

Employment and labour market in Central European countries



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Yves Franchet
Director-General

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Introduction

This is the second issue of a newly designed series on employment and labour market developments in Central European countries which was originally started by Eurostat as a semi-annual publication under the title "Central European Countries' Employment and Labour Market Review".

The present publication differs from its predecessor in four main points:

1. Instead of two, there now are three issues per year.
2. Each issue has the same structure, which includes:
 - acknowledgements of responsibilities and contributions,
 - a foreword by the Eurostat Director General,
 - the table of contents, including lists of tables and graphs,
 - an introduction to each issue,
 - an executive summary giving an overview of the essential results presented,
 - a section on "Data sources and methods" describing EU LFS standards and national compliance with them,
 - three analytical sections on "Recent labour market trends", "Regional labour markets", and a "Special topic" treating different aspects of employment and the labour market in each issue, including separate data annexes.
 - national time series and regional data containing indicators and distributions of principal variables on macroeconomic, demographic, employment and unemployment developments,
 - a list of abbreviations used and additional methodological notes.
3. While the predecessor for the most part structured both its national and regional analyses in the form of country reports, this publication generally takes a comparative approach by discussing the various aspects of employment and labour market developments across nations and regions.
4. The information presented in this publication is primarily based on the national labour force surveys carried out in 11 of the 13 countries covered (the 10 Candidate Countries Bulgaria, the Czech Republic, Estonia,

Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia and the 3 countries also participating in the PHARE programme, Albania, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia) and normally refer to the second quarter of the given year.

The "Acknowledgements", "Foreword", the section on "Data sources and methods", the national and regional time series, and the section with "Abbreviations and methodological notes" remain basically the same over all three issues in a year, except for necessary adjustments or additional data received. In contrast, the three analytical sections focus on different aspects in each issue, which is of course also reflected in the "Table of contents" and the "Executive summary".

In the first issue 2001, the national time series and the regional data were devoted to a general overview, while the special topic was "Youth unemployment".

In this second issue 2001, both the sections on "Recent labour market trends" and "Regional labour markets" focus on the structure of the employed and unemployed by their present or previous economic activity. The special topic this time is devoted to the analysis of "Long-term unemployment".

As noted in the „Introduction“ to the first issue 2001, due to the fact that data for previous years is presently not available for all countries and recent changes in administrative structures could not be taken into account retroactively on short notice, national comparisons at this stage had to be limited to the years 1999 and 2000, and the regional analysis to the year 2000 only.

With regard to the data presented in this issue it also should be noted that for Bulgaria results from the second quarter 2000 LFS now have replaced those from the first quarter, and for Albania and the Former Yugoslav Republic of Macedonia additional information has become available.

Thus, it is hoped that this publication will continually improve and achieve its objective to provide up-to-date, consistent and comparable information on the relative performance of CECs in respect to employment and labour market developments to policy makers, researchers, business, interest groups and the general public.

Executive summary

“Employment and labour market in Central European countries” covers relevant trends in 13 CECs (the ten CCs BG, CZ, EE, HU, LT, LV, PL, RO, SI, SK and the three PHARE participants AL, BA, FYROM). Rather than presenting separate country reports, however, this publication takes a comparative approach, discussing various aspects of employment and labour market developments across nations and regions in three issues per year.

The information used is primarily based on national LFSs, which all CECs (except AL and BA) introduced within the last decade. A brief description of this data source, its methodology, concepts and definitions as well as the implementation of these EU standards by the CECs is included in each issue, as is an annex with statistical tables containing national time series and regional data, which remain basically the same throughout a given year except for updates providing newly available data.

The core of this publication are three analytical sections on “Recent labour market trends”, “Regional labour markets” and a “Special topic”. In issue 1/2001, the national and regional analyses gave a general overview, while the special topic was “Youth unemployment”. In the present issue, both the sections on “Recent labour market trends” and “Regional labour markets” focus on the structure of the employed and unemployed by their present or previous economic activity. This time the special topic is “Long-term unemployment”. The main results of these three sections are summarized below.

Recent labour market trends

Focussing on the distribution of employment by economic activities, the aim of this section was to assess differences between national economies and to evaluate the employment prospects based on their comparative structure and recent growth, the composition of the employed by sex, age and qualification as well as the inherent risk of unemployment.

While agriculture still constituted the largest single sector in the CECs as a whole in the year 2000, only Romania had an above average share of employment with close to half of all jobs in this sector. In all other countries, the greatest number of people work in manufacturing, accounting for roughly between 20–30% of the employed. The third major sector is that of trade & repair with an employment share between 12–15%, which in fact ranks it second behind manufacturing except in Romania, Poland and Lithuania. Compared with these three sectors, all others play only a minor role in the CEC-10 with average shares between 1.5–6%.

The greatest sector-specific variation across countries also is found in agriculture, where the employment shares differ the most both in absolute and relative terms. Taking into account the size of the sectors, the next biggest differences

are observed in hotels & restaurants, real estate & business, and to a lesser extent in mining and finance & insurance. In contrast, the two largest sectors in most countries, manufacturing and trade & repair, exhibit the lowest relative variation together with electricity, gas & water.

Romania has the most imbalanced economic structure mainly due to the dominance of agriculture in this country. The only other country with an above average imbalance in the CEC-10 is Lithuania, while only Slovakia, Hungary and Estonia fall distinctly below that mark. In general, however, the CECs with the exception of Romania are characterized by a moderate imbalance of their national economies with many similarities and just a few discrepancies in the size and position of individual sectors.

Compared with the average sectoral shares of employment in the CEC-10, Romania again has the most dissimilar structure as a result of its oversized agriculture and commensurate deficits in almost all other activities. A fairly high level of structural differences also is found in the Czech Republic, Hungary, Estonia, Slovakia and Slovenia, but their most conspicuous common characteristic is an agricultural employment far below the CEC-10 average. In contrast, the four remaining countries Latvia, Bulgaria, Lithuania and Poland all still possess a sizable agricultural sector, yet differ the least from the CEC-10 economic structure.

An evaluation of the structural deviations according to the employment prospects of the individual sectors shows that Romania also is the farthest away from a modern economic structure and Poland clearly second to last. Bulgaria, Slovakia, Slovenia and the Czech Republic form an intermediate group, which is surpassed only by the three Baltic States on the next higher level and Hungary at the top position. Except for Estonia, these rankings moreover correspond with the changes between 1999 and 2000. In other words, the more advanced a country's economic structure was in the year 2000, the greater generally also were the steps it took since 1999 to further this development.

The educational level of the employed is quite similar in seven of the ten CECs, with only Lithuania and Estonia ranking clearly above average and Romania clearly below. The relative position of sectors in this respect shows practically the same pattern in all CECs. In every country, the employed in agriculture have the lowest, those in education the highest level of education. Most of the other sectors just fall below (mining, manufacturing, construction, and hotels & restaurants) or above the average (electricity, gas & water, trade & repair, transport & communication, and other community, social & personal services), while only finance & insurance, real estate & business, public administration, and health like education lie clearly above that mark. In this context, it should be noted, however, that the educational level of sectors does not always match with their employment perspective.

The countries do not vary much either in their sectoral distributions by occupation. Characteristically, each sector is dominated by one occupational group with shares over 50%. Skilled manual occupations rank first in all primary and secondary sectors as well as in transport & communication. Trade & repair and hotels & restaurants have mostly lower skilled non-manual staff, while an occupational mix is found in other community, social & personal services. The other service sectors are dominated by high-skilled non-manual occupations. These patterns also are related to the sectors' employment outlook. All sectors with dominantly skilled manual occupations have negative prospects, all with dominantly high-skilled non-manual occupations (except public administration) positive ones, while the three sectors with a dominance of lower skilled non-manual occupations or a mixed structure can expect future growth because they are prepared to fulfill the demand for certain types of services.

Small differences in the overall average and the same patterns in sectoral variations also characterize the distribution of the employed by age in the CECs. While six sectors lie within half a year of the average, there are four each with a markedly older or younger work force. The high average age in agriculture is mainly due to the continued employment of older persons (55–64 years), in education, electricity, gas & water and health it largely results from reduced shares in the two lowest age groups, possibly deriving from qualification prerequisites. In contrast, the very low average of employed in trade & repair and hotels & restaurants seems to have its origin in the occupational structure of these sectors, with generally lower skill levels allowing younger persons in the age groups 15–24 and 25–34 to take up jobs here at disproportionate rates, while in manufacturing and construction it is due exclusively to deficits in the highest age group, which may be an effect of the physical nature of work in these sectors.

As to the sex ratio of the employed in the CECs, there again is considerable variation across sectors and little between countries. Employment is most dominantly male in construction and mining (90–85%) and to a lesser extent in electricity, gas & water and transport & communication (78–73%), most dominantly female in health and education (81–77%) and to a lesser extent in finance & insurance and hotels & restaurants (67–62%). What is most remarkable in this context, however, is that all sectors with a negative perspective are predominantly male, while all predominantly female sectors have a positive perspective, the only exception being real estate & business, which – though male dominated – can nevertheless expect future employment growth.

Based on the comparison of the shares of employed and unemployed by their (previous) sector of activity, no clear relation is recognizable between sectoral employment prospects and the risk of losing one's job. Thus, the biggest negative difference was found in agriculture, because persons in this sector, particularly if they work as self-employed

or contributing family members, are less likely to become unemployed, the biggest positive differences in manufacturing and construction – all sectors with negative perspectives. Conversely, some sectors with a positive perspective such as trade & repairs or hotels & restaurants have disproportionately high shares of unemployed, while for others such as education and health the opposite is true.

Regional labour markets

In issue 1/2001 of this publication, the economic structure of the CEC regions was characterized on the basis of employment in the three broad sectors agriculture, industry and services, analysing their relation to a number of labour market indicators. The present analysis specifies this assessment by further differentiating the employment distribution in industry and services and taking a closer look at self-employment and unemployment according to current or previous economic activity.

Manufacturing is the largest sector within industry with regional shares of employment between 34.1–10.6%. In comparison, the share of construction merely ranges from 10.6–2.5%, and only seven CEC regions reach a share of more than 5% in the combined sector of mining and energy, the highest one being registered in the Polish mining district of Slaskie with 15.9%.

Within manufacturing, the production of textiles, clothing and leather represents the dominant sub-sector in 15 regions, in ten regions the production is concentrated on machinery and transport equipment, in six on basic metals and metal products. Other specializations are only found in 1, 2 or 3 regions, a notable one being that on food and tobacco in Latvia, where this sub-sector accounts for almost two thirds of the employed in manufacturing.

In contrast to the employment in manufacturing, there is no specialization on certain services in the regions. In other words, the ranking of service sectors is largely stable, their size varying in proportion with the overall size of the broad service sector in each region. The Czech Republic, Estonia, Slovenia and Latvia have the highest service density with 250–235 employed per 1000 inhabitants, Romania the lowest with 141. The service centres of the capital regions even reach higher concentrations up to 400. Across the CECs as a whole, the regional provision of services varies by the factor 4, and in the case of business-oriented services even by the factor 22.

The data on the extent of self-employment by sectors show that the high self-employment rates in the regions of Poland and Romania are based on agriculture, and this also applies to three regions in Bulgaria as well as to Lithuania and Latvia. In all regions, more self-employed work in the service sector than in the industrial sector. The latter only reaches employment shares of 4–6% in some regions of the Czech Republic and Hungary, while 8–9% are registered for the former in these countries, with the regions Prague, Budapest and Dolnoslaskie in Poland even exceeding 10%.

It is a common trait of all regions that unemployment is dominated by persons who previously worked in industry, while persons with their last job in services and particularly agriculture are underrepresented. The low share of unemployed from agriculture is mainly due to the weight of Poland and Romania, where this sector is characterized by the work of self-employed and contributing family members who with that status seldom become unemployed.

Long-term unemployment

The statistical definition of long-term unemployment includes all persons who have been continuously unemployed for 12 months or more. In the year 2000, the number of unemployed in the working age population amounted to about 6 mill. in the CECs as a whole, and 2.9 mill. or 48.6% of them fell into the category of long-term unemployed. The relative incidence of long-term unemployment in the individual countries at present is almost entirely determined by their overall unemployment rates. The only exceptions are Poland and Slovenia, which had the second highest and second lowest unemployment rates in the CECs, but through the lowest and highest long-term shares among all unemployed eventually assumed fifth and seventh place in long-term unemployment.

By differentiating the duration of unemployment in four categories, it is found that the countries with above average levels of long-term unemployment owe their position exclusively to the high share of persons who have been unemployed for 24 months or more. The analysis of these four duration classes also sheds some light on the inherent dynamics of unemployment, indicating that the best chances for re-employment exist in the first six months, while persons with increasing duration either tend more towards exiting the labour force or end up in the residual category which can be considered to collect all those who seem to be unemployable under the given circumstances.

Between 1999 and 2000, long-term unemployment has increased in all CECs with the exception of Hungary. Poland accounted for more than half of the overall CEC rise in the total number of about 750 000, and the highest relative increase occurred in Lithuania, where long-term unemployment more than doubled. Only in three countries these increases were primarily attributable to either changes in the long-term unemployment shares (the Czech Republic and Slovenia) or the overall unemployment rate (Poland), but generally both factors contributed to this development, which moreover affected both duration categories.

In the year 2000, the share of long-term unemployed was higher among men than among women in most CECs, thus practically reversing the situation from 1999 because the general increase in long-term unemployment affected the former more than the latter. As a rule, the direction of the gender difference in long-term unemployment shares corresponds with that in the overall unemployment rate.

In contrast to the minor gender differences, the shares of long-term unemployed in the CECs vary considerably with age, being lowest in youth, still below average in prime working age, and highest for those in the last decade of working life except in the Czech Republic and the Baltic States, which also have above average employment in this age group.

As is the case for the overall unemployment rates, the share of long-term unemployed in the CECs generally decreases with increasing educational level, though to a lesser extent. The main difference between countries lies in the span between the low and high values, which ranges from 5–8 percentage points in Estonia, Hungary, Lithuania and Romania, 13–14 in Bulgaria and Latvia, 26–30 in the Czech Republic, Poland and Slovenia to more than 50 in Slovakia.

The analysis of long-term unemployment by both previous occupation and economic activity produced mixed results. Thus, only the high and lower skilled non-manual occupations exhibit below average long-term unemployment shares, and only skilled manual occupations slightly above average ones in most CECs. Similarly, only persons from the consumption-oriented service sectors seem to run a lower risk of long-term unemployment, and only those from the industrial sector and transport & communication a slightly higher one in most CECs.

The extent to which unemployed in general and long-term unemployed in particular register with public employment offices and receive benefits varies widely in the CECs. In all countries, however, registration of long-term unemployed is lower than of short-term unemployed, and this gap widens with regard to benefits. In other words, the long-term unemployed find themselves at a double disadvantage because they not only have been without work for a longer time, but in addition are without basic financial support. There also is a slight gender difference, as female long-term unemployed in all CECs are more likely to register with labour offices, and in most cases a higher proportion of them than their male counterparts receive benefits.

Data sources and methods

The primary source of statistical information presented in this publication are the national labour force surveys which are carried out in all CCs and the FYROM. For Albania, the limited data available largely come from administrative records, while none could yet be made available from Bosnia-Herzegovina; but even in these countries there are plans to introduce a national LFS as early as next year.

Supplementary figures for all CECs on GDP growth (Statistics in focus, Theme 2 – 5/2001) and total or regional area were provided by Eurostat. Special circumstances concerning data sources or methods in individual countries are noted in the text or in the section on “Abbreviations and methodological notes”. The discussion following here only is designed to describe some of the more important aspects of national labour force surveys.

The nature of labour force surveys

A labour force survey characteristically involves personal interviews carried out in a sample of households to periodically obtain relevant information for a given reference week. This approach has certain advantages in comparison with other sources of information.

Thus, statistics from civil registers or social insurance records are by-products of administrative processes which may widely differ in their definition and coverage of employment and unemployment according to the legal and organizational provisions of the respective systems. Establishment-based surveys are restricted to the persons and activities in individual sectors and do not provide data on the not employed. A census, finally, with its complete and comprehensive coverage of the basic statistical parameters requires resources which can be mobilized only at greater intervals.

National LFSs, in contrast, are designed for the specific purpose of collecting information on employment and unemployment across the entire economy and at minimal costs. Due to their inherent flexibility, they also can be more easily harmonized in terms of topical content, concepts,

definitions, data processing and analysis to ensure comparability according to internationally accepted standards.

However, the sample base of LFSs also is their main limiting factor. In general, the reliability of results derived from a sample decreases with its size as well as with the frequency with which the measured characteristic occurs and the evenness with which it is distributed in the population. Thus, there are limits to the use of LFSs on relatively rare phenomenon, in detailed regional or sectoral disaggregation, and for monitoring trends over small time intervals or involving only minor movements.

CECs' labour force surveys

In the CECs, LFSs only were introduced during the transition process from a planned to a market-oriented economy within the last decade. Since then, however, the LFS has become the main instrument for assessing the characteristics and developments of their national labour markets.

After starting with an initial pilot or annual survey in the first year(s), all CECs except Latvia, Lithuania and the FYROM, which still were on a semi-annual schedule, conducted their year 2000 LFS on a continuous, monthly or quarterly basis. Details on the introduction of national LFSs in the CECs as well as their periodicity and sample sizes in the year 2000 are listed in Table 1. More information on the history and methodology of LFSs in the ten Central European CCs can be found in the Eurostat publication “Labour Force Survey in Central and Eastern European Countries: Methods and Definitions, 1999”.

That publication also documents the efforts of the CECs to adapt their LFSs to EU standards. These efforts have since been intensified through the “PHARE Multi-Beneficiary Programme for Statistical Cooperation: Pilot Projects on Statistics”, which assessed the compliance of national LFSs with EU regulations, provided some assistance with data transmission, and made recommendations for further harmonization.

Table 1: **Main data on CECs' LFSs**

Country	Starting date	Type of survey	Frequency of results	Sample size in the year 2000
BG	1993	quarterly	quarterly	24000 households
CZ	1992	continuous	quarterly	26000 households
EE	1995	continuous	quarterly	2000 households
HU	1991	monthly	quarterly	37000 dwellings
LT	1994	semi-annually	semi-annually	3000 households
LV	1995	semi-annually	semi-annually	8000 households
PL	1992	continuous	quarterly	24000 dwellings
RO	1993	continuous	quarterly	18000 dwellings
SI	1993	continuous	quarterly	7000 households
SK	1993	continuous	quarterly	10000 dwellings
MK	1996	semi-annually	semi-annually	7200 households

EU LFS standards

The first attempt to carry out a LFS in its member states was already made by the then EC in 1960, but it was not until 1983 that a harmonised LFS was instituted. The latest regulations applying to the time period covered in this publication are the Council Regulation (EC) No.577/98 of 9 March 1998 and the corresponding Commission Regulation (EC) No.1571/98 of 20 July 1998.

The technical aspects of these regulations are determined by Eurostat in cooperation with representatives from the NSIs (incl. CECs) at meetings of the Employment Statistics Working Party. The main EU LFS standards set in this process apply to:

- type, frequency and reference period of the survey (continuous survey providing quarterly and annual results, with the reference week preceding the interview week),
- units and scope of the survey, observation method (persons in private/collective households, interviews),
- sample (relative sampling error, rotation, weighting),
- survey characteristics (list of questions and response categories, definitions and classifications),
- transmission of data to Eurostat (individual records within 12 weeks for continuous surveys and 9 months for an annual spring survey).

The principal definitions and classifications used in the EU LFS represent international or EU conventions and include:

- employment and unemployment (ILO, 13th ICLS),
- international classification of status in employment, ICSE (ILO, 15th ICLS)
- international classification of occupations, ISCO-88 (ILO)
- statistical classification of economic activities, NACE Rev.1 (EU, adaptation of ISIC Rev.3, UN),
- international standard classification of education, ISCED 1997 (UNESCO),
- regional classification, NUTS 2 (EU).

A detailed presentation of the EU LFS standards can be found in the Eurostat publication "Labour force survey: Methods and definitions, 1998 edition".

The implementation of these standards largely falls under the responsibility of the NSIs. They design their own survey sample and a national questionnaire, conduct the interviews, compute the weighting factors, and convert the data to the prescribed record structure for transmission to Eurostat. Eurostat, in turn, checks and processes the data for EU Member States, CECs and other cooperating countries and makes the results available for dissemination.

Basic concepts and definitions

While the LFS is intended to cover the whole resident population of a country, the results are compiled only for persons living in private households (but excl. persons in compulsory military or community service surveyed in these households), because some countries do not cover collective households.

The central distinction in any LFS is the classification of persons aged 15 years or more by their labour status:

Employed are those who, during the reference week:

- did any work for pay or profit, or
- were not working but had jobs from which they were temporarily absent.

Family workers are included.

Unemployed are those who:

- had no employment during the reference week, and
 - had actively sought employment during the previous four weeks, and
 - were available to start work within the next two weeks.
- Persons who already had found a job which was to start later are also classified as unemployed.

Inactive are all those not classified as either employed or unemployed.

Graph 1 shows a flowchart classifying the population according to these definitions. In this context, persons temporarily absent from work present certain difficulties. The accepted criterion for their classification as employed is a formal attachment to their job, which in turn is defined by:

- the continued receipt of pay,
- the assurance of return to work, or
- the elapsed duration of absence.

Another problem is the classification of unemployed by LFSs as opposed to the registration in public employment offices. Due to differences in the criteria used, the respective figures for a given country can differ considerably, and while the definition applied to all CECs' LFSs is the same, the figures on registered unemployment are rarely comparable between countries due to different national regulations. The latter are therefore included in this publication only. For a discussion of the differences involved the reader is referred to the first issue of the "Review", p. 13ff and to "Employment in Europe", 1999, p. 51.

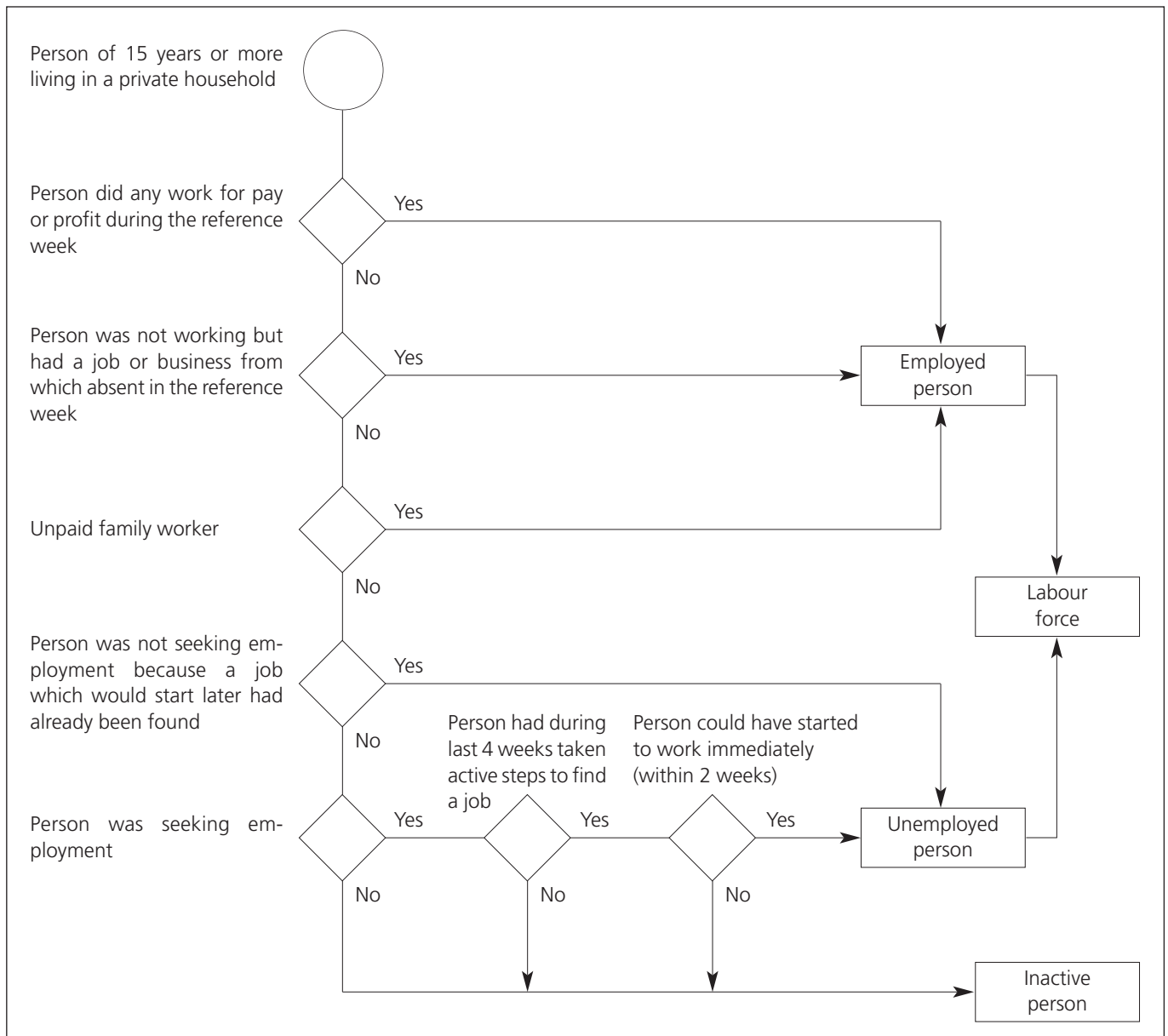
Based on age and labour status, a number of groups and rates are derived:

- **Working age population:** 15–64
- **Youth dependency rate:** under 15/15–64
- **Old age dependency rate:** 65+/15–64
- **Effective dependency rate:** not working 15+/employed
- **Labour force:** employed + unemployed
- **Activity rate:** labour force 15–64/working age population
- **Employment rate:** employed 15–64/working age population
- **Unemployment rate:** unemployed/labour force

In addition, there are a number of concepts relating to specific conditions of employment, unemployment, or inactivity:

The permanency of a job only refers to employees. Temporary employment, work contracts of limited duration or fixed-term contracts are characterized by the agreement

Graph 1: **Labour force classification in the European Union Labour Force Survey**



between employer and employee on objective conditions under which a job ends, such as a specific date, the completion of a task or the return of another employee who has been temporarily replaced. In particular, this applies to:

- persons with seasonal employment,
- persons engaged by an agency or employment exchange and hired to a third party to perform a specific task (unless there is a written contract of unlimited duration with the agency or employment exchange),
- persons with specific training contracts.

If there are no objective criteria for the end of a job or work contract, then this is considered as permanent or of unlimited duration.

The distinction between full-time and part-time work is based on the subjective declaration of the respondent. A more precise, objective definition is not possible since work-

ing hours differ from country to country and from one branch of activity to the next.

Involuntary part-time work is assumed for persons who declare that they work part-time because they were unable to find a full-time job.

The number of hours usually worked per week in the LFS only refers to the usual number of hours in the main job, including paid or unpaid overtime, but excluding travelling time between home and workplace or time for the main meal break. Apprentices or trainees should exclude any time spent at college or in other special training centres. Persons unable to provide a figure for their usual working hours may replace it by the average number of hours actually worked per week over the past four weeks. Some persons, particularly self-employed and family

workers may not have a usual timetable because their working hours vary widely from one week or month to the next.

The duration of unemployment is operationally defined by the shorter of the following two periods:

- the duration of search for work, or
- the length of time since last employment.

Youth unemployment refers to the unemployment of persons aged 15–24.

Long-term unemployment is defined by a duration of 1 year or more.

Discouraged workers are defined as persons who are not employed and not seeking work because they believe that none is available.

Willingness to work refers to persons who are not employed and not seeking employment, but would nevertheless like to have work.

In education or training only applies to persons who attended any course or programme during the previous four weeks regardless of its relevance for the respondents' present or possible future job. Thus, this includes initial and further education, continuing and further training, training within the company, apprenticeship, on-the-job training, seminars, distance learning, evening classes, self-learning, etc. as well as any courses followed out of personal interest and all forms of education and training in such subjects as languages, data processing, management, art and culture, health and medicine.

Problem areas in CECs' LFS data

While the guidelines given by the EU LFS standards, concepts and definitions are quite clear, their implementation in the national LFS of CECs still is far from complete.

A first problem area is the **survey coverage**. In some countries the LFS excludes the population under 15 or over 74 so that the necessary figures for computations involving the whole population have to be derived from other sources. Several countries also include persons living in

collective households through their private household of origin but cannot identify them as such due to the lack of corresponding questions or response categories. In some CECs persons in compulsory military or community service, who should be omitted from LFS results, are excluded from the national LFS from the very outset, in others they are included, but not identifiable.

A second problem area are **missing items or responses**. In the years 1999 or 2000 none of the CECs with a national LFS covered all EU items. Such gaps exist, among others, with regard to the willingness to work of persons without employment, persons in education or training, the full-time/part-time distinction, the permanency of jobs, the number of hours usually worked, or the situation of unemployed before they started their job search. But it also happens that responses are missing even though an item is included in the questionnaire, because some persons simply are not asked that question due to the filter applied to it.

Another area of concern is the basic classification of respondents by their **labour status**. There are considerable differences from country to country in terms of the type and number of questions as well as the criteria used to determine this status.

General methodological discrepancies also occurred with respect to:

- the **professional status**, where members of co-operatives have been variably coded as employees and self-employed with or without employees;
- the **methods used to find work**, which according to the EU standard are supposed to be taken up in separate questions, but instead were reduced to response categories in one question of which only a limited number (sometimes only one) could be selected, thus changing the character of the resulting distributions and possibly affecting the classification of unemployed or inactive.

In sum, it should be reiterated, however, that despite all of these reservations the CECs' LFSs still provide the most consistent and comparable set of statistical data for the analysis of employment and the labour market – if properly treated with the necessary caution.

Recent labour market trends

In issue 1, 2001, of this publication, the section on "Recent labour market trends" was devoted to a general overview of the latest employment and unemployment developments in the CECs, concentrating on the chances and conditions of individuals' labour force participation. In that context, the analysis of employment by broad economic sectors was only one aspect among others, showing the provision of job opportunities in the three main parts of the economy.

In the present issue, the focus of this section is shifted to the economic structure itself, comparing the countries with regard to the distribution of employment across individual sectors and their variation in key characteristics. The aim of such an approach is to assess structural differences between

national economies and to evaluate the employment prospects of sectors based on their comparative structure and recent growth, the composition of employed by sex, age, and qualification as well as the inherent risk of unemployment.

Classification by economic activity

The information on employment by sectors collected for the years 1999 and 2000 in the national LFSs refers to the economic activity of the establishment in which the employed hold their main job. It is generally coded on the 2-digit level of the EU NACE (Rev.1) classification. Since this classification will be used extensively in this and the following sections of the present issue, though in various forms and with certain modifications, the complete set of categories is reproduced here (see Box).

