College/university degree																																						
7	<i>Education and training unknown, no statement possible</i>																																						
9	<i>No response</i>																																						
Values	Value labels																																						
0	<i>Employees in vocational training (trainees, apprentices, interns)</i>																																						
1	<u>Unskilled</u> workers																																						
2	<u>Skilled</u> workers																																						
3	Master craftsmen, foremen (regardless of whether blue or white-collar)																																						
4	White-collar employees (not including white-collar master craftsmen)																																						
5 and 6	Currently unassigned so not to be used																																						
7	Home workers, freelance home workers																																						
8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)																																						
9	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988) and over, but still below full-time hours																																						

4.9.8 Number of full-time employees with unknown qualifications (*az\_uq\_vz, az\_uq\_ub\_vz*)

Variable label	Number of full-time employees with unknown qualifications
Variable name	az_uq_vz, az_uq_ub_vz
Origin	BeH
Time reference	Variable over time
Detailed description	This variable contains the number of employees with unknown qualifications described under 4.9.7. Please note, however, that in all cases this variable refers to full-time employees only.

4.10 Division of Employees by Occupational Status

4.10.1 Number of trainees/apprentices (*az\_az\_stib*)

Variable label	Number of trainees/apprentices by occupational status																				
Variable name	az_az_stib																				
Origin	BeH																				
Time reference	Variable over time																				
Detailed description	<p>The variable <i>az_az_stib</i> contains all employees identified as trainees/apprentices by occupational status (<i>B1 code, value "0"</i>). There is no distinction between trainees/apprentices, interns, semi-skilled trainees and participants in further training or retraining programmes.</p> <p>Values and value labels of the <b>B1 code</b>:</p> <table border="1"> <thead> <tr> <th>Values</th> <th>Value labels</th> </tr> </thead> <tbody> <tr> <td>0</td> <td><i>Employees in vocational training (trainees, apprentices, interns)</i></td> </tr> <tr> <td>1</td> <td><u>Unskilled</u> workers</td> </tr> <tr> <td>2</td> <td><u>Skilled</u> workers</td> </tr> <tr> <td>3</td> <td>Master craftsmen, foremen (regardless of whether blue or white-collar)</td> </tr> <tr> <td>4</td> <td>White-collar employees (not including white-collar master craftsmen)</td> </tr> <tr> <td>5 and 6</td> <td>Currently unassigned so not to be used</td> </tr> <tr> <td>7</td> <td>Home workers, freelance home workers</td> </tr> <tr> <td>8</td> <td>Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)</td> </tr> <tr> <td>9</td> <td>Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours</td> </tr> </tbody> </table>	Values	Value labels	0	<i>Employees in vocational training (trainees, apprentices, interns)</i>	1	<u>Unskilled</u> workers	2	<u>Skilled</u> workers	3	Master craftsmen, foremen (regardless of whether blue or white-collar)	4	White-collar employees (not including white-collar master craftsmen)	5 and 6	Currently unassigned so not to be used	7	Home workers, freelance home workers	8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)	9	Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours
Values	Value labels																				
0	<i>Employees in vocational training (trainees, apprentices, interns)</i>																				
1	<u>Unskilled</u> workers																				
2	<u>Skilled</u> workers																				
3	Master craftsmen, foremen (regardless of whether blue or white-collar)																				
4	White-collar employees (not including white-collar master craftsmen)																				
5 and 6	Currently unassigned so not to be used																				
7	Home workers, freelance home workers																				
8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)																				
9	Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours																				

4.10.2 Number of non-formally qualified employees (*az\_nfq*)

Variable label	Number of non-formally qualified employees
Variable name	az_nfq
Origin	BeH
Time reference	Variable over time
Detailed description	<p>This variable contains the number of employees per establishment with a "1" in the B1 code.</p> <p>Values and value labels of the <b>B1 code</b>:</p>

Values	Value labels
0	Employees in vocational training (trainees, apprentices, interns)
1	<i>Unskilled workers</i>
2	<i>Skilled workers</i>
3	Master craftsmen, foremen (regardless of whether blue or white-collar)
4	White-collar employees (not including white-collar master craftsmen)
5 and 6	Currently unassigned so not to be used
7	Home workers, freelance home workers
8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)
9	Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours

#### 4.10.3 Number of skilled workers (*az\_fa*)

Variable label	Number of skilled workers																				
Variable name	<i>az_fa</i>																				
Origin	BeH																				
Time reference	Variable over time																				
Detailed description	<p>This variable contains the number of employees per establishment with a "2" in the B1 code.</p> <p>Values and value labels of the <b>B1 code</b>:</p> <table border="1"> <thead> <tr> <th>Values</th> <th>Value labels</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Employees in vocational training (trainees, apprentices, interns)</td> </tr> <tr> <td>1</td> <td><i>Unskilled workers</i></td> </tr> <tr> <td>2</td> <td><i>Skilled workers</i></td> </tr> <tr> <td>3</td> <td>Master craftsmen, foremen (regardless of whether blue or white-collar)</td> </tr> <tr> <td>4</td> <td>White-collar employees (not including white-collar master craftsmen)</td> </tr> <tr> <td>5 and 6</td> <td>Currently unassigned so not to be used</td> </tr> <tr> <td>7</td> <td>Home workers, freelance home workers</td> </tr> <tr> <td>8</td> <td>Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)</td> </tr> <tr> <td>9</td> <td>Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours</td> </tr> </tbody> </table>	Values	Value labels	0	Employees in vocational training (trainees, apprentices, interns)	1	<i>Unskilled workers</i>	2	<i>Skilled workers</i>	3	Master craftsmen, foremen (regardless of whether blue or white-collar)	4	White-collar employees (not including white-collar master craftsmen)	5 and 6	Currently unassigned so not to be used	7	Home workers, freelance home workers	8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)	9	Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours
Values	Value labels																				
0	Employees in vocational training (trainees, apprentices, interns)																				
1	<i>Unskilled workers</i>																				
2	<i>Skilled workers</i>																				
3	Master craftsmen, foremen (regardless of whether blue or white-collar)																				
4	White-collar employees (not including white-collar master craftsmen)																				
5 and 6	Currently unassigned so not to be used																				
7	Home workers, freelance home workers																				
8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)																				
9	Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours																				

