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The catchword

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Division B 2,
tel.: +49 (0) 611 / 75 20 77
fax: +49 (0) 611 / 75 39 50
institut@destatis.de

General information
on the data supply:

Information service,
tel.:+49 (0) 611 / 75 24 05
fax: +49 (0) 611 / 75 33 30
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The catchword

National accounts revision 2011

Major revisions in national accounts

In national accounts, not only regular revisions are carried out – they may be performed at any calculation date and refer only to the more recent past (up to four years back within the scope of the annual main calculation in August) – but also major revisions are performed every five to ten years.

Such major revisions are required to

- thoroughly revise the results and methods of German national accounts in line with international standards and to adjust them to new framework conditions;
- introduce new concepts, definitions, classifications, etc. in the national accounting system;
- integrate into German national accounts new statistical calculation bases not applied before;
- apply new calculation or estimation methods.

One of the modifications implemented in the last major national accounts revision in 2005 was changing over the price adjustment method from the fixed price base to the previous year's price base. On that occasion, the entire national accounting system was recalculated backwards to 1970, so that revised data are available both for the former territory of the Federal Republic (1970-1991, years and quarters) and for Germany as a whole (from 1991).

National accounts revision 2011 to change over to the new WZ2008 classification

On 1 September 2011, the detailed results of this year's major revision of national accounts of the Federal Republic of Germany will be published for the first time. As early as on 16 August 2011, the revised results only for the GDP (without details) for the years and quarters from 1991 to 2010 will be published in a press release. Data for the former territory of the Federal Republic (that is, before 1991), however, will not be recalculated in that revision; for that territory, the status of 2005 will continue to apply.

The main purpose of the national accounts revision 2011 is to change over to the new classifications of economic activities and products, i.e. in particular to the national Classification of Economic Activities, Edition 2008 (WZ 2008), which at the international level corresponds to the new NACE Rev.2. While most specialised statistics have been based on the new classification of economic activities since 2009, national accounts will be able to change over only when comprehensive basic statistics according to the new WZ have become available, so that the change-over in national accounts will happen only in 2011. The revision is harmonised within Europe, so that revised national accounting results according to the new NACE Rev.2 will be available all over Europe from September this year.

In German national accounts, beyond the change-over to the new classification of economic activities, the previous calculations will be revised and new data will as far as possible be integrated into the calculations, as is the case in every revision. Consequently, corrections will be made to different extents in the entire time series from 1991.

Release of the results and further information

Apart from the two press releases on 16 August and 1 September 2011, detailed information on the changes and their impact on the results will be given in a comprehensive paper on the revision of national accounts 2011, which will be published in the periodical *Wirtschaft und Statistik* (WiSta), issue 9 or 10/2011. Also, the first results after the revision 2011 will be described and commented on as usual in issue 9/2011 of the periodical.

The revised results of domestic product calculations for the years from 1991 will be published in *Fachserie 18 "Volkswirtschaftliche Gesamtrechnungen"*. This and other publications are available online and free of charge through the publication service of the Federal Statistical Office at http://www.destatis.de/publications. All results of national accounts are also stored in the GENESIS database of the Federal Statistical Office. Selected data and concise information on the revision are also available on the website at http://www.destatis.de, on the page "national accounts".

Tanja Mucha, tel: +49 (0) 611 / 75 29 07, e-mail: tanja.mucha@destatis.de

Methods of federal statistics – Further development

The tested questionnaire of the household sample survey of the 2011 Census is used in the field

One of the surveys that started on 9 May 2011 – the reference date of the 2011 Census – is a sample-based household survey covering about 9.3% of the inhabitants of Germany. The household survey has two purposes. First, identifying and correcting overcoverage and undercoverage errors in the population registers and, second, obtaining census variables that are not available from registers. In 46 questions, the respondents are asked to provide information on their basic demographic data, religious affiliation, immigration, educational attainment, employment as well as occupation and economic branch (the sample questionnaire may be viewed at www.zensus2011.de).

Prior to the survey and before using the questionnaire in the field, it was tested last year in a two-stage pretest.

Background and methodological bases for the quantitative field test

To ensure that applying the survey instrument (the questionnaire) would allow valid measurement of the list of questions, the questionnaire was tested in a pretest in late 2009/early 2010 before using it in the field. In a qualitative part, questions were asked especially on the test persons' understanding of technical terms regarding immigration and education as well as on the coding of occupational information and of economic branches. In addition, the test was used to optimise the questionnaire design and filtering of the questionnaire. Based on the qualitative findings, the questionnaire was revised and subjected to a quantitative field test. The study focused on first experience acquired with interviewer instructions and scanning as well as filtering in the questionnaire, on the practicability of coding the occupation and the economic branch, and on the quantitative evaluation especially of employment and education data. A major goal was to examine how a compact survey instrument can be used to achieve a maximum coverage of persons in employment according to the internationally agreed employment status concept (ILO concept).

As the household survey is conducted by interviewers, interviewers were also used for part of the pilot survey. The other part of the pilot survey was conducted through self-completion, i.e. the respondents received the questionnaire from the statistical offices of the Länder and returned the completed questionnaire by post to the relevant Land statistical office. The pilot survey was conducted by the Land statistical offices of Bayern, Nordrhein-Westfalen, Bremen,

Berlin/Brandenburg, North, and Niedersachsen. With the exception of Bremen (where the survey was conducted mainly by inexperienced students), experienced microcensus interviewers were employed. Prior to the field phase of the pretest, the interviewers were trained.

Selected results of the field test

The net sample of the field test comprises 8191 cases. The proportion of questionnaires completed through face-to-face interviews is 16%, that of self-completion questionnaires 84%.

Analysing the filtering system and non-response possibly resulting from it showed total filter errors of 2%, which could be expected because of the fact that most of the field test was carried out without interviewers. Depending on the topic, non-response due to filter errors varied between 2% and 9%. High non-response occurred in rare cases for selected questions. Those questions were analysed separately and the chosen filtering was modified. Examining the filter errors and the resulting non-response in the block of questions on employment showed that filter jumps across columns or pages posed problems. For example, non-response of just under 9% was observed for the complete routing of persons in employment to the question on the status in employment. The reason for the high non-response rate is the position of the question at the end of the page and the fact that the block of questions on the main job does not have a headline of its own.

Valuable information regarding the questionnaire design was derived from the following fact: Although a note informed persons under the age of 15 that they did not have to complete the rest of the questionnaire, 16% of those persons ignored the note and continued completing the questionnaire. Consequently, the questionnaire layout was considerably modified there.

In the household survey questionnaire of the 2011 Census, the questions usually asked were preceded by a question for the main labour status. Therefore, that modified sequence of questions had to be examined for their functionality and the comparability with other statistics. The operationalisation involving the introductory question for the main labour status is generally considered as more respondent-friendly, which was confirmed in some qualitative tests performed in advance and then in the quantitative test, too. 90% of the persons in employment were covered by the introductory question, while for 10% the additional questions were required. The comparability with other statistics (the microcensus and the statistics of employees subject to social insurance contributions) was confirmed: The number of persons in employment as obtained through the household survey is slightly larger for nearly all age groups. That positive assessment is confirmed for the group of persons in marginal employment. In percentage terms, markedly more persons in employment were covered who perform a job, for example, in addition to studies or school or who are retired.

As regards the questions on the economic branch and on the job performed, the respondents were asked in the test to provide the information both by choosing a category from a given list of occupations or groups of occupations and in their own words. It was examined here whether the information can be obtained through a list in the questionnaire without a loss in quality compared with plain text information. Plain text information is coded both by inexperienced and experienced coders. Coding by inexperienced coders was done several times and independently of each other, so that differences between the inexperienced coders could be studied. As regards the economic branch, inexperienced coders had substantial problems with plain text coding (differences of 23% even at the level of sections (1-digit items)). This is why the economic branch is covered through a list in the revised questionnaire. Covering the occupation by an open question provides better results than for the economic branch. Also, it is difficult for the occupation to provide a list of the 1-digit items of the international classification of occupations (ISCO-08), so that the occupation is covered through plain text in two questions.

Implementing the test results in the revised questionnaire leads to a qualitative improvement, so that the questionnaire allows valid measurement of the list of questions and, consequently, of the legally required census variables.

