Institut für Finanzwissenschaft und Infrastrukturpolitik



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# Survey of the economic development of the countries in the Danube River catchment area

Bericht im Rahmen des europäischen Forschungsprojektes da NUbs













# **Draft Report**

# Survey of the economic development of the countries in the Danube River catchment area

Wolfgang Blaas - Ralf Helmel Version July 23, 2002





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# 1. Introduction

This interim report is a summary and an interpretation of empirical data of the economic development in the last decade of the countries relevant for the Danubs project, i.e. Austria, Bosnia Herzegovina, Bulgaria, Croatia, Czech Republic, Germany, Hungary, Macedonia, Moldova, Romania, Slovak Republic, Slovenia, Ukraine and Yugoslavia.

# 1.1. Presentation methods and key concepts

The economic development will be described mainly by tables and figures, which will be amended by short texts about the general economic history of the respective country and the sectoral shifts in the last ten years.

Each country will be described with the help of one table and a number of diagrams (figures). The table contains basic economic indicators about the development in the 1990s: Gross Domestic Product (GDP), Gross Domestic Product per capita (GDP/capita), growth rates, sectoral data, inflation rates, exchange rates, unemployment rates. Note that the exchange rate is the average exchange rate of the indicated year of the country's local currency against the Euro.

In order to provide for optimal comparability, all nominal values are denominated in Euro (except for GDP which is also given in local currency), sectoral data are shown both in money terms and in percentages.

It is important to note that the GDP in common currency (Euro) has been calculated both at current exchange rates ("nom") and at Purchasing Power Parities ("PPP"), so that the effect of the local price level can be seen. In countries with a stable price development as for example Germany or Austria, the trends of these two figures are very similar, whereas in countries with huge changes in inflation rates these figures depart substantially over time (see e.g. the case of Bulgaria). For a country by country comparisons of the economic living conditions the relevant indicator is of course the GDP per capita at PPP.

In the rest of this section the economic indicators will be defined.



#### Gross Domestic Production [GDP]

The total market value of all goods and services produced within the political boundaries of an economy during a given period of time, usually one year. This is the government's official measure of how much output our economy produces

#### Gross Domestic Production nominal, real

Nominal GDP: The total market value, measured in current prices, of all goods and services produced within the political boundaries of an economy during a given period of time, usually one year. The key is that nominal gross domestic product is measured in current, or actual prices; the prices buyers actually pay for goods and services purchased. Nominal gross domestic product is also termed current gross domestic product.

Real GDP: The total market value, measured in constant prices, of all goods and services produced within the political boundaries of an economy during a given period of time, usually one year. The key is that real gross domestic product is measured in constant prices, the prices for a specific base year. Real gross domestic product, also termed constant gross domestic product, adjusts gross domestic product for inflation.

#### GDP in common currency (e.g. in €)

$$GDP, \epsilon, nom = \frac{GDP, national\ currency, nom.}{exchange\ rate to\ \epsilon}$$

## Purchasing Power Parity (PPP)

represents the relation of purchasing power of different currencies (in their respective countries) for the identical set of goods

$$GDP, \epsilon, PPP, nom = \frac{GDP, national\ currency, nom.}{\underbrace{national\ currency}_{PPP}}$$

#### GDP per capita

GDP devided by the number of the country's inhabitants

$$GDP/capita = \frac{GDP}{Population}$$

Example:

GDP Ukraine: 153 bn € (PPP) GDP Slovenia: 28 bn € (PPP) GDP/capita Ukraine: 3.085 € (PPP), GDP/capita Slovenia: 14.362 € (PPP)

## Value added

The increase in the value of a good at each stage of the production process. The value that's being increased is specifically the ability of a good to satisfy wants and needs either directly as a consumption good or indirectly as a capital good. A good that provides greater satisfaction has greater value. In essence, the whole purpose of production is to transform raw materials and natural resources that have relatively little value into goods and services that have greater value.



#### Value added per capita (of industry i)

$$value\ added\ /\ capita_i = \frac{value\ added_i}{population}$$

i: agriculture, wholesale retail trade, etc

#### nominal growth rate

nominal growth rate= 
$$\frac{GDP, national\ currency, nom_{t_1}}{GDP, national\ currency, nom_{t_{t-1}}} - 1$$

#### real growth rate

real growth rate= 
$$\frac{GDP, national\ currency, real._{t}}{GDP, national\ currency, real_{t-1}} - 1$$

#### Consumer prices

The percentage change in the price level from one period to the next is called the inflation rate. The two most common price indices used to measure the inflation are the Consumer Price Index (CPI) and the GDP price deflator.

#### Exchange rate

The price of one nation's currency in terms of another nation's currency. This is often called the foreign exchange rate in that it is the price determined in the foreign exchange market when people buy and sell foreign exchange. The exchange rate is specified as the amount of one currency that can be traded per unit of another.

#### Unemployment rate

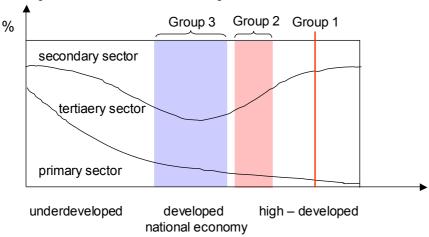
The proportion of the civilian labor force that is actively seeking employment, but is unemployed and not engaged in the production of goods and services.

#### Value added of economic branches (industries)

The economy may be devided into branches (industries) or sectors. The most well known and fundamental division is into the primary sector (agriculture), secondary sector (manufacturing) and the tertiary sector (services). The development of these sectors has been foreseen by Fourastié in 1949 as follows:



Figure 1: Trend estimation according to Fourastié



Source: J. Fourastié (1949), Le grand espoir du Xxe siécle

According to by Fourastié's vision less developed countries will be characterized by a large primary sector, developed countries will show a large manufacturing sector and highly developed contries exhibit a large service sector. The country grouping (group 1, 2 and 3) in this report will follow this basic insight.

The industry's (sector's) share in the GDP will be calculated as follows:

$$share \ of \ Sector_i = \frac{value \ added_i}{GDP}$$
 i...sector (industry)



# 1.2. <u>Structure of the presentation</u>

The discussion of the economic development of the countries relevant for this research project will start with an overview containing the most basic information in a comparative presentation (see chapter 2). It will become clear from this overview, that some of the relevant countries are on a very different stage of economic development than others. For the more detailed presentation of economic indicators (see chapters 3 to 5) we will therefore group the countries according to their Gross Domestic Product per capita (see Table 1).

Table 1: GDP per capita in EURO at PPP by country

| Table 1. GDT per capita                 |                  |                         |                                |
|---|------------------|-------------------------|--------------------------------|
| Country                                 | GDP, EUR,<br>PPP | GDP/capita,<br>EUR, PPP | Percentage of the EU – average |
| , |                  | 1999                    |                                |
| Germany                                 | 1,863            | 22,712                  | 107.5%                         |
| Austria                                 | 188              | 23,332                  | 110.4%                         |
| Czech Republic                          | 107              | 12,010                  | 56.8%                          |
| Hungary                                 | 103              | 10,315                  | 48.8%                          |
| Slovak Republic                         | 53               | 9,877                   | 46.7%                          |
| Slovenia                                | 28               | 14,362                  | 68.0%                          |
| Ukraine                                 | 153              | 3,085                   | 14.6%                          |
| Romania                                 | 122              | 5,456                   | 25.8%                          |
| Bulgaria                                | 39               | 4,758                   | 22.5%                          |
| Croatia                                 | 29               | 6,484                   | 30.7%                          |
| Macedonia                               | 8                | 4,177                   | 19.8%                          |
| Bosnia Herzegovina                      | Not available    | Not available           | Not available                  |
| Moldova                                 | Not available    | Not available           | Not available                  |
| Yugoslavia                              | Not available    | Not available           | Not available                  |
| EU-15                                   |                  | 21,131                  | 100.0%                         |

Source: OECD, WIIW, WIFO, IFIP, 2002

Table 1 suggests to form *three* groups of countries on the basis of GDP per capita. The first group contains Germany and Austria with a GDP p.c. above the EU average, the second group includes the Czech Republic, Hungary, the Slovac Republic and Slovenia with a GDP p.c. of about 50% to 70% of the EU average. In the third group with a GDP p.c. of 15% to 30% of EU average are Bulgaria, Croatia, Macedonia. Romania and Ukraine. The countries in the fourth group, Bosnia Herzegovina, Moldova and Yugoslavia can not be dealt with in a systematic way in this report because of insufficient availability of economic data.



# 2. Country overview

# 2.1. Size & population

# 2.1.1. Germany

Land area<sup>1</sup>: 357,021 km<sup>2</sup>

arable land: 33%
permanent crops: 1%
permanent pastures: 15%
forests and woodland: 31%
other: 20%

Population<sup>2</sup>: 83,029,536

Age structure: 0 - 14: 15.57%

15 – 64: 67.82% >64: 16.61%



Source: World Factbook, CIA

# 2.1.2. Austria

Land area<sup>3</sup>: 83,858 km<sup>2</sup>

arable land: 17% permanent crops: 1% permanent pastures: 23% forests and woodland: 39% other: 20%

Population<sup>2</sup>: 8,150,835

Age structure: 0 – 14: 16.57%

15 – 64: 68.05% >64: 15.38%



Source: World Factbook, CIA

<sup>&</sup>lt;sup>1</sup> World Factbook, CIA, 1993

<sup>&</sup>lt;sup>2</sup> World Factbook, CIA, 2001

<sup>&</sup>lt;sup>3</sup> World Factbook, CIA, 1996



# 2.1.3. Czech Republic

Land area<sup>1</sup>: 78,866 km<sup>2</sup>

arable land: 41%
permanent crops: 2%
permanent pastures: 11%
forests and woodland: 34%
other: 12%

Population<sup>2</sup>: 10,264,212

Age structure: 0 - 14: 16.09%

15 – 64: 69.99% >64: 13.92% GERMANY

POLAND

Decin.

Liberec

Ustí nad
Labem

PRAGUE

Plzen gonem

Ceské
Budejovice

Norania

Brando

SLOVAKIA

HUNGARY

Source: World Factbook, CIA

# 2.1.4. Hungary

Figure 5: Map of Hungary

Land area<sup>3</sup>: 93,030 km<sup>2</sup> Popula

arable land: 51% permanent crops: 3.6% permanent pastures: 12.4% forests and woodland: 19% other: 14%

Population<sup>2</sup>: 10,106,017

Age structure: 0 - 14: 16.63%

15 – 64: 68.66% >64: 14.71%

AUSTRIA

\*Györ

BUDAPEST

Debrecen

Szombathely

Székesfehérvár

Dunaújváros

Kecskemét

SLOVENIA

Szeged

Szeged

YUGOSLAVIA

Source: World Factbook, CIA

<sup>1</sup> World Factbook, CIA, 1993

<sup>2</sup> World Factbook, CIA, 2001

<sup>3</sup> World Factbook, CIA, 1999



# 2.1.5. Slovak Republic

Land area<sup>1</sup>: 48,845 km<sup>2</sup> Population<sup>1</sup>: 5,414,937

arable land: 31% Age structure: 0-14: 16.09% permanent crops: 3% 15-64: 69.60% permanent pastures: 17% >64: 11.54%

forests and woodland: 41% other: 8%

Figure 6: Map of Slovak Republic

O 25 50 km
O 26 Kosice

POLAND
O 27 Kosice

Wartin
Prešov

Imava
Banskā
Bystrica
Lučenec

HUNGARY

Source: World Factbook, CIA

# 2.1.6. Slovenia

Land area<sup>2</sup>: 20,253 km<sup>2</sup> Population<sup>3</sup>: 1,930,132

20%

arable land: 12% Age structure: 0-14: 16.09% permanent crops: 3% 15 – 64: 69.61% permanent pastures: 24% >64: 13.30% forests and woodland: 54%

Figure 7: Map of Slovenia

other:



Source: Worldfactbook, CIA

<sup>&</sup>lt;sup>1</sup> World Factbook, CIA

<sup>&</sup>lt;sup>2</sup> World Factbook, CIA, 1996

<sup>&</sup>lt;sup>3</sup> World Factbook, CIA, 2001



# 2.1.7. Ukraine

Land area<sup>1</sup>: 603,700 km<sup>2</sup>

arable land: 58%
permanent crops: 2%
permament pastures: 13%
forests and woodland: 18%
other: 9%

Population<sup>2</sup>: 48,760,474

Age structure: 0 – 14: 17.30%

15 – 64: 68.57% >64: 14.13%



Source: Worldfactbook, CIA

# 2.1.8. Romania

Land area1: 237,500 km2

arable land: 41%
permanent crops: 3%
permament pastures: 21%
forests and woodland: 29%
other: 6%

Population<sup>2</sup>: 22,364,022

Age structure: 0 - 14: 17.95%

15 – 64: 68.51% >64: 13.54%



Source: Worldfactbook, CIA

<sup>2</sup> Worldfactbook, CIA, 2001

<sup>&</sup>lt;sup>1</sup> Worldfactbook, CIA, 1993



# 2.1.9. Bulgaria

Land area<sup>1</sup>: 110,910 km<sup>2</sup>

arable land: 43% permanent crops: 2% permanent pastures: 14% forests and woodland: 38% other: 3%

Population<sup>2</sup>: 7,707,495

Age structure: 0 - 14: 15.11%

15 – 64: 68.17% >64: 16.72% Figure 10: Map of Bulgaria

O 50 100 km
O 50 100 mi

R O M A N I A

Vidin Lom
Pleven

Varna

Pleven

Varna

Stara

Zagora

Ruse

Stara

Varna

Stara

Aegean

Sea

Aegean

Sea

Source: Worldfactbook, CIA

# 2.1.10. <u>Croatia</u>

Land area<sup>3</sup>: 56,542 km<sup>2</sup>

arable land: 21%
permanent crops: 2%
permenant pastures: 20%
forests and woodland: 38%
other: 19%

Population<sup>2</sup>: 4,334,142

Age structure: 0 – 14: 18.16%

15 – 64: 66.61% >64: 15.23%



Source: Worldfactbook, CIA

<sup>&</sup>lt;sup>1</sup> World Factbook, CIA, 1999

<sup>&</sup>lt;sup>2</sup> World Factbook, CIA, 2001

<sup>&</sup>lt;sup>3</sup> Worldfactbook, CIA, 1993



#### 2.1.11. **Macedonia**

Land area<sup>1</sup>: 25,333 km<sup>2</sup>

24% arable land: permanent crops: 2% permament pastures: 25% forests and woodland: 39% other: 10%

Population<sup>2</sup>: 2,046,209

Age structure: 0 - 14: 22.92%

15 – 64: 66.94% >64: 10.14%

Figure 12: Map of Macedonia



Source: Worldfactbook, CIA

Data collection date: 1993, Source: Worldfactbook, CIA
 Data collection date: 2001, Source: Worldfactbook, CIA



# 2.2. GDP - Trend

The main indicator for the economic development of the countries (GDP/capita) is shown in Table 2 and Figure 13 below. Once again, the partition of the countries into three groups is substantiated by these data.