4.10.4 Number of master craftsmen and foremen (*az\_mp*)

Variable label	Number of master craftsmen and foremen																				
Variable name	az_mp																				
Origin	BeH																				
Time reference	Variable over time																				
Detailed description	<p>This variable contains the number of employees per establishment with a "3" in the B1 code.</p> <p>Values and value labels of the <b>B1 code</b>:</p> <table border="1"> <thead> <tr> <th>Values</th> <th>Value labels</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Employees in vocational training (trainees, apprentices, interns)</td> </tr> <tr> <td>1</td> <td>Unskilled workers</td> </tr> <tr> <td>2</td> <td>Skilled workers</td> </tr> <tr> <td>3</td> <td>Master craftsmen, foremen (regardless of whether blue or white-collar)</td> </tr> <tr> <td>4</td> <td>White-collar employees (not including white-collar master craftsmen)</td> </tr> <tr> <td>5 and 6</td> <td>Currently unassigned so not to be used</td> </tr> <tr> <td>7</td> <td>Home workers, freelance home workers</td> </tr> <tr> <td>8</td> <td>Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)</td> </tr> <tr> <td>9</td> <td>Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours</td> </tr> </tbody> </table>	Values	Value labels	0	Employees in vocational training (trainees, apprentices, interns)	1	Unskilled workers	2	Skilled workers	3	Master craftsmen, foremen (regardless of whether blue or white-collar)	4	White-collar employees (not including white-collar master craftsmen)	5 and 6	Currently unassigned so not to be used	7	Home workers, freelance home workers	8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)	9	Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours
Values	Value labels																				
0	Employees in vocational training (trainees, apprentices, interns)																				
1	Unskilled workers																				
2	Skilled workers																				
3	Master craftsmen, foremen (regardless of whether blue or white-collar)																				
4	White-collar employees (not including white-collar master craftsmen)																				
5 and 6	Currently unassigned so not to be used																				
7	Home workers, freelance home workers																				
8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)																				
9	Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours																				

4.10.5 Number of white-collar employees (*az\_ang*)

Variable label	Number of white-collar employees																				
Variable name	az_ang																				
Origin	BeH																				
Time reference	Variable over time																				
Detailed description	<p>This variable contains the number of employees per establishment with a "4" in the B1 code.</p> <p>Values and value labels of the <b>B1 code</b>:</p> <table border="1"> <thead> <tr> <th>Values</th> <th>Value labels</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Employees in vocational training (trainees, apprentices, interns)</td> </tr> <tr> <td>1</td> <td>Unskilled workers</td> </tr> <tr> <td>2</td> <td>Skilled workers</td> </tr> <tr> <td>3</td> <td>Master craftsmen, foremen (regardless of whether blue or white-collar)</td> </tr> <tr> <td>4</td> <td>White-collar employees (not including white-collar master craftsmen)</td> </tr> <tr> <td>5 and 6</td> <td>Currently unassigned so not to be used</td> </tr> <tr> <td>7</td> <td>Home workers, freelance home workers</td> </tr> <tr> <td>8</td> <td>Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)</td> </tr> <tr> <td>9</td> <td>Part-time employees with the following weekly working hours:</td> </tr> </tbody> </table>	Values	Value labels	0	Employees in vocational training (trainees, apprentices, interns)	1	Unskilled workers	2	Skilled workers	3	Master craftsmen, foremen (regardless of whether blue or white-collar)	4	White-collar employees (not including white-collar master craftsmen)	5 and 6	Currently unassigned so not to be used	7	Home workers, freelance home workers	8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)	9	Part-time employees with the following weekly working hours:
Values	Value labels																				
0	Employees in vocational training (trainees, apprentices, interns)																				
1	Unskilled workers																				
2	Skilled workers																				
3	Master craftsmen, foremen (regardless of whether blue or white-collar)																				
4	White-collar employees (not including white-collar master craftsmen)																				
5 and 6	Currently unassigned so not to be used																				
7	Home workers, freelance home workers																				
8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)																				
9	Part-time employees with the following weekly working hours:																				

		20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours
--	--	--

4.10.6 Number of home workers and freelance home workers (*az\_hh*)

Variable label	Number of home workers and freelance home workers																				
Variable name	az_hh																				
Origin	BeH																				
Time reference	Variable over time																				
Detailed description	<p>This variable contains the number of employees per establishment with a “7” in the B1 code.</p> <p>Values and value labels of the <b>B1 code</b>:</p> <table border="1"> <thead> <tr> <th>Values</th> <th>Value labels</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Employees in vocational training (trainees, apprentices, interns)</td> </tr> <tr> <td>1</td> <td>Unskilled workers</td> </tr> <tr> <td>2</td> <td>Skilled workers</td> </tr> <tr> <td>3</td> <td>Master craftsmen, foremen (regardless of whether blue or white-collar)</td> </tr> <tr> <td>4</td> <td>White-collar employees (not including white-collar master craftsmen)</td> </tr> <tr> <td>5 and 6</td> <td>Currently unassigned so not to be used</td> </tr> <tr> <td>7</td> <td>Home workers, freelance home workers</td> </tr> <tr> <td>8</td> <td>Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)</td> </tr> <tr> <td>9</td> <td>Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours</td> </tr> </tbody> </table>	Values	Value labels	0	Employees in vocational training (trainees, apprentices, interns)	1	Unskilled workers	2	Skilled workers	3	Master craftsmen, foremen (regardless of whether blue or white-collar)	4	White-collar employees (not including white-collar master craftsmen)	5 and 6	Currently unassigned so not to be used	7	Home workers, freelance home workers	8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)	9	Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours
Values	Value labels																				
0	Employees in vocational training (trainees, apprentices, interns)																				
1	Unskilled workers																				
2	Skilled workers																				
3	Master craftsmen, foremen (regardless of whether blue or white-collar)																				
4	White-collar employees (not including white-collar master craftsmen)																				
5 and 6	Currently unassigned so not to be used																				
7	Home workers, freelance home workers																				
8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)																				
9	Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours																				