Statistical Classification Of Economic Activities (NACE Rev.1) – Data is supplied at two-digit level as indicated below

Section A Agriculture, hunting and forestry

- 01 Agriculture, hunting and related service activities
- 02 Forestry, logging and related service activities

Section B Fishing

- 05 Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing

Section C Mining and quarrying

- 10 Mining of coal and lignite; extraction of peat
- 11 Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction excluding surveying
- 12 Mining of uranium and thorium ores
- 13 Mining of metal ores
- 14 Other mining and quarrying

Section D Manufacturing

- 15 Manufacture of food products and beverages
- 16 Manufacture of tobacco products
- 17 Manufacture of textiles
- 18 Manufacture of wearing apparel; dressing and dyeing of fur
- 19 Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear
- 20 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
- 21 Manufacture of pulp, paper and paper products
- 22 Publishing, printing and reproduction of recorded media
- 23 Manufacture of coke, refined petroleum products and nuclear fuel
- 24 Manufacture of chemicals and chemical products
- 25 Manufacture of rubber and plastic products
- 26 Manufacture of other non-metallic mineral products
- 27 Manufacture of basic metals
- 28 Manufacture of fabricated metal products, except machinery and equipment
- 29 Manufacture of machinery and equipment n.e.c.
- 30 Manufacture of office machinery and computers
- 31 Manufacture of electrical machinery and apparatus n.e.c.
- 32 Manufacture of radio, television and communication equipment and apparatus
- 33 Manufacture of medical, precision and optical instruments, watches and clocks
- 34 Manufacture of motor vehicles, trailers and semi-trailers
- 35 Manufacture of other transport equipment
- 36 Manufacture of furniture; manufacturing n.e.c.
- 37 Recycling

Section E Electricity, gas and water supply

- 40 Electricity, gas, steam and hot water supply
- 41 Collection, purification and distribution of water

Section F Construction

- 45 Construction

Section G Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods

- 50 Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel
- 51 Wholesale trade and commission trade, except of motor vehicles and motorcycles
- 52 Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods

Section H Hotels and restaurants

- 55 Hotels and restaurants

Section I Transport, storage and communication

- 60 Land transport; transport via pipelines
- 61 Water transport
- 62 Air transport
- 63 Supporting and auxiliary transport activities; activities of travel agencies
- 64 Post and telecommunications

Section J Financial intermediation

- 65 Financial intermediation, except insurance and pension funding
- 66 Insurance and pension funding, except compulsory social security
- 67 Activities auxiliary to financial intermediation

Section K Real estate, renting and business activities

- 70 Real estate activities
- 71 Renting of machinery and equipment without operator and of personal and household goods
- 72 Computer and related activities
- 73 Research and development
- 74 Other business activities

Section L Public administration and defence; compulsory social security

- 75 Public administration and defence; compulsory social security

Section M Education

- 80 Education

Section N Health and social work

- 85 Health and social work

Section O Other community, social and personal service activities

- 90 Sewage and refuse disposal, sanitation and similar activities
- 91 Activities of membership organization n.e.c.
- 92 Recreational, cultural and sporting activities
- 93 Other service activities

Section P Private households with employed persons

- 95 Private households with employed persons

Section Q Extra-territorial organizations and bodies

- 99 Extra-territorial organizations and bodies

Recent labour market trends

In the Polish LFS, this information was not collected in 1999 and only coded on the 1-digit level in 2000. The available data from Albania and the FYROM are incomplete or not fully compatible, while none was available from Bosnia and Hercegovina, so that these countries are not included in this comparison.

The classification by economic activity used in this section is the 1-digit NACE with three modifications. Sector B "Fishing" had to be combined with sector A "Agriculture, hunting and forestry", and sectors P "Private households with employed persons" and Q "Extra-territorial organizations and bodies" had to be combined with sector O "Other community, social and personal service activities" due to the small size of sectors B, P and Q in all national LFS samples. Except for fishing, which reached a share of 0.4% in Estonia (and even this figure has only limited statistical reliability), these sectors do not account for more than 0.2% of the employed in any CEC.

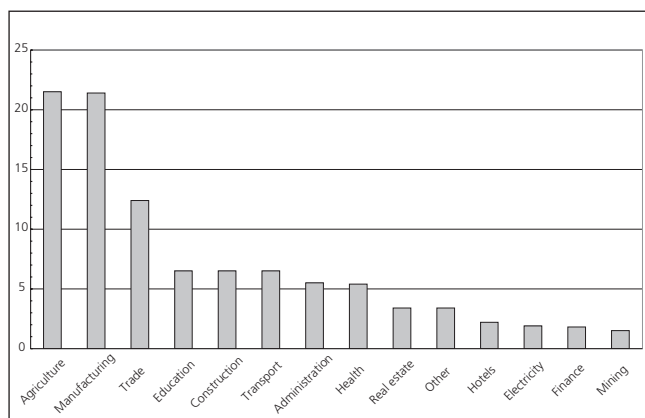
Employment by sector

In issue 1, 2001, of this publication, the economic structure of employment was analysed by the three broad sectors agriculture, industry and services. The results for the year 2000 and the CEC-10 as a whole showed a still sizable primary sector (21.2%) and an underdeveloped tertiary sector (47.4%), with the secondary sector falling in between (31.4%). However, even in this rough classification there was considerable variation across countries.

The more detailed classification by 14 sectors of economic activity which is used in this section now makes it possible to identify the focal points of employment both in the region and individual countries, to compare the structure of national economies with each other, and to assess the degree of sector-specific variation. For this purpose the sectors for both the CEC-10 as a whole (Graph 1) and the individual countries (for detailed data see Section Annex) have been arranged in the order of their average employment share in the year 2000.

With 21.5% of all employed, agriculture (NACE AB) constituted the largest single sector in the CEC-10 in the year

Graph 1: CEC-10 sectoral structure by order of size, 2000



2000. Except for the considerably higher figure for Bulgaria (due to the fact that data from the second quarter have replaced the first), the findings from the preceding issue of this publication still apply, because the primary sector analysed there is identical with the combination of the 1-digit sectors A and B formed for the present analysis.

Briefly recapitulated, the relatively high share of agricultural employment can be attributed almost exclusively to Romania with close to half the jobs in this sector, while the countries with the next biggest shares – Lithuania and Poland with 18–19%, Bulgaria and Latvia with 13–14% – already are below average, and the remaining five countries only have shares between 5–10%.

Although at 21.4% manufacturing (D) barely has to concede first rank to agriculture for the CECs as a whole, it represents the sector offering the greatest number of jobs in all countries with the exception of Romania. The highest share of employment in this sector is reached in Slovenia (30.3%), and the Czech Republic, Slovakia, Hungary, Bulgaria and Estonia also lie above the average with 23–27.5%, while Poland, Lithuania, Romania and Latvia exhibit shares between 18.5–20%.

The third major sector in the CECs with an employment share of 12.4% is that of trade & repair (G). In fact, except in Romania, Poland and Lithuania, the most important service sector ranks second only behind manufacturing, and in no country apart from Romania does its share fall short of 12.5%, nor does it rise above 15.3% anywhere in the region.

Compared with these three sectors, which interestingly also represent the primary, secondary and tertiary levels of economic activity, all others have only a minor share of employment in the CEC-10. According to their size, they can be divided into two groups, the first including construction (F), transport & communication (I), public administration (L), education (M) and health (N) with average shares around 6%, the second including mining (C), electricity, gas & water (E), hotels & restaurants (H), finance & insurance (J), real estate & business (K), and other community, social & personal services (OPQ) with average shares of 1.5–3.5%.

In construction (F), the employment share in the individual countries lies either between 5.5–6% (Bulgaria, Lithuania, Latvia, Slovenia) or between 7.0–8.0% (Estonia, Hungary, Poland, Slovakia), with only Romania (3.7%) and the Czech Republic (9.4%) transcending these group limits in opposite directions.

A different picture presents itself in the transport & communication sector (I), where only the two biggest countries (Poland and Romania) remain below the CEC-10 average, while all others fall in a range around 7–8% with the exception of Estonia, which reaches an employment share of 10.4%.

Again apart from Romania, where the predominance of agriculture reduces employment in most other sectors, the

share of public administration (L) in the individual countries varies in a narrow band of about one percentage point below and above the average, with no country transcending these limits.

In the education sector (M), in contrast, two countries – Latvia with 9.0% and particularly Lithuania with 12.1% – have unusually high shares of employment, which in three more – Hungary, Estonia and Slovakia – still amounts to around 8%, while all others with the exception of Romania lie at or above the average.

With regard to health employment (N), three countries – Estonia, Latvia and Slovenia – exhibit a fairly low share around 5%, though this is still two percentage points higher than in Romania. Slovakia holds the top position with 7.0%, and the rest fall in a range from 5.8–6.6%.

As far as the smallest six sectors in the CECs are concerned, a technical note is in order. Due to their size, on the one hand, the magnitude of differences between countries will tend to be relatively limited, on the other hand, the results are more likely to be affected by sampling errors.

In the mining sector (C), only Poland with its coal and ore production has an above average employment share, while Slovenia and Hungary, but particularly Lithuania and Latvia, have below average shares.

In the electricity, gas & water sector (E), most countries lie very closely around the CEC-10 average, the exceptions being Slovenia, which shows a fairly low share, and Lithuania with a deviation in the opposite direction (which may, however, be at least partly be caused by sampling error).

Considerable differences are found in the hotels & restaurants sector (H). Here, four countries – Latvia, Lithuania, Poland and Romania – have employment shares at or somewhat below the CEC-10 average, while all remaining countries rank clearly above it with values in the 3%-range, and Bulgaria even reaches 5.0%.

In the finance & insurance sector (J), half of the countries – Slovakia, the Czech Republic, Hungary, Slovenia and Poland – have an employment share at or moderately above the CEC-10 average, but the other half with the exception of Estonia (1.5%) merely reach the 1%-level.

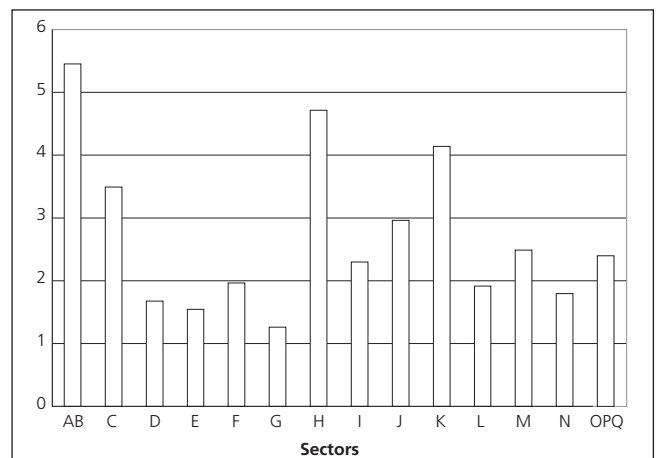
A highly differentiated pattern evolves from the comparison of countries in the sector of real estate & business (K). In this case, Romania with 1.2% shows an extremely low share of employment. Lithuania, Bulgaria and Poland are a little below or at the CEC-10 average with values between 2.8–3.5%, Slovakia with 4.1% a little above. With shares of just under or over 5%, this sector seems to be much more developed in Slovenia, Latvia, Hungary, and the Czech Republic, but they are even surpassed in this respect by Estonia (6.8%).

In the combined sector with other community, social & personal services (OPQ), finally, the employment shares of most countries group themselves within half a percentage

point below or above the overall average. The only deviant case at the bottom end again is Romania (2.2%), while at the other end the respective share in Hungary and Latvia lies 1 percentage point above average, and in Estonia more than 2.

Sector-specific variations across countries are measured here by the sum of absolute differences from the respective CEC-10 average, which in turn is divided again by that average to take into account the relative size of each sector (Graph 2). The analysis shows that the countries vary the most in their agricultural employment shares, and this both in absolute and relative terms. Manufacturing, in contrast, which has practically the same overall size, not only exhibits a much smaller sum of absolute differences, but according to its relative variation even drops to the bottom group of sectors.

Graph 2: **Relative sector-specific variation, 2000**



Apart from the agricultural sector, the countries show the greatest relative differences in hotels & restaurants and in real estate & business, and to a lesser extent in the mining and finance & insurance sectors.

In transport & communication, education, and other community, social & personal services, the variation between countries is already below average. The bottom group, finally, includes very large (manufacturing, trade & repair) as well as intermediate (construction, public administration, health) and very small sectors (electricity, gas & water), with the lowest being registered for trade & repair, where the relative variation over all countries only amounted to the 1.3-fold of its overall employment share.

The structure of national economies

The sectoral distribution of employment in each country can be investigated under two different aspects, the first being that of its internal balance or imbalance, the second that of its comparative structure.

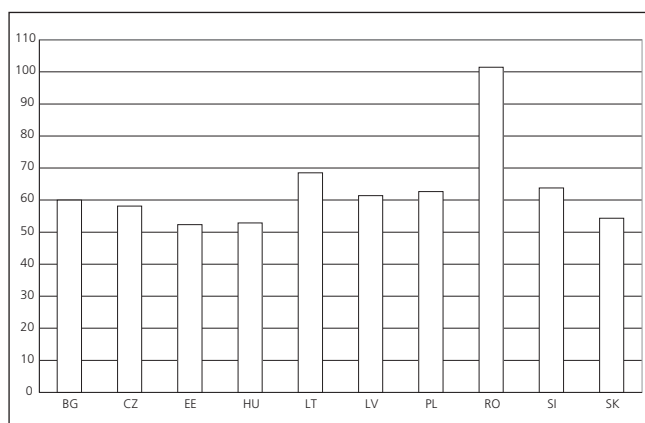
The simplest measure of the relative balance of a structure is its deviation from a uniform distribution in which each of the 14 sectors is assigned the same share of 7.14%. This

Recent labour market trends

does not assume, of course, that such a distribution represents a “properly” balanced economy. The sum of absolute differences merely provides a clearly defined standard of comparison.

Taking the sum of deviations from the uniform distribution, Romania has the most imbalanced economic structure in terms of NACE 1-digit sectors (Graph 3). This is mainly due to the dominance of agriculture, which here even surpasses manufacturing as the biggest employer. The only other sizable sector is trade & repair, while of the remaining sectors five only account for 3–4, and the smallest six for a mere 1–2% of the employed.

Graph 3: Deviations of national sectoral structures from uniform distribution, 2000



A second country with slightly more structural deviations than the CEC-10 average is Lithuania. In this case, there are four fairly large sectors, two with a share of about 18.5% (manufacturing and agriculture), and two between 12–14% (education and trade & repair), four with intermediate shares of 5–7%, while the last five with individual shares under 3% together account for only 8.5% of total employment.

In all other countries, the deviation from the uniform distribution already remains below the CEC-10 average, moderately in a first group including Slovenia, Poland, Latvia, Bulgaria and the Czech Republic, distinctly in a second group including Slovakia, Hungary and Estonia.

Very similar patterns are exhibited by Slovenia and the Czech Republic. Both have one dominant sector (manufacturing) and two of clearly above average size (trade & repair and agriculture in Slovenia, trade & repair and construction in the Czech Republic), eight intermediate sectors with shares of 3.8–6.7% in Slovenia, respectively 3.4–7.9% in the Czech Republic, and three very small sectors of about 2% or less. In fact, except for a reversal in size between the agricultural and construction sectors, the sectoral distribution of employment in these two countries is practically the same.

Certain similarities also exist between Poland and Bulgaria. Though their main sector is not as big as in Slovenia or the

Czech Republic, the top three sectors also account for more than half of the total national employment. The only difference between Poland and Bulgaria in this respect is that, in the former, agriculture joins manufacturing as the major employer, while it only plays a secondary role together with trade & repair in the latter. In both Poland and Bulgaria, these sectors are followed by a group with intermediate shares between 5–7.5% and a group with small shares between 1–3.5%, which in either case consist of the same sectors, with one exception: hotels & restaurants, with 5% in Bulgaria in the intermediate group, in Poland finds itself with 1.7% at the bottom of the list.

Latvia also resembles Bulgaria with regard to its three largest sectors, though the employment in manufacturing is not as pronounced. With education, transport & communication and public administration, the three next biggest employers are the same, too, but with shares between 8–9% their size is markedly greater. The remaining sectors then fall into two groups within ranges of 5–6 and 0.2–2%.

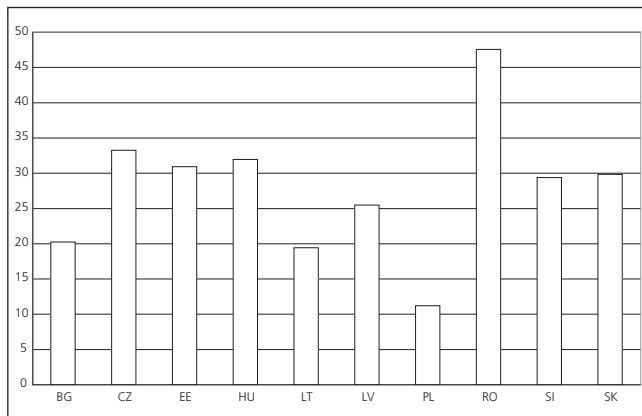
Of the three countries with the lowest deviation from the uniform distribution, Slovakia and Hungary display almost identical patterns with one dominant sector (manufacturing), one further sizable one (trade & repair), two intermediate groups and three very small sectors, which all have the same members. The only difference between the two countries is the range of employment shares in the lower intermediate group, which lies between 3.5–5.4% in Hungary, but only between 3.0–4.1% in Slovakia, being compensated there by slightly higher shares of some sectors in the first intermediate group.

Estonia also has a dominant manufacturing sector, but other than Hungary and Slovakia a third sizable sector in transport & communication with an employment share of over 10%. There is a large intermediate group of sectors with employment shares between 4.4–7.8%, which differs from the two intermediate groups in Slovakia and Hungary inasmuch as public administration and real estate & business have exchanged their positions. The four smallest sectors are again the same in all three countries.

In sum, with the exception of Romania, the CECs are characterized by a moderate imbalance of their national economies as measured by the deviation from a uniform distribution, with many similarities and only few discrepancies in the size and position of individual sectors.

However, a similar degree of internal balance in two or more countries does not necessarily mean that they possess the same economic structure. This can only be determined in a country-by-country and sector-by-sector comparison of employment shares, the simplest measure used here again yielding the sum of absolute differences. But instead of looking at all of the 45 possible pairs of countries, the analysis will focus on comparing each country with the CEC-10 average (Graph 4).

Graph 4: **Difference of national sectoral structures from CEC-10 average, 2000**



As one might have expected, Romania turns out to exhibit the most dissimilar structure compared with the CEC-10 average. This is the result of an oversized agricultural sector and commensurate deficits in all others, with two exceptions. The employment share of mining and electricity, gas & water, two sectors of elementary production, still reach the average. In contrast, the remaining eleven sectors all fall clearly short of that mark, sometimes only reaching half the average size.

A fairly high level of structural differences in comparison to the CEC-10 average is found in a group of five countries, including the Czech Republic, Hungary, Estonia, Slovakia and Slovenia, which may be considered as the economically most advanced of the CCs. Their most conspicuous common characteristic is an agricultural employment of 12–16% below the CEC-10 average.

In the Czech Republic, the non-agricultural sectors can be divided into two groups, a first with about average shares of employment, and a second of distinctly above average size. The latter includes particularly manufacturing and construction in absolute terms and real estate & business as well as hotels & restaurants in relative terms.

The non-agricultural structure of Hungary, in contrast, is characterized by moderately above average shares of employment in all other sectors except the two with elementary production, mining and electricity, gas & water, which remain below that level or just reach it. Of the larger sectors, only real estate & business stands out with the highest relative difference compared to the CEC-10.

The last statement applies even more in the case of Estonia, where this sector accounts for double the average employment. With transport & communication and other community, social & personal services, this country has only two other particularly strong non-agricultural sectors, while the deviations of the rest stay within fairly limited bounds.

Although producing about the same overall results as for the three preceding countries, the comparison of the economic structure of Slovakia and Slovenia with that of the

CEC-10 shows a quite different and more differentiated picture. Thus, Slovakia is characterized by a particularly strong manufacturing sector and generally high employment shares in the state services of public administration, education and health. Apart from these, only construction and transport & communication stand out as non-agricultural sectors with above average size.

In Slovenia, manufacturing is the only conspicuous sector with the greatest absolute deviation outside agriculture in any country, but all other secondary activities account for less than the corresponding average employment. While the comparative size of the public and private services sectors (L-Q) exhibits only minor differences with the CEC-10, the other services are generally more pronounced, particularly hotels & restaurants and real estate & business.

Latvia occupies an intermediate position in the overall comparison with the CEC-10 economic structure. The employment in agriculture has not been reduced as much as in the previous group of countries, but the shares of manufacturing and mining fall to the lowest levels of all. Differences in the opposite direction are found in the public and private services (with the exception of health) as well as in trade & repair, transport & communication, and real estate & business. The comparison for the remaining sectors yields deviations within half a percentage point.

Of the three countries with the least structural differences compared to the CEC-10 average, Bulgaria still has an agricultural sector of about the same size as Latvia. In eight sectors, the difference in employment shares is lower than 1 percentage point, and only manufacturing, trade & repair, and particularly hotels & restaurants with more than double the CEC-10 average are clearly greater in size.

In Lithuania, the share of agriculture remains only a little behind the CEC-10 average, while the structure of its secondary activities is practically the same as in Latvia, especially as far as the undersized mining and manufacturing sectors are concerned. The most conspicuous feature of the Lithuanian economy is its oversized education sector (+5.5%). Only two other sectors, trade & repair and health, are larger by more than 1 percentage point compared to the CEC-10 average, with the rest staying minimally above or below that mark.

The lowest overall structural difference for Poland, finally, may in part be due to the fact that this country, being the biggest of the CECs, also has the greatest impact on the respective sectoral averages. Nevertheless, there are some notable deviations. Thus, agricultural employment is about at the same level as in Lithuania, and there are similar tendencies in manufacturing (–1.7%) and trade & repair (+1.6%), though less pronounced. Despite their size and diminutive difference from the CEC-10 average, two of the small sectors, mining and finance & insurance, also are remarkable in Poland inasmuch as they reach their highest employment shares in this country.

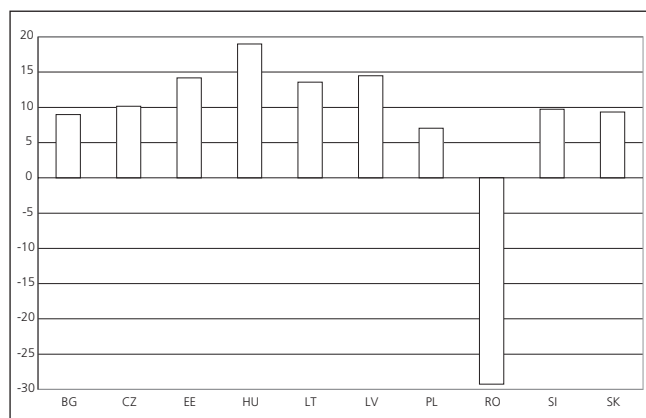
Sectoral employment trends

The distribution and variation of employment by sector, the similarities and differences in the structure of national economies can also be seen from the perspective of actual or potential growth. In this light, both the above average size of a declining sector and the below average size of an expanding one would have to be considered as unfavourable, while the reverse combinations would warrant a favourable outlook.

Based on comparisons with the EU and the USA as well as on developments within the CECs themselves, it will be assumed for the purposes of this analysis that the employment prospects are negative or at best stagnant for agriculture, mining, manufacturing, electricity, gas & water, construction, transport & communication, and public administration, but positive for trade & repair, hotels & restaurants, finance & insurance, real estate & business, education, health, and other community, social & personal services. To arrive at an overall directional measure of structural differences between the individual countries, for all sectors the respective CEC-10 average is subtracted from the national sectoral share, with the results being multiplied by -1 for the first group (negative prospects) and $+1$ for the second group (positive prospects) and then summed for each country.

In interpreting the results (Graph 5), two things should be kept in mind. Although the directions of sectoral development is largely determined by the structure and trends of Western countries, it still is the CEC-10 average which serves as the standard of reference. In other words, the figures for the individual countries only represent their position relative to each other, the reference to EU or US shares of employment would lower the level of all values by 40–60 points. Moreover, the present level of results for all countries except Lithuania, Latvia and Poland basically reflects the comparison in the agricultural sector, while the directional deviations in the remaining sectors more or less cancel each other out.

Graph 5: **Directional deviations of national sectoral structures from CEC-10 average, 2000**



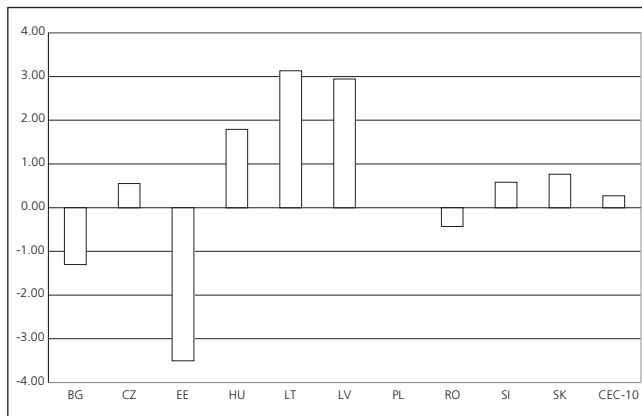
Despite these reservations, the sum of directional deviations from the CEC-10 average shows that the sectoral employment in Romania is the farthest away from a modern economic structure. All other countries not only come out on the positive side, but also fall within a fairly narrow range, with Poland still clearly second to last, Bulgaria, Slovakia, Slovenia and the Czech Republic forming an intermediate group, which is surpassed only by the three Baltic States on the next higher level and Hungary at the top position. The highest balance of $+19.0$ percentage points in this country is the combined result of three separate trends. Of the sectors with negative employment prospects, agriculture and mining already are smaller in Hungary than the CEC-10 average ($-15.0 * -1$ and $-1.0 * -1$, respectively), while manufacturing ($+2.8 * -1$), electricity, water & gas ($+0.1 * -1$), construction ($+0.5 * -1$), transport & communication ($+1.7 * -1$) and public administration ($+1.4 * -1$) are still larger. All the sectors with positive prospects are larger in Hungary than the CEC-10 average, thus contributing only positive values for trade & repair ($+2.0 * +1$), hotels & restaurants ($+1.3 * +1$), finance & insurance ($+0.4 * +1$), real estate & business ($+1.9 * +1$), education ($+1.7 * +1$), health ($+1.1 * +1$) and other services ($+1.0 * +1$).

To see whether or not the CEC economies move in the right direction, the sectoral distribution of employment in 2000 was compared with the preceding year. In general, the total amount of structural change within each country, again measured by the sum of absolute differences, remained fairly limited with values between 3.5–6.5 percentage points, with only the Baltic States Latvia (7.5), Lithuania (8.6) and particularly Estonia (14.2) exhibiting greater shifts.

Certainly, some of these differences will at least partly be due to sampling error, but it should be noted that of the 17 major changes (difference > 1.0), 16 occur in the four largest sectors of the respective countries. The only exception is a decrease of agricultural employment in Estonia (-1.8 percentage points), where this sector only ranked sixth in size in 2000, but this development matches similar reductions in the other Baltic States (-3.0 in Lithuania and -2.8 in Latvia).

On balance, however, most of these developments have gone in the right direction toward the structure of a modern economy, as the sum of directional changes between 1999 and 2000 makes evident (Graph 6). Only three of nine CECs (due to the lack of sectoral employment data in 1999, no analysis was possible for Poland) present a negative balance: Estonia, Bulgaria and Romania. In the last two cases, this is largely attributable to the counter-trend increase in agricultural employment. In the former case, however, the great number and extent of changes in opposite directions give reason to suspect some methodological problems, though the two biggest deviations – the reduction of agricultural employment and the growth in manufacturing – are in line with similar developments in the other two Baltic States.

Graph 6: **Directional changes of national sectoral structures, 2000–1999**



The next three countries – the Czech Republic, Slovenia and Slovakia – already have a positive balance, without any single sector standing out with a more conspicuous change. This is also true for Hungary, which together with Lithuania and Latvia took the greatest steps in the direction of a modern economy. In the two Baltic States, in contrast, this development is basically due to their reduction of agricultural employment, which by itself could account for the positive balance in these countries, with all other sectoral developments cancelling each other out.

In conclusion, it might be pointed out that this division of countries into three groups according to the direction of structural changes between 1999 and 2000 widely corresponds with the ranking according to the sum of directional deviations of their year 2000 economic structure from the CEC-10 average, with only Estonia dropping out from among the Baltic States to the bottom position, and Bulgaria descending from the intermediate to a lower level. In other words, the more advanced a country's economic structure was in the year 2000, the greater generally also were the steps it took since 1999 to further this development.

Qualification levels of the employed

The quality of a country's work force, often also referred to as its human capital, can be measured in various ways, including the attained level of general education, types of vocational training, skill levels or occupation. Unfortunately, the LFS in most CECs presently provides data only on educational attainment and occupation. The question to be answered in this context is whether the employed in individual economic sectors differ in these respects.

Because of the peculiarities and variation of national education systems, the attained level of general education is only classified here in three categories, less than upper secondary (1), upper secondary (2), and tertiary (3), from which the weighted average is then computed per sector and country.

The results should be taken with some caution, however. On the one hand, differences between countries may be

due to a different structure of the national education systems or to different coding practices. On the other hand, similar values may not really mean the same, because the range of values varies from country to country, and even within a country, identical sectoral averages can be based on quite different distributions by educational level.

Except for Lithuania and Estonia, where the employed have a clearly higher average educational level (2.37 and 2.23, respectively), and Romania, where this is clearly lower (1.79), the values for all other countries lie within a fairly narrow band from 1.99–2.09 above the CEC-10 average (1.98). At the same time, the range of sectoral values within each country varies considerably from a minimum between 1.90–2.36 in the Czech Republic to a maximum between 1.40–2.60 in Bulgaria. Since the main interest here is in the relative position of sectors, the differences in national levels and ranges have been eliminated by expressing the sectoral values as deviations from the country average divided by the national range.

The results show practically the same pattern in all CECs, so Graph 7 only presents the range of values for each sector, using the same symbol for all countries and marking the CEC-10 average with a longer bar.

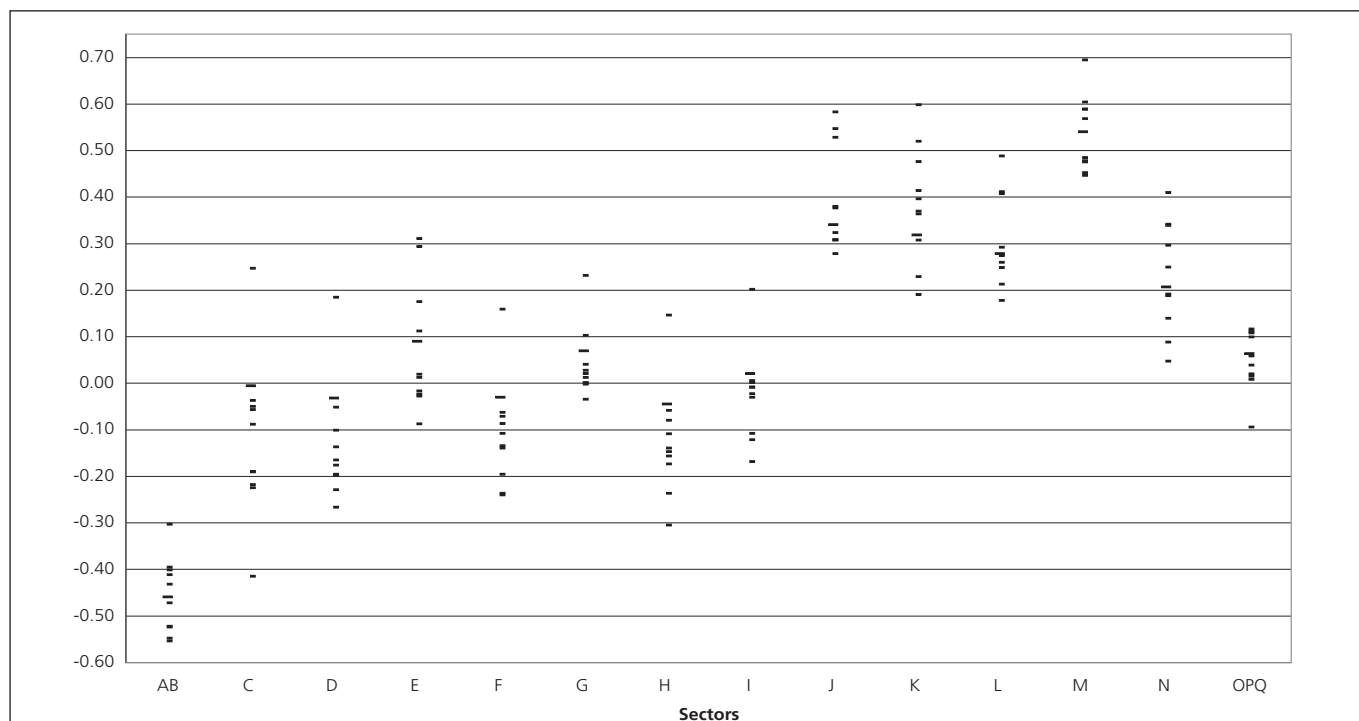
In every country, the employed in agriculture have the lowest, those in education the highest level of education (or just miss the respective rank). The remaining sectors fall into three groups. The first with a slightly below average level of education includes mining, manufacturing, construction, and hotels & restaurants. The second with a slightly above average level of education includes electricity, gas & water, trade & repair, transport & communication, and other community, social & personal services. The third group with clearly above average levels of education includes finance & insurance, real estate & business, public administration, and health. In this context, it should be noted that Romania represents a special case inasmuch as here only agriculture has a below average level of education, while all other sectors stay clearly above. As a consequence, this country has the highest deviation values in most of these sectors except in electricity, gas & water, education, health, and other community, social & personal services, in all of which it ranks second.