Table 2: Comparison of the historical trend of the GDP/capita, €, PPP, nom.

| ·              |       |       |       | GDP / | capita, | €, PPP, | nom.  |       |       |       |
|----------------|-------|-------|-------|-------|---------|---------|-------|-------|-------|-------|
| Country\Sector | 1990  | 1991  | 1992  | 1993  | 1994    | 1995    | 1996  | 1997  | 1998  | 1999  |
| Germany        |       | 16514 | 17513 | 17568 | 18734   | 19420   | 20277 | 20962 | 21802 | 22712 |
| Austria        | 15694 | 16754 | 17450 | 18070 | 18929   | 19461   | 20635 | 21568 | 22221 | 23332 |
| Czech Rep.     | 10021 | 9244  | 9665  | 9778  | 10217   | 11262   | 12020 | 11971 | 11859 | 12010 |
| Hungary        | 7216  | 7155  | 7311  | 7377  | 7790    | 8330    | 8613  | 9077  | 9677  | 10315 |
| Slovak Rep.    | 7486  | 6657  | 6515  | 6325  | 6758    | 7916    | 8532  | 9084  | 9559  | 9877  |
| Slovenia       | 10110 | 9543  | 9519  | 9933  | 10713   | 11607   | 12192 | 12835 | 13513 | 14362 |
| Ukraine        | 6434  | 5751  | 5352  | 4589  | 3636    | 3340    | 3080  | 3021  | 3024  | 3085  |
| Romania        | 5358  | 4825  | 4716  | 4851  | 5166    | 5768    | 6112  | 5779  | 5543  | 5456  |
| Bulgaria       | 4867  | 4491  | 4703  | 4410  | 4788    | 4987    | 4647  | 4372  | 4553  | 4758  |
| Croatia        | 5990  | 5173  | 4844  | 4354  | 4714    | 5216    | 5832  | 6153  | 6473  | 6484  |
| Macedonia      | 3817  | 3309  | 3107  | 3137  | 3705    | 3770    | 3845  | 3887  | 4030  | 4177  |

Source: IFIP own calculation, based on Data from OECD, Statistic Austria and WIIW, 2001

25000 Group 1 20000 GDP/capita, €, PPP, nom Group 2 15000 10000 5000 Group 3 0 1990 1991 1992 1993 1994 1996 1997 1998 1999 --- Czech Republic --- Germany --- Austria Hungary → Slovak Republic \_Slovenia — Ukraine – Romania -x-Bulgaria —<del>∗</del>— Croatia --- Macedonia

Figure 13: Countries of CEEC1, 2 and 3: GDP/capita, €, PPP, nom.

Source: IFIP own calculation, based on Data from OECD, Statistic Austria and WIIW, 2001



# 2.3. Comparison of selected economic sectors

In this section the development of economic branches in the 11 countries will be described in a comparative way. To start with a picture of the scale of the branches at the end of the considered time period (1999), in Table 3 the value added of the selected branches is shown in comparable money units (per capita, €, PPP). Furthermore, the share of the respective branches' value added is given.

The partition into three groups of countries is reconfirmed by the shares of the agricultural sector and the manufacturing sector. Whereas in Germany and Austria agriculture contributes not more than 2% to GDP, in the second group this sector contributes 3% to 5%, and in the third group 7% to 19%. Furthermore, the contribution to GDP of the manufacturing industry is generally larger in the group 2 and 3 countries than in the group 1 countries (see the explanation in section 1.1).

In order to give a more detailed picture of the development of important sectors, three branches have been selected, namely agriculture, manufacturing and wholesale/retail trade. The per capita production values of these branches are shown in the following diagrams, comparing the countries per group.

Whereas the shares in GDP of *agricultural* production show the expected differences between the country groups, in terms of (comparable) value added figures, Austria is rather in one group with the countries of group2 and with Croatia, Macedonia and Ukraine (see Figure 14, Figure 15, Figure 16).

In the *manufacturing* branch, the level of per capita value added in the group 1 countries is about  $\in$  5.000, in the group 2 countries roughly the half to three quarters of this level (€ 2.500 to € 3.000), and in the group 3 countries the production level is roughly one fifth (€ 1.000 to € 1.500) of the group 1 level (see Figure 17 to Figure 19).

A very similar picture is to be observed in the third sector. When we look at the *wholesale* and *retail* trade branch at the end of the nineties (see Figure 20 to Figure 22), the range of per capita production starts at € 300 to € 600 in the group 3 countries, increases to € 1.000 to € 1.500 in the group 2 countries and goes up to € 2.200 in Germany and € 2.700 in Austria.

Table 3: Value added per capita in EURO at PPP by country

| Sector \ Country Germany Austria  | Germany | < \  | ustria          |          | Czech R. Hungary                                | 모    | ngary   | S  | Slovak R.              | Slov | Slovenia | Ď: | Ukraine           |    | Romania |     | Bulgaria |     | Croatia |     | Macedonia | Т.  |
|---|---------|------|-----------------|----------|---|------|---------|----|------------------------|------|----------|----|-------------------|----|---------|-----|----------|-----|---------|-----|-----------|-----|
|   | value % | , Vi | alue %          | <u>ر</u> | value % value % value                           | val  | % en    | Va | value % value %        | valu | %<br>e   | Va | value %           |    | value % |     | value %  |     | value % |     | value %   | 0   |
| Agriculture 1)  | 249     | _    | 249 1 460 2     | 7        | 410 3 50  | က    | 2       | 2  | 402 4                  | 4    | 456      | က  | 346 11            |    | 795 15  |     | 892      | 19  | 453     | 7   | 406       | 10  |
| Manufactoring 2)  | 5.180   | 23   | 4.966           | 21       | 5.180 23 4.966 21 3.761 31 2.562                |      |         | 25 | 2.612 26               |      | 3.946    | 27 | 998               | 28 | 1.499   | 27  | 1.057    | 22  | 1.318   | 20  | 867       | 21  |
| Construction 3)   | 1.114   | 2    | 1.114 5 1.818   | 00       | 827 7   | _    | 415     | 4  | 514                    | 2    | 763      | 2  | 136               | 4  | 291     | 2   | 158      | က   | 364     | 9   | 264       | 9   |
| Transport 4)  | 1.173   | 2    | 1.173 5 1.531 7 | _        | 1.066   | 6    | 895     | တ  | 987 10                 |      | 1.012    | _  | 344               | 7  | 476     | တ   | 348      | 7   | 524     | 00  | 300       | 7   |
| Hotels <sup>5)</sup>  | 258 1   | _    | 864             | 4        |   |      | 175     | 7  |                        |      | 369      | က  |                   |    | 202     | 4   | 87       | 7   | 148     | 7   |           |     |
| Retail <sup>6)</sup>  | 2.186   | 10   | 2.765           | 12       | $2.186 \ 10 \ 2.765 \ 12 \ 1.583^7 \ 13 \ 1.05$ | 3    | _       |    | 1.383 <sup>7)</sup> 14 |      | 1.438    | 9  |                   |    | 546     | 10  | 324      | 7   | 617     | 10  |           |     |
| Other <sup>6)</sup>   | 12.553  | 22   | 10.928          | 46       | 12.553 55 10.928 46 4.363 37 4.716              | . 78 |         | 45 | 3.980 41               |      | .379     | 15 | 6.379 45 1.392 46 | 46 | 1.648   | 30  | 1.892    | 40  | 3.060   | 47  | 2.340     | 56  |
| GDP p.c., €, PPP   22.712 100 23.332 100 12.010 100 10.315 100 9.877 100 14.363 100 3.085 100 5.456 100 4.758 100 6.484 100 4.177 100 | 22.712  | 100  | 23.332          | 100      | 12.010 10                                       | 10 1 | 0.315 1 | 00 | 9.877 100              | 0 14 | .363 10  | 00 | 3.085             | 00 | 5.456   | 100 | 4.758    | 100 | 6.484   | 100 | 4.177     | 100 |
| GDP, €, PPP, bn   1.863   | 1.863   |      | 188             |          | 107   |      | 103     |    | 53                     |      | 28       |    | 153               |    | 122     |     | 39       |     | 29      |     | 8         |     |
|   |         |      |                 |          |   |      |         |    |                        |      |          |    |                   |    |         |     |          |     |         |     |           |     |

Note: 1) Agriculture, 2) Total manufacturing, 3) Construction, 4) Transport- storage and telecommunication,

5) Hotels and restaurants, 6) Wholesale, retail trade and repair motor vehicle

7) Includes the Data of Hotels and restaurants

Source: OECD, Federal Statistical Office Germany, Statistic Austria, WIIW, IFIP

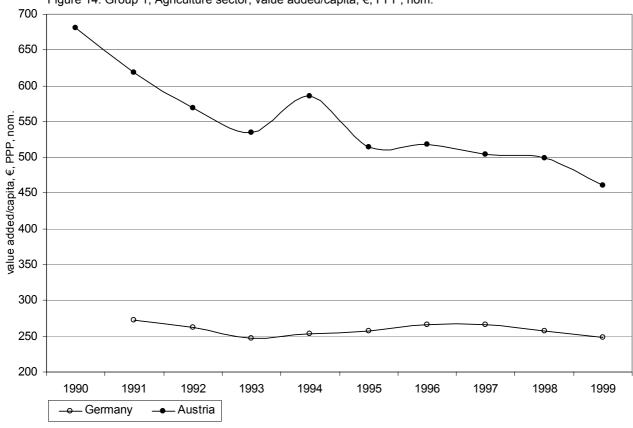
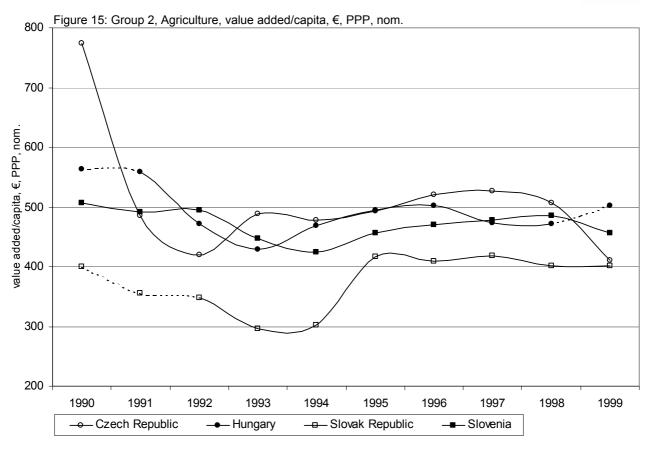


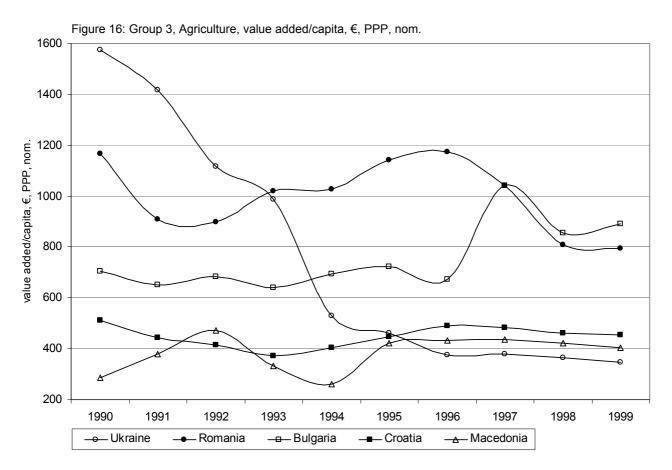
Figure 14: Group 1, Agriculture sector, value added/capita, €, PPP, nom.

Source: IFIP own calculation, based on Data of OECD (2001) and Statistic Austria (2001)





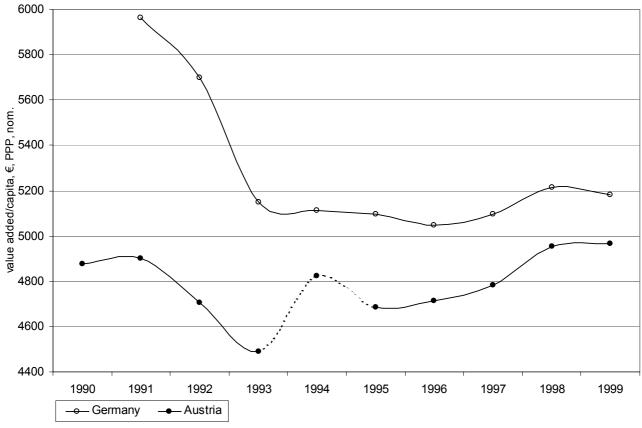
Source: IFIP own calculation based on Data of WIIW



Source: IFIP own calculation, based on Data of WIIW

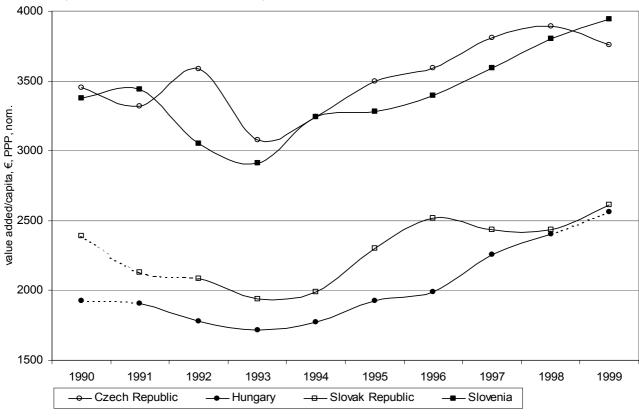


Figure 17: Group 1, Total manufacturing, value added/capita, €, PPP, nom.



Source: IFIP own calculation, based on Data from OECD (2001) and Statistic Austria (2001)

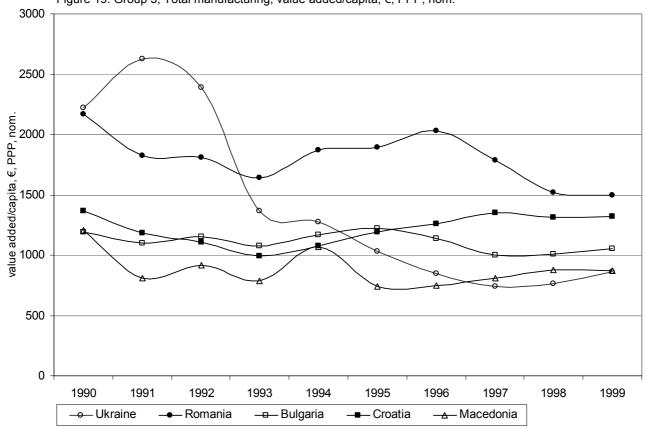
Figure 18: Group 2, Total manufacturing, value added/capita, €, PPP, nom.



Source: IFIP own calculation, based on Data from WIIW, 2001 (2001)

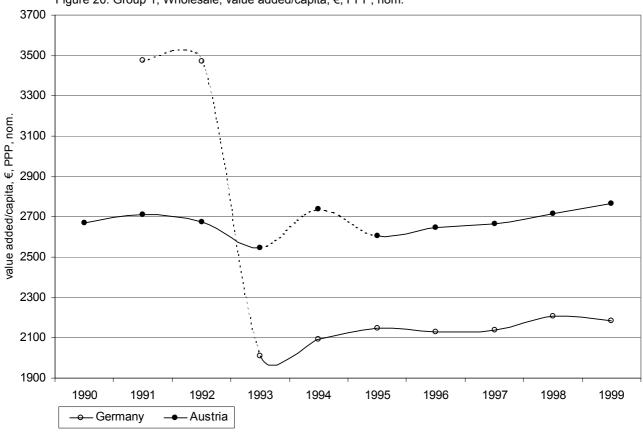


Figure 19: Group 3, Total manufacturing, value added/capita, €, PPP, nom.



Source: IFIP own calculation, based on Data from WIIW, 2001 (2001)

Figure 20: Group 1, Wholesale, value added/capita, €, PPP, nom.



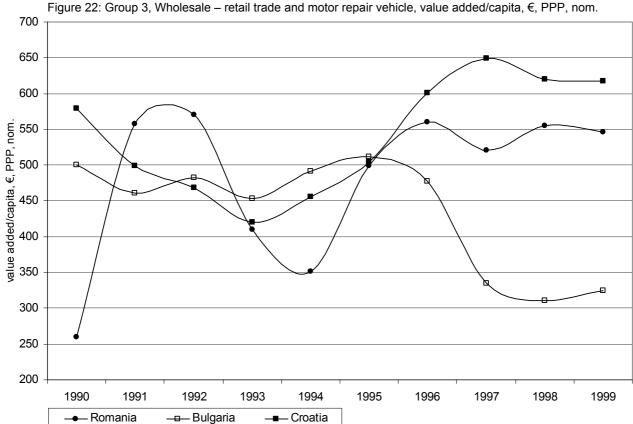
Source: IFIP own calculation, based on Data from OECD and Statistic Austria



value added/capita, €, PPP, nom. 1200 1000 1000 --- Czech Republic — Hungary -B-Slovak Republic 

Figure 21: Group 2, Wholesale – retail trade and motor repair vehicle, value added/capita, €, PPP, nom.