4.10.7 Number of part-time employees in mini part-time employment (*az\_ktz*)

Variable label	Number of part-time employees in mini part-time employment ( <i>NB: Mini part-time employment refers to less than 20 (15, 18) working hours per week</i> )										
Variable name	az_ktz										
Origin	BeH										
Time reference	Variable over time										
Detailed description	<p>This variable contains the number of employees per establishment with an “8” in the B1 code.</p> <p>Values and value labels of the <b>B1 code</b>:</p> <table border="1"> <thead> <tr> <th>Values</th> <th>Value labels</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Employees in vocational training (trainees, apprentices, interns)</td> </tr> <tr> <td>1</td> <td>Unskilled workers</td> </tr> <tr> <td>2</td> <td>Skilled workers</td> </tr> <tr> <td>3</td> <td>Master craftsmen, foremen (regardless of whether blue or white-collar)</td> </tr> </tbody> </table>	Values	Value labels	0	Employees in vocational training (trainees, apprentices, interns)	1	Unskilled workers	2	Skilled workers	3	Master craftsmen, foremen (regardless of whether blue or white-collar)
Values	Value labels										
0	Employees in vocational training (trainees, apprentices, interns)										
1	Unskilled workers										
2	Skilled workers										
3	Master craftsmen, foremen (regardless of whether blue or white-collar)										



	4	White-collar employees (not including white-collar master craftsmen)
	5 and 6	Currently unassigned so not to be used
	7	Home workers, freelance home workers
	8	Part-time employees with the following weekly working hours: up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)
	9	Part-time employees with the following weekly working hours: 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours

4.10.8 Number of part-time employees in midi part-time employment (*az\_gtz*)

Variable label	Number of part-time employees in midi part-time employment ( <i>NB: midi part-time employment refers to 20 (15, 18) working hours or over per week</i> )																				
Variable name	<i>az_gtz</i>																				
Origin	BeH																				
Time reference	Variable over time																				
Detailed description	<p>This variable contains the number of employees per establishment with a “9” in the B1 code.</p> <p>Values and value labels of the <b>B1 code</b>:</p> <table border="1"> <thead> <tr> <th>Values</th> <th>Value labels</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Employees in vocational training (trainees, apprentices, interns)</td> </tr> <tr> <td>1</td> <td>Unskilled workers</td> </tr> <tr> <td>2</td> <td>Skilled workers</td> </tr> <tr> <td>3</td> <td>Master craftsmen, foremen (regardless of whether blue or white-collar)</td> </tr> <tr> <td>4</td> <td>White-collar employees (not including white-collar master craftsmen)</td> </tr> <tr> <td>5 and 6</td> <td>Currently unassigned so not to be used</td> </tr> <tr> <td>7</td> <td>Home workers, freelance home workers</td> </tr> <tr> <td>8</td> <td>Part-time employees with the following weekly working hours up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)</td> </tr> <tr> <td>9</td> <td>Part-time employees with the following weekly working hours of 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours</td> </tr> </tbody> </table>	Values	Value labels	0	Employees in vocational training (trainees, apprentices, interns)	1	Unskilled workers	2	Skilled workers	3	Master craftsmen, foremen (regardless of whether blue or white-collar)	4	White-collar employees (not including white-collar master craftsmen)	5 and 6	Currently unassigned so not to be used	7	Home workers, freelance home workers	8	Part-time employees with the following weekly working hours up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)	9	Part-time employees with the following weekly working hours of 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours
Values	Value labels																				
0	Employees in vocational training (trainees, apprentices, interns)																				
1	Unskilled workers																				
2	Skilled workers																				
3	Master craftsmen, foremen (regardless of whether blue or white-collar)																				
4	White-collar employees (not including white-collar master craftsmen)																				
5 and 6	Currently unassigned so not to be used																				
7	Home workers, freelance home workers																				
8	Part-time employees with the following weekly working hours up to 20 hours (01/01/1970 – 31/12/1978) up to 15 hours (01/01/1979 – 31/12/1987) up to 18 hours (as of 01/01/1988)																				
9	Part-time employees with the following weekly working hours of 20 hours (01/01/1970 – 31/12/1978) 15 hours (01/01/1979 – 31/12/1987) 18 hours (as of 01/01/1988) and over, but still below full-time hours																				

4.11 Division of Employees by Person Group

4.11.1 Number of trainees/ apprentices by person group (*az\_az\_pers*)

Variable label	Number of trainees/ apprentices by person group
Variable name	<i>az_az_pers</i>
Origin	BeH
Time reference	Variable over time

Detailed description	The variable <i>az_az_pers</i> contains all employees that are defined in the person group code as trainees/ apprentices. Trainees/ apprentices, as defined by person group code 102, are “those persons who, under a traineeship agreement in accordance with the German Vocational Training Act, are undergoing industrial training in a recognised qualified profession. Vocational training is defined as training undergone within the framework of statutory regulations for vocational training/apprenticeships in officially recognised qualified professions. Further, vocational training also includes training in a profession for which no statutory training regulations exist but for which training is standard procedure and widely recognised.” ( <i>Ratgeber zur Sozialversicherung</i> , 2006, p. 43)
----------------------	---

