fb

No. 289
September 2002

Research Reports
Forschungsberichte

The Vienna Institute
for International Economic Studies (WIIW)

Wiener Institut
für Internationale Wirtschaftsvergleiche (WIIW)

Hermine Vidovic

The Services Sectors in Central and Eastern Europe

Hermine Vidovic is WIIW research economist.

This study was commissioned and first published by Bank Austria Creditanstalt. It has been reprinted by WIIW in order to make it also available to the Institute's clients.

Hermine Vidovic

The Services Sectors in Central and Eastern Europe

Table of Contents

List of Tables, Figures and Maps in the text

Introduction

Over the last decade the Central and East European countries (CEECs) have undergone a dramatic structural change both in terms of GDP and employment which is still under way. During the communist past a common feature of all CEECs was the process of rapid industrialization and intense urbanization. Employment was highly concentrated in (heavy) industry, and the majority of workers was employed in large-scale state-owned enterprises. In Romania, Poland, Bulgaria and to some extent in Hungary, agriculture as well absorbed a considerable proportion of total employment.

Unlike in market economies, employment in the services sector was rather low. Under the former system the CEECs did not pay much attention to the development of services, in line with the ideological perception of that time that services were not vital to growth and development, while industry ranked top in all economic policy considerations. Thus most services were considered 'unproductive labour' and their contribution to the efficient functioning of the economy was neglected (Stare and Zupancic, 2000). As a result some services were either rarely provided on the market or simply non-existent. The services sector was 'underdeveloped, because governments controlled supply and failed to respond to growing demand for services. Many modern services that play an important role in market economies – such as financial, real estate, and business services – were simply not needed under socialism' (Soubbotina and Sheram, 2000). Others, such as wholesale and retail trade, transport and telecommunications, were centrally organized and under strict control. Most of the services, particularly business services and certain community services (e.g. child care, some health care activities)[1], were provided by the large industrial enterprises (Stare, 2001).[2] Since the start of the transformation the CEECs have been undergoing a reverse process – a rapid de-industrialization and, in most countries, also a de-agrarization process; consequently the share of services both in valued added and employment has expanded. These developments went along with the privatization of the huge state-owned enterprises, the establishment of new private small and medium-sized firms and a deregulation of the services markets. The transition has caused widespread layoffs in state-owned companies, and thus unemployment and poverty for a very large number of people. However, the magnitude and timing of these developments vary significantly across countries.

The following analysis covers seven transition countries: the Czech Republic, Hungary, Poland, Slovakia, Slovenia, Bulgaria and Romania. The structure of the paper is organized as follows: Section 1 describes the

1) The two sub-sectors of the services sector refer to market services, comprising trade, transport and finance and community services, made up of public administration, education, health and social work.

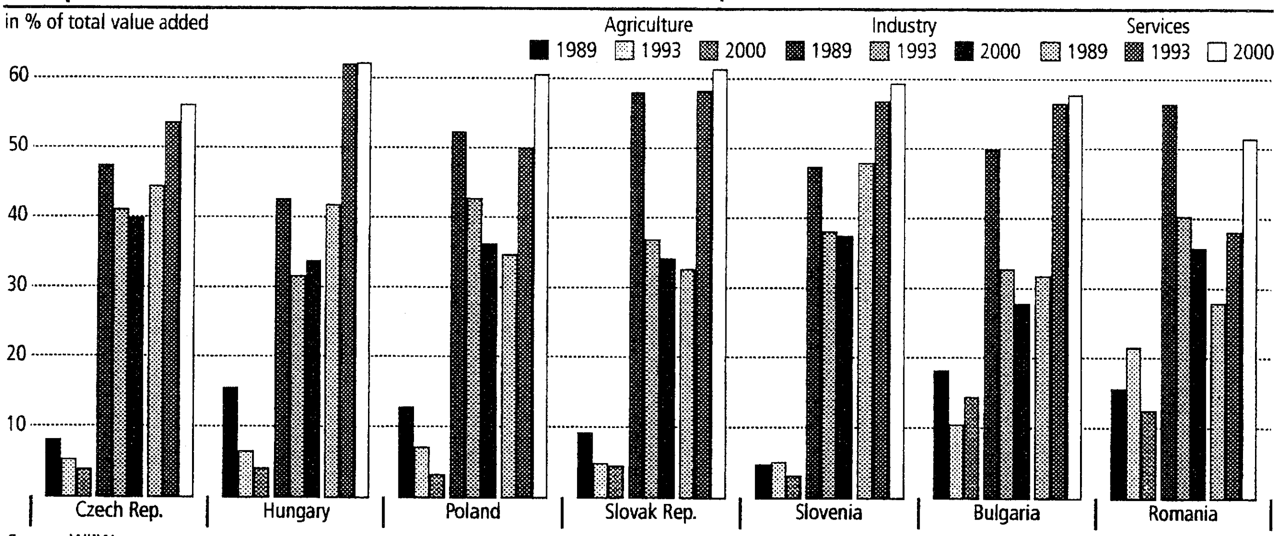
2) Employees of industrial enterprises rarely disposed of specialized knowledge and were employed on a full-time basis, irrespective of the actual need for the services they performed. Such services implied high transaction costs and were of low quality, deteriorating the efficiency of firms (Stare, 2001).

changing patterns of value added by broad sector, showing the process of de-agrarization, de-industrialization and tertiarization which the CEECs have undergone over the transition period and providing an overview of inter-country differences. Section 2 examines the changes in employment patterns that have evolved during the transition period. Further it compares the employment patterns in the European Union (divided into a northern and a southern part) with those in the CEECs and shows where there is an employment absorption potential in the individual transition countries. Section 3 deals in detail with the developments in the CEECs' services sector and its individual segments and again compares these with the EU countries. Section 4 analyses the regional dimension of the services sector in the CEE economies. Section 5 refers to the impact of FDI on the development of the services sector (especially the market services sector) and section 6 gives an overview of the tertiarization process country by country. Section 7 offers some concluding remarks.

1 The contribution of the services sector to gross value added

There are significant differences among the transition countries under review concerning the contribution of the services sector to the countries' gross value added (GVA, Figure 1). Some countries have already a significant services sector the proportion of which varies between 63% in Hungary and close to 60% in Slovakia, Poland and Slovenia while others still have a strong orientation towards manufacturing, such as the Czech Republic and to some extent also Slovenia, or agriculture, such as Bulgaria and Romania. The important position still held by industry in the Czech Republic seems to be one of the reasons why there the services sector share in value added is lower than in the other advanced transition countries, about 57%. Similarly the proportion of the market and community services sectors varies across countries. The community services sector contributes only 11% to the value added in Romania, but about 20% in Slovenia and Hungary. Values of close to 15% are reported for Bulgaria, the Czech Republic and Slovakia; in Poland the respective share amounts to about 18%. Market services generate the highest share of value added in Slovakia, close to 46%, which is among other things due to the high proportion of the transport and telecom segment (especially pipeline transport) in the GVA. The lowest values, at 39%, are recorded for Slovenia and Romania. With the exceptions of Bulgaria, Hungary and Slovenia, wholesale/retail trade is the dominant market services segment in most countries, growing most dynamically in Poland where it generates about 20% of the value added. In Hungary, the country with the most advanced services sector, the proportion of trade in value added has been continuously on the decline from 1991 onwards and contracted to some 11% in

Figure 1
Comparison of CEEC's value added structures in 1989, 1993 and 2000



Source: WIIW

1999. In Slovenia it remained stationary at the 1996 level (roughly the same as in Hungary) while in all other countries the contribution of that segment has been growing.[3)]

In a comparative perspective, by the end of the 1990s services (including the public sector) accounted for 69% of the OECD value added, manufacturing for about 19% and agriculture for 3%. Due to rising demand for services the gap has been steadily increasing over recent years. In addition low productivity growth in many services sectors has contributed to increase their share (at current prices) in overall economic activity. The large services sectors in countries such as the US, Denmark and France are particularly due to a high proportion of value added in finance, insurance, real estate and business services, but also due to a large community services sector (OECD, 2001).

As in the European Union, there is no clear relation between the contribution of the services sector to the GDP (or value added) and its share in total employment in the transition countries. In all countries under review the proportion of the services sector in value added was higher than its share in employment. This points to the high value added per employee in the services sector, traditionally attributed to the shift in relative prices towards the sector with low productivity growth – known as the 'Baumol effect' in economic literature (Baumol, 1967, Inman, 1985). The gap is most pronounced in Romania, where the two measures differ by nearly 20 percentage points. In Bulgaria and Poland the share of the services sector in value added exceeds that of employment by about 10 and in Slovenia by 8 percentage points. In the Czech Republic, in Hungary and in Slovakia the differences were much smaller, varying by 2 to 4 percentage points.

3) For further details see Annex A

2 Changing employment patterns

Since the start of the transition, employment in the CEECs has been subject to substantial shifts:

- from former concentration in large-scale enterprises towards small and medium-sized firms,
- from state-owned enterprises to private companies (either privatized firms or newly created firms) and
- from the agricultural and industrial sectors towards the tertiary sector.

Although labour hoarding in agriculture had not been as pronounced as in industry in the past, in the whole region the number employed on farms shrank by 1.4 million persons over the period 1989 to 2000 (of which 1.3 million jobs were lost over the period 1989 to 1993 alone). Under the previous system, agricultural co-operatives and state farms had the (social) obligation to employ (and hoard) workers of their region, very often unskilled and poorly qualified people. Labour shedding was highest in Hungary, where the number of those employed in agriculture in 1997 was only about one third of the 1989 level. The transformation or liquidation of agricultural co-operatives alone accounted for the elimination of almost 400,000 jobs in Hungarian agriculture after 1989. Similar developments could be observed in the Czech Republic, where the number of employed dropped to 35% of the 1989 level, in the Slovak Republic (to 40%) and in Slovenia (to about 60%); however, part of this fall results from changes in sectoral data coverage.

It is worth noting that in all countries – except Hungary, where the share of employment in agriculture was initially high – layoffs in other sectors have led to a return to small-scale farming. Thus countries with the most excessive employment in agriculture in 1989 experienced the slowest declines (Jackman and Pauna, 1997). The most outstanding example is Romania, where agricultural employment increased steadily until 1994; and the proportion of those employed in agriculture accounts for over 40% of the total – in 1989 it had been 28%; this is higher than the proportion employed in industry even including construction, or in the services sector (Figure 2). This trend is partly attributed to the emergence of numerous small private farm units after the ownership transformation of huge agricultural enterprises, but also to economic hardship that has forced people to return to self-employed farming (Burda, 1996).

Employment in industry – comprising manufacturing, mining, water supply, electricity and construction – has declined in all countries since 1989, reflecting the large employment overhang prevailing under the previous system. Over the period 1990 to 2000, employment in industry and construction in the CEECs dropped by 7.7 million persons or 40%.

Over two thirds of job losses in industry occurred during the first stage of the transition (1990 to 1992). Bulgaria and Romania were hit hardest by job losses, reporting employment drops by 59% and 53% respectively over the entire period. In Slovenia, the number employed in industry fell by 38%, in Poland by about one third. Within industry, official figures indicate a sharp employment decline in construction throughout the region, excepting Slovenia, in the period 1990 to 2000.

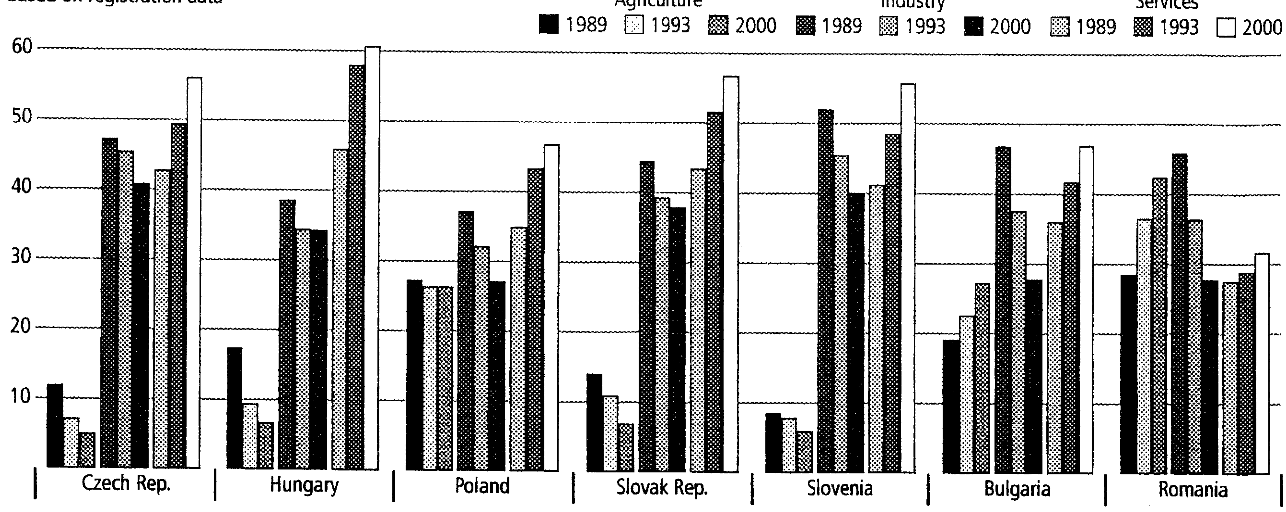
In accordance with declining employment in the secondary sector (industry and construction) and, in a few countries, in the primary sector, the share of the services sector in total employment increased substantially in all Central and East European countries. However, it should be noted that in the past, industry and to some extent also agriculture disguised a number of service-type jobs, such as transport and distribution, repairs and maintenance and the provision of food and other services to the workers. Thus, a significant portion of the employed registered in the services sector or of the drop in agriculture might be the result of methodological changes in statistics rather than of new job creation (see also OECD, 1995, p. 21).

With the exception of Romania, services employment accounted for the largest share in total employment in the year 2000. Between 1989 and 2000 the proportion of those employed in the services sector rose most rapidly in Hungary and Slovenia, by 15 and 14 percentage points respectively, and in the Czech Republic and in Slovakia, by slightly more than 13 percentage points each. Hungary reports the highest level of services employment among all CEECs – almost 60% of total employment – even though the actual number of people employed has been growing only moderately (by 6.1%) over the entire period 1990 to 2000. Compared with other countries of the region, the

Figure 2

Comparison of CEEC's employment structures in 1989, 1993 and 2000

based on registration data



Source: WIIW

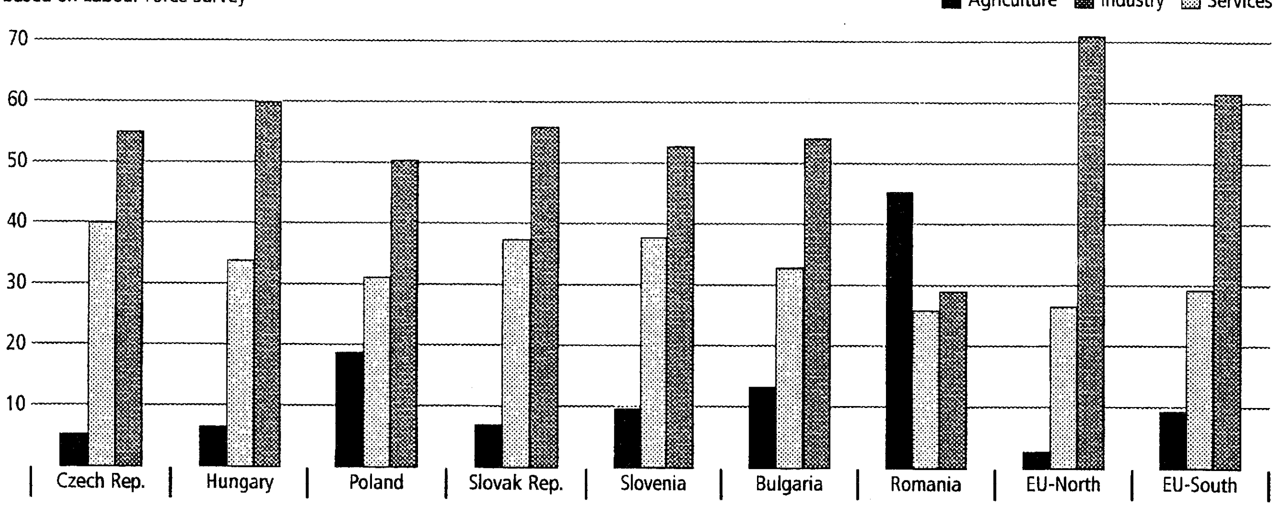
accelerated development of the services sector started earlier in Hungary – after the adoption of the Enterprise Act in 1989. In the Czech Republic, in Slovakia and Slovenia employment in services accounted for about 55% of the total in 2000. Services sector employment accounted for half of the total in Poland and less than one third in Romania.

However, compared with the huge job losses in industry and agriculture, employment increases in absolute terms in the services sector were rather modest in most of the countries and far from sufficient to offset job losses in the other two sectors. In the whole region services jobs grew by an estimated 1.5 million (the bulk of which in Poland) during the period 1990 to 2000, while in agriculture and industry about 9.1 million jobs were lost. Employment in the services sector started to grow in the more advanced transition countries in 1992, in Romania in 1994 and in Bulgaria in 1995. The most outstanding growth rate was reported for Poland, showing a 27% increase over the period 1994 to 2000, followed by Slovenia (18%), Slovakia (17%) and Romania (9%). Looking at the increase in the absolute number of persons employed in the services sector, Poland is in the lead: in the period 1994 to 2000 about 900 thousand services sector jobs were created. Next come Romania and the Czech Republic, reporting services jobs to have grown by 280 and 200 thousand persons over the same period[4]. Combined with some other factors this increase might also have contributed to the comparatively low unemployment rate in the Czech Republic, at least at the beginning of the transition.

Figure 3

CEEC's employment structures compared with EU-North and EU-South, 2000

based on Labour Force Survey



Notes: EU-North: Belgium, France, Germany, United Kingdom; EU-South: Greece, Portugal, Spain
Source: WIIW

4) Data for the Czech Republic refer to the 1993–2000 period.

For the purpose of a comparison of employment structures in the CEECs with selected EU countries, we divided the EU countries into a Southern group, made up of Greece, Portugal and Spain, and a Northern group, comprising Germany, France, Great Britain and Belgium (Figure 3).[5] In comparison with either of the EU groups, there was surplus industrial employment in all CEECs, excepting Romania; the deviations were most marked in the Czech Republic, Slovakia and Slovenia, while in Romania industrial employment was similar to EU-North, in Poland to EU-South. In agriculture, there was surplus employment in Romania, Poland and Bulgaria compared with both EU groups; Slovenia resembles the EU-South pattern and the other CEE countries are somewhere in between EU-North and EU-South. The services sector was underdeveloped compared to EU-North and even to EU-South in all countries except Hungary, implying that there is still a considerable potential in the services sector to absorb labour from other sectors in most CEECs. The imbalance was most pronounced in Romania, where the proportion employed in the services sector was only half that in EU-South.

5) Based on Labour Force Survey (LFS) data, both for the CEE countries and the European Union.

3 The services sector

General developments

The outstanding growth of the services industry has been the main feature of structural change in the developed countries during the twentieth century. A first comprehensive analysis of that factor was undertaken by Fourastie (1949) and Clark (1941, 1957) in a three-sector analysis, focusing on employment shifts between the agricultural, industrial and services sectors. Measured in terms of labour force reallocation, the extent of structural change throughout the twentieth century has been impressive.[6] For 25 developed economies it is estimated that at the beginning of the century agricultural employment accounted for 47% of the total, whereas 28% were employed in manufacturing and only 25% in services. Over the century structural change was characterized by a rapid decline of the agricultural sector, while up to the mid-1960s (in some countries until the beginning of the 1970s) the shares of both the manufacturing and services sectors in total employment experienced a rapid expansion. From the 1970s onwards, the process of tertiarization in employment outpaced that in manufacturing. In 1998 the services sector's share in total employment reached 67%, in manufacturing 28% and had contracted to about 5% in agriculture.[7] In the OECD economies the tertiary sector accounts for over 60% of GDP on average, and for more than 70% in ten countries. About two thirds of workers are engaged in service-related activities, in seven OECD countries the proportion exceeded the 70% mark as well. In the period 1980 to 1997 more jobs were created in services in OECD countries than were created overall, implying that growth in service-related jobs more than compensated for job losses in other sectors (OECD, 2000).

The most rapidly growing sectors are finance, insurance and real estate and some strategic business services – computer software and information processing, R&D and technical testing, advertising and marketing, human resource development and organizational advice. In some countries also community, social and personal services have increased as well. On the other hand the relative importance of the transport and communications services in total services and that of the distributive sector has been on the decline. The falls 'reflect saturated demand for some of these services, while relatively rapid productivity growth in sectors such as communications has contributed to changes in relative prices and reduced the share of these sectors in output and employment' (OECD, 2000). The diversity of services is reflected in the skill structure of the labour force, ranging from relatively low-skilled workers to highly skilled specialists.[8]

6) Peneder et al. (2000), quoting Feinstein (1999).

7) In the USA the tertiarization process started already in the middle of the last century and recorded in 1998 the highest employment share in the services sector, 73.7%, followed by the EU (65.7%) and Japan (62.7%).

8) Close to 90% out of the 20 million jobs created in the United States between 1993 and 1997 were in service-related activities. 81% of the new jobs were created in segments paying above median wages, of which two thirds in job categories with wages in the highest paying third of industry/occupation categories. Most of the job gains were in professional and managerial occupations. (US Council of Economic Advisers and US Department of Labour, 1999, quoted in: OECD, 2002)

The development of the tertiary sector is considered to be a demand-driven phenomenon, a function of productivity growth and rising incomes. In the modern knowledge-based economy, an adequate level and growth of services becomes not only a result of but also a precondition for the development of other economic sectors. Inadequate infrastructure, in particular concerning telecommunications and transport services, are well-known obstacles to the development of both manufacturing and services themselves. The accumulation of knowledge is directly influenced by the supply of education services, research and development and legal services, enforcing intellectual property rights (UN/ECE, 2001a, p. 8). Other reasons for the growing demand for services are the increased participation of women in the labour force, which has expanded the market both for domestic and social services and the outsourcing of activities carried out in-house previously.

Technological progress (e.g. the development of computer networks and telecommunications infrastructure, e-business) has had a considerable impact on the characteristics of the services sector development in western economies – some services have de facto become tradables. Results obtained from a UN/ECE survey investigating the internet infrastructure development in transition countries show that the development of the internet in the CEECs is closely linked to the level of economic development of the respective country; for instance, the Czech Republic and Slovenia had principal internet indicators (number of hosts, secure servers, percentage of internet users and the range of services available via internet) close to those of developed market economies.

Transition countries

There is extensive literature investigating the various aspects of structural changes in manufacturing in the CEECs in general and in individual countries in particular. However, given the growing importance that services play in the transition economies, developments in that sector have been treated only marginally in the analyses of the structural changes in the Central and East European countries. Rask and Rask (1994) were among the first who had emphasized the pivotal role of organizational services (identical with market services, but excluding tourism) in facilitating growth and development in transition countries. Similarly, Kostecki and Fehervary (1996) argue that producer services[9] are the motive power of restructuring transition economies and also remain critical determinants for the successful implementation of market-oriented reforms in the future (quoted in Stare, 2001). In order 'to develop an efficient and dynamic economy, transition countries have to upgrade their service sectors and improve the quality of services. For that purpose capital, know-how, special knowledge skills are

9) Producer services: telecommunications, financial services and a variety of business services (Stare, 2001).

necessary, which may be lacking in those countries but can be provided through FDI' (Stare and Vanyai, 1995, p. 349). Kigyóssi-Schmidt et al. (2002) pointed out that in the specific case of the Central and East European countries, business services are an important vehicle for establishing linkages between macroeconomic stabilization, real structural adjustment and institution building. The services sector development is, however, dependent on overall economic growth as the demand for services tends to increase along with income. More prosperous countries have a larger services sector, a denser infrastructure and a more developed financial system than poorer ones (Gros and Suhrcke, 2000).

Growth of the services sector in the transition economies follows a similar pattern as in the western countries and is largely driven by market-oriented reforms and the adjustment of industrial production to technological transformation (Stare and Zupancic, 2000, Stare 2001):

- In order to manage the adjustment of industrial production to business cycles, to technological changes and to widening competition, enterprises increased their demand for specific services (research and development, marketing, information-related services).
- Private sector firms established in the wake of market-oriented reforms are in need of supporting services such as consulting, bookkeeping, accountancy etc. In addition new services supporting the privatization process as a whole (asset valuation, auditing) were created.
- The dissolution of large industrial conglomerates into smaller enterprises has required companies to focus on core activities, which consequently led to an outsourcing of services (functions) that had previously been performed internally (contributing to the statistical growth of services). Modernizing the production process and the introduction of information-communication technologies required sophisticated services and intensified the linkages between industry and the services sector.

An additional explanation for the accelerating tertiarization process in the transition countries is the growing consumer demand for services unfulfilled or only insufficiently provided under the previous system. In 2001, three quarters of all firms in the seven CEECs were active in the services sector (Gács, 2001).

For a more detailed analysis, we compare the employment structure of the sub-sectors and their respective segments in the CEECs and in selected EU countries (EU-North and EU-South), and examine the importance of individual segments of the services sector.

The structural shift towards a service economy is evident when looking at the growth segments of employment in the transition countries. They are all in the services sector, especially within market services: trade, real estate and business activities, financial intermediation, hotels and restaurants. Industry, in contrast, has been a declining sector, except in Hungary.[10] Data for the year 2000 indicate that in all CEECs the contribution of the market services sector to total employment was by far higher than that of the community services sector. In Hungary and the Czech Republic the market services sector absorbed about one third of the total, in Slovenia and Slovakia about 30%. The values obtained for Poland and Bulgaria were slightly below that mark, while market services in Romania accounted for only 17% of total employment. Measured in absolute terms, in the period 1994 to 2000, jobs were created most of all in the market services sector, while at the same time employment in the community services sector rose only slightly or even declined in Bulgaria, Hungary and Poland (for further details see Annex B).

In the year 2000 all CEE countries had a lower employment level in the market services segment than either EU group; the countries coming closest to the EU values of 37–38% are Hungary, the Czech Republic, Slovakia and Slovenia – but still they lag behind considerably (Figure 4).

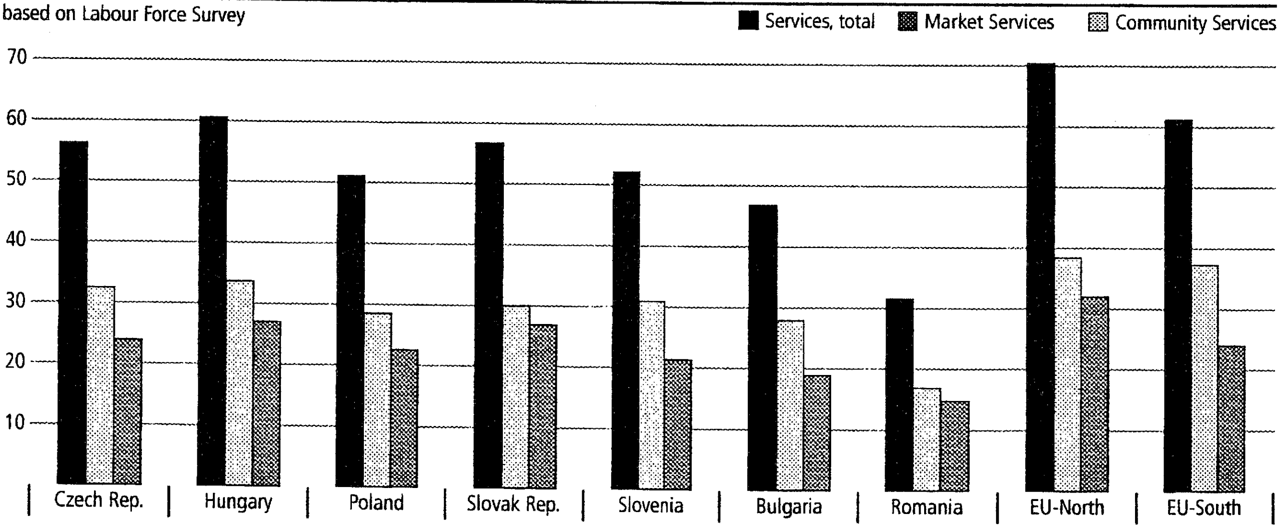
Market services

Among the individual segments of the market services sector, employment patterns for transport and communications structures in Poland and Slovenia were much

Figure 4

CEEC's services sector employment structures compared with EU-North and EU-South, 2000

based on Labour Force Survey



Notes: EU-North: Belgium, France, Germany, United Kingdom. EU-South: Greece, Portugal, Spain. Market Services compromise the following sectors: Trade and Repair; Hotels and Restaurants, Transport, Storage, Communications; Financial intermediation, Real Estate, Renting and Business activities. Community services comprise the following sectors; Public Administration, defence, compulsory social security; Education; Health and social work, Other community, Social and Personal Service.
Source: WIIW

10) The increasing importance of the services sector in contributing to the CEECs' GDP has been proved also by Gács (2001). Accordingly in 1988 all candidate countries were located far below the main trend of development (in a comparison of 124 countries) while in 1999 already six out of ten candidate countries were above the normal level of services intensity and all candidate countries had joined the mainstream.

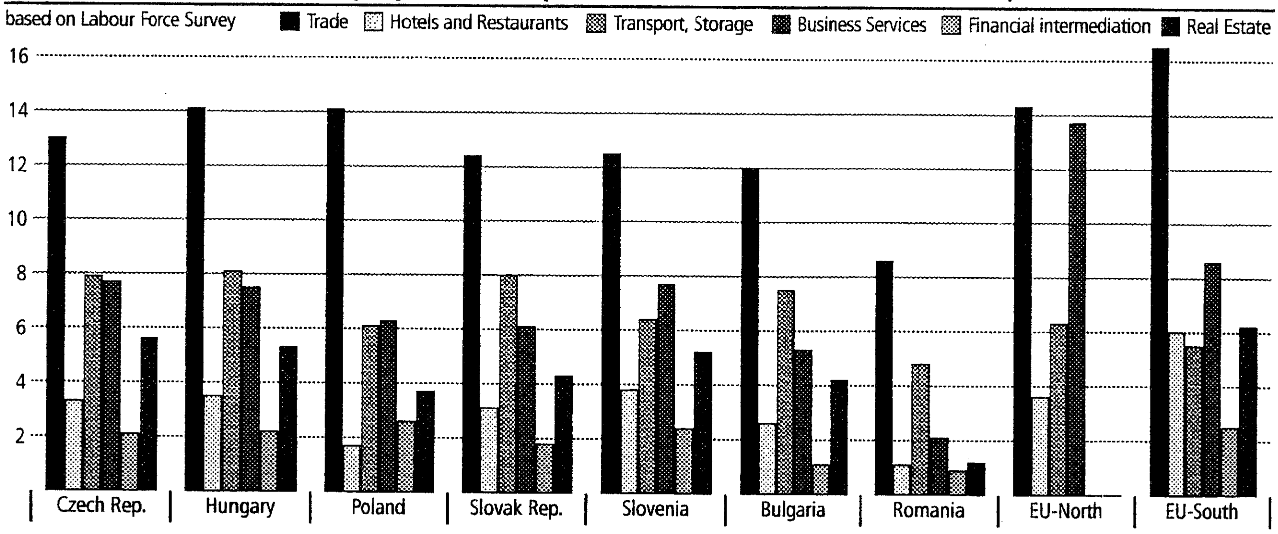
the same as in EU-North, exceeded the level of both EU groups in the Czech Republic, Slovakia and Hungary and were lowest in Romania (Figure 5). Employment in trade was similar to EU-North in Hungary and Poland, but lower in all other CEECs (most remarkably so again in Romania). Finance (including insurance) shows an uneven picture: all CEECs were below the employment level of the Northern European countries, but Slovenia and Poland resembled the Southern European structure. Business services (financial intermediation plus real estate) is underdeveloped in all countries compared with either EU group. As for community services, the CEECs employed fewer people than Northern European countries, while the deviation was less pronounced compared with EU-South, with Hungary's and Slovenia's structure falling somewhere in between. Poland and Slovakia show a very similar pattern compared with EU-South, while the strongest deviation was shown by Romania. Because of the lack of data for some EU countries, a comparison of individual segments of the community services sector was not possible.