Source: IFIP own calculation, based on Data from WIIW



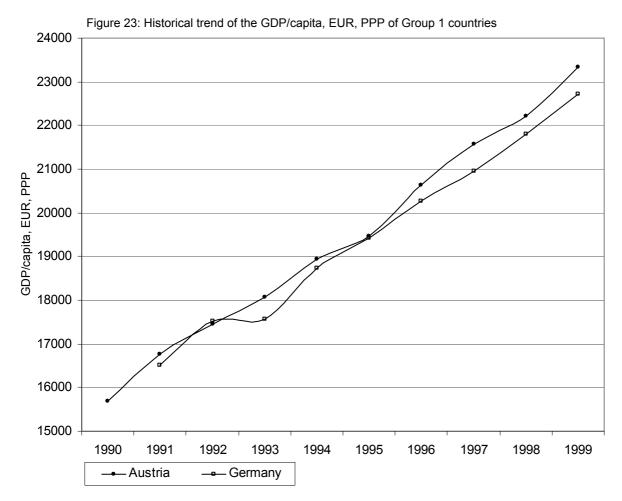
Source: IFIP own calculation, based on Data from WIIW, 2001



# 3. The development of group 1 countries

# 3.1. GDP trends

Figure 23 shows that the countries in group1, Germany<sup>1</sup> and Austria, not only had quite similar and constant trends of the GDP/capita (PPP) in the period analysed but also that their respective GDP values per capita do not differ significantly. In the 1990s, the GDP/capita at PPP in Austria increased almost by 49% and in Germany by 38%. The average real growth rate in Austria during the 1990s was 2,5%, in Germany 1,85%.



Source: IFIP own calculation, based on Data from WIIW, 2001

<sup>1</sup> The German unification in 1990 is the reason why the trend representation of Germany begins in 1991.



# 3.2. Germany

#### <u>History</u>

After the disbanding of the USSR and the collapse of the political system of the German Democratic Republic, the unification of West and East Germany took place on October 3 in 1990. From the first day on, the new state was also a monetary union, and the "East-Mark" was exchanged to the "West-Mark" on parity. While this was acclaimed frantically by most of the inhabitants of the "new Laender", it proved to be disastrous for the east German companies: they had to face a revaluation of their exchange rate (against third countries) by 30% to 50%. No company depending significantly on export can survive such a deterioration of it's international competitiveness. From an economic point of view, the breakdown of many eastern companies were only a logical consequence of this kind of unification policy. Still today, unemployment rates are quite different in western and eastern regions of Germany, e.g.: 8,7% in Bavaria compared to 22,2% in Mecklenburg. Nevertheless Germany is one of the economically most powerfull countries. Despite the problems of unification Germany's GDP per capita is clear above the EU average (see Table 1 and Table 4). Germany is also a member of the EMU since January 2002.

Table 4: Germany - Basic data

| Table 4. Octiliarly - Das | io ac | itu    |        |        |        |        |        |        |        |        |
|---------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                           |       | 1991   | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |
| GDP, DM, nom.             | bn    | 2,938  | 3,155  | 3,235  | 3,394  | 3,523  | 3,587  | 3,661  | 3,774  | 3,861  |
| Exchange rate             |       | 2,076  | 2,039  | 1,95   | 1,939  | 1,868  | 1,899  | 1,976  | 1,991  | 1,956  |
| GDP, € nom.               | bn    | 1,502  | 1,613  | 1,654  | 1,736  | 1,801  | 1,834  | 1,872  | 1,929  | 1,974  |
| GDP, €, PPP, nom.         | bn    | 1,317  | 1,406  | 1,423  | 1,524  | 1,583  | 1,659  | 1,719  | 1,789  | 1,863  |
| GDP/capita, €, nom.       |       | 17,963 | 19,455 | 20,634 | 21,684 | 23,059 | 22,956 | 22,759 | 23,421 | 24,164 |
| GDP/capita, €, PPP        |       | 16,514 | 17,513 | 17,568 | 18,734 | 19,420 | 20,277 | 20,962 | 21,802 | 22,712 |
| nom. growth rate          | %     |        | 6.05   | 0.31   | 6.64   | 3.66   | 4.41   | 3.38   | 4.01   | 4.17   |
| real GDP change           | 0.4   |        |        |        |        |        |        |        |        |        |
| compared to 1991          | %     |        | 2,24   | 1,13   | 3,50   | 5,29   | 6,10   | 7,59   | 9,70   | 11,73  |
| real growth rate          | %     |        | 2.24   | -1.09  | 2.35   | 1.73   | 0.77   | 1.40   | 1.96   | 1.85   |
| Sector primary            | %     | 1.31   | 1.24   | 1.19   | 1.20   | 1.20   | 1.24   | 1.22   | 1.16   | 1.10   |
| secondary                 | %     | 34.25  | 33.14  | 31.16  | 30.76  | 30.11  | 29.39  | 29.00  | 28.70  | 27.90  |
| tertiary                  | %     | 64.44  | 65.62  | 67.65  | 68.04  | 68.69  | 69.37  | 69.78  | 70.14  | 71.00  |
| Agriculture               | %     | 1.31   | 1.24   | 1.19   | 1.20   | 1.20   | 1.24   | 1.22   | 1.16   | 1.10   |
| Total manufacturing       | %     | 28.65  | 26.95  | 24.85  | 24.21  | 23.78  | 23.45  | 23.40  | 23.47  | 22.96  |
| Construction              | %     | 5.60   | 6.19   | 6.32   | 6.55   | 6.33   | 5.94   | 5.60   | 5.23   | 4.94   |
| Transport, etc.           | %     |        |        | 5.44   | 5.33   | 5.39   | 5.17   | 5.34   | 5.35   | 5.20   |
| Hotels & Restaurants      | %     |        |        | 1.29   | 1.27   | 1.22   | 1.18   | 1.18   | 1.17   | 1.14   |
| Wholesale, etc.           | %     | 16.69  | 16.43  | 9.69   | 9.89   | 10.02  | 9.88   | 9.82   | 9.95   | 9.69   |
| Other                     | %     | 47.75  | 49.20  | 51.23  | 51.54  | 52.06  | 53.14  | 53.44  | 53.67  | 54.97  |
| Consumer prices           | %     | 4.03   | 5.09   | 4.42   | 2.76   | 1.72   | 1.42   | 1.89   | 0.93   | 0.58   |
| Exchange rate             |       | 2.076  | 2.039  | 1.950  | 1.939  | 1.868  | 1.899  | 1.976  | 1.991  | 1.956  |
| Unemployment rate         | %     | 8.79   | 7.74   | 8.93   | 9.58   | 9.44   | 10.39  | 11.48  | 11.08  | 10.51  |

Note: The monetary data has been converted from DM toEURO with the conversion rate of 1,95583 Source: Eurostat, Federal Reserve Statistical Release, Federal Statistical Office Germany, WIFO, IFIP



#### Interpretation of the data

The primary and the secondary sector loose out on their share in GDP in Germany as in most other industrialised countries (Table 4). On the other hand, the tertiary sector's share is growing, for example in the 1990s by about 6,5 percentage points (a growth in GDP share which is almost exclusively due to the decline of the share of the secondary sector).

Figure 24 shows the trend of the value added of important economic sectors. The rather dramatic decrease from 1992 to 1993 of the wholesale sector is a purely statistical effect of separating from 1993 onwards the transport (storage, telecom) sector from the wholesale sector. Taking this into account, no significant changes of the GDP-shares of the sectors can be observed (see Figure 25).

#### Agricultural sector

The agricultural (primary) sector produces not more than roughly one percent of the GDP. Only a small part of agrarian production is organic production. The majority of farmers use conventional methods of production<sup>1</sup>. However, in 1998 Germany signed the European Community Directive which requires a more cautious handling of chemicals in agricultural production processes.

#### Construction sector:

In the aftermath of the German unification, a boom in building and rebuilding activities was responsible for a rather good performance of the construction industry (see Figure 24). The nominal added value of this sector increased by about 16% from 1991 in 1999. However, the sector's share fell by about 0,7 percentage points (see Table 4) because the real added value increased from 1991 to 1994 by 21% and decreased thereafter by 19%, so that the sectoral share was actually falling.

#### Hotels and restaurant sector:

Again, this sector is separately presented only from 1993 onwards. In nominal terms, the sector increased it's value added by about 5,8% over the period, and the share in GDP fell slightly (see Table 4).

#### Total manufacturing

Manufacturing is still the most important single branch in Germany (see Figure 24). In 1999 the real output was about 2% greater than 1993 and it was growing continuously (except for 1993). It was already mentioned that the secondary sectors's share in GDP is declining, the share of the manufacturing industry decreased from 28,7% in 1991 down to 23% in 1999 (see Table 4).

#### Transport, storage and telecommunication sector:

The separate statistical measurement of this sector started in the year 1993. Until that time it was a part of the wholesale, retail trade, repair motor vehicle sector. The sector output was falling by an average rate of -0.7% per year, and the GDP-share fell slightly to about 5,2% (see Table 4 and Figure 25).

Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit [http://www.bmu.de] [Federal Environment Ministry]



## Wholesale, retail trade, repair motor vehicle sector:

From 1993 onwards, when transport (storage, telcom) sector was separated from wholesale as a statistical unit, the sector grew slowly (average growth rate: 3%), showing no change in it's GDP-share (see Table 4)

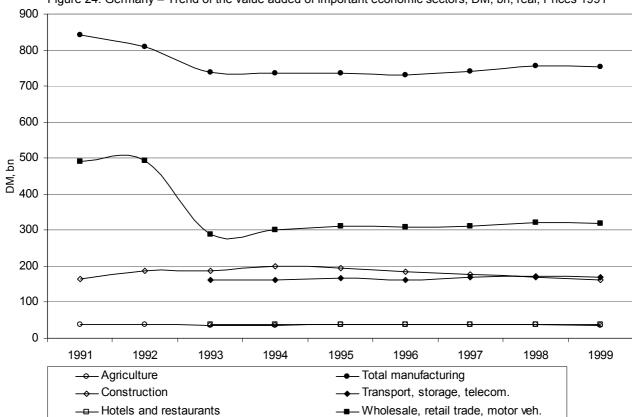


Figure 24: Germany – Trend of the value added of important economic sectors, DM, bn, real, Prices 1991

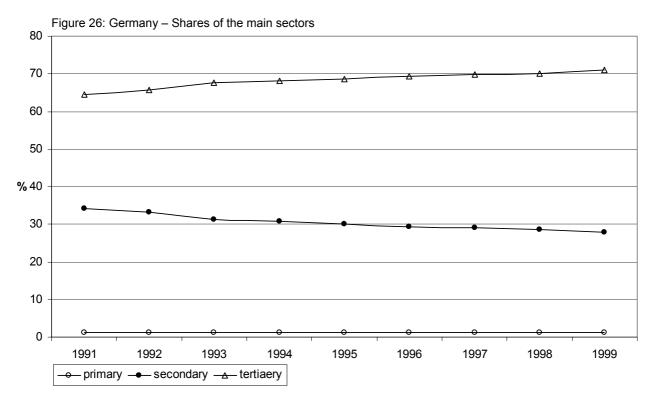
Source: IFIP own calculation based on data from the Federal Statistical Office Germany, 2002



**%** 15 — Agriculture Total manufacturing → Construction - Transport, storage, telecom. — Hotels and restaurants ■ Wholesale, retail trade, repair motor veh.

Figure 25: Germany – development of the sectoral GDP-shares

Source: IFIP own calculation based on data from the Federal Statistical Office Germany, 2002



Source: IFIP own calculation based on Data from the Federal Statistical Office Germany, 2002



# 3.3. Austria

#### <u>History</u>

The 1990s have been a period of important changes in the Austrian economy. The preparation for the accession to the EU, the entering of the EU in 1995 and the preparation for the European Monetary Union at the end of the decade all had decisive effects on the structure and institutions of Austria's economy. In particular, trade liberalisation and the trend towards more private and international ownership of companies may be mentioned. Today, Austria is part of the European Monetary Union (1 EURO = 13,7603 ATS).

Table 5: Austria - Basic data

| Table 5. Austria – basi             | ic uc | ııa    |        |        |        |        |        |        |        |        |        |
|-------------------------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                     |       | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |
| GDP, ATS, nom.                      | bn    | 1,838  | 1,971  | 2,089  | 2,160  | 2,276  | 2,371  | 2,450  | 2,511  | 2,614  | 2,706  |
| Exchange rate                       |       | 14.494 | 14.608 | 14.349 | 13.720 | 13.641 | 13.144 | 13.363 | 13.904 | 14.004 | 13.760 |
| GDP, €, nom.                        | bn    | 133.60 | 143.23 | 151.83 | 156.94 | 165.41 | 172.29 | 178.05 | 182.49 | 189.94 | 196.66 |
| GDP, €, PPP, nom.                   | bn    | 121.3  | 130.9  | 138.1  | 144.4  | 152    | 156.6  | 166.3  | 174.1  | 179.5  | 188.8  |
| GDP/capita, €, nom.                 |       | 17,286 | 18,332 | 19,185 | 19,639 | 20,599 | 21,410 | 22,093 | 22,629 | 23,522 | 24,356 |
| GDP/capita, €, PPP                  |       | 15,694 | 16,754 | 17,450 | 18,070 | 18,929 | 19,461 | 20,635 | 21,568 | 22,221 | 23,332 |
| nom. growth rate                    | %     | 8.2    | 7.20   | 6.01   | 3.36   | 5.40   | 4.16   | 3.34   | 2.49   | 4.08   | 3.54   |
| real GDP change<br>compared to 1990 | %     |        | 3,40   | 4,74   | 5,27   | 7,79   | 9,63   | 11,82  | 14,61  | 18,63  | 21,95  |
| real growth rate                    | %     | 4.72   | 3.32   | 2.30   | 0.42   | 2.61   | 1.62   | 2.00   | 1.59   | 3.52   | 2.81   |
| Sector primary                      | %     | 3.34   | 2.96   | 2.72   | 2.57   | 2.76   | 2.39   | 2.37   | 2.28   | 2.19   | 1.99   |
| secondary                           | %     | 30.36  | 30.33  | 29.48  | 28.70  | 30.79  | 29.21  | 29.16  | 29.19  | 29.48  | 29.29  |
| tertiary                            | %     | 66.30  | 66.71  | 67.79  | 68.72  | 66.44  | 68.40  | 68.47  | 68.53  | 68.32  | 68.72  |
| Agriculture                         | %     | 3.34   | 2.96   | 2.72   | 2.57   | 2.76   | 2.39   | 2.37   | 2.28   | 2.19   | 1.99   |
| Total manufacturing                 | %     | 23.90  | 23.47  | 22.53  | 21.60  | 22.78  | 21.79  | 21.54  | 21.63  | 21.79  | 21.44  |
| Construction                        | %     | 6.46   | 6.86   | 6.95   | 7.11   | 8.01   | 7.42   | 7.63   | 7.56   | 7.69   | 7.85   |
| Transport, etc.                     | %     | 7.23   | 7.39   | 7.57   | 7.65   | 0.83   | 6.98   | 6.48   | 6.84   | 6.83   | 6.61   |
| Hotels & Restaurants                | %     | 3.59   | 3.69   | 3.78   | 3.82   | 3.96   | 3.70   | 3.65   | 3.59   | 3.66   | 3.73   |
| Wholesale, etc.                     | %     | 13.08  | 12.99  | 12.79  | 12.25  | 12.93  | 12.11  | 12.08  | 12.05  | 11.95  | 11.94  |
| Other                               | %     | 42.40  | 42.64  | 43.65  | 45.00  | 48.72  | 45.60  | 46.26  | 46.06  | 45.88  | 46.44  |
| Consumer prices                     | %     | 3.30   | 3.29   | 4.07   | 3.57   | 3.04   | 2.23   | 1.87   | 1.30   | 0.89   | 0.59   |
| Exchange rate                       |       | 14.49  | 14.61  | 14.35  | 13.72  | 13.64  | 13.14  | 13.36  | 13.90  | 14.00  | 13.76  |
| Unemployment rate                   | %     | 4.12   | 4.53   | 4.71   | 5.40   | 5.28   | 5.27   | 5.64   | 5.66   | 5.73   | 5.32   |

Note: The monetary data has been converted from ATS to EURO with the conversion rate of

13.7603. Reason: usual procedure of the statistical offices of the EU.

Source: Federal Reserve Statistical Release, Statistic Austria, WIFO, IFIP



#### Interpretation of data

The share of the primary sector was continuously decreasing during the last 10 years from 3,3% to 2%, the value added of the sector decreased by about 12% (about 27% in real terms). Also the secondary sector's share was falling about 1%-point while increasing its value added by about 42% (about 18% in real terms). The tertiary sector grew during that period by about 2,5 percentage points.