After the questionnaire had been finished, it was translated into 13 languages. The results of the test were also used to implement and optimise the online version of the questionnaire. After programming, the online questionnaire was subjected to a functionality and usability test, so that it can now be used together with the paper questionnaire in time for the census reference date.

Britta Gauckler, tel: +49 (0) 611/ 75 26 98, e-mail: britta.gauckler@destatis.de

Monthly unemployment statistics: trend estimation using BV4.1

Monthly unemployment statistics

For many years, the Federal Statistical Office has published monthly results on unemployment according to the labour force concept of the International Labour Organization (ILO concept). As from 2005, monthly labour market reporting was first based on a specific monthly telephone survey. In 2007 it was changed over to the labour force survey, which currently is integrated in the microcensus. As the microcensus, or the labour force survey, has been conducted as a continuous sub-annual survey since 1 January 2005, results as from 2005 are generally also available here. However, monthly data from the labour force survey could only be published as from reference month January 2007 because earlier results were not sufficiently reliable due to problems that occurred in changing the survey over from an annual to a sub-annual survey.

When monthly results of the labour force survey were first published in October 2007, many methodological issues had to be further examined, so that some transitional solutions were implemented. For example, seasonally adjusted unemployment figures were estimated by means of seasonally adjusted results on registered unemployed of the Federal Employment Agency. The reason for using that provisional solution was – apart from a high time series volatility which is due to methodology – the fact that the unemployment time series was too short to be subjected to seasonal adjustment. Since the publication of labour market data for reference month March 2011, the Federal Statistical Office has used a trend estimation method (to replace the above estimation), which exclusively uses unadjusted values of the labour force survey.

With the completion of reference year 2010, the time series now available is sufficiently long in purely technical terms and would allow performing complete seasonal adjustment of the unemployment time series. Nevertheless, only a trend estimate will be published for the time being because the time series does not show (yet) regular seasonal patterns over its entire length, which is due to methodological and organisational problems of the labour force survey. Applying a seasonal adjustment procedure would lead to a seasonally adjusted series which would also be highly volatile and interpretation would hardly be possible. In addition, seasonal adjustment of such a volatile basic series would lead to statistical artefacts of the seasonal components. In trend estimation (more exactly: estimation of a trend cycle component), those problems can be avoided because there the time series is adjusted not only for regularly recurring seasonal fluctuations but also for irregular effects, i.e. random and methodological variations.

For the trend estimation, monthly unemployment figures as from 1991 are used. The results for the months of January 1991 to December 2004 are based on a back calculation using the relevant annual results of the labour force survey and the monthly trends observed from 2005 to 2010. While the back calculation results themselves are not suited for publication, results of the trend estimation as from January 1991 can be published. However, they should be interpreted

with caution. It is helpful here to know the method applied. Trend estimation is done on the basis of the Berlin method BV4.1 and is explained below.

The basic model of BV4.1

Following the general approach of component decomposition, the basic model of the Berlin method BV4.1 is additively composed of three stochastic sub-processes describing the trend cycle fluctuations, the seasonal fluctuations and the random fluctuations of the time series. The basic functions applied to monthly series are a third-degree polynomial function for the trend cycle component and a sixth-degree trigonometric function for the seasonal component:

$$(1) \qquad y_t = \underbrace{\sum_{j=0}^{3} \alpha_j \cdot t^j}_{\substack{\text{trend cycle} \\ \text{component } m_t}} + \underbrace{\sum_{j=1}^{6} \left(\beta_j \cdot \cos \pi \cdot {}^{j}\!/\!_{6} \cdot t + \gamma_j \sin \pi \cdot {}^{j}\!/\!_{6} \cdot t \right)}_{\text{seasonal component } s_t} + u_t \quad \text{for t=1,...,n.}$$

Modelling is done through a moving reference range n which generally comprises 27 monthly values. When put as a matrix, the basic model is

$$(2) \qquad \mathbf{y} = \mathbf{X} \cdot \boldsymbol{\beta} + \boldsymbol{\varepsilon} ,$$

with **X** being the regressor matrix with the points in time t=1,...,n of the reference range used and **y** being the relevant vector of the time series values. The **parameter vector** $\boldsymbol{\beta}$ contains – without the last sin member – 15 parameters α_j (j=0,1,2,3), β_j (j=1,...,6) and γ_j (j=1,...,5) of the basic functions of the trend component and the seasonal component. Those parameters are estimated through a **Weighted Least Squares (WLS) approach** for the moving reference range n. By including the weights w_t in the regression approach, the time series values in the direct vicinity of the estimation point get a larger weight in parameter estimation. There is:

$$(3) \qquad w_t = 1 - \frac{|t - t^*|}{D + 1} \quad \text{for t=1,...,n.}$$

Here, t* is the point in time within the reference range that should get the largest weight $w_{t^*} = 1$ and D is the larger number of months between t* and the two end points 1 and n of the reference range. For the middle estimation range with n=27, there is t*=14 and D=13.

When put as a matrix, the following solution is obtained for the vector of the estimated WLS parameters:

$$(4) \qquad \underset{[15\times 1]}{\hat{\boldsymbol{\beta}}^{WLS}} = \left[\underset{[15\times n]}{\mathbf{X}'} \cdot \underset{[n\times n]}{\mathbf{Q}} \cdot \underset{[n\times 15]}{\mathbf{X}} \right]^{-1} \cdot \underset{[15\times n]}{\mathbf{X}'} \cdot \underset{[n\times n]}{\mathbf{Q}} \cdot \underset{[n\times 1]}{\mathbf{y}} ,$$

with **Q** being a diagonal matrix of the weights w_t used. By means of the $\hat{\alpha}_j^{WLS}$ parameter of the trend cycle component, which is contained in the estimated parameter vector $\hat{\boldsymbol{\beta}}^{WLS}$, it is now possible to calculate an estimate for the trend cycle component $\hat{m}_t$ through

$$(5) \qquad \hat{m}_t = \sum_{j=0}^{3} \hat{\alpha}_j^{WLS} \cdot t^j$$

Due to the principle of the moving estimation, a different reference range is used for every single estimation point $\hat{m}_t$ and each time the parameter vector is recalculated. Except for the first and the last 13 trend components to be estimated, the trend estimate is allocated to the middle point t=14 of the reference range n=27.

While the estimated parameters of the trend cycle component $\hat{\alpha}_j^{WLS}$ depend on the underlying time series values y_t of the reference range and, consequently, have to be recalculated for every single estimate $\hat{m}_t$, this does not apply to the so-called **filter weights**.

The filter weights of the trend cycle component

For all parameter estimations with the same reference range length n, changes occur neither for the weights w_t and, consequently for the diagonal matrix **Q** , nor for the regressor matrix **X** of the basic model. The calculation of the trend estimate $\hat{m}_t$ from equation (5) in connection with (4) can thus be shown as a function or linear combination of the time series values y_t and can be interpreted as a **filter weight**. The trend estimate allocated to the middle point t=14 of a reference range n=27 is obtained through the **symmetric middle filter** $\mathbf{f}_{14}'$. There is:

$$\underset{[1\times 27]}{\hat{m}} = \underset{[1\times 27]}{\mathbf{f}_{14}'} \cdot \underset{[27\times 1]}{\mathbf{y}} \quad . \tag{6}$$

As, for the symmetric middle filter, the reference range has a length of n=27 time series values, the trend value to be estimated for a specific month must be followed by 13 subsequent monthly results. Trend estimates for the last 13 months of a time series must therefore be ascertained in a different way at first. The basic model is widely used here, although changes occur for the length of the reference range and the estimation point, which is no longer in the middle of the reference range. Trend estimates for the last 13 months are thus obtained through an **asymmetric end filter**. In addition, the trend estimate for the last 6 points in time is ascertained through a weighted mean of two individual estimates. While the trend cycle component in the basic model of the first individual estimate continues to be a third-degree polynomial, the trend cycle component is modelled by a straight line in the calculation of the second individual estimate. Table 1 shows the values of the provisional 13 asymmetric end filter vectors $\mathbf{f}_1$ to $\mathbf{f}_{13}$ and of the final symmetric middle filter $\mathbf{f}_{14}$. 30 time series values are available here. The index i is assigned to them, starting with the chronologically first value.