Obviously, the educational level of sectors does not always match with their employment perspective. Thus, the employed in the hotels & restaurants sector, which has good prospects for the future, possess a below average education, while those in electricity, gas & water and transport & communication, both sectors with negative expectations, are on a slightly above average level. Only the high educational level in public administration is readily explainable by the nature of that sector, as are its dim employment prospects in the light of efforts to reduce state expenditures.

Like with respect to education, the original information on occupation, which in the national LFSs is coded on the 2-

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Graph 7: *Deviations of sectoral educational levels from national averages, 2000*

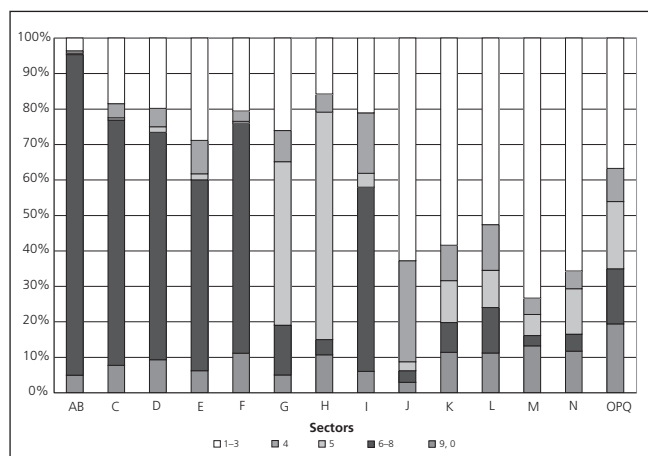


digit level of ISCO, had to be reduced to five groups (as proposed in "Employment in Europe", 1999, p. 96):

- high-skilled non-manual: managers, professionals and technicians,
- medium-skilled non-manual: clerks and office workers,
- lower skilled non-manual: sales and service workers,
- skilled manual: agricultural workers, crafts and related workers and plant and machine operators,
- unskilled manual: elementary workers (also incl. armed forces).

In general, the sectoral distributions by occupations in each country do not vary greatly from the corresponding CEC-10 averages (Graph 8). In most countries the high-skilled non-manual and the skilled manual occupations account for

Graph 8: *Sectors by occupational groups, CEC-10 average, 2000*



about the same share of the employed, with a clear advantage of the latter only in Romania (43.5 vs. 18.1%) and Poland (43.2 vs. 29.9%), which in both cases is basically due to the large agricultural employment. The individual sectors, however, exhibit various characteristic distribution patterns usually dominated by one of these two groups with shares over 50%, with three exceptions. Skilled manual occupations rank first in all primary and secondary sectors as well as in transport & communication. High-skilled non-manual occupations dominate in all service sectors except the first and last three. Trade & repair and hotels & restaurants have mostly lower skilled non-manual staff (and transport & communication mostly skilled manual), while the residual group of other community, social & personal services seems to consist of an occupational mix, in which the high-skilled non-manual still make up the largest fraction, though.

The dominance of skilled manual occupations is most pronounced in agriculture, and here particularly in Poland and Romania with shares of almost 95%. Somewhat lower shares in the other countries are usually compensated by the unskilled manual, but Slovakia and the Czech Republic also have a sizable high-skilled non-manual group.

In the other sectors dominated by skilled manual occupations, their share lies either in the 60%-range (mining, manufacturing and construction) or around 50% (electricity, gas & water and transport & communication). It should be noted that in all of these sectors the high-skilled non-manual occupations account for 20% or more of the employed, indicating the basic need for managerial or qualified technical staff. There are three cases in which the occupa-

tional structure of a country deviates fundamentally from the respective CEC-10 average in one of these sectors. In Lithuania, the unskilled manual constitute the largest group in mining, while both in Estonia and Slovenia the high-skilled non-manual occupations account for practically the same share in electricity, gas & water.

In the two sectors with a dominance of lower skilled non-manual occupations, this is more pronounced in hotels & restaurants with shares in the 60%-range than in trade & repair with shares in the 40%-range. Again, there is a sizable group of high-skilled non-manual employed in both of these sectors, but particularly in trade & repair. Deviant distributions here are exhibited by Latvia in trade & repair, where the high-skilled non-manual group reaches about the same size, and Estonia in hotels & restaurants, where the unskilled manual make up 25% of the work force.

In the five sectors with dominantly high-skilled non-manual occupations, the respective shares vary around 70 (education), 60 (health, finance & insurance, and real estate & business) and 50% (public administration). In the first two of these, all other occupations have comparable shares, in the last two, only the lowest non-manual and manual occupations play a moderate role. Finance & insurance is the only sector where semi-skilled occupations take second rank with about a quarter of the employed, the next highest share being achieved by them in transport & communication. In the residual service sector, the high-skilled non-manual occupations still represent the largest group of employed with 30–40%, but the other occupational groups also have shares of about 10–20% each.

Exceptional deviations to be noted in national occupational structures here concern Estonia, where the high-skilled non-manual group reaches its highest share anywhere with 82.5% in finance & insurance, Romania, where the dominant group in the CECs as a whole is replaced in both public administration (by skilled manual) and other community, social & personal services (by unskilled manual), and Bulgaria and Hungary, where members of the armed forces account for about $\frac{1}{6}$ of all employed in public administration (but are included in the unskilled manual).

Their occupational structure also further specifies the relation between qualification and the employment outlook in the different sectors. All sectors with dominantly skilled manual occupations have negative prospects, all with dominantly high-skilled non-manual occupations (with the noted exception of public administration) positive ones. The three sectors with a dominance of lower skilled non-manual occupations or a mixed structure, finally, can expect future growth because they are prepared to fulfil the demand for certain types of services.

Sectoral employment by age

The basic parameters for the age structure of the employed in a country are set by the age distribution of its population, upon which then the age-specific labour force participation

rates (and their constituent parts, the employment and unemployment rates) operate, which in turn depend on such factors as the duration of school enrolment at the lower and retirement regulations or practices at the upper end of working life. As a consequence of all of these influences, the average age of the employed varies from country to country, though the differences stay within a fairly narrow range of ± 1 year (Bulgaria and Slovakia, respectively) around the CEC-10 average of 39.4 (simply computed from the shares of the 10-year age groups between 15–64 and assumed group averages of 20, 30, 40, 50 and 60).

Since the main interest in this context is not in the overall national differences, but rather in possible variation between sectors both within the CECs as a whole and in individual countries, Graph 9 again only shows the range of values for each sector expressed as deviations from the corresponding country or CEC averages, using the same symbol for all countries and marking the CEC-10 average with a longer bar.

As was the case for both education and occupation, the average age of the employed differs considerably from sector to sector with little variation in the basic pattern between countries. There are four sectors (agriculture, electricity, gas & water, education and health) with clearly above average age, six (mining, construction, transport & communication, real estate & business, public administration, and other community, social & personal services) within half a year of the average, two (manufacturing and finance & insurance) already more than one year below that mark, while the last two (trade & repair and hotels & restaurants) possess a markedly younger work force.

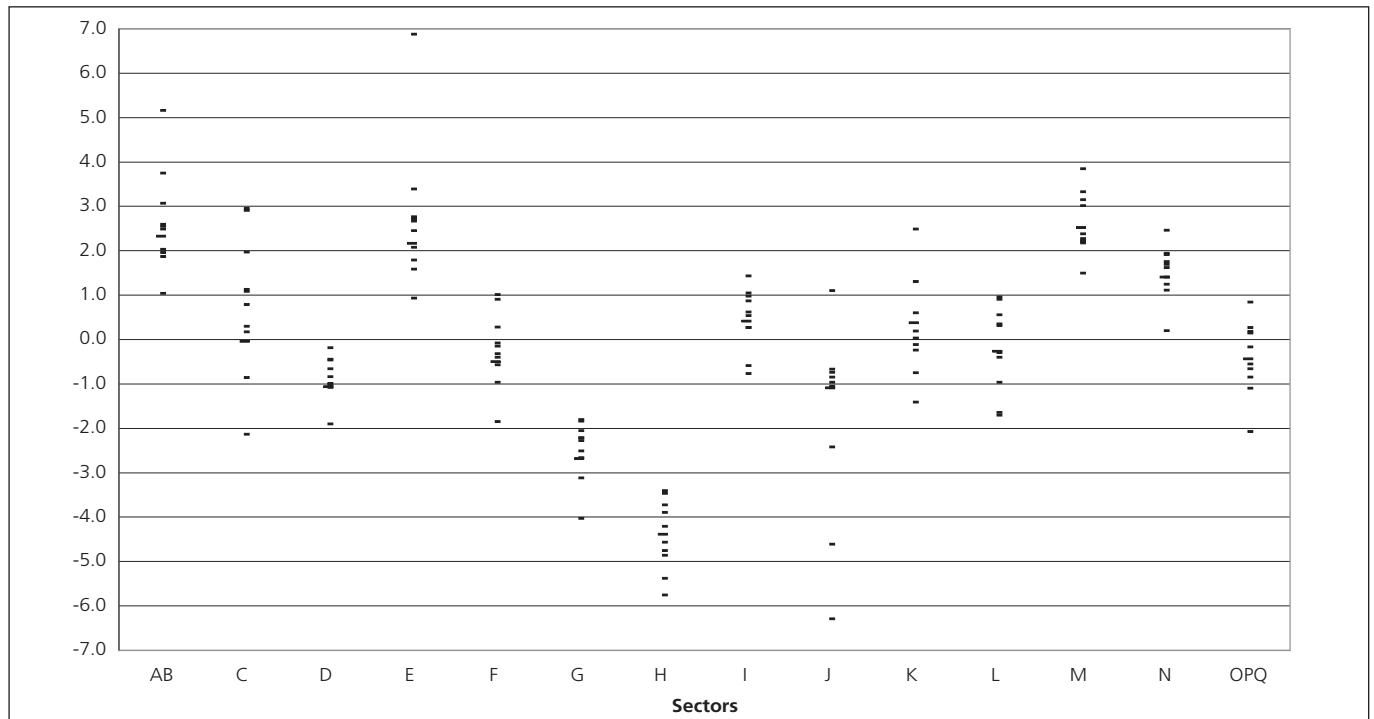
It should be noted in this context that the extreme values in the individual sectoral ranges are supplied mostly by Romania (negative deviations only) or one of the Baltic States. In the former case this again is a consequence of the dominantly agricultural employment, in the latter it must be assumed that the sampling error may play a certain role, particularly because the extremes are found at both ends of the spectrum.

A closer inspection of the sectoral age distributions points to the possible reasons for the observed differences. Thus, the high average age in agriculture is mainly due to the continued employment of older persons (55–64 years). Education is the only other sector where their share is above the CEC-10 average, but the high average in this sector is largely the result of educational entrance requirements which reduce the shares of employed in the two lowest age groups. A similar age distribution, though probably for different reasons, also is found in the electricity, gas & water and health sectors.

The very low average of employed in trade & repair and hotels & restaurants, in contrast, seems to have its origin in the occupational structure of these sectors, with generally lower skill levels allowing younger persons in the age groups

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Graph 9: *Deviations of sectoral age levels from national averages, 2000*



15–24 and 25–34 to take up jobs here at disproportionate rates. The lower age in manufacturing and construction, however, is due exclusively to deficits in the highest age group, which may be an effect of the physical nature of work in these sectors.

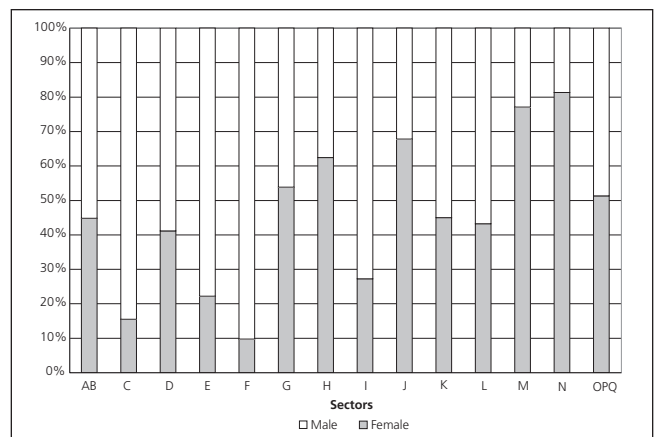
In the remaining sectors, various combinations of these factors (educational requirements, occupational structure, type of work) seem to operate, possibly supplemented by retirement regulations and practices, which then produce reduced shares either at the top or the bottom end of the age spectrum, yielding corresponding average age levels. As a consequence, there is no systematic relation between the sectors' age structure and their employment prospects.

Gender differences in sectoral employment

The majority of the employed in the CECs are male (54.1%), and this sex ratio is more or less similar in all countries except the Baltic States, where the gender difference is less than half as big in Latvia and Estonia or even slightly reversed (49.9 vs. 50.1%) in Lithuania. The shares of males and females vary considerably, however, across sectors, while within a given sector there usually is little variation over countries, so that Graph 10 could again be limited to the respective CEC-10 values.

On the one hand, employment is most dominantly male in construction and mining (90–85%), still strongly so in electricity, gas & water and transport & communication (78–73%), and least in manufacturing, public administration, agriculture and real estate & business (59–55%). On the other hand, sectoral employment is most dominantly

Graph 10: *Sectors by sex, CEC-10 average, 2000*



female in health and education (81–77%), moderately so in finance & insurance and hotels & restaurants (67–62%), and least in trade & repair and other community, social & personal services (54–51%).

There are only two sectors with a notable variation of gender differences over countries, agriculture and public administration. While in agriculture males account for more than 50% of the employed in all countries, their share in the two countries with the largest agricultural sectors, Romania and Poland, is only 50.7 and 56.1%. In contrast, the countries with the smallest agricultural sectors, the Czech Republic, Hungary and Slovakia, exhibit the largest male shares (67.9, 76.9 and 71.2%, respectively). In public administration, the gender difference reaches a maximum in Romania (68.0 vs. 32.0%) and Bulgaria (63.3 vs. 36.7%),

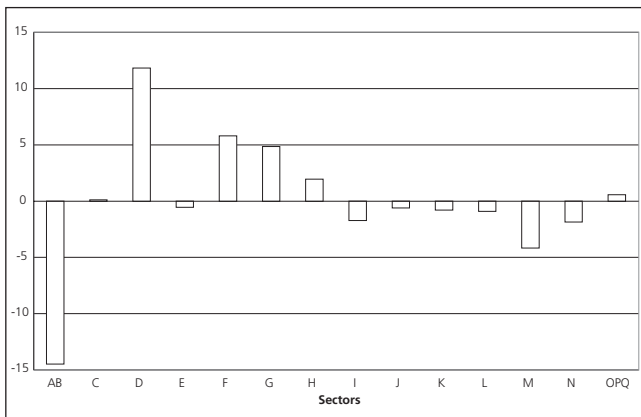
but is erased or even reversed in Slovenia (50.0 vs. 50.0%), Slovakia (49.0 vs. 51.0%) and Estonia (44.9 vs. 55.1%).

The most remarkable observation to be made in this context, however, concerns the relation between sectoral gender differences and employment prospects. All sectors with a negative perspective are predominantly male, while all predominantly female sectors have a positive perspective. The only departure from this pattern is found in real estate & business, which – though male dominated – can nevertheless expect future employment growth.

Previous economic activity of unemployed

The past and current development of a sector also is reflected in the number of unemployed who lost their last job in it. For sectors with a positive employment perspective, the share of unemployed from it may be expected to be smaller than that of its currently employed, while in the opposite case this relation should be reversed. Graph 11 therefore shows the difference between the sectoral shares of unemployed and employed.

Graph 11: *Difference of sectoral shares, unemployed-employed, CEC-10 average, 2000*



The results of this comparison are again presented only for the CEC-10 as a whole because the variations across countries are rather limited and rarely in opposite directions, with two exceptions. In both mining and other community, social & personal services, the share of unemployed is higher than that of the employed in half of the countries and lower in the other. In the former case, these oscillations may be due to the small size of the sector, in the latter case, it is interesting to note that in all countries with lower unemployment shares this sector already is bigger than on the CEC-10 average. In all other sectors, there are either no or maximally two countries with a difference running counter the overall trend, but even these mostly of minor proportions.

The biggest difference between the shares of unemployed and employed is found in agriculture, because persons in this sector, particularly if they work as self-employed or contributing family members, are less likely to lose their job.

The biggest positive differences are found in the two large industrial sectors, manufacturing and construction, but the two service sectors with predominantly lower skilled occupations, trade & repair and hotels & restaurants, also exhibit sizable tendencies in the same direction.

Comparatively low unemployment shares can be registered for the three largely state-controlled sectors of education, health and public administration, but also in transport & communication and to a lesser degree in the two commercially oriented sectors with predominantly high-skilled occupations, finance & insurance and real estate & business.

In sum, it must be stated, however, that the results of this comparison do not always coincide with the employment prospects of individual sectors, perhaps because the risk of losing one's job and the chances of finding a new one depend at least in part on factors which are not fully reflected in current sectoral unemployment shares.

Sectoral structure and characteristics

Employment by sectors, 1999 and 2000 (by order of average size 2000)						
1999	BG	CZ	EE	HU	LT	LV
agriculture	10.9	5.3	8.8	7.0	21.4	17.2
manufacturing	24.9	27.7	20.9	24.6	17.5	17.4
trade & repair	14.5	13.7	14.5	13.9	13.8	14.4
education	7.6	6.0	8.9	8.3	10.2	8.8
construction	6.1	9.4	6.5	6.7	6.5	6.1
transport & communication	7.1	7.8	8.9	8.1	6.5	8.5
public administration	7.1	6.3	6.4	6.8	5.2	7.5
health	6.1	5.6	5.7	6.4	6.5	5.5
real estate & business	3.1	5.4	6.6	4.7	3.1	4.0
other services	3.3	3.8	4.8	4.6	4.2	5.0
hotels & restaurants	4.7	3.4	2.1	3.7	1.7	2.1
electricity, gas & water	1.9	1.7	3.0	2.3	2.3	2.2
finance & insurance	1.1	2.1	1.4	2.1	1.0	1.3
mining	1.6	1.7	1.4	0.7	.	.
Total (1000)	2961	4713	615	3785	1613	998
2000	BG	CZ	EE	HU	LT	LV
agriculture	13.2	5.2	7.0	6.5	18.4	14.4
manufacturing	23.5	27.4	23.0	24.2	18.6	18.5
trade & repair	14.1	12.9	12.8	14.5	13.7	15.3
education	7.4	6.4	7.8	8.2	12.1	9.0
construction	5.9	9.4	7.8	7.0	5.9	6.0
transport & communication	7.5	7.9	10.4	8.1	6.8	8.5
public administration	6.8	6.6	5.6	7.0	5.4	7.8
health	5.8	6.1	4.8	6.5	6.6	5.0
real estate & business	3.2	5.7	6.8	5.4	2.8	4.9
other services	3.1	3.7	5.7	4.4	3.9	4.7
hotels & restaurants	5.0	3.4	3.0	3.5	1.8	2.3
electricity, gas & water	2.0	1.6	2.1	2.0	2.6	2.1
finance & insurance	1.1	2.0	1.5	2.2	1.0	1.2
mining	1.5	1.6	1.7	0.6	(0.3)	.
Total (1000)	2857	4671	604	3807	1525	968
Sectors by average educational level, CEC-10, 2000						
Sector	AB	C	D	E	F	G
CEC-10	1.54	1.97	1.95	2.07	1.95	2.05
Sectors by occupational structure, CEC-10, 2000						
Sector	AB	C	D	E	F	G
high-skilled non-manual	3.6	18.5	19.8	28.9	20.6	26.1
medium-skilled non-manual	0.7	4.0	5.2	9.4	2.9	8.8
lower skilled non-manual	0.4	0.6	1.6	1.7	0.5	46.1
skilled manual	90.4	69.2	64.0	53.8	64.9	14.0
unskilled manual	4.9	7.7	9.3	6.2	11.1	5.0
Sectors by average age, CEC-10, 2000						
Sector	AB	C	D	E	F	G
CEC-10	41.8	39.4	38.4	41.6	38.9	36.8
Sectors by sex, CEC-10, 2000						
Sector	AB	C	D	E	F	G
Female	44.8	15.5	41.1	22.2	9.7	53.8
Male	55.2	84.5	58.9	77.8	90.3	46.2
Unemployed and employed by sector of (previous) economic activity, CEC-10, 2000						
Sector	AB	C	D	E	F	G
unemployed	7.0	1.6	33.3	1.3	12.2	17.2
employed	21.5	1.5	21.4	1.9	6.5	12.4

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PL	RO	SI	SK	CEC-10	1999			
	44.0	10.8	7.2	22.7	agriculture			
	19.6	31.1	25.7	22.8	manufacturing			
	8.3	12.3	12.4	11.6	trade & repair			
	4.0	6.7	7.8	6.2	education			
	3.6	5.1	9.0	6.0	construction			
	4.4	6.0	7.8	6.4	transport & communication			
	3.7	5.5	7.1	5.5	public administration			
	3.1	5.1	7.3	4.9	health			
	1.4	5.5	3.7	3.3	real estate & business			
	2.2	4.1	3.5	3.3	other services			
	1.1	3.8	3.1	2.5	hotels & restaurants			
	2.1	0.9	2.4	2.1	electricity, gas & water			
	0.8	2.3	1.7	1.4	finance & insurance			
	1.7	0.7	1.4	1.4	mining			
	11022	886	2128	28721	Total (1000)			
PL	RO	SI	SK	CEC-10	2000			
	18.7	9.6	6.9	21.5	agriculture			
	19.8	30.3	25.8	21.4	manufacturing			
	14.0	13.4	12.5	12.4	trade & repair			
	6.9	6.4	7.8	6.5	education			
	7.4	5.4	8.0	6.5	construction			
	6.2	6.7	8.2	6.5	transport & communication			
	5.3	6.0	7.7	5.5	public administration			
	6.5	5.2	7.0	5.4	health			
	3.5	4.8	4.1	3.4	real estate & business			
	3.6	3.9	3.7	3.4	other services			
	1.7	3.8	3.0	2.2	hotels & restaurants			
	1.8	1.1	2.2	1.9	electricity, gas & water			
	2.5	2.4	1.8	1.8	finance & insurance			
	2.1	0.8	1.2	1.5	mining			
	14518	888	2083	42818	Total (1000)			
H	I	J	K	L	M	N	OPQ	All
1.94	2.00	2.31	2.29	2.25	2.50	2.18	2.04	1.98
H	I	J	K	L	M	N	OPQ	All
15.8	21.1	62.8	58.5	52.7	73.4	65.7	36.7	28.5
5.1	17.0	28.5	10.0	12.9	4.6	5.0	9.4	6.7
64.1	3.9	2.5	11.8	10.5	6.0	12.8	18.9	11.0
4.3	51.9	3.3	8.4	12.8	2.9	4.8	15.5	45.3
10.7	6.0	2.9	11.4	11.2	13.2	11.7	19.4	8.5
H	I	J	K	L	M	N	OPQ	All
35.0	39.8	38.3	39.8	39.2	42.0	40.8	39.0	39.4
H	I	J	K	L	M	N	OPQ	All
62.4	27.2	67.8	45.0	43.2	77.1	81.3	51.3	45.9
37.6	72.8	32.2	55.0	56.8	22.9	18.7	48.7	54.1
H	I	J	K	L	M	N	OPQ	All (1000)
4.2	4.7	1.2	2.6	4.6	2.4	3.6	3.9	3599
2.2	6.5	1.8	3.4	5.5	6.5	5.4	3.4	42818

Regional labour markets

In issue 1/2001 of this publication, the regional employment structure of ten Central European countries was analysed by the broad sectors agriculture, industry and services, elaborating certain basic patterns. Many regions are marked by a high share of agricultural employment. This applies above all to Poland, Romania and the Baltic States Lithuania and Latvia. The majority of regions in the Czech Republic and some regions in Slovakia, Hungary and Poland have an above average industrial share. Only the regions around Prague, Budapest and Sofia can be characterized as service centres, in which employment is concentrated in the tertiary sector. In the remaining regions it was not possible to determine a dominant sector in the employment structure.

The sectoral structure of the economy also is related to other indicators of regional labour markets. Thus, it was found that the proportion of self-employed is high in areas where agriculture has a dominant influence on employment. The employment rates of the older generation (55–64) also are positively correlated with the size of the agricultural sector, while the unemployment rate tends to be below average. On the one hand, agriculture offers opportunities for economic activity, on the other, high employment of older persons and contributing family members leads to lower unemployment by increasing its reference group.

The service centres around the capitals possess favourable labour market indicators. The employment rates are high and, correspondingly, unemployment is low.

The regions with high industrial employment did not present a uniform picture. While most of the regions in the Czech Republic and the industrial regions in Hungary are characterized by low unemployment, two regions in the Czech Republic and the industrial regions in Slovakia and Poland are battling with above average unemployment.

The mixed regions exhibited few typical common traits. The conjecture was that due to the size of the agricultural

sector, which in some cases still is considerable, and lower industrial employment they have a strong share of state administration and develop little economic dynamics.

This overall assessment needs to be specified. Therefore the employment structures in the industrial and service sectors will be further differentiated. The prevalence of certain economic activities can give an indication regarding the position of regions within the current division of labour in the national production, existing sector-specific know-how or regional competitive advantages. A high share of old industries with declining production could call attention to existing or imminent structural problems. It also can be examined if there is a basis for modern, viable services. It is not intended, however, to evaluate the regions in terms of their development potential, nor could this be accomplished using just a few labour market indicators. Instead, the regional employment structures will be described and peculiarities noted using LFS data of the CEC-10 from the second quarter 2000.

The regional classification includes 53 statistical units in the ten countries which correspond to the NUTS2-level of the European Union. Six countries are sub-classified by regions: Bulgaria, the Czech Republic, Hungary, Poland, Romania and Slovakia. Four countries are classified as a whole as forming a level-2 unit: Estonia, Lithuania, Latvia and Slovenia.

The differentiation of the employment structure in industry and services is based on the NACE classification used in the LFS. NACE distinguishes between 17 sectors (A–Q) and 60 sub-sectors (cf. Box in section “Recent labour market trends”). Some of these sectors and most of the sub-sectors have such low shares in the regions that they fall short of the LFS reliability limits. A differentiation by nine groups, some of which combine several sectors, seems to be sufficient, however, to compare the structures. In contrast, the manufacturing sector includes 23 2-digit sub-sectors so that a sub-classification was advisable here (see Box).

Combination of economic sectors			Combination of sub-sectors in manufacturing		
No.	Description	NACE 1	No.	Description	NACE 2
1	Agriculture and Fishing	A, B	1	Food, Tobacco	15–16
2	Electricity, gas & water, Mining & quarrying	C, E	2	Textiles, Wearing apparel, Leather	17–19
3	Manufacturing	D	3	Coke & petroleum products, Chemicals, Rubber & plastics	23–25
4	Construction	F	4	Metals, Metal products	27–28
5	Trade & repair, Hotels & restaurants	G, H	5	Machinery, Motor vehicles, Other transport equipment	29; 34–35
6	Transport & communication	I	6	Office machinery & computers, Electrical machinery, Radio television & communication equipment, Medical, precision & optical instruments, watches & clocks	30–33
7	Finance & insurance, Real estate & business	J, K	7	Wood, Paper, Publishing & printing, Other non-metallic products, Furniture, Recycling	20–22; 26; 36; 37
8	Public administration	L			
9	Other Services	M–Q			



Main sectors of industrial employment

Table 1 in the section annex therefore shows the employment shares of the regions by nine combined sectors. The shares of the three broad sectors are displayed as subtotals. In addition, the main sub-sector of employment within the manufacturing sector is given for each region. A table with a complete differentiation by sub-sectors is not possible.

The broad industrial sector consists of the sectors "mining & quarrying" (NACE sector C), "manufacturing" (D), "electricity, gas & water supply" (E) and "construction" (F). The sectors C and E, which stand in a supplementary relation to each other as producers of primary raw materials and energy have been combined here.

Graph 1 gives an impression of the relative size of the three industrial sectors and the importance of industry in the regions. As expected, manufacturing is the sector with the largest share of employment in industry. The employment shares vary across regions between 34.1% (CZ07) and 10.6% in Prague (CZ01). The main sub-sectors of production within manufacturing will have to be commented on later.

On the CEC-10 average, 3.4% of the employed work in the primary production of energy and raw materials (Sectors C+E). Seven regions stand out by having an above average employment of more than 5%. The highest share of this sector is registered in the mining district Slaskie (PLOC) with 15.9% of the employed. In Dolnoslaskie (PL01) the share amounts to 5.5%. In the Czech Republic, the production centers lie in Ostravsko (CZ08) with 8% and Severozapad (CZ04) with 6.9%. In Bulgaria, this sector employs 7.2% in the North-West region (BG03). In both South-West and

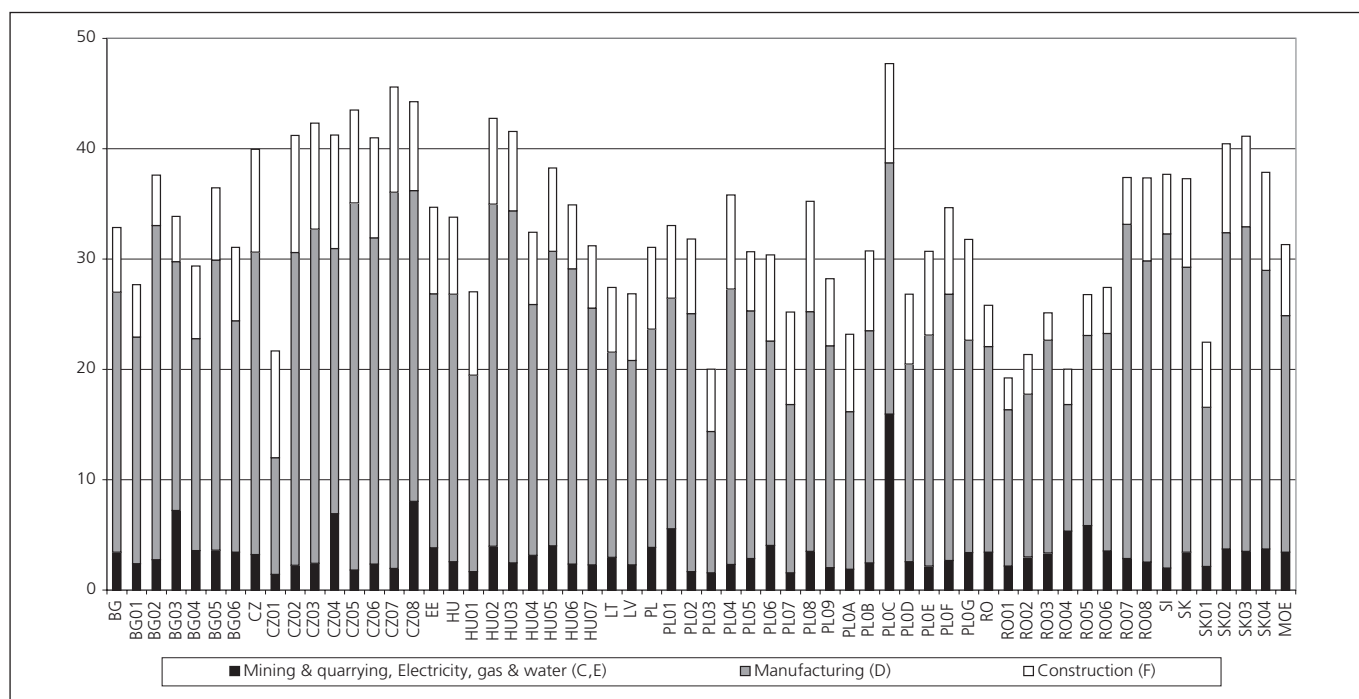
West Romania, 5.5% of the employed work in mining & quarrying or the production of energy. While Slaskie and the regions in the Czech Republic are characterized by a relatively high industrial employment, the other regions offer fewer industrial jobs or are predominantly agricultural, so that the sector assumes a greater weight within industry.