Figure 27 shows the absolute numbers of value added of important economic sectors at 1990 prices. The trend of all sectors is quite constant growth with the exception of the transport sector<sup>1</sup>. In priniciple there was no significant change of the GDP-shares of the sectors (see Figure 28). Only the construction sector grew relatively larger and ranks now before the transport sector.

#### Agricultural sector

The agricultural sector was particularly hit by Austria's entrance into the EU in 1995. After major reorganisations 70% of the agricultural companies<sup>2</sup> take part in the environmental programm ÖPUL, i.e. in ecological-oriented farming (EU – average = 20%). It has already been mentioned that the value added of the sector was declining, it is therefore no surprise that the labour force diminished substantially, moving mainly to the manufacturing industries.

#### Construction sector:

The construction sector was growing at a relatively constant annual rate (average: nearly 7%, average real growth rate 4,6%) and in 1999 the value added (nom.) was about 78% higher than in 1990 (value added at constant prices was about 48% higher  $\rightarrow$  see Figure 27). But the sector increased not only in absolute but also in relative terms: it's share in GDP grew from a value of 6,5% to 7,9% (Table 5).

#### Hotels and restaurants sector:

The value added of this sector increased in real terms over the period by about 27% (Figure 27) without changing it's share in GDP significantly (see Table 5).

#### Manufacturing industry:

The manufacturing sector increased it's nominal value added during the 1990s by about 32% and at constant prices by about 10% (see Figure 27) while the sectoral share in GDP was going down by about 2,5 percentage points (see Table 5). The growth trend of this sector is since 1995 very continuous.

#### Transport, storage and telecommunication sector:

Measured by nominal values the transport, storage and telecommunication sector grew by about 34% over the period (Figure 27 shows the growth rate at constant prices which was about 11%), which is again less than GDP growth so that the sector share fell by about a half percentage points (Table 5).

The developments in this sector are heavily influenced by Austria's and EU transport policy. For example, agreements between the EU and Austria aiming at the reduction of NOx and other emissions of commercial trucks have reduced partially and/or restructured heavy traffic through and within Austria. To give exemplary figures: between 1993 and

<sup>&</sup>lt;sup>1</sup> The apparent downswing of the transport sector in the year 1994 may result from a error in the data.

<sup>&</sup>lt;sup>2</sup> Bundespressedienst - Österreich: "Tatsachen und Zahlen" Wien, 2000 [Federal press service – Austria: "Facts and numbers" Vienna, 2000]



1996 truck traffic was rising by about 20% whereas NOx emissions were reduced more than required by the agreement<sup>1</sup>.

#### Wholesale, retail trade, repair motor vehicle sector:

Also this sector grew constantly by about 34% (nom.) over the period, or about 11% (real) see Figure 27 and Table 4, but again less than GDP in total, so that it's share in GDP decreased by about one percentage point (see Table 5 and Figure 28).

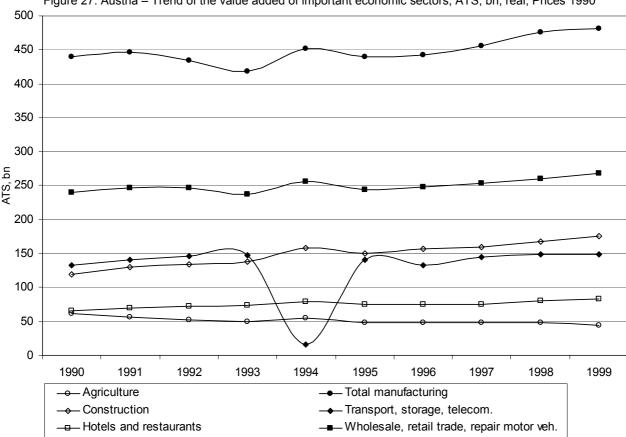


Figure 27: Austria - Trend of the value added of important economic sectors, ATS, bn, real, Prices 1990

<sup>1</sup> WIFO: "Erste Bewertung des Transitvertrags", Wilfried Puwein, 24. Feb. 1998 [WIFO: "First evaluation of the transit pact", Wilfried Puwein, 24. Feb. 1998]

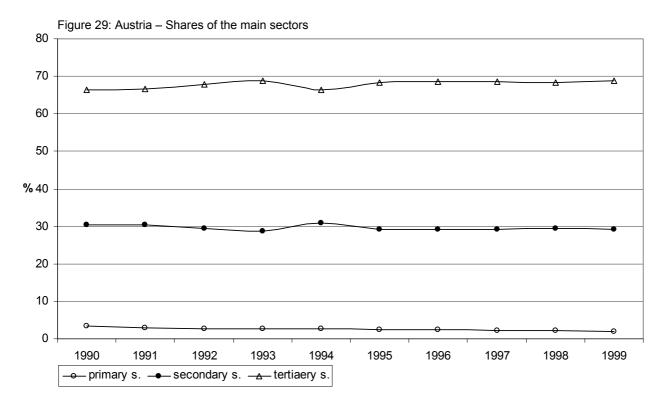
Source: IFIP own calculation based on Data of Statistic Austria and WIFO



% — Agriculture Total manufacturing → Construction Transport, storage, telecom. — Hotels and restaurants - Wholesale, retail trade, repair motor veh.

Figure 28: Austria – development of the sectoral GDP-shares

Source: IFIP own calculation based on Data of Statistic Austria and WIFO



Source: IFIP own calculation based on Data of Statistic Austria and WIFO



# 4. The development of group 2 countries

# 4.1. GDP trends

All countries in this group suffered from the system change (market shock) at the beginning of the 1990s. With the notable exception of Hungary, the shock also caused the GDP in these countries to contract in monetary terms for different lengths of time (Figure 30)

Between 1991 and 1993 all of the countries of Group 2 were able to stop the downswing and especially Slovenia impressed by here excellent development. An overview over the economic situation at the end of the year 1999 offer Table 1 and Figure 30.

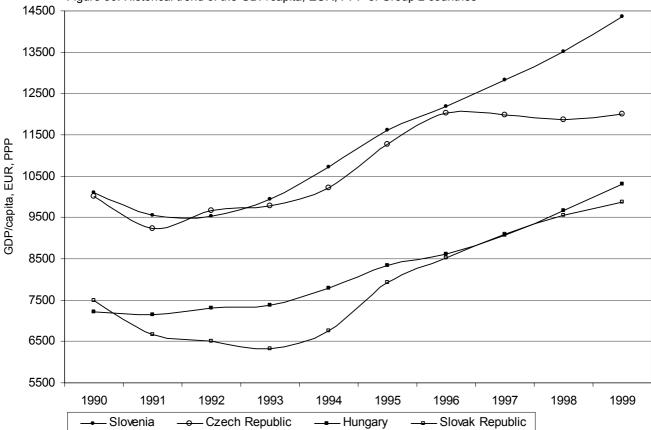


Figure 30: Historical trend of the GDP/capita, EUR, PPP of Group 2 countries

Source: IFIP own calculation, based on Data from WIIW, 2001



# 4.2. Czech Republic

On January 1<sup>st</sup>, 1993, the Czechs and the Slovaks agreed to separate peacefully. Until this date, the Czech and the Slovak economy have been an integrated area. However, since there have been separate parliaments for the two parts of the Czechoslovak republic, there were also separate economic statistics for the two parts. The economic data for the years 1990 to 1992 therefore are official statistics from goevernmental sources and not estimates.<sup>1</sup>

The Czech Republic was hit by the transition to a market economy quite severly. In real terms, the economy contracted two years in a row (1991 and 1992), in the year 1991 by more than 11%. A positive real growth was achieved for the first time after the transition in 1993, and in the mid-1990s there were some years of quite good economic performance. However, the situation was worsening again at the end of the decade with negative real growth rates from 1997 onwards (see Table 6).

Table 6: Czech Republic - Basic data

| Table C. OZOGIT Ropub |    |        |        |        |        |        |        |        |        |        |        |
|-----------------------|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                       |    | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |
| GDP, CZK, nom.        | bn | 626.2  | 753.8  | 842.6  | 1,020  | 1,183  | 1,381  | 1,572  | 1,669  | 1,798  | 1,836  |
| Exchange rate         |    | 22.89  | 36.6   | 36.62  | 34.1   | 34.06  | 34.31  | 34.01  | 35.8   | 36.16  | 36.88  |
| GDP, €, nom.          | bn | 27.36  | 20.59  | 23.01  | 29.92  | 34.73  | 40.25  | 46.23  | 46.62  | 49.73  | 49.79  |
| GDP, €, PPP, nom.     | bn | 103.8  | 95.29  | 99.72  | 101    | 105.6  | 116.3  | 124    | 123.3  | 107    | 107.1  |
| GDP/capita, €, nom.   |    | 2,640  | 1,998  | 2,230  | 2,896  | 3,360  | 3,896  | 4,482  | 4,524  | 4,232  | 4,200  |
| GDP/capita, €, PPP    |    | 10,021 | 9,244  | 9,665  | 9,778  | 10,217 | 11,262 | 12,020 | 11,971 | 11,859 | 12,010 |
| nom. growth rate      | %  |        | -7.76  | 4.55   | 1.18   | 4.49   | 10.23  | 6.73   | -0.41  | -0.94  | 1.27   |
| real GDP change       |    |        |        |        |        |        |        |        |        |        |        |
| compared to 1990      | %  |        | -11,60 | -12,04 | -11,95 | -10,02 | -4,71  | -0,13  | -1,13  | -3,31  | -3,50  |
| real growth rate      | %  |        | -11.60 | -0.50  | 0.10   | 2.20   | 5.90   | 4.80   | -1.00  | -2.20  | -0.20  |
| Sector primary        | %  | 7.72   | 5.24   | 4.35   | 4.99   | 4.67   | 4.38   | 4.33   | 4.40   | 4.28   | 3.41   |
| secondary             | %  | 44.65  | 43.50  | 43.60  | 38.86  | 38.71  | 39.16  | 37.62  | 39.79  | 40.29  | 38.20  |
| tertiary              | %  | 47.63  | 51.25  | 52.05  | 56.15  | 56.62  | 56.45  | 58.05  | 55.81  | 55.43  | 58.38  |
| Agriculture           | %  | 7.72   | 5.24   | 4.35   | 4.99   | 4.67   | 4.38   | 4.33   | 4.40   | 4.28   | 3.41   |
| Total manufacturing   | %  | 34.48  | 35.88  | 37.10  | 31.49  | 31.74  | 31.08  | 29.90  | 31.84  | 32.81  | 31.32  |
| Construction          | %  | 10.17  | 7.62   | 6.50   | 7.37   | 6.97   | 8.08   | 7.72   | 7.94   | 7.48   | 6.88   |
| Transport, etc.       | %  | 3.53   | 3.89   | 5.79   | 8.16   | 7.92   | 7.59   | 7.41   | 7.24   | 8.62   | 8.88   |
| Hotels & Restaurants  | %  | 0.91   | 1.40   | 1.62   | 1.82   | 2.49   | 3.35   | 2.86   | 2.28   |        |        |
| Wholesale, etc.       | %  | 10.60  | 11.35  | 11.73  | 11.04  | 10.66  | 10.71  | 12.19  | 10.76  | 12.83  | 13.18  |
| Other                 | %  | 32.59  | 34.61  | 32.90  | 35.12  | 35.54  | 34.80  | 35.58  | 35.53  | 33.98  | 36.33  |
| Consumer prices       | %  | 9.70   | 56.60  | 11.10  | 20.80  | 10.00  | 9.10   | 8.80   | 8.50   | 10.70  | 2.10   |
| Exchange rate         |    | 22.89  | 36.60  | 36.62  | 34.10  | 34.06  | 34.31  | 34.01  | 35.80  | 36.16  | 36.88  |
| Unemployment rate     | %  | 0.80   | 4.10   | 2.60   | 3.50   | 3.20   | 2.90   | 3.50   | 5.20   | 7.50   | 9.40   |

Source: WIIW, IFIP

It seems, however, that the recession has been surpassed. In 2001, the Czech economy was growing again despite the economic downturn in Europe. The forecasts for the years 2003 to 2005 are quite optimistic (expected average growth rates of 4% to 5%), on the condition that the world economy will recover from the current slump.

1

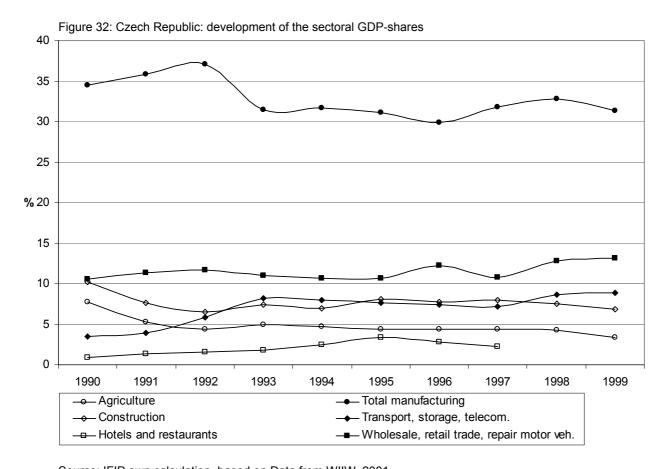
<sup>&</sup>lt;sup>1</sup> Information from Dipl. -Ing. Zdenek Lukas, WIIW, 2002



CZK, bn --- Agriculture - Total manufacturing → Construction - Transport, storage, telecom. — Hotels and restaurants - Wholesale, retail trade, repair motor veh.

Figure 31: Czech Republic - Trend of the value added of important economic sectors, CZK, bn, real, Prices 1990

Source: IFIP own calculation, based on Data from WIIW, 2001





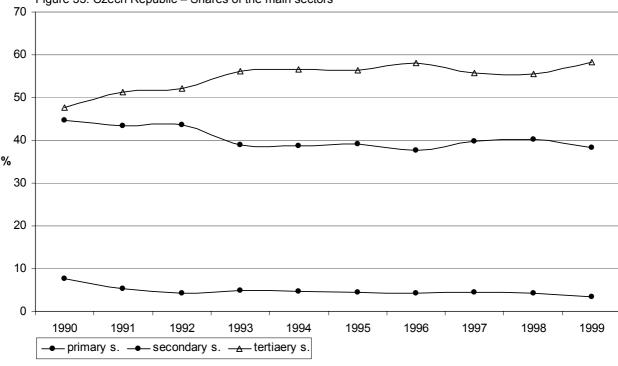


Figure 33: Czech Republic – Shares of the main sectors

Source: IFIP own calculation, based on Data from WIIW, 2001

Tourism has become an important branch, contributing almost 10% to the GDP. In agriculture, it has been the goal to follow the american model to create large companies. Consequently, today only one fourth to one third of the agricultural companies are still small (family) enterprises. In any case, there was a significant break down af value added in this sector at the beginning of the nineties (-40% 1991, -18% 1992, in real terms. see Figure 31).



### 4.3. Hungary

The Hungarian economy experienced the negative effects of the transition even longer than the Czech Republic. Until 1993 the economy was shrinking in real terms every year, boosting the unemployment rate from only 2% in 1990 to 14% in 1993. After 1993, however, Hungary achieved steady real growth until the end of the 1990s, so that the labour market situation improved so that the rate of unemployment was coming down below 10% in 1999.

On the other hand, during the whole decade Hungary was struggling with rather high rates of inflation (up to almost 30% in 1995), and only at the end of the decade the price increases out 10% in 1999 were again relatively moderate (see Table 7). The forecasts for this year (2002) and the immediate future are nevertheless quite optimistic also for Hungary. In November 2001, experts were expecting a real growth rate of 3,8% in 2002 and of 4% for 2003.