Within market services, trade is the dominant segment, absorbing 14% of total employment in Hungary and Poland, but only 9% in Romania. In all other CEE countries employment in trade accounts for about 12%. The share of trade tended to grow in Bulgaria, Hungary and in Slovakia and remained almost stagnant elsewhere. However, in the period 1994 to 2000 trade was only in Romania the most expanding segment measured in relative terms.

In Hungary, Poland, Slovenia and Bulgaria new jobs were created primarily in the real estate, rent-

Figure 5

CEEC's services sector employment compared with EU-North and EU-South, 2000[1)]



1) EU-North: Belgium, France, Germany, United Kingdom. EU-South: Greece, Portugal, Spain.
Source: WIIW, ILO: Yearbook of Labour Statistics, 2000

ing, and business activities segment over the period 1994 to 2000. The proportion of the latter in total employment has been growing in all countries except Romania; in Slovenia its share fell slightly after an impressive growth up to 1999 (Figure 6). Together with the Czech Republic and Hungary, Slovenia exhibits the highest proportion of employed in that segment (this trend is also mirrored by soaring FDI).

Measured as a proportion of total employment finance and insurance ranks at the bottom in all countries (except Poland) with an average share of 2.6% in total employment, but was the fastest growing employment segment in the Czech Republic, Slovakia and Romania. Measured as a proportion of total employment the financial services sector remains underdeveloped in Bulgaria and Romania, absorbing about 1% of the total. Compared to high-wage EU countries, with financial sector employment reaching some 3.5% of the total, there is still some room for new job creation in the CEECs. Over the last decade the transition countries' financial sector has undergone dramatic changes, from state monopolies to a two-tier banking system, and a large number of private banks were established. In all countries except Slovenia the privatization process of the banking sector has been completed, mostly through foreign direct investment. The insurance industry (part of the financial intermediation segment) increased at relatively high rates, but the market is still very small and underdeveloped as it started its development from very low levels. In 1999, in the transition countries as a whole the 'average insurance penetration', measured by total insurance premiums as a percentage of GDP, was estimated at 1.7% for non-life and 0.7% for life insurance. In western Europe these ratios amounted to 3% and 5% respectively (UN/ECE, 2001b). Consequently this segment might be one of the main sources of future employment growth in the services sector.

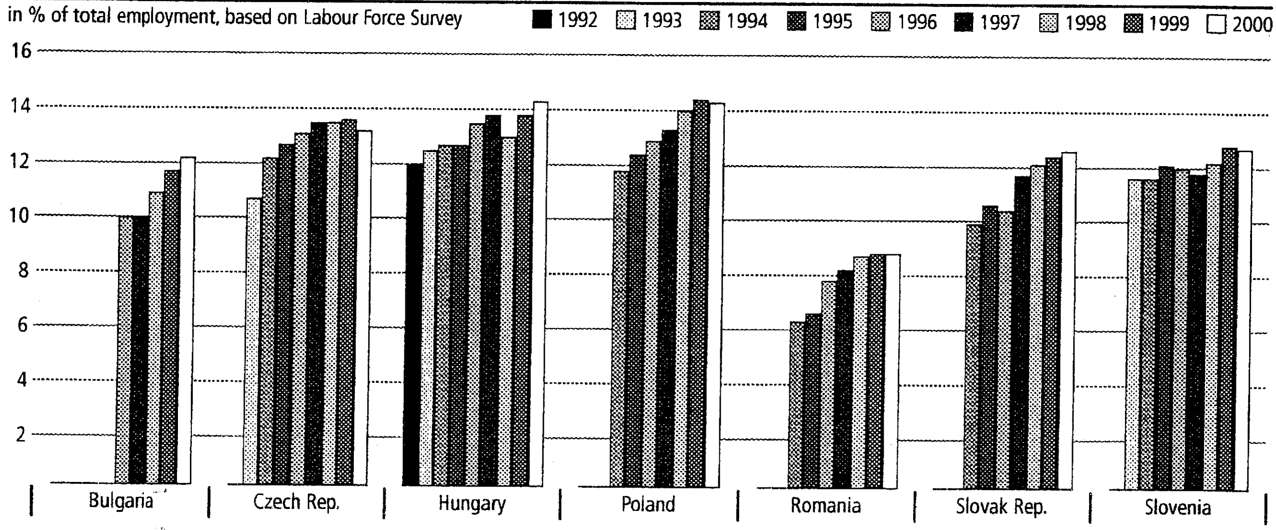
There are also considerable inter-country differences in the ranking of other segments of the market services sector. All CEECs except Slovenia reported employment reductions in the transport and telecommunications segment, but altogether that sector has maintained its important position as an employer in the transition economies. As data for the share of the transport sector in employment are not available separately from those for the communication sector, we may assume that the job losses were mainly due to the dramatic changes in the transport sector during the transition period, while the telecom segment has developed favourably in most countries (as described below in the case of Hungary).[11]

Employment in tourism grew most significantly in Poland, with

11) Changes in the transport sector relate among others to the new direction of traffic flows, from CMEA trade towards western Europe, to the growth of road transport at the expense of rail transport, the type of transported goods and the emergence of private ownership in the transport sector. (UN/ECE, 2001c)

Figure 6/1
Wholesale and retail trade & repair

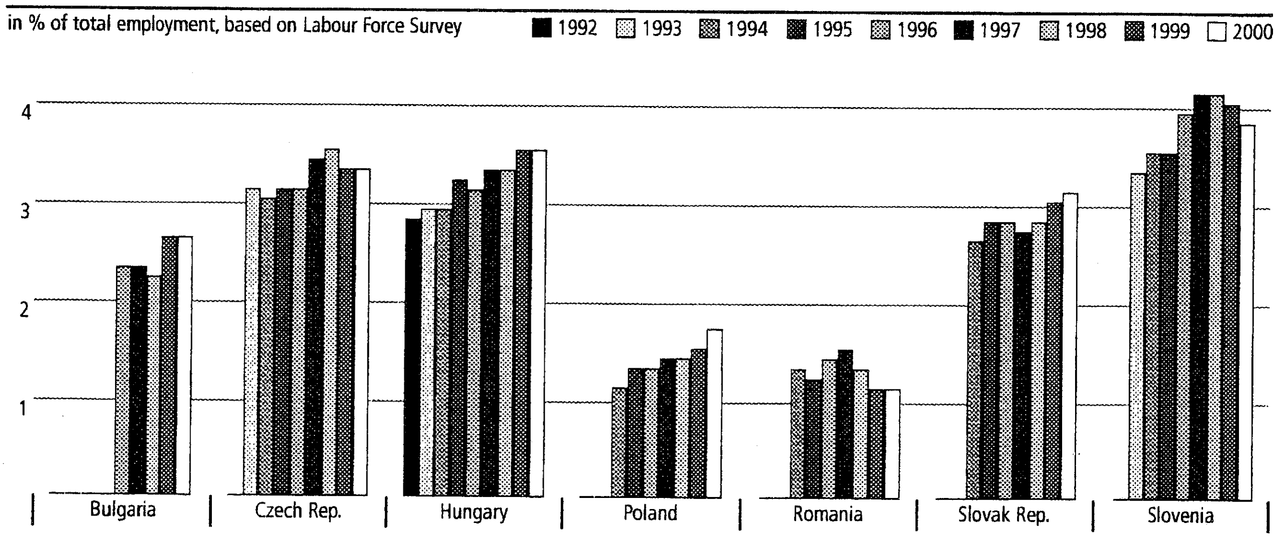
in % of total employment, based on Labour Force Survey



Source: WIIW

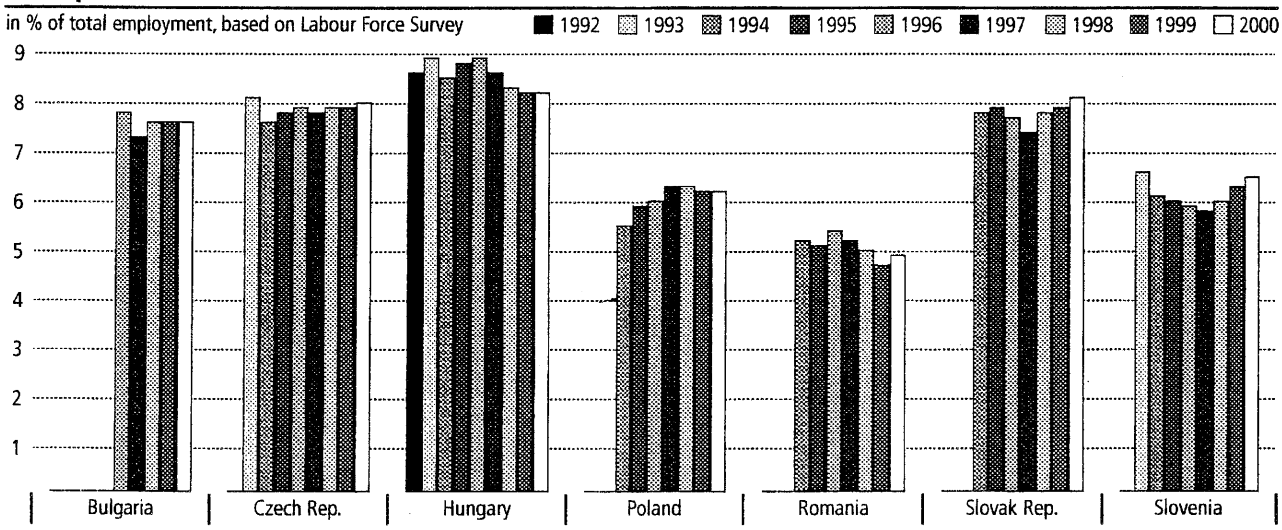
Figure 6/2
Hotels and restaurants

in % of total employment, based on Labour Force Survey



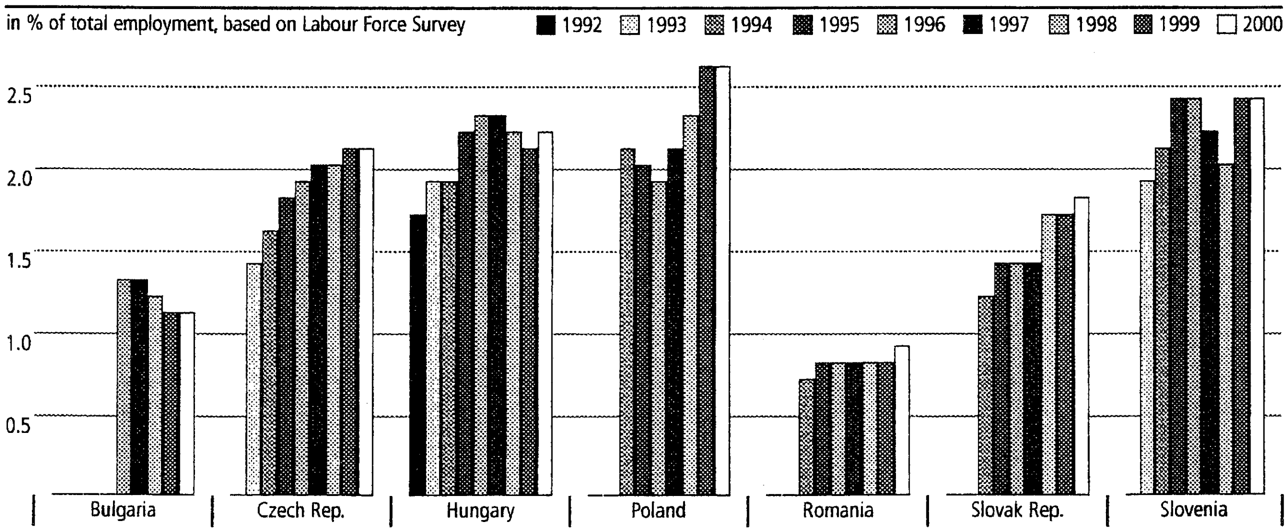
Source: WIIW

Figure 6/3
Transport & telecommunications



Source: WIIW

Figure 6/4
Financial intermediation

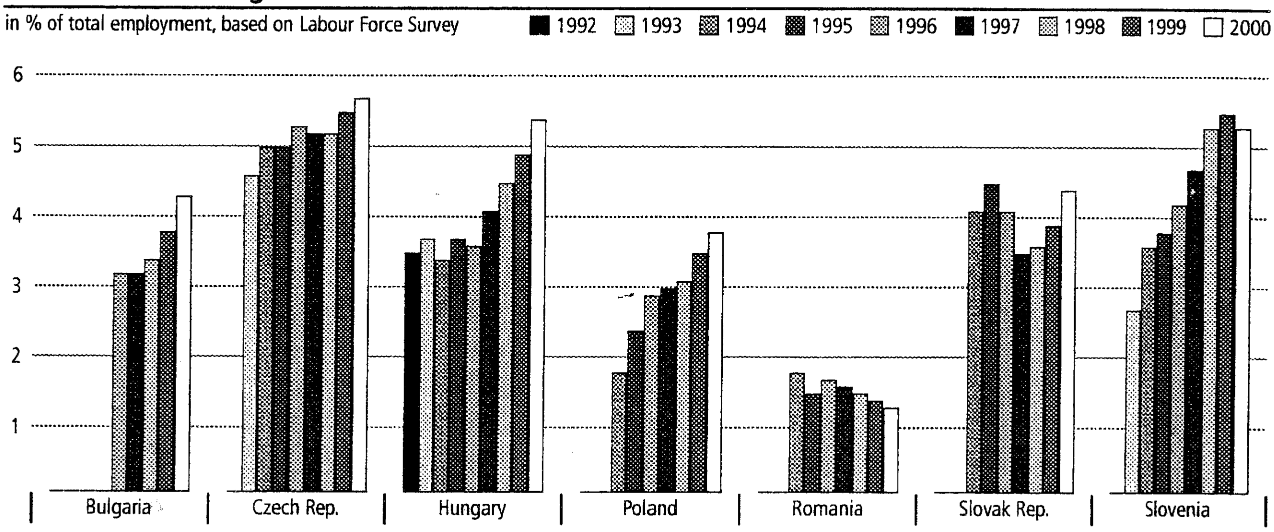


Source: WIIW

Figure 6/5

Real estate, renting & business activities

in % of total employment, based on Labour Force Survey



Source: WIIW

the number of employed up by 47% in 2000 compared with 1994, which is also confirmed by a significant increase in the value added over that period. A noteworthy employment growth is also reported for Hungary, up by 21%. Over the same period almost one fifth of jobs in tourism were lost in Romania, which recorded also the lowest proportion of employed in that segment.

Community (non-market) services

Considering the budgetary constraints, it is noticeable that the proportion of employed in community services – comprising public administration, education, health and other community and personal services – has been on the increase in the majority of CEECs, while it fell in Bulgaria and Hungary and remained stagnant in Poland. In the year 2000, the share of employed in this sector ranged between 14.5% in Romania and 26% to 27% in Hungary and Slovakia. Value added has been on the increase, of which most impressively in Slovenia and Slovakia; public administration has been the fastest growing segment in Slovenia (40%), Poland (24%) and Bulgaria in the 1994–2000 period, while it was health in Hungary. Data for individual community sector segments in the Czech Republic and Slovakia are not available (for further details see Annex A).

Education is the main employer in this sector in most CEECs, except in the Czech Republic and Romania where public administration ranks first (Figure 7). However, looking at the period 1994 to 2000, the number of employed in education contracted in all countries except Slovenia and Poland. Falls were most pronounced in

Slovakia and Romania, where the number of employed in 2000 was 10% lower than in 1994. In Hungary and in the Czech Republic employment in education fell by 6% and 4% respectively. At the same time employment in public administration has been growing rapidly across all countries but Hungary. Employment in that segment grew most strongly in Slovenia, where in 2000 it was about one third higher than in 1994; in Slovakia and Romania it increased by one quarter and in Bulgaria by over 20%.[12] Only in the Czech Republic job creation in administration was rather modest, up by about 6% over that period. Hungary, the Czech Republic and Slovakia have been exhibiting the highest level of employed in administration, absorbing about 8% of the total workforce, while in Bulgaria only 3% of total employment accounts for administration.[13] Employment in health and social work shrank most strongly in Bulgaria and Slovenia between 1994 and 2000, which is also reflected in the lowest proportion of employed in that segment (5% of the total each)[14], while it grew in the Czech Republic and Slovakia and remained stagnant in Poland and Romania.

If measured as a proportion of the GDP, non-market services had and still have a relatively high level in the transition countries comparable to that in the EU, implying that the CEE countries are lagging behind the EU in the market services segment rather than in community services.[15]

Despite the progress achieved in the services sector development in the last decade, the tertiary sector's level is lagging behind that of the European Union. The main shortcomings consist in the lower efficiency and quality of services in the transition countries, their poor competitiveness on the world market, and the dominance of traditional services sectors (transport, distribution, hotels and restaurants) over higher value-added services sectors (Stare and Zupancic, 2000), which represents also an important obstacle to the trade in services. In the second half of the 1990s countries such as the Czech Republic, Hungary, Poland and Slovenia became net exporters of services, first of all of transport and travel services and construction-related services, which are often labour- and energy-intensive and dependent on natural factors ('nature-endowment-intensive'). At the same time these countries remained net importers of business-to-business services, requiring a good capital basis and highly skilled labour (UN/ECE, 2001a, p. 19).

12) Apart from the creation of an independent state, which necessitated the building-up of an adequate administration, employment in that sector has e.g. in Slovenia been attracted by wages higher than in the private sector (OECD, 1997); job security was/is another important factor for taking a job in public administration (the latter is of course not only specific for Slovenia and is also true for other countries under consideration).

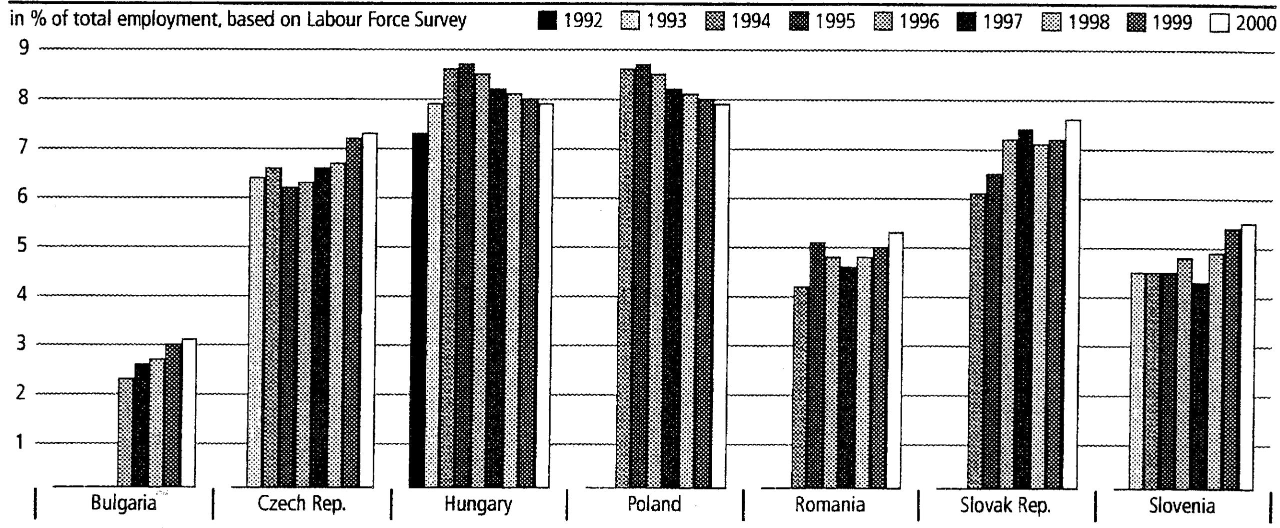
13) In Germany public administration absorbs 8.7% of total employment, in Italy 9.3%, in the Netherlands 7.1% and in the UK 6%.

14) The strong decline in Slovenia's health sector employment can hardly be explained. Figures based on registration data indicate a job increase of more than 20% over that period.

15) The high level of non-market services in the transition countries is to be associated with the priorities of the former system regarding health and education. Thus in the past the CEECs had achieved a relatively higher rank in the human development indicators than in other economic indicators (see also Gács, 2001).

Figure 7/1

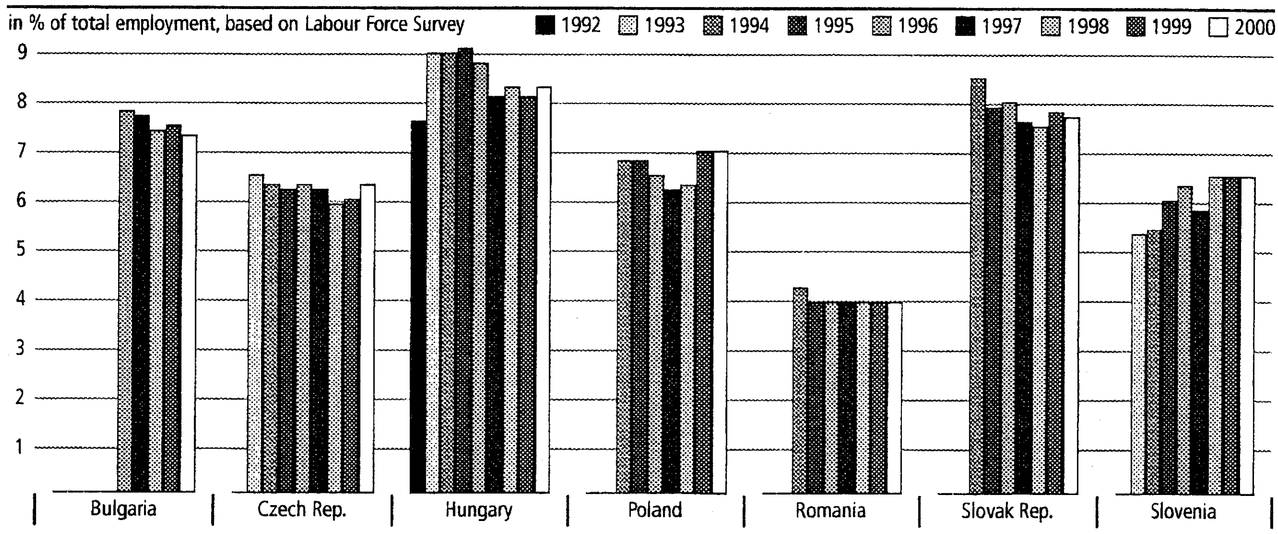
Public administration, defense & compulsory social security



Source: WIIW

Figure 7/2

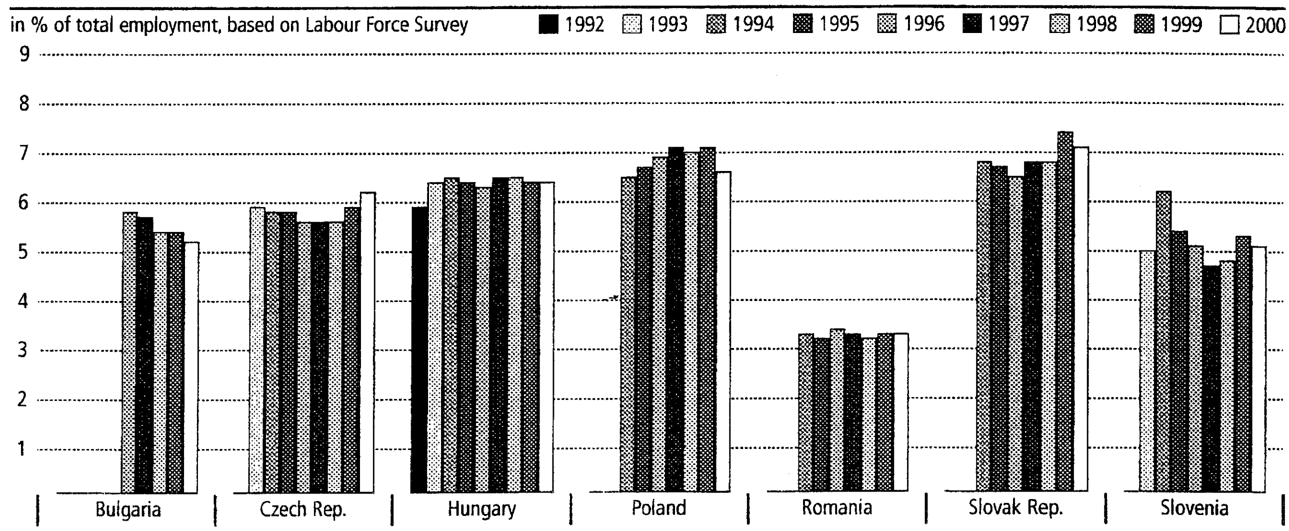
Education



Source: WIIW

Figure 7/3

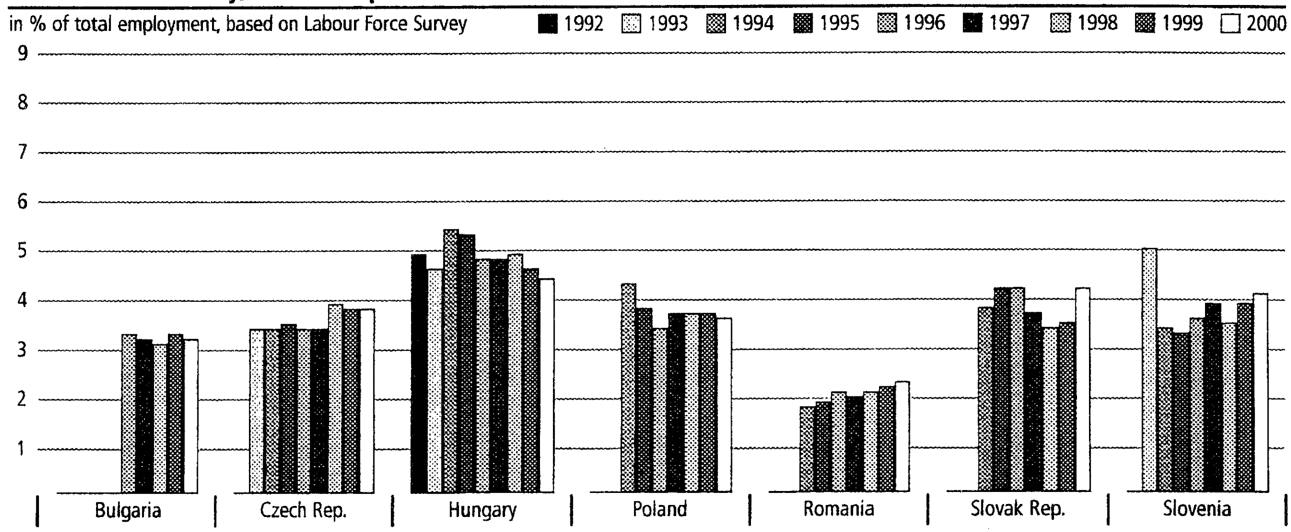
Health & social work



Source: WIIW

Figure 7/4

Other community, social & personal services



Source: WIIW

4 Regional distribution/development of the services sector[16)]

Services sector expansion is primarily a big city phenomenon. Growth of employment has been concentrated in the large urban areas, especially in the capital cities. Employment in the tertiary sector varies in the CEE regions between 78% in the region of Prague and 19% in southwest Romania. The capital regions of Prague, Bratislava, Budapest and Sofia, and Zachodniopomorskie in north-western Poland, where more than two thirds of employed are engaged in services sector activities, are classified as service centres.[17)] In all countries but Poland and Romania the services employment by regions comprises more than half of the total except in south-central Bulgaria and in central Moravia.

In the Czech Republic the regional proportions of the services sector employment are at around 50%, laggards can be found in the north-eastern parts of the country. Services industries that are less developed are the two industrial northern regions and eastern Bohemia. The capital Prague shows the highest proportion of services sector employment, about 78% of the total; more than 80% of the capital's value added is generated in the tertiary sector (Table 1).

Apart from being the largest agglomeration of the country, Prague is also an important tourist destination, thus providing a substantial number of jobs in that segment. Services sector employment also plays an important role

Table 1

Regional gross value added by economic activities in the Czech Republic

(in % of total, 2000)

Region	A+B	C-E	F	G-P	G	H	I	J	K	L-P	TOTAL	Gross value added CZK million
	Gross value added by economic activities											
Czech Republic	3.9	32.8	7.1	56.2	14.4	1.9	7.4	4.3	12.2	16.0	100.0	1807966
Prague	0.2	10.6	6.3	82.8	22.5	3.8	8.4	10.0	24.1	14.0	100.0	445,965
Central Bohemia	5.4	41.9	6.1	46.7	15.2	1.3	7.4	1.7	6.5	14.6	100.0	164,141
South West	7.7	39.1	7.7	45.4	10.8	1.0	7.3	2.9	7.4	16.0	100.0	192,659
North West	2.7	41.3	7.7	48.2	9.2	2.0	8.7	2.4	7.2	18.7	100.0	162,702
North East	5.1	42.2	6.9	45.7	11.4	1.3	6.6	3.0	7.2	16.2	100.0	224,942
South East	6.5	34.1	7.8	51.5	12.3	1.5	6.6	2.6	11.3	17.2	100.0	253,834
Central Moravia	5.3	39.4	8.1	47.1	12.3	1.1	6.4	2.2	8.3	16.7	100.0	175,132
Ostrava Region	2.5	43.4	7.0	47.1	10.9	1.1	7.1	2.3	8.9	16.8	100.0	188,591

Note: Code of economic activities (by NACE Rev.I): A+B Agriculture, forestry; fishing, C-E Mining and quarrying; manufacturing; electricity, gas, steam and hot water supply, F Construction, G-P Services, total, G Wholesale, retail trade, repair motor vehicles , H Hotels and restaurants , I Transport, storage, telecommunications , J Financial intermediation, K Real estate, renting & business activities, J+K Financial intermediation, insurance; real estate, renting and business activities, L-P Community services.
Source: Statistical Office of the Czech Republic.