On the CEC-10 average, 6.5% of the employed work in the construction sector. The shares vary across regions between 10.6% (CZ02) and 2.5% (RO03). In the Czech Republic and Slovakia this sector is consistently bigger than in Bulgaria and Romania. In general, the employment in construction tends to be the greater, the smaller the share of agricultural employment is.

Given the fact that manufacturing is the main sector of industrial employment in all regions, it now will be attempted to take a look at regional differences within this sector. The dominant sub-sectors of production in each region given in Table 1 are identified according to the classification shown in the Box. It can be assumed that the complexity of production, the necessary technical standard and the qualification requirements tend to increase with the order in which the combined sub-sectors are listed. The residual group, however, is hard to place. This description of main sectors is not possible for Poland due to the fact that the sectors are not coded on the NACE 2-digit level.

The main sub-sectors are not identified according to their employment share in the region, but according to their relative position within manufacturing. In other words, the analysis is not carried out under the perspective of employment shares in the region, but refers to the type of specialization within manufacturing.

Graph 1: **Shares of industrial employment by sectors (NACE), 2000**



In three regions (BG01, HU07, LV), the manufacture of food and tobacco represents the main sector of production within manufacturing. In Latvia, about two thirds of the employed in manufacturing are found in this sub-sector, so that it might be called a pronounced monostructure. In North-East Bulgaria and Del-Alföld, one quarter of the employed in manufacturing are found in this sub-sector. In addition, food production (NACE 15) taken by itself is the largest sub-sector on the NACE 2-digit level in four regions of Bulgaria, five regions of Hungary, in Lithuania and one region of Slovakia.

The production of textiles, clothing and leather is the largest manufacturing sub-sector in 15 regions. Four of these regions are located in Bulgaria, three in Hungary, four in Romania, one in Slovakia. In addition, this economic activity dominates in Estonia, Lithuania and Slovenia. In these regions these sub-sectors account for one fifth to one quarter of the employment within manufacturing.

The consumption-oriented manufacturing sub-sectors "food" and "textiles & clothing" are mainly found in regions with a high employment share in agriculture or in mixed regions without a pronounced profile.

The regions South-East Bulgaria (BG04) and Közép-Magyarország (HU01) around Budapest employ the greatest number of workers in the production of chemical and related products in the sub-sectors coke, petroleum refining, chemical industry, rubber and plastics (NACE 23–25).

The manufacture of basic metals and metal products (NACE 27–28) are the main sub-sectors in six regions (CZ04, CZ08, HU05, RO02, SK03, SK04). In Ostravsko (CZ08), these two sectors account for more than 40% of the employment in manufacturing. The two Czech regions also stand out by their combination of above average employment in mining/energy and metal production.

In ten regions the production is concentrated in the manufacture of machinery and transport vehicles (NACE 29, 34–35). Six of them are located in the Czech Republic (CZ 01–03, 05–07), three in Romania (RO03, 04, 07) and one in Slovakia (SK01).

Chiefly technical machinery and instruments (NACE 30-33) are produced in Közép-Dunántul (HU02). These sub-sectors account for almost one third of the employment in manufacturing.

Apart from the noted dominant activities, other regions also have specialized in areas which only become apparent by looking at the employment in sub-sectors (NACE 2-digit level). Thus, in Prague (CZ01), one fifth of all employed within the very small manufacturing sector work in the sub-sector "publishing & printing" (NACE 22). In Severozapad (CZ04), the manufacture of non-metallic mineral products (NACE 26), in Estonia and Stredne Slovensko (SK03) the manufacture of wood products constitute the biggest sub-sector.

Employment in the service sector

The service sector already is sufficiently differentiated on the NACE 1-digit level. On the one hand, some of the sectors already are so small that a sub-classification reaches the limits of possible disaggregation within the LFS. On the other hand, only a few sectors are further sub-classified. The present analysis will use the combined service sectors described in the Box. The grouping attempts to distinguish between consumption-oriented services (NACE G, H), infrastructure services (I) and business-oriented services (J, K). In addition, public administration (L) is distinguished from general care services (education, health, etc., M-Q).

In issue 1/2001 of this publication, four regions were characterized as service centres with an employment share of more than 60%. This applied to the capital regions around Sofia, Prague, Budapest and Bratislava. In further regions services constituted the largest sector due to the small size of industry and an above average employment in agriculture.

In contrast to the employment in manufacturing, there is no specialization on certain services in the regions. While the ranking of individual sub-sectors in manufacturing by their size varies from region to region, the ranking of service sectors is largely stable. "Trade & repair and hotels & restaurants" (sectors G, H) and the "services of general public care" (M–Q) are the biggest and second biggest sectors in all regions with employment shares of the same magnitude. As a rule, "transport & communication" (I) is the third largest sector, and usually more persons are employed in public administration (L) than in "finance & insurance and real estate & business" (J, K).

Given the different size of the service sector in the regions with an overall employment share between 77.6 and 18.7%, this means that the employment weights of all sectors largely change jointly. In other words, the sectors stand in a complementary relation to each other. The bigger the broad service sector in a region, the bigger are the employment shares of the individual sectors, correlating highly with the overall size. The deviations from this basic pattern tend to be small.

The employment share of "trade & repair and hotels & restaurants" (G, H) varies from 22.7 to 5.7%. The sector is largest in the regions around Sofia (BG06), Prague (CZ01), Budapest (HU01), Constanzia (BG04) and Bucharest (RO08). In five regions of Romania its share lies under 10%.

Between 10.4 and 2.6% of the employed are working in services for "transport & communication" (I). This sector has its biggest share in Estonia, followed by the regions Prague, Constanzia, Pomorskie (PLOB) and Bucharest. Again, the lowest shares for this sector are found in five regions of Romania and one in Poland.

The range of employment shares in the business-oriented services "finance & insurance and real estate & business" (J, K) is particularly wide, extending from 17.5 to less than 1%.

Regional labour markets

Here employment is clearly concentrated in the capital regions and service centres Prague (CZ01), Bratislava (SK01) and Budapest (HU01). The seven regions in Romania with agricultural character offer less than 2.5% employment in this sector.

Between 10.4 and 2.1% of the employed work in the area of “public administration, defence, social security” (L). Bratislava (SK01), Zachodniopomorskie (PLOG), Sofia (BG04) and Bukarest (RO08) possess the highest employment shares, North-East and South-West Romania (RO01, RO04) and Slaskie (PLOC) the lowest.

The “other services” (M–Q) including education and health account for 22.9 to 6.4% of the employed. Again, the three service centres around the capitals find themselves at the top. Bratislava (SK01), Lithuania, the regions Eszak-Alföld (HU06), Budapest (HU01) and Del-Dunantul (HU04) as well as Prague (CZ01) offer about 20% of their jobs in this sector. And again, the regions of Romania are found at the end of the list.

Service density

The multiple appearance of individual regions with overproportional employment in several service sectors as well as other regions with underproportional employment confirms the complementary relation between the services noted above. Graph 2 compares the employment shares in the consumption- and business-oriented services (G–K) with those of public administration and general care (L–Q).

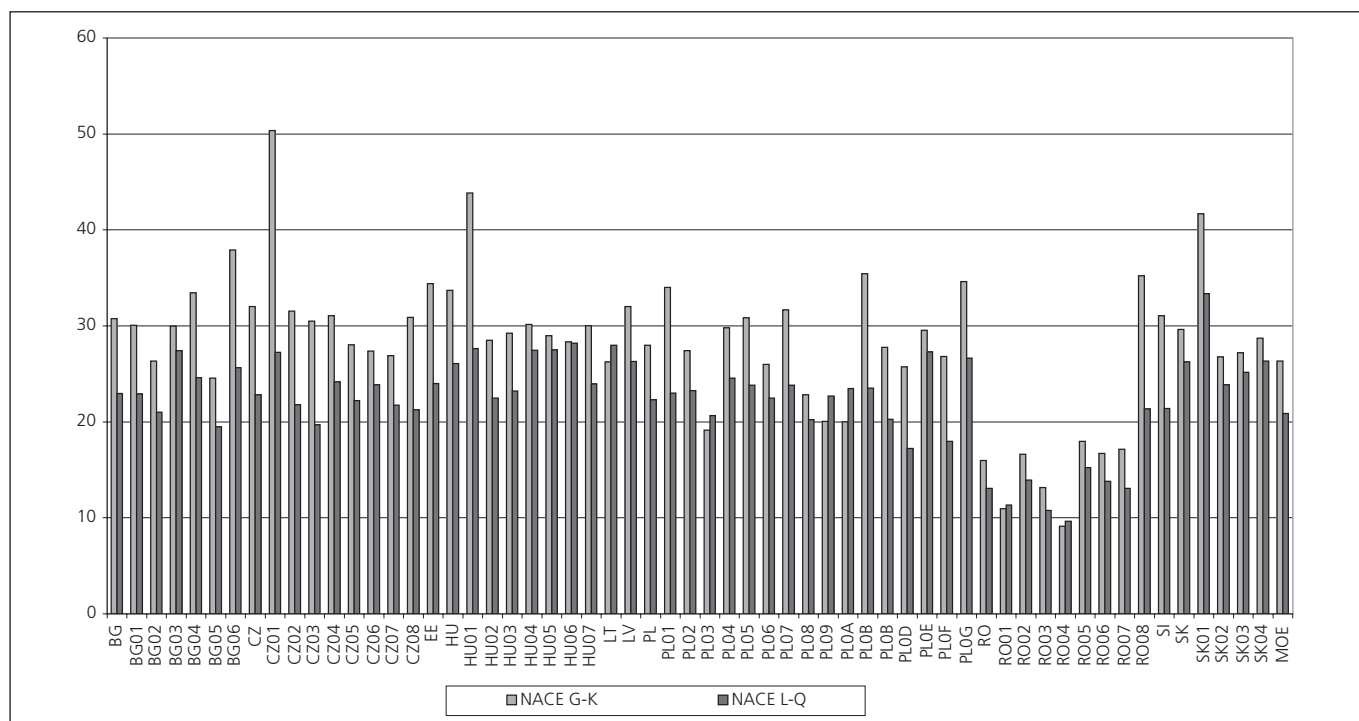
Since the size of the service sector, of course, also depends on the size of agriculture and industry and the agricultural

regions are characterized by higher labour force participation, the importance of services could be underestimated due to the high activity rates of the rural population. By applying the concept of service density one can measure the availability of services for the population independently from the influences of labour force participation.

On the one hand, it has been noted that the reform countries in Central Europe continue to have a voluminous public administration from the time of planned economies. On the other hand, it is assumed that there is a deficit of private services, both in the consumption-oriented area and particularly in the services for enterprises. Based on the regional employment in the five sectors specified above one can derive density figures for the provision of services to the population. These density figures are computed as the number of employed in an economic sector per 1000 inhabitants. Especially for public administration and the services of general care as well as the consumption-oriented services, this figure is a measure for the degree to which the population is provided with essential services. For the infrastructure services and the business-oriented services, the density figure may carry less weight because their provision is not directly related to population size. But the density figures also make for a better comparability between regions because these indicators are not influenced by the relative size of other sectors in the region.

The greatest service density is exhibited by the Czech Republic and Estonia with about 250 employed per 1000 inhabitants (cf. Table 2 in the section annex). In Slovenia and Latvia the provision of services is only a little lower with 235/1000. Romania only has a density of 141 on the

Graph 2: **Employment shares of market-oriented and public services, 2000**



country average. The service centres of the capital regions Budapest, Bratislava and Prague reach concentrations between 300 and 400 per 1000 inhabitants. The regions around Sofia, Bucharest and Warsaw reach service densities between 256 and 235.

The regional provision of services varies across regions by about the factor 4. This also applies to four of the five combined service sectors. However, the service density for the business-oriented services even differs by the factor 22.

Self-employed by economic sectors

The share of the self-employed among the employed indicates to which extent employment is based on one's own capital resources and carried on at one's own risk. As self-employment was often restricted in socialist countries, the share of self-employment shows to which extent reforms towards a market-oriented economy have led to the establishment of private enterprises. Furthermore, the establishment of additional enterprises in economic branches with good perspectives for the future are linked with hopes for new jobs.

In issue 1/2001 of this publication, attention was called to the fact that the level of self-employment is related to the size of the agricultural sector in the CECs. For this issue, we now also have data on the extent of self-employment by sectors which can be used to present a more differentiated picture.

In Graph 3, the self-employment rate (share of self-employed among all employed of the region) is subdivided according to the contribution of the self-employed to the

employment in the three broad economic sectors (also see Table 3 in the section annex). The sectoral contributions are computed as their shares of self-employed in the overall regional employment. Summed up, they yield the self-employment rate.

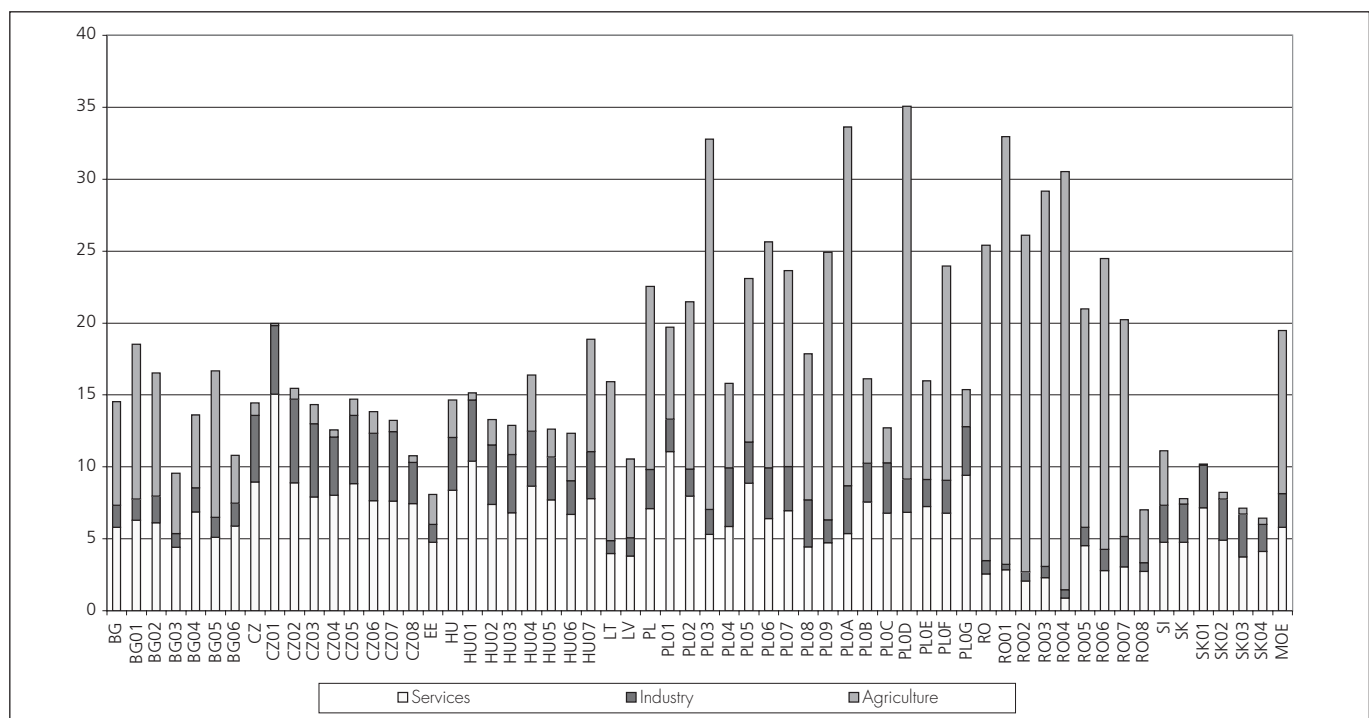
The graph illustrates that the highest self-employment rates in the regions of Poland and Romania are based on agriculture. The major part of the self-employed work in this sector. This also applies to three regions in Bulgaria as well as to Lithuania and Latvia. Thus, the relation between the agricultural character of regions and high self-employment rates is confirmed.

In Romania, more than 20% of the employed work as self-employed in agriculture. In Poland, these are 12.7%, but in three regions their share also lies around 25%. In Lithuania, 11.1% of the employed are self-employed in agriculture. In the Czech Republic and Slovakia, in contrast, the relatively small agricultural sector hardly contributes to self-employment with an average of less than 1%.

The industrial sector generally has few self-employed. Self-employment activities are most widespread in the industrial sector of regions in the Czech Republic with an employment share between 4 and 6%. In Hungary, this group on the average accounts for 3.7% of the total employment. In Bulgaria, the Baltic States and Romania, however, hardly any self-employed are found here. They account for less than 2% of the employed in all regions of these countries.

In all regions, more self-employed work in the service sector than in the industrial sector. Their employment share is particularly high in the Czech Republic with 8.9% and Hungary

Graph 3: **Self-employment rate by contribution of sectors, 2000**



Regional labour markets

with 8.4%. In the regions Prague (CZ01), Dolnoslaskie (PL01) and Budapest (HU01) this share even exceeds 10%.

Unemployed by economic sector of last employment

The CEC regions have quite different unemployment rates between 4.1 and 28% (cf. Regional data and the description in issue 1/2001 of this publication). The most favourable situation is found in the capital regions with a developed service sector, which in each country possess the lowest or at least below average rates. The regions with a pronounced agricultural character also tend to have lower unemployment rates because high self-employment and high activity rates of older persons (above 55 years) lead to high employment.

The question in the present context is to what extent the structural change in the countries has affected the composition of the unemployed. The declining importance of agriculture in the long run, slumps in the industrial sector after market-oriented reforms and the reorganization of state administration have led and still lead to changes in employment which in varying degrees also result in unemployment.

Since the LFS in the CECs also asks the unemployed about the economic activity of their last employment, unemployment can be differentiated by the sector of origin. It should be kept in mind, however, that this information is not available for part of the unemployed, and this not only for first-time job seekers. This is the case if the last employment lies far back in time or the sector of the last employment could not be determined.

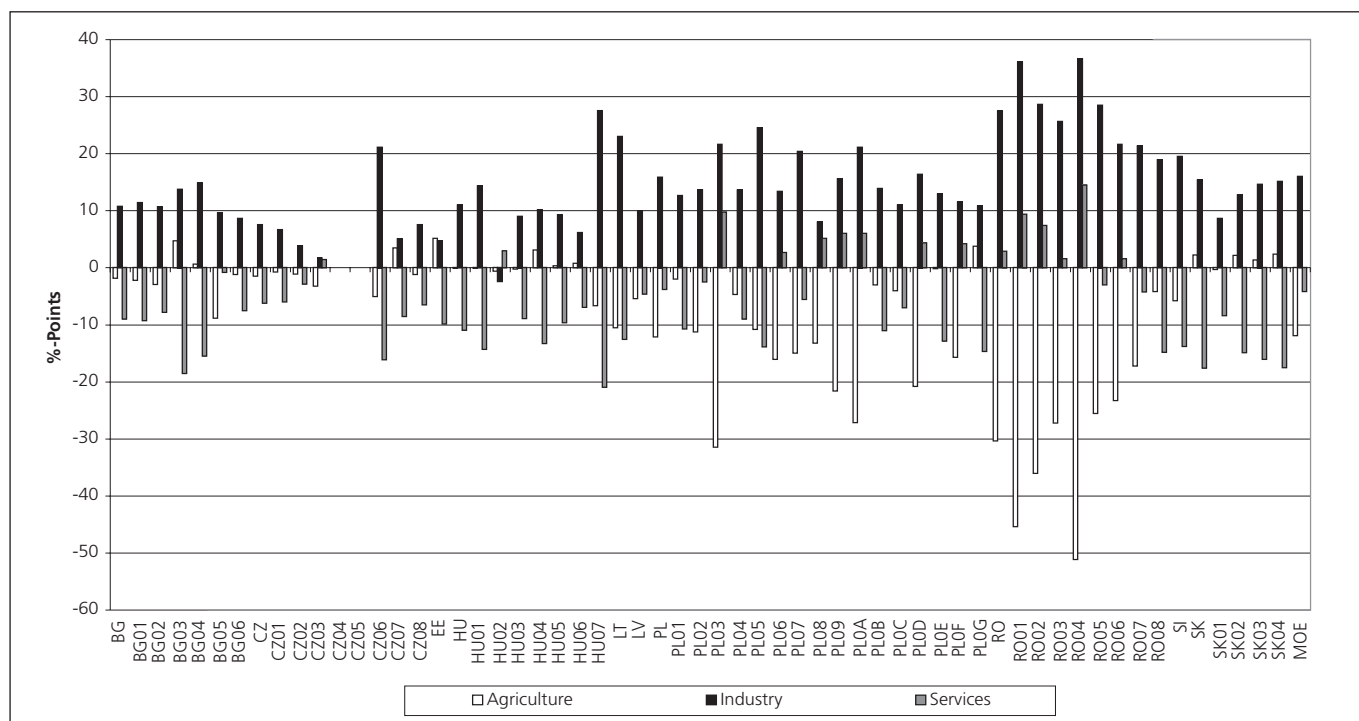
Table 4 in the section annex shows the distribution of unemployed by the sector of their last employment and the respective share of long-term unemployment.

On the CEC average, 4.2% of the unemployed came from agriculture, 29.1% from industry and 26.8% from the service sector. For 39.9% no information was available because the person was a first-time job seeker, so far only worked on occasional jobs or no answer was given. Considering the high youth unemployment in the countries, the high share with missing sector of origin may be quite reasonable. But it was not possible to find a systematic relation between the share of unemployed without sector of origin and the youth unemployment rate.

To determine the sectoral influence on the composition of unemployment one has to take into account the size of the sectors in the regions. This is achieved by comparing the distribution of the unemployed by sectors in the regions with that of the employed. The unemployed without information on their sector of origin are not included. Thus it can be determined if the share of unemployment corresponds with the share of sectoral employment. The deviations show whether a sector has released its work force into unemployment to a greater or lesser extent. Graph 4 shows the results of the structural comparison.

On the CEC average, the share of unemployed from agriculture is almost 12 percentage points lower than the sectoral employment share. To a lesser degree this also applies to services where the deviation is 4 percentage points. In contrast, the share of unemployed who were previously employed in industry exceeds the employment

Graph 4: *Deviations between the structure of unemployment and employment by sectors, 2000*



share by 16 percentage points. On the CEC average, the unemployed thus come overproportionally from industry and underproportionally from agriculture and services.

It is a common trait of all regions that unemployment is dominated by persons who previously worked in industry. This tendency is the strongest in Romania, Lithuania and some regions of Poland. In Bulgaria, the Czech Republic (with the exception of the region Jihovýchod, CZ06), Estonia and Hungary, unemployment is distributed more in proportion to the sectoral structure. In Bulgaria, the Czech Republic, Estonia, Hungary and Slovakia, the share of unemployed from agriculture largely corresponded with the employment share. In these countries, overproportional unemployment after working in industry goes along with underproportional unemployment after working in services.

Thus it is the agricultural sector in Poland and Romania which determines the CEC average on the basis of the country weights. In these countries, agriculture is largely characterized by the work of self-employed and contributing family members who with that status hardly can become unemployed.

Long-term-unemployment by sector of origin

Almost half of the unemployment in the CECs is accounted for by persons who have lost their last job more than 12 months ago and are looking for work. This share varies across regions between 25 and 77%. There is a clearly noticeable relation to the level of unemployment. It there-

fore can be supposed that the origin from sectors which strongly affect unemployment in the regions also influence the duration of unemployment and thus the share of long-term unemployed. The share of long-term unemployed by their sector of origin also is included in Table 4. However, due to the generally low unemployment in agriculture the figures of long-term unemployed from this sector for many regions are too small to be reliable, so that only data on the country level can be used for this analysis.

In general, long-term unemployment seems to be lower after previous employment in the service sector than after previous employment in industry. In most countries and regions there is an above average share of persons without information. This can be due to special difficulties of first-time job seekers or persons who for a long time only carried out occasional jobs.

In the Czech Republic, Estonia and Poland, one finds above average long-term unemployment among persons previously working in agriculture. In Bulgaria, Hungary and Slovakia, the share of long-term unemployed from agriculture deviates only little from the average, in Romania and Lithuania it is distinctly below average.

Long-term unemployment among persons previously working in industry largely corresponds with the average share.

On the whole, it is hard to detect any systematic relation in the differences between sectors of origin within each region.

Regional labour markets

Table 1: *Distribution of employment by combined sectors*

Code	Country/Region	NACE sec. Employed (in 1000)	A, B Agriculture, Fishery	C-F Industry	C, E Mining & quarrying, Electricity, gas & water	D Manufacturing	F Construction	G-Q Services	G, H Trade & repair, Hotels & restaurants
BG	Bulgaria	2872	13.2	32.8	3.4	23.5	5.9	54.0	19.1
BG01	North-East	449	19.3	27.7	2.4	20.5	4.7	53.1	18.7
BG02	North Central	417	15.0	37.6	2.7	30.3	4.6	47.4	16.6
BG03	North-West	154	8.7	33.9	7.2	22.5	(4.1)	57.4	17.8
BG04	South-East	257	12.6	29.3	(3.6)	19.2	6.6	58.0	19.7
BG05	South Central	736	19.0	36.4	3.6	26.3	6.5	44.6	16.4
BG06	South-West	859	5.2	31.0	3.4	21.0	6.6	63.7	22.8
CZ	Czech Republic	4675	5.2	39.9	3.2	27.4	9.4	54.8	16.4
CZ01	Praha	607	0.7	21.7	1.4	10.6	9.7	77.7	22.6
CZ02	Stredni Cechy	515	5.6	41.2	2.2	28.3	10.6	53.2	15.9
CZ03	Jihozapad	560	7.5	42.3	2.4	30.3	9.6	50.2	17.5
CZ04	Severozapad	484	3.6	41.2	6.9	24.0	10.3	55.2	14.0
CZ05	Severovýchod	689	6.2	43.5	1.8	33.3	8.4	50.3	14.9
CZ06	Jihovýchod	757	7.8	41.0	2.3	29.6	9.1	51.2	14.3
CZ07	Stredni Morava	538	5.8	45.6	2.0	34.1	9.5	48.6	15.1
CZ08	Ostravsko	525	3.5	44.2	8.0	28.2	8.0	52.3	16.7
EE	Estonia	604	7.0	34.7	3.8	23.0	7.8	58.3	15.7
HU	Hungary	3807	6.5	33.8	2.6	24.2	7.0	59.8	18.0
HU01	Közep-Magyarország	1180	1.5	27.0	1.6	17.8	7.6	71.4	21.2
HU02	Közep-Dunántul	449	6.4	42.7	4.0	31.0	7.8	50.9	15.3
HU03	Nyugat-Dunántul	423	6.1	41.5	2.4	31.9	7.2	52.4	17.0
HU04	Del-Dunántul	349	10.0	32.4	3.1	22.7	6.6	57.6	18.2
HU05	Eszak-Magyarország	417	5.3	38.3	4.0	26.7	7.6	56.4	15.7
HU06	Eszak-Alföld	491	8.6	34.9	2.4	26.8	5.8	56.5	15.2
HU07	Del-Alföld	497	14.9	31.2	2.3	23.3	5.6	53.9	18.1
LT	Lithuania	1525	18.4	27.4	2.9	18.6	5.9	54.2	15.5
LV	Latvia	976	14.4	26.8	2.3	18.5	6.0	58.7	17.6
PL	Poland	14518	18.7	31.1	3.9	19.8	7.4	50.3	15.7
PL01	Dolnoslaskie	972	10.1	33.0	5.5	20.9	6.6	56.9	18.7
PL02	Kujawsko-Pomorskie	785	17.6	31.8	(1.7)	23.4	6.7	50.6	16.8
PL03	Lubelskie	997	40.2	20.0	(1.5)	12.8	5.7	39.8	10.6
PL04	Lubuskie	359	9.9	35.8	(2.3)	25.0	8.5	54.3	15.4
PL05	Lodzkie	1202	14.7	30.6	2.8	22.5	5.4	54.6	17.5
PL06	Malopolskie	1350	21.2	30.4	4.0	18.5	7.8	48.4	15.7
PL07	Mazowieckie	2109	19.4	25.2	1.5	15.3	8.4	55.5	15.9
PL08	Opolskie	418	21.8	35.2	(3.5)	21.7	10.0	43.0	12.4
PL09	Podkarpackie	808	29.1	28.2	(2.0)	20.1	6.1	42.7	13.0
PL0A	Podlaskie	452	33.4	23.2	(1.9)	14.3	7.0	43.4	10.4
PL0B	Pomorskie	672	10.3	30.7	(2.4)	21.0	7.2	59.0	16.7
PL0C	Slaskie	1324	4.3	47.7	15.9	22.8	9.0	48.0	15.6
PL0D	Swietokrzyskie	527	30.3	26.8	(2.5)	17.9	6.3	42.9	14.8
PL0E	Warminsko-Mazurskie	529	12.5	30.7	(2.1)	20.9	7.6	56.8	18.4
PL0F	Wielkopolskie	1434	20.6	34.6	2.7	24.1	7.8	44.8	16.6
PL0G	Zachodniopomorskie	578	7.0	31.8	(3.4)	19.3	9.1	61.2	18.8
RO	Romania	10898	45.2	25.8	3.4	18.6	3.7	29.0	9.4
RO01	Nord-Est	1975	58.5	19.2	2.2	14.1	2.9	22.2	6.8
RO02	Sud-Est	1377	48.2	21.3	3.0	14.8	3.6	30.5	8.7
RO03	Sud	1781	51.0	25.1	3.3	19.3	2.5	23.9	7.5
RO04	Sud-Vest	1324	61.3	20.0	5.3	11.5	3.2	18.7	5.7
RO05	Vest	936	40.1	26.8	5.8	17.2	3.7	33.1	11.7
RO06	Nord-Vest	1343	42.1	27.4	3.5	19.7	4.2	30.5	9.8
RO07	Centru	1188	32.5	37.4	2.8	30.3	4.2	30.1	10.9
RO08	Bucuresti	973	6.1	37.3	2.5	27.3	7.5	56.5	19.2
SI	Slovenia	894	9.6	37.7	2.0	30.3	5.4	52.7	17.2
SK	Slovakia	2083	6.9	37.3	3.4	25.8	8.0	55.8	15.5
SK01	Bratislavsky kraj	311	2.5	22.4	2.1	14.4	5.9	75.1	17.3
SK02	Zapadne Slovensko	731	8.9	40.4	3.7	28.7	8.1	50.6	15.9
SK03	Stredne Slovensko	505	6.5	41.1	3.5	29.4	8.2	52.4	14.6
SK04	Vychodne Slovensko	536	7.2	37.8	3.7	25.2	8.9	55.0	14.8
CEC-10		42851	21.5	31.3	3.4	21.4	6.5	47.2	14.7
Max			61.3	47.7	15.9	34.1	10.6	77.7	22.8
Min			0.7	19.2	1.4	10.6	2.5	18.7	5.7