Table 7: Hungary – Basic data

|                      | _  |       |        |        |        |        |        |        |        |        |        |
|----------------------|----|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                      |    | 1990  | 1991   | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |
| GDP, HUF, nom.       | bn | 2,089 | 2,498  | 2,943  | 3,548  | 4,365  | 5,614  | 6,894  | 8,541  | 10,087 | 11,439 |
| Exchange rate        |    | 80.48 | 92.70  | 102.10 | 107.50 | 124.78 | 162.65 | 191.15 | 210.93 | 240.98 | 252.80 |
| GDP, €, nom.         | bn | 25.96 | 26.95  | 28.82  | 33.01  | 34.98  | 34.52  | 36.07  | 40.49  | 41.86  | 45.25  |
| GDP, €, PPP, nom.    | bn | 74.72 | 73.96  | 75.38  | 75.82  | 79.81  | 85.07  | 87.63  | 92.00  | 97.66  | 103.60 |
| GDP/capita, €, nom.  |    |       | 2,607  | 2,795  | 3,212  | 3,414  | 3,380  | 3,545  | 3,995  | 4,148  | 4,505  |
| GDP/capita, €, PPP   |    | 7,216 | 7,155  | 7,311  | 7,377  | 7,790  | 8,330  | 8,613  | 9,077  | 9,677  | 10,315 |
| nom. growth rate     | %  |       | -0.86  | 2.18   | 0.91   | 5.59   | 6.94   | 3.39   | 5.39   | 6.61   | 6.59   |
| real GDP change      |    |       |        |        |        |        |        |        |        |        |        |
| compared to 1990     | %  |       | -11,90 | -14,63 | -15,14 | -12,68 | -11,37 | -10,22 | -6,09  | -1,49  | 2,94   |
| real growth rate     | %  | -4    | -11.90 | -3.10  | -0.60  | 2.90   | 1.50   | 1.30   | 4.60   | 4.90   | 4.50   |
| Sector primary       | %  |       | 7.81   | 6.45   | 5.81   | 6.01   | 5.93   | 5.84   | 5.21   | 4.87   |        |
| secondary            | %  |       | 31.62  | 29.61  | 27.95  | 27.38  | 27.15  | 26.87  | 28.91  | 28.85  |        |
| tertiary             | %  |       | 60.57  | 63.94  | 66.24  | 66.61  | 66.92  | 67.30  | 65.87  | 66.27  |        |
| Agriculture          | %  |       | 7.81   | 6.45   | 5.81   | 6.01   | 5.93   | 5.84   | 5.21   | 4.87   |        |
| Total manufacturing  | %  |       | 26.68  | 24.38  | 23.23  | 22.76  | 23.09  | 23.08  | 24.86  | 24.83  |        |
| Construction         | %  |       | 4.94   | 5.23   | 4.72   | 4.61   | 4.06   | 3.78   | 4.05   | 4.02   |        |
| Transport, etc.      | %  |       | 8.40   | 8.34   | 7.81   | 7.65   | 7.89   | 8.07   | 8.62   | 8.68   |        |
| Hotels & Restaurants | %  |       | 1.94   | 1.96   | 1.79   | 1.68   | 1.76   | 1.75   | 1.76   | 1.70   |        |
| Wholesale, etc.      | %  |       | 12.30  | 9.65   | 9.97   | 9.64   | 9.92   | 9.92   | 10.15  | 10.18  |        |
| Other                | %  |       | 37.93  | 44.00  | 46.67  | 47.65  | 47.35  | 47.56  | 45.34  | 45.72  |        |
| Consumer prices      | %  | 28.90 | 35.00  | 23.00  | 22.50  | 18.80  | 28.20  | 23.60  | 18.30  | 14.30  | 10.00  |
| Exchange rate        |    | 80.48 | 92.70  | 102.10 | 107.50 | 124.78 | 162.65 | 191.15 | 210.93 | 240.98 | 252.80 |
| Unemployment rate    | %  | 2.00  | 8.20   | 13.90  | 14.00  | 12.00  | 11.70  | 11.40  | 11.00  | 9.60   | 9.60   |

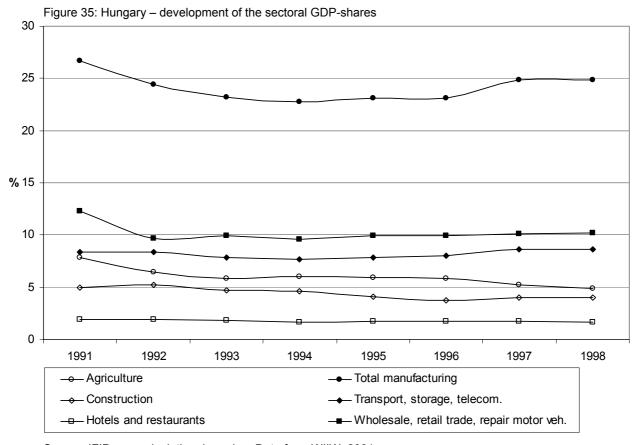
Source: WIIW, IFIP



- Total manufacturing --- Agriculture --- Construction - Transport, storage, telecom. — Hotels and restaurants --- Wholesale, retail trade, repair motor veh.

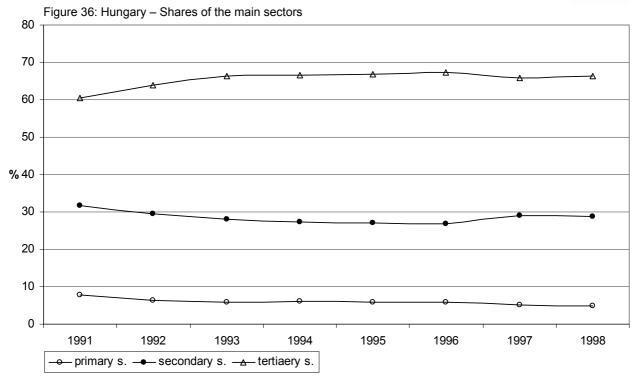
Figure 34: Hungary – Trend of the value added of important economic sectors, HUF, bn, real, Prices 1991

Source: IFIP own calculation, based on Data from WIIW, 2001<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Interupted lines represent estimates.







#### 4.4. Slovak Republic

The effects of the transition were felt also quite strongly in the Slovak economy and they were rather similar to those in Hungary. Again, a contraction of the economy in real terms until the year 1993 led to exploding unemployment rates from only 1,6% in 1990 to over 14% in 1993 (see Table 8).

Even the strong growth performance after 1993 was not able to bring down unemployment rates substantially, and at the end of the decade unemployment became a severe problem with a rate of unemployment of over 19% in 1999.

The official forecasts for the current year (2002) and for the years 2003 to 2005 with about 3% growth are rather optimistic, given the volatility of the oil price which may pose a problem for the recovery of the eastern countries in general and Slovakia in particular.

Table 8: Slovak Republic - Basic data

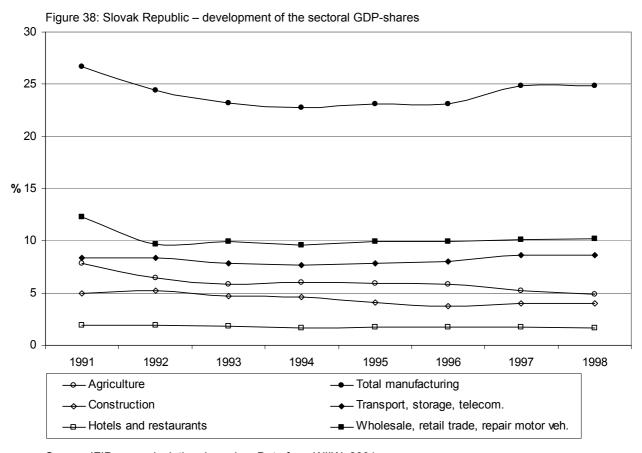
| Table o. Glovak Repai               | ,,,, | Daoio c | iata   |        |        |        |        |       |       |       |       |
|-------------------------------------|------|---------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
|                                     |      | 1990    | 1991   | 1992   | 1993   | 1994   | 1995   | 1996  | 1997  | 1998  | 1999  |
| GDP, SKK, nom.                      | Bn   | 278     | 320    | 332    | 369    | 441    | 546    | 606   | 686   | 751   | 815   |
| Exchange rate                       |      | 22.98   | 36.48  | 36.63  | 35.98  | 37.93  | 38.45  | 38.41 | 37.96 | 39.58 | 44.1  |
| GDP, €, nom.                        | Bn   |         |        | 9.07   | 10.26  | 11.61  | 12.55  | 13.85 | 15.60 | 16.41 | 16.18 |
| GDP, €, PPP, nom.                   | Bn   | 39.66   | 35.17  | 34.57  | 33.68  | 36.14  | 42.5   | 45.8  | 48.9  | 51.5  | 53.3  |
| GDP/capita, €, nom.                 | _    |         |        | 1,709  | 1,927  | 2,172  | 2,340  | 2,577 | 2,898 | 3,044 | 2,999 |
| GDP/capita, €, PPP                  |      | 7,486   | 6,657  | 6,515  | 6,325  | 6,758  | 7,916  | 8,532 | 9,084 | 9,559 | 9,877 |
| nom. growth rate                    | %    |         | -11.07 | -2.12  | -2.92  | 6.84   | 17.14  | 7.77  | 6.48  | 5.22  | 3.33  |
| real GDP change<br>compared to 1990 | %    |         | -14,60 | -20,15 | -23,11 | -19,34 | -13,93 | -8,60 | -2,93 | 1,05  | 2,97  |
| real growth rate                    | %    | -2.50   | -14.60 | -6.50  | -3.70  | 4.90   | 6.70   | 6.20  | 6.20  | 4.10  | 1.90  |
| Sector primary                      | / %  |         |        | 5.34   | 4.68   | 4.47   | 5.27   | 4.79  | 4.61  | 4.21  | 4.07  |
| secondary                           | / %  |         |        | 37.95  | 35.36  | 35.88  | 36.08  | 36.66 | 33.78 | 31.89 | 31.64 |
| tertiary                            | / %  |         |        | 56.71  | 59.96  | 59.65  | 58.65  | 58.54 | 61.61 | 63.90 | 64.29 |
| Agriculture                         | %    |         |        | 5.34   | 4.68   | 4.47   | 5.27   | 4.79  | 4.61  | 4.21  | 4.07  |
| Total manufacturing                 | %    |         |        | 31.97  | 30.63  | 29.48  | 29.10  | 29.51 | 26.83 | 25.47 | 26.44 |
| Construction                        | %    |         |        | 5.99   | 4.73   | 6.40   | 6.98   | 7.15  | 6.95  | 6.42  | 5.20  |
| Transport, etc.                     | %    |         |        | 8.23   | 8.04   | 9.05   | 9.17   | 10.01 | 9.58  | 9.87  | 9.99  |
| Hotels & Restaurants                | %    |         |        | 1.45   | 2.24   | 1.55   |        |       |       |       |       |
| Wholesale, etc.                     | %    |         |        | 12.12  | 18.59  | 15.73  | 12.83  | 12.62 | 12.47 | 13.69 | 14.00 |
| Other                               | %    |         |        | 34.91  | 31.10  | 33.33  | 36.65  | 35.92 | 39.56 | 40.34 | 40.30 |
| Consumer prices                     | %    | 10.40   | 61.20  | 10.00  | 23.20  | 13.40  | 9.90   | 5.80  | 6.10  | 6.70  | 10.60 |
| Exchange rate                       | %    | 22.98   | 36.48  | 36.63  | 35.98  | 37.93  | 38.45  | 38.41 | 37.96 | 39.58 | 44.10 |
| Unemployment rate                   | %    | 1.60    | 11.80  | 10.40  | 14.40  | 14.60  | 13.10  | 12.80 | 12.50 | 15.60 | 19.20 |

Source: WIIW, IFIP



SKK, bn → Agriculture - Total manufacturing → Construction — Transport, storage, telecom. — Hotels and restaurants ■ Wholesale, retail trade, repair motor veh.

Figure 37: Slovak Republic – Trend of the value added of important economic sectors, SKK, bn, real, Prices 1992





% — primary s. — secondary s. — tertiaery s.

Figure 39: Slovak Republic – Shares of the main sectors



### 4.5. Slovenia

The republic of Slovenia is an independent and autonomous state since 1991. Also Slovenia could not escape the negative effects of the transition. For three years in a row (1990 to 1992) the economy was contracting in real terms, and unemployment rates went up from 5,8% in 1990 to more that 15% in 1993. Furthermore, Slovenia also suffered from two years of hyperinflation (1991 and 1992) with inflation rates of more than 100%.

From 1993 onwards the economic situation started to improve. With a steady growth between 3% and 5% it was possible to keep unemployment from rising even further and the rate of unemployment was reduced down to 13% at the end of the decade. Furthermore, price level changes normalised slowly and were down to under 10% in the seond half of the nineties (see Table 9).

In the years to come economists expect an economic growth of 3% (to 4% at maximum). The growth perspectives seem to be that a slow but steady increase in GDP will follow from a cautious strategy of privatisation (in manufacturing) and from an only slowly expanding touristic infastructure.

Table 9: Slovenia - Basic data

| Table 3. Glovella – De              | 2010 | uala   |       |        |        |        |        |        |        |        |        |
|-------------------------------------|------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                     |      | 1990   | 1991  | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |
| GDP, SIT, nom.                      | bn   | 197    | 349   | 1,018  | 1,435  | 1,853  | 2,221  | 2,555  | 2,907  | 3,254  | 3,637  |
| Exchange rate                       |      | 14.39  | 34.02 | 105    | 132.3  | 152.4  | 153.1  | 169.5  | 180.4  | 186.3  | 193.6  |
| GDP, nom.                           | bn   | 13.67  | 10.27 | 9.69   | 10.85  | 12.16  | 14.51  | 15.08  | 16.12  | 17.47  | 18.79  |
| GDP, PPP, nom.                      | bn   | 20.20  | 19.10 | 19.00  | 19.77  | 21.31  | 23.07  | 24.28  | 25.50  | 26.79  | 28.52  |
| GDP/capita, nom.                    |      | 6,843  | 5,131 | 4,857  | 5,450  | 6,115  | 7,300  | 7,571  | 8,111  | 8,811  | 9,461  |
| GDP/capita, PPP                     |      | 10,110 | 9,543 | 9,519  | 9,933  | 10,713 | 11,607 | 12,192 | 12,835 | 13,513 | 14,362 |
| nom. growth rate                    | %    |        | -5.61 | -0.25  | 4.34   | 7.85   | 8.35   | 5.04   | 5.27   | 5.28   | 6.28   |
| real GDP change<br>compared to 1990 | %    |        | -8,90 | -13,91 | -11,50 | -6,81  | -2,99  | 0,41   | 5,03   | 9,02   | 14,36  |
| real growth rate                    | %    | -4.70  | -8.90 | -5.50  | 2.80   | 5.30   | 4.10   | 3.50   | 4.60   | 3.80   | 4.90   |
| Sector primary                      | / %  | 5.01   | 5.15  | 5.19   | 4.51   | 3.96   | 3.94   | 3.86   | 3.72   | 3.59   | 3.17   |
| secondary                           | / %  | 37.76  | 39.71 | 35.87  | 33.43  | 34.38  | 32.64  | 32.71  | 32.91  | 33.02  | 32.78  |
| tertiar                             | / %  | 57.23  | 55.14 | 58.94  | 62.06  | 61.66  | 63.43  | 63.42  | 63.37  | 63.39  | 64.04  |
| Agriculture                         | %    | 5.01   | 5.15  | 5.19   | 4.51   | 3.96   | 3.94   | 3.86   | 3.72   | 3.59   | 3.17   |
| Total manufacturing                 | %    | 33.43  | 36.04 | 32.06  | 29.33  | 30.26  | 28.29  | 27.87  | 27.99  | 28.13  | 27.47  |
| Construction                        | %    | 4.33   | 3.67  | 3.80   | 4.10   | 4.12   | 4.35   | 4.85   | 4.92   | 4.90   | 5.31   |
| Transport, etc.                     | %    | 7.79   | 7.16  | 6.53   | 6.82   | 6.55   | 6.70   | 6.62   | 7.05   | 7.16   | 7.05   |
| Hotels & Restaurants                | %    | 2.04   | 1.80  | 2.23   | 2.54   | 2.61   | 2.57   | 2.68   | 2.66   | 2.59   | 2.57   |
| Wholesale, etc.                     | %    | 10.41  | 8.83  | 9.41   | 9.71   | 10.30  | 10.46  | 10.07  | 10.12  | 10.04  | 10.01  |
| Other                               | %    | 36.99  | 37.36 | 40.77  | 42.99  | 42.19  | 43.70  | 44.05  | 43.54  | 43.60  | 44.41  |
| Consumer prices                     | %    | 551.6  | 115.0 | 207.3  | 32.90  | 21.00  | 13.50  | 9.90   | 8.40   | 7.90   | 6.10   |
| Exchange rate                       |      | 14.4   | 34.0  | 105.0  | 132.28 | 152.36 | 153.12 | 169.51 | 180.40 | 186.27 | 193.63 |
| Unemployment rate                   | %    | 5.80   | 10.10 | 13.40  | 15.40  | 14.20  | 14.50  | 14.40  | 14.80  | 14.60  | 13.00  |