#### 4.11.2 Number of marginal part-time workers (*az\_gf*)

Variable label	Number of marginal part-time workers
Variable name	<i>az_gf</i>
Origin	BeH
Time reference	Variable over time
Detailed description	The number of marginal part-time employees is formed from the person group code – value 109. This variable was not included in the dataset until the year 1999, as this was the first year that this variable was integrated into the social security notifications procedure. <sup>13</sup>

#### 4.12 Wage Structure of Full-Time Employees

In accordance with the social security notifications regulations, employers must specify the gross wage subject to contributions of the employee for a given period of time (“*Zeitraumtgelt*” = wage for duration of period). Until the end of 1998, employers were obliged to specify the gross earnings subject to social security contributions only. This meant that the only wages recorded were those that lay above the marginal part-time income threshold and below the upper earnings limit.<sup>14</sup> As of 1999, however, as part of the new notifications procedure, wages that are below the marginal part-time income threshold also have to be specified. Gross wages that lie above the upper earnings limit, however, continue to be excluded from the notifications.

To determine the gross daily wage, the wage for the duration of the given period is divided by the number of calendar days within the period and the value obtained rounded to two decimal points. These data were then aggregated to establishment level.

<sup>13</sup> The three-digit person group code indicates, amongst other things, whether the employee is working as part of an internship programme, is in partial retirement, is a family worker or is in marginal part-time employment.

<sup>14</sup> Cf. Appendix 3: earnings and marginal employment limits for contribution assessment.

4.12.1 Wage quartiles (gross average daily wage) for all full-time employees (*te\_p25*, *te\_med*, *te\_p75*)

Variable label	Wage quartiles (gross average daily wage) for all full-time employees
Variable name	<i>te_p25</i> , <i>te_med</i> , <i>te_p75</i>
Origin	BeH
Time reference	Variable over time
Detailed description	These variables contain the P25 and P75 quartiles and the median of the gross average daily wage of all employees of a given establishment. They do not contain marginal part-time and dormant employment (average daily wage = 0). <sup>15</sup> In alle cases, the values are given in Euro.

4.12.2 Wage quartiles (gross average daily wage) full-time female employees (*te\_p25\_f*, *te\_med\_f*, *te\_p75\_f*)

Variable label	Wage quartiles (gross average daily wage) full-time female employees
Variable name	<i>te_p25_f</i> , <i>te_med_f</i> , <i>te_p75_f</i>
Origin	BeH
Time reference	Variable over time
Detailed description	These variables contain the P25 and P75 quartiles and the median of the gross average daily wage of all female full-time employees of a given establishment. They do not contain marginal part-time and dormant employment (average daily wage = 0). In alle cases, the values are given in Euro.

4.12.3 Wage quartiles (gross average daily wage) full-time German employees (*te\_p25\_d*, *te\_med\_d*, *te\_p75\_d*)

Variable label	Wage quartiles (gross average daily wage) full-time German employees
Variable name	<i>te_p25_d</i> , <i>te_med_d</i> , <i>te_p75_d</i>
Origin	BeH
Time reference	Variable over time
Detailed description	These variables contain the P25 and P75 quartiles and the median of the gross average daily wage of all full-time German employees of a given establishment. They do not contain marginal part-time and dormant employment (average daily wage = 0). In alle cases, the values are given in Euro.

4.12.4 Wage quartiles (gross average daily wage) full-time foreign employees (*te\_p25\_a*, *te\_med\_a*, *te\_p75\_a*)

Variable label	Wage quartiles (gross average daily wage) full-time foreign employees
Variable name	<i>te_p25_a</i> , <i>te_med_a</i> , <i>te_p75_a</i>
Origin	BeH
Time reference	Variable over time
Detailed description	These variables contain the P25 and P75 quartiles and the median of the gross average daily wage of all full-time foreign employees of a given establishment. They do not contain marginal part-time and dormant

<sup>15</sup> Dormant employment includes e.g. maternity leave periods, periods of sickness longer than 42 days, or sabbaticals.

	employment (average daily wage = 0). In alle cases, the values are given in Euro.
--	---

#### 4.12.5 Wage quartiles (gross average daily wage) full-time employees without educational and vocational qualifications (*te\_p25\_gq, te\_med\_gq, te\_p75\_gq*)

Variable label	Wage quartiles (gross average daily wage) full-time employees without educational and vocational qualifications
Variable name	<i>te_p25_gq, te_med_gq, te_p75_gq</i>
Origin	BeH
Time reference	Variable over time
Detailed description	These variables contain the P25 and P75 quartiles and the median of the gross average daily wage of all full-time employees without educational and vocational qualifications of a given establishment <sup>16</sup> . They do not contain marginal part-time and dormant employment (average daily wage = 0). In alle cases, the values are given in Euro.

#### 4.12.6 Wage quartiles (gross average daily wage) full-time employees with educational and vocational qualifications (*te\_p25\_mq, te\_med\_mq, te\_p75\_mq*)

Variable label	Wage quartiles (gross average daily wage) full-time employees with educational and vocational qualifications
Variable name	<i>te_p25_mq, te_med_mq, te_p75_mq</i>
Origin	BeH
Time reference	Variable over time
Detailed description	These variables contain the P25 and P75 quartiles and the median of the gross average daily wage of all full-time employees with educational and vocational qualifications for a given establishment <sup>17</sup> . They do not contain marginal part-time and dormant employment (average daily wage = 0). In alle cases, the values are given in Euro.

#### 4.12.7 Wage quartiles (gross average daily wage) full-time employees with (specialised) higher education qualifications (*te\_p25\_hq, te\_med\_hq, te\_p75\_hq*)

Variable label	Wage quartiles (gross average daily wage) full-time employees with (specialised) higher education qualifications
Variable name	<i>te_p25_hq, te_med_hq, te_p75_hq</i>
Origin	BeH
Time reference	Variable over time
Detailed description	These variables contain the P25 and P75 quartiles and the median of the gross average daily wage of all full-time employees with (specialised) higher education qualifications for a given establishment <sup>18</sup> . They do not contain marginal part-time and dormant employment (average daily wage = 0). In alle cases, the values are given in Euro.