I	J, K	L	M-Q	Dominant sub-sectors within manufacturing		
				NACE2	Description	Employment share
Transport & communication	Finance & insurance, Real estate & business	Public administration	Other services			
7.5	4.4	6.8	16.3	17-19	Textiles. Wearing apparel. Leather	24.9
7.8	3.6	7.1	15.9	15-16	Food, Tobacco	24.2
7.0	2.8	5.6	15.4	17-19	Textiles, Wearing apparel, Leather	25.2
8.5	(3.7)	7.9	19.5	17-19	Textiles, Wearing apparel, Leather	29.4
10.0	(3.7)	9.0	15.6	23-25	Coke & petroleum products, Chemicals, Rubber & plastics	23.2
5.9	2.5	5.4	14.3	17-19	Textiles, Wearing apparel, Leather	26.3
7.9	7.4	7.6	18.1	17-19	Textiles, Wearing apparel, Leather	25.0
7.9	7.7	6.6	16.2	29; 34-35	Machinery. Motor vehicles. Other transport equipment	19.2
10.2	17.5	7.4	19.9	29; 34-35	Machinery, Motor vehicles, Other transport equipment	23.7
9.2	6.4	6.7	15.0	29; 34-35	Machinery, Motor vehicles, Other transport equipment	24.9
7.0	6.0	7.1	12.6	29; 34-35	Machinery, Motor vehicles, Other transport equipment	19.4
9.8	7.2	7.7	16.5	27-28	Metals, Metal products	15.2
7.0	6.2	6.2	16.1	29; 34-35	Machinery, Motor vehicles, Other transport equipment	19.6
6.1	7.1	7.1	16.8	29; 34-35	Machinery, Motor vehicles, Other transport equipment	18.7
6.5	5.3	5.6	16.1	29; 34-35	Machinery, Motor vehicles, Other transport equipment	18.1
8.7	5.6	5.2	16.1	27-28	Metals, Metal products	41.8
10.4	8.2	5.6	18.4	17-19	Textiles. Wearing apparel. Leather	18.1
8.1	7.6	7.0	19.1	17-19	Textiles. Wearing apparel. Leather	18.0
9.8	12.8	6.9	20.7	23-25	Coke & petroleum products, Chemicals, Rubber & plastics	17.0
7.6	5.5	6.4	16.1	30-33	Office machinery & computers, Electrical machinery, etc.	29.1
6.7	5.5	6.0	17.1	17-19	Textiles, Wearing apparel, Leather	21.5
6.6	5.3	6.9	20.6	17-19	Textiles, Wearing apparel, Leather	24.1
7.8	5.5	8.3	19.2	27-28	Metals, Metal products	19.6
8.1	5.0	7.4	20.8	17-19	Textiles, Wearing apparel, Leather	28.0
7.2	4.7	6.9	17.0	15-16	Food, Tobacco	25.8
6.8	3.9	5.4	22.6	17-19	Textiles, Wearing apparel, Leather	26.9
8.5	6.1	7.8	18.7	15-16	Food, Tobacco	64.4
6.2	6.0	5.3	17.0			
7.3	8.0	5.4	17.5			
6.1	4.4	5.5	17.7			
4.6	4.0	4.9	15.8			
6.9	7.5	7.4	17.1			
5.1	8.2	5.4	18.4			
4.9	5.3	3.7	18.8			
6.9	8.8	6.3	17.6			
5.0	5.4	6.4	13.7			
3.8	3.2	5.2	17.5			
4.6	5.1	5.3	18.1			
9.8	8.9	5.8	17.7			
7.7	4.4	3.3	17.0			
6.2	4.7	4.1	13.1			
6.3	4.9	7.6	19.7			
5.6	4.6	4.3	13.7			
9.0	6.8	9.6	17.0			
4.5	2.1	3.9	9.1	17-19	Textiles, Wearing apparel, Leather	26.1
2.8	1.4	2.1	9.2	17-19	Textiles, Wearing apparel, Leather	34.1
5.6	2.2	4.9	9.0	27-28	Metals, Metal products	30.5
4.2	1.4	3.6	7.2	29; 34-35	Machinery, Motor vehicles, Other transport equipment	26.6
2.6	0.8	3.2	6.4	29; 34-35	Machinery, Motor vehicles, Other transport equipment	26.6
4.1	2.1	4.7	10.5	17-19	Textiles, Wearing apparel, Leather	28.3
4.5	2.4	3.6	10.2	17-19	Textiles, Wearing apparel, Leather	30.4
4.3	1.9	3.5	9.6	29; 34-35	Machinery, Motor vehicles, Other transport equipment	27.8
9.8	6.2	8.3	13.0	17-19	Textiles, Wearing apparel, Leather	28.9
6.7	7.3	6.0	15.5	17-19	Textiles, Wearing apparel, Leather	17.5
8.2	5.9	7.7	18.5	27-28	Metals, Metal products	17.5
9.4	15.0	10.4	22.9	29; 34-35	Machinery, Motor vehicles, Other transport equipment	17.3
7.0	3.9	6.7	17.1	17-19	Textiles, Wearing apparel, Leather	19.0
8.2	4.4	8.2	16.9	27-28	Metals, Metal products	20.1
9.3	4.6	6.9	19.4	27-28	Metals, Metal products	24.0
6.5	5.2	5.5	15.3	17-19	Textiles, Wearing apparel, Leather	20.2
10.4	17.5	10.4	22.9			64.4
2.6	0.8	2.1	6.4			15.2

Sub-sectors on 2-digit level NACE not available for Poland

Regional labour markets

Table 2: *Service density per 1000 inhabitants*

Code	Country/Region	Services total	Trade & repair, Hotels & restaurants	Transport & communication	Finance & insurance, Real estate	Public administration	Other services	Inhabitants per sq. km	Region type
BG	Bulgaria	190	67	26	15	24	57	73	
BG01	North-East	178	63	26	12	24	53	60	AG
BG02	North Central	162	57	24	9	19	53	68	AG
BG03	North-West	151	47	22	10	21	51	68	SM
BG04	South-East	182	62	31	12	28	49	68	SM
BG05	South Central	158	58	21	9	19	51	75	AG
BG06	South-West	256	92	32	30	31	73	96	SC
CZ	Czech Republic	251	75	36	35	30	74	130	
CZ01	Praha	399	116	53	90	38	102	2378	SC
CZ02	Stredni Cechy	248	74	43	30	31	70	100	IN
CZ03	Jihozapad	240	83	34	29	34	60	67	IN
CZ04	Severozapad	238	60	42	31	33	71	130	IN
CZ05	Severovýchod	234	69	32	29	29	75	119	IN
CZ06	Jihovýchod	235	65	28	32	32	77	118	IN
CZ07	Stredni Morava	212	66	28	23	24	70	135	IN
CZ08	Ostravsko	214	69	36	23	21	66	230	IN
EE	Estonia	247	66	44	35	24	78	33	SM
HU	Hungary	229	69	31	29	27	73	107	
HU01	Közep-Magyarország	300	89	41	54	29	87	406	SC
HU02	Közep-Dunantul	208	63	31	23	26	66	97	IN
HU03	Nyugat-Dunantul	228	74	29	24	26	75	87	IN
HU04	Del-Dunantul	209	66	24	19	25	75	68	SM
HU05	Eszak-Magyarország	187	52	26	18	27	64	94	SM
HU06	Eszak-Alföld	184	50	26	16	24	68	85	SM
HU07	Del-Alföld	202	68	27	18	26	64	72	AG
LT	Lithuania	223	64	28	16	22	93	57	AG
LV	Latvia	235	70	34	24	31	75	38	AG
PL	Poland	192	60	24	23	20	65	121	
PL01	Dolnoslaskie	198	65	25	28	19	61	140	SM
PL02	Kujawsko-Pomorskie	186	62	23	16	20	65	119	AG
PL03	Lubelskie	166	44	19	17	20	66	95	AG
PL04	Lubuskie	188	54	24	26	26	59	74	SM
PL05	Lodzkie	222	71	21	33	22	75	162	AG
PL06	Malopolskie	197	64	20	21	15	76	219	AG
PL07	Mazowieckie	233	67	29	37	26	74	141	AG
PL08	Opolskie	168	49	19	21	25	54	114	AG
PL09	Podkarpackie	166	51	15	13	20	68	116	AG
PL0A	Podlaskie	170	41	18	20	21	71	57	AG
PL0B	Pomorskie	207	59	34	31	20	62	105	SM
PL0C	Slaskie	159	52	26	15	11	56	325	IN
PL0D	Swietokrzyskie	164	57	24	18	16	50	118	AG
PL0E	Warmińsko-Mazurskie	198	64	22	17	26	69	63	SM
PL0F	Wielkopolskie	180	67	23	18	17	55	119	AG
PL0G	Zachodniopomorskie	217	67	32	24	34	60	71	SC
RO	Romania	141	46	22	10	19	44	94	
RO01	Nord-Est	115	35	14	7	11	47	104	AG
RO02	Sud-Est	143	41	26	10	23	43	82	AG
RO03	Sud	123	38	22	7	18	37	100	AG
RO04	Sud-Vest	103	32	14	4	18	35	82	AG
RO05	Vest	153	54	19	10	22	49	63	AG
RO06	Nord-Vest	145	47	21	11	17	48	83	AG
RO07	Centru	136	49	19	8	16	43	77	AG
RO08	Bucuresti	246	83	43	27	36	57	1229	SM
SI	Slovenia	236	77	30	32	27	69	98	SM
SK	Slovakia	216	60	32	23	30	72	110	
SK01	Bratislavsky kraj	379	87	48	76	53	116	299	SC
SK02	Zapadne Slovensko	198	62	27	15	26	67	125	IN
SK03	Stredne Slovensko	196	55	31	17	31	63	83	IN
SK04	Vychodne Slovensko	191	51	32	16	24	67	98	SM
CEC-10		195	61	27	22	23	63		
Max		399	116	53	90	53	116		
Min		103	32	14	4	11	35		

Table 3: *Self-employment rate and contribution by sectors*

Code	Country/Region	Self-employment rate	Contribution of sectors		
			Agriculture	Industry	Services
BG	Bulgaria	14.6	7.2	1.5	5.8
BG01	North-East	18.6	10.8	(1.5)	6.3
BG02	North Central	16.6	8.6	(1.8)	6.1
BG03	North-West	9.6	(4.2)	.	(4.4)
BG04	South-East	13.6	5.0	.	6.9
BG05	South Central	16.7	10.2	1.4	5.1
BG06	South-West	10.9	3.3	1.6	5.9
CZ	Czech Republic	14.5	0.9	4.6	8.9
CZ01	Praha	20.0	.	4.8	15.0
CZ02	Stredni Cechy	15.5	0.8	5.8	8.9
CZ03	Jihozapad	14.3	1.3	5.1	7.9
CZ04	Severozapad	12.5	0.5	4.1	8.0
CZ05	Severovýchod	14.7	1.1	4.8	8.8
CZ06	Jihovýchod	13.8	1.5	4.7	7.6
CZ07	Stredni Morava	13.2	0.8	4.8	7.6
CZ08	Ostravsko	10.8	0.5	2.9	7.4
EE	Estonia	8.1	2.1	1.3	4.7
HU	Hungary	14.6	2.6	3.7	8.4
HU01	Közep-Magyarország	15.1	0.5	4.3	10.4
HU02	Közep-Dunantul	13.3	1.8	4.1	7.4
HU03	Nyugat-Dunantul	12.9	2.0	4.1	6.8
HU04	Del-Dunantul	16.4	3.9	3.8	8.6
HU05	Eszak-Magyarország	12.6	1.9	3.0	7.7
HU06	Eszak-Alföld	12.3	3.3	2.3	6.7
HU07	Del-Alföld	18.8	7.8	3.3	7.8
LT	Lithuania	15.9	11.1	0.9	4.0
LV	Latvia	10.5	5.5	1.3	3.8
PL	Poland	22.5	12.7	2.7	7.1
PL01	Dolnoslaskie	19.7	6.4	2.3	11.0
PL02	Kujawsko-Pomorskie	21.5	11.6	(1.9)	7.9
PL03	Lubelskie	32.8	25.8	(1.7)	5.3
PL04	Lubuskie	15.8	5.9	(4.1)	5.8
PL05	Lodzkie	23.1	11.4	2.9	8.9
PL06	Malopolskie	25.6	15.7	3.5	6.4
PL07	Mazowieckie	23.6	13.6	3.1	7.0
PL08	Opolskie	17.9	10.2	(3.3)	(4.4)
PL09	Podkarpackie	24.9	18.6	(1.6)	4.7
PL0A	Podlaskie	33.6	24.9	(3.3)	5.3
PL0B	Pomorskie	16.1	5.9	(2.7)	7.6
PL0C	Slaskie	12.7	2.4	3.5	6.8
PL0D	Swietokrzyskie	35.1	25.9	(2.3)	6.8
PL0E	Warminsko-Mazurskie	16.0	6.9	(1.9)	7.2
PL0F	Wielkopolskie	23.9	14.9	2.3	6.8
PL0G	Zachodniopomorskie	15.4	(2.6)	(3.4)	9.4
RO	Romania	25.4	21.9	0.9	2.6
RO01	Nord-Est	32.9	29.7	0.4	2.8
RO02	Sud-Est	26.1	23.4	0.6	2.1
RO03	Sud	29.2	26.1	0.8	2.3
RO04	Sud-Vest	30.5	29.1	0.6	0.9
RO05	Vest	21.0	15.2	1.3	4.5
RO06	Nord-Vest	24.5	20.2	1.5	2.8
RO07	Centru	20.2	15.1	2.1	3.0
RO08	Bucuresti	7.0	3.7	0.6	2.7
SI	Slovenia	11.2	3.8	2.6	4.7
SK	Slovakia	7.8	0.4	2.7	4.7
SK01	Bratislavsky kraj	10.2	.	3.0	7.1
SK02	Zapadne Slovensko	8.2	0.5	2.8	4.9
SK03	Stredne Slovensko	7.1	.	3.0	3.7
SK04	Vychodne Slovensko	6.4	.	1.9	4.1
CEC-10		19.5	11.3	2.4	5.8
Max		35.1	29.7	5.8	15.0
Min		6.4	0.4	0.4	0.9

Regional labour markets

Table 4: *Unemployment by sector of last employment*

Code	Country/Region	Unemployed (in 1000)	Unemploy- ment rate	Unemployed by sector of origin (%)				Share of long-term unemployed (12+months)				
				Agriculture	Industry	Services	No answer	Total	Agriculture	Industry	Services	No answer
BG	Bulgaria	555	16.4	7.8	32.2	33.3	26.6	58.4	62.9	58.1	49.2	68.9
BG01	North-East	126	22.2	11.5	28.5	32.1	27.9	55.9	(62.3)	51.4	42.6	73.0
BG02	North Central	84	17.1	(7.6)	37.3	30.9	24.1	61.5	.	62.9	52.3	71.8
BG03	North-West	59	28.0	(9.8)	35.8	29.4	25.1	77.0	96.0	78.3	70.0	75.8
BG04	South-East	70	21.7	(8.3)	30.2	29.2	32.3	60.1	.	66.5	(47.3)	67.2
BG05	South Central	109	13.1	(7.0)	34.2	32.5	26.3	54.6	.	51.8	52.4	62.1
BG06	South-West	107	11.1	.	30.0	42.5	24.5	51.3	.	49.4	43.5	66.0
CZ	Czech Republic	448	8.8	(2.1)	26.2	26.5	45.2	49.1	61.7	51.5	42.8	50.0
CZ01	Praha	25	4.1	0.0	23.3	58.8	18.0	28.7	.	21.1	32.3	27.1
CZ02	Stredni Cechy	42	7.6	3.3	33.8	37.7	25.2	51.3	.	51.0	40.4	66.4
CZ03	Jihozapad	36	6.1	.	18.6	21.6	57.9	41.4	.	47.5	23.7	45.5
CZ04	Severozapad	85	15.1	.	.	.	100.0	56.9	.	.	.	.
CZ05	Severovychod	50	6.9	.	.	.	100.0	41.3	.	.	.	.
CZ06	Jihovychod	58	7.2	.	13.1	7.3	79.0	47.1	.	52.0	51.1	46.3
CZ07	Stredni Morava	65	10.9	4.0	22.1	17.4	56.5	47.7	72.1	48.3	47.9	45.8
CZ08	Ostravsko	86	14.2	1.7	38.2	33.6	26.4	56.5	.	59.1	51.3	59.0
EE	Estonia	92	13.5	10.3	33.8	41.0	14.9	47.3	59.3	47.0	42.8	51.7
HU	Hungary	267	6.6	5.1	35.6	38.7	20.6	47.9	50.0	46.6	44.6	55.8
HU01	Közep-Magyarország	68	5.5	.	33.1	45.6	20.1	49.5	.	46.2	51.3	49.9
HU02	Közep-Dunantul	24	5.2	.	34.7	46.2	14.1	42.0	.	(39.8)	39.3	.
HU03	Nyugat-Dunantul	19	4.4	.	39.6	34.1	(21.7)	44.8	.	(53.9)	42.6	.
HU04	Del-Dunantul	30	7.9	(10.5)	34.2	35.6	19.6	46.6	.	49.5	41.4	(57.4)
HU05	Eszak-Magyarország	46	10.0	.	36.5	35.8	23.5	53.3	.	56.5	45.6	61.6
HU06	Eszak-Alföld	53	9.8	(7.3)	32.2	38.8	21.6	48.7	.	43.6	42.8	62.9
HU07	Del-Alföld	26	5.1	.	46.4	26.1	21.2	41.9	.	(35.9)	.	57.5
LT	Lithuania	280	15.9	5.3	40.0	33.3	21.4	52.4	42.6	54.6	46.3	60.1
LV	Latvia	160	14.4	5.0	22.0	32.5	40.6	55.7	.	42.8	35.8	81.8
PL	Poland	2815	16.6	3.0	26.4	26.2	44.4	44.6	55.7	48.0	43.5	42.5
PL01	Dolnoslaskie	285	22.8	4.4	26.1	26.5	43.0	45.7	62.3	58.7	39.4	39.9
PL02	Kujawsko-Pomorskie	173	18.2	3.5	26.9	28.7	40.9	54.4	91.8	54.8	56.9	49.3
PL03	Lubelskie	155	14.1	.	22.1	26.5	48.3	41.0	.	(40.7)	(31.8)	46.5
PL04	Lubuskie	97	21.4	.	29.4	26.7	40.7	30.3	.	(32.6)	(32.7)	28.3
PL05	Lodzkie	231	16.5	.	31.3	23.3	43.7	50.0	.	51.2	44.5	52.4
PL06	Malopolskie	178	12.0	.	22.2	26.1	50.0	42.1	.	(38.0)	(39.7)	45.2
PL07	Mazowieckie	318	13.6	(1.7)	22.8	25.1	50.4	41.3	.	48.4	41.3	37.5
PL08	Opolskie	71	14.9	.	26.0	28.6	40.8	25.3	.	(33.5)	.	21.8
PL09	Podkarpackie	137	15.2	.	24.1	27.1	46.8	51.9	.	(50.9)	(46.3)	54.5
PL0A	Podlaskie	84	16.3	.	22.1	25.0	50.8	53.5	.	(60.7)	(56.7)	48.7
PL0B	Pomorskie	139	17.2	(4.5)	27.2	29.1	39.2	43.7	.	(48.1)	54.5	31.2
PL0C	Slaskie	306	19.0	0.0	31.8	22.1	46.1	37.7	.	47.7	30.2	34.4
PL0D	Swietokrzyskie	107	17.5	.	23.7	26.0	46.7	47.1	.	(42.5)	(52.1)	45.8
PL0E	Warminsko-Mazurskie	153	22.5	(7.6)	27.3	27.5	37.6	49.1	69.8	(46.8)	(41.4)	52.1
PL0F	Wielkopolskie	235	14.3	(2.7)	28.3	29.8	39.2	43.6	.	46.3	44.3	41.7
PL0G	Zachodniopomorskie	145	20.2	(6.1)	24.5	26.9	42.5	53.2	.	(46.7)	68.2	47.6
RO	Romania	816	7.7	5.2	33.4	20.9	40.5	49.2	26.8	51.1	46.7	51.9
RO01	Nord-Est	145	7.9	3.6	32.5	19.6	44.4	53.0	.	54.5	54.7	53.1
RO02	Sud-Est	135	9.8	4.4	34.9	27.5	33.3	40.0	50.3	46.1	34.0	37.2
RO03	Sud	125	7.5	7.7	25.0	13.3	54.0	45.5	.	50.9	46.5	47.5
RO04	Sud-Vest	70	5.8	.	33.5	20.3	44.2	49.0	.	52.6	50.5	45.8
RO05	Vest	77	8.2	6.5	38.6	22.1	32.9	45.0	.	36.9	54.8	52.6
RO06	Nord-Vest	101	7.6	8.5	32.3	21.8	37.3	48.0	.	44.2	37.3	65.4
RO07	Centru	95	7.9	7.1	39.8	18.1	35.0	63.3	42.2	63.1	64.9	67.1
RO08	Bucuresti	69	6.8	.	34.8	26.2	39.0	53.5	.	60.5	44.3	53.3
SI	Slovenia	66	7.1	.	33.3	23.0	42.6	62.7	.	56.7	56.2	70.7
SK	Slovakia	490	19.1	6.1	35.2	25.6	33.0	53.8	52.3	49.0	46.0	65.3
SK01	Bratislavsky kraj	25	7.4	.	23.4	49.8	25.1	29.2	0.0	.	28.8	.
SK02	Zapadne Slovensko	156	17.6	7.5	36.1	24.3	32.1	53.3	36.6	46.0	49.3	68.5
SK03	Stredne Slovensko	134	21.0	5.4	38.6	25.2	30.8	54.4	70.7	51.7	41.6	65.4
SK04	Vychodne Slovensko	175	24.6	6.0	33.5	23.8	36.7	57.3	59.1	51.6	51.7	65.7
CEC-10		5988	12.7	4.2	29.1	26.8	39.9	48.6	50.1	50.1	44.7	50.0
Max			28.0	11.5	46.4	58.8	79.0	77.0	96.0	78.3	70.0	81.8
Min			4.1	0.0	13.1	7.3	14.1	25.3	0.0	21.1	23.0	21.8

Long-term unemployment

The incidence of long-term unemployment can be viewed under personal, political or statistical aspects. In the first place, of course, long-term unemployment is a personal problem. To the individuals affected by it this means being out of work – and possibly also financial support – for an extended period of time, unsuccessful or unable to find a new job, accompanied by a gradual loss of skills and professional experience, which in turn makes them less attractive for potential employers and may lead to the belief that no work is available and thus eventually discourage any further job search attempts.

From the political perspective, long-term unemployment beyond a certain level represents a social problem. Its dimension serves as a basic indicator for a functioning economic system and its ability to integrate a substantial part of the population into the work process, the failure of

which may call for appropriate remedial action.

In statistical terms, long-term unemployment essentially is an analytical problem. The definition and measurement of such a phenomenon inevitably raises questions about the factors and processes determining its development, on the one hand, as well as its prevalence among or effect on specific groups of the labour force, on the other.

Although the weight ascribed to the problem of long-term unemployment ultimately derives from its personal and political implications, they are not the primary subject of discussions in this section. The main concern here is to present statistical evidence on the nature and extent of this phenomenon in the CECs for which data are available. In evaluating this evidence, however, a number of methodological issues should be taken into account (see Box).

Long-term unemployment: methodological issues

The definition of long-term unemployment is quite straightforward, including each person who has been continuously unemployed for 12 months or more. For the sake of simplification it will be assumed here that the person concerned was not employed at any time during this period and always fulfilled the additional unemployment criteria of actively looking for work and being available to start a new job immediately – even though the verification of these conditions is almost impossible in actual practice. The more important methodological issues in this context have to do with the forms of data collection and the reference periods used, the measures computed on that basis and their relation to labour market processes.

In the LFS, the duration of unemployment is determined only for persons who were unemployed during the whole reference week either as the time since they lost their last job or as the time since they started to look for a new one, whichever is shorter. The concept applied is that of the current duration of unemployment. Under this approach, persons classified as employed or inactive in the reference week are not asked about possible periods of previous unemployment, so that the unemployed in the LFS represent a residual group in the labour market process comprising only those without work some time prior to the reference week and still not in a new job by the end of it. As an effect, persons with longer durations are over represented in this group.

In contrast, the concept of completed duration of unemployment includes all persons who at some time during a given reference period (usually one year or more) were unemployed, but then either found a job or exited from the labour market. The application of this concept requires complete work histories which can only be compiled through panel studies, unemployment registration or from social security records, the difficulties here lying in an inaccurate assessment of a person's employment status or incomplete coverage. Under this approach, the resulting distribution generally is shifted markedly in the direction of shorter durations of unemployment because here the persons still unemployed

at the end of the reference period are excluded. A more complete picture of the duration of unemployment therefore would have to combine the two concepts while at the same time distinguishing between the respective groups of people.

Independent of the concept applied, the incidence of long-term unemployment can be measured in absolute terms by simply giving the number of persons affected by it, or relative to the total number of unemployed or the labour force as a whole, yielding the share of long-term unemployed and the long-term unemployment rate, respectively. The share of unemployed by their duration in that status focuses on the internal structure of this group, while the long-term unemployment rate in addition takes into account that the dimension of this phenomenon in different countries, even assuming identical long-term unemployment shares, also depends on their overall unemployment rates. Inasmuch as it simply is the mathematical product of these two factors, however, the long-term unemployment rate provides no new information beyond that already contained in its constituent parts, and the present analysis will therefore mainly focus on them.

Finally, it should be noted that all the measures of unemployment used here, and particularly those of long-term unemployment, refer to stocks at a certain point in time without regard to the type and magnitude of flows which led to them. But it is precisely these processes that determine the basic character of a labour market.

As far as long-term unemployment is concerned, an increase in stock may be due to the fact that the chance of finding a new job diminishes with the duration of unemployment, but it also would occur in the complete absence of flows because in that case all unemployed gradually grow into the long-term status. Conversely, a reduction in long-term unemployment could be effected by actions specifically designed to promote the re-employment of persons with this status, or it may be due to the fact that many of them simply exit from the ranks of the economically active. In sum, the inherent dynamics of long-term unemployment and the variety of underlying flows – though not explicitly covered by present LFSs – will have to be kept in mind in interpreting the available data on this subject.

The scope of long-term unemployment in the CECs

The aim of this section is to first describe the overall extent, structure and development of long-term unemployment in the CECs, followed by a more detailed examination of the personal, social and economic characteristics and relevant behaviour patterns of the individuals concerned. Since the data on these more differentiated aspects are rather incomplete for Albania, Bosnia and Herzegovina, and the Former Yugoslav Republic of Macedonia, this analysis is limited to the ten Candidate Countries in Central Europe (Bulgaria, the Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Romania, Slovenia and Slovakia), here referred to as the CECs or the CEC-10.

In the year 2000, the number of unemployed in the working age population (15–64) of the CECs as a whole amounted to a total of about 6 mill., and 2.9 mill. of these had been looking for a job for 12 months or more. This translates into an overall unemployment rate of 12.7 on the CEC-10 average and a share of long-term unemployed of 48.6% (cf. Graphs 1 and 2; for detailed statistics see Section Annex).

Statistically, the relative incidence of long-term unemployment is the product of two factors, the overall unemploy-

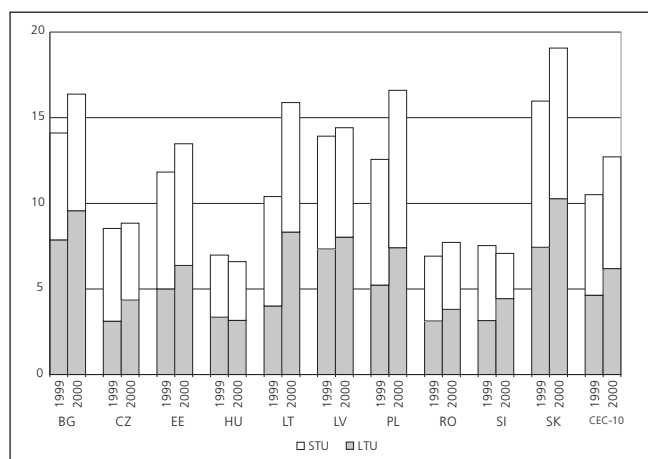
ment rate and the long-term share among all unemployed. In the CECs, the scope of long-term unemployment in the individual countries as measured by that part of the overall unemployment rate accounted for by the long-term unemployed, also referred to as the long-term unemployment rate, at present is almost entirely determined by their overall unemployment rates.

In fact, the rank order of countries by the two measures matches perfectly with two exceptions. Poland, which in the year 2000 had the second highest unemployment rate in the CECs, drops to fifth place in terms of long-term unemployment, while Slovenia, which had the second lowest unemployment, rises to seventh in long-term unemployment, with all other countries in these two shift ranges moving en bloc by one rank up or down.

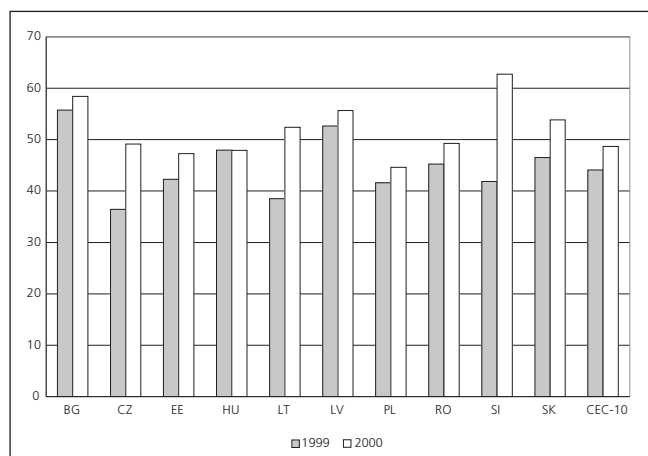
The cause for Poland's and Slovenia's deviation from the common pattern is found in their respective long-term shares among all unemployed, which in the former case is the lowest (44.6%) and in the latter the highest (62.7%) of all CECs. Of the other countries, four have share values between 47.3–49.2% (Estonia, Hungary, the Czech Republic and Romania), four between 52.4–58.4% (Lithuania, Slovakia, Latvia and Bulgaria). In most of these cases, below average unemployment rates go along with below average long-term shares, and above average unemployment rates with above average long-term shares. The only other exception apart from Poland and Slovenia is Estonia, where the comparatively few long-term unemployed find themselves in an overall labour market situation that already belongs to the less favourable even by CEC standards.

In sum, it can be said that of the two factors determining the incidence of long-term unemployment in the CECs, there is much more variation across countries in overall unemployment rates than in the long-term shares, though both generally work in the same direction.