For time series for which no extreme values are identified, those filter weights can be used to estimate a trend cycle component simply through linear combination with the unadjusted values. After 13 months, the estimated trend value will definitely not change any more. The need for revision is largest in the first few months and decreases afterwards.

Trend estimation according to the Berlin method BV4.1 can be applied irrespective of the time series to be analysed because only the **time invariant and universally applicable filters** shown in table 1 are needed. An analysis of the characteristics of different time series is not required because the optimisation process is already integrated in the filter design. When BV4.1 was developed, the filters were optimised on the basis of comprehensive spectral analyses, so that they can be applied to any economic time series.

Table 1: BV4.1 filter weights for estimation of the trend cycle component in monthly series for the 14 most recent series values in 30 monthly values: symmetric middle filter and asymmetric end filters

BV4.1 filter weights – Table 1: **part 1**
Filter M_t(estimation range,estimation point,polynomial degree)
and M_t(estimation range,estimation point,point with maximum weight,polynomial degree);
for 2 filters: weighted mean of the filters

	f_1	f_2	f_3	f_4	f_5	f_6	f_7
i	M_t(27,27,3) M_t(20,20,20,1)	M_{t-1}(26,25,3) M_{t-1}(21,20,21,1)	M_{t-2}(25,23,3) M_{t-2}(22,20,22,1)	M_{t-3}(25,22,3) M_{t-3}(23,20,23,1)	M_{t-4}(25,21,3) M_{t-4}(24,20,24,1)	M_{t-5}(25,20,3) M_{t-5}(25,20,25,1)	M_{t-6}(26,20,3)
1	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0
4	-0,01649	0	0	0	0	0	0
5	-0,02865	-0,01665	0	0	0	0	0,01612
6	-0,04086	-0,03038	-0,01284	0,00026	0,01121	0,01881	0,02417
7	0,01106	0,00311	0,00154	0,01061	0,01739	0,02159	0,01350
8	0,02333	0,01192	0,00568	0,00998	0,01326	0,01431	0,00143
9	0,03471	0,02083	0,00842	0,00684	0,00463	0,00124	-0,01306
10	0,04337	0,02446	0,01011	0,00183	-0,00632	-0,01425	-0,02739
11	0,04063	0,02491	0,00968	-0,00456	-0,00632	-0,02929	-0,03929
12	0,03225	0,02062	0,00616	-0,01192	-0,00632	-0,04132	-0,04666
13	0,01655	0,01015	-0,00140	-0,01992	-0,00632	-0,04801	-0,04351
14	-0,00808	-0,00792	-0,01393	-0,02826	-0,03982	-0,04337	-0,03198
15	-0,04318	-0,03494	-0,03231	-0,03667	-0,03529	-0,02930	-0,01143
16	-0,08462	-0,07228	-0,05743	-0,04190	-0,02449	-0,00512	0,01832
17	-0,14075	-0,11555	-0,08636	-0,04599	-0,00707	0,02934	0,04949
18	-0,21161	-0,16627	-0,11614	-0,04888	0,01215	0,06490	0,09169
19	0,07227	0,08022	0,08179	0,07272	0,06594	0,06175	0,06984
20	0,06000	0,07141	0,07765	0,07336	0,07007	0,06902	0,08191
21	0,04862	0,06251	0,07491	0,07650	0,07870	0,08209	0,09639
22	0,03996	0,05887	0,07323	0,08151	0,08966	0,09758	0,11073
23	0,04270	0,05843	0,07365	0,08789	0,10111	0,11262	0,12262
24	0,05108	0,06271	0,07717	0,09525	0,11147	0,12466	**0,12999**
25	0,06678	0,07319	0,08474	0,10325	0,11927	**0,13134**	0,12684
26	0,09142	0,09125	0,09726	0,11159	**0,12316**	0,12671	0,11531
27	0,12652	0,11828	0,11564	**0,12000**	0,11863	0,11263	0,09476
28	0,18444	0,15561	**0,14077**	0,12523	0,10782	0,08845	0,06501
29	0,25273	**0,21553**	0,16969	0,12933	0,09040	0,05400	0,01773
30	**0,33580**	0,27998	0,21231	0,13196	0,05997	-0,00037	-0,03252

	BV4.1 filter weights – Table 1: **part 2** Filter M_t(estimation range,estimation point,polynomial degree)						
	f_8	f_9	f_{10}	f_{11}	f_{12}	f_{13}	f_{14}
i	M_{t-7}(28,21,3)	M_{t-8}(29,21,3)	M_{t-9}(30,21,3)	M_{t-10}(30,20,3)	M_{t-11}(29,18,3)	M_{t-12}(28,16,3)	M_{t-13}(27,14,3)
1	0	0	0,00506	0,00290	0	0	0
2	0	0,00715	0,00621	0,00315	-0,00010	0	0
3	0,00953	0,00942	0,00526	0,00214	-0,00092	-0,00427	0
4	0,01317	0,00901	0,00360	0,00094	-0,00172	-0,00677	-0,01059
5	0,01360	0,00770	0,00234	0,00032	-0,00200	-0,00776	-0,01609
6	0,01299	0,00687	0,00231	0,00087	-0,00147	-0,00757	-0,01549
7	-0,00444	-0,01235	-0,01681	-0,01672	-0,01487	-0,01162	-0,01175
8	-0,01555	-0,02128	-0,02303	-0,02085	-0,01376	-0,00675	-0,00196
9	-0,02585	-0,02854	-0,02716	-0,01953	-0,00996	0,00074	0,01088
10	-0,03395	-0,03309	-0,02500	-0,01501	-0,00324	0,01070	0,02577
11	-0,03861	-0,03039	-0,01898	-0,00702	0,00647	0,02284	0,04167
12	-0,03491	-0,02289	-0,00886	0,00450	0,01905	0,03671	0,05757
13	-0,02537	-0,01032	0,00323	0,01812	0,03424	0,05178	0,07245
14	-0,00965	0,00429	0,02085	0,03604	0,05162	0,06733	0,08530
15	0,00818	0,02570	0,04320	0,05738	0,07097	0,08534	0,09509
16	0,03417	0,05291	0,06927	0,08107	0,09110	0,10126	0,10941
17	0,06708	0,08463	0,09784	0,10589	0,11071	0,11392	**0,11551**
18	0,10532	0,11936	0,12757	0,13049	0,12842	**0,12216**	0,10941
19	0,08778	0,09569	0,10014	0,10006	**0,09820**	0,09495	0,09509
20	0,09889	0,10462	0,10636	**0,10418**	0,09709	0,09009	0,08530
21	0,10918	0,11188	**0,11049**	0,10287	0,09329	0,08259	0,07245
22	0,11729	**0,11643**	0,10833	0,09834	0,08657	0,07263	0,05757
23	**0,12194**	0,11372	0,10231	0,09035	0,07687	0,06050	0,04167
24	0,11824	0,10623	0,09219	0,07883	0,06428	0,04662	0,02577
25	0,10870	0,09365	0,07505	0,06231	0,04910	0,03156	0,01088
26	0,09298	0,07189	0,05627	0,04414	0,03181	0,01600	-0,00196
27	0,06562	0,04821	0,03488	0,02381	0,01329	0,00226	-0,01175
28	0,03599	0,02142	0,01047	0,00133	-0,00605	-0,01115	-0,01549
29	0,00265	-0,00900	-0,01685	-0,02288	-0,02538	-0,02283	-0,01609
30	-0,03497	-0,04290	-0,04654	-0,04803	-0,04361	-0,03126	-0,01059

Further reading

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Dr. Martina Rengers, tel: +49 (0) 611 / 75 42 71, e-mail: martina.rengers@destatis.de

Impact of the level of detail of the expansion variable of "age" on the labour force survey results

With the introduction of the sub-annual microcensus, or the labour force survey, two expansion models were developed: One of the models allows examining the annual results for nearly all variables at highly regionalised levels and the other allows a flash evaluation of the monthly unemployment figures as part of labour market reporting. As data are available only for part of the sample when the monthly flash evaluation is done, the expansion variable of "age" was broken down to a more detailed level than is done for the annual expansion, so that a highly differentiated adjustment can be performed. However, the highly detailed regionalisation was not applied to the expansion of monthly results.