16) Unless otherwise stated information in this section is based on European Commission (Eurostat) 2/1999 and 1/2001.

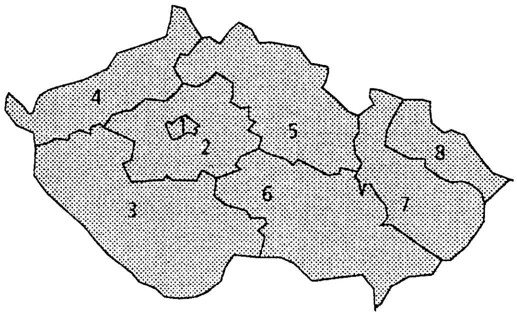
17) According to the sectoral employment structure, regions can be subsumed under four types (European Commission, 2001):

- regions of a strongly agricultural character with employment shares in agriculture of more than 14%: type AG; out of the 50 level 2 regions in the seven CEE countries there are 19 such regions;
- regions with an above-average industrial employment share – more than 40%: type IN, 13 regions;
- regions which can be called services centres with an employment share exceeding 60% of the total: type SC, 5 regions identified (not included Bucharest, Ljubljana and Warsaw);
- regions with a mixed sectoral structure, a less pronounced industrial sector, in which services constitute the largest sector: type SM, 11 regions.

Map 1

Czech Republic: Regional employment by broad economic sector, 2000

in % of total employment, LFS



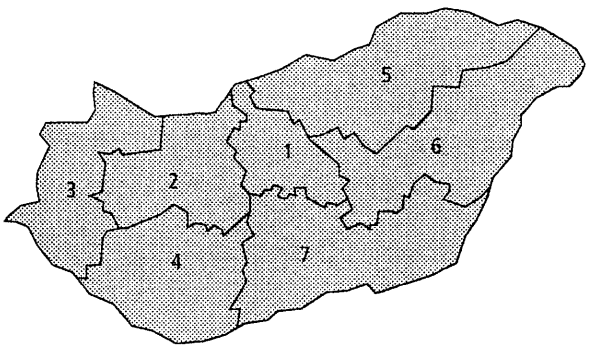
Regions	Agriculture	Industry	Services
1 Prague	0.7	21.7	77.7
2 Central Bohemia	5.6	41.2	53.2
3 South West	7.5	42.3	50.2
4 North West	3.6	41.2	55.2
5 North East	6.2	43.5	50.3
6 South East	7.8	41.0	51.2
7 Central Moravia	5.8	45.6	48.6
8 Ostrava	3.5	44.2	52.3
Czech Republic	**5.2**	**39.9**	**54.8**

Source: EUROSTAT

Map 2

Hungary: Regional employment by broad economic sectors, 2000

in % of total employment, LFS



Regions	Agriculture	Industry	Services
1 Central Hungary	1.5	27.0	71.4
2 Central Transdanubia	6.4	42.7	50.9
3 Western Transdanubia	6.1	41.5	52.4
4 Southern Transdanubia	10.0	32.4	57.6
5 Northern Hungary	5.3	38.3	56.4
6 Northern Great Plain	8.6	34.9	56.5
7 Southern Great Plain	14.9	31.2	53.9
Hungary	**6.5**	**33.8**	**59.8**

Source: EUROSTAT

in western and central Bohemia, but by far less than in Prague.

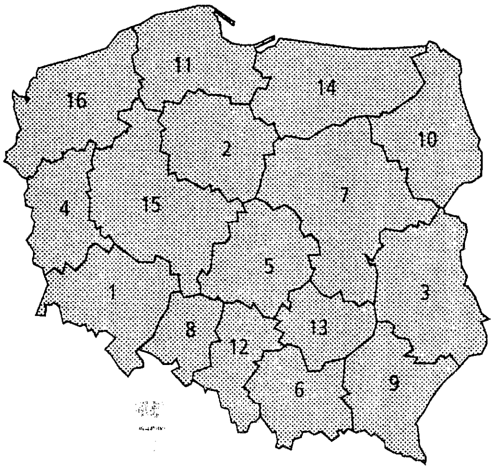
In Hungary the highest share of services employment, about 70% of the total workforce, is concentrated in Budapest, followed by Southern Transdanubia, Northern Hungary and the Northern Great Plain. All other regions exhibit lower values than the national average (of about 59%). The tertiary sector is least developed in Central Transdanubia, where only about half of the total workforce is employed in that segment. Western Transdanubia, Hungary's second most prosperous region after Budapest, is strongly oriented towards industry – which is also reflected by a high inflow of FDI – thus providing a less developed services sector than one may expect.

In Poland services sector employment is concentrated in the most prosperous economic regions, first of all in the agglomerations of Warsaw, Poznan, Wroclaw, Krakow and Gdansk-Sopot-Gdynia. The capital Warsaw plays an outstanding role as an economic centre for the regions of Podlaskie and Lubelskie as well as for the regions bordering on Belarus and Ukraine. The leading role of

Map 3

Poland: Regional employment by broad economic sectors, 2000

in % of total employment, LFS



Regions	Agriculture	Industry	Services
1 Dolnoslaskie	10.1	33.0	56.9
2 Kujawsko-Pomorskie	17.6	31.8	50.6
3 Lubelskie	40.2	20.0	39.8
4 Lubuskie	9.9	35.8	54.3
5 Lodzkie	14.7	30.6	54.6
6 Malopolskie	21.2	30.4	48.8
7 Mazowieckie	19.4	25.2	55.5
8 Opolskie	21.8	35.2	43.0
9 Podkarpackie	29.1	28.2	42.7
10 Podlaskie	33.4	23.2	43.4
11 Pomorskie	10.3	30.7	59.0
12 Slaskie	4.3	47.7	48.0
13 Swietokrzyskie	30.3	26.8	42.9
14 Warminsko-Mazurskie	12.5	30.7	56.8
15 Wielkopolskie	20.6	34.6	44.8
16 Zachodniopomorskie	7.0	31.8	61.2
Poland	**18.7**	**31.1**	**50.3**

Source: EUROSTAT

Warsaw is also reflected by the high investments in the services sector, the most important segments being banking and retailing. Services employment exceeds the national average (of about 50%) in the Mazowieckie (Warsaw), Pomorskie (Gdansk) and Dolnoslaskie (Wroclaw) regions and is also an important employer in the regions bordering on Germany (mainly due to shopping tourism). Together with Wielkopolskie these regions have also proved to be the most attractive locations for foreign investment. Over the last decade Poland's large cities together with their surrounding urbanized zones have been able to restructure – not least because of high domestic and foreign investment – most of their economy and to move from their previous dependence on industry to a dominance of services sector activities (Korcelli and Nowosielska). Large cites have strongly increased services sector employment, both in consumer and producer services such as financial, insurance, real estate and other business services. Job creation in the producer services sector was primarily led by the establishment and expansion of small firms. Despite a number of similarities in the development patterns, Warsaw differs quite substantially from the other urban agglomerations as an administrative and financial centre and/or by attracting a substantial proportion of foreign investment.

A study by Deichmann and Henderson on urban and regional dynamics in Poland came to the conclusion that services are spatially fairly concentrated (similar to industry and agriculture), more than is usual by international standards. Similarly, variations of services sector employ-

Strengths and weaknesses of Polish regions

a: GDP per inhabitant, Poland = 100, 1997

b: highest/lowest value of GDP per inhabitant in districts within a given region, 1997

Regional capitals	Strengths	Weaknesses
Bialystok (Podlaskie) a=72; b=2.1	Clean environment. Higher education. Border location. Tourist potential.	Peripheral location. High share of agriculture. Low educational level.
Bydgoszcz Torun (Kujawsko-pomorskie) a=84; b=2.4	Favourable location an Northern-South axis. Higher education.	Internal periphery. Deteriorated urban structures. Inefficient transport infrastructure. Conflicts within regional elites
Gdansk (Pomorskie) a=100; b=2.6	Maritime location. Big harbour, Cultural heritage. Tourist potential. International airport	Deteriorated urban structures. Inefficient transport infrastructure.
Katowice (Slaskie) a=115; b=2.6	Good transport connections. Higher education and R&D potential. Big urban agglomeration. Industrial traditions.	Derelict industrial and urban structures. Heavy pollution. Low educational and one-dimensional level
Kielce (Swietokrzyskie) a=69; b=2.2	Central location	Low endogenous potential. Poor infrastructure. Deteriorated rural space. Low educational level. Internal periphery
Kraków (Malopolskie) a=90; b=2.9	Cultural heritage. Favourite image. Tourist potential. Higher education and R&D potential. International airport.	Deteriorated urban structure. High pollution in the city.
Lublin (Lubelskie) a=73: b=2.7	Higher education. Border location.	Peripheral location. High share of agriculture. Low educational level.
Lódz (Lódzkie) a=94; b=2.8	Higher education, R&D potential. Central location. Proximity of Warsaw	Deteriorated urban structure. Shallow restructuring. "Shadow" of Warsaw.
Opole (Opolskie) a=86: b=1,8	Location between two greater metropoles. Rich infrastructure. Industrial traditions. Contacts with Germany.	Low endogenous potential. Pollution.
Olsztyn (Warminsko-Mazurskie) a=77; b=2.2	Clean environment. Tourist potential.	Peripheral location. High share of agriculture. Low educational level.
Poznan (Wielkopolskie) a=108; b=2.1	Western location. Higher education. R&D potential. Organizational skills and traditions. Diversified economic structure. International airport. Good image.	Inefficient transport infrastructure. Deteriorated urban structure.
Rzeszów (Podkarpackie) a=75; b=3.0	Higher education. Clean environment. Tourist potential.	Peripheral location. Poor infrastructure. Low educa tional level. Difficult restructuring of agriculture.
Szczecin (Zachodnio-pomorskie) a=97; b=2.4	Proximity to Berlin. Maritime location. Big harbour	Inefficient transport infrastructure. Deteriorated urban structure.
Warszawa (Mazowieckie) a=151; b=4.2	National capital. Higher education. R&D potential. Cultural heritage. Diversified economic structure. International airport.	Deteriorated urban structure. Chaotic urban develop-ment. Inefficient transport infrastructure.
Wroclaw (Dolnoslaskie) a=94; b=2.0	Higher education. R&D potential. Diversified economic structure. Cultural heritage. Tourist potential. Western location.	Deteriorated urban structure.
Zielona Góra – Gorzów (Lubuskie) a=86; b=1.7	Border location. Tourist potential.	External periphery. Inefficient transport infrastructure.

Source: Gorzelak (1999).

ment are very high across voivodships and the concentration of the services sector is on the increase. 'There is also a general divergence of employment patterns with larger centres growing more quickly than smaller ones – a very unusual finding'. A description of the strengths and weaknesses of Polish regional capitals is given by Gorzelak (1999). See Overview.

In Slovakia a high degree of regional differentiation can be observed. There is a sharp distinction between the capital city Bratislava and the rest of the country, characterized by a centre-periphery relationship. The regional diversification is manifested in terms of structure. Bratislava features the highest level of education and concentrates more than 90% of all Slovak employees in the banking and insurance sectors and more than 40% of R&D and business services sector employees. More than 60% of total FDI directed towards Slovakia is located in Bratislava. It is self-evident that Bratislava is the leading region in market services, with particular emphasis on growth in information technology, real estate activities and leasing of machinery and equipment (Karasz et al., 2000). Kosice comes next among the main Slovak services centres (Table 2).

The different structure of the economy in the individual regions reflects the regional economic disparities. Altogether the economic level of the regions correlates significantly with the share of the services sector in the value added of the respective region – market services contribute very strongly to value added. Compared to the country average, a lower share, particularly in trade, financial intermediation, real estate, renting and business activities and community services occurs in principle in all regions except Bratislava

Table 2

Regional gross value added by economic activities in the Slovak Republic

(at basic prices, in % of total, 2000)

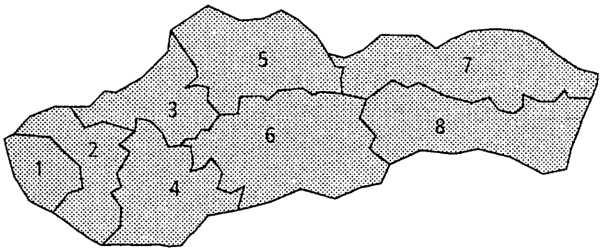
Region	Gross value added by economic activities								
	A+B	C-E	F	G-P	G-I	J+K	L-P	TOTAL	Gross value added SKK million
Slovak Republic	4.5	29.3	5.3	60.8	28.2	18.3	14.3	100.0	795,171
Bratislavsky	1.1	24.3	4.5	70.0	29.9	25.6	14.6	100.0	187,726
Trnavsky	8.4	38.7	4.0	48.9	22.3	14.9	11.7	100.0	82,403
Trenciansky	4.8	42.8	5.2	47.2	24.0	10.4	12.8	100.0	76,941
Nitriansky	9.1	31.2	6.0	53.8	27.2	14.3	12.3	100.0	91,656
Zilinsky	3.8	28.3	7.5	60.5	28.7	17.4	14.4	100.0	85,194
Banskobystricky	5.3	29.2	4.5	61.1	29.9	15.2	16.0	100.0	86,912
Prešovsky	5.2	25.2	6.5	63.1	29.5	15.4	18.2	100.0	72,605
Košicky	3.1	23.6	5.3	68.0	31.1	22.5	14.4	100.0	111,734

Note: Code of economic activities (by NACE Rev.I): A+B Agriculture, forestry; fishing, C-E Mining and quarrying; manufacturing; electricity, gas, steam and hot water supply, F Construction, G-P Services, total, G-I Trade; hotels and restaurants; transport, post and telecommunications, J+K Financial intermediation, insurance; real estate, renting and business activities, L-P Community services, and FISIM (Financial intermediation services indirectly measured).
Source: Statistical Office of the Slovak Republic, Regional Comparisons in the Slovak Republic 2000.

Map 4

Slovak Republic: Regional employment by broad economic sectors, 1999

in % of total employment, registration data



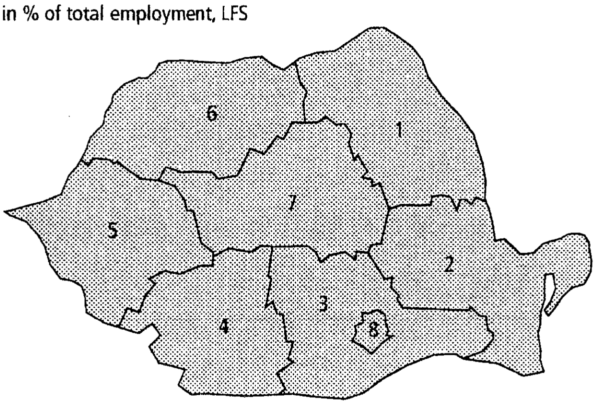
Regions	Agriculture	Industry	Services
1 Bratislavsky	1.8	23.7	74.6
2 Trnavsky	10.6	37.6	51.8
3 Trenciansky	6.0	47.5	46.6
4 Nitriansky	11.8	34.3	53.9
5 Zilinsky	7.2	41.0	51.9
6 Banskobystricky	11.6	33.7	54.7
7 Presovsky	9.2	35.2	55.6
8 Kosicky	6.9	30.6	62.5
Slovak Republic	**7.4**	**38.5**	**54.1**

Source: WIIW

Map 5

Romania: Regional employment by broad economic sectors, 2000

in % of total employment, LFS



Regions	Agriculture	Industry	Services
1 North East	58.5	19.2	22.2
2 South East	48.2	21.3	30.5
3 South East	51.0	25.1	23.9
4 South West	61.3	20.0	18.7
5 West	40.1	26.8	33.1
6 North West	42.1	27.4	30.5
7 Central	32.5	37.4	30.1
8 Bucharest	6.1	37.3	56.5
Romania	**45.2**	**25.8**	**29.0**

Source: EUROSTAT

(WIIW and Slovak Academy of Sciences, 2000, p. 50).

Services sector employment in Slovenia is by far highest in the coastal region, with more than 70% engaged in services sector employment due to the port of Koper and tourism on the coast strip. Central Slovenia with the capital Ljubljana employs about 60% in the services sector and Goriska about half of the total. Industrial regions such as Koroska, Zasavska and Dolenjska and the agricultural and least developed region of Pomuska report the lowest employment shares in the tertiary sector.

Similarly as in other CEECs, Bulgaria's capital city Sofia is classified as a services centre: more than 60% of the employed are engaged in services sector activities. Sofia has a high concentration of active business entities irrespective of the type of ownership and is the main location of private enterprises, about one fifth of Bulgaria's total. Also foreign direct investment is primarily concentrated in the capital city.

Romania's capital Bucharest absorbs about 57% of total employment in the services sector. In contrast to other capital cities in Central and Eastern Europe it is therefore not classified as a services centre – but as a region with a mixed sectoral structure (see footnote 16). The strong agricultural orientation of the country is also confirmed by the values obtained for the services sector employment in other regions, lagging far behind with the proportion working in that segment, varying from 19% to 33%. Consequently all of them are classified as regions of a strongly agricultural character.

5 The services sector and FDI

Conventional cross-border trade does not constitute an exclusive mode of linking buyers and sellers of services both for technical (non-storability and non-transportability) and regulatory (insufficient legal infrastructure) reasons. Thus, foreign direct investment (FDI) remains an economically important delivery method in a number of industries (UN/ECE, 2001a). In contrast to cross-border trade, where the domestic services sector may even contract, services provided through FDI are assumed to entail an increase of the host country's tertiary sector. When analysing the performance of foreign investment enterprises (FIEs) in the Slovenian business services sector, Stare (2001, p. 31) came to the conclusion that FIEs 'performed much better than the average of all enterprises in business services' in terms of labour productivity, implying 'above all that indirect effects (indirect productivity) of business services provided by FIEs can be diffused through growing inter-industry linkages'. In addition, FDI into business services provide specialized knowledge and skills and a steady upgrading of the services quality. Especially at the outset of transition privatization agencies and governments in most transition countries preferred western consulting firms in supporting the privatization process.

Over recent years the distribution of FDI by broad economic sectors has undergone significant changes. In countries such as the Czech Republic and Slovenia the share of services in FDI stock is much higher than that in manufacturing, a trend that can also be observed in the OECD area (OECD, 2000). The proportion of banking and telecommunications investments in new investments increased compared to earlier stocks. In the more advanced countries investment is booming in real estate and supermarket development. In general, FDI into the services sector is limited to the market services segment, while FDI in community services, such as education, health, social and personal services is almost negligible. The proportion of manufacturing in FDI stocks fell most pronouncedly in the Czech Republic and in Hungary, while there is a reverse trend in Bulgaria, where the share of manufacturing FDI may even further increase in the wake of the privatization (see also, Hunya and Stankovsky, 2001). An analysis of FDI stocks shows that foreign direct investment in the services sector in transition economies is directed similar as in OECD countries towards financial intermediation, wholesale and retail trade, transport and telecom and real estate (OECD, 2000). Financial intermediation is in all transition countries but Hungary and the Czech Republic the main recipient of FDI in the services sector, accounting for 20% to 25% of the total FDI stock (with the highest ratios recorded for Slovenia and Poland)[18] (see Table 3). In the Czech Republic and in Roma-

18) The high share of financial intermediation in the Slovenian FDI stock is reflecting debts of FIEs to their parent companies due to the relatively high interest rates in Slovenia. The privatization of the main state-owned banks is still in its initial phase. Thus, the share of services in general and that of financial intermediation in particular in the total FDI stock is overestimated. See also Stare (2001), p. 32.

Table 3

FDI stock in the CEECs in 2000, by economic activities[1)]

(in % of total FDI-stock, December 2000[2)])

	Czech Republic[2)]	Hungary	Poland	Slovakia[2)]	Slovenia	Bulgaria[1)]	Romania[1)2)]
Agriculture, forestry, fishing	0.2	1.1	0.1	0.1	0.0	0.2	3.6
Industry, total	44.9	47.8	50.3	49.8	41.5	49.5	50.7
Industry	43.7	46.5	44.9	49.2	41.3	48.5	46.0
Construction	1.2	1.2	5.4	0.7	0.2	1.0	4.7
Services	54.8	51.1	49.6	50.0	56.1	44.6	45.8
Market services	54.2	49.8	46.0	49.7	55.3	44.6	–
Trade, repair of motor vehicles, etc.	17.8	12.5	8.7	11.8	14.0	16.5	18.0
Hotels and restaurants	0.8	1.8	1.5	0.7	0.6	4.3	3.0
Transport, storage, communications	12.0	7.8	12.2	15.1	1.6	3.9	7.4
Financial intermediation	14.9	11.6	22.7	19.1	25.8	20.0	–
Real estate, renting & business activities	8.7	16.1	1.0	3.1	13.3	–	–
Community services	0.6	1.3	3.5	0.3	0.8	–	–
Public administration, defence, compulsory social security	–	–	–	–	–	–	–
Education	0.0	0.0	–	–	0.0	–	–
Health and social work	0.1	0.1	–	0.0	0.0	–	–
Other community. social & personal services	0.5	1.2	3.5	0.3	0.8	–	–
Other non classified activities	0.1	0.0	0.0	0.0	–	5.7	–

Notes: 1) FDI-stocks of Bulgaria and Romania do not correspond exactly to NACE classification. – 2) FDI-stocks for Czech Republic, Slovak Republic, Romania: September 2001.
Source: WIIW-WIFO FDI Database.

Table 4

FDI stock in the Czech Republic – by economic activities[1)]

NACE Code		December 1997		December 1999		December 2000		September 2001[2)]	
		USD mn	Share in %	USD mn	Share in %	USD mn	Share in %	USD mn	Share in %
A-B	Agriculture, forestry, fishing	5.3	0.1	17.9	0.1	30.5	0.1	55.7	0.2
C-F	Industry, total	5,794.0	62.7	8,401.8	47.9	10,134.2	45.8	11,240.9	44.9
C-E	Industry	5,607.8	60.7	8,225.3	46.9	9,844.1	44.4	10,933.8	43.7
F	Construction	186.2	2.0	176.5	1.0	290.1	1.3	307.2	1.2
G-O	Services	3,434.5	37.2	9,132.3	52.0	11,982.4	54.1	13,707.2	54.8
G-K	Market services	3,418.3	37.0	9,025.6	51.4	11,828.4	53.4	13,553.2	54.2
G	Trade, repair of motor vehicles, etc.	1,116.8	12.1	2,770.6	15.8	3,855.6	17.4	4,458.7	17.8
H	Hotels and restaurants	73.9	0.8	167.0	1.0	167.0	0.8	194.0	0.8
I	Transport, storage, communications	868.2	9.4	2,141.9	12.2	2,295.6	10.4	3,001.5	12.0
J	Financial intermediation	1,047.5	11.3	2,648.4	15.1	3,567.6	16.1	3,717.8	14.9
K	Real estate, renting & business act.	312.0	3.4	1,297.6	7.4	1,942.5	8.8	2,181.1	8.7
L-O	Community services	16.2	0.2	106.7	0.6	154.0	0.7	154.0	0.6
L	Public admin., defence, compuls.soc.sec.	0.0	0.0	–	–	–	–	–	–
M	Education	0.3	0.0	–0.1	0.0	0.9	0.0	0.9	0.0
N	Health and social work	11.5	0.1	10.9	0.1	27.9	0.1	27.9	0.1
O	Other community, social & personal serv.	4.4	0.0	95.9	0.5	125.2	0.6	125.2	0.5
	Other non classified activities	–	–	–	–	–	–	16.59	0.1
Total		**9,233.8**	**100.0**	**17,552.1**	**100.0**	**22,147.2**	**100.0**	**25,020.4**	**100.0**

Notes: 1) Equity capital, reinvested earnings, loans. – 2) Preliminary data.

Source: Czech National Bank.

nia wholesale and retail trade represents the main FDI target in the tertiary sector, while this segment ranks second in Bulgaria, Slovenia and in Hungary. In Poland, the Czech Republic and Slovakia, also transport and telecommunications absorb a significant proportion of services sector FDI. While Slovakia reports the highest share in that segment, FDI in transport and telecom is almost negligible in Slovenia. As stated above, FDI in real estate is concentrated in only three countries: Slovenia, the Czech Republic and Hungary (where it is the leading FDI segment in the services sector). Foreign direct investment in hotels and restaurants plays only a subordinate role. Only in Bulgaria the tourism industry has attracted considerable investment (about 5% of the total FDI stock).

Over the period 1990 to 2000 the Czech Republic attracted FDI worth USD 22 billion, of which more than 60% accounted for the services sector (Table 4). Within that sector the trade and repairs and the financial intermediation and insurance segments absorbed most FDI (about 17% of the total each). Data for the first half of 2001 indicate that even three quarters of the total FDI inflow was concentrated in the services sector, most of which (39%) in the transport and telecom segment.

One of the main contributors to Hungary's economic transformation have been large inflows of foreign direct investment. While in the initial years of transition manufacturing was most attractive for foreign investors, in recent years investments in the services sector gained more and more importance. However, there has been a large FDI inflow to certain business service segments – such as management consulting, real estate and asset valuation, banking, telecom and information networks – also in the early stages of transformation.[19] In 1999 it was the real estate segment that absorbed 28% of the FDI stock in the services sector or 13.5% of the total (Table 5). According to OECD data for 1998 (comprising 18 countries) in Hungary the share of foreign affiliates in services turnover was highest, at over 30%, followed by Belgium and Ireland, while in terms of employment the share of foreigners accounted for 14%, a similar proportion as in Ireland. However, the lion's share of foreign penetration, both in terms of employment and turnover, is still to be found in manufacturing.

Over the past years the services sector gained importance in receiving foreign direct investment in Poland, while the share of the manufacturing sector has been falling. Financial intermediation received a significant portion of FDI due to the privatization of state-owned banks, and the opening of the insurance and pension sectors to foreigners (EBRD, 2001a, p. 9). By the end of 2000 the financial services sector had accumulated foreign investments worth USD 10.3 billion or about 23% of the total FDI stock (Table 6).

19) In 1993, of the USD 2 billion FDI inflow, 70% were directed towards the services sector (Vanyai quoted in Kovacs, 1999).

Table 5

FDI stock in Hungary – by economic activities[1)]

NACE code		December 1991 USD mn	December 1991 Share in %	December 1995 USD mn	December 1995 Share in %	December 1999 USD mn	December 1999 Share in %	December 2000 USD mn	December 2000 Share in %
A,B	Agriculture, forestry, fishing	13.2	0.5	111.1	1.2	119.2	1.1	110.3	1.1
C-F	Industry, total	1,739.0	61.2	5,620.6	60.1	5,242.4	50.4	4,826.0	47.8
C-E	Industry	1,617.3	56.9	5,291.5	56.6	5,084.7	48.9	4,700.6	46.5
F	Construction	121.7	4.3	329.1	3.5	157.6	1.5	125.4	1.2
G-O	Services	1,091.0	38.4	3,623.0	38.7	5,031.7	48.4	5,167.7	51.1
G-K	Market services	1,065.9	37.5	3,550.6	38.0	4,800.0	46.2	5,036.4	49.8
G	Trade, repair of motor vehicles, etc.	355.7	12.5	1,120.0	12.0	1,259.3	12.1	1,262.6	12.5
H	Hotels and restaurants	96.5	3.4	234.5	2.5	201.2	1.9	186.8	1.8
I	Transport, storage, communications	58.2	2.0	840.3	9.0	857.4	8.2	785.0	7.8
J	Financial intermediation	321.3	11.3	754.3	8.1	1,083.9	10.4	1,174.4	11.6
K	Real estate, renting & business act.	234.18.2	601.6	6.4	1,398.3	13.5	1,627.5	16.1	0.0
L-O	Community services	25.1	0.9	72.4	0.8	231.7	2.2	131.4	1.3
L	Public admin., defence, compuls.soc.sec.	–	–	–	–	–	–	–	–
M	Education	1.3	0.0	3.6	0.0	2.4	0.0	3.5	0.0
N	Health and social work	11.9	0.4	17.9	0.2	10.7	0.1	8.4	0.1
O	Other community, social & personal serv.	11.9	0.4	50.9	0.5	218.6	2.1	119.4	1.2
Total		**2843.2**	**100.0**	**9,354.7**	**100.0**	**10,393.2**	**100.0**	**10,104.0**	**100.0**

Note: 1) Equity capital based on corporation-tax declarations. Source: Central Statistical Office.

Table 6

FDI stock in Poland – by economic activities[1)]

NACE code		December 1994[2)] USD mn	December 1994[2)] Share in %	December 1995[2)] USD mn	December 1995[2)] Share in %	December 1999 USD mn	December 1999 Share in %	December 2000 USD mn	December 2000 Share in %
A,B	Agriculture, forestry, fishing	8.0	0.2	9.0	0.1	30.1	0.1	44.8	0.1
C-F	Industry, total	2,968.0	68.7	4,821.8	70.6	19,790.0	56.3	23,040.2	50.3
C-E	Industry	2,588.6	59.9	4,325.6	63.3	17,859.7	50.8	20,549.6	44.9
F	Construction	379.4	8.8	496.2	7.3	1,930.3	5.5	2,490.6	5.4
G-O	Services	1,344.8	31.1	2,000.5	29.3	15,350.9	43.6	22,686.7	49.6
G-K	Market services	1,324.4	30.7	1,977.7	28.9	13,765.2	39.1	21,072.3	46.0
G	Trade, repair of motor vehicles, etc.	237.3	5.5	364.3	5.3	3,398.4	9.7	3,962.6	8.7
H	Hotels and restaurants	–	–	–	–	423.1	1.2	696.8	1.5
I	Transport, storage, communications	265.3	6.1	318.7	4.7	1,891.7	5.4	5,568.8	12.2
J	Financial intermediation	821.8	19.0	1,294.7	18.9	7,861.8	22.4	10,392.7	22.7
K	Real estate, renting & business act.	–	–	–	–	190.2	0.5	451.4	1.0
L-O	Community services	20.4	0.5	22.8	0.3	1,585.7	4.5	1,614.4	3.5
L	Public admin., defence, compuls.soc.sec.	20.4	0.5	22.8	0.3	–	–	–	–
M	Education	–	–	–	–	–	–	–	–
N	Health and social work	–	–	–	–	–	–	–	–
O	Other community, social & personal serv.	–	–	–	–	1585.7	4.5	1614.4	3.5
Total		**4,320.8**	**100.0**	**6,832.2**	**100.0**	**35,171.0**	**100.0**	**45,772.0**	**100.0**

Notes: 1) Equity capital, loans, reinvested earnings gross; projects over USD 1 million capital. 2) From 1994 till 1996: Old classification adjusted to NACE.
Source: Polish Agency for Foreign Investment (PAIZ).