Graph 1: Overall unemployment rates by LTU and STU shares, 1999 and 2000



Graph 2: LTU shares, 1999 and 2000

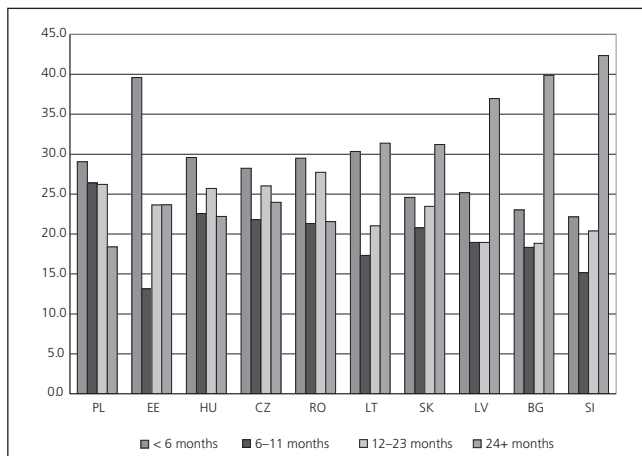


The structure of short-term and long-term unemployment

To allow a further differentiation between countries with lower and higher shares of long-term unemployment, both the short-term and long-term unemployed are subdivided into two groups, adding a category at the bottom (<6 months) and top (24+ months) end of the duration spectrum. The resulting distributions reveal two distinct types of structures, each with certain common characteristics of their own as well as fundamental differences to the other (Graph 3). For demonstration purposes, the countries have been arranged in the order of their level of long-term unemployment, starting with the lowest (Poland) and ending with the highest (Slovenia).

Looking first at the shares of the individual duration categories, one will easily recognize that the countries with above average levels of long-term unemployment owe their position entirely to the longest duration category. In the other three duration categories, including the lower long-

Graph 3: *Duration structure of unemployed, 2000*



term duration of 12–23 months, the countries with below average long-term unemployment possess the higher shares. There are only two exceptions to this pattern. Estonia and Lithuania have the highest shares in the under 6 months category (39.6 and 30.3%, respectively), but this is compensated by the lowest and third lowest shares of unemployed with 6–11 months duration (13.1 and 17.3%, respectively).

As far as the internal distribution patterns are concerned, it should be noted that in both groups of countries the proportion of unemployed in the lower short-term category is higher than in the upper one. On the one hand, this simply reflects the fact that all newly unemployed start at the bottom of the duration scale. On the other hand, the chances of finding a job usually are best in the first half year of unemployment, so that many of the newly unemployed never reach the second duration category. A reversal of the observed relation therefore would be possible only if one or both of these flows in and out of unemployment were abruptly and substantially curtailed.

With regard to the relation between the two duration categories of long-term unemployment, in contrast, the internal distribution patterns exhibit distinct differences – and these in opposite directions. Since the lower of the long-term categories (12–23 months) covers double the time span as each of the short-term categories and the upper one (24+ months) even is open-ended, they could account for a larger share of the unemployed than the respective preceding category if the effects of the greater time base were not offset by corresponding outflows from unemployment.

In fact, in the year 2000 the percentage of persons who have been unemployed for 12–23 months was higher than that for persons with 6–11 months duration in all countries except Poland and Latvia, where the shares were about equal. The main difference between the internal distribution patterns of countries with lower levels of long-term unemployment and those with higher ones lies in the relative position of the residual category (24+ months). While its

share remains below that of the lower long-term (except for Estonia, where they are equal) as well as the lower short-term category in the former group of countries, both of these relations are reversed in the latter. Inasmuch as these differences cannot be traced back to divergent developments of unemployment in previous years, the explanation for them probably lies in the type and volume of outflows from long-term unemployment and relevant administrative regulations in each individual country. With increased duration of unemployment and depending on age and sex of the persons affected, these outflows may also no longer lead largely to re-employment, but more and more end in inactivity or (early) retirement. In this context, a dominant residual duration category really represents the normal case, as it can be considered to collect those persons who seem to be unemployable under the given circumstances.

Development of long-term unemployment between 1999 and 2000

Since 1999 the incidence of long-term unemployment has increased in absolute as well as relative terms in all CECs with the exception of Hungary (see Graphs 1 and 2). Such a development is hardly surprising in view of the fact that the overall unemployment has risen in most of these countries not only during the last year, but over the last two years, thus adding newly unemployed to the stock and simultaneously tightening the labour market for those who already have been looking for a job for some time.

The greatest increase in the number of long-term unemployed occurred in Poland, which with almost 390000 accounted for more than half of the overall CEC rise of about 750000. The highest relative increase is found in Lithuania, where long-term unemployment more than doubled between 1999 and 2000. Apart from the decrease in Hungary, only Latvia reported a growth of less than 10%, Bulgaria, Romania and Estonia had moderate increases of 20–28%, while the remaining countries lay in a range from 40–45%.

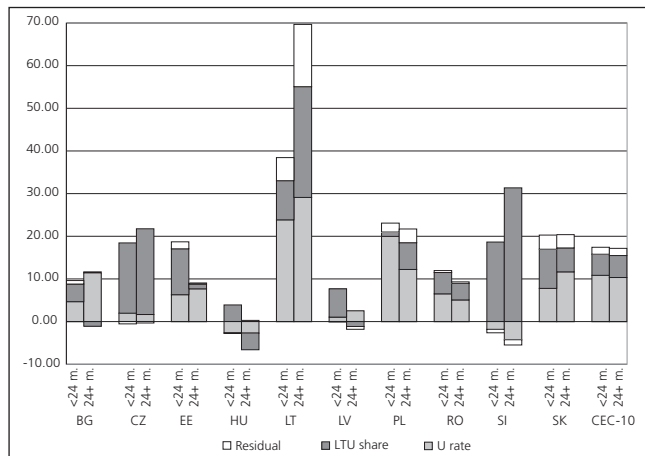
To allow a more differentiated analysis of these developments, Graph 4 shows the changes from 1999–2000 separately for the two categories of long-term unemployed (12–23 and 24+ months), subdividing each according to the contribution attributable to the corresponding changes in the overall unemployment rate and in the share of the respective duration group among all unemployed – plus or minus a possible unexplained residual part.

The first insight to be drawn from this graph is that only in four countries very long-term unemployment accounts for the major part of the changes between 1999 and 2000. Two of these, Slovenia and Bulgaria, currently have the highest long-term unemployment shares in the CECs, while the Czech Republic and Lithuania experienced very high increases of about 20 percentage points in this measure during the last or the last two years.

The Czech Republic and Slovenia also are the only two countries in which the increases in both duration categories

Long-term unemployment

Graph 4: Contributions to overall changes in LTU, 1999–2000



were primarily attributable to changes in the long-term unemployment shares. In Slovenia, this development would have been even more dramatic had it not been counteracted by a slight decrease in overall unemployment.

Conversely, Poland is the only country where overall unemployment clearly is the dominating factor in the rise of long-term unemployment in the two duration categories from 1999 to 2000. In the other countries, this is either not true for one of the groups – usually the very long-term unemployed – or both exhibit a pattern of mixed influences.

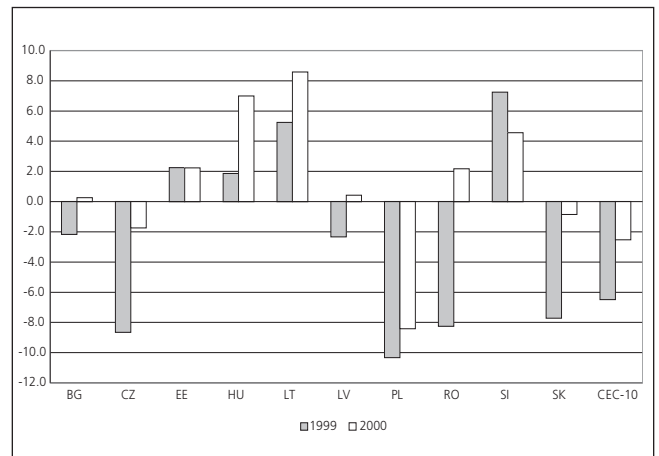
Gender differences in long-term unemployment

In looking at the relation between long-term unemployment and some of the major personal, social and economic characteristics of the persons affected by it, the primary question to be addressed here is whether certain groups of unemployed are more likely than others to remain in that status for an extended period of time. Inasmuch as this analysis focusses on the relative position rather than the absolute level of long-term unemployment of the individual groups, the comparisons will be based on the difference between them or their deviation from the country or CEC average.

In the year 2000, the share of long-term unemployed was higher for men than for women in most CECs (Graph 5) except in the Czech Republic, Poland and Slovakia. One year before, the situation still had been practically the opposite, with most countries reporting higher female shares, except Estonia, Hungary, Lithuania and Slovenia. Since both male and female long-term unemployment shares rose in most countries from 1999 to 2000, the reversal of the gender difference is generally due to the fact that the rate of increase was lower for women – and in the case of Hungary and Romania even negative.

It should be noted, however, that the differences between male and female long-term unemployment shares are fairly small, remaining in a range from under 1 to about 2 percentage points in six of the ten countries and reaching levels around 5–8 percentage points only in Hungary (50.6 vs.

Graph 5: Differences in LTU shares, men-women, 1999 and 2000



43.6%), Lithuania (55.9 vs. 47.3%) and Slovenia (64.9 vs. 60.3%) as well as Poland (40.2 vs. 48.6%) in the opposite direction.

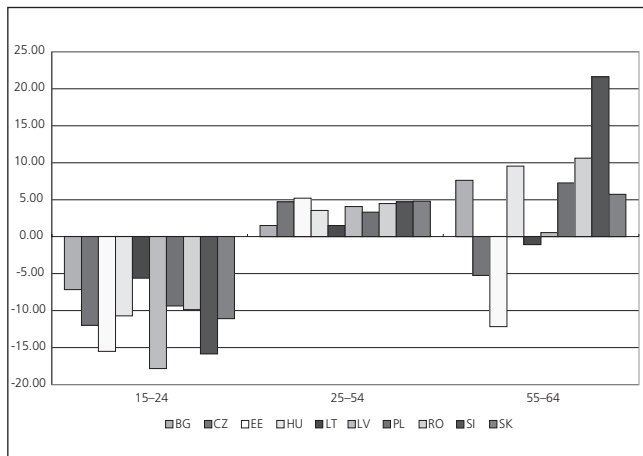
As a rule, the direction of the gender difference in long-term unemployment shares corresponds with that in the overall unemployment rate. Thus, two of the three countries with higher female than male unemployment rates also have higher female long-term unemployment shares (the Czech Republic and Poland), while the third (Slovenia) is the only country in which the long-term unemployment share of women rose more rapidly from 1999 to 2000 than that of men. Similarly, six of the seven countries with higher male than female unemployment rates also have higher male long-term unemployment shares, the only exception being Slovakia, where the gender difference in the long-term unemployment share has been reduced from 7.7% in 1999 to 0.9% in 2000, but not yet reversed to agree in its direction with that in overall unemployment.

Long-term unemployment by age

In contrast to the minor gender differences, the shares of long-term unemployment in the CECs vary considerably by age. While the variation within each of the three major groups (15–24, 25–54 and 55–64) across countries generally corresponds with their overall shares, the patterns across these age groups within each country have some common characteristics as well as certain peculiarities.

Thus, in all CECs the proportion of long-term unemployed among all unemployed is lowest in youth (Graph 6). Also in all countries, the share of long-term unemployment in prime working age lies above the national average. The only difference between countries occurs in the older age group. While in most countries and the CEC-10 as a whole the shares of long-term unemployment increase with age, and consequently the highest shares are registered for those aged 55–64, they take up the middle position around or somewhat below the national average in the Czech Republic and the three Baltic States. On the one hand, this may be

Graph 6: **Deviations from average LTU shares by age groups, 2000**



due to an earlier exit from working life than in other countries. On the other hand, it is interesting to note that apart from Romania, where the large agricultural sector accounts for continued employment at higher ages, these four countries are the only ones with above average employment rates in the 55–64 group, so that even persons of this age who have been unemployed for an extended period of time may still see a chance or feel under some social pressure to find a new job.

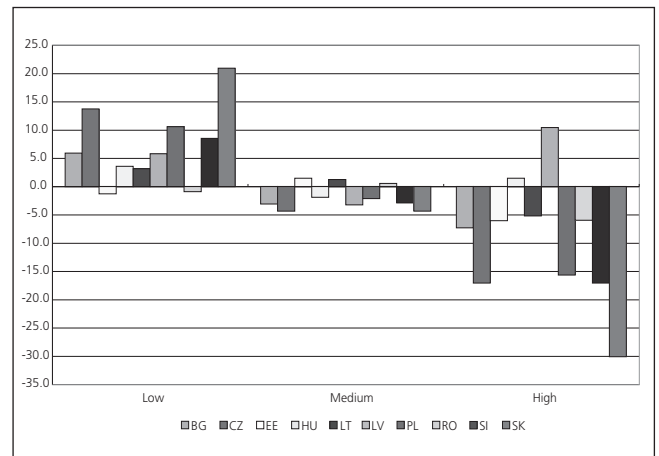
In most countries, the differences between the highest and lowest share of long-term unemployment by age range between 15–20 percentage points, the only exceptions being Lithuania with an unusual narrow span of 7 percentage points and Slovenia with an unusual wide one of 37 percentage points. However, other than in the case of the gender differences in long-term unemployment shares, which largely agreed with the overall unemployment rates, the corresponding age patterns generally exhibit a reversal of structures because unemployment practically without exception decreases with age.

Long-term unemployment by level of education

Although the LFS data on educational attainment are originally coded according to ten ISCED levels, results and analyses presented by Eurostat usually apply a reduced classification with three categories: less than upper secondary (low), upper secondary (medium), and tertiary (high). An analysis using this classification shows that the share of long-term unemployment among the unemployed generally decreases with their level of education (Graph 7), and in this case the differences gain additional weight by the fact that the same tendency is even more pronounced with regard to the overall unemployment rates of the respective groups.

There are four countries which slightly depart from this pattern. In Romania and Estonia, unemployed with medium education have the highest long-term shares, while in Hungary and Lithuania the high education group ranks second and even first, respectively. The deviation of Romania is

Graph 7: **Deviations from average LTU shares by educational level, 2000**



easily traced to its dominantly agricultural labour force, which on the one hand possesses a comparatively low level of education, but on the other also runs a lower risk of unemployment, so that both the overall unemployment rate and the long-term unemployment share of the bottom educational group remain below that of the intermediate one. In the case of the other countries, no such obvious explanation presents itself in either the unemployment, employment or economic structures, suggesting that the observed differences probably are the result of specific conditions in each country.

While the direction of the pattern between level of education and long-term unemployment share is generally the same, the countries vary considerably in their range of values. In Estonia, Hungary, Lithuania and Romania, the highest and the lowest shares only differ by 5–8 percentage points. In Bulgaria and Latvia, the span already is doubled with 13–14 percentage points, reaching 26–30 percentage points in the Czech Republic, Poland and Slovenia. In Slovakia, finally, the range between the lowest share of long-term unemployment for the high education group (23.7%) and the top value for the low education group (74.7%) is almost ten times as wide as in Hungary.

Long-term unemployment by previous occupation

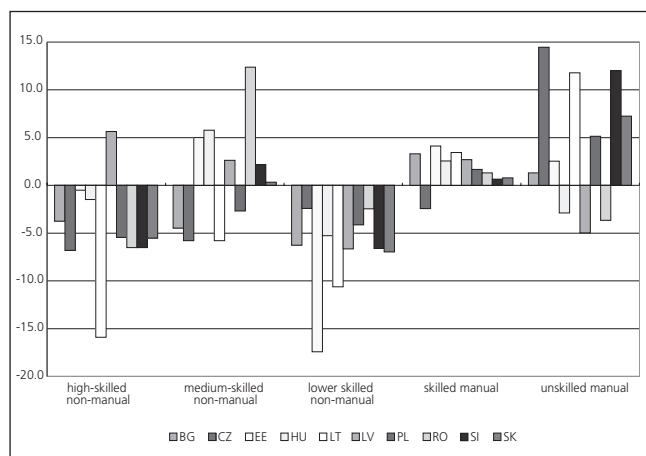
For the analysis of long-term unemployment by occupation, the original information from the national LFSs had to be reduced to five groups consisting of the following ISCO codes (also see section “Recent labour market trends”):

- high-skilled non-manual (1–3),
- medium-skilled non-manual (4),
- lower skilled non-manual (5),
- skilled manual (6–8),
- unskilled manual (9, 0).

The results presented in Graph 8 show distinct tendencies for three of these groups and mixed ones for the other two. Thus, the unemployed who in their last job worked in high-skilled non-manual occupations exhibit below average long-

Long-term unemployment

Graph 8: *Deviations from average LTU shares by occupational groups, 2000*



term unemployment shares in all CECs with the exception of Latvia. The same tendency without any exception also is found for the lower skilled non-manual occupations. It seems that the comparatively more favourable situation of persons in the first group is due to their higher qualification, while that of the second group could be accounted for by the fact that they fulfil the demand for certain services in rising branches of the economy. In contrast, the medium-skilled non-manual occupations consisting of clerks and office workers may either be caught in rationalization efforts in state administration and private firms or profit from the upswing in more modern economic activities.

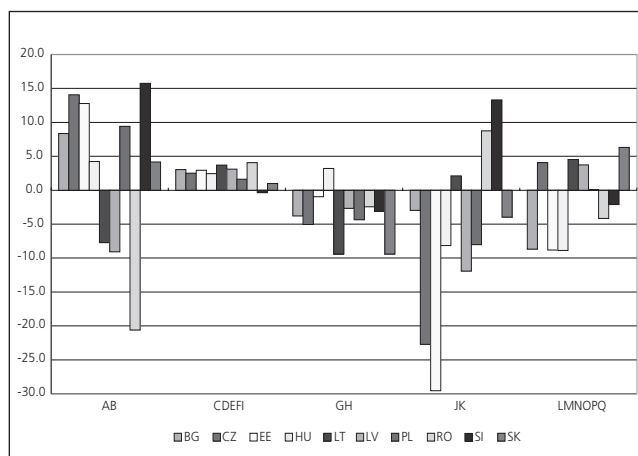
The skilled manual occupations already are in a slightly unfavourable position with regard to long-term unemployment in all CECs with the exception of the Czech Republic, where only the unskilled manual occupations are affected disproportionately by extended joblessness. This last group also possesses the highest shares of long-term unemployment in four other countries (Lithuania, Poland, Slovenia and Slovakia), but Hungary, Latvia and Romania report a tendency in the opposite direction, which at least in the latter two cases seems to be attributable to lower long-term unemployment shares in the agricultural sector.

Long-term unemployment by previous economic activity

The results of long-term unemployment by economic activity of the establishment in which the unemployed last worked in a way further specify the findings for occupations because the sectors have characteristic occupational structures. Like in the case of occupations, the original information from the national LFSs was reduced to five groups (consisting of the following NACE 1-digit codes):

- agriculture (AB),
- all industrial sectors plus transport & communication (CDEFI),
- trade & repair and hotels & restaurants (GH),
- finance & insurance and real estate & business (JK),
- other services (LMNOPQ).

Graph 9: *Deviations from average LTU shares by economic activity, 2000*



Based on international comparisons, the first two of these groups can be considered as having negative employment prospects, and this is confirmed by their above average long-term unemployment shares, particularly in the case of agriculture (Graph 9). The opposite tendencies found for this sector in Lithuania, Latvia and especially Romania may be due to differences in the structure of the employed or in the development of this sector in the respective national economies.

In the sectors providing more consumption-oriented (GH) or more business-oriented services (JK), the positive perspective for the future also is reflected in below average shares of long-term unemployment, with major exceptions only being found in the latter in Slovenia and Romania. In the sectors providing basic public or personal services (LMNOPQ), which are still largely state-controlled, the situation with regard to long-term unemployment appears mixed, depending probably on different policies and specific national circumstances.

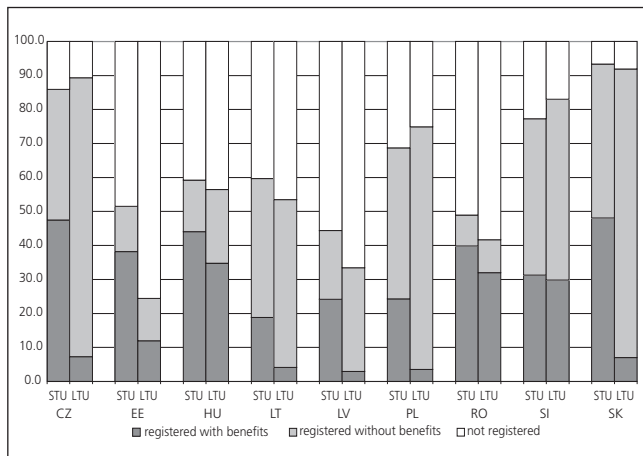
Registration and benefits

The extent to which unemployed in general and long-term unemployed in particular register with public employment offices and receive benefits varies widely in the CECs most likely because of different national regulations in these respects.

About 90% of the unemployed are registered in Slovakia and the Czech Republic, still between 70–80% in Slovenia and Poland, and with the exception of Slovakia the long-term unemployed even surpass the short-term unemployed (Graph 10). In all other countries, the registration lies between 40–60%, always being lower for long-term unemployed, particularly in Estonia, where it barely reaches one quarter.

The major difference between short-term and long-term unemployed concerns the reception of benefits. Only in Slovenia, Romania and Hungary the gap between these two

Graph 10: *Unemployed by duration, registration and benefits, 2000*



groups remains under 10 percentage points, with about three out of ten long-term unemployed receiving some kind of assistance. In all other countries, this proportion merely lies between 3–12%. In other words, the long-term unemployed find themselves at a double disadvantage compared to the short-term unemployed, because they not only have been without work for a longer time, but in addition are without basic financial support.

There also is a slight gender difference with regard to long-term unemployment. In all CECs, women with this status are more likely to register with labour offices, and in most cases a higher proportion of them than their male counterparts receive benefits, particularly in Estonia (24.9 vs. 3.0%) and Romania (38.1 vs. 27.5%), with only Slovenia exhibiting a gender difference in the opposite direction (24.4 vs. 32.7%).

Long-term unemployment

Basic data on long-term unemployment

Year	Indicator	Unit	BG	CZ	EE	HU	LT
Employed, unemployed and long-term unemployed (15–64)							
1999	employed	1000	2947.8	4652.4	598.8	3762.4	1583.6
	unemployed	1000	484.0	433.9	80.3	281.7	183.5
2000	long-term unemployed	1000	269.6	158.0	33.9	135.0	70.6
	employed	1000	2834.2	4617.3	588.8	3781.5	1486.0
	unemployed	1000	554.9	447.5	91.7	266.9	280.5
	long-term unemployed	1000	323.9	219.9	43.3	127.8	146.9
Distribution of unemployed (15–64) by duration							
1999	< 6 months	%	26.8	37.1	39.5	29.2	37.8
	6–11 months	%	16.2	26.4	18.2	22.9	23.5
	12–23 months	%	16.5	20.0	19.1	23.8	17.4
	24+ months	%	40.5	16.6	23.2	24.1	21.3
2000	< 6 months	%	23.0	28.2	39.6	29.6	30.3
	6–11 months	%	18.3	21.8	13.1	22.5	17.3
	12–23 months	%	18.8	26.0	23.6	25.7	21.0
	24+ months	%	39.9	24.0	23.6	22.2	31.4
Contribution to changes in long-term unemployment, 1999–2000							
1999-2000	<24 m.: unemployment rate	1000	12.5	3.1	2.1	-3.6	16.8
	long-term share	1000	11.1	26.0	3.6	5.2	6.5
	residual	1000	2.3	-0.9	0.6	-0.2	3.8
	24+ m.: unemployment rate	1000	30.9	2.6	2.6	-3.6	20.5
	long-term share	1000	-3.0	31.8	0.4	-5.3	18.3
	residual	1000	0.6	-0.6	0.1	0.3	10.3
	total change	1000	54.3	61.9	9.4	-7.2	76.3
	total change	%	20.1	39.2	27.7	-5.3	108.1
Long-term unemployment shares by sex							
1999	female	%	56.9	40.4	41.0	46.8	35.5
	male	%	54.7	31.8	43.2	48.7	40.7
2000	female	%	58.2	49.9	46.0	43.6	47.3
	male	%	58.5	48.2	48.2	50.6	55.9
Long-term unemployment shares by age							
2000	15–24	%	51.2	37.2	31.8	37.2	46.8
	25–54	%	59.9	53.8	52.5	51.4	53.9
	55–64	%	66.0	43.9	(35.1)	(57.4)	(51.3)
Long-term unemployment shares by level of education							
2000	low	%	64.3	62.9	46.0	51.5	55.5
	medium	%	55.3	44.8	48.7	46.0	53.6
	high	%	51.1	32.1	41.3	49.4	47.2
Long-term unemployment shares by occupation							
2000	high-skilled non-manual	%	50.8	40.8	46.0	44.8	34.4
	medium-skilled non-manual	%	50.1	41.8	.	52.1	44.5
	lower skilled non-manual	%	48.3	45.2	(29.1)	41.0	39.7
	skilled manual	%	57.9	45.2	50.6	48.8	53.7
	unskilled manual	%	55.9	62.0	49.0	43.4	62.1
	Total (excl. No Answer)	%	54.6	47.6	46.5	46.3	50.3
Long-term unemployment shares by economic sectors							
2000	AB	%	62.9	61.7	59.3	50.0	42.6
	CDEFI	%	57.6	50.2	49.4	48.3	54.0
	GH	%	50.8	42.6	45.5	49.0	40.9
	JK	%	(51.6)	25.0	.	37.7	52.4
	LMNOPQ	%	45.9	51.7	37.7	37.0	54.8
	Total (excl. No Answer)	%	54.6	47.7	46.5	45.8	50.3
Registration and benefits of unemployed by duration							
2000	<12 m.: registered, benefits	%		47.4	38.2	44.1	18.8
	registered, no benefits	%		38.4	13.3	15.1	40.9
	not registered	%		14.1	48.5	40.8	40.3
	12+ m.: registered, benefits	%		7.3	11.9	34.7	4.1
	registered, no benefits	%		82.0	12.5	21.7	49.4
	not registered	%		10.7	75.6	43.6	46.5

Long-term unemployment

LV	PL	RO	SI	SK	CEC-10			
968.0	14522.5	9869.7	862.5	2121.2	41889.0	employed	1999	
156.5	2085.1	733.2	70.2	403.2	4911.6	unemployed		
82.4	866.9	331.5	29.4	187.4	2164.8	long-term unemployed		
952.2	14145.4	9765.0	872.9	2078.3	41121.6	employed		
160.2	2814.5	816.1	66.4	489.6	5988.4	unemployed		
89.2	1254.6	401.8	41.6	263.5	2912.6	long-term unemployed		
27.3	35.8	32.6	32.0	29.2	33.4	< 6 months	1999	
19.7	22.7	22.2	26.2	23.2	22.3	6–11 months		
15.4	25.8	25.5	12.6	19.1	22.7	12–23 months		
37.6	15.8	19.8	29.2	28.5	21.6	24+ months		
25.2	29.0	29.5	22.1	24.6	28.2	< 6 months		
18.9	26.4	21.3	15.2	20.8	23.0	6–11 months		
18.9	26.2	27.7	20.4	23.4	24.9	12–23 months	2000	
36.9	18.4	21.5	42.3	31.2	23.9	24+ months		
0.8	173.0	21.5	-0.5	14.6	234.6	<24 m.: unemployment rate		1999-2000
5.5	8.6	16.5	5.5	17.2	107.1	long-term share		
-0.1	18.1	1.4	-0.2	6.2	35.3	residual		
2.0	105.9	16.7	-1.3	21.8	222.6	24+ m.: unemployment rate		
-1.0	54.0	13.0	9.2	10.5	112.4	long-term share		
-0.5	28.1	1.1	-0.4	5.8	35.8	residual		
6.8	387.8	70.3	12.3	76.0	747.9	total change		
8.2	44.7	21.2	41.8	40.6	34.5	total change		
53.9	46.8	50.0	38.0	50.7	47.5	female	1999	
51.6	36.5	41.8	45.2	43.0	41.0	male		
55.4	48.6	48.0	60.3	54.3	49.9	female		
55.8	40.2	50.2	64.9	53.4	47.4	male		
37.8	35.2	39.4	46.9	42.7	38.5	15–24	2000	
59.7	47.9	53.7	67.4	58.6	52.2	25–54		
56.2	51.8	59.9	(84.3)	59.5	54.1	55–64		
61.4	55.2	48.4	71.2	74.7	57.8	low	2000	
52.5	42.5	49.8	59.8	49.5	46.3	medium		
66.1	29.0	43.3	(45.7)	23.7	40.2	high		
43.6	40.8	41.8	(55.8)	42.7	42.6	high-skilled non-manual	2000	
.	43.6	60.7	(64.4)	48.5	47.7	medium-skilled non-manual		
31.3	42.1	45.9	(55.7)	41.2	42.5	lower skilled non-manual		
40.6	47.9	49.6	62.9	48.9	49.8	skilled manual		
32.9	51.4	44.7	(74.3)	55.4	52.1	unskilled manual		
37.9	46.2	48.3	62.3	48.2	47.9	Total (excl. No Answer)		
28.7	55.7	26.8	.	52.3	50.1	AB		2000
40.9	47.9	51.5	56.4	49.1	50.1	CDEFI		
35.1	41.9	45.0	53.7	38.8	43.3	GH		
.	38.3	56.1	.	44.2	40.1	JK		
41.5	46.3	43.3	54.7	54.5	46.4	LMNOPQ		
37.8	46.3	47.4	56.8	48.2	47.7	Total (excl. No Answer)		
24.2	24.3	39.8	31.3	48.0	31.3	<12 m.: registered, benefits	2000	
20.2	44.4	9.1	46.0	45.3	36.1	registered, no benefits		
55.6	31.3	51.1	22.8	6.6	32.6	not registered		
(2.9)	3.5	32.0	29.8	7.0	10.7	12+ m.: registered, benefits		
30.5	71.3	9.7	53.2	84.9	57.6	registered, no benefits		
66.6	25.1	58.3	17.0	8.1	31.6	not registered		