Due to the different expansion methods, but also for other reasons, the monthly results differ from the annual results. To quantify the impact the expansion method has on those differences, a project was carried out to study the detailed breakdown of the expansion term of age in the annual model. The results are presented below.

1 The expansion method for quarterly and annual results

Expansion of the annual results is a two-stage procedure. In a first step, to eliminate sampling errors and non-sampling errors, known non-response is compensated for by means of information on households who did not respond. In a second step, selected auxiliary variables are adjusted to key figures from intercensal population updates and from the Central Register of Foreigners. The auxiliary variables used here are three age groups (under 15 years, 15 to 44 years, 45 years and over) and four citizenship groups (German, Turkish, EU-25 and non-EU-25), always in a breakdown by sex. Adjustment is made per quarter at different regional levels (Land, administrative region, regional adjustment stratum). The compensation factors and expansion factors are obtained by means of a Generalized Regression Estimator (GREG), so that very small frequencies in the adjustment classes can be avoided.[1]

2 The expansion method for the monthly flash estimate

The expansion method of the monthly flash estimate is one-stage. For reasons of timeliness, the monthly results are expanded without separate compensation for non-response. However, those results, too, are adjusted to key figures from intercensal population updates, which means that an indirect compensation is done. The selected auxiliary variables are age (in 13 age groups with five age years each) and two citizenship groups (German, non-German), each broken down by sex. The regional breakdown (Land, "Nielsen areas", former territory of the Federal Republic and New Länder) is less detailed than that of the annual calculation. The expansion factors are calculated by means of the same calibration method as described above. This allows adjustment to separate marginal distributions.[2]

[1] For detailed information on the expansion procedure see Afentakis, A./Bihler, W. 2005: *Das Hochrechnungsverfahren beim unterjährigen Mikrozensus ab 2005*. In *Wirtschaft und Statistik* 10/2005, p. 1039ff.

[2] cf. Statistisches Bundesamt 2008: Quality Report "Monthly unemployment statistics according to the ILO concept".

Table 1: Overview of expansion terms[1]

Regional units	Month	Quarter/Year	Variant tested
Total Germany	• 13 age groups × sex • weekly adjustment	no adjustment	no adjustment
2 units (west-east)	• 2 citizenship groups × sex	no adjustment	no adjustment
8 Nielsen areas	• 6 age groups × sex	no adjustment	no adjustment
16 Länder	• sex	• age (3 age groups) × sex • 4 citizenship groups × sex • soldiers, persons doing compulsory military service • total population per month	• age (19 age groups) × sex • 4 citizenship groups × sex • soldiers, persons doing compulsory military service • total population per month
39 administrative regions	no adjustment	• 2 citizenship groups x sex	• 2 citizenship groups x sex
132 regional adjustment strata	no adjustment	• total population	• total population

3 Variant tested – integration of the more detailed expansion variable of "age"

Combining the two expansion methods allows, for the analysis of annual results, maintaining the desired level of regional breakdown and, in addition, adjustment to more detailed age groups. The expansion tested here involves the same approach as the annual expansion method – with the exception of the adjustment term of "sex and age per Land", where 19 age groups are used instead of three. Apart from that, the comparisons shown below are based on the same annual survey results. Due to the calibration method applied in the expansion, empty cells are avoided also in the adjustment to 19 age groups. The random sampling error (relative standard error) is even somewhat smaller than in the annual expansion method.

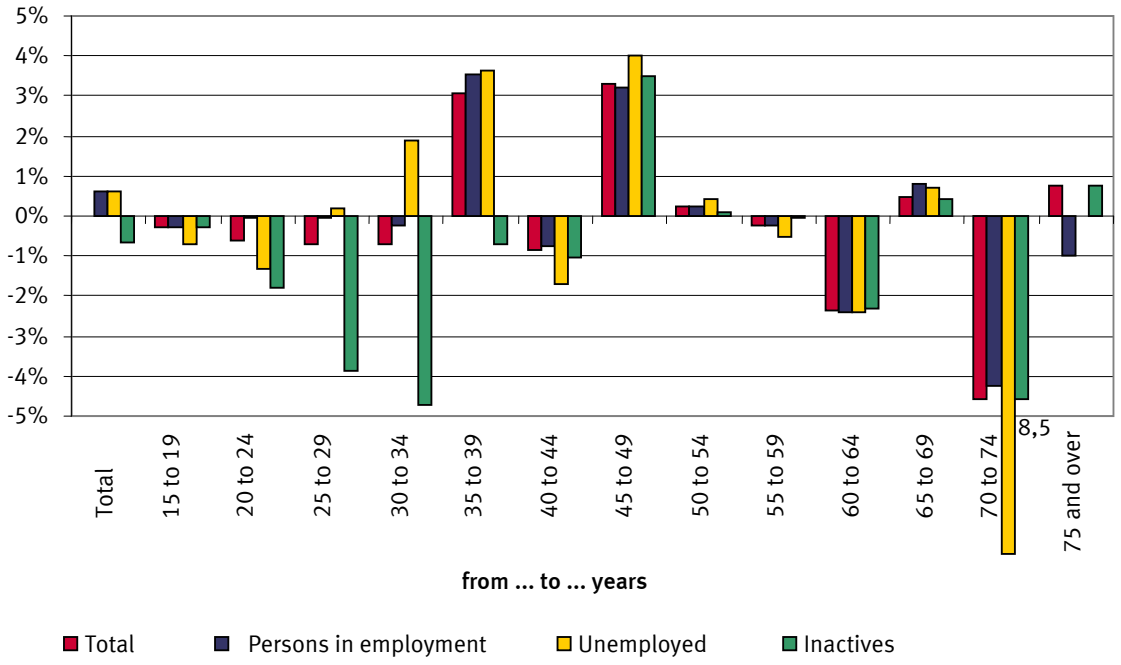
4 Comparing the results of the expansion variants

Performing an adjustment to the more detailed breakdown of age groups in the expansion procedure has two consequences. First, cohort-related jumps in (time series) results are reduced. Second – and this is more important for the interpretation of labour market data – it provides detailed results regarding analyses for the survey variable of age.

Applying the modified expansion factors to the calculation of results for 2009 will provide modified results when analysing the population by age. The number of inhabitants in the age groups of the 35 to 39 year olds and the 45 to 49 year olds is by more than three percent higher. It should be taken into account here that the group of the 45 to 49 year olds belongs to the highest of the three age groups in the original expansion of the labour force survey. Consequently, there is an impact on the results of variables such as employment where that age group is particularly strongly represented. Examining the results for the overall population shows that the expansion-related increase in some age groups is offset by expansion-related decreases (e.g. in the age group of the 70 to 74 year olds). For results where only specific age groups are examined, however, that offsetting effect does not occur.

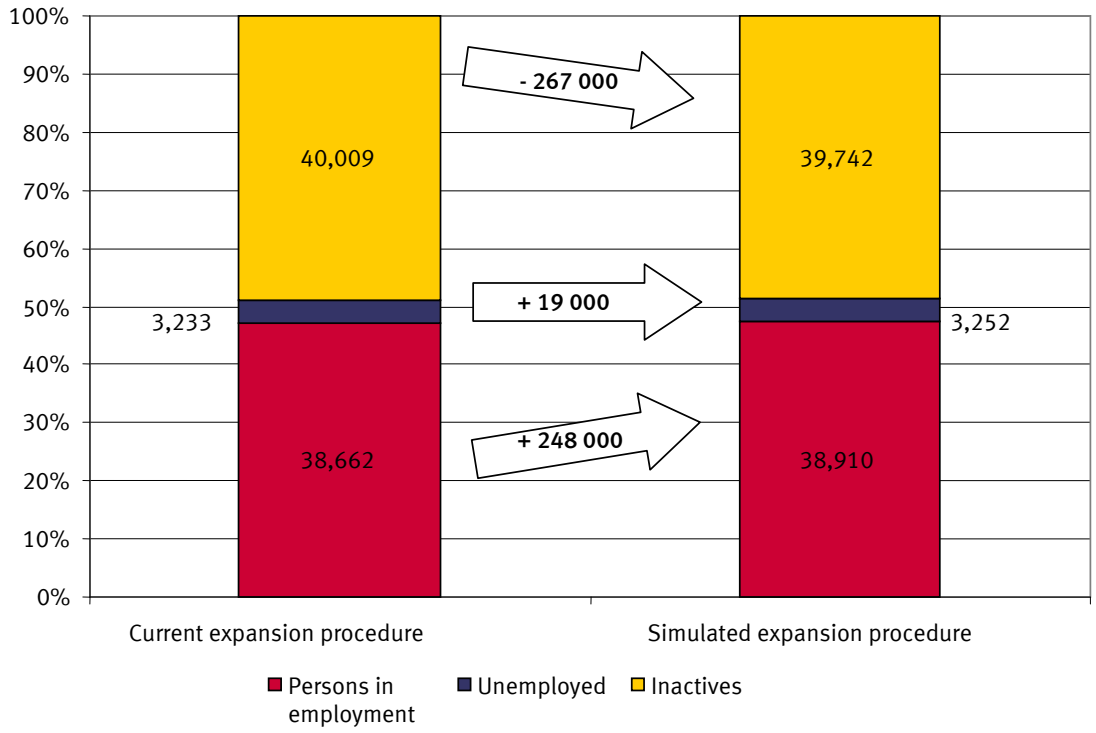
[1] Simplified representation.