Slovakia was considerably lagging behind the FDI level of other transition countries up to 1999, but exhibited a turnaround in 2000 which was made possible by a new incentive scheme for the entry of FDI. Regarding the structure of foreign direct investment, investments are equally distributed between the manufacturing and the services sectors. Within the latter the bulk (slightly over 90% of the FDI stock) is concentrated in only three segments: trade, transport and communications and financial intermediation. There was a significant increase in the transport and communications sector's share in the country's total FDI stock in 2000, due to the sale of a majority stake in the Slovak Telekom to Deutsche Telekom (Table 7). In addition there was growing foreign interest in data communications and internet services, e.g. Telenor (Norway), KPN and UPC (both Netherlands) made investments in that sector.[20] Following the privatization of the banking sector, financial intermediation accounted for almost 20% of the total FDI stock in 2001. An important target for foreign investors is the insurance market, developing rapidly in the late 1990s with the entry of foreign insurance companies such as AIG Life (US), Nationale Netherlanden, Allianz (Germany) and Wiener Städtische and UNIQA (both Austria).

In contrast to the outset of the transition, when FDI in the services sector accounted for only one

Table 7

FDI stock in Slovakia – by economic activities[1]

		December 1996		December 1999		December 2000		September 2001	
NACE code		USD mn	Share in %	USD mn	Share in %	USD mn	Share in %	USD mn	Share in %
A,B	Agriculture, forestry, fishing	1.0	0.1	4.4	0.2	4.0	0.1	4.0	0.1
C-F	Industry, total	788.7	54.8	1,201.4	53.2	2,056.6	55.7	2,144.1	49.8
C-E	Industry	756.3	52.6	1,159.1	51.4	2,013.2	54.5	2,115.2	49.2
F	Construction	32.4	2.3	42.3	1.9	43.4	1.2	28.9	0.7
G-O	Services	649.3	45.1	1,050.5	46.6	1,631.6	44.2	2,152.4	50.0
G-K	Market services	639.6	44.5	1,037.8	46.0	1,618.9	43.8	2,138.3	49.7
G	Trade, repair of motor vehicles, etc.	279.6	19.4	415.0	18.4	426.2	11.5	508.0	11.8
H	Hotels and restaurants	19.8	1.4	29.2	1.3	27.5	0.7	28.2	0.7
I	Transport, storage, communications	50.9	3.5	67.5	3.0	618.8	16.8	649.8	15.1
J	Financial intermediation	250.3	17.4	421.9	18.7	443.7	12.0	819.7	19.1
K	Real estate, renting & business act.	39.0	2.7	104.1	4.6	102.8	2.8	132.5	3.1
L-O	Community services	9.7	0.7	12.8	0.6	12.7	0.3	14.1	0.3
L	Public admin., defence, compuls.soc.sec.	–	–	–	–	–	–	–	–
M	Education	–	–	–	–	–	–	–	–
N	Health and social work	0.3	0.0	0.4	0.0	1.4	0.0	1.6	0.0
O	Other community, social & personal serv.	9.4	0.7	12.3	0.5	11.2	0.3	12.4	0.3
Total		**1,438.9**	**100.0**	**2,256.4**	**100.0**	**3,692.2**	**100.0**	**4,302.0**	**100.0**

Note: 1) Equity capital, reinvested earnings.
Source: National Bank of Slovakia.

20) Information on FDI undertaken by specific enterprises refer to the EBRD Investment Profile Slovakia 2001.

*The Service Sectors in **Central** and **Eastern Europe***

third of the total FDI stock in Slovenia, in 2000 it had jumped to 56% (Table 8). Within the services segment, financial intermediation is the most important recipient of FDI (one quarter of the total FDI stock), followed by trade and real restate (around 14% each). The high share of financial intermediation in total FDI – the largest among all transition countries – is the more surprising as the privatization of the two largest banks has not yet materialized. On the other hand, Slovenia is the country reporting the lowest proportion of foreign investment in transport and telecommunications segments resulting from the delay in the privatization. For the time being it is only the services sector that has attracted wholly foreign-owned greenfield investment.

Data on the Bulgarian FDI stock for 2000 indicate a growing share of services from close to 44% in 1999 to 51%. The financial services segment is the main FDI target, accounting for almost 20% of the total FDI stock, followed by trade with about 16%. (Table 9).

The impact of FDI on the economy in general and on the services sector in particular is still very limited in Romania. Data for 2000 indicate that more than half of the FDI stock is devoted to the industrial and agricultural sectors (Table 10). Within the services sector, FDI is

Table 8

FDI stock in Slovenia – by economic activities[1)]

NACE code		December 1994 USD mn	December 1994 Share in %	December 1995 USD mn	December 1995 Share in %	December 1999 USD mn	December 1999 Share in %	December 2000 USD mn	December 2000 Share in %
A,B	Agriculture, forestry, fishing	0.3	0.0	0.4	0.0	0.9	0.0	0.5	0.0
C-F	Industry, total	899.7	67.9	1,049.9	59.5	1,295.8	48.8	1,164.2	41.5
C-E	Industry	897.7	67.7	1,047.1	59.4	1,288.3	48.5	1,159.9	41.3
F	Construction	2.0	0.2	2.8	0.2	7.5	0.3	4.3	0.2
G-O	Services	426.2	32.1	713.5	40.5	1,359.9	51.2	1,576.5	56.1
G-K	Market services	422.2	31.8	691.6	39.2	1,333.5	50.2	1,552.8	55.3
G	Trade, repair of motor vehicles, etc.	197.1	14.9	241.6	13.7	405.1	15.2	394.3	14.0
H	Hotels and restaurants	8.6	0.6	13.4	0.8	17.0	0.6	17.4	0.6
I	Transport, storage, communications	18.4	1.4	20.8	1.2	37.2	1.4	43.6	1.6
J	Financial intermediation	98.1	7.4	249.5	14.1	532.1	20.0	724.4	25.8
K	Real estate, renting & business act.	100.0	7.5	166.3	9.4	342.1	12.9	373.1	13.3
L-Q	Community services	4.0	0.3	21.9	1.2	26.4	1.0	23.7	0.8
L	Public admin., defence, compuls.soc.sec.	0.0	0.0	0.02	0.0	0.0	0.0	0.0	0.0
M	Education	0.2	0.0	0.4	0.0	0.4	0.0	0.1	0.0
N	Health and social work	0.2	0.0	0.2	0.0	0.7	0.0	1.3	0.0
O	Other community, social & personal serv.	3.6	0.3	21.3	1.2	25.3	1.0	22.3	0.8
P	Private households with employed persons	–	–	–	–	–	–	–	–
Q	Extra-territorial organizations and bodies	–	–	–	–	–	–	–	–
Other not classified activities		–0.3	0.0	–0.4	0.0	–0.1	0.0	67.3	2.4
Total		**1,325.9**	**100.0**	**1,763.4**	**100.0**	**2,656.5**	**100.0**	**2,808.5**	**100.0**

Note: 1) Equity capital, reinvested earnings, loans.
Source: Bank of Slovenia.

mainly concentrated in the wholesale and retail trade segment (18%), followed by 'services' and transport. Though detailed information about the allocation of FDI to specific services is lacking, foreign actors where undoubtedly the driving force behind the development of the business services sector in Romania, especially in professional services which could not be provided domestically such as legal services, accounting and auditing, tax consultancy, management consultancy etc. These are still the segments where foreigners dominate, while in areas requiring less qualification such as real estate local companies have been entering the market.

Table 9

FDI stock in Bulgaria – by economic activities[1)]

	December 1992		December 1995		December 1999		December 2000	
	USD mn	Share in %	USD mn	Share in %	USD mn	Share in %	USD mn	Share in %
Agriculture	0.00	0.0	0.06	0.0	8.5	0.3	8.5	0.2
Industry	0.16	0.5	143.71	28.2	1,556.5	54.8	1,863.7	48.5
Construction	0.17	0.5	6.36	1.2	26.5	0.9	39.2	1.0
Trade	13.50	39.2	163.45	32.0	543.0	19.1	632.5	16.5
Tourism	0.55	1.6	54.94	10.8	142.8	5.0	163.6	4.3
Transport	12.76	37.1	71.23	14.0	73.6	2.6	83.7	2.2
Telecommunications	6.08	17.7	10.05	2.0	51.9	1.8	66.8	1.7
Finance	0.00	0.0	53.01	10.4	324.0	11.4	767.2	20.0
Other	1.20	3.5	7.46	1.5	114.8	4.0	217.9	5.7
Total	**34.42**	**100.0**	**510.27**	**100.0**	**2,841.6**	**100.0**	**3,843.1**	**100.0**

Note: 1) Equity capital, reinvested earnings, loans.
Source: Bulgarian Foreign Investment Agency.

Table 10

FDI stock in Romania – by economic activities[1)]

	December 1997[2)]		December 1999[2)]		December 2000		September 2001	
	USD mn	Share in %	USD mn	Share in %	USD mn	Share in %	USD mn	Share in %
Agriculture	–	–	130.9	3	160.2	3.5	170.6	3.6
Industry	1,302.0	39.2	1,911.4	43.8	2,072.8	45.3	2,197.8	46.0
Construction	49.8	1.5	100.4	2.3	237.9	5.2	222.2	4.7
Retail and wholesale trade	807.1	24.3	1,051.7	24.1	832.8	18.2	858.1	18.0
Tourism	–	–	34.9	0.8	128.1	2.8	141.4	3.0
Transport	–	–	100.4	2.3	356.9	7.8	355.0	7.4
Foreign trade	172.7	5.2	–	–	–	–	0.0	0.0
Services	989.8	29.8	1034.3	23.7	787.0	17.2	832.8	17.4
Total	**3,321.5**	**100.0**	**4,364.0**	**100.0**	**4,575.8**	**100.0**	**4,777.9**	**100.0**

Notes: 1) Equity capital subscribed at registration. – 2) Unrevised data.
Source: Chamber of Commerce and Industry.

6 Services sector developments by country

Czech Republic

Over the last decade the Czech Republic has experienced a remarkable change of the services sector's share in the country's gross value added, from about 44% in 1990 to 49% in 1993 and some 57% in 2000 (Table 11).

After an initial fall in 1992 the services sector started growing until 1996, declined in accordance with the general slump of the economy in the two subsequent years and resumed growth in 1999. Growth was especially impressive in the trade and business services sectors, while social services in general and the health and educational sectors in particular stagnated or even decreased. Employment in education showed a steady contraction until 1999, with the number of employed declining by about 28 thousand persons from 1993 onwards (when the first Labour Force Survey was conducted). However, the year 2000 witnessed a remarkable increase of jobs in that segment (see Annex, Table B.2). Compared with developed market economies the services sector is still small in the Czech Republic and has a less favourable structure. Traditional personal services are dominating over modern ones based upon 'manipulation with symbols and information' (Vercernik and Mateju, 1999). Employment is lagging behind in segments, such as research and development, public and social services, and public administration and social welfare.

Table 11

Employment and gross value added by activities in the Czech Republic

(in % of total)

		Employment		Gross value added	
		1993	1999	1993	1999
A-Q	Employment, total	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	7.7	5.2	5.3	3.9
C-F	Industry total	42.9	40.1	41.1	39.2
C-E	Industry	34.2	30.8	33.3	31.8
F	Construction	8.7	9.3	7.8	7.4
G-O	Services	49.4	54.6	53.6	56.8
G-K	Market services	27.4	32.0	40.6	41.3
G	Wholesale, retail trade, repair motor vehicles	10.5	13.4	11.7	14.1
H	Hotels and restaurants	3.1	3.3	1.9	1.8
I	Transport, storage, telecommunications	8.0	7.8	8.6	7.8
J	Financial intermediation	1.4	2.1	6.4	5.2
K	Real estate, renting & business activities	4.5	5.4	11.9	12.4
L-O	Community services	22.0	22.7	13.0	15.6
L	Public admin., defence, compulsory social security	6.3	7.1	4.4	5.5
M	Education	6.5	6.0	3.0	3.6
N	Health and social work	5.8	5.8	3.0	3.6
O	Other community, social & personal services	3.3	3.7	2.5	2.9

Source: WIIW Database incorporating national statistics.

Hungary

In Hungary the shift to a service economy began in the late 1980s, starting with the adoption of the Company Law in 1989. Since then the number of firms providing services has increased twice as much as the number of all firms (Kovacs, 1999). In 2000 the services sector generated 62% of the country's value added and accounted for nearly 60% of total employment (Table 12). Over the period 1994 to 2000 the cumulated growth of value added in the services sectors lagged behind that of industry (see Annex, Table A.3). Transport and telecommunications (as one statistical item) grew most rapidly. However, looking at these two segments separately, the transport sector underwent a drastic slump until the mid-1990s and recovered only in 1997, while the telecommunications sector experienced an extraordinary upward development following the privatization of the national telecom company and legislative changes coupled with intense investment activities (Viszt and Borsi, 2001). Between 1990 and 2000 the number of telephone subscribers per 1000 inhabitants rose from 181 to 348. Real estate, renting & business activities is another growth segment, increasing its value added by more than 20% in the period 1994 to 2000. The value added of hotels and restaurants declined in real terms until 1995, that of trade until 1996, and resumed growth thereafter. Interestingly, financial intermediation reported significant growth rates in 1993 and 1994, but quite substantial falls of value added thereafter implying an in-

Table 12

Employment and gross value added by activities in Hungary

(in % of total)

		Employment		Gross value added	
		1992	2000	1992	2000
A-Q	Employment, total	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	11.3	6.5	7.2	4.1
C-F	Industry total	35.1	33.7	33.2	33.8
C-E	Industry	29.7	26.8	27.3	29.2
F	Construction	5.3	7.0	5.9	4.6
G-O	Services.	53.6	59.7	59.6	62.1
G-K	Market services	28.2	33.1	38.6	42.7
G	Wholesale, retail trade, repair motor vehicles	11.8	14.1	10.8	10.7
H	Hotels and restaurants	2.8	3.5	2.2	1.8
I	Transport, storage, telecommunications	8.5	8.1	9.3	9.6
J	Financial intermediation	1.7	2.2	4.2	4.0
K	Real estate, renting & business activities	3.4	5.3	12.1	16.5
L-O	Community services	25.4	26.6	21.0	19.4
L	Public admin., defence, compulsory social security	7.2	7.8	7.1	7.2
M	Education	7.6	8.3	5.4	4.7
N	Health and social work	5.8	6.3	4.7	4.6
O	Other community, social & personal services	4.8	4.3	3.7	3.0

Source: WIIW Database incorporating national statistics.

*The Service Sectors in **Central** and **Eastern Europe***

creasing competition in this segment.

Among community services all segments but 'other community services' increased their valued added over the period 1994 to 2000, but at lower rates than the business and financial services sectors.

Poland

Over the last decade Poland's economy has undergone an extensive restructuring towards a service economy. The contribution of the tertiary sector to gross value added rose from 50% in 1994 to 61.3% in 2000, while at the same time the shares of agriculture and industry fell to 3.8% and 35% respectively (Table 13). However, comparing the overall economic growth and that of industry the services sector's value added growth lagged substantially behind over the period 1994 to 2000. Within the tertiary sector the value added of financial intermediation more than doubled, hotels and restaurants exceeded the 1994 level by 84%, and wholesale and retail trade were higher by 41% (see Annex Table A.4). The latter generate slightly over 20% of the country's value added, representing by far the highest share in the whole region. Retailing has been the third most important target of foreign investors, controlling about 10–12% of the whole retail market in Poland. Leading investors include Metro AG (Germany), IKEA (Sweden) and some French and Portuguese companies (EBRD, 2001b).

Table 13

Employment and gross value added by activities in Poland

(in % of total)

		Employment		Gross value added	
		1994	2000	1994	2000
A-Q	Employment, total	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	24.0	18.7	7.1	3.8
C-F	Industry total	31.9	30.8	42.6	34.9
C-E	Industry	25.8	23.8	36.2	26.6
F	Construction	6.2	7.1	6.4	8.3
G-O	Services	43.9	50.3	50.3	61.3
G-K	Market services	21.9	28.1	30.5	43.8
G	Wholesale, retail trade, repair motor vehicles	11.6	14.1	15.3	20.9
H	Hotels and restaurants	1.1	1.7	0.6	1.3
I	Transport, storage, telecommunications	5.4	6.1	6.7	6.8
J	Financial intermediation	2.1	2.6	1.1	2.3
K	Real estate, renting & business activities	1.7	3.7	6.7	12.5
L-O	Community services	22.0	22.2	19.8	17.5
L	Public admin., defence, compulsory social security	4.6	5.3	5.0	5.3
M	Education	6.8	7.0	3.9	4.6
N	Health and social work	6.4	6.5	4.0	3.5
O	Other community, social & personal services	4.2	3.5	6.8	4.1

Source: WIIW Database incorporating national statistics.

What makes Poland different from most other transition countries is its high proportion of agricultural employment, absorbing about 19% of the total based on LFS data or even 26% according to registration data.[21] Apart from some temporary improvement (up to 1998) total employment remained almost stagnant between 1994 and 2000, while the value added exceeded the 1994 level by more than one third in 2000. In contrast to agriculture and industry where job losses continued, the services sector reported employment increases over that period. Jobs were almost exclusively created in the market services segment, while community services employment remained at the 1994 level. Within market services the most impressive growth rates were reported in the real estate, renting and business services segment where the number of employed more than doubled. In the hotels and restaurants segment employment was up by almost 50% as compared to 1994. Wholesale and retail trade and financial intermediation recorded employment increases in the magnitude of about 20%. Public administration and defence has been the only growing employment segment among community services.

Slovakia

In 2000 Slovakia was the second country after Hungary creating more than 60% of its value added in the services sector, while employing about 56% of the total workforce (Table 14). The real level of output exceeded that of 1995 by more than 30%, in the community services sector even by 44% (see Annex, Table A.6). Within market services, up by 26%, value added in wholesale and retail trade (including hotels and restaurants) expanded most, by over 40%, followed by transport and telecom and real estate and business activities. The value added level of financial intermediation was about one third lower than in 1995 reflecting the dramatic changes the sector has undergone over the last decade. In terms of employment the tertiary sector expanded by only 6% over that period, with growth in the market services sector up by 8% (see Annex, Table B.6). The highest job increases occurred in financial intermediation and wholesale and retail trade, and also above average in the hotels and restaurants segment. Real estate, experiencing extraordinary growth rates in most other transition countries, reported a lower employment level in 2000 than in 1995. Employment creation in the community services sector was concentrated most in public administration, while jobs in education fell continuously from 1997. Job destruction in education is also reflected by its declining share in total employment; however, compared to other CEE countries the proportion of employed in that segment is still among the highest.

Slovenia

Slovenia's tertiarization process gained momentum in the second half of the 1980s. In 1980 the services sector generated about 42% of the GDP and absorbed some

21) Based on the results of the agricultural micro-census, which registers the number of persons connected with the running of a farm, but not those who are actually working.

38% of total employment. Following the recession in the late 1980s (Slovenia then still being part of the former Yugoslavia) and the dissolution of Yugoslavia, industrial output fell significantly at the beginning of the 1990s, while the services sector was less affected by these developments (Stare, 2001).

From 1994 onwards the cumulated growth of value added in the services sector grew at a lower pace than in industry, but the gap was less pronounced than in Hungary (see Annex, Table A.7). Value added in the community services sector grew at a faster pace than in the market services sector, up by about 30% in 2000 compared to 1994. Over that period Slovenia witnessed the highest growth in the community services sector both in terms of value added and employment among all countries under consideration (see Annex, Table B.7). These developments might be explained by the activities related to the building of a new state, e.g. employment in public administration was almost one third higher in 2000 than in 1994. From 1990 the proportion of the tertiary sector in the country's value added rose from 53% to 59%, but remained almost stagnant from 1995 onwards; the share in total employment increased from 45% in 1993 to 51% in 2000 (Table 15). Real estate, renting and business services (K) is the most dynamically growing segment among market services, with jobs increasing by more than 50% since 1994 and the value added up by 20%. In 2000 this segment accounted for about 12% of total

Table 14

Employment and gross value added by activities in the Slovak Republic

(in % of total)

		Employment		Gross value added	
		1994	2000	1994	2000
A-Q	Employment, total	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	10.2	6.6	4.9	4.5
C-F	Industry total	39.7	37.3	39.2	34.2
C-E	Industry	30.8	29.3	32.2	28.9
F	Construction	8.9	8.0	7.0	5.2
G-O	Services	50.0	55.9	55.9	61.3
G-K	Market services	25.2	29.5	43.6	45.9
G	Wholesale, retail trade, repair motor vehicles	9.7	12.4	17.2	16.7
H	Hotels and restaurants	2.6	3.1	1.7	–
I	Transport, storage, telecommunications	7.7	8.0	9.9	11.2
J	Financial intermediation	1.2	1.8	7.8	4.2
K	Real estate, renting & business activities	4.0	4.3	7.0	13.9
L-O	Community services	24.8	26.4	12.3	15.4
L	Public admin., defence, compulsory social security	6.0	7.5	3.5	–
M	Education	8.5	7.7	4.6	–
N	Health and social work	6.7	7.0	1.5	–
O	Other community, social & personal services	3.7	4.1	2.7	2.2

Source: WIIW Database incorporating national statistics.

Table 15

Employment and gross value added by activities in Slovenia

(in % of total)

		Employment		Gross value added	
		1993	2000	1993	2000
A-Q	Employment, total	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	10.7	9.9	5.1	3.2
C-F	Industry total	44.1	37.7	38.1	37.5
C-E	Industry	38.7	32.3	33.4	31.4
F	Construction	5.4	5.4	4.7	6.0
G-O	Services	45.1	51.4	56.8	59.3
G-K	Market services	25.7	30.4	36.3	38.6
G	Wholesale, retail trade, repair motor vehicles	11.4	12.5	11.1	11.3
H	Hotels and restaurants	3.3	3.8	2.9	3.1
I	Transport, storage, telecommunications	6.5	6.4	7.8	7.9
J	Financial intermediation	1.9	2.4	4.0	4.4
K	Real estate, renting & business activities	2.6	5.2	10.6	11.8
L-O	Community services	19.4	21.0	20.5	20.7
L	Public admin., defence, compulsory social security	4.4	5.4	4.9	5.7
M	Education	5.3	6.5	5.4	5.8
N	Health and social work	4.9	5.0	5.1	5.5
O	Other community, social & personal services	4.9	4.0	5.2	3.7

Source: WIIW Database incorporating national statistics

Table 16

Employment and gross value added by activities in Bulgaria

(in % of total)

		Employment		Gross value added	
		1996	1999	1996	1999
A-Q	Employment, total	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	24.4	25.8	15.4	17.3
C-F	Industry total	32.6	28.9	30.2	26.8
C-E	Industry	27.5	24.6	25.9	23.1
F	Construction	5.1	4.3	4.3	3.7
G-O	Services	43.1	45.4	54.5	55.9
G-K	Market services	24.2	26.4	45.8	41.5
G	Wholesale, retail trade, repair motor vehicles	9.8	11.5	10.9	7.5
H	Hotels and restaurants	2.3	2.6	1.2	2.2
I	Transport, storage, telecommunications	7.7	7.5	7.5	8.7
J	Financial intermediation	1.3	1.1	8.7	2.9
K	Real estate, renting & business activities	3.1	3.7	17.6	20.1
L-O	Community services	18.9	18.9	8.6	14.4
L	Public admin., defence, compulsory social security	2.2	2.9	3.4	6.1
M	Education	7.8	7.5	2.4	3.8
N	Health and social work	5.7	5.3	1.8	2.4
O	Other community, social & personal services	3.2	3.2	1.1	2.1

Source: WIIW Database incorporating national statistics.

value added and about 5% of employment. Data available from the balance sheets and profit and loss accounts indicate that in the period 1995 to 2000 the number of enterprises in this segment rose by 21% to 8851 while at the same time the number of employees increased by about 17%. Computer and related services are the fastest growing subsegment not only within the activities comprising K, but in the economy as a whole. The number of employees more than doubled and the value added per employee exceeded the average of all companies by 49% in 2000 (IMAD, 2001). In the real estate subsegment the number of firms tripled in the period 1995 to 2000 and the number of employees even jumped by 70%; the value added per employee surpassed the average of all companies by 43%. Architectural and technical consulting are the most important activities regarding the number of employees and the value added, but available data indicate a steady decline of companies and people employed. Surprisingly, the worst results were recorded for companies dealing with legal, tax and business consulting. Over the whole period 1995 to 2000 they were reporting net losses, of which primarily in companies dealing with business and management consulting.

Bulgaria

Job losses in Bulgaria have been among the highest in the CEE economies, and have not been followed by a long-run process of job reallocation from industry and agriculture towards the services sector. Developments suggest that restructuring in Bulgaria is taking place at a slower speed than in other accession countries (Garibaldi et al., 2001). In contrast to other CEE countries not only the share in services employment but also in agriculture had increased over the transition period. Figures available since 1996 based on the NACE classification indicate an increase of the services sector's share in value added to 57% in 2000; at the same time employment accounted for 46% (Table 16). Altogether, both value added and employment in the tertiary sector were lower in 2000 than in 1996. Employment in the two subsectors developed unevenly, with a slight job increase within market services and a 12% job loss in the community services sector. A notable employment increase is reported only in a few subsegments such as real estate and public administration, expanding employment by 22% each, in the wholesale and retail trade sector, where the number of jobs rose by 10%, and in hotels and restaurants by 2% (see Annex, Table B.1). All other services segments experienced falls, sometimes dramatic ones: for instance, employment in financial intermediation contracted by one quarter, in transport and telecommunications by 12%. Within community services where employment was down by 12% in 2000 as against 1996, jobs in health and social work were reduced by 20% and in education by 16%. These two sectors are in a process of radical restructuring and are still financed by the state budget; wages are lower than the national average and an upgrading of qualifications is almost impossible (ETF, 1999). The privatization of the services sector is still lagging behind, but may speed up if the proposed privatization of some state monopolies proceeds as planned.

Romania

Romania is the least developed service economy among the transition countries under consideration. In 1999 the tertiary sector generated only about half of the country's value added and absorbed less than one third of total employment (Table 17). These results are primarily attributable to the lagging reform process, particularly as far as mass privatization and industrial restructuring are concerned (Ghibutiu, 2001). However, there was a dynamic growth of services sector enterprises, especially during the initial stage of transition: between 1992 and 1994 the total number of firms in that sector more than doubled; however, growth lost momentum thereafter. In 1999, wholesale and retail trade accounted for 82% of all services sector enterprises, about 4 percentage points less than in 1994, while the number of firms in other segments such as financial services, real estate, hotels and restaurants was (close to) double of what it was in 1994. The latter reported also the most impressive cumulative growth in value added over the period 1994 to 1998, up by over 40%, followed by

Table 17

Employment and gross value added by activities in Romania

(in % of total)

		Employment		Gross value added	
		1994	1999	1994	1999
A-Q	Employment, total	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	39.0	41.8	20.6	14.8
C-F	Industry total	32.9	27.6	44.4	35.3
C-E	Industry	28.7	23.9	37.6	29.9
F	Construction	4.1	3.7	6.8	5.4
G-O	Services	28.1	30.7	35.0	49.9
G-K	Market services	14.8	16.5	25.8	38.6
G	Wholesale, retail trade, repair motor vehicles	6.1	8.6	7.1	12.7
H	Hotels and restaurants	1.3	1.1	1.4	1.8
I	Transport, storage, telecommunications	5.1	4.6	9.1	11.3
J	Financial intermediation	0.7	0.8	5.0	1.7
K	Real estate, renting & business activities	1.7	1.3	3.3	11.1
L-O	Community services	13.3	14.2	9.2	11.4
L	Public admin., defence, compulsory social security	4.1	4.9	3.4	3.6
M	Education	4.2	3.9	2.6	2.8
N	Health and social work	3.2	3.2	2.0	2.3
O	Other community, social & personal services	1.7	2.1	1.2	2.6

Source: WIIW Database incorporating national statistics.

wholesale and retail trade, increasing its real output level by about one quarter (see Annex, Table A.5). At the same time the value added both in financial intermediation and transport and telecommunications contracted by nearly one third and 12% respectively. Despite this sharp fall the latter segment still generates around 10% of the total value added; together with Slovakia, Romania has the biggest transport and telecom sector measured as a proportion of value added in the whole region. In contrast, the proportion of financial intermediation fell from about 5% in 1994 to only 1.7% in 1999 and is the least developed such segment among all transition countries under review.

Within community services, public administration and other community services experienced the strongest employment growth over the period 1994 to 2000, by about one quarter each, while at the same time about 10% of jobs in the education segment were lost.

7 Conclusions

The Central and East European countries' transition from a planned to a market economy has been characterized by a rapid process of tertiarization. The importance of the tertiary sector has grown as a proportion of gross value added (GVA) and employment resulting from changes in technology, information use, consumer demand and in response to the systemic change. But the magnitude and timing of this developments vary significantly across the region. Some countries have already a significant services sector the proportion of which ranges between 63% of the GVA in Hungary and 50% in Romania. Values exceeding the 60% mark have been registered also in Slovakia and Poland, while others still have a strong orientation towards industry such as the Czech Republic and Slovenia, or towards agriculture such as Bulgaria and Romania. For comparison, by the end of the 1990s services accounted for 69% of value added in the OECD and for about two thirds in the EU.

In all countries the proportion of the tertiary sector in value added was higher than its share in total employment, pointing to the high value added per employee in the services sector, traditionally attributed to the shift in relative prices towards the sector with low productivity growth.

With the exception of Romania services employment accounted for the largest share in total employment in the year 2000. Between 1989 and 2000 the proportion of those employed in the services sector rose most rapidly in Hungary and Slovenia, by 15 and 14 percentage points respectively, and in the Czech Republic and in Slovakia, by 13 percentage points each. Hungary reports the highest level of employment in the tertiary sector – almost 60%, while in Romania it accounts for less than one third. In comparison with the EU countries the tertiary sector is still underdeveloped compared with either EU groups in all countries but Hungary, implying that there is a considerable potential in the services sector to absorb labour from other sectors in most CEECs. The imbalance is most pronounced in Romania, where the proportion employed in the tertiary sector was only half that in EU-South.

Taking into account the huge job losses in industry and agriculture, employment creation in the services sector was far from sufficient to offset job cuts in the other two sectors.

The tertiary sector in the transition countries is still dominated by traditional services sector segments such as wholesale/retail trade and transport while most higher value-added segments such as business services, requiring a good capital basis and highly skilled labour, are still underdeveloped. All CEE countries provide a lower employment level in the market services segment than either EU groups. There are also considerable inter-country differences in the importance and ranking of the market services segments.

Similar as in the European Union, trade is the dominant segment within market services in the CEECs, reaching EU-North levels (in employment terms) in Hungary and Poland. Employment in financial services, almost non-existent under the previous system, has been growing fastest and all countries except Bulgaria and Romania have reached the southern European level. There is quite some room for employment expansion in that segment, in particular in the insurance sector, which is even less developed than the banking sector.