<sup>16</sup> Cf. point 4.9.1 for labelling of employees without educational and vocational qualifications

<sup>17</sup> Cf. point 4.9.3 for labelling of employees with educational and vocational qualifications

<sup>18</sup> Cf. point 4.9.5 for labelling of employees with (specialised) higher education qualifications

#### 4.12.8 Wage quartiles (gross average daily wage) full-time employees with unknown qualifications (*te\_p25\_uq*, *te\_med\_uq*, *te\_p75\_uq*)

Variable label	Wage quartiles (gross average daily wage) full-time employees with unknown qualifications
Variable name	<i>te_p25_uq</i> , <i>te_med_uq</i> , <i>te_p75_uq</i>
Origin	BeH
Time reference	Variable over time
Detailed description	These variables contain the P25 and P75 quartiles and the median of the gross average daily wage of all full-time employees with unknown qualifications of any given establishment <sup>19</sup> . They do not contain marginal part-time and dormant employment (average daily wage = 0). In alle cases, the values are given in Euro.

## 5 Data Sources

The BHP is based on the IAB Employee and Benefit Recipient History (BLH), Version 5.00. The Employee and Benefit Recipient History (BLH) of the IAB comprises the Employee History File (BeH) and the Benefit Recipient History File (LeH) of the IAB.

The Employee History File (BeH) contains all wage notifications for employment liable to social security received from West Germany and East Germany since 1975 and 1991, respectively. With regard to statutory requirements, social security notifications became mandatory as a result of the integrated notifications procedure for health, pension and unemployment insurance, which came into effect as of January 1, 1973 and which was extended to include East Germany as of January 1, 1993 (regulated under the Regulation on Data Collection and Transmission (DEÜV); formerly the DEVO/DÜVO) (Cf. Bender et al. 1996, Brix und Fritsch 2002).

Under the Regulation on Data Collection and Transmission (DEÜV), employers are obliged to notify the relevant social security agencies of all employees liable to social security contributions (For information on notification types as defined under the DEÜV, please refer to the table in Appendix 1). Under § 27 of the German Social Code Book III (SGB III), the term “liable to security contributions” applies to anyone who is subject to at least one insurance contribution scheme (health, nursing, pension and/or accident insurance). Since January 1, 1999, when the notification procedure was modified, this regulation has also included those in marginal part-time employment. However, as the marginal part-time income thresholds often changed in the course of time, variations in the number of marginal part-time employees will inevitably occur over the years (Cf. table in Appendix 3). The database does not include, among others, civil servants, self-employed or regular students that are not liable to social security contributions (Cf. Cramer 1985). As, however, the notifications procedure does not apply to all employees, in the case of establishments from certain areas of economic activity in which, for instance, the

<sup>19</sup> Cf. point 4.9.7 for labelling of employees with unknown qualifications

proportion of self-employed or civil servants is relatively high the data will ultimately not cover enough ground (Cf. Brixy und Fritsch 2002).

To form the BHP, all notifications that were applicable as per 30 June of a given year were first selected from the BLH. These data on individuals were then corrected and, on the basis of the establishment number<sup>20</sup>, aggregated to establishment level. The Establishment History Panel thus contains all establishments from the years 1975 to 2005 which had at least one employee liable to social security contributions or (as of 1999) at least one marginal part-time employee as per the reference date (30 June of a given year).

## 6 Table of Acronyms

BA	Federal Employment Agency (former: Bundesanstalt für Arbeit)
BeH	Employee History File from the IAB
BHP	Establishment History Panel
BLH	Employee and Benefit Recipient History File (linked dataset of employee and benefit recipient history from the IAB)
DEÜV	Regulation on Data Collection and Transmission (effective as per 1 January 1999)
DEVO	Data Collection Regulation (2nd DEVO was substituted by the Regulation on Data Collection and Transmission on 1 January 1999)
DÜVO	Data Transmission Regulation (2nd DÜVO was substituted by the Regulation on Data Collection and Transmission on 1 January 1999)
FDZ	Research Data Centre
IAB	Institute for Employment Research
LeH	Benefit Recipient History File
NACE	Nomenclature of Economic Activities
SGB	German Social Code

<sup>20</sup> For information on the allocation of establishment numbers see Bender et. al. 1996

## **7 Data Use**

### **7.1 Data Access**

At present, the BHP is available to users as a weakly anonymous dataset only for on-site use (by visiting researchers) only.

Extra workstations are available at the Research Data Centre (FDZ) for visiting researchers to access and analyze the data. At the end of a visiting researcher's stay at the Research Data Centre (FDZ), a data protection check is performed and the visiting researchers are given the data files containing the results of their research. After such visits to the FDZ, visiting researchers may also make use of remote data access option. Here, the users send finished analysis programs to the FDZ that are run on the weakly anonymous version of the BHP. A data protection check is performed on the results, which are then sent back to the users.

Detailed and up-to-date information on the data access requirements and the application procedure for the individual access paths can be found on the FDZ homepage.

### **7.2 Working Tools**

The FDZ homepage contains tools to assist users in their work with the data. In addition to these tools, the FDZ literature database also contains a pool of research papers based on FDZ data, as well as method reports, which can be used to facilitate data processing.

## 8 References

**AOK** (ed.) 1998: Sozialversicherung 2: Meldungen. Aktuelle Informationen zum 1. Januar 1999, 14th edition, Bonn 1998, p. 49.

**Bundesagentur für Arbeit** (ed.) 2005: Schlüsselverzeichnis für die Angaben zur Tätigkeit in den Meldungen zur Sozialversicherung. January 2005, Nuremberg.