Percentage change of the simulated expansion when compared with the current expansion procedure



The adjustment in the expansion procedure has an effect in particular on the results by employment status (see chart). The number of persons in employment and of unemployed persons rises by 0.6% each. The number of inactives is by 0.7% lower in the expansion variant tested. In some age groups, the more detailed breakdown of age groups is particularly obvious, leading to a difference of more than 3% between the results.

Comparing the results for the population by employment status (2009)



5 Conclusion

Comparing the two expansion variants shows that the standard errors caused by the applied expansion procedure do not change much – they even decrease slightly. The results for individual groups of people, however, change in part considerably, especially if examined by age.

It can generally be assumed that an adjustment to age groups with a more detailed breakdown will lead to more coherent results. As such detailed information from intercensal population updates is currently not available at a quarterly basis, it is not possible at present to do an adjustment to 5-year age groups. However, that expansion variant – or the element of age adjustment to 5-year age groups – should be included in a modification of the expansion procedure in the context of the new population results from the 2011 Census. This applies in particular with a view to the Regulation on the organisation of a labour force sample survey[1], which requires a breakdown of the expansion variable of age by 5-year age groups also for the expansion of the quarterly and annual results.

Katharina Puch, tel: +49 (0) 611 / 75 41 06, e-mail: katharina.puch@destatis.de

Staffing ratio in child day care centres – methodological bases and selected results

The staffing ratio as a major quality criterion

The staffing ratio – in addition to the qualification level of the pedagogical staff – is a major criterion to assess the quality of upbringing, education and care in child day care centres. Child day care centres are facilities where children aged 0 to 13 years are taken care of as a complement to upbringing and education by the parents. The children are taken care of by pedagogical staff in various group types, depending on the children's age.

As, however, staffing is governed by Land legislation, it is difficult, or impossible, to compare the situation between Länder. Reasons are the highly different recommendations regarding staffing and management functions in day care centres. In some Länder the staffing regulations are even a matter of the municipalities or the relevant institutions themselves. Consequently, different regulations may apply even within a Land. It is therefore not possible to ascertain average values for a recommended staffing ratio at the federal level.

The goal of calculating staffing ratios is to ascertain the number of children taken care of in a day care centre per pedagogical staff member, put in relation to the various group types. The staffing ratio to be shown is just a calculated figure that allows obtaining general information on differences in terms of region and time. The actual situation of daily care may be different. This is why the calculated figure of a staffing ratio is not a *real* staff-child ratio[2].

[1] See Council Regulation (EC) No 577/98, Article 3 (5): "The weighting factors are calculated taking into account in particular the probability of selection and external data relating to the distribution of the population being surveyed, by sex, age (five-year age groups) and region (NUTS II level), where such external data are held to be sufficiently reliable by the Member States concerned." Official Journal of the European Communities, L 77 of 9 March 1998.

[2] Despite that restriction, the term "staffing ratio" is used in this paper.

Basic data from the statistics of child day care centres

The calculations performed to ascertain the staffing ratio are based on the individual data of the statistics on "children and persons employed in child day care centres"[1]. Some special factors have to be taken into account and relevant assumption have to be made.

- For the statistics of child day care centres, only the contractually agreed weekly working hours are covered for the staff. Items that cannot be covered are non-specific working hours (e. g. days of advanced training or conceptual work) and hours of absence due to sickness or leave.
- For the centre managers it must be examined how they are included in the calculation of the staffing ratio. Until the survey of 2010, only the centre managers that were 100% released from normal work were covered in the statistics. Not covered is the management share of persons working in day care centres where there is no centre manager who is 100% released. Due to the different regulations in the Länder, no average can be calculated for the management share. There are just recommendations which refer in part to the number of groups in a centre, to the children in full-time care or to the number of places occupied on average.
- For children in day care centres, the contractually agreed daily hours of care are covered in size classes. Care averages are calculated to obtain weekly hours of care. The contractually agreed hours of care may well differ from the actual care hours if the contractually agreed care hours are not fully utilised. It may happen, for instance, that daily care hours of up to 7 hours have been agreed on in the contract while, actually, the child is picked up after just under 5 hours on various days. It may also happen that a child fully utilises the 7 hours per day, while just 6 hours are included in the calculation of the staffing ratio (cf. table below). This may be a reason for the actual staffing ratio differing from the calculated figure of the staffing ratio shown here.
- As the extent of care depends to a high degree on the group's age structure, it is also necessary in the staffing ratio calculation to ascertain and represent the group types.

Calculating the staffing ratio

The staffing ratio of child day care centres is calculated on the basis of a standardised calculation of full-time equivalents for the children taken care of there (full-time care equivalent) and for the persons working in the child day care centre (full-time employment equivalent) for the various group types.

The staffing ratios of child day care centres is calculated at the group level, i.e. only child day care centres with a fixed group structure are examined. With about 88%, they are the most frequent type (44,700 of a total of 50,800 centres).

Groups or child day care centres taking care only of disabled children, or of disabled and non-disabled children in an integrative way, are not included. Some or all of the children in those centres or groups receive integration grants due to physical/mental disability pursuant to Sections 53, 54 of Social Code XII or emotional disability pursuant to Section 35a of Social Code VIII. The higher need for support in such cases generally involves different staffing. Consequently, the total number of groups that can be included in the calculation of the staffing ratio is smaller than the number of all groups in child day care centres.

As both the working hours and the care hours vary in the groups examined, standardisation must first of all be achieved as a basis for calculating the staffing ratio, both for staff and the children taken care of.

[1] The legal basis of the statistics is laid down in Sections 98 ff of the Social Code VIII.

First, a *full-time care equivalent* is calculated for the children taken care of in the groups. For the purpose, the contractually agreed daily hours of care are collected by way of size classes, which are then taken to calculate care averages.

Size classes of daily care hours	**Care average in hours**
- up to 5 hours	4.5
- more than 5 and up to 7 hours	6
- more than 7 and up to 10 hours	8.5
- more than 10 hours	10.5
- morning and afternoon (excl. lunch break care)	6

The average care hours for any child of a group are added up. Multiplying the result by 5 provides the weekly care hours for the group's children, which are put in relation to a total of 40 weekly care hours. The result is the *full-time care equivalent*.

> *Example: 10 children of a specific group are taken care of for less than 5 hours and 15 children for 5 to under 7 hours. The total of the care averages for all children of the group is 135 hours per day. This corresponds to a weekly care average of 675 hours. The relevant full-time care equivalent is 16.875.*

For the persons working in the group (staff), too, a *full-time equivalent* is calculated, that is, by adding up the contractually agreed weekly working hours, put in relation to the regular weekly working hours of 39 hours. Group leaders, secondary or supplementary staff as well as persons working across groups and centre managers are included in the calculation of staffing ratios. The working hours of people working across groups and of centre managers released from normal work are evenly distributed among all groups of the child day care centre. The reason why even centre managers that are 100% released are included in staffing ratio calculation is that, in centres without released centre managers, no management task percentage can be deducted for the staff working there because the number of hours spent on such tasks is unknown. The regulations on when, and to what percentage, staff members working in group service are released for management functions differ both within and between Länder. So the released centre managers are included to achieve comparability between the Länder.