Despite dramatic changes the transport and telecommunications segment has maintained its important position as an employer in the transition economies and structures are similar to the northern EU countries in Poland and Slovenia. All other countries but Romania saw a greater number of employed than either of the EU groups.

Hungary, the Czech Republic and Slovenia employ the most significant quantities of labour in the real estate, renting and business activities segment and do compare favourably with the group of southern EU countries, but deviate considerably from the northern EU countries. The rising importance of that segment is also reflected by soaring FDI.

Measured as a proportion of the GDP, non-market services provision had and still has a relatively strong position in the transition economies which is comparable to that in the EU; this implies that the CEE countries are lagging behind the EU level in the market services segment rather than in community services. Despite budgetary constraints in all countries value added in the latter has been on the increase, of which most impressively in Slovenia and Slovakia. Public administration contributed significantly to growth in this subsector, both in terms of value added and employment over the 1994–2000 period. The remaining two segments have developed unevenly across countries: strong value added growth both in health and education has been observed in Hungary and Slovenia, stagnation in Romania and a fall in Bulgaria.

Services sector expansion is primarily concentrated in large urban areas, especially in the capital cities, providing adequate infrastructure (e.g. educated and skilled labour). Employment in the tertiary sector in the CEE regions varies between 78% in the region of Prague and 19% in South-West Romania.

The orientation towards the tertiary sector is also mirrored in the composition of FDI. Over recent years the distribution of FDI by broad economic sectors has undergone significant changes. In countries such as the Czech Republic and Slovenia the stock of services in FDI is much higher than that in manufacturing – a trend that can also be observed in the OECD area. FDI in the services sector in the CEECs is mainly directed towards financial intermediation, wholesale and retail trade, transport and telecom and is booming in the real estate segment in the more advanced countries such as Hungary, the Czech Republic and Slovenia. Financial intermediation is in all transition countries but Hungary and the Czech Republic the main recipient of FDI in the services sector, accounting for 20% to 25% of the total FDI stock. In general, FDI in the tertiary sector is limited to the market services segment, while foreign activities related to community services such as education, health, social and personal services is almost negligible.

There is still a high potential for strengthening the role of the services sector, especially that of the market services in the CEECs. Its further development will depend on the overall economic growth in general and on real incomes is particular, since services are in most instances are characterized by high income elasticities. Another important factor to increase services sector employment is the establishment of small and medium-sized enterprises and the ability of transition countries to succeed in attracting further FDI in this sector. The continuing of the tertiarisation process in the CEECs is also confirmed by the Joint Assessments of the Employment Policy Priorities – prepared by the individual countries and the European Commission – emphasing the further development of the services sector employment as one of the main future priorities.

Apart from the market services sector, which is seen by all authors as the driving force of economic development, the community services sector will become an important source of future employment as well (e.g. further institution building in the wake of accession).

Data

Basic information for the analysis of the labour market was collected from the respective Statistical Offices (Labour Force Survey, LFS) and the National Employment Offices.

Changes in employment in comparison with the pre-transition period are based on registration data from the WIIW database. The given figures may only serve as guideline indicators as caution is warranted in comparing pre- and post-transition employment figures due to considerable conceptual and measurement differences. Available statistics do not provide consistent time series covering the whole transition period e.g. for total employment or the sectoral composition of employment for most of the countries. For instance, many jobs previously allocated to agriculture and industry have been reassigned to services. This tends to exaggerate the shifts between broad sectors which have occurred and to overstate the relative growth of services.

Comparisons of employment developments between 1994 and 2000 are based on information obtained from the national Labour Force Surveys (LFS), as they provide harmonized data on an internationally comparable basis. The Labour Force Surveys were introduced first in Hungary (1991), in the Czech Republic and in Poland (1992), and in all other countries in 1994. In all transition countries under review LFS are carried out on a quarterly basis. For comparisons of the value added and employment developments 1994 was taken as the base year as it offered for all countries, except Bulgaria (where 1996 is the base year) the same standard classification, i.e. NACE. Employment figures for Bulgaria are registration data as they are not available based on the LFS. Results for Poland have to be treated with caution because of methodological changes in the LFS in 1999.

Supplementary figures for CEECs on value added were provided by the WIIW database, for FDI by activities by the WIIW-WIFO database and regional data from EUROSTAT and the WIIW regional database. Figures for comparisons with the European Union are based on ILO data.

References

Baumol, W.J. (1967), Macroeconomics of Unbalanced Growth: The Anatomy of Orban Crisis', American Economic Review 57, June, pp. 415–426

Burda, M. C. (1996), 'Unemployment in Central and Eastern Europe: East Meets West', in Fighting Europe's Unemployment in the 1990s, ed. by H. Giersch for the Egon-Sohmen-Foundation, Springer-Verlag, Berlin, Heidelberg, New York.

Deichman, U. and V. Henderson (2000), 'Urban and regional dynamics in Poland', World Bank, Working Paper 2457, September.

EBRD (2001a), 'Poland. Investment Profile 2001', Business Forum, London, 22–24 April.

EBRD (2001b), 'Slovak Republic. Investment Profile 2001', Business Forum, London, 22–24 April.

European Commission (1999a), Sixth Periodic Report on the Social and Economic Situation and Development of the Region of the European Union, Brussels.

European Commission (1999b), Central European countries' employment and labour market review, Eurostat, Luxembourg, 1999/2.

European Commission (2001), Employment and labour market in Central European countries, Eurostat, Luxembourg, 2001/1.

Europäische Kommission (1997), Beschäftigung in Europa, Generaldirektion Beschäftigung, Arbeitsbeziehungen und soziale Angelegenheiten, Referat V/A.1, Luxemburg.

European Training Foundation – ETF (1999), Employment and labour market in Bulgaria. Background Study, Sofia, August.

European Training Foundation – ETF (1999), Employment and labour market in the Slovak Republic. Background Study, Bratislava, October.

Feinstein, (1999), 'Structural change in the Developed Countries during the Twentieth Century', Oxford Review of Economic Policy,

Fourastie, J. (1949), 'Le grand espoir du XXe siecle', P.U.F., Paris.

Gács, J. (2001), 'Structural Change and Catching Up: Experience of the Ten Candidate Countries', Paper prepared for the East-West conference of the Oesterreichische Nationalbank on Convergence and Divergence in Europe, Vienna, 5–6 November.

Garibaldi, P. et al. (2001), 'The Bulgarian Labor Market over the 90s: From Transition to EU accession', World Bank, Working Paper, April.

Ghibutiu, A. and C. Ivan-Ungureanu (2002), 'Business Services in the Transitional Economy of Romania', in Kigyóssi-Schmidt, E. (ed.) (2002), Business Related Services in Central and Eastern Europe. A Cross Country Approach, Deutscher Universitäts-Verlag, Wiesbaden, January.

Gorzelak, G. (1999), 'Regional policies and regional capacity building in Poland', in M. Brusis (1999), Central and Eastern Europe on the Way into the European Union: Regional Policy-Making in Bulgaria, the Czech Republic, Estonia, Hungary, Poland and Slovakia, CAP Working Paper, Ludwig-Maximilians-University, Munich, December.

Gros, D. and M. Suhrcke (2000), Ten years after: what is special about transition countries?, Working Paper No. 56, EBRD, August.

Hunya, G. and J. Stankovsky (2002), WIIW-WIFO Database. Foreign Direct Investment in Central and Eastern European Countries and the Former Soviet Union, Vienna, February.

Inman, R. (ed.) (1985), Managing the service economy. Prospects and problems, Cambridge University Press.

Institute of Macroeconomic Analysis and Development – IMAD (2001), Slovenian Economic Mirror, No. 12, Vol. VII, Ljubljana, November.

Jackman, R. and C. Pauna (1997), 'Labour market policies and reallocation of labour across sectors', in S. Zecchini (ed.), Lessons from the Economic Transition. Central and Eastern Europe in the 1990s, OECD, Kluwer Academic Publishers.

Karazs, P., Karasz, P. jr. and R. Pala (2000), 'Development Possibilities of Regions of the Slovak Republic', Friedrich Ebert Stiftung, March.

Kigyóssi-Schmidt, E. (ed.) (2002), Business Related Services in Central and Eastern Europe. A Cross Country Approach, Deutscher Universitäts-Verlag, Wiesbaden, January.

Korcelli, P. and E. Nowosielska, 'The urban system of Poland', study carried out as a part of the Interreg IIc project 'Urban Systems and Urban Networking in the Baltic Sea Region', http://www.vasab.org.pl

Kostecki, M. and A. Fehervary (1996), 'Conclusions and Strategic Guidelines for Foreign Firms', in Kostecki, M. and A. Fehervary (eds), Services in the Transition Economies, Oxford : Elsevier Science Ltd.

Kovacs, I. (1999), 'Business services in Hungary during the transition', Institute of Economics, Hungarian Academy of Sciences, KTK/IE Discussion Papers 1999/4, Budapest.

Landesmann, M. (2000), 'Structural Change in the Transition Economies, 1989 to 1999', WIIW Research Reports, No. 269, The Vienna Institute for International Economic Studies, September.

OECD (1995), Review of the Labour Market in the Czech Republic, Paris.

OECD (1997), Economic Surveys. Slovenia, Paris.

OECD (1999), Business and Industry Policy Forum on the Services Economy: Background Report, Directorate for Science, Technology and Industry, Industry Committee, Paris, 27–29 September.

OECD (2000), 'The Service Economy. STI Science Technology Industry', Business and Industry Policy Forum Series, Paris.

OECD (2001), STI Scoreboard 2001, D.6. The structure of OECD economies, http://www1.oecd.org/publications/e-book/92-2001-04-1-2987/D.6.htm

Peneder, M., S. Kaniovski and B. Dachs (2000), 'External Services, Structural Change and Industrial Performance', Background Report for the 'European Union Competitiveness Report 2000', Austrian Institute of Economic Research (WIFO), September.

Rask, K. J. and K. N. Rask (1994), 'The pivotal role of services in transitional economies: lessons from the West', The Economics of Transition, Vol. 2, No. 4.

Soubbotina, T. and K. Sheram (2000), Beyond Economic Growth: Meeting the Challenges of Global Development, World Bank, October.

Stare, M. and J. Vanyai (1995), 'The increasing importance of the services industry in countries in transition', Development & International Cooperation, Volume XI, No. 20–21, Ljubljana, June-December.

Stare, M. and S. Zupancic (2000), 'Liberalisation of Trade in Services: Slovenia's Experience', Round Table on 'Ten Years of Trade Liberalisation in Transition Economies', OECD, document CCNM/TD (2000)52.

Stare, M. (2001), 'Advancing the Development of Producer Services in Slovenia with Foreign Direct Investment', The Service Industries Journal, Vol. 21, No. 1, pp. 19-34, published by Frank Cass, London, January.

UN/ECE (2001a), 'Important Features of the Services Sector and Trade in Services in Transition Economies', Committee for Trade, Industry and Enterprise Development, Trade/2002/1, April.

UN/ECE (2001b), 'Important Features of the Services Sector and Trade in Services in Transition Economies. Financial Services in Transition Economies', Committee for Trade Industry and Enterprise Development, Trade/2001/1/Add. 1, May.

UN/ECE (2001c), 'Important Features of the Services Sector and Trade in Services in Transition Economies. Transport Services', Committee for Trade Industry and Enterprise Development, Trade/2001/1/Add. 2, May.

US Council of Economic Advisers and US Department of Labour (1999), '20 Million Jobs: January 1993 – November 1999', December, http://www.dol.gov

Vecernik, J. and P. Mateju (eds.) (1999), Ten years of rebuilding capitalism: Czech society after 1989, Academia, Prague.

Viszt, E. and B. Borsi (2001), 'Structural Changes in the Hungarian Economy and Foreign Trade in 1993–1998', Acta Oeconomica, Periodical of the Hungarian Academy of Sciences, Volume 51, Issue 3, 2000/2001, Budapest.

The Vienna Institute for International Economic Studies (WIIW) and The Institute of Slovak & World Economics of the Slovak Academy of Sciences (2000), 'Intensification of East-West Relations in the Process of EU Enlargement: The Case of Austria/Slovak Republic', Study commissioned by the Austrian and Slovak governments, Bratislava and Vienna, April.

Annex of Tables

A Gross value added by activities (WIIW Database)

B Employment (structure) by activities (LFS)

C Number of enterprises by industries

Annex A

Gross value added by activities (WIIW Database)

Table A.1

Bulgaria: Gross value added by activities

(Lew mn, current prices, real growth rates)

NACE label	NACE classification:	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices[1]	1,650.4	15,294.5	19,203.2	19,890.9	22,532.6
	growth rate in %, const. prices	-9.8	-4.4	1.7	1.8	6.7
A-B	Agriculture, forestry, fishing	253.7	4,062.7	4,045.4	3,440.0	3,269.0
	growth rate in %, const. prices	-7.4	32.9	1.4	0.6	-10.1
C-F	Industry total	497.9	4,316.3	5,508.8	5,326.0	6,263.0
	growth rate in %, const. prices	-13.2	-11.3	4.3	-4.3	15.2
C-E	Industry	427.6	3,891.7	4,791.1	4,589.0	5,443.0
	growth rate in %. const. prices	-11.8	-9.6	4.1	-4.5	16.7
F	Construction	70.2	424.6	717.6	737.0	820.0
	growth rate in %, const. prices	-20.8	-21.4	5.8	-3.6	5.9
G-O	Services.	898.9	6,915.5	9,649.1	11,125.0	13,001.0
	growth rate in %. const. prices	-19.4	0.5	5.8	7.8	–
G-K	Market services.	756.4	5,606.7	7,346.7	8,257.0	–
	growth rate in %, const. prices	–	–	-21.5	-0.5	3.7
G	Wholesale, retail trade, repair motor veh.	179.6	1,304.9	1,470.3	1,486.0	2,159.0
	growth rate in %, const. prices.	-33.4	6.9	1.9	25.0	–
H	Hotels and restaurants	19.7	222.7	396.5	442.0	–
	growth rate in %, const. prices	–	21.3	16.4	-1.1	–
I	Transport, storage, telecommunications	123.1	1,155.0	1,577.3	1,737.0	2,357.0
	growth rate in %, const. prices	2.0	1.7	-3.2	5.2	22.7
J	Financial intermediation	143.9	398.2	407.2	585.0	700.0
	growth rate in %, const. prices	8.3	-74.6	-13.4	44.6	6.9
K	Real estate, renting & business activities	290.1	2,525.9	3,495.3	4,007.0	–
	growth rate in %, const. prices	–	-0.6	-2.6	-0.5	–
L-O	Community services.	142	1,309	2,302	2,868	–
	growth rate in %, const. prices	–	-7.9	4.8	12.6	–
L	Public admin., defence, compuls.soc.sec.	56.6	484.1	866.1	1,211.0	–
	growth rate in %, const. prices	–	-18.2	6.4	30.4	–
M	Education	39.1	391.2	669.2	765.0	–
	growth rate in %, const. prices	–	-1.0	0.5	-0.1	–
N	Health and social work	29.2	293.9	446.9	471.0	–
	growth rate in %, const. prices	–	2.1	-1.6	-2.9	–
O	Oth. community, social & personal serv.	17.6	139.6	320.2	421.0	–
	growth rate in %, const. prices.	–	-6.7	25.2	12.7	–

Note: 1) Excluding FISIM: Financial intermediation services indirectly measured.

Source: Statistical Office of Bulgaria

(per cent of total)

NACE label	NACE classification:	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices[1]	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture. forestry, fishing	15.4	26.6	21.1	17.3	14.5
C-F	Industry total	30.2	28.2	28.7	26.8	27.8
C-E	Industry	25.9	25.4	24.9	23.1	24.2
F	Construction	4.3	2.8	3.7	3.7	3.6
G-O	Services	54.5	45.2	50.2	55.9	57.7
G-K	Market services	45.8	36.7	38.3	41.5	–
G	Wholesale, retail trade, repair motor veh.	10.9	8.5	7.7	7.5	9.6
H	Hotels and restaurants	1.2	1.5	2.1	2.2	–
I	Transport, storage, telecommunications	7.5	7.6	8.2	8.7	10.5
J	Financial intermediation	8.7	2.6	2.1	2.9	3.1
K	Real estate, renting & business activities	17.6	16.5	18.2	20.1	–
L-O	Community services	8.6	8.6	12.0	14.4	–
L	Public admin., defence, compuls.soc.sec.	3.4	3.2	4.5	6.1	–
M	Education	2.4	2.6	3.5	3.8	–
N	Health and social work	1.8	1.9	2.3	2.4	–
O	Oth. community, social & personal serv.	1.1	0.9	1.7	2.1	–

(Index: 1996 = 100)

NACE label	NACE classification:	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices[1]	100.0	95.6	97.2	99.0	105.6
A-B	Agriculture, forestry, fishing	100.0	132.9	134.8	135.6	121.9
C-F	Industry total	100.0	88.7	92.5	88.5	101.9
C-E	Industry.	100.0	90.4	94.1	89.9	104.9
F	Construction	100.0	78.6	83.2	80.2	84.9
G-O	Services	100.0	80.6	81.0	85.7	92.4
G-K	Market services	100.0	78.5	78.1	80.9	–
G	Wholesale, retail trade, repair motor veh.	100.0	66.6	71.2	72.6	90.7
H	Hotels and restaurants	100.0	121.3	141.2	139.7	–
I	Transport, storage, telecommunications	100.0	101.7	98.4	103.5	127.0
J	Financial intermediation	100.0	25.4	22.0	31.8	34.0
K	Real estate, renting & business activities	100.0	99.4	96.8	96.3	–
L-O	Community services	100.0	92.1	96.6	108.7	–
L	Public admin., defence, compuls.soc.sec.	100.0	81.8	87.0	113.5	–
M	Education	100.0	99.0	99.5	99.4	–
N	Health and social work	100.0	102.1	100.5	97.6	–
O	Oth. community, social & personal serv.	100.0	93.3	116.8	131.6	–

Note: 1) Excluding FISIM: Financial intermediation services indirectly measured.
Source: WIIW incorporating national statistics.

Table A.2

Czech Republic: Gross value added by activities

(Koruna mn, current prices, real growth rates)

NACE label	NACE classification:	1990	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices[1]	589,607	1,290,592	1,449,750	1,564,389	1,716,882	1,745,046	1,807,966
	growth rate in %, const. prices	–	4.8	3.7	–0.7	–1.4	–0.7	2.9
A-B	Agriculture, forestry, fishing	48,338	60,524	70,187	69,286	81,038	68,827	71,058
	growth rate in %, const. prices	–	–4.9	6.8	–2.5	12.2	7.7	–5.3
C-F	Industry total	279,618	540,874	623,335	659,308	683,118	684,769	721,845
	growth rate in %, const. prices	–	9.8	9.1	–1.6	–10.9	–3.7	3.7
C-E	Industry	215,934	429,233	511,563	534,133	560,471	555,644	593,291
	growth rate in %, const. prices	–	7.5	16.2	–0.2	–8.3	–3.8	5.7
F	Construction	63,684	111,641	111,772	125,175	122,647	129,125	128,554
	growth rate in %, const. prices	–	20.5	–18.1	–8.3	–21.9	–3.5	–5.1
G-O	Services	261,651	689,194	756,228	835,795	952,726	991,450	1,015,063
	growth rate in %, const. prices	–	2.9	0.4	0.7	3.8	1.7	2.4
G-K	Market services	190,559	509,742	545,179	602,888	704,716	719,909	726,278
	growth rate in %, const. prices	–	3.3	0.0	2.7	7.5	2.7	3.5
G	Wholesale, retail trade, repair motor veh.	66,370	147,938	169,188	205,740	235,827	246,261	259,508
	growth rate in %, const. prices	–	–0.2	3.5	12.3	11.9	2.4	6.5
H	Hotels and restaurants	5,704	46,206	42,986	33,567	31,749	30,656	34,990
	growth rate in %, const. prices	–	43.9	–11.7	–26.1	–15.8	–6.1	10.5
I	Transport, storage, telecommunications	22,090	104,858	111,684	127,848	143,964	136,904	133,984
	growth rate in %, const. prices	–	1.6	–1.5	5.7	4.7	–3.4	1.2
J	Financial intermediation	26,619	60,919	57,200	57,217	95,411	90,463	78,200
	growth rate in %, const. prices	–	9.7	19.8	3.2	27.9	–1.2	–4.7
K	Real estate, renting & business activities	69,776	149,821	164,121	178,516	197,765	215,625	219,596
	growth rate in %, const. prices	–	–4.0	–6.9	–1.9	2.5	10.6	4.0
L-O	Community services	71,092	179,452	211,049	232,907	248,010	271,541	288,785
	growth rate in %, const. prices	–	1.6	1.7	–4.5	–5.9	–0.9	–0.5
L	Public admin., defence, compuls.soc.sec.	22,292	56,636	68,198	85,562	92,367	96,545	–
	growth rate in %, const. prices	–	–	–	–	–	–	–
M	Education	15,919	42,327	51,821	51,512	51,326	62,235	62,235
	growth rate in %, const. prices	–	–	–	–	–	–	–
N	Health and social work	16,655	44,422	49,089	53,991	57,513	62,339	–
	growth rate in %, const. prices	–	–	–	–	–	–	–
O	Oth. community, social & personal serv.	16,226	36,067	41,941	41,842	46,804	50,422	–
	growth rate in %, const. prices	–	–	–	–	–	–	–

Note: 1) Excluding FISIM: Financial intermediation services indirectly measured.
Source: Statistical Office of the Czech Republic

(per cent of GVA)

NACE label	NACE classification:	1990	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices[1]	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	8.2	4.7	4.8	4.4	4.7	3.9	3.9
C-F	Industry total	47.4	41.9	43.0	42.1	39.8	39.2	39.9
C-E	Industry	36.6	33.3	35.3	34.1	32.6	31.8	32.8
F	Construction	10.8	8.7	7.7	8.0	7.1	7.4	7.1
G-O	Services	44.4	53.4	52.2	53.4	55.5	56.8	56.1
G-K	Market services	32.3	39.5	37.6	38.5	41.0	41.3	40.2
G	Wholesale, retail trade, repair motor veh.	11.3	11.5	11.7	13.2	13.7	14.1	14.4
H	Hotels and restaurants	1.0	3.6	3.0	2.1	1.8	1.8	1.9
I	Transport, storage, telecommunications	3.7	8.1	7.7	8.2	8.4	7.8	7.4
J	Financial intermediation	4.5	4.7	3.9	3.7	5.6	5.2	4.3
K	Real estate, renting & business activities	11.8	11.6	11.3	11.4	11.5	12.4	12.1
L-O	Community services	12.1	13.9	14.6	14.9	14.4	15.6	16.0
L	Public admin., defence, compuls.soc.sec.	3.8	4.4	4.7	5.5	5.4	5.5	–
M	Education	2.7	3.3	3.6	3.3	3.0	3.6	–
N	Health and social work	2.8	3.4	3.4	3.5	3.3	3.6	–
O	Oth. community, social & personal serv.	2.8	2.8	2.9	2.7	2.7	2.9	–

(Index: 1994 = 100)

NACE label	NACE classification:	1990	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices[1]	110.6	104.8	108.7	107.9	106.4	105.6	108.7
A-B	Agriculture, forestry, fishing	72.4	95.1	101.6	99.1	111.1	119.7	113.4
C-F	Industry total	140.0	109.8	119.8	117.8	105.0	101.1	104.8
C-E	Industry	135.6	107.5	124.8	124.6	114.3	110.0	116.2
F	Construction	162.3	120.5	98.7	90.5	70.7	68.1	64.7
G-O	Services	84.4	102.9	103.3	104.1	108.0	109.9	112.6
G-K	Market services	82.4	103.3	103.3	106.1	114.1	117.2	121.3
G	Wholesale, retail trade, repair motor veh.	101.9	99.8	103.3	116.1	129.9	133.0	141.7
H	Hotels and restaurants	24.8	143.9	127.2	94.0	79.1	74.3	82.1
I	Transport, storage, telecommunications	75.4	101.6	100.1	105.8	110.7	107.0	108.3
J	Financial intermediation	91.8	109.7	131.4	135.6	173.5	171.5	163.4
K	Real estate, renting & business activities	81.6	96.0	89.4	87.8	89.9	99.4	103.5
L-O	Community services	94.0	101.6	103.3	98.7	92.9	92.0	91.6
L	Public admin., defence, compuls.soc.sec.	–	–	–	–	–	–	–
M	Education	–	–	–	–	–	–	–
N	Health and social work	–	–	–	–	–	–	–
O	Oth. community, social & personal serv.	–	–	–	–	–	–	–

Note: 1) Excluding FISIM: Financial intermediation services indirectly measured.
Source: WIIW incorporating national statistics.

Table A.3

Hungary: Gross value added by activities

(Forint bn, current prices, real growth rates)

NACE label	NACE classification:	1990	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices[1]	2,298.9	4,932.9	6,061.3	7,556.0	8,873.5	9,973.0	11,414.4
	growth rate in %, const. prices	−10,7	1,5	3,1	5,1	5,2	4,2	5.3
A-B	Agriculture, forestry, fishing	195.1	332.9	402.3	445.1	491.4	483.5	472.3
	growth rate in %, const. prices	–	2.7	4.1	−0.5	−1.5	0.9	−4.0
C-F	Industry total	790.0	1,524.3	1,852.1	2,469.5	2,910.7	3,221.6	3,857.5
	growth rate in %, const. prices	–	5.8	1.6	10.9	8.0	6.8	8.5
C-E	Industry	666.5	1,296.5	1,591.4	2,123.6	2,505.1	2,757.8	3,337.5
	growth rate in %, const. prices	–	6.9	3.2	11.4	8.3	7.2	9.2
F	Construction	123.5	227.8	260.7	345.9	405.6	463.8	520.0
	growth rate in %, const. prices	–	0.2	−7.2	8.2	5.8	4.3	4.1
G-O	Services	1,314	3,076	3,807	4,641	5,471	6,268	7,085
	growth rate in %, const. prices	–	−3.0	2.3	2.1	3.6	3.2	3.5
G-K	Market services	902	2,064	2,637	3,201	3,760	4,292	4,868
	growth rate in %, const. prices	–	−1.9	3.3	2.0	4.0	3.2	4.0
G	Wholesale, retail trade, repair motor veh.	307.2	557.0	683.9	866.8	1,027.4	1,097.5	1,227.0
	growth rate in %, const. prices	–	−2.8	−0.5	6.2	5.8	0.2	1.8
H	Hotels and restaurants	48.5	98.8	120.7	150.6	171.0	178.1	201.3
	growth rate in %, const. prices	–	−5.7	0.2	8.3	3.2	3.0	−2.6
I	Transport, storage, telecommunications	209.9	442.8	556.1	736.2	875.1	1,018.4	1,096.3
	growth rate in %, const. prices	–	12.4	3.1	9.3	3.2	5.5	2.0
J	Financial intermediation	101.8	259.0	312.3	341.9	367.7	394.5	455.1
	growth rate in %, const. prices	–	−17.6	−0.3	−5.2	−4.9	−0.5	5.6
K	Real estate, renting & business activities	234.8	706.1	963.7	1,105.0	1,318.8	1,603.9	1,888.6
	growth rate in %, const. prices	–	−2.3	8.2	−3.7	6.0	5.0	7.2
L-O	Community services	412	1,012	1,170	1,441	1,711	1,975	2,216
	growth rate in %, const. prices	–	−5.2	0.2	2.4	2.8	3.3	2.3
L	Public admin., defence, compuls.soc.sec.	147.1	351.0	417.0	525.9	638.7	723.4	816.7
	growth rate in %, const. prices	–	0.0	2.3	1.8	5.2	1.0	1.2
M	Education	110.0	253.4	277.8	348.7	416.0	477.9	535.3
	growth rate in %, const. prices	–	−3.4	0.0	4.5	3.8	3.8	4.8
N	Health and social work	95.8	228.4	272.7	337.4	390.7	446.1	521.9
	growth rate in %, const. prices	–	−3.5	3.2	5.1	1.7	4.6	5.7
O	Oth. community, social & personal serv.	58.7	179.2	202.7	228.8	265.8	328.0	342.4
	growth rate in %, const. prices	–	−18.9	−7.5	−3.1	−2.6	6.4	−3.4

Note: [1]) Excluding FISIM: Financial intermediation services indirectly measured.
Source: Statistical Office of Hungary

(per cent of GVA)

NACE label	NACE classification:	1990	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices 1)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	8.5	6.7	6.6	5.9	5.5	4.8	4.1
C-F	Industry total	34.4	30.9	30.6	32.7	32.8	32.3	33.8
C-E	Industry	29.0	26.3	26.3	28.1	28.2	27.7	29.2
F	Construction	5.4	4.6	4.3	4.6	4.6	4.7	4.6
G-O	Services	57.1	62.4	62.8	61.4	61.7	62.8	62.1
G-K	Market services	39.2	41.8	43.5	42.4	42.4	43.0	42.7
G	Wholesale, retail trade, repair motor veh.	13.4	11.3	11.3	11.5	11.6	11.0	10.7
H	Hotels and restaurants	2.1	2.0	2.0	2.0	1.9	1.8	1.8
I	Transport, storage, telecommunications	9.1	9.0	9.2	9.7	9.9	10.2	9.6
J	Financial intermediation	4.4	5.3	5.2	4.5	4.1	4.0	4.0
K	Real estate, renting & business activities	10.2	14.3	15.9	14.6	14.9	16.1	16.5
L-O	Community services	17.9	20.5	19.3	19.1	19.3	19.8	19.4
L	Public admin., defence, compuls.soc.sec.	6.4	7.1	6.9	7.0	7.2	7.3	7.2
M	Education	4.8	5.1	4.6	4.6	4.7	4.8	4.7
N	Health and social work	4.2	4.6	4.5	4.5	4.4	4.5	4.6
O	Oth. community, social & personal serv.	2.6	3.6	3.3	3.0	3.0	3.3	3.0

(Index: 1994 = 100)

NACE label	NACE classification:	1990	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices 1)	101.0	101.5	104.6	110.0	115.8	120.6	127.0
A-B	Agriculture, forestry, fishing	130.4	102.7	106.9	106.4	104.8	105.8	101.6
C-F	Industry total	98.4	105.8	107.5	119.3	128.7	137.5	149.1
C-E	Industry	98.1	106.9	110.3	122.9	133.1	142.6	155.7
F	Construction	99.2	100.2	93.0	100.6	106.4	111.0	115.6
G-O	Services	98.2	97.0	99.2	101.3	105.0	108.3	112.1
G-K	Market services	104.7	98.1	101.4	103.4	107.6	111.0	115.4
G	Wholesale, retail trade, repair motor veh.	131.2	97.2	96.8	102.8	108.7	108.9	110.9
H	Hotels and restaurants	116.4	94.3	94.5	102.4	105.7	108.9	106.0
I	Transport, storage, telecommunications	108.9	112.4	115.9	126.6	130.7	137.9	140.7
J	Financial intermediation	80.3	82.4	82.2	77.9	74.1	73.7	77.8
K	Real estate, renting & business activities	88.9	97.7	105.7	101.8	107.9	113.3	121.5
L-O	Community services	86.4	94.8	95.0	97.2	100.0	103.3	105.7
L	Public admin., defence, compuls.soc.sec.	92.8	100.0	102.3	104.2	109.6	110.6	111.9
M	Education	90.8	96.6	96.6	100.9	104.8	108.8	114.0
N	Health and social work	88.8	96.5	99.6	104.6	106.4	111.3	117.7
O	Oth. community, social & personal serv.	66.1	81.1	75.0	72.7	70.8	75.3	72.8

Note: 1) Excluding FISIM: Financial intermediation services indirectly measured.
Source: WIIW incorporating national statistics.