Source: WIIW, IFIP

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<sup>&</sup>lt;sup>1</sup> Mag. Vidovic, WIIW



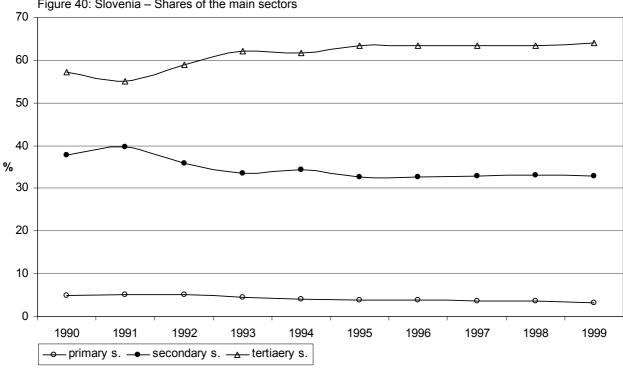
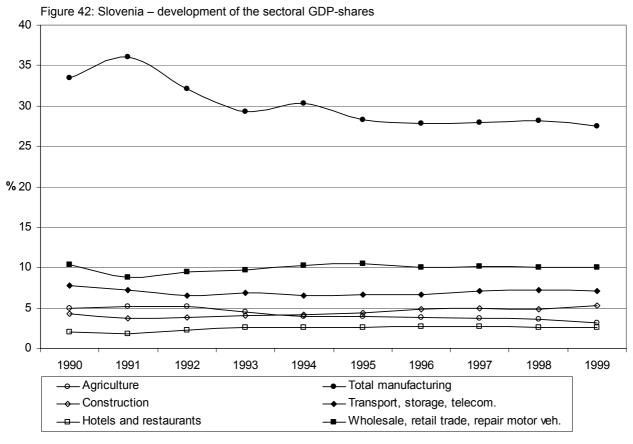


Figure 40: Slovenia – Shares of the main sectors



SIT, bn — Agriculture Total manufacturing → Construction → Transport, storage, telecom. --- Hotels and restaurants --- Wholesale, retail trade, repair motor veh.

Figure 41: Slovenia - Trend of the value added of important economic sectors, SIT, bn, real, Prices 1990





# 5. The development of group 3 countries

#### 5.1. GDP trends

All of the countries in this group had enormous economic problems after the end of the Sovietunion and as a consequence of their own transition from plan to market. Soaring consumer prices and unemployment rates were the most visible evils. As a result, the GDP dropped down at the beginning of the 1990s in all countries (Figure 43; GDP per capita). A comparison of the real growth performance of these countries is given in Table 10 and in Figure 44 (GDP).

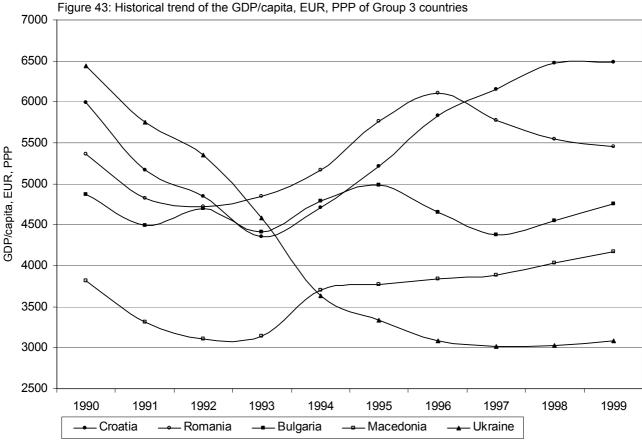


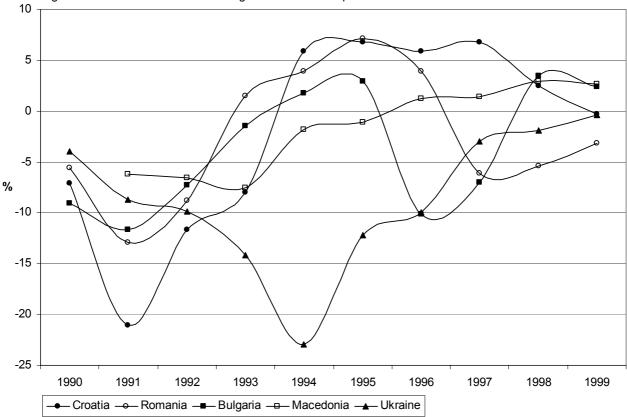


Table 10: Real growth rates of Group 3 economies

|           | 9.0        |        | ip o cconon |        |             |         |            |       |            |       |
|-----------|------------|--------|-------------|--------|-------------|---------|------------|-------|------------|-------|
| Country   |            |        |             | rea    | al growth r | ate, %  |            |       |            |       |
|           | 1990       | 1991   | 1992        | 1993   | 1994        | 1995    | 1996       | 1997  | 1998       | 1999  |
| Bulgaria  | -9.1       | -11.7  | -7.3        | -1.5   | 1.8         | 2.9     | -10.1      | -7    | 3.5        | 2.4   |
| Croatia   | -7.1       | -21.1  | -11.7       | -8     | 5.9         | 6.8     | 5.9        | 6.8   | 2.5        | -0.3  |
| Macedonia |            | -6.2   | -6.6        | -7.5   | -1.8        | -1.1    | 1.2        | 1.4   | 2.9        | 2.7   |
| Romania   | -5.6       | -12.9  | -8.8        | 1.5    | 3.9         | 7.1     | 3.9        | -6.1  | -5.4       | -3.2  |
| Ukraine   | -4         | -8.7   | -9.9        | -14.2  | -22.9       | -12.2   | -10        | -3    | -1.9       | -0.4  |
|           |            |        |             | averag | e real grov | vth rat | e, %       |       |            |       |
| Bulgaria  | 90' to 93' | -7.40  | 90' to 93'  | -7.40  | 94' to 99'  | -1.08   | 94' to 99' | -1.08 | 90' to 99' | -3.61 |
| Croatia   | 90' to 93' | -11.98 | 90' to 93'  | -11.98 | 94' to 99'  | 4.60    | 94' to 99' | 4.60  | 90' to 99' | -2.03 |
| Macedonia | 91' to 93' | -6.77  | 91' to 95'  | -4.64  | 94' to 99'  | 0.88    | 96' to 99' | 2.05  | 91' to 99' | -1.67 |
| Romania   | 90' to 93' | -6.45  | 90' to 92'  | -9.10  | 94' to 99'  | 0.03    | 93' to 99' | 0.24  | 90' to 99' | -2.56 |
| Ukraine   | 90' to 93' | -9.20  | 90' to 99'  | -8.72  | 94' to 99'  | -8.40   |            |       | 90' to 99' | -8.72 |
| average   |            | -8.36  |             |        |             | -0.79   |            |       |            | -1.86 |

Source: WIIW, IFIP, 2001

Figure 44: Historical trend of the real growth rate of Group 3 countries



Source: WIIW, 2001



## 5.2. Ukraine

Ukraine, which was the country in group 3 with the highest GDP p.c. (Euro, PPP) in 1990 was at the end of the 1990s the country with the lowest GDP p.c. (see Figure 43). The simple explanation is that Ukraine is the only country in the group with an economy shrinking in real terms every year from 1990 to 1999 (see Table 11). The official unemployment rate does not seem to reflect this dark picture. Despite an increase by a magnitude of 10 (from 0,3% in 1992 to 4,3% in 1999), the official rates are still very low compared to other transition countries. The explanation for these rather small unemployment rates may be either that official statistics do not cover real unemployment because of no incentive for unemploeyed people to register, and/or that agriculture, which is still a very large sector in the Ukraine, works as a pool for many people waiting for better job opportunities in other parts of the economy.

Quite similar to other countries in group 3, also the Ukraine had to suffer from hyperinflation in the 1990s (e.g. inflation rates of more than 1000% in 1992 and 1993). Inflation was still high at the end of the decade but on more tolerable levels (10% to 20%).

Table 11: Ukraine - Basic data

| Table 11. Oktaine – Basic data |    |         |         |        |        |        |        |        |        |        |        |
|--------------------------------|----|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                |    | 1990    | 1991    | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |
| GDP, UAH, nom.                 | bn | 0.002   | 0.003   | 0.05   | 1.483  | 12.04  | 54.52  | 81.52  | 93.37  | 102.6  | 127.1  |
| Exchange rate                  |    | 7.0E-06 | 2.2E-05 | 0.0027 | 0.0527 | 0.385  | 1.928  | 2.322  | 2.113  | 2.768  | 4.393  |
| GDP, €, nom.                   | bn | 238.77  | 136.11  | 18.85  | 28.13  | 31.27  | 28.28  | 35.11  | 44.19  | 37.06  | 28.94  |
| GDP, €, PPP, nom.              | bn | 334.20  | 299.40  | 279.61 | 239.15 | 188.09 | 171.44 | 156.77 | 152.56 | 151.54 | 153.35 |
| GDP/capita, €, nom.            |    | 4,597   | 2,615   | 361    | 540    | 604    | 551    | 690    | 875    | 740    | 582    |
| GDP/capita, €, PPP             |    | 6,434   | 5,751   | 5,352  | 4,589  | 3,636  | 3,340  | 3,080  | 3,021  | 3,024  | 3,085  |
| nom. growth rate               | %  |         | -10.61  | -6.94  | -14.26 | -20.76 | -8.15  | -7.77  | -1.93  | 0.12   | 2.00   |
| real GDP change                |    |         |         |        |        |        |        |        |        |        |        |
| compared to 1990               | %  |         | -8,70   | -17,74 | -29,42 | -45,58 | -52,22 | -57,00 | -58,29 | -59,08 | -59,25 |
| real growth rate               | %  | -4.00   | -8.70   | -9.90  | -14.20 | -22.90 | -12.20 | -10.00 | -3.00  | -1.90  | -0.40  |
| Sector primary                 | %  | 24.45   | 24.62   | 20.84  | 21.54  | 14.57  | 13.77  | 12.23  | 12.52  | 12.07  | 11.23  |
| secondary                      | %  | 42.62   | 54.55   | 52.16  | 36.64  | 42.45  | 37.83  | 33.36  | 29.80  | 30.00  | 32.48  |
| tertiary                       | %  | 32.93   | 20.83   | 27.00  | 41.82  | 42.98  | 48.40  | 54.41  | 57.69  | 57.93  | 56.29  |
| Agriculture                    | %  | 24.45   | 24.62   | 20.84  | 21.54  | 14.57  | 13.77  | 12.23  | 12.52  | 12.07  | 11.23  |
| Total manufacturing            | %  | 34.49   | 45.67   | 44.61  | 29.70  | 35.01  | 30.95  | 27.45  | 24.63  | 25.26  | 28.08  |
| Construction                   | %  | 8.13    | 8.88    | 7.55   | 6.93   | 7.44   | 6.88   | 5.91   | 5.17   | 4.75   | 4.40   |
| Transport, etc.                | %  | 7.30    | 6.84    | 8.40   | 11.76  | 8.08   | 12.01  | 13.15  | 12.59  | 12.37  | 11.16  |
| Other                          | %  | 25.63   | 13.99   | 18.60  | 30.07  | 34.90  | 36.39  | 41.26  | 45.10  | 45.56  | 45.13  |
| Consumer prices                | %  | 4.80    | 91.2    | 1,210  | 5,371  | 891    | 376.8  | 80.20  | 15.90  | 10.60  | 22.70  |
| Exchange rate 2)               |    | 7*10^-6 | 2*10^-5 | 0.0027 | 0.0527 | 0.385  | 1.928  | 2.322  | 2.113  | 2.768  | 4.393  |
| Unemployment rate              | %  |         |         | 0.30   | 0.40   | 0.40   | 0.50   | 1.30   | 2.30   | 3.70   | 4.30   |

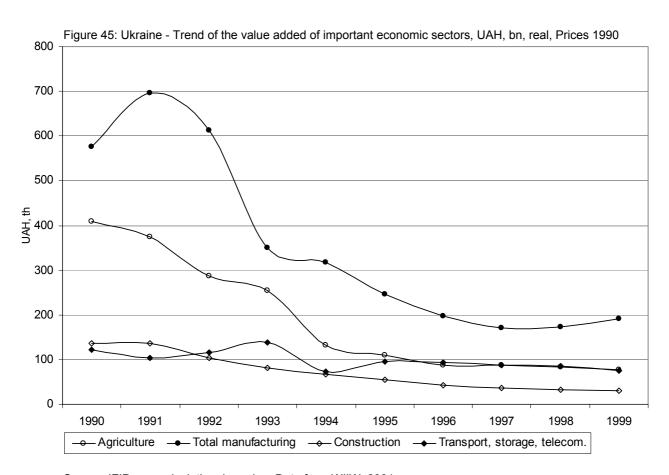
Source: WIIW, IFIP

To counteract the deep economic crisis, in July 1996 a new constitution was accepted by the parliament, and in the same year a new currency, the Hryvnia, was introduced. The first positive effect was that inflation was slowing down after 1996, and the negative trend in real growth slowly started to recede (see Table 11, Figure 45). Finally, in the year 2000 a real growth rate of 5,9% has been estimated (by the International Centre for Policy Studies), and a rate of 9% for 2001. Furthermore, for the years 2002 to 2004 economists expect a real growth of 4,5% to 5,5%<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Tetiana Sytnyk - ICPS Chief Economist, "Economic growth will slow down in 2002 – 2004", International Centre for Policy Studies, 21. Juni 2002, <a href="http://www.icps.kiev.ua/eng/forecast/2002-2004.html">http://www.icps.kiev.ua/eng/forecast/2002-2004.html</a>



Because of the still very deep economic problems in the Ukraine, the EU accession will certainly take some time. In the meantime, however, special arrangements like the "priviledged neighborhood" between EU and the Ukraine (similar to the arrangements with Moldavia and Belorussia) may support the efforts to prepare the country for the accession.<sup>1</sup>.



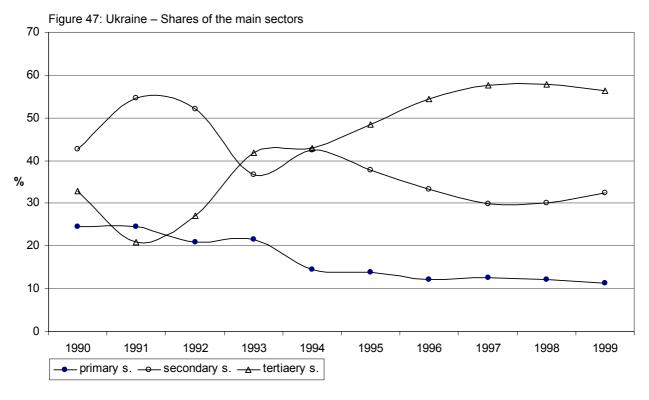
<sup>&</sup>lt;sup>1</sup> Burkhard Bischof, "Kiew will aus Europas neuer Grauzone heraus", Die Presse, 7. Juni 2002



**%** 25 Total manufacturing → Construction → Transport, storage, telecom.

Figure 46: Ukraine – development of the sectoral GDP-shares

Source: IFIP own calculation, based on Data from WIIW, 2001





#### 5.3. Romania

Romania experienced the typical downturn at the beginning of the 1990s, the turnaround to positive real growth came in 1993. However, in contrast to many other transition economies, Romania managed to keep unemployment, which was also rising from 3% in 1991 to over 10% in 1993, under control. Despite a worsening growth performance from 1997 onwards, unemployment rates were still at about 11% at the end of the decade (see Table 12).

Romania had also to fight heavy inflation, not only in the first half of the decade (with more than 200% inflation in 1992 and 1993), but also in the second half (155% inflation in 1997). An extreme devaluation of the Romanian currency was the unavoidable consequence.