The equivalents calculated for children and staff are put in relation to each other. This provides a standardised staffing ratio per group. It describes the relation between full-time care equivalent and full-time employment equivalent.

Staffing ratio calculation in official statistics is based on the system of different group types as shown in the standard tables of the statistics on children and persons employed in child day care centres.

As upbringing, education and care of children under compulsory school age currently are the focus of public and political debate, the study is at first limited to the three group types excluding school children:

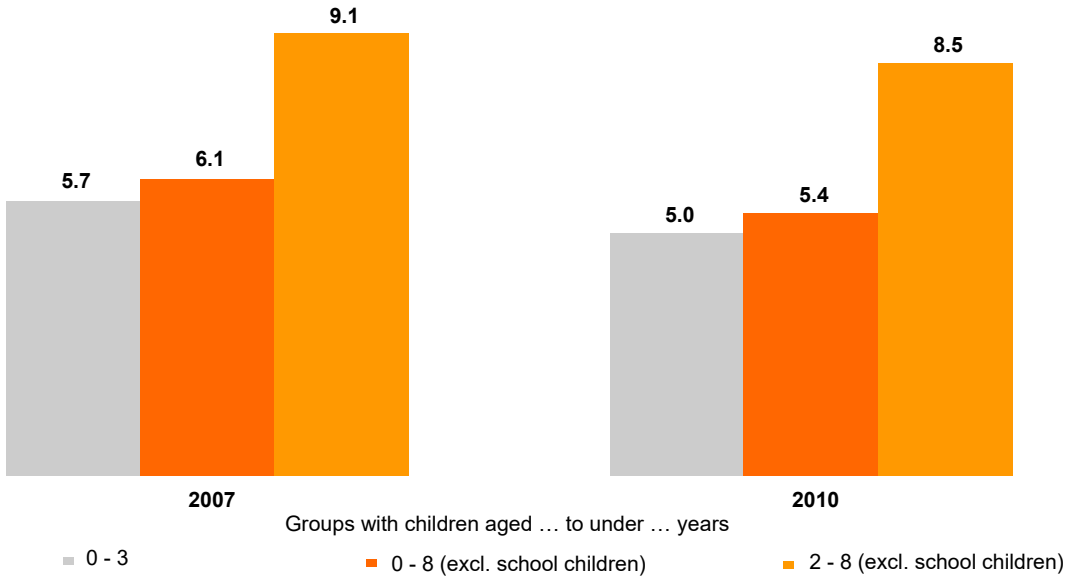
- Groups with children aged 0 to under 3 years
- Groups with children aged 2 to under 8 years (excluding school children)
- Groups with children aged 0 to under 8 years (excluding school children)

Finally, the staffing ratio per group type is obtained by using the group-related median for each group type[1].

Summary of results

Based on that calculation, the results can be shown for the various group types and over time:

Chart 1: Staffing ratio in child day care centres by group type in 2007 and 2010



- Most of the children who are not at compulsory school age are taken care of in groups with children aged 2 to under 8 years. In that group type an average staffing ratio of 1:8.5 was ascertained for the whole of Germany (reference date 1 March 2010). This means that, theoretically, a person doing full-time pedagogical work accounts for 8.5 children in full-time care. For comparison, in March 2007 the staffing ratio for that group type was 1:9.1.
- A much lower, i.e. better, staffing ratio of 1:5.0 was obtained for children in groups from 0 to under 3 years.
- Apart from those two group types, children aged under 3 years are also taken care of in groups with children aged 0 to under 8 years (excluding school children). For the whole of Germany, the staffing ratio was 1:5.4 in March 2010.
- For all three group types shown, the staffing ratio improved between 2007 and 2010.

Further methodological development

To allow a more detailed representation of the staffing ratio, two major modifications have been implemented in the statistics on children and persons employed in child day care centres.

As from 2011, it has been possible in the survey to indicate up to two fields of responsibility instead of one for the persons employed. This allows, for instance, eliminating the management percentage from the total working hours of the relevant staff. It can also be indicated whether staff members work in different groups. That modification will allow better allocation of the staff to the various group types.

[1] The median divides a distribution in half and, contrary to the arithmetic mean, is more robust towards “outliers” in a population with a non-normal distribution.

In addition the survey will change over from weekly care hours to daily care hours in 2012 as soon as the relevant basis has been created by a legal modification in Social Code VIII. Consequently, covering the daily care hours by size class will no longer be done. It will then be possible to exactly cover the contractually agreed care hours.

Sascha Krieger, tel: +49 (0) 228 / 99 643 81 59, e-mail: sascha.krieger@destatis.de

Indicating the third sector in the statistical business register

After more than a decade, the project "Civil Society in Figures" has closed a data gap regarding non-profit research by re-assessing the economic importance of the third sector in Germany.

The term of third sector – also referred to as non-profit sector – defines a separate sector beyond government and private-sector enterprises. According to the United Nations (2003), third-sector enterprises are 1. *organisations*, that is, they are institutionalised to some extent, 2. *private,* that is, institutionally separate from government, 3. *non-profit-distributing,* that is, they do not return profits generated to their owners or directors, 4. *self-governing*, that is, able to control their own activities, and 5. *voluntary*[1].

As part of the project "Civil Society in Figures", the Federal Statistical Office, in co-operation with the Centre for Social Investment at Heidelberg University and the Social Science Research Center Berlin, has created the preconditions for regular reporting in the form of a "Civil Society Information System" (Module 1). The development of Module 1 was supported and funded by the Donors' Association for the Promotion of Sciences and Humanities, the Fritz Thyssen Foundation and the Bertelsmann Foundation, which jointly carry out the Civil Society in Figures overall project. The work took two years and was successfully finished in April 2011 when a final report was submitted to the three commissioning institutions. The main goal of Module 1 was to ascertain the number of enterprises and the number of employees subject to social insurance contributions in the third sector and, based on those data, to do a model calculation of the gross value added in national accounts.

To allow ascertaining the number of third sector units, enterprises contained in the statistical business register (*Unternehmensregistersystem – URS*) were taken as a basis because, as the smallest legally independent units, they meet the above-defined criteria 1 and 4. That definition of enterprise also includes public-law corporations, foundations and institutions. The approximately 3.6 million enterprises of the URS have at least one employee subject to social insurance contributions and/or achieve a minimum taxable turnover of Euro 17,500 per year. This means that all units whose turnover is below that level and which do not have any employees subject to social insurance contributions are not included. Generally, such units have some importance in the third sector because it is assumed that many employees do voluntary work in the third sector and probably many third-sector enterprises are exempted from turnover tax due to their charitable status. However, in terms of economic importance and, consequently, regarding the project goals, such units are considered rather unimportant.

Classifying enterprises as third-sector or non-third sector was done in a multi-stage process. Using an automated algorithm that had been programmed with the SAS statistics software, it was first of all attempted to clearly classify as many URS enterprises as possible under one of the two categories.

[1] Cf. United Nations (2003). Handbook on Non-Profit Institutions in the System of National Accounts. New York: United Nations, p. 16.

For the purpose, the URS (reference year 2007) was used with its information on, among other things,

- name and address,
- Land (federal state) in which the enterprise has its registered office,
- economic activity according to the Classification of Economic Activities (WZ 2003 or WZ 2008),
- legal form,
- employees subject to social insurance contributions, and
- reference to other registers (code numbers).

Only for purposes of the projects, it was in part improved and new variables were added.

After the legal form classification in the URS had been modified for purposes of the project, a first group of enterprises were classified to the third sector on the basis of the following work steps:

First, all economic branches (according to WZ 2008) were subdivided into the three categories WZ=0 (atypical of third sector), WZ=1 (potentially third-sector) and WZ=2 (typical of third sector). While, for example, the economic branches of manufacture of machinery and equipment as well as electricity, gas, steam and air conditioning supply were classified under WZ=0, the branches of accommodation and food service activities were set at WZ=1, and residential care activities and social work activities at WZ=2.

In an analogous way, the legal forms were classified to the categories RF=0 (atypical of third sector), RF=1 (potentially third-sector) and RF=2 (typical of third sector). For example, all partnerships were classified as untypical of the third sector. The legal form of limited liability company was classified as potentially third-sector because it covers both third-sector units (e.g. charitable limited liability companies) and non-third sector units (e.g. profit-oriented limited liability companies). The only legal form classified as typical of the third sector is the religious societies under public law.