Table A.4

Poland: Gross value added by activities

(Zloty mn, current prices, real growth rates)

NACE label	NACE classification:	1992	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices 1) 2) 3)	110,260.6	268,289.1	336,853.5	412,870.4	485,177.0	535,829.0	601,532.0
	growth rate in %, const. prices	–	6.7	5.3	6.4	4.7	3.9	3.8
	NACE classification:							
A-B	Agriculture, forestry, fishing	7,814.8	18,559.7	21,645.8	22,771.0	23,097.2	21,312.5	22,661.3
	growth rate in %, const. prices	–	10.2	2.4	1.0	5.7	–0.4	–6.0
C-F	Industry total	48,058.4	10,4467.2	126,331.8	153,794.4	175,951.7	192,354.1	210,190.2
	growth rate in %, const. prices	–	9.7	6.7	11.0	5.4	3.1	4.7
C-E	Industry	39,126.8	84,961.6	101,283.1	121,025.2	133,962.9	145211.4	160074.1
	growth rate in %, const. prices	–	10.4	7.6	10.3	4.3	3.0	6.5
F	Construction	8,931.6	19,505.6	25,048.7	32,769.2	41,988.8	47142.7	50,116.1
	growth rate in %. const. prices	–	5.8	2.8	13.6	9.3	3.5	–0.7
G-P	Services	54387.4	145,262.2	188,875.9	236,305.0	286,128.1	322,162.4	368,575.9
	growth rate in %, const. prices	–	4.1	4.7	4.0	4.2	3.9	3.8
G-K	Market services	30,720.8	98,173.9	128,419.1	163,557.2	201,163.1	228,452.3	263,492.1
	growth rate in %. const. prices	–	5.2	5.2	5.5	5.2	6.3	4.5
G	Wholesale, retail trade, repair motor veh.	15,112.4	53,575.9	70,477.3	86,766.9	100,339.1	110,605.5	125,575.3
	growth rate in %, const. prices	–	5.0	6.1	8.1	5.0	7.1	3.9
H	Hotels and restaurants	493.2	2,405.9	3,427.4	4,366.1	5,503.6	6,724.9	7,588.6
	growth rate in %, const. prices	–	6.1	15.9	7.2	12.7	17.0	6.1
I	Transport. storage, telecommunications	7,101.1	17,588.9	21,812.3	26,679.3	30,948.9	36,259.1	41,122.2
	growth rate in %, const. prices	–	2.3	5.4	5.6	6.3	10.5	3.2
J	Financial intermediation	598.4	2,625.0	3,511.7	5,708.4	7,717.0	11,580.0	13,779.8
	growth rate in %. const. prices	–	21.4	11.3	2.9	9.2	36.3	13.3
K	Real estate, renting & business activities	7,415.7	21,978.2	29,190.4	40,036.5	56,654.5	63,282.8	75,426.2
	growth rate in %, const. prices	–	5.8	0.9	–0.7	3.4	–2.6	4.6
L-P	Community services	23666.6	47,088.3	60,456.8	72,747.8	84,965.0	93,710.1	105,083.8
	growth rate in %, const. prices	–	2.4	3.5	0.9	2.1	–1.6	2.1
L	Public admin,. defence, compuls.soc.sec.	6,999.7	14,762.8	19,304.6	22,312.9	25,939.8	26,892.3	31,776.6
	growth rate in %, const. prices	–	4.2	4.4	5.9	1.6	0.2	6.1
M	Education	4,370.4	10,913.8	13,860.7	17,677.9	20,556.4	23,770.7	27,830.3
	growth rate in %, const. prices	–	1.4	1.3	0.9	4.9	3.3	1.3
N	Health and social work	4822.7	10,972.8	13,741.1	17,177.3	19,225.5	21,210.8	21,108.5
	growth rate in %, const. prices	–	1.6	1.5	0.7	0.5	–13.8	–1.6
O	Oth. community, social & personal serv.	7473.8	10,436.7	13,547.6	15,576.2	19,239.2	21,831.8	24,363.3
	growth rate in %, const. prices	–	2.0	6.7	–6.1	1.3	2.8	1.6
P	Private households with employed pers.	–	2.2	2.8	3.5	4.1	4.5	5.1

Notes: 1) Excluding FISIM: Financial intermediation services indirectly measured. 2) From 1995 including new revised shadow economy.
3) 1992–1994 at producer prices. The same for GVA structure.
Source: Statistical Office of Poland

(per cent of GVA)

NACE label	NACE classification:	1992	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices 1) 2) 3)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	7.1	6.9	6.4	5.5	4.8	4.0	3.8
C-F	Industry total	43.6	38.9	37.5	37.3	36.3	35.9	34.9
C-E	Industry	35.5	31.7	30.1	29.3	27.6	27.1	26.6
F	Construction	8.1	7.3	7.4	7.9	8.7	8.8	8.3
G-P	Services	49.3	54.1	56.1	57.2	59.0	60.1	61.3
G-K	Market services	27.9	36.6	38.1	39.6	41.5	42.6	43.8
G	Wholesale, retail trade. repair motor veh.	13.7	20.0	20.9	21.0	20.7	20.6	20.9
H	Hotels and restaurants	0.4	0.9	1.0	1.1	1.1	1.3	1.3
I	Transport, storage, telecommunications	6.4	6.6	6.5	6.5	6.4	6.8	6.8
J	Financial intermediation	0.5	1.0	1.0	1.4	1.6	2.2	2.3
K	Real estate, renting & business activities	6.7	8.2	8.7	9.7	11.7	11.8	12.5
L-P	Community services	21.5	17.6	17.9	17.6	17.5	17.5	17.5
L	Public admin., defence, compuls.soc.sec.	6.3	5.5	5.7	5.4	5.3	5.0	5.3
M	Education	4.0	4.1	4.1	4.3	4.2	4.4	4.6
N	Health and social work	4.4	4.1	4.1	4.2	4.0	4.0	3.5
O	Oth. community, social & personal serv.	6.8	3.9	4.0	3.8	4.0	4.1	4.1
P	Private households with employed pers.	–	0.0	0.0	0.0	0.0	0.0	0.0

(Index: 1994 = 100)

NACE label	NACE classification:	1992	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices 1) 2) 3)	92.1	106.7	112.4	119.5	125.2	130.1	135.0
A-B	Agriculture, forestry, fishing	111.1	110.2	112.8	114.0	120.5	120.0	112.8
C-F	Industry total	85.5	109.7	117.1	129.9	136.8	141.1	147.8
C-E	Industry	83.5	110.4	118.8	131.0	136.7	140.8	149.9
F	Construction	96.3	105.8	108.8	123.5	135.0	139.7	138.7
G-P	Services	96.3	104.1	108.9	113.3	118.1	122.7	127.4
G-K	Market services	94.6	105.2	110.7	116.8	122.8	130.5	136.4
G	Wholesale, retail trade, repair motor veh.	96.0	105.0	111.4	120.4	126.5	135.5	140.7
H	Hotels and restaurants	91.1	106.1	123.0	131.8	148.6	173.8	184.4
I	Transport, storage, telecommunications	105.0	102.3	107.8	113.9	121.0	133.8	138.0
J	Financial intermediation	38.3	121.4	135.1	139.1	151.9	207.0	234.5
K	Real estate, renting & business activities	92.2	105.8	106.7	106.0	109.6	106.7	111.7
L-P	Community services	98.3	102.4	106.0	106.9	109.1	107.3	109.6
L	Public admin., defence, compuls.soc.sec.	88.2	104.2	108.8	115.2	117.0	117.2	124.4
M	Education	90.6	101.4	102.7	103.6	108.7	112.3	113.8
N	Health and social work	95.6	101.6	103.1	103.9	104.4	90.0	88.5
O	Oth. community, social & personal serv.	118.2	102.0	108.8	102.2	103.5	106.4	108.1

Notes: 1) Excluding FISIM: Financial intermediation services indirectly measured. 2) From 1995 including new revised shadow economy.
3) 1992–1994 at producer prices. The same for GVA structure.
Source: WIIW incorporating national statistics.

Table A.5

Romania: Gross value added by activities

(LEU bn, current prices, real growth rates)

NACE label	NACE classification:	1990	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices[1]	808.0	68,773.5	104,076.9	234,073.6	340,128.6	488,059.0	719,834.1
	growth rate in %, const. prices	–2.4	6.8	3.9	–7.3	–5.4	–1.7	1.7
A-B	Agriculture, forestry, fishing	187.1	14,269.3	20,949.2	45,532.8	53,763.8	72,116.0	–
	growth rate in %, const. prices	37.2	4.6	–4.2	–1.3	–10.4	3.4	–
C-F	Industry total	393.7	28,466.4	43,248.9	91,323.8	121,785.1	172,314.4	257,988.4
	growth rate in %, const. prices	–14.9	5.8	5.8	–9.8	–5.2	–1.6	6.1
C-E	Industry	347.6	23,711.3	36,181.5	78,093.8	103,053.7	146,054.2	219,861.1
	growth rate in %, const. prices	–16.7	5.6	6.9	–8.0	–5.3	–1.4	6.1
F	Construction	46.0	4,755.1	7,067.4	13,230.0	18,731.4	26,260.2	38,127.3
	growth rate in %, const. prices	1.1	6.7	0.8	–19.2	–4.5	–2.3	6.3
G-Q	Services	227	26,038	39,879	97,217	164,580	243,649	–
	growth rate in %, const. prices	–	8.2	5.4	–10.2	–0.7	–3.4	–
G-K	Market services	152	19,225	29,778	77,345	125,455	188,231	–
	growth rate in %. const. prices	–	9.3	5.4	–11.3	–1.5	–	–
G	Wholesale, retail trade, repair motor veh.	41.7	6,242.5	9,972.6	22,789.2	40,789.7	62,026.0	–
	growth rate in %, const. prices	4.3	18.9	7.1	–9.2	7.6	–	–
H	Hotels and restaurants	11.5	1,327.7	2,749.7	5,978.3	8,704.6	8,634.4	–
	growth rate in %, const. prices	31.2	36.1	37.4	–16.5	–9.3	–	–
I	Transport, storage. telecommunications	49.3	5,576.6	9,804.7	22,665.3	34,471.5	55,140.5	–
	growth rate in %. const. prices	–21.4	1.6	6.3	–9.5	–10.0	–3.0	–
J	Financial intermediation	23.2	3,588.1	3,243.1	4,298.7	6,529.1	8,494.1	–
	growth rate in %, const. prices	17.2	1.4	–14.2	–22.6	1.9	–9.4	–
K	Real estate, renting & business activities	26.1	2,490.2	4,008.3	21,613.2	34,960.4	53,935.7	–
	growth rate in %, const. prices	0.2	9.8	10.2	–8.3	–0.6	–	–
L-Q	Community services	75	6,813	10,100	19,872	39,124	55,418	–
	growth rate in %, const. prices	–	5.1	5.6	–6.8	2.3	–	–
L	Public admin., defence, compuls.soc.sec.	23.9	2,691.8	3,355.2	6,763.3	13,222.1	17,800.1	–
	growth rate in %, const. prices	14.0	4.4	–7.1	–3.3	–3.4	–9.3	–
M	Education	22.3	1,853.9	2,776.5	5,152.7	9,975.1	13,495.3	–
	growth rate in %, const. prices	5.4	3.5	10.0	–9.4	–0.4	–2.8	–
N	Health and social work	17.4	1,304.6	2,105.9	3,709.4	7,916.6	11,405.3	–
	growth rate in %, const. prices	24.4	2.7	9.4	–11.9	15.7	–9.7	–
O-Q	Other activities	11.7	962.4	1,862.8	4,246.9	8,010.6	12,717.2	–
	growth rate in %, const. prices	13.6	14.5	27.3	–3.8	2.8	–	–

Note: 1) Excluding FISIM: Financial intermediation services indirectly measured.
Source: Statistical Office of Romania

(per cent of GVA)

NACE label	NACE classification:	1990	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	23.2	20.7	20.1	19.5	15.8	14.8	–
C-F	Industry total	48.7	41.4	41.6	39.0	35.8	35.3	35.8
C-E	Industry	43.0	34.5	34.8	33.4	30.3	29.9	30.5
F	Construction	5.7	6.9	6.8	5.7	5.5	5.4	5.3
G-Q	Services	28.1	37.9	38.3	41.5	48.4	49.9	–
G-K	Market services	18.8	28.0	28.6	33.0	36.9	38.6	–
G	Wholesale, retail trade. repair motor veh.	5.2	9.1	9.6	9.7	12.0	12.7	–
H	Hotels and restaurants	1.4	1.9	2.6	2.6	2.6	1.8	–
I	Transport, storage, telecommunications	6.1	8.1	9.4	9.7	10.1	11.3	–
J	Financial intermediation	2.9	5.2	3.1	1.8	1.9	1.7	–
K	Real estate, renting & business activities	3.2	3.6	3.9	9.2	10.3	11.1	–
L-Q	Community services	9.3	9.9	9.7	8.5	11.5	11.4	–
L	Public admin,. defence. compuls.soc.sec.	3.0	3.9	3.2	2.9	3.9	3.6	–
M	Education	2.8	2.7	2.7	2.2	2.9	2.8	–
N	Health and social work	2.2	1.9	2.0	1.6	2.3	2.3	–
O-Q	Other activities	1.5	1.4	1.8	1.8	2.4	2.6	–

(Index: 1994 = 100)

NACE label	NACE classification:	1990	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices1)	115.6	106.8	111.0	102.9	97.3	95.7	97.3
A-B	Agriculture, forestry, fishing	112.1	104.6	100.3	98.9	88.7	91.7	–
C-F	Industry total	120.2	105.8	112.0	100.9	95.7	94.2	100.0
C-E	Industry	127.2	105.6	112.8	103.8	98.3	96.9	102.8
F	Construction	82.8	106.7	107.5	86.8	82.9	81.0	86.1
G-Q	Services	106.6	108.2	114.1	102.4	101.7	98.3	–
G-K	Market services	112.8	109.3	115.1	102.1	100.6	–	–
G	Wholesale, retail trade, repair motor veh.	154.3	118.9	127.3	115.6	124.4	–	–
H	Hotels and restaurants	229.6	136.1	187.0	156.1	141.6	–	–
I	Transport, storage, telecommunications	110.3	101.6	108.0	97.8	88.0	85.4	–
J	Financial intermediation	70.3	101.4	86.9	67.3	68.6	62.1	–
K	Real estate. renting & business activities	66.1	109.8	121.0	110.9	110.3	–	–
L-Q	Community services	92.3	105.1	111.0	103.4	105.7	–	–
L	Public admin., defence, compuls.soc.sec.	87.8	104.4	97.0	93.9	90.7	82.3	–
M	Education	83.3	103.5	113.8	103.2	102.8	99.9	–
N	Health and social work	94.1	102.7	112.4	99.0	114.5	103.4	–
O-Q	Oth. community. social & personal serv.	133.0	114.5	145.7	140.2	144.1	–	–

Note: 1) Excluding FISIM: Financial intermediation services indirectly measured.
Source: WIIW incorporating national statistics.

Table A.6

Slovak Republic: Gross value added by activities

(Koruna mn, current prices, real growth rates)

NACE label	NACE classification:	1992	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices[1)2)]	303,119	503,493	555,726	632,861	680,357	736,202	805,716
	growth rate in %, const. prices	–	–	6.0	6.1	4.4	2.6	2.0
A-B	Agriculture, forestry, fishing	17,738	28,772	29,062	31,643	31,591	33,200	36,003
	growth rate in %, const. prices	–	–	–3.0	5.2	–0.1	8.8	3.1
C-F	Industry total	126,100.0	197,034.0	222,210.0	231,764.0	239,433.0	257,994.0	275,426.0
	growth rate in %, const. prices	–	–	5.8	–0.3	–0.4	–0.3	–0.4
C-E	Industry	106,212	158,898	178,888	184,110	191,255	215,597	233,147
	growth rate in %, const. prices	–	–	7.5	–0.4	1.0	7.3	2.5
F	Construction	19,888	38,136	43,322	47,654	48,178	42,397	42,279
	growth rate in %, const. prices	–	–	–1.3	0.1	–5.8	–30.5	–15.0
G-P	Services	159,281	277,687	304,454	369,454	409,333	445,008	494,287
	growth rate in %, const. prices	–	–	6.2	11.6	4.3	1.6	4.0
G-K	Market services	111,531	207,320	222,722	266,551	297,683	330,935	370,163
	growth rate in %, const. prices	–	–	1.5	9.9	6.8	2.3	3.5
G	Wholesale, retail trade, repair motor veh. [3)]	40,263	70,067	76,485	85,536	102,751	114,132	134,205
	growth rate in %, const. prices [3)]	–	–	2.4	5.4	13.7	3.9	11.7
H	Hotels and restaurants	4816	–	–	–	–	–	–
	growth rate in %, const. prices	–	–	–	–	–	–	–
I	Transport, storage, telecommunications	27,352	50,058	60,656	65,707	74,117	81,454	90,125
	growth rate in %, const. prices	–	–	23.6	1.9	7.5	3.6	–2.9
J	Financial intermediation	18,213	34,772	26,447	44,295	41,208	40,202	33,463
	growth rate in %, const. prices	–	–	–31.5	46.5	–10.6	–8.7	–19.9
K	Real estate, renting & business activities	20,887	52,423	59,134	71,013	79,607	95,147	112,370
	growth rate in %. const. prices	–	–	1.0	7.8	8.6	4.8	9.0
L-P	Community services	47,750	70,367	81,732	102,903	111,650	114,073	124,124
	growth rate in %, const. prices	–	–	20.0	16.2	–1.9	–0.1	5.7
L-N	Community serv. less Oth. comm., soc.&pers.serv.	38,661	63,391	74,157	93,984	10,1215	10,1732	106,067
	growth rate in %, const. prices	–	–	19.1	16.6	–3.9	–0.6	1.5
L	Public admin., defence, compuls.soc.sec.	24,822	–	–	–	–	–	–
	growth rate in %, const. prices	–	–	–	–	–	–	–
M	Education	11,936	–	–	–	–	–	–
	growth rate in %, const. prices	–	–	–	–	–	–	–
N	Health and social work	1,903	–	–	–	–	–	–
	growth rate in %, const. prices	–	–	–	–	–	–	–
O	Oth. community, social & personal serv.	8,952	6,976	7,575	8,919	10,435	12,341	18,057
	growth rate in %, const. prices	–	–	28.0	11.6	18.5	4.7	40.3
P	Private households with employed pers.	137	–	–	–	–	–	–

Note: 1) Excluding FISIM: Financial intermediation services indirectly measured. 2) From 1995 according to ESA 1995 Classification. The same for GVA structure.
3) From 1995 including hotels and restaurants.
Source: Statistical Office of the Slovak Republic

(per cent of GVA)

NACE label	NACE classification:	1992	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices[1)2)]	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	5.9	5.7	5.2	5.0	4.6	4.5	4.5
C-F	Industry total	41.6	39.1	40.0	36.6	35.2	35.0	34.2
C-E	Industry	35.0	31.6	32.2	29.1	28.1	29.3	28.9
F	Construction	6.6	7.6	7.8	7.5	7.1	5.8	5.2
G-P	Services	52.5	55.2	54.8	58.4	60.2	60.4	61.3
G-K	Market services	36.8	41.2	40.1	42.1	43.8	45.0	45.9
G	Wholesale, retail trade, repair motor veh.[3)]	13.3	13.9	13.8	13.5	15.1	15.5	16.7
H	Hotels and restaurants	1.6	–	–	–	–	–	–
I	Transport, storage, telecommunications	9.0	9.9	10.9	10.4	10.9	11.1	11.2
J	Financial intermediation	6.0	6.9	4.8	7.0	6.1	5.5	4.2
K	Real estate, renting & business activities	6.9	10.4	10.6	11.2	11.7	12.9	13.9
L-P	Community services	15.8	14.0	14.7	16.3	16.4	15.5	15.4
L-N	Community serv. less Oth. comm., soc. & pers. serv.	12.8	12.6	13.3	14.9	14.9	13.8	13.2
L	Public admin., defence, compuls.soc.sec.	8.2	–	–	–	–	–	–
M	Education	3.9	–	–	–	–	–	–
N	Health and social work	0.6	–	–	–	–	–	–
O	Oth. community, social & personal serv.	3.0	1.4	1.4	1.4	1.5	1.7	2.2
P	Private households with employed pers.	0.0	–	–	–	–	–	–

(Index: 1995 = 100)

NACE label	NACE classification:	1992	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices[1)2)]	–	100.0	106.0	112.4	117.4	120.5	122.8
A-B	Agriculture, forestry, fishing	–	100.0	97.0	102.0	102.0	110.9	114.4
C-F	Industry total	–	100.0	105.8	105.5	105.1	104.7	104.3
C-E	Industry	–	100.0	107.5	107.1	108.2	116.1	118.9
F	Construction	–	100.0	98.7	98.8	93.0	64.7	55.0
G-P	Services	–	100.0	106.2	118.5	123.7	125.7	130.8
G-K	Market services	–	100.0	101.5	111.6	119.1	121.8	126.1
G	Wholesale, retail trade, repair motor veh.[3)]	–	100.0	102.4	107.9	122.7	127.4	142.4
H	Hotels and restaurants	–	–	–	–	–	–	–
I	Transport, storage, telecommunications	–	100.0	123.6	126.0	135.4	140.3	136.1
J	Financial intermediation	–	100.0	68.5	100.3	89.7	81.9	65.6
K	Real estate, renting & business activities	–	100.0	101.0	108.8	118.2	123.8	134.9
L-P	Community services	–	100.0	120.0	139.4	136.7	136.5	144.3
L-N	Community serv. less Oth. comm., soc. & pers. serv.	–	100.0	119.1	139.0	133.6	132.7	134.7
L	Public admin., defence, compuls.soc.sec.	–	–	–	–	–	–	–
M	Education	–	–	–	–	–	–	–
N	Health and social work	–	–	–	–	–	–	–
O	Oth. community, social & personal serv.	–	100.0	128.0	142.9	169.4	177.4	248.9

Note: 1) Excluding FISIM: Financial intermediation services indirectly measured. 2) From 1995 according to ESA 1995 Classification. The same for GVA structure.
3) From 1995 including hotels and restaurants. Source: WIIW incorporating national statistics.

Table A.7

Slovenia: Gross value added by activities

(Tolas mn, current prices, real growth rates)

NACE label	NACE classification:	1990	1995	1996	1997	1998	1999	2000
					(tolar mn, current prices)			
A-Q	Gross value added at basic prices[1)2)]	178,170	1.928,258	2.227,628	2.561,063	2.857,241	3.179,760	3.562,383
	growth rate in %, const. prices	–	3.5	3.4	4.6	3.7	4.6	5.1
A-B	Agriculture, forestry, fishing	9,856	87,458	98,699	108,184	116,734	115,072	115,635
	growth rate in %, const. prices	1.7	1.6	1.1	–2.9	3.1	–2.1	–1.0
C-F	Industry total	74,302	725,017	835,952	956,824	1,074,489	1,190,415	1,334,480
	growth rate in %, const. prices	–10.3	3.1	3.1	6.4	4.2	4.6	6.9
C-E	Industry	65,773	628,429	712,125	813,666	915,177	994,536	1.119,545
	growth rate in %, const. prices	–10.2	2.3	1.5	6.2	4.1	2.7	7.8
F	Construction	8,529	96,588	123,827	143,158	159,312	195,879	214,935
	growth rate in %, const. prices	–10.8	9.2	13.3	7.7	4.6	15.8	2.8
G-O	Services	94,012	1.115,783	1.292,977	1.496,053	1.666,018	1.874,275	2.112,267
	growth rate in %, const. prices	–5.2	4.1	4.2	3.8	3.4	4.8	4.2
G-K	Market services	63,740	741,454	851,764	976,922	1.097,248	1.234,091	1.375,804
	growth rate in %, const. prices	–5.0	4.9	4.2	2.8	3.2	4.6	4.0
G	Wholesale, retail trade, repair motor veh.	20,483	232,286	257,269	294,293	326,778	365,101	403,227
	growth rate in %, const. prices	–5.8	6.7	3.0	2.8	2.8	6.3	2.5
H	Hotels and restaurants	4,009	57,164	68,467	77,314	84,124	94,979	111,721
	growth rate in %, const. prices	–0.5	3.5	4.4	3.6	0.9	3.1	9.8
I	Transport, storage, telecommunications	15,324	148,746	169,275	204,827	233,079	259,090	282,646
	growth rate in %, const. prices	–2.0	5.9	2.6	4.2	5.2	3.2	4.7
J	Financial intermediation	5,818	77,067	93,185	108,916	119,023	134,177	156,326
	growth rate in %, const. prices	–0.3	3.5	10.9	0.1	4.5	3.3	5.9
K	Real estate, renting & business activities	18,106	226,191	263,568	291,572	334,244	380,744	421,884
	growth rate in %, const. prices	6.8	3.1	4.1	2.5	2.3	4.7	3.0
L-O	Community services	30,272	374,329	441,213	519,131	568,770	640,184	736,463
	growth rate in %, const. prices	1.3	2.6	4.3	5.7	3.7	5.1	4.5
L	Public admin., defence, compuls.soc.sec.	6,413	102,937	121,447	149,612	161,704	178,540	203,034
	growth rate in %, const. prices	–0.4	3.1	5.3	10.3	5.0	5.4	5.7
M	Education	8,394	108,178	123,881	146,687	157,735	177,098	205,041
	growth rate in %, const. prices	2.6	2.8	1.1	4.9	3.1	3.4	3.7
N	Health and social work	8,287	99,385	118,454	134,589	148,882	169,420	195,243
	growth rate in %, const. prices	–1.2	2.0	6.4	3.1	1.7	6.4	4.2
O	Oth. community, social & personal serv.	7,178	63,829	77,431	88,243	100,449	115,126	133,145
	growth rate in %, const. prices	–0.4	2.1	4.9	4.1	5.8	5.6	4.5

Note: 1) Excluding FISIM: Financial intermediation services indirectly measured. 2) Up to 1993 at factor cost. The same for GVA structure.
Source: Statistical Office of Slovenia

(per cent of GVA)

NACE label	NACE classification:	1990	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices 1)2)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	5.5	4.5	4.4	4.2	4.1	3.6	3.2
C-F	Industry total	41.7	37.6	37.5	37.4	37.6	37.4	37.5
C-E	Industry	36.9	32.6	32.0	31.8	32.0	31.3	31.4
F	Construction	4.8	5.0	5.6	5.6	5.6	6.2	6.0
G-O	Services	52.8	57.9	58.0	58.4	58.3	58.9	59.3
G-K	Market services	35.8	38.5	38.2	38.1	38.4	38.8	38.6
G	Wholesale, retail trade, repair motor veh.	11.5	12.0	11.5	11.5	11.4	11.5	11.3
H	Hotels and restaurants	2.3	3.0	3.1	3.0	2.9	3.0	3.1
I	Transport, storage, telecommunications	8.6	7.7	7.6	8.0	8.2	8.1	7.9
J	Financial intermediation	3.3	4.0	4.2	4.3	4.2	4.2	4.4
K	Real estate, renting & business activities	10.2	11.7	11.8	11.4	11.7	12.0	11.8
L-O	Community services	17.0	19.4	19.8	20.3	19.9	20.1	20.7
L	Public admin., defence, compuls.soc.sec.	3.6	5.3	5.5	5.8	5.7	5.6	5.7
M	Education	4.7	5.6	5.6	5.7	5.5	5.6	5.8
N	Health and social work	4.7	5.2	5.3	5.3	5.2	5.3	5.5
O	Oth. community, social & personal serv.	403.6	3.3	3.5	3.4	3.5	3.6	3.7

(Index: 1994 = 100)

NACE label	NACE classification:	1990	1995	1996	1997	1998	1999	2000
A-Q	Gross value added at basic prices 1)2)	108.4	103.5	107.1	112.0	116.1	121.5	127.7
A-B	Agriculture, forestry, fishing	110.0	101.6	102.6	99.6	102.7	100.6	99.5
C-F	Industry total	125.2	103.1	106.3	113.1	117.9	123.3	131.9
C-E	Industry	124.4	102.3	103.8	110.3	114.8	117.9	127.1
F	Construction	129.9	109.2	123.7	133.2	139.3	161.2	165.8
G-O	Services	96.7	104.1	108.5	112.6	116.4	122.0	127.1
G-K	Market services	101.0	104.9	109.3	112.3	115.9	121.2	126.1
G	Wholesale, retail trade, repair motor veh.	101.5	106.7	109.9	113.0	116.2	123.5	126.6
H	Hotels and restaurants	115.6	103.5	108.0	111.9	112.9	116.4	127.8
I	Transport, storage, telecommunications	121.9	105.9	108.6	113.2	119.1	122.9	128.6
J	Financial intermediation	99.8	103.5	114.8	114.9	120.1	124.0	131.4
K	Real estate. renting & business activities	85.3	103.1	107.3	110.1	112.6	118.0	121.5
L-O	Community services	88.7	102.6	107.0	113.1	117.4	123.4	129.0
L	Public admin., defence, compuls.soc.sec.	77.5	103.1	108.6	119.8	125.8	132.5	140.1
M	Education	98.9	102.8	103.9	109.0	112.4	116.2	120.6
N	Health and social work	91.5	102.0	108.6	112.0	113.9	121.1	126.2
O	Oth. community, social & personal serv.	86.5	102.1	107.1	111.5	117.9	124.5	130.1

Note: 1) Excluding FISIM: Financial intermediation services indirectly measured. 2) Up to 1993 at factor cost. The same for GVA structure.
Source: WIIW incorporating national statistics.