**Bender, Stefan; Hilzendegen, Jürgen; Rohwer, Götz; Rudolph, Helmut** 1996: Die IAB-Beschäftigtenstichprobe 1975-1990. Beiträge zur Arbeitsmarkt- und Berufsforschung 197, Nuremberg.

**Brixy, Udo; Fritsch, Michael** 2002: Die Betriebsdatei der Beschäftigtenstatistik der Bundesanstalt für Arbeit. In: Fritsch, Michael; Grotz, Reinhold (ed.), Das Gründungsgeschehen in Deutschland. Published by Physica, Heidelberg.

**Cramer, Ulrich** 1985: Probleme der Genauigkeit der Beschäftigtenstatistik. In: Allgemeines Statistisches Archiv 69: p. 56-68.

**Deutsche BKK** (ed.) 2006: Ratgeber zur Sozialversicherung 2006, Wolfsburg.

**Drews, Nils** 2007: Variablen der schwach anonymisierten Version der IAB-Beschäftigtenstichprobe. FDZ Datenreport 03/2007, Nuremberg.  
Download: [http://doku.iab.de/fdz/reporte/2007/Dr\\_03-07.pdf](http://doku.iab.de/fdz/reporte/2007/Dr_03-07.pdf)

**Dundler, Agnes, Stamm, Melanie, Adler, Silke** 2006: Das Establishment History Panel. FDZ Datenreport 03/2006, Nuremberg.  
Download: [http://doku.iab.de/fdz/reporte/2006/DR\\_03-06.pdf](http://doku.iab.de/fdz/reporte/2006/DR_03-06.pdf)

**Fritsch, Michael; Brixy, Udo** 2004: The Establishment File of the German Social Insurance Statistics. Journal of Applied Social Science Studies 124 (1): pp. 183-190

**Meinken, Holger; Koch, Iris** 2004: BA-Beschäftigtenpanel 1998-2002. Codebuch, Nuremberg.

---



## 9 Appendix

### Appendix 1: Type of notification in accordance with DEÜV

<b>Registrations</b>	
10	Due to start of employment
11	Due to change of health insurer
12	Due to change of contribution group
13	Due to other reasons / changes in employment relationship
<b>Notice of departure</b>	
30	Due to end of employment
31	Due to change of health insurer
32	Due to change of contribution group
33	Due to other reasons / changes in employment relationship
34	Due to end of employment liable to social security after an interruption of longer than one month
35	Due to industrial dispute of longer than one month
36	Due to change in pay calculation system (optional)
40	Simultaneous registration and notice of departure due to end of employment
49	Due to death
<b>Annual notification / Notifications of interruption / Other wage notifications</b>	
50	Annual notification
51	Notification of interruption due to drawing of or claim to benefits
52	Notification of interruption due to parental part-time employment
53	Notification of interruption due to statutory national service
54	Notification of a one-off wage payment (special notification)
55	Notification of value credits used in violation of agreement (fault)
56	Notification of differential sum for benefits during partial retirement
<b>Notifications of changes</b>	
60	Change of name
61	Change of address
62	Change of employee's ref. number / personnel number (optional)
63	Change of nationality
<b>Notifications in the event of insolvency</b>	
70	Annual notification for released employees
71	Notification of submission of insolvency / release
72	Wage notification as of legal end of employment



### Grund der Abgabe in den Meldungen nach der DEÜV

#### Anmeldungen

- 10 Anmeldung wegen Beginn einer Beschäftigung
- 11 Anmeldung wegen Krankenkassenwechsel
- 12 Anmeldung wegen Beitragsgruppenwechsel
- 13 Anmeldung wegen sonstiger Gründe/Änderungen im Beschäftigungsverhältnis z.B.
  - Anmeldung nach unbezahltem Urlaub oder Streik von mehr als einem Monat nach § 7 Abs. 3 Satz 1 SGB IV
  - Anmeldung wegen Wechsel des Entgelt-abrechnungssystems (optional)
  - Anmeldung wegen Änderung des Personen-gruppenschlüssels ohne Beitragsgruppen-wechsel

#### Meldungen in Insolvenzfällen

- 70 Jahresmeldung für freigestellte Arbeiter
- 71 Meldung des Vortages der Insolvenz/der Freistellung
- 72 Entgeltmeldung zum rechtlichen Ende der Beschäftigung

#### Abmeldungen

- 30 Abmeldung wegen Beginn einer Beschäftigung
- 31 Abmeldung wegen Krankenkassenwechsel
- 32 Abmeldung wegen Beitragsgruppenwechsel
- 33 Abmeldung wegen sonstiger Gründe/Änderungen im Beschäftigungsverhältnis
- 34 Abmeldung wegen Ende einer sozial-versicherungsrechtlichen Beschäftigung nach einer Unterbrechung von länger als einem Monat
- 35 Abmeldung wegen Arbeitskampf von länger als einem Monat
- 36 Abmeldung wegen Wechsel des Entgelt-abrechnungssystems (optional)
- 40 Gleichzeitige An- und Abmeldung wegen Ende der Beschäftigung
- 49 Abmeldung wegen Tod

#### Jahresmeldung / Unterbrechungs-meldungen / sonstige Entgeltmeldungen

- 50 Jahresmeldung
- 51 Unterrechnungsmeldung wegen Bezug von bzw. Anspruch auf Entgeltersatzleistungen
- 52 Unterbrechungsmeldung wegen Erziehungsurlaub
- 53 Unterbrechungsmeldung wegen gesetzlicher Dienstpflcht
- 54 Meldung eines einmalig gezahlten Arbeitsentgelts (Sondermeldung)