Second, using regular expressions, enterprises were filtered out whose enterprise name contained clear third-sector keywords – such as charitable status, registered association, Caritas (and other names of welfare associations) etc. The problem was to cover all – even incorrect – spellings while keeping the error rate low.

Third, various positive and negative lists were compiled, with positive lists containing third-sector units and negative lists containing non-third sector enterprises. The lists were based on official and non-official data sources and contained, for instance, independent and non-profit hospitals, universities and co-operatives.

Based on that preparatory work, the provisional variable of third sector was then created, which, in line with the variables of legal form and economic branch, was given the three values of DS=0 (non-third sector), DS=1 (potentially third-sector, also referred to as grey area) and DS=2 (third sector). Through that automated procedure, about 2.5 million or 70% of the enterprises were clearly classified as non-third sector or third-sector. For about 1.1 million or 30% of the URS enterprises, no clear classification was possible by means of automated procedures, so that they formed the grey area.

Then those remaining enterprises had to be examined more closely and for some of them, time-consuming single-case research had to be carried out. For the purpose, first of all, samples were drawn, each of them comprising 500 cases broken down by the variables of economic branch and legal form. Then they were examined for their third-sector relevance. As a result, 70% of the 1.1 million units from the grey area studied were clearly excluded and classified as non-third

sector because no third-sector units were found in the samples. For another 25% of the enterprises of the grey area, the samples showed between 1% and 2% third-sector enterprises. That group was examined more closely using a larger sample with a total of about 11,000 cases, stratified by employee size classes. The results were included in expansions performed for national accounting purposes. The remaining 5% of the grey-area enterprises, that is, about 55,000 enterprises, were subjected to an overall single-case research because sampling showed that, in part, over 50% of those enterprises have to be classified as third-sector.

One of the bases of the single-case research was the enterprise names, which were again checked for any information indicating whether the enterprises should be classified under the third sector. The main research, however, was done through the internet. Here, the enterprises were checked for information indicating charitable status, government control or possible relations to parent companies. While charitable status and a lack of profit orientation suggest third-sector status, government control of over 50% of an enterprise led to exclusion from the third sector. However, in cases where an enterprise was active in an economic branch that is typical of the third sector, and its legal form was classified as potentially third-sector, and its parent company belonged to the third sector (e.g. a Caritas institution), that subsidiary company was also classified as third-sector.

After the single-case research had been finished, the grey area was completely eliminated and all URS enterprises were provisionally classified as third-sector or non-third sector.

In a last step, characteristics of parent companies were transferred to their subsidiaries, so that an enterprise's provisional classification as third-sector or non-third sector was overwritten where applicable. Such transferral was based on the following rules:

a) If the parent company had been classified as third-sector, and if its subsidiary had not yet been classified as third-sector, and if the subsidiary was active in an economic branch typical of the third sector (WZ=2), and if the subsidiary was not a public unit, then the subsidiary was also classified as third-sector (third sector=2).

b) If the parent company was a public unit, and if the subsidiary had not yet been marked as a public unit, then the subsidiary was classified as non-third sector and was given the characteristic "public unit".

In a first step of that process, characteristics were transferred from all majority shareholders to their direct subsidiaries. Further iterative steps took account of the fact that an enterprise may be both a subsidiary and a parent company. If the characteristic of a subsidiary changed, the subsidiary's relation to its direct subsidiaries was checked again and – if one of the above conditions applied – characteristics were transferred again. That process was repeated until no further changes occurred.

A total of about 80% of the third-sector enterprises were classified as third-sector in an automated way and about 20% through single-case research.

Detailed project results are expected to be published by the commissioning institutions in late June (see http://www.stifterverband.info/statistik_und_analysen/dritter_sektor/index.html, latest access on 19 May 2011).

Natalie Rosenski, tel: +49 (0) 611 / 75 42 84, e-mail: natalie.rosenski@destatis.de

Linking microdata of different business statistics in the context of an ICT impact project

Introduction

An increasingly important function of official statistics is to describe what factors cause what social, economic and societal changes. In the area of business statistics, linking microdata sets of various existing surveys is therefore a tool whose importance has increased, too. The approach permits further statistical analyses without placing an additional burden on respondents. To create a balance between increasing information requirements, resource constraints faced by the statistical offices and the burden imposed on enterprises, the methodological procedures used in this area require further advancement in a European context.

Against this background, a project on "ICT impact assessment by linking data from different sources (ICT Impact)" was carried out by 13 Member States of the European Statistical System (ESS) between 2006 and 2008. The goal of that feasibility study was to analyse, by means of linking different microdata, the impact of using information and communication technologies (ICT) on the productivity of enterprises. The task consisted in an empirical study of correlations rather than an explanation of economic causality.[1]

The growing importance of ICT for economic activity has also caused an increasing demand for appropriate statistics and corresponding scientific analyses. The effects of an increasing ICT usage on the economic activity of enterprises are of particular interest in terms of an international comparison. Therefore, multinational comparability was a focus of the project.

Methodological bases of the project

The challenge of the feasibility study was to perform a multinational statistical analysis of linked microdata which would never leave the national statistical offices. This was to ensure data confidentiality and required close co-ordination in respect of both metadata and the statistical procedures applied.

A metadata analysis at the beginning of the project was therefore aimed at determining the indicators that could be calculated from the existing data material for different countries and would be suited for an empirical analysis of their economic impact. Due to the heterogeneous conditions in the Member States and differences in detail that were found irrespective of harmonised surveys, it was very difficult to reach agreement on the variables to be studied because of the high metadata quality requirements. Structural statistics that are in place in a standardised form in the European countries were largely used for the calculation of enterprise productivities.

As regards Germany, the microdata of the survey of ICT usage in enterprises, various structural and cost structure surveys and, in addition, data of the business register were included in the analysis for the reference years 2002 to 2005.

To link the variables selected and make productivity calculations and statistical evaluations, Prof. Bartelsman of the VU University Amsterdam developed a program (SAS), which was made available to the project members. After an adjustment of the metadata, the SAS program was run in each of the participating Member States. In this way, the microdata were uniformly linked, analysed and subsequently aggregated at branch level.

In a first step, the common program code served to link the microdata from different sources, that is, the incorporated national surveys. In a next step, the linked microdata were used to make a range of statistical analyses, such as regression and correlation analyses. Due to the harmonised program code, the results of the statistical evaluations are comparable in all countries involved.

[1] See: Statistisches Bundesamt, Statistische Analyse des Einflusses von Informations- und Kommunikationstechnologien auf die Produktivität von Unternehmen, Wirtschaft und Statistik 12/2010, Wiesbaden

In addition, the above approach of distributed microdata permits cross-country analyses at the European level. What makes the method so special is that cross-country statistical evaluations can be made on the basis of the aggregated microdata provided. The national microdata remain in the national statistical institutes while, at the same time, permitting multinational and comparable analyses. Before storing the aggregated data and results in a common data set of all countries, compliance with the relevant national data protection provisions was checked prior to data transmission.

Methodology of statistical analysis

The linked microdata of enterprises provided a broad evaluation potential at both the national and the international level. The statistical analysis of the study was based on filtering out empirical correlations and impacts of ICT indicators on different productivities. Although the possibilities for depicting a detailed economic model were limited by the variables of the statistics included, they permitted several informative regression analyses at the microlevel.

To obtain information as sound as possible on cause-effect relationships, multiple regression models with productivity as the variable to be explained formed the basis for the analysis. In addition to labour productivity and capital productivity, more complex productivities with two or more input factors were calculated, which considered a combination of input factors rather than focusing only on the efficient utilisation of one production factor. Such an approach provides more profound knowledge as production technologies can differ widely with regard to their labour and capital intensities.

The question of what importance the ICT usage intensity has for explaining productivity in the context of the regression models was in the focus of the productivity analyses.

As a next step of analysis, the ICT usage intensity was directly compared with the relevant productivities by means of a correlation analysis. Based on a breakdown by economic sections and enterprise size classes, that procedure was carried out for different ICT indicators and productivities. In this way, a clear picture emerged of the empirically measured direct relationship between productivities and ICT usage.

A separate study of certain economic branches has complemented the analyses performed and provided information on further noteworthy aspects.