Annex B

Employment (structure) by activities (LFS)

Table B.1

Bulgaria: Employment by activities – registration data

(annual average, 1000 persons, growth rates)

NACE label	NACE classification:	1996	1997	1998	1999	2000
A-Q	Employment, total	3,285.9	3,157.4	3,152.6	3,087.8	2,943.4
	growth rate in %	0.1	–3.9	–0.2	–2.1	–4.7
A-B	Agriculture, forestry, fishing	800.3	800.4	825.2	795.6	785.9
	growth rate in %	–	0.0	3.1	–3.6	–1.2
C-F	Industry total	1,070.6	1010.4	965.5	891.2	800.0
	growth rate in %	–	–5.6	–4.4	–7.7	–10.2
C-E	Industry	904.5	871.4	836.4	759.1	678.3
	growth rate in %	–	–3.7	–4.0	–9.2	–10.6
F	Construction	166.1	139.0	129.1	132.1	121.7
	growth rate in %	–	–16.3	–7.1	2.3	–7.9
G-O	Services	1,415.0	1,346.7	1,361.8	1,401.1	1,357.5
	growth rate in %	–	–4.8	1.1	2.9	–3.1
G-K	Market services	794.8	749.4	785.0	816.3	810.0
	growth rate in %	–	–5.7	4.8	4.0	–0.8
G	Wholesale, retail trade, repair motor veh.	321.4	310.4	337.2	354.6	353.2
	growth rate in %	–	–3.4	8.7	5.1	–0.4
H	Hotels and restaurants	76.5	72.1	70.5	79.9	77.9
	growth rate in %	–	–5.6	–2.2	13.2	–2.5
I	Transport, storage, telecommunications	252.1	228.2	236.7	233.1	221.7
	growth rate in %	–	–9.5	3.7	–1.5	–4.9
J	Financial intermediation	42.9	40.0	37.6	34.5	32.3
	growth rate in %	–	–6.8	–5.9	–8.2	–6.6
K	Real estate. renting & business activities	102.0	98.7	102.9	114.2	125.0
	growth rate in %	–	–3.3	4.3	10.9	9.4
L-O	Community services	620.2	597.3	576.8	584.8	547.5
	growth rate in %	–	–3.7	–3.4	1.4	–6.4
L	Public admin., defence, compuls.soc.sec.	73.2	78.9	80.7	90.0	89.5
	growth rate in %	–	7.8	2.3	11.4	–0.5
M	Education	255.8	242.6	233.0	230.9	215.5
	growth rate in %	–	–5.2	–3.9	–0.9	–6.7
N	Health and social work	187.2	177.6	167.1	164.1	150.4
	growth rate in %	–	–5.1	–5.9	–1.8	–8.4
O	Oth. community, social & personal serv.	104.0	98.1	95.9	99.8	92.2
	growth rate in %	–	–5.6	–2.2	4.0	–7.6

Source: Statistical Office of Bulgaria

(per cent of total)

NACE label	NACE classification:	1996	1997	1998	1999	2000
A-Q	Employment. total	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture. forestry. fishing	24.4	25.3	26.2	25.8	26.7
C-F	Industry total	32.6	32.0	30.6	28.9	27.2
C-E	Industry	27.5	27.6	26.5	24.6	23.0
F	Construction	5.1	4.4	4.1	4.3	4.1
G-O	Services	43.1	42.7	43.2	45.4	46.1
G-K	Market services	24.2	23.7	24.9	26.4	27.5
G	Wholesale, retail trade, repair motor veh.	9.8	9.8	10.7	11.5	12.0
H	Hotels and restaurants	2.3	2.3	2.2	2.6	2.6
I	Transport, storage, telecommunications	7.7	7.2	7.5	7.5	7.5
J	Financial intermediation	1.3	1.3	1.2	1.1	1.1
K	Real estate, renting & business activities	3.1	3.1	3.3	3.7	4.2
L-O	Community services	18.9	18.9	18.3	18.9	18.6
L	Public admin., defence, compuls.soc.sec.	2.2	2.5	2.6	2.9	3.0
M	Education	7.8	7.7	7.4	7.5	7.3
N	Health and social work	5.7	5.6	5.3	5.3	5.1
O	Oth. community, social & personal serv.	3.2	3.1	3.0	3.2	3.1

(Index: 1996 = 100)

NACE label	NACE classification:	1996	1997	1998	1999	2000
A-Q	Employment, total	100.0	96.1	95.9	94.0	89.6
A-B	Agriculture, forestry, fishing	100.0	100.0	103.1	99.4	98.2
C-F	Industry total	100.0	94.4	90.2	83.2	74.7
C-E	Industry	100.0	96.3	92.5	83.9	75.0
F	Construction	100.0	83.7	77.7	79.5	73.3
G-O	Services	100.0	95.2	96.2	99.0	95.9
G-K	Market services	100.0	94.3	98.8	102.7	101.9
G	Wholesale, retail trade, repair motor veh.	100.0	96.6	104.9	110.3	109.9
H	Hotels and restaurants	100.0	94.4	92.3	104.4	101.8
I	Transport, storage, telecommunications	100.0	90.5	93.9	92.5	88.0
J	Financial intermediation	100.0	93.2	87.7	80.5	75.2
K	Real estate, renting & business activities	100.0	96.7	100.8	111.9	122.5
L-O	Community services	100.0	96.3	93.0	94.3	88.3
L	Public admin., defence, compuls.soc.sec.	100.0	107.8	110.3	122.9	122.2
M	Education	100.0	94.8	91.1	90.3	84.2
N	Health and social work	100.0	94.9	89.3	87.7	80.3
O	Oth. community, social & personal serv.	100.0	94.4	92.3	96.0	88.7

Source: WIIW incoporating national statistics

Table B.2

Czech Republic: Employment by activities – Labour force survey data

(annual average, 1000 persons, growth rates)

NACE label	NACE classification:	1993	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	4,873.5	4,962.6	4,972.0	4,936.5	4,865.7	4,764.1	4,731.6
	growth rate in %	–	0.7	0.2	–0.7	–1.4	–2.1	–0.7
A-B	Agriculture, forestry, fishing	375.0	325.8	305.4	284.4	266.9	247.3	240.7
	growth rate in %	–	–3.6	–6.3	–6.9	–6.1	–7.4	–2.7
C-F	Industry total	2,093.0	2,076.3	2,065.1	2,031.1	1,992.0	1,911.9	1,868.4
	growth rate in %	–	–0.1	–0.5	–1.6	–1.9	–4.0	–2.3
C-E	Industry	1,669.1	1,620.9	1,597.7	1,550.3	1,519.9	1,468.8	1,429.5
	growth rate in %	–	–0.3	–1.4	–3.0	–2.0	–3.4	–2.7
F	Construction	423.9	455.4	467.5	480.9	472.0	443.2	439.0
	growth rate in %	–	0.8	2.6	2.9	–1.8	–6.1	–0.9
G-Q	Services	2,405.5	2,558.1	2,599.4	2,618.8	2,605.9	2,603.5	2,620.1
	growth rate in %	–	2.0	1.6	0.7	–0.5	–0.1	0.6
G-K	Market services	1,335.0	1,491.2	1,534.3	1,555.0	1,541.0	1,524.3	1,508.0
	growth rate in %	–	7.2	4.2	2.9	1.3	–0.9	–1.1
G	Wholesale, retail trade, repair motor veh.	510.3	618.6	639.6	658.7	645.5	640.7	612.9
	growth rate in %	–	5.0	3.4	3.0	–2.0	–0.8	–4.3
H	Hotels and restaurants	148.9	153.9	155.6	166.2	169.2	157.4	156.3
	growth rate in %	–	0.3	3.1	1.1	6.8	1.8	–7.0
I	Transport, storage, telecommunications	388.1	381.8	388.2	381.6	378.2	371.0	373.2
	growth rate in %	–	3.1	1.7	–1.7	–0.9	–1.9	0.6
J	Financial intermediation	68.2	91.5	94.8	96.7	99.7	98.8	99.6
	growth rate in %	–	19.3	12.5	3.7	1.9	3.2	–0.9
K	Real estate, renting & business activities	219.6	245.4	256.1	251.9	248.4	256.5	266.0
	growth rate in %	–	10.0	1.6	4.3	–1.6	–1.4	3.3
L-Q	Community services	1,070.6	1,066.9	1,065.2	1,063.8	1,064.9	1,079.3	1,112.1
	growth rate in %	–	–0.9	–0.2	–0.1	0.1	1.3	3.0
L	Public admin., defence, compuls.soc.sec.	308.4	302.3	310.6	320.6	322.8	336.5	342.9
	growth rate in %	–	–6.2	2.8	3.2	0.7	4.2	1.9
M	Education	315.0	309.2	311.8	306.4	289.0	286.7	298.9
	growth rate in %	–	–0.5	0.9	–1.7	–5.7	–0.8	4.3
N	Health and social work	282.1	283.0	273.0	272.4	267.7	276.6	290.7
	growth rate in %	–	1.4	–3.5	–0.2	–1.7	3.3	5.1
O	Oth. community, social & personal serv.	162.9	170.4	166.2	161.3	182.6	176.1	175.8
	growth rate in %	–	4.6	–2.5	–2.9	13.2	–3.5	–0.2
P-Q	Other services	2.2	2.1	3.6	3.0	2.8	3.3	3.8
X	Other not elsewhere classified activities	0.1	2.4	2.1	2.3	1.0	1.3	2.4

Source: Statistical Office of the Czech Republic

(per cent of total)

NACE label	NACE classification:	1993	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	7.7	6.6	6.1	5.8	5.5	5.2	5.1
C-F	Industry total	42.9	41.8	41.5	41.1	40.9	40.1	39.5
C-E	Industry	34.2	32.7	32.1	31.4	31.2	30.8	30.2
F	Construction	8.7	9.2	9.4	9.7	9.7	9.3	9.3
G-Q	Services	49.4	51.5	52.3	53.0	53.6	54.6	55.4
G-K	Market services	27.4	30.0	30.9	31.5	31.7	32.0	31.9
G	Wholesale, retail trade, repair motor veh.	10.5	12.5	12.9	13.3	13.3	13.4	13.0
H	Hotels and restaurants	3.1	3.1	3.1	3.4	3.5	3.3	3.3
I	Transport, storage, telecommunications	8.0	7.7	7.8	7.7	7.8	7.8	7.9
J	Financial intermediation	1.4	1.8	1.9	2.0	2.0	2.1	2.1
K	Real estate, renting & business activities	4.5	4.9	5.2	5.1	5.1	5.4	5.6
L-Q	Community services	22.0	21.5	21.4	21.5	21.9	22.7	23.5
L	Public admin., defence, compuls.soc.sec.	6.3	6.1	6.2	6.5	6.6	7.1	7.2
M	Education	6.5	6.2	6.3	6.2	5.9	6.0	6.3
N	Health and social work	5.8	5.7	5.5	5.5	5.5	5.8	6.1
O	Oth. community, social & personal serv.	3.3	3.4	3.3	3.3	3.8	3.7	3.7
P-Q	Other services	0.0	0.0	0.1	0.1	0.1	0.1	0.1

(Index: 1994 = 100)

NACE label	NACE classification:	1993	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	98.9	100.7	100.9	100.2	98.8	96.7	96.0
A-B	Agriculture, forestry, fishing	111.0	96.4	90.4	84.2	79.0	73.2	71.2
C-F	Industry total	100.7	99.9	99.4	97.7	95.8	92.0	89.9
C-E	Industry	102.6	99.7	98.2	95.3	93.4	90.3	87.9
F	Construction	93.8	100.8	103.5	106.4	104.5	98.1	97.2
G-Q	Services	95.9	102.0	103.6	104.4	103.9	103.8	104.5
G-K	Market services	93.2	104.2	107.2	108.6	107.6	106.5	105.3
G	Wholesale, retail trade, repair motor veh.	86.6	105.0	108.6	111.8	109.6	108.7	104.0
H	Hotels and restaurants	99.7	103.1	104.2	111.2	113.3	105.4	104.7
I	Transport, storage, telecommunications	104.8	103.1	104.8	103.0	102.1	100.2	100.8
J	Financial intermediation	83.8	112.5	116.7	118.9	122.7	121.5	122.5
K	Real estate, renting & business activities	90.9	101.6	106.0	104.2	102.8	106.2	110.1
L-Q	Community services	99.4	99.1	98.9	98.8	98.9	100.2	103.3
L	Public admin., defence, compuls.soc.sec.	95.7	93.8	96.3	99.5	100.1	104.4	106.4
M	Education	101.4	99.5	100.4	98.6	93.0	92.3	96.2
N	Health and social work	101.1	101.4	97.8	97.6	96.0	99.1	104.2
O	Oth. community, social & personal serv.	100.0	104.6	102.1	99.1	112.1	108.1	108.0
P-Q	Other services	115.9	109.0	188.9	160.3	149.2	176.7	201.1

Source: WIIW incoporating national statistics

Table B.3

Hungary: Employment by activities – Labour force survey data

(annual average, 1000 persons, growth rates)

NACE label	NACE classification:	1992	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	4,082.7	3,678.8	3,648.1	3,646.3	3,697.7	3,811.5	3,849.1
	growth rate in %	–	–1.9	–0.8	0.0	0.7	3.1	1.0
A-B	Agriculture, forestry, fishing	460.1	295.1	302.4	287.8	278.8	270.4	251.7
	growth rate in %	–	–9.9	2.5	–4.8	–5.1	–3.0	–6.9
C-F	Industry total	1,431.0	1,198.1	1,190.1	1,208.0	1,264.3	1,296.1	1,298.4
	growth rate in %	–	–3.2	–0.7	1.5	3.7	2.5	0.2
C-E	Industry	1,214.2	980.8	972.4	988.8	1,034.3	1,043.1	1,030.6
	growth rate in %	–	–5.3	–0.9	1.7	3.5	0.9	–1.2
F	Construction	216.8	217.3	217.7	219.2	230.0	253.0	267.8
	growth rate in %	–	8.1	0.2	0.7	4.4	10.0	5.8
G-O	Services	2,187.3	2,185.1	2,155.2	2,150.4	2,154.6	2,244.9	2,299.0
	growth rate in %	–	0.0	–1.4	–0.2	–0.2	4.2	2.4
G-K	Market services	1,151.4	1,108.9	1,133.7	1,157.3	1,140.5	1,223.8	1,274.3
	growth rate in %	–	1.6	2.2	2.1	–1.6	7.3	4.1
G	Wholesale, retail trade, repair motor veh.	480.4	459.9	486.9	496.8	472.2	517.5	540.9
	growth rate in %	–	–1.6	5.9	2.0	–5.3	9.6	4.5
H	Hotels and restaurants	115.6	116.6	114.1	120.9	121.6	133.2	133.3
	growth rate in %	–	5.4	–2.1	6.0	–0.2	9.5	0.1
I	Transport, storage, telecommunications	346.4	319.6	321.2	310.0	301.9	308.3	311.8
	growth rate in %	–	1.6	0.5	–3.5	–3.4	2.1	1.1
J	Financial intermediation	68.7	82.2	83.3	83.3	81.8	80.9	83.7
	growth rate in %	–	12.8	1.3	0.0	1.1	–1.1	3.5
K	Real estate, renting & business activities	140.3	130.6	128.2	146.3	163.0	183.9	204.6
	growth rate in %		4.0	–1.8	14.1	11.9	12.8	11.3
L-O	Community services	1,035.9	1,076.2	1,021.5	993.1	1,014.1	1,021.1	1,024.7
	growth rate in %	–	–1.7	–5.1	–2.8	1.3	0.7	0.4
L	Public admin., defence, compuls.soc.sec.	293.7	318.1	306.6	293.8	294.3	301.9	299.0
	growth rate in %	–	–0.7	–3.6	–4.2	2.0	2.6	–1.0
M	Education	311.8	335.4	319.6	296.9	305.5	306.9	317.8
	growth rate in %	–	–0.9	–4.7	–7.1	2.0	0.5	3.6
N	Health and social work	236.3	231.4	225.6	232.1	237.8	239.2	241.7
	growth rate in %	–	–3.2	–2.5	2.9	2.6	0.6	1.0
O	Oth. community, social & personal serv.	194.1	191.3	169.7	170.3	176.5	173.1	166.2
	growth rate in %	–	–3.0	–11.3	0.4	–2.4	–1.9	–4.0
X	Other not elsewhere classified activities	4.3	0.5	0.4	0.1	–	–	–

Source: Statistical Office of Hungary

(per cent of total)

NACE label	NACE classification:	1992	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	11.3	8.0	8.3	7.9	7.5	7.1	6.5
C-F	Industry total	35.1	32.6	32.6	33.1	34.2	34.0	33.7
C-E	Industry	29.7	26.7	26.7	27.1	28.0	27.4	26.8
F	Construction	5.3	5.9	6.0	6.0	6.2	6.6	7.0
G-O	Services	53.6	59.4	59.1	59.0	58.3	58.9	59.7
G-K	Market services	28.2	30.1	31.1	31.7	30.8	32.1	33.1
G	Wholesale, retail trade, repair motor veh.	11.8	12.5	13.3	13.6	12.8	13.6	14.1
H	Hotels and restaurants	2.8	3.2	3.1	3.3	3.3	3.5	3.5
I	Transport, storage, telecommunications	8.5	8.7	8.8	8.5	8.2	8.1	8.1
J	Financial intermediation	1.7	2.2	2.3	2.3	2.2	2.1	2.2
K	Real estate, renting & business activities	3.4	3.6	3.5	4.0	4.4	4.8	5.3
L-O	Community services	25.4	29.3	28.0	27.2	27.4	26.8	26.6
L	Public admin., defence, compuls.soc.sec.	7.2	8.6	8.4	8.1	8.0	7.9	7.8
M	Education	7.6	9.1	8.8	8.1	8.3	8.1	8.3
N	Health and social work	5.8	6.3	6.2	6.4	6.4	6.3	6.3
O	Oth. community, social & personal serv.	4.8	5.2	4.7	4.7	4.8	4.5	4.3

(Index: 1994 = 100)

NACE label	NACE classification:	1992	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	108.8	98.1	97.2	97.2	98.6	101.6	102.6
A-B	Agriculture, forestry, fishing	140.4	90.1	92.3	87.9	85.1	82.5	76.8
C-F	Industry total	115.7	96.8	96.2	97.6	102.2	104.8	105.0
C-E	Industry	117.2	94.7	93.9	95.4	99.8	100.7	99.5
F	Construction	107.9	108.1	108.3	109.1	114.4	125.9	133.2
G-O	Services	100.1	100.0	98.6	98.4	98.6	102.7	105.2
G-K	Market services	105.5	101.6	103.9	106.1	104.5	112.2	116.8
G	Wholesale, retail trade, repair motor veh.	102.8	98.4	104.2	106.3	101.0	110.7	115.7
H	Hotels and restaurants	104.5	105.4	103.2	109.3	109.9	120.4	120.5
I	Transport, storage, telecommunications	110.1	101.6	102.1	98.6	96.0	98.0	99.1
J	Financial intermediation	94.2	112.8	114.3	114.3	112.2	111.0	114.8
K	Real estate, renting & business activities	111.7	104.0	102.1	116.5	129.8	146.4	162.9
L-O	Community services	94.6	98.3	93.3	90.7	92.6	93.3	93.6
L	Public admin., defence, compuls.soc.sec.	91.7	99.3	95.8	91.8	91.9	94.3	93.4
M	Education	92.1	99.1	94.4	87.7	90.2	90.6	93.9
N	Health and social work	98.9	96.8	94.4	97.1	99.5	100.1	101.1
O	Oth. community, social & personal serv.	98.4	97.0	86.1	86.4	89.5	87.8	84.3

Source: WIIW incorporating national statistics

Table B.4

Poland: Employment by activities – Labour force survey data[1)]

(annual average, 1000 persons, growth rates)

NACE label	NACE classification:	1994	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	14,658	14,791	14,969	15,177	15,354	14,757	14,526.0
	growth rate in %	–	0.9	1.2	1.4	1.2	–3.9	–1.6
A-B	Agriculture, forestry, fishing	3,514	3,345	3,310	3,117	2,946	2,667	2,715.3
	growth rate in %	–	–4.8	–1.0	–5.8	–5.5	–9.5	1.8
C-F	Industry total	4,682	4,729	4,740	4,846	4,922	4,622	4,480.8
	growth rate in %	–	1.0	0.2	2.2	1.6	–6.1	–3.1
C-E	Industry	3,778	3,831	3,819	3,843	3,851	3,610	3,456.5
	growth rate in %	–	1.4	–0.3	0.6	0.2	–6.3	–4.3
F	Construction	904	898	921	1,003	1,071	1,012	1,024.3
	growth rate in %	–	–0.7	2.6	8.9	6.8	–5.5	1.2
G-Q	Services	6,441	6,705	6,922	7,217	7,486	7,466	7,310.5
	growth rate in %	–	4.1	3.2	4.3	3.7	–0.3	–2.1
G-K	Market services	3,214	3,494	3,685	3,890	4,112	4,105	4,088.5
	growth rate in %	–	8.7	5.5	5.6	5.7	–0.2	–0.4
G	Wholesale, retail trade, repair motor veh.	1,703	1,811	1,895	1,992	2,117	2,095	2,043.5
	growth rate in %	–	6.3	4.6	5.1	6.3	–1.0	–2.5
H	Hotels and restaurants	163	194	202	210	219	222	240.8
	growth rate in %	–	19.0	4.1	4.0	4.3	1.4	8.4
I	Transport, storage, telecommunications	794	856	890	936	958	895	893.3
	growth rate in %	–	7.8	4.0	5.2	2.4	–6.6	–0.2
J	Financial intermediation	308	296	286	312	354	387	380.0
	growth rate in %	–	–3.9	–3.4	9.1	13.5	9.3	–1.8
K	Real estate, renting & business activities	246	337	412	440	464	506	531.0
	growth rate in %	–	37.0	22.3	6.8	5.5	9.1	4.9
L-Q	Community services	3,227	3,211	3,237	3,327	3,374	3,361	3,222.0
	growth rate in %	–	–0.5	0.8	2.8	1.4	–0.4	–4.1
L	Public admin., defence, compuls.soc.sec.	680	685	746	782	779	772	764.3
	growth rate in %	–	0.7	8.9	4.8	–0.4	–0.9	–1.0
M	Education	997	999	968	940	972	1,029	1,012.8
	growth rate in %	–	0.2	–3.1	–2.9	3.4	5.9	–1.6
N	Health and social work	932	975	1,022	1,057	1,056	1,028	938.3
	growth rate in %	–	4.6	4.8	3.4	–0.1	–2.7	–8.7
O	Oth. community, social & personal serv.	610	541	488	540	558	527	506.8
	growth rate in %	–	–11.3	–9.8	10.7	3.3	–5.6	–3.8
P-Q	Other services	8	11	13	8	9	5	–

Note: 1) Structural break in 1999: the Polish survey method has been changed from the reference point observation into a continuous survey.
Source: Statistical Office of Poland

(per cent of total)

NACE label	NACE classification:	1994	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	24.0	22.6	22.1	20.5	19.2	18.1	18.7
C-F	Industry total	31.9	32.0	31.7	31.9	32.1	31.3	30.8
C-E	Industry	25.8	25.9	25.5	25.3	25.1	24.5	23.8
F	Construction	6.2	6.1	6.2	6.6	7.0	6.9	7.1
G-Q	Services	43.9	45.3	46.2	47.6	48.8	50.6	50.3
G-K	Market services	21.9	23.6	24.6	25.6	26.8	27.8	28.1
G	Wholesale, retail trade, repair motor veh.	11.6	12.2	12.7	13.1	13.8	14.2	14.1
H	Hotels and restaurants	1.1	1.3	1.3	1.4	1.4	1.5	1.7
I	Transport, storage, telecommunications	5.4	5.8	5.9	6.2	6.2	6.1	6.1
J	Financial intermediation	2.1	2.0	1.9	2.1	2.3	2.6	2.6
K	Real estate, renting & business activities	1.7	2.3	2.8	2.9	3.0	3.4	3.7
L-Q	Community services	22.0	21.7	21.6	21.9	22.0	22.8	22.2
L	Public admin., defence, compuls.soc.sec.	4.6	4.6	5.0	5.2	5.1	5.2	5.3
M	Education	6.8	6.8	6.5	6.2	6.3	7.0	7.0
N	Health and social work	6.4	6.6	6.8	7.0	6.9	7.0	6.5
O	Oth. community, social & personal serv.	4.2	3.7	3.3	3.6	3.6	3.6	3.5

(Index: 1994 = 100)

NACE label	NACE classification:	1994	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	100.0	100.9	102.1	103.5	104.7	100.7	99.1
A-B	Agriculture, forestry, fishing	100.0	95.2	94.2	88.7	83.8	75.9	77.3
C-F	Industry total	100.0	101.0	101.2	103.5	105.1	98.7	95.7
C-E	Industry	100.0	101.4	101.1	101.7	101.9	95.6	91.5
F	Construction	100.0	99.3	101.9	111.0	118.5	111.9	113.3
G-Q	Services	100.0	104.1	107.5	112.0	116.2	115.9	113.5
G-K	Market services	100.0	108.7	114.7	121.0	127.9	127.7	127.2
G	Wholesale, retail trade, repair motor veh.	100.0	106.3	111.3	117.0	124.3	123.0	120.0
H	Hotels and restaurants	100.0	119.0	123.9	128.8	134.4	136.2	147.7
I	Transport, storage, telecommunications	100.0	107.8	112.1	117.9	120.7	112.7	112.5
J	Financial intermediation	100.0	96.1	92.9	101.3	114.9	125.6	123.4
K	Real estate, renting & business activities	100.0	137.0	167.5	178.9	188.6	205.7	215.9
L-Q	Community services	100.0	99.5	100.3	103.1	104.6	104.2	99.8
L	Public admin., defence, compuls.soc.sec.	100.0	100.7	109.7	115.0	114.6	113.5	112.4
M	Education	100.0	100.2	97.1	94.3	97.5	103.2	101.6
N	Health and social work	100.0	104.6	109.7	113.4	113.3	110.3	100.7
O	Oth. community, social & personal serv.	100.0	88.7	80.0	88.5	91.5	86.4	83.1

Note: 1) Structural break in 1999: the Polish survey method has been changed from the reference point observation into a continuous survey.
Source: WIIW incorporating national statistics

Table B.5

Romania: Employment by activities – Labour force survey data[1)]

(annual average, 1000 persons, growth rates)

NACE label	NACE classification:	1994	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	10,914.1	11,152.3	10,935.5	11,050.0	10,844.9	10,775.6	10,763.8
	growth rate in %	–	2.2	–1.9	1.0	–1.9	–0.6	–0.1
A-B	Agriculture, forestry, fishing	4,261.1	4,497.6	4,150.8	4,311.0	4,342.2	4,499.3	4,598.7
	growth rate in %	–	5.6	–7.7	3.9	0.7	3.6	2.2
C-F	Industry total	3,585.7	3,452.1	3,447.4	3,370.9	3,184.1	2,971.7	2,816.2
	growth rate in %	–	–3.7	–0.1	–2.2	–5.5	–6.7	–5.2
C-E	Industry	3,133.5	2,983.9	2,977.2	2,903.3	2,750.6	2,574.7	2,412.8
	growth rate in %	–	–4.8	–0.2	–2.5	–5.3	–6.4	–6.3
F	Construction	452.2	468.1	470.2	467.6	433.5	397.0	403.4
	growth rate in %	–	3.5	0.4	–0.6	–7.3	–8.4	1.6
G-Q	Services	3,067.2	3,202.6	3,337.4	3,368.1	3,318.6	3,304.7	3,348.8
	growth rate in %	–	4.4	4.2	0.9	–1.5	–0.4	1.3
G-K	Market services	1,619.3	1,652.3	1,821.7	1,860.8	1,833.1	1,778.1	1,787.4
	growth rate in %	–	2.0	10.3	2.1	–1.5	–3.0	0.5
G	Wholesale, retail trade, repair motor veh.	661.9	717.0	832.3	882.6	925.9	926.3	928.4
	growth rate in %	–	8.3	16.1	6.0	4.9	0.0	0.2
H	Hotels and restaurants	147.1	138.2	148.2	161.4	142.1	123.9	122.8
	growth rate in %	–	–6.0	7.2	8.9	–11.9	–12.8	–0.8
I	Transport, storage, telecommunications	552.3	556.6	576.1	559.0	529.4	499.8	511.3
	growth rate in %	–	0.8	3.5	–3.0	–5.3	–5.6	2.3
J	Financial intermediation	76.7	87.1	86.6	90.2	81.8	87.0	92.6
	growth rate in %	–	13.5	–0.5	4.2	–9.4	6.4	6.3
K	Real estate, renting & business activities	181.3	153.4	178.5	167.6	153.9	141.1	132.3
	growth rate in %	–	–15.4	16.4	–6.1	–8.2	–8.3	–6.2
L-Q	Community services	1,447.9	1,550.3	1,515.7	1,507.3	1,485.6	1,526.6	1,561.4
	growth rate in %	–	7.1	–2.2	–0.6	–1.4	2.8	2.3
L	Public admin., defence, compuls.soc.sec.	451.5	562.8	517.8	500.3	504.6	532.7	563.1
	growth rate in %	–	24.7	–8.0	–3.4	0.8	5.6	5.7
M	Education	460.7	436.3	421.9	435.6	428.1	423.2	415.0
	growth rate in %	–	–5.3	–3.3	3.2	–1.7	–1.2	–1.9
N	Health and social work	348.1	345.2	357.0	358.5	335.4	340.5	345.8
	growth rate in %	–	–0.8	3.4	0.4	–6.4	1.5	1.6
O-Q	Oth. community services	187.7	205.9	218.9	212.9	217.5	230.3	237.5
	growth rate in %	–	9.7	6.3	–2.8	2.2	5.9	3.1

Note: 1) 1994–1995: March of each year, persons aged 14 years and over.
Source: Statistical Office of Romania

(per cent of total)

NACE label	NACE classification:	1994	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	39.0	40.3	38.0	39.0	40.0	41.8	42.7
C-F	Industry total	32.9	31.0	31.5	30.5	29.4	27.6	26.2
C-E	Industry	28.7	26.8	27.2	26.3	25.4	23.9	22.4
F	Construction	4.1	4.2	4.3	4.2	4.0	3.7	3.7
G-Q	Services	28.1	28.7	30.5	30.5	30.6	30.7	31.1
G-K	Market services	14.8	14.8	16.7	16.8	16.9	16.5	16.6
G	Wholesale, retail trade, repair motor veh.	6.1	6.4	7.6	8.0	8.5	8.6	8.6
H	Hotels and restaurants	1.3	1.2	1.4	1.5	1.3	1.1	1.1
I	Transport, storage, telecommunications	5.1	5.0	5.3	5.1	4.9	4.6	4.8
J	Financial intermediation	0.7	0.8	0.8	0.8	0.8	0.8	0.9
K	Real estate, renting & business activities	1.7	1.4	1.6	1.5	1.4	1.3	1.2
L-Q	Community services	13.3	13.9	13.9	13.6	13.7	14.2	14.5
L	Public admin., defence, compuls.soc.sec.	4.1	5.0	4.7	4.5	4.7	4.9	5.2
M	Education	4.2	3.9	3.9	3.9	3.9	3.9	3.9
N	Health and social work	3.2	3.1	3.3	3.2	3.1	3.2	3.2
O-Q	Oth. community services	1.7	1.8	2.0	1.9	2.0	2.1	2.2

(Index: 1994 = 100)