### Personengruppen in den Meldungen nach der DEÜV

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>101 Sozialversicherungspflichtig Beschäftigte ohne besondere Merkmale</li> <li>102 Auszubildende</li> <li>103 Beschäftigte in Altersteilzeit</li> <li>104 Hausgewerbetreibende</li> <li>105 Praktikanten</li> <li>106 Werkstudenten</li> <li>107 Personen in Einrichtungen der Jugendhilfe oder in Werkstätten für Behinderte</li> <li>108 Bezieher von Vorruhestandsgeld</li> <li>109 Geringfügig entlohnte Beschäftigte nach § 8 Abs. 1 Nr. 1 SGB IV</li> <li>110 Kurzfristig Beschäftigte nach § 8 Abs. 1 Nr. 2 SGB IV</li> </ul> | <ul style="list-style-type: none"> <li>111 Personen in beruflfördernden Maßnahmen zur Rehabilitation</li> <li>112 Mitarbeitende Familienangehörige in der Landwirtschaft</li> <li>113 Nebenerwerbslandwirte</li> <li>114 Nebenerwerbslandwirte – saisonal beschäftigt</li> <li>116 Ausgleichsgeldempfänger nach dem FELEG</li> <li>118 Unständig Beschäftigte</li> <li>119 Versicherungsfreie Altersvollrentner und Versorgungsbezieher wegen Alters</li> <li>120 Personen, bei denen eine Beschäftigung vermutet wird (§ 7 Abs. 4 SGB IV)</li> </ul> |
|---|---|

### Häufige Staatsangehörigkeiten

deutsch	000		
agyptisch	287	luxemburgisch	143
amerikanisch	368	marokkanisch	252
athiopisch	225	niederländisch	148
belgisch	124	norwegisch	149
britisch	168	österreichisch	151
dänisch	126	pakistanisch	461
finnisch	128	polnisch	152
französisch	129	portugiesisch	153
ghanaisch	238	rumänisch	154
griechisch	134	schwedisch	157
indisch	436	schweizerisch	158
iranisch	439	spanisch	161
irisch	135	thailändisch	476
islandisch	136	tschechisch	164
italienisch	137	tunesisch	285
japanisch	442	türkisch	163
jugoslawisch	138	ungarisch	165
liechtensteinisch	141		

### Beitragsgruppen in den Meldungen nach der DEÜV

Die Beitragsgruppen sind so zu verschlüsseln, dass für jeden Beschäftigten in der Reihenfolge: Krankenversicherung, Rentenversicherung, Arbeitslosenversicherung und Pflegeversicherung, die jeweils zutreffende Ziffer anzugeben ist.

#### Krankenversicherung (KV)

- 0 kein Beitrag
- 1 allgemeiner Beitrag
- 2 erhöhter Beitrag
- 3 ermäßigter Beitrag
- 4 Beitrag zur landwirtschaftlichen KV
- 5 Arbeitgeberbeitrag zur landwirtschaftlichen KV
- 6 Pauschalbeitrag für geringfügig Beschäftigte

#### Rentenversicherung (RV)

- 0 kein Beitrag
- 1 voller Beitrag zur ArV
- 2 voller Beitrag zur AnV
- 3 halber Beitrag zur ArV
- 4 halber Beitrag zur AnV
- 5 Pauschalbeitrag zur ArV für geringfügig Beschäftigte
- 6 Pauschalbeitrag zur AnV für geringfügig Beschäftigte

#### Arbeitslosenversicherung (ALV)

- 0 kein Beitrag
- 1 voller Beitrag
- 2 halber Beitrag

#### Pflegeversicherung (PV)

- 0 kein Beitrag
- 1 voller Beitrag
- 2 halber Beitrag

#### freiwillige Krankenversicherung

- 9 Firmenzahler

### Appendix 3: Earnings and marginal employment limits for contribution assessment between 1975 and 2005 <sup>21</sup>

Old German states									
	Pension insurance for wage-earners and salaried employees; unemployment insurance			Miner's pension insurance			Marginal employment limit		
	DM/ year	DM/ month	DM/ day	DM/ year	DM/ month	DM/ day	DM/ year	DM/ month	DM/ day
01/01 – 31/12/1975	33,600	2,800	92.05	40,800	3,400	111.78	4,200	350	11.51
01/01 – 31/12/1976	37,200	3,100	101.64	45,600	3,800	124.59	4,650	387,50	12.70
01/01 – 31/12/1977	40,800	3,400	111.78	50,400	4,200	138.08	4,440	370	12.16
01/01 – 31/12/1978	44,400	3,700	121.64	55,200	4,600	151.23	4,680	390	12.82
01/01 – 31/12/1979	48,000	4,000	131.51	57,600	4,800	157.81	4,680	390	12.82
01/01 – 31/12/1980	50,400	4,200	137.70	61,200	5,100	167.21	4,680	390	12.79
01/01 – 31/12/1981	52,800	4,400	144.66	64,800	5,400	177.53	4,680	390	12.82
01/01 – 31/12/1982	56,400	4,700	154.52	69,600	5,800	190.68	4,680	390	12.82
01/01 – 31/12/1983	60,000	5,000	164.38	73,200	6,100	200.55	4,680	390	12.82
01/01 – 31/12/1984	62,400	5,200	170.49	76,800	6,400	209.84	4,680	390	12.79
01/01 – 31/12/1985	64,800	5,400	177.53	80,400	6,700	220.27	4,800	400	13.15
01/01 – 31/12/1986	67,200	5,600	184.11	82,800	6,900	226.85	4,920	410	13.48
01/01 – 31/12/1987	68,400	5,700	187.40	85,200	7,100	233.42	5,160	430	14.14
01/01 – 31/12/1988	72,000	6,000	196.72	87,600	7,300	239.34	5,280	440	14.43
01/01 – 31/12/1989	73,200	6,100	200.55	90,000	7,500	246.58	5,400	450	14.79
01/01 – 31/12/1990	75,600	6,300	207.12	93,600	7,800	256.44	5,640	470	15.45
01/01 – 31/12/1991	78,000	6,500	213.70	96,000	8,000	263.01	5,760	480	15.78
01/01 – 31/12/1992	81,600	6,800	222.95	100,800	8,400	275.41	6,000	500	16.39
01/01 – 31/12/1993	86,400	7,200	236.71	106,800	8,900	292.60	6,360	530	17.42
01/01 – 31/12/1994	91,200	7,600	249.86	112,800	9,400	309.04	6,720	560	18.41
01/01 – 31/12/1995	93,600	7,800	256.44	115,200	9,600	315.62	6,960	580	19.07
01/01 – 31/12/1996	96,000	8,000	262.30	117,600	9,800	321.31	7,080	590	19.34
01/01 – 31/12/1997	98,400	8,200	269.59	121,200	10,100	332.05	7,320	610	20.05
01/01 – 31/12/1998	100,800	8,400	276.16	123,600	10,300	338.63	7,440	620	20.38
	€/year	€/month	€/day	€/year	€/month	€/day	€/year	€/month	€/day
01/01 – 31/12/1999	52,152	4,346	142.88	63,809	5,317	174.82	3,865	322	10.59
01/01 – 31/12/2000	52,765	4,397	144.17	65,036	5,420	177.69	3,865	322	10.56
01/01 – 31/12/2001	53,379	4,448	146.24	65,650	5,471	179.86	3,865	322	10.59
01/01 – 31/12/2002	54,000	4,500	147.95	66,600	5,550	182.47	3,900	325	10.68
01/01 – 31/12/2003	61,200	5,100	167.67	75,000	6,250	205.48	4,800	400	13.15
01/01 – 31/12/2004	61,800	5,150	168.85	76,200	6,350	208.20	4,800	400	13.11
01/01 – 31/12/2005	62,400	5,200	170.96	76,800	6,400	210.41	4,800	400	13.15