Conclusion

The project has shown that the linking of microdata of different surveys produces interesting and promising results of analysis. Especially the multinational approach has provided an added value for studying the cause-effect relationships, while strictly respecting the data protection provisions. Based on that study, however, a more detailed statistical analysis will be required. To this end, enlarging the data basis will be of great importance as it allows a better description of dependencies and causalities. Therefore a follow-up project called “ESSnet on linking of microdata on ICT usage” was launched in December 2010. Its objective is to advance both the methodology and statistical analysis of linked microdata.

Jan Rauland, tel: +49 (0)228 / 99 643 85 81, e-mail: jan.rauland@destatis.de

Events

Global Forum on Trade Statistics

Between 2 and 4 February 2011, a Global Forum on Trade Statistics took place in Geneva. The forum was organised jointly by the United Nations Statistics Division (UNSD) and the Statistical Office of the European Communities (Eurostat) in collaboration with the World Trade Organisation (WTO) and the United Nations Conference on Trade and Development (UNCTAD). The forum was attended by some 200 delegates from 75 countries (including Germany) and representatives of a number of international organisations. The overarching theme of the event was the question "Measuring Global Trade - Do we have the right numbers?".

The objective of the forum was to analyse the current situation of statistics of the cross-border trading of goods and services. On the one hand, the question was whether and to what extent the recently revised UN recommendations regarding the international trade in goods (International Merchandise Trade Statistics (IMTS 2010)) and the international trade in services (Manual on Statistics of International Trade in Services (MSITS 2010)) were implemented throughout the world.

And on the other hand, discussions focused on how international trade statistics could be adapted to the challenges caused by progressing globalisation. The proposal was made to integrate statistics of the cross-border trade in goods and services to a greater extent and to link them to business statistics.

Particular attention was paid to the statistical coverage and analysis of global production processes (global manufacturing). Here the question arose as to what extent trade statistics could describe and measure cross-border value-added chains in addition to the gross values of trade flows.

The papers and discussions cannot be covered in detail in this article.

All presentations and more information on the event can however be accessed via the UN website at:

http://unstats.un.org/unsd/trade/s_geneva2011/geneva2011.htm

Special mention should be made of a joint UN, Eurostat and WTO background paper on International Trade Information Systems in 2020.

At the end of the event, the UN proposed a theses paper for discussion, which includes visions regarding the future of international trade statistics. The recommendations of the paper can be summarised as follows:

- improving the comparability of international trade statistics by applying the methodological recommendations of the United Nations
- improving the informative value by linking trade data to the relevant economic, environment-related, social and financial information from existing data sources
- establishing a joint statistical data basis at the microdata level
- improving co-operation between the national institutions that are engaged in compiling international trade statistics
- improving coherence between the relevant classifications (HS, BEC, CPC, ISIC) to allow and facilitate multi-domain analyses

Plans have been made to further discuss the results of the Global Forum in various international bodies and, in particular, during the next session of the UN Statistical Commission in 2012. A

UN group of classification experts is to revise the correspondence tables between the different classifications.

Albrecht Krockow, tel: +49 (0)611 / 75 20 60, e-mail: albrecht.krockow@destatis.de

Scientific conference "Survey research - basis for decision-making by the political and business communities"

Together with the ADM Arbeitskreis Deutscher Markt- und Sozialforschungsinstitute e.V. and the Arbeitsgemeinschaft Sozialwissenschaftlicher Institute e.V. (ASI), the Federal Statistical Office held the 9th scientific conference in Wiesbaden on 30 June and 1 July 2011.

This year's topic "Umfrageforschung – Entscheidungsgrundlage für Politik und Wirtschaft" ("Survey research - basis for decisions-making by the political and business communities") moved the users into the focus of interest.

After the moderator Prof. Dr. Jürgen Schupp of the German Institute for Economic Research had given an introduction into the topic, Prof. Dr. Gert G. Wagner, Chairman of the Executive Board of the German Institute for Economic Research, provided information on the relationship between theory and practice in survey-based policy consultation.

Richard Hilmer of Infratest dimap then explained why election research was that component of empirical research which was particularly in the focus of public attention. He also indicated the resulting implications. Afterwards, Horst Becker reported on the experience he had gained in the area of research and consultation regarding the planning of Bundestag election campaigns.

The 2011 Census was on the agenda of the afternoon session. Karsten Lamla of the Land office of Baden-Württemberg provided information on the evaluation concept of the population census conducted in 2011.

Afterwards, Dr. Holger Bonin of the Centre for European Economic Research (ZEW) in Mannheim focused on evaluations of labour-policy measures using the German Socio-Economic Panel (SOEP).

At the end of the first conference day, Hartmut Scheffler, Chairman of the ADM Board, explained the contribution of market research in the area of brand management in times of comprehensive digitisation.

On the second conference day, Uwe Czaia of Czaia Marktforschung provided information on survey-based media planning.

Boyan Genev of Eurostat gave an overview of the EU-SILC indicator system, which focuses on tools to measure poverty and social exclusion.

The last two papers were delivered by data users. Petra Mackroth, Head of the Family Policy Directorate in the Federal Ministry for Family Affairs, Senior Citizens, Women and Youth, informed the audience on what decision-makers expect from data producers.

At the end of the conference, Malte Ristau-Winkler, Head of the Basic Principles Directorate-General in the Federal Ministry of Labour and Social Affairs, explained the role of survey data in the work of his Ministry.

The papers of this scientific conference will be published as a conference volume in the GESIS publication series.

Christian König, tel: +49-(0)611 / 75 20 77, e-mail: christian.koenig@destatis.de

User conference on "Research based on the microcensus and the sample survey of income and expenditure" in Mannheim from 29 to 30 September 2011

The user conference will deal with studying the social structure of income and consumption in Germany. At the user conference, research results will be presented and discussed which have been obtained on the basis of official household statistics, that is, the microcensus and the sample survey of income and expenditure. In addition, the conference will provide a forum for exchanging experience among data users as well as between users and representatives of the statistical offices as data producers.

The target group of the event are scientists who work, or intend to work, with the Scientific Use Files of the microcensus or of the sample survey of income and expenditure. The conference will be organised and held by the German Microdata Lab (GML) of GESIS and the Federal Statistical Office (Divisions F2 "Population, Microcensus, Housing and Migration" and H3 "Income, Consumption, Living Conditions and Time Use of Households").

You may **register** for the user conference **by 15 September 2011 at the latest** at the following address:
workshop-mannheim@gesis.org

The conference fee is Euro 120 (students: Euro 90).
Conference venue: Rheingoldhalle, Rheingoldstraße 215, 68199 Mannheim, Germany.

For further information and the detailed conference programme please refer to:
http://www.gesis.org/veranstaltungen/konferenzen/

Your contacts at GESIS:

Dr. Georgios Papastefanou and Dr. Bernhard Schimpl-Neimanns

GESIS – Leibniz Institute for the Social Sciences, German Microdata Lab

P.O. Box 12 21 55, D-68072 Mannheim, Germany

tel: +49 (0) 621 12 46 265; fax: +49 (0) 621 12 46 100

e-mail: georgios.papastefanou@gesis.org and bernhard.schimpl-neimanns@gesis.org

The results and presentations of the last six user conferences on the microcensus and of one user conference on the sample survey of income and expenditure are available here:
http://www.gesis.org/veranstaltungen/veranstaltungs-archiv/german-microdata-lab/

Thomas Haustein, tel: +49 (0) 611 / 75 81 34, e-mail: thomas.haustein@destatis.de

National accounting specialist committee, Wiesbaden, 2 – 3 November 2011

Every two to three years, the National Accounts Department of the Federal Statistical Office organises a national accounting specialist committee meeting for any data users interested. In 2011, too, a national accounting specialist committee meeting will be held in Wiesbaden on 2 and 3 November 2011. In the afternoon of the first day and in the morning of the second day, the Federal Statistical Office will inform its users about most recent developments in German and European national accounts. The focus of the 2011 specialist committee meeting will be on the 2011 national accounts revision. The other topics will probably include measuring well-being and

the 2014 national accounts revision. Anyone interested may contact the national accounts info team of the Federal Statistical Office at: bip-info@destatis.de

Tanja Mucha, tel: +49 (0) 611 / 75 29 07, e-mail: tanja.mucha@destatis.de