NACE label	NACE classification:	1994	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	100.0	102.2	100.2	101.2	99.4	98.7	98.6
A-B	Agriculture, forestry, fishing	100.0	105.6	97.4	101.2	101.9	105.6	107.9
C-F	Industry total	100.0	96.3	96.1	94.0	88.8	82.9	78.5
C-E	Industry	100.0	95.2	95.0	92.7	87.8	82.2	77.0
F	Construction	100.0	103.5	104.0	103.4	95.9	87.8	89.2
G-Q	Services	100.0	104.4	108.8	109.8	108.2	107.7	109.2
G-K	Market services	100.0	102.0	112.5	114.9	113.2	109.8	110.4
G	Wholesale, retail trade, repair motor veh.	100.0	108.3	125.7	133.3	139.9	139.9	140.3
H	Hotels and restaurants	100.0	94.0	100.8	109.7	96.6	84.2	83.5
I	Transport, storage, telecommunications	100.0	100.8	104.3	101.2	95.9	90.5	92.6
J	Financial intermediation	100.0	113.5	112.9	117.6	106.6	113.4	120.6
K	Real estate, renting & business activities	100.0	84.6	98.5	92.5	84.9	77.8	73.0
L-Q	Community services	100.0	107.1	104.7	104.1	102.6	105.4	107.8
L	Public admin., defence, compuls.soc.sec.	100.0	124.7	114.7	110.8	111.8	118.0	124.7
M	Education	100.0	94.7	91.6	94.5	92.9	91.9	90.1
N	Health and social work	100.0	99.2	102.6	103.0	96.4	97.8	99.3
O-Q	Oth. community services	100.0	109.7	116.6	113.4	115.9	122.7	126.5

Note: 1) 1994–1995: March of each year, persons aged 14 years and over.
Source: WIIW incorporating national statistics

Table B.6

Slovak Republic: Employment by activities – Labour force survey data

(annual average, 1000 persons, growth rates)

NACE label	NACE classification:	1994	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	2,110.2	2,146.8	2,224.9	2,205.9	2,198.6	2,132.1	2,101.7
	growth rate in %	–	1.7	3.6	–0.9	–0.3	–3.0	–1.4
A-B	Agriculture, forestry, fishing	214.4	197.2	198.0	202.3	181.4	157.2	139.8
	growth rate in %	–	–8.0	0.4	2.2	–10.3	–13.3	–11.1
C-F	Industry total	836.7	834.7	879.7	866.6	867.0	820.0	783.0
	growth rate in %	–	–0.2	5.4	–1.5	0.0	–5.4	–4.5
C-E	Industry	649.1	650.5	690.0	665.8	662.5	630.3	615.3
	growth rate in %	–	0.2	6.1	–3.5	–0.5	–4.9	–2.4
F	Construction	187.6	184.2	189.7	200.8	204.5	189.7	167.7
	growth rate in %	–	–1.8	3.0	5.9	1.8	–7.2	–11.6
G-O	Services	1,055.2	1,112.1	1,144.1	1,133.8	1,147.4	1,152.9	1,174.3
	growth rate in %	–	5.4	2.9	–0.9	1.2	0.5	1.9
G-K	Market services	530.9	574.2	576.1	579.4	609.0	607.9	619.8
	growth rate in %	–	8.2	0.3	0.6	5.1	–0.2	2.0
G	Wholesale, retail trade, repair motor veh.	204.9	222.2	226.1	254.1	262.3	260.4	259.6
	growth rate in %	–	8.4	1.8	12.4	3.2	–0.7	–0.3
H	Hotels and restaurants	54.0	59.6	62.6	60.2	62.5	64.8	65.3
	growth rate in %	–	10.4	5.0	–3.8	3.8	3.7	0.7
I	Transport, storage, telecommunications	163.4	167.1	168.6	160.4	169.7	166.0	167.1
	growth rate in %	–	2.3	0.9	–4.9	5.8	–2.2	0.7
J	Financial intermediation	24.9	29.8	30.3	30.2	37.2	36.7	37.1
	growth rate in %	–	19.7	1.7	–0.3	23.2	–1.3	1.0
K	Real estate, renting & business activities	83.7	95.5	88.5	74.5	77.3	80.0	90.8
	growth rate in %	–	14.1	–7.3	–15.8	3.8	3.5	13.4
L-O	Community services	524.3	537.9	568.0	554.4	538.4	545.0	554.5
	growth rate in %	–	2.6	5.6	–2.4	–2.9	1.2	1.7
L	Public admin., defence, compuls.soc.sec.	126.8	137.3	157.2	160.3	153.9	150.4	158.3
	growth rate in %	–	8.3	14.5	2.0	–4.0	–2.3	5.3
M	Education	179.0	170.2	177.3	166.7	165.3	166.7	161.6
	growth rate in %	–	–4.9	4.2	–6.0	–0.8	0.8	–3.0
N	Health and social work	141.2	141.6	143.1	146.9	146.3	155.0	147.9
	growth rate in %	–	0.3	1.1	2.7	–0.4	5.9	–4.6
O	Oth. community, social & personal serv.	77.3	88.8	90.4	80.5	72.9	72.9	86.6
	growth rate in %	–	14.9	1.8	–11.0	–9.4	0.0	18.8

Source: Statistical Office of the Slovak Republic

(per cent of total)

NACE label	NACE classification:	1994	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	10.2	9.2	8.9	9.2	8.3	7.4	6.6
C-F	Industry total	39.7	38.9	39.5	39.3	39.4	38.5	37.3
C-E	Industry	30.8	30.3	31.0	30.2	30.1	29.6	29.3
F	Construction	8.9	8.6	8.5	9.1	9.3	8.9	8.0
G-O	Services	50.0	51.8	51.4	51.4	52.2	54.1	55.9
G-K	Market services	25.2	26.7	25.9	26.3	27.7	28.5	29.5
G	Wholesale, retail trade, repair motor veh.	9.7	10.4	10.2	11.5	11.9	12.2	12.4
H	Hotels and restaurants	2.6	2.8	2.8	2.7	2.8	3.0	3.1
I	Transport, storage, telecommunications	7.7	7.8	7.6	7.3	7.7	7.8	8.0
J	Financial intermediation	1.2	1.4	1.4	1.4	1.7	1.7	1.8
K	Real estate, renting & business activities	4.0	4.4	4.0	3.4	3.5	3.8	4.3
L-O	Community services	24.8	25.1	25.5	25.1	24.5	25.6	26.4
L	Public admin., defence, compuls.soc.sec.	6.0	6.4	7.1	7.3	7.0	7.1	7.5
M	Education	8.5	7.9	8.0	7.6	7.5	7.8	7.7
N	Health and social work	6.7	6.6	6.4	6.7	6.7	7.3	7.0
O	Oth. community, social & personal serv.	3.7	4.1	4.1	3.6	3.3	3.4	4.1

(Index: 1994 = 100)

NACE label	NACE classification:	1994	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	100.0	101.7	105.4	104.5	104.2	101.0	99.6
A-B	Agriculture, forestry, fishing	100.0	92.0	92.4	94.4	84.6	73.3	65.2
C-F	Industry total	100.0	99.8	105.1	103.6	103.6	98.0	93.6
C-E	Industry	100.0	100.2	106.3	102.6	102.1	97.1	94.8
F	Construction	100.0	98.2	101.1	107.0	109.0	101.1	89.4
G-O	Services	100.0	105.4	108.4	107.4	108.7	109.3	111.3
G-K	Market services	100.0	108.2	108.5	109.1	114.7	114.5	116.7
G	Wholesale, retail trade, repair motor veh.	100.0	108.4	110.3	124.0	128.0	127.1	126.7
H	Hotels and restaurants	100.0	110.4	115.9	111.5	115.7	120.0	120.8
I	Transport, storage, telecommunications	100.0	102.3	103.2	98.2	103.9	101.6	102.3
J	Financial intermediation	100.0	119.7	121.7	121.3	149.4	147.4	148.9
K	Real estate, renting & business activities	100.0	114.1	105.7	89.0	92.4	95.6	108.4
L-O	Community services	100.0	102.6	108.3	105.7	102.7	103.9	105.8
L	Public admin., defence, compuls.soc.sec.	100.0	108.3	124.0	126.4	121.4	118.6	124.9
M	Education	100.0	95.1	99.1	93.1	92.3	93.1	90.3
N	Health and social work	100.0	100.3	101.3	104.0	103.6	109.8	104.7
O	Oth. community, social & personal serv.	100.0	114.9	116.9	104.1	94.3	94.3	112.1

Source: WIIW incorporating national statistics

Table B.7

Slovenia: Employment by activities – Labour force survey data[1)]

(annual average, 1000 persons, growth rates)

NACE label	NACE classification:	1994	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	845	882	876	906	901	886	901
	growth rate in %	–1.6	3.8	–0.7	3.4	–0.6	–1.7	1.7
	NACE classification:							
A-B	Agriculture, forestry, fishing	90	92	89	115	103	90	89
	growth rate in %	–	–6.1	–3.3	29.2	–10.4	–12.4	–1.4
C-F	Industry total	373	380	370	363	353	339	340
	growth rate in %	–	5.8	–2.6	–1.9	–2.8	–4.1	0.4
C-E	Industry	327	335	323	310	303	291	291
	growth rate in %	–	7.7	–3.6	–4.0	–2.3	–3.9	–0.1
F	Construction	46	45	47	53	50	47	49
	growth rate in %	–	–6.3	4.4	12.8	–5.7	–5.5	3.7
G-O	Services	381	409	418	424	438	455	463
	growth rate in %	–	4.6	2.2	1.4	3.3	3.8	1.9
G-K	Market services	217	242	245	256	263	270	274
	growth rate in %	–	7.1	1.2	4.5	2.7	2.8	1.4
G	Wholesale, retail trade, repair motor veh.	96	105	103	105	108	111	113
	growth rate in %	–	8.2	–1.9	1.9	2.9	3.0	1.6
H	Hotels and restaurants	28	31	34	37	37	35	34
	growth rate in %	–	3.3	9.7	8.8	0.0	–5.4	–2.9
I	Transport, storage, telecommunications	55	52	51	52	53	55	58
	growth rate in %	–	2.0	–1.9	2.0	1.9	3.8	5.5
J	Financial intermediation	16	21	21	20	18	21	22
	growth rate in %	–	16.7	0.0	–4.8	–10.0	18.1	3.5
K	Real estate. renting & business activities	22	33	36	42	47	48	47
	growth rate in %	–	10.0	9.1	16.7	11.9	1.6	–1.6
L-O	Community services	164	167	173	168	175	184	189
	growth rate in %	–	1.2	3.6	–2.9	4.2	5.3	2.6
L	Public admin., defence, compuls.soc.sec.	37	39	41	38	43	47	49
	growth rate in %	–	5.4	5.1	–7.3	13.2	9.3	4.3
M	Education	45	53	55	53	59	58	59
	growth rate in %	–	15.2	3.8	–3.6	11.3	–2.5	2.6
N	Health and social work	41	47	44	42	42	47	45
	growth rate in %	–	–9.6	–6.4	–4.5	0.0	10.7	–3.2
O	Oth. community, social & personal serv.	41	28	31	34	31	33	36
	growth rate in %	–	0.0	10.7	9.7	–8.8	7.3	8.3

Note: 1) Until 1997: 2nd quarter of each year
Source: Statistical Office of Slovenia

(per cent of total)

NACE label	NACE classification:	1994	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
A-B	Agriculture, forestry, fishing	10.7	10.4	10.2	12.7	11.4	10.2	9.9
C-F	Industry total	44.1	43.1	42.2	40.1	39.2	38.2	37.7
C-E	Industry	38.7	38.0	36.9	34.2	33.6	32.9	32.3
F	Construction	5.4	5.1	5.4	5.8	5.5	5.3	5.4
G-O	Services	45.1	46.4	47.7	46.8	48.6	51.3	51.4
G-K	Market services	25.7	27.4	28.0	28.3	29.2	30.5	30.4
G	Wholesale, retail trade, repair motor veh.	11.4	11.9	11.8	11.6	12.0	12.6	12.5
H	Hotels and restaurants	3.3	3.5	3.9	4.1	4.1	4.0	3.8
I	Transport, storage, telecommunications	6.5	5.9	5.8	5.7	5.9	6.2	6.4
J	Financial intermediation	1.9	2.4	2.4	2.2	2.0	2.4	2.4
K	Real estate, renting & business activities	2.6	3.7	4.1	4.6	5.2	5.4	5.2
L-O	Community services	19.4	18.9	19.7	18.5	19.4	20.8	21.0
L	Public admin., defence, compuls.soc.sec.	4.4	4.4	4.7	4.2	4.8	5.3	5.4
M	Education	5.3	6.0	6.3	5.8	6.5	6.5	6.5
N	Health and social work	4.9	5.3	5.0	4.6	4.7	5.2	5.0
O	Oth. community, social & personal serv.	4.9	3.2	3.5	3.8	3.4	3.8	4.0

(Index: 1994 = 100)

NACE label	NACE classification:	1994	1995	1996	1997	1998	1999	2000
A-Q	Employment, total	99.4	103.8	103.1	106.6	106.0	104.2	106.0
A-B	Agriculture, forestry, fishing	91.8	93.9	90.8	117.3	105.1	92.1	90.8
C-F	Industry total	103.9	105.8	103.1	101.1	98.3	94.3	94.7
C-E	Industry	105.1	107.7	103.9	99.7	97.4	93.6	93.6
F	Construction	95.8	93.8	97.9	110.4	104.2	98.4	102.1
G-O	Services	97.4	104.6	106.9	108.4	112.0	116.2	118.4
G-K	Market services	96.0	107.1	108.4	113.3	116.4	119.6	121.2
G	Wholesale, retail trade, repair motor veh.	99.0	108.2	106.2	108.2	111.3	114.7	116.5
H	Hotels and restaurants	93.3	103.3	113.3	123.3	123.3	116.7	113.3
I	Transport, storage, telecommunications	107.8	102.0	100.0	102.0	103.9	107.8	113.7
J	Financial intermediation	88.9	116.7	116.7	111.1	100.0	118.1	122.2
K	Real estate, renting & business activities	73.3	110.0	120.0	140.0	156.7	159.2	156.7
L-O	Community services	99.4	101.2	104.8	101.8	106.1	111.7	114.5
L	Public admin., defence, compuls.soc.sec.	100.0	105.4	110.8	102.7	116.2	127.0	132.4
M	Education	97.8	115.2	119.6	115.2	128.3	125.0	128.3
N	Health and social work	78.8	90.4	84.6	80.8	80.8	89.4	86.5
O	Oth. community, social & personal serv.	146.4	100.0	110.7	121.4	110.7	118.8	128.6

Note: 1) Until 1997: 2nd quarter of each year
Source: WIIW incorporating national statistics

Annex C

Number of enterprises by industries

Table C.1

Czech Republic: Number of registered businesses[1)]

End of year

NACE label	NACE classification:	1995	1996	2000
A-Q	Registered businesses, total	1.305,509	1.453,181	2.035,514
A-B	Agriculture, forestry, fishing	113,067	120,825	131,144
C-F	Industry total	330,642	357,927	485,190
C-E	Industry	187,822	200,213	263,863
F	Construction	142,820	157,714	221,327
G-O	Services	861,576	974,235	1.418,935
G-K	Market services	735,131	831,332	1.211,332
G	Wholesale, retail trade, repair motor veh.	412,224	467,311	637,995
H	Hotels and restaurants	54,180	59,747	97,644
I	Transport, storage, telecommunications	46,743	50,868	70,305
J	Financial intermediation	8,439	10,872	71,321
K	Real estate, renting & business activities	213,545	242,534	334,067
L-O	Community services	126,445	142,903	207,603
L	Public admin., defence, compuls.soc.sec.	2,053	3,816	4,676
M	Education	11,046	12,167	19,368
N	Health and social work	25,195	25,942	28,511
O	Oth. community, social & personal serv.	88,151	100,978	155,048

Notes: 1) Legal entities and natural persons that enjoy the status of entrepreneuer; Government sector exluded.
Source: Statistical Yearbook of the Czech Republic

Table C.2

Hungary: Number of active corporations and unincorporated enterprises by industries

End of year

NACE label	NACE classification:	1996	2000
A-Q	Corporations and enterprises, total	698,045	847,024
	NACE classification:		
A-B	Agriculture, forestry, fishing	32,321	39,160
C-F	Industry total	153,186	157,063
C-E	Industry	93,347	84,928
F	Construction	59,839	72,135
G-Q	Services	512,538	650,801
G-K	Market services	454,513	556,438
G	Wholesale, retail trade, repair motor veh.	218,511	210,192
H	Hotels and restaurants	34,813	41,834
I	Transport, storage, telecommunications	46,897	45,973
J	Financial intermediation	1,979	21,817
K	Real estate, renting & business activities	152,313	236,622
L-Q	Community services	58,025	94,363
L	Public admin., defence, compuls.soc.sec.	–	–
M	Education	2,729	17,646
N	Health and social work	11,107	23,077
O	Oth. community, social & personal serv.	44,066	53,640[1)]
P-Q	Other not elsewhere classified activities	123	–

Notes: 1) Includes P-Q: Other not elsewhere classified activities
Source: Statistical Yearbook of Hungary

Table C.3

Poland: Companies by industries[1)]

End of year

NACE label	NACE classification:	1993	1996	2000
A-Q	Companies, total	183,256	238,923	381,371
A-B	Agriculture, forestry, fishing	8,453	10,979	12,200
C-F	Industry total	40,871	49,703	60,427
C-E	Industry	26,569	32,927	40,021
F	Construction	14,302	16,776	20,406
G-O	Services	133,931	178,238	308,739
G-K	Market services	67,273	88,486	163,417
G	Wholesale, retail trade, repair motor veh.	35,916	47,005	61,138
H	Hotels and restaurants	1,393	2,199	3,413
I	Transport, storage, telecommunications	4,472	6,047	8,031
J	Financial intermediation	2,457	3,348	4,672
K	Real estate, renting & business activities	23,035	29,887	86,163
L-O	Community services	66,658	89,752	145,322
L	Public admin., defence, compuls.soc.sec.	5,259	5,953	19,127
M	Education	21,195	22,429	29,510
N	Health and social work	8,153	11,311	16,955
O	Oth. community, social & personal serv.	32,051	50,059	79,730

Notes: 1) Data concern legal persons as well as organizational units without legal personality; data do not include natural persons conducting economic activiy and civil law partnerships.
Source: Statistical Yearbook of Poland

Table C.4

Romania: Number of active enterprises[1)]

End of year

NACE label	NACE classification:	1992	1996	1999
A-Q	Active enterprises, total			
A-B	Agriculture, forestry, fishing	–	9,497	11,091
C-F	Industry total	25,306	39,575	52,869
C-E	Industry	20,976	32,529	41,540
F	Construction	4,330	7,046	11,329
G-O	Services	104,770	272,963	266,765
G-K	Market services	98,243	259,186	256,060
G	Wholesale, retail trade, repair motor veh.	79,699	226,038	217,438
H	Hotels and restaurants	6,723	10,886	10,127
I	Transport, storage, telecommunications	5,817	10,589	12,381
J	Financial intermediation	–	471	898
K	Real estate, renting & business activities	6,004	11,202	15,216
L-O	Community services	6,527	13,777	10,705
L	Public admin., defence, compuls.soc.sec.	–	–	–
M	Education	345	515	616
N	Health and social work[2)]	1,366	2,684	3,901
O	Oth. community, social & personal serv.[2)]	4,816	10,578	6,188

Notes: 1) Not included are: Natural independent persons and family associations.
2) Only include the enterprises with activities related to education or health and social assistance, organised as companies
Source: Statistical Yearbook of Romania

Table C.5

Slovak Republic: Number of profit organisations and natural persons by industries1)

End of year

NACE label	NACE classification:	1992	1996	2000
A-Q	Profit organisations and natural persons, total	321,170	306,028	357,440
A-B	Agriculture, forestry, fishing	20,872	28,401	23,182
C-F	Industry total	126,727	126,979	101,049
C-E	Industry	62,047	93,347	59,188
F	Construction	64,680	33,632	41,861
G-O	Services	173,540	191,265	233,209
G-K	Market services	157,335	172,278	210,583
G	Wholesale, retail trade, repair motor veh,	79,589	105,549	130,150
H	Hotels and restaurants	12,412	15,161	16,259
I	Transport, storage, telecommunications	12,161	14,237	17,035
J	Financial intermediation	350	1,832	888
K	Real estate, renting & business activities	52,823	35,499	46,251
L-O	Community services	16,205	18,987	22,626
L	Public admin., defence, compuls.soc.sec.	1,135	390	1
M	Education	2,531	2,067	2,575
N	Health and social work	567	6,988	8,403
O	Oth. community, social & personal serv.	11,972	9,542	11,647

Notes: 1) Profit organizations include: incorporated enterprises and firms running business to make profit. Natural persons include: non-incorporated small businessmen, independent self-earning farmers and freelance people.
Source: Statistical Yearbook of the Slovak Republic

Table C.6

Slovenia: Number of economic subjects by industries[1)]

End of year

NACE label	NACE classification:	1995	1996	2000
A-Q	Economic subjects, total	109,855	114,783	115,717
A-B	Agriculture, forestry, fishing	1,193	1,261	1,312
C-F	Industry total	34,327	35,926	35,056
C-E	Industry	23,449	24,166	21,824
F	Construction	10,878	11,760	13,232
G-O	Services	74,335	77,596	79,349
G-K	Market services	69,317	72,112	69,658
G	Wholesale, retail trade, repair motor veh.	32,603	33,737	30,230
H	Hotels and restaurants	7,606	8,044	8,579
I	Transport, storage, telecommunications	11,354	11,922	10,755
J	Financial intermediation	518	576	924
K	Real estate, renting & business activities	17,236	17,833	19,170
L-O	Community services	5,018	5,484	9,691
L	Public admin., defence, compuls.soc.sec.	13	35	15
M	Education	672	710	778
N	Health and social work	289	351	1,876
O	Oth. community, social & personal serv.	4,044	4,388	7,022

Notes. 1) Economic subjects include legal persons (enterprises and companies) and natural persons (private entrepreneurs).
Source: Statistical Yearbook of Slovenia

Short list of the most recent WIIW publications (as of September 2002)

For current updates and summaries see also WIIW's website at www.wiiw.ac.at

The Services Sectors in Central and Eastern Europe
by Hermine Vidovic
WIIW Research Reports, No. 289, September 2002
88 pages including 17 Tables, 7 Figures and 5 Maps, EUR 22.00

Macroeconomic and Sectoral Aspects of Hungary's International Competitiveness and Trade Performance on EU Markets
by Gábor Oblath and Sándor Richter
WIIW Research Reports, No. 288, September 2002
37 pages including 14 Tables and 14 Figures, EUR 22.00

Restructuring Through FDI in Romanian Manufacturing
by Gábor Hunya
WIIW Research Reports, No. 287, August 2002
27 pages including 4 Tables and 8 Figures, EUR 22.00

The Vienna Institute Monthly Report 2002/8-9
edited by Leon Podkaminer

- Agriculture in transition countries: robust expansion backed by investment and bumper harvests
- Average effective tax rates in CEE and EU countries
- Selected monthly data on the economic situation in ten transition countries, 2001 to 2002
- Guide to WIIW statistical services on Central and Eastern Europe, Russia and Ukraine

WIIW, June 2002
31 pages including 15 Tables and 1 Figure
(exclusively for subscribers to the WIIW Service Package)

The CEECs in the Enlarged Europe: Convergence Patterns, Specialization and Labour Market Implications
by Michael Landesmann and Robert Stehrer
WIIW Research Reports, No. 286, July 2002
51 pages including 11 Tables and 14 Figures, EUR 22.00

Transition Countries in 2002: Losing Steam
by Leon Podkaminer et al.
WIIW Research Reports, No. 285, July 2002
89 pages including 28 Tables and 8 Figures, EUR 70.00

The Vienna Institute Monthly Report 2002/7
edited by Leon Podkaminer

- The fear of intervention: the case of the Polish zloty
- Sector profile: the textile and clothing sector in the CEECs
- 'State of play' in the EU accession negotiations (Table)
- Selected monthly data on the economic situation in ten transition countries, 2001 to 2002
- Guide to WIIW statistical services on Central and Eastern Europe, Russia and Ukraine

WIIW, June 2002
36 pages including 14 Tables and 6 Figures
(exclusively for subscribers to the WIIW Service Package)

WIIW-WIFO Database. Foreign Direct Investment in Central and East European Countries and the Former Soviet Union – with Special Attention to Austrian FDI Activities

by Gábor Hunya and Jan Stankovsky

WIIW-WIFO, Vienna, 13th edition, July 2002
49 pages including 44 Tables, EUR 47.00

The Vienna Institute Monthly Report 2002/6

edited by Leon Podkaminer

- Albania: high but powerless growth
- Patterns of trade specialization in CEECs
- Economic consequences of the Schengen Treaty for labour markets in the Polish borderland regions
- Selected monthly data on the economic situation in ten transition countries, 2001 to 2002
- Guide to WIIW statistical services on Central and Eastern Europe, Russia and Ukraine

WIIW, June 2002
36 pages including 14 Tables and 6 Figures
(exclusively for subscribers to the WIIW Service Package)

Wirkung der weltweiten Wirtschaftsflaute in den MOEL begrenzt

by Josef Pöschl

WIIW Research Papers in German language, May 2002
17 pages including 11 Tables and 6 Figures, EUR 8.00

Development and Prospects of the Textiles and Textile Products Sector in the Central and Eastern European Countries

by Doris Hanzl

WIIW Industry Studies, No. 2002/2, May 2002
61 pages including 34 Tables and 10 Figures, EUR 70.00

Recent Impacts of Foreign Direct Investment on Growth and Restructuring in Central European Transition Countries

by Gábor Hunya

WIIW Research Reports, No. 284, May 2002
23 pages including 12 Tables, EUR 22.00

The Vienna Institute Monthly Report 2002/5

edited by Leon Podkaminer

- Hungary after the elections
- Barter in Russia: competing explanations and empirical evidence
- Perils of opening-up: the case of Turkey
- 'State of play' in the EU accession negotiations (Table)
- Selected monthly data on the economic situation in ten transition countries, 2000 to 2002
- Guide to WIIW statistical services on Central and Eastern Europe, Russia and Ukraine

WIIW, May 2002
30 pages including 12 Tables and 1 Figure
(exclusively for subscribers to the WIIW Service Package)

The EU Enlargement Process: Current State of Play and Stumbling Blocks

by Sándor Richter

WIIW Current Analyses and Country Profiles, No. 17, April 2002
21 pages including 8 Tables, EUR 30.00

Technical Change, Effective Demand and Economic Growth

by Michael Landesmann and Robert Stehrer

WIIW Working Papers, No. 22, April 2002
32 pages including 3 Tables and 4 Figures, EUR 8.00 (free PDF download from the WIIW website)

A Feasibility Study on the Creation of a Loan and Capital Guarantee Institution in Slovakia

by FGG – Finanzierungsgarantie-Gesellschaft mbH, Vienna
WIIW, Vienna 2002
272 pages, EUR 35.00 (ISBN 3-85209-0022-9)

Potential Trade in South-East Europe: a Gravity Model Approach

by Edward Christie
WIIW Working Papers, No. 21, March 2002
35 pages, EUR 8.00 (free PDF download from the WIIW website)

Development and Prospects of the Basic Metals and Fabricated Metal Products Sector in the Central and Eastern European Countries

by Doris Hanzl
WIIW Industry Studies, No. 2002/1, February 2002
65 pages including 36 Tables and 10 Figures, EUR 70.00

Transition Countries Face Up to Global Stagnation: Is It Catching?

by Josef Pöschl et al.
WIIW Research Reports, No. 283, February 2002
95 pages including 29 Tables and 14 Figures, EUR 70.00

WIIW-WIFO Database. Foreign Direct Investment in Central and East European Countries and the Former Soviet Union

by Gábor Hunya and Jan Stankovsky
WIIW-WIFO Monograph, Vienna, **Update February 2002**
46 pages including 41 Tables, EUR 47.00

Regional Economic Co-operation in Asia: Challenges for Europe

Proceedings of a conference jointly organized by The Vienna Institute for International Economic Studies (WIIW) and the Japan Center for International Finance (JCIF), Vienna, 4/5 October 2001
WIIW, February 2002
115 pages, free PDF download from the WIIW website

**The Caspian States of the Former Soviet Union:
Recent Economic Performance and Prospects in Light of the September Events**

by Helen Boss Heslop
WIIW Current Analyses and Country Profiles, No. 16, December 2001
53 pages including 1 Table and 1 Map, EUR 43.60

China: Looking back on a landmark year

by Waltraut Urban
WIIW China Report, No. 2001/3, December 2001
9 pages including 1 Table, EUR 18.17

Countries in Transition 2001: WIIW Handbook of Statistics

covers twelve transition countries (Bulgaria, Croatia, Czech Republic, Hungary, Poland, Macedonia, Romania, Russia, Slovakia, Slovenia, Ukraine, Yugoslavia), 1990 to August 2001
WIIW, Vienna, October 2001
540 pages, EUR 90.00 (ISBN 3-85209-006-7)

South Eastern Europe: Economic Statistics

covers seven countries of South Eastern Europe (Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Macedonia, Romania, Yugoslavia)
WIIW, Vienna 2001
212 pages, EUR 35.00 (ISBN 3-85209-022-9)

WIIW Service Package

The Vienna Institute offers to firms and institutions interested in unbiased and up-to-date information on Central and East European markets a package of exclusive services and preferential access to its publications and research findings, on the basis of a subscription at an annual fee of EUR 2,000.

This subscription fee entitles to the following package of **Special Services**:

- A free invitation to the Vienna Institute's **Spring Seminar**, a whole-day event at the end of March, devoted to compelling topics in the economic transformation of the Central and East European region (for subscribers to the WIIW Service Package only).
- Copies of, or online access to, ***The Vienna Institute Monthly Report***, a periodical consisting of timely articles summarizing and interpreting the latest economic developments in Central and Eastern Europe and the former Soviet Union. The statistical annex to each *Monthly Report* contains tables of the latest monthly country data. This periodical is not for sale, it can only be obtained in the framework of the WIIW Service Package.
- Free copies of the Institute's ***Research Reports*** (including ***Reprints***), ***Analytical Forecasts*** and ***Current Analyses and Country Profiles***
- A free copy of the **WIIW Handbook of Statistics, *Countries in Transition*** (published in October each year and containing more than 200 tables and 100 figures on the economies of Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, Slovakia, Slovenia, Russia and Ukraine)
- Free online access to the **WIIW Monthly Database**, containing more than 1000 leading indicators monitoring the latest key economic developments in ten Central and East European countries.
- **Consulting**. The Vienna Institute is pleased to advise subscribers on questions concerning the East European economies or East-West economic relations if the required background research has already been undertaken by the Institute. We regret we have to charge extra for *ad hoc* research.
- Free access to the Institute's specialized economics library and documentation facilities.

Subscribers who wish to purchase WIIW data sets **on diskette** or special publications not included in the WIIW Service Package are granted considerable **price reductions**.

For detailed information about the WIIW Service Package
please see the WIIW website, www.wiiw.ac.at