Table 12: Romania - Basic data

| Table 12. Normania – basic data |    |        |        |        |        |        |        |         |         |         |         |
|---------------------------------|----|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
|                                 |    | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   | 1996    | 1997    | 1998    | 1999    |
| GDP, ROL, nom.                  | bn | 858    | 2,204  | 6,029  | 20,036 | 49,773 | 72,136 | 108,920 | 252,926 | 368,261 | 521,736 |
| Exchange rate                   |    | 31.1   | 94.8   | 399.4  | 884.6  | 1,968  | 2,630  | 3,863   | 8,091   | 9,988   | 16,295  |
| GDP, €, nom.                    | bn | 27.58  | 23.25  | 15.10  | 22.65  | 25.30  | 27.43  | 28.20   | 31.26   | 36.87   | 18.10   |
| GDP, €, PPP, nom.               | bn | 124.33 | 111.87 | 107.47 | 110.39 | 117.42 | 130.82 | 138.19  | 130.29  | 124.74  | 122.53  |
| GDP/capita, €, nom.             |    | 1,188  | 1,003  | 662    | 995    | 1,113  | 1,210  | 1,247   | 1,387   | 1,638   | 806     |
| GDP/capita, €, PPP              |    | 5,358  | 4,825  | 4,716  | 4,851  | 5,166  | 5,768  | 6,112   | 5,779   | 5,543   | 5,456   |
| nom. growth rate                | %  |        | -9.94  | -2.26  | 2.87   | 6.48   | 11.66  | 5.97    | -5.45   | -4.08   | -1.58   |
| real GDP change                 |    |        |        |        |        |        |        |         |         |         |         |
| compared to 1990                | %  |        | -12,90 | -20,56 | -19,37 | -16,23 | -10,28 | -6,78   | -12,47  | -17,20  | -19,84  |
| real growth rate                | %  | -5.60  | -12.90 | -8.80  | 1.50   | 3.90   | 7.10   | 3.90    | -6.10   | -5.40   | -3.20   |
| Sector primary                  | %  | 21.81  | 18.87  | 19.04  | 20.99  | 19.89  | 19.78  | 19.23   | 18.00   | 14.58   |         |
| secondary                       | %  | 45.88  | 42.23  | 43.14  | 39.04  | 42.73  | 39.46  | 39.71   | 36.11   | 32.80   |         |
| tertiary                        | %  | 32.31  | 38.90  | 37.82  | 39.97  | 37.38  | 40.76  | 41.06   | 45.89   | 52.63   |         |
| Agriculture                     | %  | 21.81  | 18.87  | 19.04  | 20.99  | 19.89  | 19.78  | 19.23   | 18.00   | 14.58   |         |
| Total manufacturing             | %  | 40.52  | 37.87  | 38.33  | 33.85  | 36.20  | 32.87  | 33.22   | 30.88   | 27.47   |         |
| Construction                    | %  | 5.36   | 4.36   | 4.81   | 5.19   | 6.53   | 6.59   | 6.49    | 5.23    | 5.33    |         |
| Transport, etc.                 | %  | 5.75   | 6.67   | 8.53   | 10.06  | 8.75   | 7.73   | 9.00    | 8.96    | 8.72    |         |
| Hotels & Restaurants            | %  | 1.34   | 1.91   | 2.17   | 1.81   | 1.39   | 1.84   | 2.52    | 2.36    | 3.70    |         |
| Wholesale, etc.                 | %  | 4.86   | 11.54  | 12.09  | 8.46   | 6.80   | 8.65   | 9.16    | 9.01    | 10.00   |         |
| Other                           | %  | 20.36  | 18.77  | 15.04  | 19.65  | 20.45  | 22.53  | 20.38   | 25.56   | 30.20   |         |
| Consumer prices                 | %  | 5.10   | 170.20 | 210.40 | 256.10 | 136.80 | 32.30  | 38.80   | 154.80  | 59.10   | 45.80   |
| Exchange rate                   |    | 31.1   | 94.8   | 399.4  | 884.6  | 1,968  | 2,630  | 3,863   | 8,091   |         | 16,295  |
| Unemployment rate               | %  |        | 3.00   | 8.20   | 10.40  | 10.90  | 9.50   | 6.60    | 8.90    | 10.40   | 11.50   |

Source: WIIW, IFIP

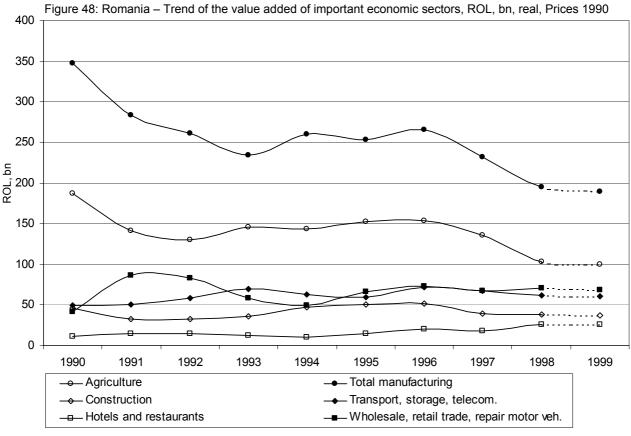
Romania is a candidate for the EU accession since February 2000, and great efforts are being made to prepare the country for the integration.

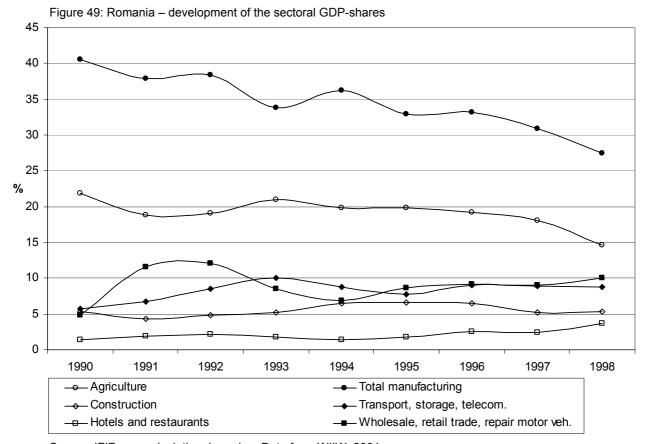
In 2001, the economy was growing in real terms by 4,9%, for the current year (2002) a growth rate of 2,5% is expected<sup>1</sup>

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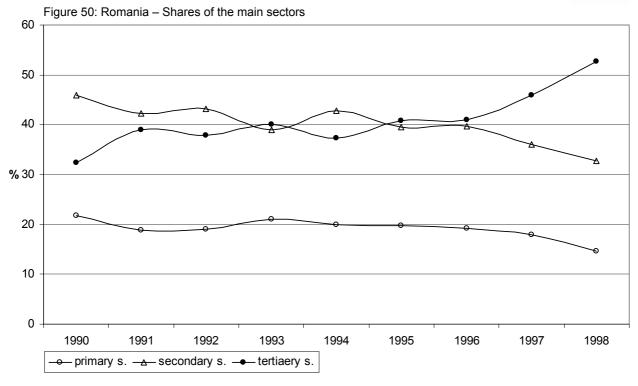
<sup>&</sup>lt;sup>1</sup> Dr. Hunya, WIIW













## 5.4. Bulgaria

Bulgaria is a transition economy with heavier problems than the average case (see Table 13). First, the real contraction of the economy lasted longer than in other countries. Only in 1994 a moderate real growth marked a short turnaround in the economic development. However, already two years later, the economy shrank again (severely) for two consecutive years. Consequently, the unemployment rate rose steeply from 1,7% in 1990 to over 16% in 1993 and was again up to 16% at the end of the decade after some years in between, where unemployment came down slightly. According to newspaper sources, the current rate of unemployment (May 2002) of 19,8% is among the highest of all CEEs (inofficial estimates go up to even 40%). Hence, the average income of roughly € 124 is the lowest of all CEEs¹.

Furthermore price increases were a heavy problem over the whole decade. Inflation rates over 300% in 1991, near 100% in 1992 and 1994, more than 100% in 1996 and more than 1000% (!) in 1997 posed not only great difficulties to the domestic economy. As a consequence of these price increases the exchange rate had to fall dramatically (by about 2000% over the ten years period).

A large number of otherwise unemployed has remained in or even has gone back to the agricultural industry, so that this sector takes an unusually large share in GDP.

Table 13: Bulgaria – Basic data

| Table 10. Balgaria B | uoic |       |        |        |        |        |        |        |        |        |        |
|----------------------|------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                      |      | 1990  | 1991   | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |
| GDP, BGN, nom.       | bn   | 0.045 | 0.136  | 0.201  | 0.299  | 0.526  | 0.88   | 1.749  | 17.06  | 21.58  | 22.78  |
| Exchange rate        |      | 0.001 | 0.021  | 0.03   | 0.032  | 0.065  | 0.087  | 0.192  | 1.896  | 1.972  | 1.956  |
| GDP, €, nom.         | bn   | 45.40 | 6.56   | 6.69   | 9.34   | 8.09   | 10.12  | 9.11   | 9.00   | 10.94  | 11.64  |
| GDP, €, PPP, nom.    | bn   | 42.43 | 38.77  | 40.16  | 37.36  | 40.43  | 41.92  | 38.86  | 35.91  | 37.59  | 39.07  |
| GDP/capita, €, nom.  |      | 5,207 | 759    | 784    | 1,102  | 958    | 1,204  | 1,089  | 1,095  | 1,325  | 1,418  |
| GDP/capita, €, PPP   |      | 4,867 | 4,491  | 4,703  | 4,410  | 4,788  | 4,987  | 4,647  | 4,372  | 4,553  | 4,758  |
| nom. growth rate     | %    |       | -7.71  | 4.70   | -6.22  | 8.58   | 4.14   | -6.81  | -5.91  | 4.13   | 4.51   |
| real GDP change      |      |       |        |        |        |        |        |        |        |        |        |
| compared to 1990     | %    |       | -11,70 | -18,15 | -19,37 | -17,92 | -15,54 | -24,07 | -29,39 | -26,92 | -25,16 |
| real growth rate     | %    | -9.10 | -11.70 | -7.30  | -1.50  | 1.80   | 2.90   | -10.10 | -7.00  | 3.50   | 2.40   |
| Sector primary       | / %  |       |        |        |        |        |        | 14.51  | 23.82  | 18.75  |        |
| secondary            | / %  |       |        |        |        |        |        | 28.47  | 25.31  | 25.53  |        |
| tertiary             | / %  |       |        |        |        |        |        | 57.03  | 50.87  | 55.72  |        |
| Agriculture          | %    |       |        |        |        |        |        | 14.51  | 23.82  | 18.75  |        |
| Total manufacturing  | %    |       |        |        |        |        |        | 24.45  | 22.82  | 22.20  | 20.15  |
| Construction         | %    |       |        |        |        |        |        | 4.01   | 2.49   | 3.33   | 3.24   |
| Transport, etc.      | %    |       |        |        |        |        |        | 7.04   | 6.77   | 7.31   | 7.63   |
| Hotels & Restaurants | %    |       |        |        |        |        |        | 1.13   | 1.31   | 1.84   |        |
| Wholesale, etc.      | %    |       |        |        |        |        |        | 10.27  | 7.65   | 6.81   | 6.52   |
| Other                | %    |       |        |        |        |        |        | 38.59  | 35.14  | 39.76  | 62.47  |
| Consumer prices      | %    | 23.8  | 338.5  | 91.2   | 72.8   | 96.0   | 62.1   | 123.0  | 1082.3 | 22.3   | 0.30   |
| Exchange rate        |      | 0.001 | 0.021  | 0.030  | 0.032  | 0.065  | 0.087  | 0.192  | 1.896  | 1.972  | 1.956  |
| Unemployment rate    | %    | 1.70  | 11.10  | 15.20  | 16.40  | 12.80  | 11.10  | 12.50  | 13.70  | 12.20  | 16.00  |

Source: WIIW. IFIP

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<sup>&</sup>lt;sup>1</sup> "Studie: Gehälter sind niedriger als in Rumänien", Die Presse, 29.05.2002



It is not surprising therefore, that the economic outlook for Bulgaria is assessed very cautiously by experts. The opinion is prevailing that the Bulgarian economy will need some time to converge to the levels already achieved by other (e.g. group 2) countries. It is even feared by some that Bulgaria's process of catching up may be hampered by difficult and prolonged integration negatiations. Nevertheless, for the current year (2002) a real growth of 4% (+/- 1%) is forecasted.<sup>2</sup>

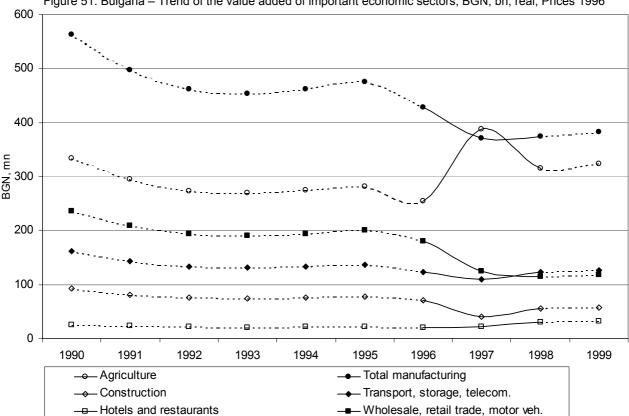


Figure 51: Bulgaria - Trend of the value added of important economic sectors, BGN, bn, real, Prices 1996

Source: IFIP own calculation based on WIIW - Database, 2001

<sup>&</sup>lt;sup>1</sup> "Abseits der Erweiterung: Gefahr der Ausgrenzung", Die Presse, 20.03.2002

<sup>&</sup>lt;sup>2</sup> Dr. Gábor Hunya, WIIW



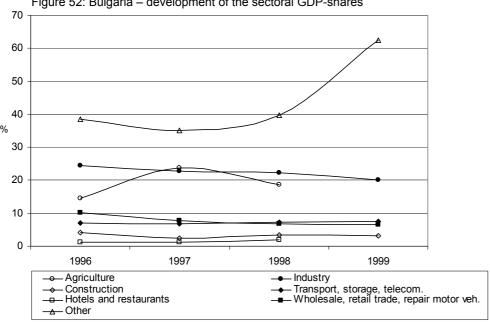
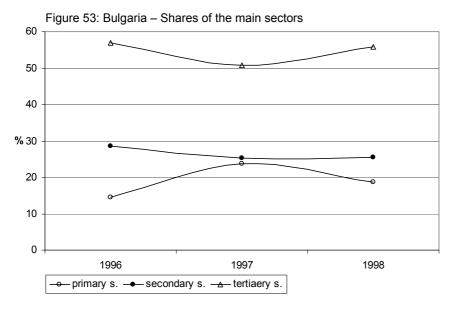


Figure 52: Bulgaria – development of the sectoral GDP-shares



Source: IFIP own calculation based on WIIW - Database, 2001



#### 5.5. Croatia

The Croatian economy had not only to cope with transition but also with war. Therefore it is no surprise that from 1990 to 1993 the economy was contracting severely in real terms (see Table 14). Only in 1994, with the end of the war and the achievement of independence from Yugoslavia and autonomy of Croatia, the economy benefited from a five years period of real growth. However, unemployment, which had increased to over 15% in 1992, could only be kept under control for these years of real growth, and at the end of the decade, when growth slowed down and was even negative in 1999, unemployment rates went up again to over 19%.

A more positive picture is produced by price level data. After the first transition years with extremely high inflation rates, from 1995 onwards, inflation has been under control (price increases of about 3% to 5%.