National time series

Bulgaria	unit	1999			2000		
Macroeconomic indicators		GDP (1998)	Employed	Unemployed	GDP (1999)	Employed	Unemployed
annual change	%	+3.5	-5.7	+10.3	+2.4	-3.3	+14.9
	unit	1999			2000		
		all	male	female	all	male	female
Population							
total	1000	8230	4014	4216	8133	3933	4200
age group 15–64	1000	5569	2748	2821	5502	2687	2815
<i>age group 15–64 by education</i>							
< upper secondary	%	43.8	42.8	44.8	43.9	43.1	44.7
upper secondary	%	42.6	45.1	40.3	42.3	44.6	40.2
tertiary	%	13.6	12.1	15.0	13.7	12.3	15.1
<i>dependency and activity</i>							
youth dependency	rate	24.1	25.0	23.1	23.6	24.8	22.5
old age dependency	rate	23.7	21.0	26.3	24.2	21.6	26.7
activity age group 15–64	rate	61.6	66.3	57.0	61.6	67.4	56.1
effective dependency	rate	131.9	110.2	156.6	137.9	113.2	166.0
Employment							
total	1000	2971	1582	1389	2872	1532	1341
<i>by age groups</i>							
15–24	rate	21.1	22.7	19.4	20.5	23.0	18.0
25–54	rate	73.0	75.3	70.7	69.7	72.1	67.4
55–64	rate	21.3	34.5	10.0	22.1	34.9	11.2
65+	rate	1.7	2.8	(0.9)	2.9	4.4	1.7
15–64	rate	52.9	57.0	49.0	51.5	56.1	47.2
<i>by education</i>							
< upper secondary	%	22.2	25.1	19.0	23.2	26.2	19.8
upper secondary	%	55.4	56.8	53.8	58.0	60.1	55.5
tertiary	%	22.3	18.1	27.2	23.9	19.1	29.3
<i>by economic activity</i>							
agriculture & fishery	%	10.9	13.1	8.4	13.2	15.4	10.6
mining & quarrying	%	1.6	2.5	(0.7)	1.5	2.2	(0.6)
manufacturing	%	24.9	24.2	25.7	23.5	23.3	23.8
electricity, gas, water	%	1.9	2.6	1.1	2.0	2.7	1.2
construction	%	6.1	10.1	1.6	5.9	9.5	1.8
trade & repair	%	14.5	13.4	15.7	14.1	13.2	15.2
hotels & restaurants	%	4.7	3.8	5.8	5.0	3.9	6.2
transport & communication	%	7.1	9.9	4.0	7.5	10.2	4.4
financial intermediation	%	1.1	0.7	1.5	1.1	0.7	1.6
real estate & business	%	3.1	3.0	3.1	3.2	3.0	3.5
public administration	%	7.1	8.3	5.7	6.8	8.1	5.4
education	%	7.6	3.1	12.8	7.4	2.7	12.7
health & social work	%	6.1	2.5	10.1	5.8	2.5	9.6
other services	%	3.3	2.8	3.8	3.1	2.7	3.6
self-employed	% of total	11.9	15.1	8.3	14.6	18.2	10.5
part-time	% of total						
temporary	% of employees						
<i>usual weekly hours</i>							
full-time employees	average	40.2	41.1	40.2	40.4	40.8	40.0
part-time employees	average						
self-employed	average	45.4	46.0	44.3	42.5	43.4	40.7
Unemployment							
total	1000	484	258	226	556	304	252
<i>by age groups</i>							
15–24	rate	31.3	31.3	31.3	33.3	36.1	29.6
25–54	rate	12.2	12.3	12.1	14.6	14.6	14.7
55–64	rate	9.5	9.1	(10.4)	12.2	12.6	(10.8)
15–64	rate	14.1	14.1	14.0	16.4	16.8	15.9
<i>by education</i>							
< upper secondary	rate	23.1	21.9	24.9	25.0	23.6	27.0
upper secondary	rate	13.1	12.7	13.5	15.8	16.0	15.6
tertiary	rate	5.4	5.3	5.5	6.7	7.0	6.5
long-term	% of total	58.3	57.6	59.1	58.7	58.8	58.7

Czech Republic		unit	1999			2000		
Macroeconomic indicators			GDP (1998)	Employed	Unemployed	GDP (1999)	Employed	Unemployed
	annual change	%	-2.2	-2.3	+42.3	-0.8	-0.9	+3.1
	unit		1999			2000		
			all	male	female	all	male	female
Population								
total	1000		10237	4956	5281	10222	4948	5274
age group 15–64	1000		7087	3523	3564	7111	3535	3576
<i>age group 15–64 by education</i>								
< upper secondary	%		23.0	16.2	29.3	23.8	16.9	30.2
upper secondary	%		68.3	73.2	63.8	67.0	72.0	62.5
tertiary	%		8.7	10.6	6.9	9.1	11.1	7.3
<i>dependency and activity</i>								
youth dependency	rate		24.5	25.2	23.7	23.8	24.5	23.0
old age dependency	rate		20.0	15.4	24.5	20.0	15.4	24.4
activity age group 15–64	rate		71.8	79.7	63.9	71.2	79.0	63.5
effective dependency	rate		80.3	53.8	114.2	82.5	55.6	116.8
Employment								
total	1000		4716	2644	2071	4675	2623	2052
<i>by age groups</i>								
15–24	rate		38.3	42.7	33.9	36.4	39.3	33.6
25–54	rate		82.0	89.5	74.3	81.5	89.2	73.7
55–64	rate		37.6	53.2	23.6	36.1	51.6	22.1
65+	rate		4.5	6.9	2.9	4.1	6.8	2.3
15–64	rate		65.6	74.0	57.4	64.9	73.1	56.8
<i>by education</i>								
< upper secondary	%		8.7	6.5	11.6	8.8	6.2	12.0
upper secondary	%		79.2	80.5	77.6	78.7	80.2	76.7
tertiary	%		11.9	12.9	10.7	12.6	13.6	11.2
<i>by economic activity</i>								
agriculture & fishery	%		5.3	6.4	3.9	5.2	6.3	3.8
mining & quarrying	%		1.7	2.7	0.4	1.6	2.4	0.5
manufacturing	%		27.7	29.8	25.0	27.4	29.9	24.2
electricity, gas, water	%		1.7	2.4	0.9	1.6	2.3	0.8
construction	%		9.4	15.5	1.8	9.4	15.3	1.7
trade & repair	%		13.7	11.4	16.6	12.9	10.7	15.8
hotels & restaurants	%		3.4	2.6	4.4	3.4	2.6	4.5
transport & communication	%		7.8	9.6	5.6	7.9	9.6	5.8
financial intermediation	%		2.1	1.3	3.1	2.0	1.2	3.1
real estate & business	%		5.4	5.3	5.5	5.7	5.6	5.8
public administration	%		6.3	5.8	6.9	6.6	6.3	7.0
education	%		6.0	2.5	10.5	6.4	2.6	11.2
health & social work	%		5.6	1.7	10.7	6.1	2.0	11.3
other services	%		3.8	3.0	4.8	3.7	3.2	4.4
self-employed	% of total		13.9	18.0	8.7	14.5	18.7	9.0
part-time	% of total		5.7	2.5	9.7	5.3	2.2	9.2
temporary	% of employees		7.4	6.1	8.9	8.1	7.0	9.4
<i>usual weekly hours</i>								
full-time employees	average		43.3	44.1	42.4	43.3	44.0	42.4
part-time employees	average		26.2	24.5	26.7	25.8	24.4	26.2
self-employed	average		51.4	53.7	45.2	51.0	53.1	45.6
Unemployment								
total	1000		434	203	231	448	207	240
<i>by age groups</i>								
15–24	rate		16.6	16.3	16.9	17.0	17.4	16.4
25–54	rate		7.4	5.8	9.3	7.8	6.0	10.0
55–64	rate		4.9	4.8	4.9	5.3	5.3	5.2
15–64	rate		8.5	7.2	10.2	8.8	7.4	10.6
<i>by education</i>								
< upper secondary	rate		20.7	22.6	19.4	22.6	26.1	20.1
upper secondary	rate		7.7	6.4	9.4	7.8	6.3	9.7
tertiary	rate		3.0	2.6	3.7	3.0	2.3	4.0
long-term	% of total		36.6	32.1	40.5	50.0	49.1	50.7

National time series

Estonia	unit	1999			2000		
Macroeconomic indicators		GDP (1998)	Employed	Unemployed	GDP (1999)	Employed	Unemployed
annual change	%	+4.7	-4.4	+18.1	-1.1	-1.7	+14.2
	unit	1999			2000		
		all	male	female	all	male	female
Population							
total	1000	1436	667	770	1430	663	767
age group 15–64	1000	966	464	502	972	470	502
<i>age group 15–64 by education</i>							
< upper secondary	%	26.1	27.0	25.4	26.2	26.4	26.1
upper secondary	%	50.5	54.7	47.0	51.3	56.0	47.2
tertiary	%	23.3	18.4	27.6	22.5	17.6	26.7
<i>dependency and activity</i>							
youth dependency	rate	27.0	28.8	25.3	25.3	26.5	24.3
old age dependency	rate	21.7	14.8	28.0	21.8	14.8	28.4
activity age group 15–64	rate	70.3	76.2	64.8	70.0	75.6	64.8
effective dependency	rate	91.2	69.1	114.5	95.9	74.3	118.6
Employment							
total	1000	615	315	300	604	309	295
<i>by age groups</i>							
15–24	rate	29.2	34.1	24.4	27.4	31.4	23.2
25–54	rate	77.3	79.4	75.2	76.8	79.5	74.2
55–64	rate	47.9	59.2	39.3	43.0	50.2	37.5
65+	rate	7.6	11.0	5.9	7.3	10.8	5.7
15–64	rate	62.0	66.3	58.0	60.6	64.3	57.1
<i>by education</i>							
< upper secondary	%	11.6	13.9	9.2	10.7	12.2	9.2
upper secondary	%	56.9	61.0	52.5	57.4	63.7	50.8
tertiary	%	31.5	25.0	38.3	31.8	24.1	39.9
<i>by economic activity</i>							
agriculture & fishery	%	8.8	10.9	6.7	7.0	8.7	5.2
mining & quarrying	%	1.4	2.4	.	1.7	2.4	(0.9)
manufacturing	%	20.9	22.3	19.4	23.0	26.6	19.3
electricity, gas, water	%	3.0	4.1	1.8	2.1	2.9	1.3
construction	%	6.5	11.4	1.3	7.8	14.5	(0.8)
trade & repair	%	14.5	11.9	17.1	12.8	9.5	16.2
hotels & restaurants	%	2.1	(0.6)	3.7	3.0	(0.9)	5.1
transport & communication	%	8.9	13.0	4.7	10.4	14.7	5.9
financial intermediation	%	1.4	(1.1)	1.8	1.5	(1.1)	1.8
real estate & business	%	6.6	7.2	6.1	6.8	6.7	6.8
public administration	%	6.4	6.6	6.3	5.6	5.1	6.2
education	%	8.9	3.7	14.4	7.8	2.4	13.5
health & social work	%	5.7	1.6	10.0	4.8	1.2	8.6
other services	%	4.8	3.4	6.3	5.7	3.2	8.4
self-employed	% of total	8.2	10.6	5.6	8.1	9.7	6.4
part-time	% of total	7.1	5.2	9.0	6.7	4.2	9.3
temporary	% of employees	2.0	2.3	1.7	2.3	3.1	1.4
<i>usual weekly hours</i>							
full-time employees	average	41.3	42.2	40.4	41.2	41.9	40.5
part-time employees	average	22.1	23.6	21.2	21.0	19.8	21.5
self-employed	average	46.5	48.2	43.1	46.2	48.2	43.0
Unemployment							
total	1000	80	46	34	92	53	38
<i>by age groups</i>							
15–24	rate	22.1	22.2	21.9	23.7	24.7	22.4
25–54	rate	11.2	12.4	10.0	12.8	13.9	11.5
55–64	rate	6.1	8.0	.	8.2	11.4	.
15–64	rate	11.8	13.1	10.5	13.5	15.0	11.8
<i>by education</i>							
< upper secondary	rate	20.4	21.6	18.3	25.3	26.9	23.1
upper secondary	rate	12.6	13.7	11.3	14.7	14.8	14.6
tertiary	rate	6.0	5.2	6.5	5.0	6.3	4.1
long-term	% of total	42.2	43.2	41.0	47.3	48.2	46.0

Hungary		unit	1999			2000		
Macroeconomic indicators			GDP (1998)	Employed	Unemployed	GDP (1999)	Employed	Unemployed
annual change		%	+4.9	+3.3	-11.7	+4.5	+0.6	-5.3
		unit	1999			2000		
			all	male	female	all	male	female
Population								
total		1000	9976	4753	5223	9927	4727	5200
age group 15–64		1000	6788	3314	3473	6760	3312	3448
<i>age group 15–64 by education</i>								
< upper secondary		%	34.2	27.7	40.1	38.5	34.0	42.7
upper secondary		%	54.4	61.0	48.4	50.3	54.7	46.2
tertiary		%	11.4	11.3	11.5	11.2	11.3	11.1
<i>dependency and activity</i>								
youth dependency		rate	25.5	26.7	24.3	25.2	26.4	24.1
old age dependency		rate	21.5	16.7	26.1	21.6	16.3	26.7
activity age group 15–64		rate	59.6	67.5	52.0	59.9	67.6	52.5
effective dependency		rate	117.9	85.8	157.2	116.0	84.2	154.7
Employment								
total		1000	3785	2081	1703	3807	2092	1715
<i>by age groups</i>								
15–24		rate	34.9	38.6	31.2	33.1	37.0	29.2
25–54		rate	72.2	78.8	65.8	72.8	79.0	66.7
55–64		rate	19.1	29.3	11.1	21.9	33.0	13.0
65+		rate	1.5	2.5	0.9	1.7	2.7	1.1
15–64		rate	55.4	62.4	48.8	55.9	62.7	49.4
<i>by education</i>								
< upper secondary		%	14.9	12.8	17.6	17.4	16.1	19.1
upper secondary		%	67.3	71.3	62.4	65.5	68.4	61.9
tertiary		%	17.5	15.6	19.8	17.1	15.5	19.0
<i>by economic activity</i>								
agriculture & fishery		%	7.0	9.7	3.7	6.5	9.0	3.3
mining & quarrying		%	0.7	1.0	0.3	0.6	0.9	(0.2)
manufacturing		%	24.6	26.7	22.2	24.2	25.8	22.3
electricity, gas, water		%	2.3	3.0	1.4	2.0	2.7	1.0
construction		%	6.7	11.3	1.1	7.0	11.7	1.2
trade & repair		%	13.9	11.9	16.4	14.5	12.9	16.4
hotels & restaurants		%	3.7	3.1	4.3	3.5	2.9	4.3
transport & communication		%	8.1	10.7	4.9	8.1	10.7	4.9
financial intermediation		%	2.1	1.3	3.2	2.2	1.4	3.2
real estate & business		%	4.7	4.9	4.6	5.4	5.3	5.4
public administration		%	6.8	6.4	7.3	7.0	6.6	7.4
education		%	8.3	3.5	14.1	8.2	3.3	14.2
health & social work		%	6.4	2.6	11.1	6.5	2.9	10.9
other services		%	4.6	4.0	5.4	4.4	3.9	5.1
self-employed		% of total	14.9	18.8	10.2	14.6	18.7	9.6
part-time		% of total	3.5	2.1	5.3	3.2	1.8	5.0
temporary		% of employees	6.2	6.5	5.8	6.9	7.3	6.4
<i>usual weekly hours</i>								
full-time employees		average	41.3	42.1	40.5	41.3	42.2	40.4
part-time employees		average	23.4	23.3	23.4	23.5	23.2	23.7
self-employed		average	45.5	46.6	43.2	45.6	46.8	43.1
Unemployment								
total		1000	282	169	113	267	162	105
<i>by age groups</i>								
15–24		rate	12.3	13.5	10.6	12.3	13.7	10.4
25–54		rate	6.2	6.7	5.7	5.9	6.3	5.3
55–64		rate	2.7	3.3	.	3.1	3.8	.
15–64		rate	7.0	7.5	6.2	6.6	7.2	5.8
<i>by education</i>								
< upper secondary		rate	13.7	16.2	11.4	11.5	13.3	9.6
upper secondary		rate	6.7	7.0	6.3	6.4	6.9	5.9
tertiary		rate	1.2	1.5	(1.0)	1.4	1.6	(1.3)
long-term		% of total	47.9	48.7	46.8	47.9	50.6	43.6

National time series

Lithuania	unit	1999			2000		
Macroeconomic indicators		GDP (1998)	Employed	Unemployed	GDP (1999)	Employed	Unemployed
annual change	%	+5.1	+1.9	-28.5	-4.2	-5.5	+52.9
	unit	1999			2000		
		all	male	female	all	male	female
Population							
total	1000	3669	1373	1585	3698	1744	1954
age group 15–64	1000	2435	1183	1251	2472	1198	1274
<i>age group 15–64 by education</i>							
< upper secondary	%	36.3	36.1	36.4	31.3	28.7	33.5
upper secondary	%	32.0	34.6	29.8	36.8	42.0	32.3
tertiary	%	31.7	29.3	33.8	31.9	29.3	34.2
<i>dependency and activity</i>							
youth dependency	rate	30.9	0.0	0.0	29.6	31.2	28.0
old age dependency	rate	19.8	14.1	25.2	20.0	14.3	25.4
activity age group 15–64	rate	72.6	77.7	67.7	71.5	75.5	67.6
effective dependency	rate	80.8	65.2	102.6	94.6	80.8	108.2
Employment							
total	1000	1613	831	782	1525	757	767
<i>by age groups</i>							
15–24	rate	33.8	38.3	29.2	26.7	30.2	23.2
25–54	rate	81.5	82.4	80.7	76.0	75.1	76.8
55–64	rate	42.6	56.7	31.8	42.2	52.2	34.5
65+	rate	6.2	9.7	4.3	7.8	9.7	6.8
15–64	rate	65.0	68.9	61.4	60.1	61.8	58.5
<i>by education</i>							
< upper secondary	%	17.8	21.7	13.7	11.4	13.3	9.6
upper secondary	%	37.4	39.7	34.9	42.6	46.8	38.5
tertiary	%	44.8	38.6	51.4	45.9	39.9	51.8
<i>by economic activity</i>							
agriculture & fishery	%	21.4	25.3	17.3	18.4	22.3	14.6
mining & quarrying	%	.	.	.	0.3	.	.
manufacturing	%	17.5	16.6	18.4	18.6	19.3	17.9
electricity, gas, water	%	2.3	3.2	1.3	2.6	3.3	1.9
construction	%	6.5	11.5	1.3	5.9	10.8	1.0
trade & repair	%	13.8	14.1	13.5	13.7	12.6	14.9
hotels & restaurants	%	1.7	0.7	2.8	1.8	1.1	2.5
transport & communication	%	6.5	8.5	4.3	6.8	9.2	4.5
financial intermediation	%	1.0	0.8	1.2	1.0	0.9	1.2
real estate & business	%	3.1	3.2	2.9	2.8	3.1	2.5
public administration	%	5.2	6.1	4.2	5.4	6.4	4.4
education	%	10.2	4.7	16.0	12.1	5.4	18.6
health & social work	%	6.5	2.0	11.2	6.6	1.7	11.5
other services	%	4.2	3.1	5.3	3.9	3.7	4.0
self-employed	% of total	17.0	20.3	13.4	15.9	19.2	12.7
part-time	% of total	0.0	0.0	0.0	8.6	7.6	9.6
temporary	% of employees	5.3	7.3	3.4	3.8	5.1	2.7
<i>usual weekly hours</i>							
full-time employees	average	39.2	40.2	38.2	39.7	40.4	39.2
part-time employees	average				23.4	23.5	23.3
self-employed	average	40.0	41.0	38.3	39.9	40.6	38.9
Unemployment							
total	1000	183	104	79	280	164	116
<i>by age groups</i>							
15–24	rate	21.3	22.7	19.3	27.5	27.6	27.4
25–54	rate	9.4	10.0	8.9	15.1	17.5	12.8
55–64	rate	4.0	6.4	.	9.2	12.4	.
15–64	rate	10.4	11.4	9.3	15.9	18.2	13.5
<i>by education</i>							
< upper secondary	rate	15.3	16.9	12.5	22.5	25.5	18.0
upper secondary	rate	11.8	12.6	10.9	19.9	21.2	18.1
tertiary	rate	6.6	6.0	7.0	9.0	10.4	8.0
long-term	% of total	38.8	40.9	35.9	52.4	55.9	47.3

Latvia	unit	1999			2000		
Macroeconomic indicators		GDP (1998)	Employed	Unemployed	GDP (1999)	Employed	Unemployed
annual change	%	+3.9	-0.6	-9.0	+1.1	-2.2	+2.4
	unit	1999			2000		
		all	male	female	all	male	female
Population							
total	1000	2440	1128	1312	2424	1123	1301
age group 15–64	1000	1627	783	843	1636	788	848
<i>age group 15–64 by education</i>							
< upper secondary	%	29.7	28.8	30.4	30.6	29.7	31.4
upper secondary	%	56.2	58.1	54.6	55.3	56.6	54.1
tertiary	%	14.2	13.1	15.1	14.1	13.6	14.5
<i>dependency and activity</i>							
youth dependency	rate	27.7	29.1	26.4	26.4	28.1	24.8
old age dependency	rate	22.3	14.9	29.2	21.7	14.4	28.5
activity age group 15–64	rate	69.1	76.2	62.6	68.0	73.6	62.8
effective dependency	rate	99.3	71.0	130.9	104.1	79.3	130.5
Employment							
total	1000	998	526	472	976	503	473
<i>by age groups</i>							
15–24	rate	33.2	37.6	28.7	30.4	35.2	25.6
25–54	rate	74.8	78.7	71.2	74.2	75.4	73.0
55–64	rate	36.6	50.3	26.4	35.4	48.3	25.9
65+	rate	8.3	12.2	6.4	6.6	10.2	5.0
15–64	rate	59.5	65.4	54.1	58.2	62.3	54.3
<i>by education</i>							
< upper secondary	%	13.4	16.0	10.6	12.7	14.9	10.3
upper secondary	%	66.2	67.3	65.0	66.3	66.9	65.7
tertiary	%	20.3	16.7	24.3	21.0	18.2	24.0
<i>by economic activity</i>							
agriculture & fishery	%	17.2	19.1	15.1	14.4	16.0	12.8
mining & quarrying	%	.	.	.	.	.	.
manufacturing	%	17.4	19.8	14.7	18.5	20.5	16.4
electricity, gas, water	%	2.2	3.0	1.3	2.1	2.8	1.3
construction	%	6.1	10.1	1.6	6.0	10.8	(0.9)
trade & repair	%	14.4	12.4	16.5	15.3	12.7	18.1
hotels & restaurants	%	2.1	0.9	3.4	2.3	1.2	3.5
transport & communication	%	8.5	11.4	5.4	8.5	11.5	5.3
financial intermediation	%	1.3	(0.8)	1.9	1.2	1.0	1.5
real estate & business	%	4.0	4.0	3.9	4.9	5.0	4.7
public administration	%	7.5	8.0	6.9	7.8	8.7	6.7
education	%	8.8	3.6	14.5	9.0	4.0	14.4
health & social work	%	5.5	2.4	9.0	5.0	1.2	9.1
other services	%	5.0	4.3	5.9	4.7	4.3	5.1
self-employed	% of total	11.1	12.9	9.2	10.5	12.5	8.4
part-time	% of total	11.9	10.9	12.9	10.7	9.5	12.1
temporary	% of employees	7.5	10.1	4.6	6.7	8.8	4.6
<i>usual weekly hours</i>							
full-time employees	average	43.0	44.1	41.8	43.0	43.8	42.3
part-time employees	average	23.5	25.8	22.0	22.7	25.0	21.2
self-employed	average	46.5	48.4	43.9	45.6	47.4	42.8
Unemployment							
total	1000	157	85	72	160	89	72
<i>by age groups</i>							
15–24	rate	23.4	26.1	19.5	21.2	21.1	21.3
25–54	rate	13.1	13.0	13.3	14.0	15.0	13.0
55–64	rate	8.2	7.1	9.8	9.4	10.5	7.9
15–64	rate	13.9	14.2	13.6	14.4	15.3	13.5
<i>by education</i>							
< upper secondary	rate	17.5	18.9	15.1	21.2	23.7	17.1
upper secondary	rate	15.0	14.3	15.7	14.7	14.8	14.6
tertiary	rate	6.3	7.6	5.3	7.1	7.0	7.2
long-term	% of total	53.0	52.0	54.1	55.9	56.2	55.5

National time series

Poland	unit	1999			2000		
Macroeconomic indicators		GDP (1998)	Employed	Unemployed	GDP (1999)	Employed	Unemployed
annual change	%	+4.8	-2.8	+18.9	+4.0	-2.8	+35.0
	unit	1999			2000		
		all	male	female	all	male	female
Population							
total	1000	37997	18372	19625	38093	18426	19667
age group 15–64	1000	25252	12457	12795	25652	12670	12982
<i>age group 15–64 by education</i>							
< upper secondary	%	35.2	32.0	38.1	33.1	29.7	36.2
upper secondary	%	56.4	59.5	53.5	58.3	62.1	54.9
tertiary	%	8.4	8.5	8.4	8.6	8.2	8.9
<i>dependency and activity</i>							
youth dependency	rate	31.1	32.3	29.9	29.5	30.6	28.4
old age dependency	rate	19.3	15.1	23.4	19.0	14.8	23.1
activity age group 15–64	rate	65.8	72.1	59.6	66.1	71.8	60.5
effective dependency	rate	101.7	75.7	133.1	110.3	82.5	144.3
Employment							
total	1000	14940	8164	6776	14518	7975	6543
<i>by age groups</i>							
15–24	rate	24.3	27.2	21.5	24.1	26.4	21.9
25–54	rate	73.7	79.8	67.6	71.0	77.5	64.5
55–64	rate	32.5	41.8	24.5	29.0	37.4	21.8
65+	rate	8.5	12.7	6.0	7.6	12.0	4.9
15–64	rate	57.5	63.6	51.6	55.1	61.2	49.3
<i>by education</i>							
< upper secondary	%	16.5	16.7	16.2	14.8	14.9	14.8
upper secondary	%	70.1	71.4	68.7	71.3	73.5	68.6
tertiary	%	13.4	11.9	15.1	13.9	11.6	16.6
<i>by economic activity</i>							
agriculture & fishery	%				18.7	18.9	18.4
mining & quarrying	%				2.1	3.2	0.7
manufacturing	%				19.8	22.9	15.9
electricity, gas, water	%				1.8	2.7	0.7
construction	%				7.4	12.3	1.5
trade & repair	%				14.0	12.0	16.5
hotels & restaurants	%				1.7	0.9	2.6
transport & communication	%				6.2	8.4	3.5
financial intermediation	%				2.5	1.4	3.9
real estate & business	%				3.5	3.6	3.4
public administration	%				5.3	5.3	5.4
education	%				6.9	3.0	11.6
health & social work	%				6.5	2.1	11.8
other services	%				3.6	3.2	4.1
self-employed	% of total	22.8	26.1	19.0	22.5	25.9	18.4
part-time	% of total	9.6	7.4	12.2	10.6	8.4	13.2
temporary	% of employees	4.8	5.1	4.5	5.8	6.6	4.8
<i>usual weekly hours</i>							
full-time employees	average						
part-time employees	average						
self-employed	average						
Unemployment							
total	1000	2085	1060	1025	2815	1351	1463
<i>by age groups</i>							
15–24	rate	29.6	27.9	31.6	35.7	34.3	37.2
25–54	rate	10.6	9.9	11.6	14.2	12.3	16.3
55–64	rate	7.3	8.5	5.6	9.7	9.1	10.6
15–64	rate	12.6	11.8	13.4	16.6	14.8	18.6
<i>by education</i>							
< upper secondary	rate	17.0	17.6	16.4	21.5	20.9	22.1
upper secondary	rate	12.7	11.4	14.3	17.0	14.6	20.0
tertiary	rate	3.2	2.9	3.5	5.5	5.0	5.9
long-term	% of total	41.6	36.5	46.8	44.6	40.2	48.6

Romania	unit	1999			2000		
Macroeconomic indicators		GDP (1998)	Employed	Unemployed	GDP (1999)	Employed	Unemployed
annual change	%	-5.4	-1.8	+10.4	-3.2	-1.1	+11.3
	unit	1999			2000		
		all	male	female	all	male	female
Population							
total	1000	22358	10870	11487	22338	10863	11475
age group 15–64	1000	15190	7477	7713	15213	7499	7714
<i>age group 15–64 by education</i>							
< upper secondary	%	43.6	37.8	49.0	43.2	37.2	48.8
upper secondary	%	49.8	54.4	45.5	49.9	54.8	45.4
tertiary	%	6.6	7.8	5.5	6.9	8.0	5.8
<i>dependency and activity</i>							
youth dependency	rate	28.1	29.1	27.0	27.3	28.4	26.3
old age dependency	rate	19.1	16.2	21.9	19.5	16.5	22.4
activity age group 15–64	rate	69.8	76.1	63.7	69.6	75.7	63.6
effective dependency	rate	64.2	49.7	80.4	66.8	51.9	83.5
Employment							
total	1000	11022	5808	5214	10898	5750	5148
<i>by age groups</i>							
15–24	rate	35.3	38.8	31.9	34.0	36.9	31.1
25–54	rate	79.6	85.2	74.1	78.6	84.6	72.7
55–64	rate	52.9	59.4	47.3	52.0	57.4	47.3
65+	rate	39.7	45.0	35.8	38.2	43.5	34.4
15–64	rate	65.0	70.4	59.7	64.2	69.5	59.0
<i>by education</i>							
< upper secondary	%	37.1	32.2	42.6	36.8	32.0	42.3
upper secondary	%	54.5	58.8	49.7	54.4	58.8	49.6
tertiary	%	8.4	9.0	7.7	8.7	9.2	8.1
<i>by economic activity</i>							
agriculture & fishery	%	44.0	40.8	47.6	45.2	42.8	47.9
mining & quarrying	%	1.7	2.8	0.5	1.6	2.6	0.5
manufacturing	%	19.6	20.6	18.5	18.6	19.2	18.0
electricity, gas, water	%	2.1	3.2	0.8	1.8	2.7	0.9
construction	%	3.6	6.1	0.9	3.7	6.1	1.0
trade & repair	%	8.3	6.9	9.8	8.3	6.9	9.9
hotels & restaurants	%	1.1	0.7	1.5	1.1	0.8	1.4
transport & communication	%	4.4	6.2	2.4	4.5	6.5	2.2
financial intermediation	%	0.8	0.4	1.2	0.9	0.5	1.3
real estate & business	%	1.4	1.3	1.5	1.2	1.3	1.1
public administration	%	3.7	5.0	2.4	3.9	5.1	2.7
education	%	4.0	2.3	5.9	4.0	2.1	6.1
health & social work	%	3.1	1.3	5.0	2.9	1.1	5.0
other services	%	2.2	2.3	2.1	2.2	2.3	2.1
self-employed	% of total	23.8	30.1	16.8	25.4	32.6	17.4
part-time	% of total	16.5	14.0	19.2	16.4	14.3	18.6
temporary	% of employees	3.1	3.0	3.2	2.9	3.0	2.9
<i>usual weekly hours</i>							
full-time employees	average	41.1	41.3	40.9	41.4	41.6	41.1
part-time employees	average	34.0	37.9	29.6	32.4	33.5	31.7
self-employed	average	41.3	43.1	37.2	40.4	41.8	37.3
Unemployment							
total	1000	733	428	305	816	466	351
<i>by age groups</i>							
15–24	rate	17.3	18.8	15.5	17.8	19.3	15.9
25–54	rate	5.8	6.2	5.5	6.9	7.1	6.7
55–64	rate	0.9	1.5	0.3	1.1	1.7	0.4
15–64	rate	6.9	7.5	6.2	7.7	8.2	7.1
<i>by education</i>							
< upper secondary	rate	3.6	4.8	2.5	3.9	4.9	3.1
upper secondary	rate	8.5	8.6	8.3	9.4	9.4	9.5
tertiary	rate	2.7	2.5	3.0	3.6	4.0	3.1
long-term	% of total	45.2	41.8	50.0	49.2	50.2	48.0