<sup>21</sup> cf. Drews 2007

New German states									
	Pension insurance for wage-earners and salaried employees; unemployment insurance			Miner's pension insurance			Marginal employment limit		
	DM/ year	DM/ month	DM/ day	DM/ year	DM/ month	DM/ day	DM/ year	DM/ month	DM/ day
01/07 – 31/12/1990	32,400	2,700	88.77	32,400	2,700	88.77	2,400	200	6.58
01/01 – 30/06/1991	36,000	3,000	98.63	36,000	3,000	98.63	2,640	220	7.23
01/07 – 31/12/1991	40,800	3,400	111.78	40,800	3,400	111.78	3,000	250	8.22
01/01 – 31/12/1992	57,600	4,800	157.38	70,800	5,900	193.44	3,600	300	9.84
01/01 – 31/12/1993	63,600	5,300	174.25	78,000	6,500	213.70	4,680	390	12.82
01/01 – 31/12/1994	70,800	5,900	193.97	87,600	7,300	240.00	5,280	440	14.47
01/01 – 31/12/1995	76,800	6,400	210.41	93,600	7,800	256.44	5,640	470	15.45
01/01 – 31/12/1996	81,600	6,800	222.95	100,800	8,400	275.41	6,000	500	16.39
01/01 – 31/12/1997	85,200	7,100	233.42	104,400	8,700	286.03	6,120	510	16.77
01/01 – 31/12/1998	84,000	7,000	230.14	103,200	8,600	282.74	6,240	520	17.10
	€/year	€/month	€/day	€/year	€/month	€/day	€/year	€/month	€/day
01/01 – 31/03/1999	44,176	3,681	121.03	53,992	4,499	147.93	3,252	271	8.91
01/04 – 31/12/1999	44,176	3,681	121.03	53,992	4,499	147.93	3,865	322	10.59
01/01 – 31/12/2000	43,562	3,630	119.02	53,379	4,448	145.85	3,865	322	10.56
01/01 – 31/12/2001	44,789	3,732	122.71	55,220	4,602	151.29	3,865	322	10.59
01/01 – 31/12/2002	45,000	3,750	123.29	55,800	4,650	152.88	3,900	325	10.68
01/01 – 31/12/2003	51,000	4,250	139.73	63,000	5,250	172.60	4,800	400	13.15
01/01 – 31/12/2004	52,200	4,350	142.62	64,200	5,350	175.41	4,800	400	13.11
01/01 – 31/12/2005	52,800	4,400	144.66	64,800	5,400	177.53	4,800	400	13.15

## References:

1) The source of the monthly earnings and marginal employment limits for contribution assessment: Federal Ministry of Health (BMGS); the limits for the year 1990 in the new German states, in contrast, were taken from: Meinken/Koch 2004: p. 71.

2) The remaining values are calculated values (Agnes Dundler, Dagmar Herrlinger, Research Data Centre (FDZ) of the Federal Employment Agency (BA) at the Institute for Employment Research (IAB): To determine the annual limits, the monthly values were multiplied by 12; to calculate the daily limits, the annual limits were divided by 365, or 366 for leap years.

**Imprint****FDZ *Datenreport***

No. 04/2007

**Publisher**

The Research Data Centre (FDZ)  
of the Federal Employment Service  
in the Institute for Employment Research  
Regensburger Str. 104  
D-90478 Nuremberg

**Editorial staff**

Stefan Bender, Dagmar Herrlinger

**Technical production**

Dagmar Herrlinger

**Copyright**

Reproduction – also in parts – only with permission of the FDZ

**Download**[http://doku.iab.de/fdz/reporte/2007/DR\\_04-07\\_e.pdf](http://doku.iab.de/fdz/reporte/2007/DR_04-07_e.pdf)**Internet**<http://fdz.iab.de/>**Corresponding author**

Anja Spengler, Institute for Employment Research,  
Regensburger Str. 104, D-90478 Nuremberg  
Phone: +49-(0)911/179-4986  
E-Mail: [anja.spengler@iab.de](mailto:anja.spengler@iab.de)

---