The future prospects may be brightened by the fact that successful negotiations between Croatia and the EU (Agreement on stabilisation and association; elimination of import tariffs of the EU market for 96% of croatian products) will support a positive economic development. For 2002 a real growth of 3% to 3,5% is expected<sup>1</sup>

Table 14: Croatia - Basic data

| Table 14. Crodita – Basic data |    |       |        |        |        |        |        |        |        |        |        |
|--------------------------------|----|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                |    | 1990  | 1991   | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |
| GDP, HRK, nom.                 | bn | 0.281 | 0.441  | 2.707  | 39     | 87.44  | 98.38  | 108    | 123.8  | 138.4  | 143.5  |
| Exchange rate                  |    | 0.014 | 0.024  | 0.34   | 4.13   | 7.09   | 6.76   | 6.8    | 6.96   | 7.14   | 7.58   |
| GDP, €, nom.                   | bn | 19.48 | 18.08  | 7.96   | 9.44   | 12.33  | 14.55  | 15.88  | 17.79  | 19.38  | 18.93  |
| GDP, PPP, €, nom.              | bn | 28.62 | 23.34  | 21.65  | 20.21  | 21.92  | 24.35  | 26.21  | 28.14  | 29.14  | 29.53  |
| GDP/capita, €, nom.            |    | 4,077 | 4,007  | 1,781  | 2,035  | 2,653  | 3,117  | 3,533  | 3,890  | 4,306  | 4,157  |
| GDP/capita, €, PPP             |    | 5,990 | 5,173  | 4,844  | 4,354  | 4,714  | 5,216  | 5,832  | 6,153  | 6,473  | 6,484  |
| nom. growth rate               | %  |       | 6.75   | 4.15   | 3.55   | 4.75   | 2.81   | 6.04   | 4.52   | 3.03   | 5.00   |
| real GDP change                |    |       |        |        |        |        |        |        |        |        |        |
| compared to 1990               | %  |       | -21,10 | -30,33 | -35,90 | -32,12 | -27,51 | -23,23 | -18,01 | -15,96 | -16,21 |
| real growth rate               | %  | -7.10 | -21.10 | -11.70 | -8.00  | 5.90   | 6.80   | 5.90   | 6.80   | 2.50   | -0.30  |
| Sector primary                 | %  |       |        |        |        |        | 8.55   | 8.39   | 7.82   | 7.11   | 6.99   |
| secondary                      | %  |       |        |        |        |        | 27.51  | 27.11  | 27.91  | 25.90  | 25.94  |
| tertiary                       | %  |       |        |        |        |        | 63.94  | 64.50  | 64.27  | 66.99  | 67.07  |
| Agriculture                    | %  |       |        |        |        |        | 8.55   | 8.39   | 7.82   | 7.11   | 6.99   |
| Total manufacturing            | %  |       |        |        |        |        | 22.81  | 21.58  | 21.90  | 20.26  | 20.33  |
| Construction                   | %  |       |        |        |        |        | 4.70   | 5.52   | 6.01   | 5.64   | 5.61   |
| Transport, etc.                | %  |       |        |        |        |        | 7.93   | 7.43   | 7.34   | 7.67   | 8.09   |
| Hotels & Restaurants           | %  |       |        |        |        |        | 2.08   | 2.53   | 2.64   | 2.47   | 2.28   |
| Wholesale, etc.                | %  |       |        |        |        |        | 9.66   | 10.30  | 10.54  | 9.57   | 9.51   |
| Other                          | %  |       |        |        |        |        | 44.26  | 44.24  | 43.75  | 47.28  | 47.19  |
| Retail prices                  | %  | 609.5 | 123.0  | 665.5  | 1517.5 | 97.6   | 2.00   | 3.50   | 3.60   | 5.70   | 4.20   |
| Exchange rate                  |    | 0.014 | 0.024  | 0.34   | 4.13   | 7.09   | 6.76   | 6.8    | 6.96   | 7.14   | 7.58   |
| Unemployment rate              | %  |       |        | 15.50  | 14.60  | 14.80  | 15.10  | 15.90  | 17.60  | 18.10  | 19.10  |

Source: WIIW, IFIP

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<sup>&</sup>lt;sup>1</sup> Mag. Vidovic, WIIW.

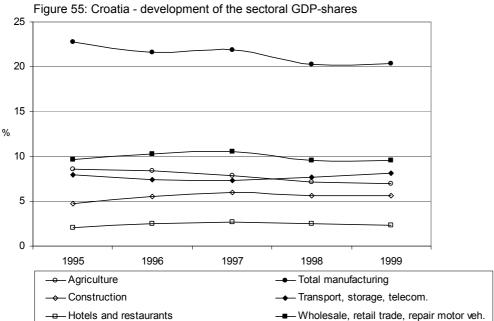


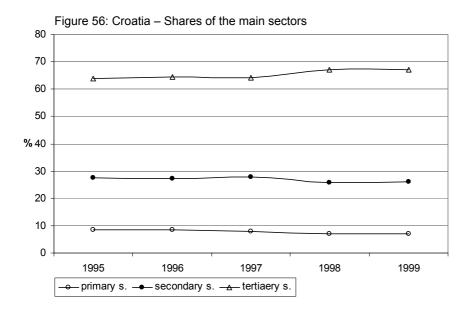
HRK, bn 0 -— Agriculture --- Total manufacturing → Construction Transport, storage, telecom. — Hotels and restaurants -- Wholesale, retail trade, repair motor veh.

Figure 54: Croatia - Trend of the value added of important economic sectors, HRK, bn, real, Prices 1995

Source: IFIP own calculation, based on WIIW - Database 2001









#### 5.6. Macedonia

After the referendum in 1991, Macedonia constituted itself as a separate and souvereign state. However, the young state had not only to cope with transition, but also the balkan war and the Greek embargo (1994/95).

Hence, it is not surprising that until 1995 the economy was shrinking in real terms every year. Only from 1996 onwards, a quite moderate real growth marked the turnaround. However, this modest growth was not enough to bring down significantly the high unemployment rates of over 30% (see Table 15).

A positive achievement may be observed at the battle to fight inflation. After a period of hyperinflation in the first half of the 1990s (e.g. inflation rate over 1000% in 1992), from 1996 onwards the price increases have been able to be kept under control.

Table 15: Macedonia - Basic data

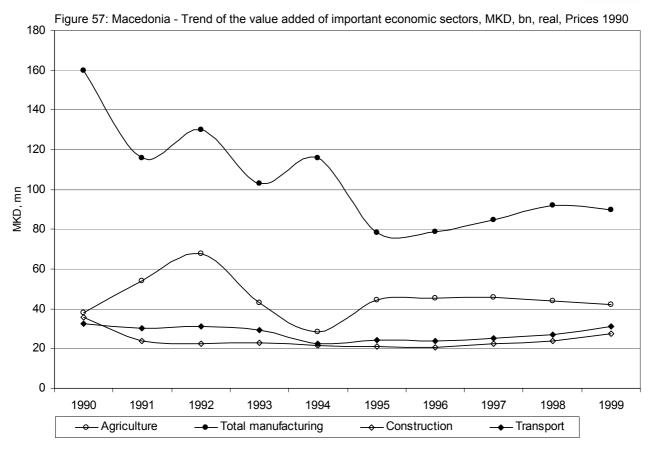
| Table To: Maccacina  |     |       |        |        |        |        |        |        |        |        |        |
|----------------------|-----|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                      |     | 1990  | 1991   | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |
| GDP, MKD, nom.       | bn  | 0.506 | 0.92   | 11.79  | 59.17  | 146.4  | 169.5  | 176.4  | 185    | 190.8  | 195.3  |
| Exchange rate        |     | 0.144 | 0.242  | 6.681  | 27.3   | 51.09  | 49.15  | 50.08  | 56.2   | 61.07  | 60.62  |
| GDP, €, nom.         | bn  | 3.52  | 3.81   | 1.77   | 2.17   | 2.87   | 3.45   | 3.52   | 3.29   | 3.12   | 3.22   |
| GDP, PPP, €, nom.    | bn  | 7.74  | 6.75   | 6.39   | 6.48   | 7.21   | 7.41   | 7.63   | 7.76   | 8.09   | 8.43   |
| GDP/capita, €, nom.  |     | 1,604 | 1,869  | 859    | 1,049  | 1,473  | 1,754  | 1,777  | 1,648  | 1,557  | 1,597  |
| GDP/capita, €, PPP   |     | 3,817 | 3,309  | 3,107  | 3,137  | 3,705  | 3,770  | 3,845  | 3,887  | 4,030  | 4,177  |
| nom. growth rate     | %   |       | -13.31 | -6.08  | 0.94   | 18.11  | 1.77   | 1.98   | 1.10   | 3.66   | 3.66   |
| real GDP change      |     |       |        |        |        |        |        |        |        |        |        |
| compared to 1990     | %   |       | -6,20  | -12,39 | -18,96 | -20,42 | -21,30 | -20,35 | -19,24 | -16,89 | -14,65 |
| real growth rate     | %   |       | -6.20  | -6.60  | -7.50  | -1.80  | -1.10  | 1.20   | 1.40   | 2.90   | 2.70   |
| <u>Sector</u> rimary | / % | 7.53  | 11.41  | 15.24  | 10.54  | 7.05   | 11.16  | 11.22  | 11.22  | 10.47  | 9.71   |
| secondary            | / % | 38.62 | 29.42  | 34.41  | 30.70  | 34.07  | 24.89  | 24.63  | 26.21  | 27.52  | 27.07  |
| tertiary             | / % | 53.85 | 59.17  | 50.36  | 58.75  | 58.87  | 63.95  | 64.15  | 62.57  | 62.01  | 63.22  |
| Agriculture          | %   | 7.53  | 11.41  | 15.24  | 10.54  | 7.05   | 11.16  | 11.22  | 11.22  | 10.47  | 9.71   |
| Total manufacturing  | %   | 31.55 | 24.44  | 29.37  | 25.07  | 28.77  | 19.63  | 19.49  | 20.73  | 21.84  | 20.75  |
| Construction         | %   | 7.07  | 4.98   | 5.04   | 5.63   | 5.31   | 5.26   | 5.14   | 5.48   | 5.68   | 6.32   |
| Transport, etc.      | %   | 6.44  | 6.41   | 7.06   | 7.20   | 5.59   | 6.10   | 5.91   | 6.11   | 6.41   | 7.19   |
| Other                | %   | 47.41 | 52.76  | 43.30  | 51.56  | 53.28  | 57.85  | 58.24  | 56.46  | 55.60  | 56.02  |
| Retail prices        | %   | 608.4 | 114.9  | 1,690  | 349.8  | 121.7  | 15.90  | 3.00   | 4.40   | 0.80   | -1.10  |
| Exchange rate        |     | 0.144 | 0.242  | 6.681  | 27.3   | 51.09  | 49.15  | 50.08  | 56.2   | 61.07  | 60.62  |
| Unemployment rate    | %   |       |        |        |        |        |        | 31.90  | 36.00  | 34.50  | 32.40  |

Source: WIIW, IFIP

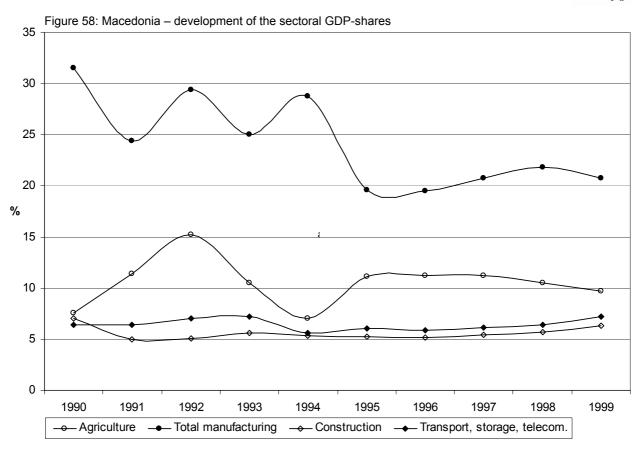
The current perspective for the years 2000 to 2003 are rather mixed. Whereas for the year 2000 a real growth of 4,3% has been estimated, the economy produced 4% less in real terms in 2001. For 2002 a stagnation (real growth of 0%) is predicted, while for 2003 a modest growth of 2% is expected.<sup>1</sup>

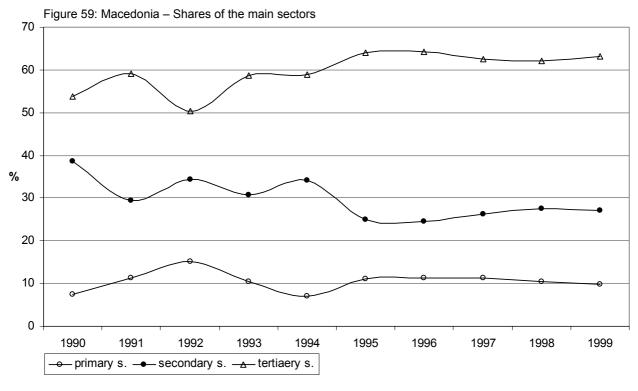
<sup>1</sup> Transition Countries Face Up to Global Stagnation, WIIW, February 2002













# 6. Summary

This summary concentrates on macroeconomic indicators, the sectoral shifts and developments will be discussed in a further report.

The main difference between the group 1 countries (Germany, Austria) on the one hand and the group 2 and 3 countries on the other hand is of course, that the latter economies had to go through the transition process from a command economy to a market economy. Furthermore, some of these countries have been involved in the Balkan war which meant an additional stress on the economy.

Therefore, it is not surprising that virtually all transition countries experienced a significant economic downturn at the beginning of the 1990s (as a consequence of the market shock policy, which was chosen by the governments and advised by western experts and politicians). If we look over the whole range of the nineties, the development of the real quantity of domestic production exhibits a picture which is clear and dramatic at the same time (see Table 16): all economies in the group 3 suffered from an absolute decline in real GDP, which was in some countries (e.g. the Ukraine) quite dramatic. Hungary and Slovakia managed to recover more or less to the production levels at the beginning of the decade, whereas Czech economy represents the negative and the Slovenian economy the positive special case in the group 2.

Rising unemployment was but one of the severe problems the transition countries had to face. The "shock therapy" destabilised many of the economies to an extent that hyperinflation and volatile and strongly falling exchange rates ensued. Only gradually, and depending largely on the pace of institutional and political reforms inside the countries, the economies of group 2 and group 3 seem to recover from the market shock and manage to capture a more stable and steady path of economic development.

Table 16: Real GDP change compared to 1990 (Germany: to 1991)

|             | re     | real growth rate compared to 1990 (bzw. 1991 Germany) |        |        |        |        |        |        |        |  |  |  |  |
|-------------|--------|---|--------|--------|--------|--------|--------|--------|--------|--|--|--|--|
|             | 1991   | 1992  | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   |  |  |  |  |
| Germany     |        | 2,24  | 1,13   | 3,50   | 5,29   | 6,10   | 7,59   | 9,70   | 11,73  |  |  |  |  |
| Austria     | 3,40   | 4,74  | 5,27   | 7,79   | 9,63   | 11,82  | 14,61  | 18,63  | 21,95  |  |  |  |  |
| Czech Rep.  | -11,60 | -12,04  | -11,95 | -10,02 | -4,71  | -0,13  | -1,13  | -3,31  | -3,50  |  |  |  |  |
| Hungary     | -11,90 | -14,63  | -15,14 | -12,68 | -11,37 | -10,22 | -6,09  | -1,49  | 2,94   |  |  |  |  |
| Slovak Rep. | -14,60 | -20,15  | -23,11 | -19,34 | -13,93 | -8,60  | -2,93  | 1,05   | 2,97   |  |  |  |  |
| Slovenia    | -8,90  | -13,91  | -11,50 | -6,81  | -2,99  | 0,41   | 5,03   | 9,02   | 14,36  |  |  |  |  |
| Ukraine     | -8,70  | -17,74  | -29,42 | -45,58 | -52,22 | -57,00 | -58,29 | -59,08 | -59,25 |  |  |  |  |
| Romania     | -12,90 | -20,56  | -19,37 | -16,23 | -10,28 | -6,78  | -12,47 | -17,20 | -19,84 |  |  |  |  |
| Bulgaria    | -11,70 | -18,15  | -19,37 | -17,92 | -15,54 | -24,07 | -29,39 | -26,92 | -25,16 |  |  |  |  |
| Croatia     | -21,10 | -30,33  | -35,90 | -32,12 | -27,51 | -23,23 | -18,01 | -15,96 | -16,21 |  |  |  |  |
| Macedonia   | -6,20  | -12,39  | -18,96 | -20,42 | -21,30 | -20,35 | -19,24 | -16,89 | -14,65 |  |  |  |  |

Source: WIIW, IFIP

Even so it is still open to the future, when and by which means a successful stabilisation and positive economic development on a broad front will take place in the considered economies, at least some hope can be gained from the current developments in the years 2000 to 2003. The perspective for these years seems to be a positive rate of real growth and a more stable monetary regime in most countries.



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