National time series

Slovenia		unit	1999			2000		
Macroeconomic indicators			GDP (1998)	Employed	Unemployed	GDP (1999)	Employed	Unemployed
annual change		%	+3.8	-2.0	-6.4	+5.0	+0.6	-5.4
		unit	1999			2000		
			all	male	female	all	male	female
Population								
total		1000	1980	964	1015	1988	971	1018
age group 15–64		1000	1379	698	681	1393	704	689
<i>age group 15–64 by education</i>								
< upper secondary		%	35.4	28.8	41.5	33.9	27.8	39.7
upper secondary		%	53.1	59.9	46.6	53.9	60.2	48.1
tertiary		%	11.6	11.3	11.9	12.1	12.0	12.2
<i>dependency and activity</i>								
youth dependency		rate	23.4	23.8	23.1	22.7	23.0	22.4
old age dependency		rate	20.1	14.3	26.0	20.0	14.9	25.3
activity age group 15–64		rate	67.6	72.2	63.0	67.4	71.7	63.1
effective dependency		rate	86.4	66.3	110.1	87.1	68.1	109.3
Employment								
total		1000	889	480	409	894	481	413
<i>by age groups</i>								
15–24		rate	32.9	34.7	31.2	31.2	34.7	27.4
25–54		rate	82.2	85.6	78.6	82.6	85.5	79.6
55–64		rate	23.4	32.2	14.9	22.3	31.0	14.3
65+		rate	9.4	13.3	7.3	7.4	10.8	5.4
15–64		rate	62.5	66.8	58.1	62.7	66.7	58.5
<i>by education</i>								
< upper secondary		%	21.0	18.8	23.5	19.9	18.0	22.2
upper secondary		%	62.5	67.0	57.1	62.8	67.4	57.4
tertiary		%	16.6	14.2	19.3	17.3	14.6	20.4
<i>by economic activity</i>								
agriculture & fishery		%	10.8	10.7	11.0	9.6	9.5	9.7
mining & quarrying		%	0.7	1.3	.	0.8	1.4	(0.3)
manufacturing		%	31.1	35.2	26.4	30.3	33.5	26.5
electricity, gas, water		%	0.9	1.3	(0.4)	1.1	1.7	(0.5)
construction		%	5.1	8.6	1.0	5.4	9.0	1.2
trade & repair		%	12.3	11.2	13.6	13.4	11.9	15.1
hotels & restaurants		%	3.8	3.0	4.7	3.8	3.0	4.8
transport & communication		%	6.0	8.8	2.8	6.7	9.7	3.3
financial intermediation		%	2.3	1.1	3.7	2.4	1.5	3.6
real estate & business		%	5.5	5.2	5.9	4.8	5.1	4.5
public administration		%	5.5	5.3	5.8	6.0	5.5	6.4
education		%	6.7	2.9	11.2	6.4	2.6	10.9
health & social work		%	5.1	1.9	8.8	5.2	2.0	9.0
other services		%	4.1	3.5	4.8	3.9	3.6	4.3
self-employed		% of total	12.6	16.6	8.0	11.2	15.3	6.5
part-time		% of total	6.6	5.6	7.8	6.1	4.7	7.7
temporary		% of employees	10.8	10.0	11.7	12.9	12.4	13.5
<i>usual weekly hours</i>								
full-time employees		average	41.5	42.0	40.9	41.4	41.8	41.0
part-time employees		average	17.8	17.0	18.4	19.3	18.4	19.9
self-employed		average	50.4	51.1	48.6	49.8	50.5	48.0
Unemployment								
total		1000	70	37	33	66	35	31
<i>by age groups</i>								
15–24		rate	18.5	17.2	19.8	16.4	14.8	18.5
25–54		rate	6.1	6.1	6.0	5.8	5.7	6.0
55–64		rate	(3.7)	(4.8)	.	(6.1)	(7.6)	.
15–64		rate	7.5	7.4	7.7	7.1	6.9	7.2
<i>by education</i>								
< upper secondary		rate	9.9	10.5	9.3	10.6	11.4	9.8
upper secondary		rate	7.5	7.1	8.2	6.9	6.6	7.4
tertiary		rate	3.0	(3.2)	(2.9)	(2.2)	.	(2.9)
long-term		% of total	41.8	45.2	38.0	62.7	64.9	60.3

Slovakia	unit	1999			2000		
Macroeconomic indicators		GDP (1998)	Employed	Unemployed	GDP (1999)	Employed	Unemployed
annual change	%	+4.1	-3.3	+31.8	+1.9	-2.1	+21.4
	unit	1999			2000		
		all	male	female	all	male	female
Population							
total	1000	5369	2599	2770	5377	2604	2773
age group 15–64	1000	3657	1802	1855	3692	1821	1871
<i>age group 15–64 by education</i>							
< upper secondary	%	30.1	23.6	36.1	28.8	22.6	34.5
upper secondary	%	62.5	67.9	57.6	63.5	68.8	58.7
tertiary	%	7.3	8.5	6.3	7.6	8.5	6.8
<i>dependency and activity</i>							
youth dependency	rate	30.1	31.3	29.0	29.0	30.0	27.9
old age dependency	rate	16.7	13.0	20.3	16.7	12.9	20.3
activity age group 15–64	rate	69.0	76.3	62.0	69.5	76.5	62.8
effective dependency	rate	100.5	75.6	130.2	106.8	82.8	135.0
Employment							
total	1000	2128	1159	969	2083	1125	958
<i>by age groups</i>							
15–24	rate	31.1	33.1	29.1	28.3	28.7	27.9
25–54	rate	75.9	81.3	70.5	74.2	79.1	69.3
55–64	rate	22.2	36.4	10.6	21.5	35.2	10.2
65+	rate	1.2	2.2	.	0.8	1.6	.
15–64	rate	58.0	64.0	52.1	56.3	61.6	51.1
<i>by education</i>							
< upper secondary	%	8.2	6.3	10.4	6.9	5.0	9.2
upper secondary	%	80.0	81.8	77.9	80.7	82.8	78.3
tertiary	%	11.8	11.9	11.6	12.4	12.3	12.5
<i>by economic activity</i>							
agriculture & fishery	%	7.2	9.3	4.8	6.9	9.2	4.3
mining & quarrying	%	1.4	2.3	0.4	1.2	2.0	0.3
manufacturing	%	25.7	28.0	22.9	25.8	28.3	22.9
electricity, gas, water	%	2.4	3.6	0.9	2.2	3.5	0.8
construction	%	9.0	14.9	1.9	8.0	13.5	1.5
trade & repair	%	12.4	8.8	16.6	12.5	9.5	15.9
hotels & restaurants	%	3.1	2.1	4.3	3.0	2.1	4.1
transport & communication	%	7.8	10.1	4.9	8.2	10.5	5.6
financial intermediation	%	1.7	0.9	2.8	1.8	1.1	2.5
real estate & business	%	3.7	4.1	3.1	4.1	4.6	3.6
public administration	%	7.1	7.1	7.0	7.7	7.0	8.5
education	%	7.8	3.1	13.5	7.8	3.2	13.2
health & social work	%	7.3	2.5	13.0	7.0	2.4	12.5
other services	%	3.5	3.2	3.9	3.7	3.2	4.3
self-employed	% of total	7.4	10.1	4.2	7.8	10.9	4.1
part-time	% of total	1.9	1.0	3.0	1.7	0.9	2.8
temporary	% of employees	3.7	3.8	3.7	4.0	3.8	4.3
<i>usual weekly hours</i>							
full-time employees	average	42.2	42.7	41.7	42.2	42.7	41.7
part-time employees	average	24.8	25.8	24.4	24.1	24.2	24.0
self-employed	average	50.9	52.0	48.0	50.7	51.3	48.8
Unemployment							
total	1000	403	220	183	490	271	219
<i>by age groups</i>							
15–24	rate	32.0	33.1	30.8	36.9	40.0	33.3
25–54	rate	13.0	12.8	13.1	15.9	15.8	16.0
55–64	rate	10.3	11.7	.	12.7	14.2	.
15–64	rate	16.0	16.0	15.9	19.1	19.5	18.6
<i>by education</i>							
< upper secondary	rate	34.1	39.4	29.7	40.4	48.7	33.6
upper secondary	rate	15.1	15.0	15.2	18.4	18.4	18.4
tertiary	rate	4.1	4.0	4.3	5.3	6.1	4.3
long-term	% of total	47.6	44.3	51.5	54.7	54.5	54.8

National time series

Albania	unit	1999			2000		
Macroeconomic indicators		GDP (1998)	Employed	Unemployed	GDP (1999)	Employed	Unemployed
annual change	%	+8.0	-1.8	+2.1	+8.0	+0.3	-10.4
	unit	1999			2000		
		all	male	female	all	male	female
Population							
total	1000	3373	1662	1711	3401	1677	1724
age group 15–64	1000	2083	1013	1070	2116	1029	1087
<i>age group 15–64 by education</i>							
< upper secondary	%						
upper secondary	%						
tertiary	%						
<i>dependency and activity</i>							
youth dependency	rate	52.5	55.7	49.4	51.7	54.9	48.7
old age dependency	rate	9.5	8.4	10.5	9.0	8.0	9.9
activity age group 15–64	rate						
effective dependency	rate						
Employment							
total	1000	1065	661	404	1068	641	427
<i>by age groups</i>							
15–24	rate						
25–54	rate						
55–64	rate						
65+	rate						
15–64	rate						
<i>by education (public sector)</i>							
< upper secondary	%	20.8			20.8		
upper secondary	%	51.0			51.0		
tertiary	%	28.2			28.2		
<i>by economic activity</i>							
agriculture & fishery	%	72.2			71.9		
mining & quarrying	%	1.5			0.9		
manufacturing	%	5.0			3.2		
electricity, gas, water	%	1.2			1.4		
construction	%	1.1			1.2		
trade & repair	%	2.7			4.5		
hotels & restaurants	%	1.3			1.8		
transport & communication	%	3.0			2.4		
financial intermediation	%						
real estate & business	%						
public administration	%						
education	%	4.5			4.4		
health & social work	%	2.4			2.1		
other services	%	5.2			6.2		
self-employed	% of total						
part-time	% of total						
temporary	% of employees						
<i>usual weekly hours</i>							
full-time employees	average						
part-time employees	average						
self-employed	average						
Unemployment							
total	1000	240	130	110	215	113	102
<i>by age groups</i>							
under 35	% of total	58.5	54.6	63.1	57.8	57.9	57.8
35 and more	% of total	41.5	45.4	36.9	42.1	42.1	42.1
<i>by education</i>							
< upper secondary	% of total	47.9			48.7		
upper secondary	% of total	49.2			48.7		
tertiary	% of total	2.9			2.7		
long-term	% of total	90.2	89.4	91.3	89.7	88.8	90.8

FYROM	unit	1999			2000		
Macroeconomic indicators		GDP (1998)	Employed	Unemployed	GDP (1999)	Employed	Unemployed
annual change	%	+2.9			+2.7	+0.8	+0.1
	unit	1999			2000		
		all	male	female	all	male	female
Population							
total (age 15–80)	1000	2022	1011	1010	2026	1014	1012
age group 15–64	1000	1337	674	663	1347	674	673
<i>age group 15–64 by education</i>							
< upper secondary	%	52.1	46.2	57.9	52.4	45.6	59.1
upper secondary	%	37.3	42.7	32.0	38.0	43.7	32.4
tertiary	%	9.6	10.9	8.2	9.6	10.7	8.5
<i>dependency and activity</i>							
youth dependency	rate	33.3	34.2	32.4			
old age dependency	rate	14.6	13.0	16.2			
activity age group 15–64	rate	59.7	72.8	46.5	59.7	71.7	47.7
effective dependency	rate	178.5	124.2	267.0	179.0	123.5	268.7
Employment							
total	1000	545	338	207	550	340	210
<i>by age groups</i>							
15–24	rate	14.4	16.8	11.9	15.1	18.3	11.8
25–54	rate	53.6	64.3	42.6	53.2	64.2	42.1
55–64	rate	26.3	40.3	12.6	26.2	39.4	14.0
65+	rate	4.1	6.5	2.1	3.7	5.4	2.3
15–64	rate	40.2	49.4	30.9	40.3	49.7	30.9
<i>by education</i>							
< upper secondary	%	33.1	34.8	30.2	33.0	33.8	31.8
upper secondary	%	48.4	48.7	48.0	49.7	50.8	47.9
tertiary	%	17.7	16.0	20.3	17.2	15.4	20.2
<i>by economic activity</i>							
agriculture & fishery	%	21.0	22.2	19.0	21.8	21.9	21.7
mining & quarrying	%	incl. in manufacturing			incl. in manufacturing		
manufacturing	%	27.5	26.1	29.6	27.0	25.7	29.1
electricity, gas, water	%	0.5	0.8	0.1	0.5	0.8	0.1
construction	%	5.7	8.3	1.5	6.5	9.4	1.7
trade & repair	%	12.9	12.8	13.1	12.2	12.2	12.2
hotels & restaurants	%	2.6	2.7	2.5	2.9	2.9	2.8
transport & communication	%	5.0	6.6	2.5	5.0	6.6	2.4
financial intermediation	%	3.1	2.6	3.9	2.9	2.6	3.3
real estate & business	%	1.7	2.5	0.5	1.9	2.4	1.1
public administration	%	5.9	5.9	5.7	5.9	6.6	4.8
education	%	7.4	6.2	9.2	7.3	5.6	10.1
health & social work	%	5.7	2.6	10.6	5.8	2.8	10.6
other services	%	0.2	0.2	0.2	0.3	0.4	0.2
self-employed	% of total	15.2	20.9	6.1	14.8	19.1	7.8
part-time	% of total	4.4	3.6	5.7	7.2	6.5	8.3
temporary	% of total	9.1	9.2	9.0	10.3	11.1	9.0
<i>usual weekly hours</i>							
full-time employees	average						
part-time employees	average						
self-employed	average						
Unemployment							
total	1000	261	158	103	262	149	113
<i>by age groups</i>							
15–24	rate	62.9	63.6	61.8	59.9	58.1	62.4
25–54	rate	28.3	27.9	29.0	28.6	26.9	31.2
55–64	rate	13.5	14.3	11.0	16.3	17.9	11.9
15–64	rate	32.7	32.2	33.5	32.5	30.7	35.1
<i>by education</i>							
< upper secondary	rate	37.5	38.2	36.3	37.6	37.7	37.3
upper secondary	rate	33.3	31.5	36.1	32.6	28.8	38.1
tertiary	rate	16.4	14.1	19.1	17.8	15.7	20.2
long-term	% of total	83.8	82.9	85.2	83.3	83.2	83.6

Regional data

Country Region	Year	Population		Employment						
		total (1000)	15-64 (1000)	total (1000)	all 15-64 (rate)	males 15-64 (rate)	females 15-64 (rate)	in agri- culture (%)	in industry (%)	in services (%)
Bulgaria	2000	8136	5502	2872	51.5	56.1	47.2	13.2	32.8	54.0
North-East	2000	1336	916	449	48.1	53.7	42.8	19.3	27.7	53.1
North Central	2000	1219	813	417	50.0	54.8	45.4	15.0	37.6	47.4
North-West	2000	581	367	154	41.6	43.2	40.1	8.7	33.9	57.4
South-East	2000	820	554	257	45.6	50.7	40.6	12.6	29.3	58.0
South Central	2000	2051	1385	736	52.7	57.6	48.0	19.0	36.4	44.6
South-West	2000	2129	1468	859	58.1	62.2	54.3	5.2	31.0	63.7
Czech Republic	2000	10222	7111	4675	64.9	73.1	56.8	5.2	39.9	54.8
Praha	2000	1180	823	607	71.4	77.3	65.9	0.7	21.7	77.7
Stredni Cechy	2000	1107	767	515	66.5	76.0	57.0	5.6	41.2	53.2
Jihozapad	2000	1172	815	560	68.1	77.0	59.1	7.5	42.3	50.2
Severozapad	2000	1124	793	484	60.4	68.9	52.0	3.6	41.2	55.2
Severovýchod	2000	1481	1022	689	66.4	74.4	58.5	6.2	43.5	50.3
Jihovýchod	2000	1652	1141	757	65.7	74.1	57.4	7.8	41.0	51.2
Stredni Morava	2000	1233	856	538	62.5	72.1	53.1	5.8	45.6	48.6
Ostravsko	2000	1275	894	525	58.4	65.5	51.3	3.5	44.2	52.3
Estonia	2000	1430	972	604	60.6	64.3	57.1	7.0	34.7	58.3
Hungary	2000	9927	6760	3807	55.9	62.7	49.4	6.5	33.8	59.8
Közep-Magyarország	2000	2807	1941	1180	60.2	66.8	54.2	1.5	27.0	71.4
Közep-Dunantul	2000	1097	761	449	58.8	65.8	51.9	6.4	42.7	50.9
Nyugat-Dunantul	2000	972	667	423	63.1	70.4	56.0	6.1	41.5	52.4
Del-Dunantul	2000	964	655	349	53.1	59.6	46.9	10.0	32.4	57.6
Eszak-Magyarország	2000	1256	841	417	49.2	55.3	43.3	5.3	38.3	56.4
Eszak-Alföld	2000	1506	1009	491	48.4	55.1	41.8	8.6	34.9	56.5
Del-Alföld	2000	1326	886	497	55.7	63.6	48.1	14.9	31.2	53.9
Lithuania	2000	3698	2472	1525	60.1	61.8	58.5	18.4	27.4	54.2
Latvia	2000	2424	1636	976	58.2	62.3	54.3	14.4	26.8	58.7
Poland	2000	37955	25652	14518	55.1	61.2	49.3	18.7	31.1	50.3
Dolnoslaskie	2000	2792	1903	972	50.7	56.0	45.4	10.1	33.0	56.9
Kujawsko-Pomorskie	2000	2140	1481	785	52.5	59.2	46.1	17.6	31.8	50.6
Lubelskie	2000	2387	1570	997	60.2	64.0	56.5	40.2	20.0	39.8
Lubuskie	2000	1035	716	359	49.6	55.4	43.8	9.9	35.8	54.3
Lodzkie	2000	2957	2092	1202	56.0	61.1	51.4	14.7	30.6	54.6
Malopolskie	2000	3320	2221	1350	59.0	64.4	53.7	21.2	30.4	48.4
Mazowieckie	2000	5011	3315	2109	61.2	67.0	55.5	19.4	25.2	55.5
Opolskie	2000	1069	729	418	55.9	65.1	46.9	21.8	35.2	43.0
Podkarpackie	2000	2082	1356	808	56.3	59.9	52.7	29.1	28.2	42.7
Podlaskie	2000	1155	743	452	58.4	65.4	51.3	33.4	23.2	43.4
Pomorskie	2000	1918	1262	672	53.0	61.6	44.9	10.3	30.7	59.0
Slaskie	2000	3999	2682	1324	48.7	55.6	41.8	4.3	47.7	48.0
Swietokrzyskie	2000	1381	941	527	53.4	58.8	47.9	30.3	26.8	42.9
Warminsko-Mazurskie	2000	1517	1041	529	50.5	56.3	44.8	12.5	30.7	56.8
Wielkopolskie	2000	3561	2493	1434	56.7	63.8	49.8	20.6	34.6	44.8
Zachodniopomorskie	2000	1632	1107	578	51.7	58.6	45.0	7.0	31.8	61.2
Romania	2000	22338	15213	10898	64.2	69.5	59.0	45.2	25.8	29.0
Nord-Est	2000	3817	2524	1975	67.2	70.5	63.8	58.5	19.2	22.2
Sud-Est	2000	2929	2005	1377	61.9	68.0	56.0	48.2	21.3	30.5
Sud	2000	3462	2319	1781	66.9	73.8	60.1	51.0	25.1	23.9
Sud-Vest	2000	2403	1610	1324	70.0	73.2	66.9	61.3	20.0	18.7
Vest	2000	2022	1398	936	61.6	67.1	56.4	40.1	26.8	33.1
Nord-Vest	2000	2834	1939	1343	63.2	68.2	58.3	42.1	27.4	30.5
Centru	2000	2633	1821	1188	61.1	66.3	55.9	32.5	37.4	30.1
Bucuresti	2000	2238	1599	973	59.5	67.1	52.8	6.1	37.3	56.5
Slovenia	2000	1988	1393	894	62.7	66.7	58.5	9.6	37.7	52.7
Slovak Republic	2000	5377	3692	2083	56.3	61.6	51.1	6.9	37.3	55.8
Bratislavsky kraj	2000	615	439	311	70.2	75.3	65.5	2.5	22.4	75.1
Zapadne Slovensko	2000	1869	1297	731	56.3	62.1	50.7	8.9	40.4	50.6
Stredne Slovensko	2000	1350	921	505	54.7	61.8	47.8	6.5	41.1	52.4
Vychodne Slovensko	2000	1544	1035	536	51.7	55.1	48.4	7.2	37.8	55.0

Employment			Unemployment						Year	Country Region
self-employed (% of total)	temporary (% of employees)	part-time (% of total)	total (1000)	all 15-64 (rate)	males 15-64 (rate)	females 15-64 (rate)	youth unempl. (rate)	long-term unempl. (% of total)		
14.6			556.0	16.4	16.8	15.9	33.3	58.7	2000	Bulgaria
18.6			125.7	22.2	22.1	22.3	42.2	56.0	2000	North-East
16.6			83.6	17.1	17.5	16.5	32.3	62.0	2000	North Central
9.6			59.4	28.0	29.9	25.8	51.7	77.4	2000	North-West
13.6			70.1	21.7	21.2	22.3	43.3	60.3	2000	South-East
16.7			109.7	13.1	13.3	12.8	28.2	54.9	2000	South Central
10.9			107.5	11.1	11.7	10.5	23.3	51.8	2000	South-West
14.5	8.1	5.3	447.5	8.8	7.4	10.6	17.0	49.1	2000	Czech Republic
20.0	6.5	6.1	25.0	4.1	3.7	4.5	11.3	29.4	2000	Praha
15.5	6.0	5.1	42.0	7.6	5.5	10.3	11.6	51.3	2000	Stredni Cechy
14.3	7.5	5.6	35.8	6.1	4.8	7.7	10.8	41.4	2000	Jihozapad
12.5	9.1	3.8	84.9	15.1	13.8	16.6	25.6	56.8	2000	Severozapad
14.7	10.3	6.1	50.3	6.9	5.5	8.6	14.3	41.6	2000	Severovychod
13.8	7.9	5.2	58.0	7.2	5.8	8.9	12.7	46.9	2000	Jihovychod
13.2	8.7	5.6	65.2	10.9	8.7	13.6	20.0	47.6	2000	Stredni Morava
10.8	8.8	4.4	86.4	14.2	12.4	16.4	30.5	56.5	2000	Ostravsko
8.1	2.3	6.7	91.7	13.5	15.0	11.8	23.7	47.4	2000	Estonia
14.6	6.9	3.2	266.9	6.6	7.2	5.8	12.3	47.8	2000	Hungary
15.1	4.9	3.4	67.9	5.5	5.9	5.1	11.6	49.4	2000	Közep-Magyarország
13.3	5.7	2.9	24.5	5.2	5.3	5.1	8.0	42.0	2000	Közep-Dunantul
12.9	5.7	2.5	19.3	4.4	4.1	4.8	8.4	44.8	2000	Nyugat-Dunantul
16.4	9.5	3.9	29.8	7.9	9.2	6.2	12.4	46.1	2000	Del-Dunantul
12.6	10.1	3.6	46.1	10.0	11.8	7.8	20.2	53.3	2000	Eszak-Magyarország
12.3	8.1	3.4	52.9	9.8	10.6	8.6	16.7	48.7	2000	Eszak-Alföld
18.8	8.2	3.0	26.4	5.1	5.6	4.4	8.0	41.9	2000	Del-Alföld
15.9	3.7	8.6	280.5	15.9	18.2	13.5	27.5	52.4	2000	Lithuania
10.5	6.7	10.7	160.2	14.4	15.3	13.5	21.2	55.8	2000	Latvia
22.5	5.8	10.6	2814.5	16.6	14.8	18.6	35.7	44.7	2000	Poland
19.7	5.8	9.6	284.6	22.8	21.1	24.7	42.1	45.7	2000	Dolnoslaskie
21.5	4.8	7.9	173.5	18.2	16.3	20.5	38.1	54.4	2000	Kujawsko-Pomorskie
32.8	7.4	18.2	155.4	14.1	13.5	14.8	34.9	41.5	2000	Lubelskie
15.8	6.0	9.4	96.7	21.4	18.7	24.5	35.4	30.6	2000	Lubuskie
23.1	4.4	10.9	231.0	16.5	15.9	17.1	41.2	50.1	2000	Lodzkie
25.6	5.3	13.7	177.8	12.0	11.0	13.1	27.6	42.1	2000	Malopolskie
23.6	4.6	9.3	318.3	13.6	13.1	14.1	32.0	41.9	2000	Mazowieckie
17.9	8.9	10.0	71.3	14.9	10.0	20.7	31.4	25.3	2000	Opolskie
24.9	5.6	13.6	137.2	15.2	15.7	14.7	41.6	51.9	2000	Podkarpackie
33.6	7.5	12.6	84.3	16.3	14.1	18.9	30.9	53.5	2000	Podlaskie
16.1	4.5	7.9	139.1	17.2	14.0	21.0	33.6	43.7	2000	Pomorskie
12.7	5.7	9.1	305.9	19.0	15.5	23.1	34.1	38.1	2000	Slaskie
35.1	6.6	10.3	106.6	17.5	16.3	19.0	40.3	46.9	2000	Swietokrzyskie
16.0	9.8	6.8	152.8	22.5	20.7	24.6	41.2	49.1	2000	Warminsko-Mazurskie
23.9	6.0	10.0	234.9	14.3	10.8	18.1	32.9	43.7	2000	Wielkopolskie
15.4	6.0	6.5	145.0	20.2	17.5	23.4	46.2	52.8	2000	Zachodniopomorskie
25.4	2.9	16.4	816.1	7.7	8.2	7.1	17.8	49.2	2000	Romania
32.9	3.4	25.4	145.2	7.9	8.1	7.7	15.3	53.0	2000	Nord-Est
26.1	3.8	18.2	134.7	9.8	10.1	9.4	20.1	40.0	2000	Sud-Est
29.2	2.7	17.4	125.1	7.5	8.0	6.8	21.4	45.5	2000	Sud
30.5	2.1	6.2	69.5	5.8	6.0	5.6	14.0	49.0	2000	Sud-Vest
21.0	2.8	16.3	76.9	8.2	9.2	7.0	20.9	45.0	2000	Vest
24.5	2.6	12.6	100.8	7.6	8.0	7.1	15.4	48.0	2000	Nord-Vest
20.2	3.1	20.4	94.8	7.9	8.6	7.0	16.6	63.3	2000	Centru
7.0	2.7	7.4	69.0	6.8	7.5	6.0	22.4	53.5	2000	Bucuresti
11.2	12.9	6.1	66.4	7.1	6.9	7.2	16.4	62.7	2000	Slovenia
7.8	4.0	1.7	489.6	19.1	19.5	18.6	36.9	53.8	2000	Slovak Republic
10.2	3.4	2.0	24.6	7.4	7.2	7.6	18.9	29.7	2000	Bratislavsky kraj
8.2	2.7	1.6	155.7	17.6	17.7	17.5	32.8	53.3	2000	Zapadne Slovensko
7.1	3.6	2.2	134.3	21.0	19.9	22.4	37.5	54.4	2000	Stredne Slovensko
6.4	6.7	1.4	175.1	24.6	26.8	22.1	47.4	57.3	2000	Vychodne Slovensko

Abbreviations and methodological notes

Abbreviations

Countries

CC	Candidate Country: BG, CZ, EE, HU, LT, LV, PL, RO, SI, SK
CEC	Central European Country: CCs plus AL, BA, FYROM
BG	Bulgaria
CZ	Czech Republic
EE	Estonia
HU	Hungary
LT	Lithuania
LV	Latvia
PL	Poland
RO	Romania
SI	Slovenia
SK	Slovakia
AL	Albania
BA	Bosnia and Hercegovina
FYROM	Former Yugoslav Republic of Macedonia (in text)
MK	Former Yugoslav Republic of Macedonia (in tables and graphs)

Institutions and Programmes

EC	European Community
EU	European Union
Eurostat	Statistical Office of the European Communities
IAB	Institut für Arbeitsmarkt- und Berufsforschung, Nuremberg
ILO	International Labour Office
ICLS	International Conference of Labour Statisticians
ICON	Icon-Institute, Cologne
NSI	National Statistical Institute
PHARE	Poland and Hungary: Action for the Restructuring of the Economy
TACIS	Technical Assistance to the Commonwealth of Independent States
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organisation

Concepts and Classifications

GDP	Gross Domestic Product
ICSE	International Classification of Status in Employment
ISIC	International Standard Industrial Classification
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
LFS	Labour Force Survey
LTU	Long-term unemployment
NACE	Nomenclature general des Activités Économiques dans les Communeautés Européennes
NUTS	Nomenclature des Unités Territoriales pour Statistiques
STU	Short-term unemployment

Methodological notes

Major concepts and measures are described in “Data sources and methods” or in the text of the respective sections. The following notes are devoted to specific conditions and circumstances that should be taken into account in interpreting the information presented here or comparing it with other sources.

Reference period

The LFS data included here generally refer to the second quarter of 1999 or 2000. They may therefore not be directly comparable to data representing annual averages or referring to other points in time, e.g. mid-year or the end of the year.

The LFS data from Poland for the year 1999 refer to the first quarter.

The LFS data from Bulgaria for the year 2000, which in issue 1/2001 referred to the first quarter, now have been replaced by data from the second quarter.

The administrative data from Albania for 1999 and 2000 refer to the end of the year.

Respondents

Generally, the LFS includes the resident population living in private households. Persons living in collective households and conscripts in compulsory military or community service are either not covered in the survey or, if covered through their private household of origin, excluded in subsequent data processing. However, in a few countries some of these persons may remain in the survey due to the lack of information for their retroactive identification.

In Bulgaria, Lithuania and Poland the LFS does not cover the population under 15 years of age. The required figures for this age group were provided by the respective NSIs from other sources.

In Estonia, the 15-year age limit is defined as of January 1 rather than the last day of the reference week.

Data availability, inconsistencies and reliability

The national LFSs in the CECs do not yet fully implement the EU LFS standards. As a consequence, some items may be missing completely, in others individual response categories may have been combined or omitted. In the case of missing information the tables or graphs will show blanks or leave out the country altogether.

For example, the Latvian LFS includes persons who are inactive for family reasons in the residual category, the Bulgarian LFS does not provide data on part-time and temporary employment, unemployment registration and benefits.

Apart from different reference periods and survey coverage noted above, inconsistencies in data on the same subject may result from rounding errors or, particularly in the case of shares, whether persons with no answer are taken into account. In other cases, apparent inconsistencies are due to the application of different age limits for the persons included (usually 15–64).

Figures which are unreliable owing to the small size of the sample are set in brackets (). In the case of extremely unreliable data, figures are replaced by a “.”.

Other

The CEC-10 figures refer to the CCs (BG, CZ, EE, HU, LT, LV, PL, RO, SI, SK) and are computed as a weighted average. It should be noted that this average will be dominated by the results from the largest countries (PL and RO). As such, the CEC-10 only is a statistical computation and does not represent any type of political unit.

The order of countries in the tables and graphs follows the alphabetical order of the English country codes first for the CCs, then for the three additional PHARE programme participants.

The order of regions within countries follows their numbering according to Eurostat.

In the annex table of the section on “Recent labour market trends”, the unemployment by age groups shown for Albania refer to persons aged under 35/35+.

The male and female activity rates shown for the working age population in the Former Yugoslav Republic of Macedonia refer to the population aged 15+ rather than 15–64.

Errata in issue 1/2001

- P.14, 20, 51: By an error in the placement of the decimal point, the employment growth for the year 2000 in Hungary was given as 5.8 instead of 0.58%, so the correct figure should be 0.6.
- P.17: In the first paragraph, last line, the first word should be “unemployment” instead of “employment”.
- P.53: The unemployment rates by age for Latvia accidentally copied the figures from Lithuania.
- P.59: Although the national LFS in the FYROM collects basic data on all persons in a household, the published results only refer to the age group 15–80. Thus, the total population as well as the activity rates for males and females given for the year 2000 only referred to that age group and the youth and old age dependency rates were calculated on an incorrect basis.