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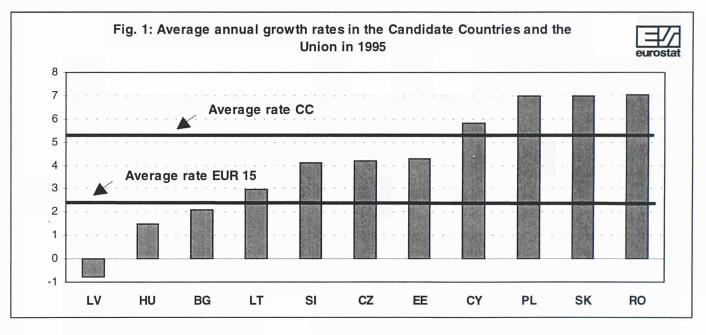
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OVERVIEW OF THE CANDIDATE COUNTRIES' GDP

In December 1994, the Essen European Council set up a strategy for preparing for the accession of the "associated countries of Central and Eastern Europe"¹. The aim of this strategy is to provide the Candidate Countries (CC) with guidelines enabling them to integrate gradually into the internal market of the EU by adopting the necessary measures step by step. The economic eligibility criteria on which the EU must base its judgement on whether or not the associated countries actually accede include the compatibility of macroeconomic data and the public accounts. In addition, the Madrid European Council in December 1995, while affirming that enlargement was both a political necessity and a historic opportunity for Europe, stressed the need for effective preparations, particularly through intensification of the pre-accession strategy defined in Essen.

¹ The associated countries of Central and Eastern Europe are the eleven associated countries which have applied for membership pursuant to Article O of the Treaty on European Union, i.e. Poland, Hungary, the Czech Republic, Romania, Bulgaria, the three Baltic Republics (Lithuania, Latvia and Estonia) the Republic of Slovenia and Cyprus. They are called Candidate Countries (CC).



Manuscript completed on = 20.08.1997 For further information please contact: M.De March / S.Stapel Eurostat, L-2920 Luxembourg, tel. 4301-33207/32547 Fax: 4301-33879

Price (excl. VAT) in Luxembourg: Subscription 'Statistics in focus' of all themes: ECU 310 Subscription 'Statistics in focus' of Theme 2 'Economy and Finance': ECU 85 Single copy: ECU 6 This report simply sets out the main macroeconomic data of the Candidate Countries - describing the development of GDP and its structure and comparing it with that of the European Union, in the full realization that these data are not yet in line with the EU-standards particularly because of the weakness of the basic statistics and the National Accounts methods used. Moreover, the situation of the economies in transition makes the task of the statistician particularly difficult in these countries.

Box 1: Data sources and methodological remarks

The data presented in this edition of "Statistics in Focus" have been delivered by the countries according to an Eurostat-questionnaire in Spring 1997, in some cases updated for the purposes of this report by June 1997. In future, they will be provided following a regular time schedule, stepwise incorporating changes in calculations methods and improvements of the quality (see Box 3).

For the time being, however, statistics from the Candidate Countries must still be treated with some caution. As mentioned above, they are derived from national sources which do not yet fully conform to EU standards. Moreover the comparability with respective EU statistics cannot be guaranteed.

Major problems with respect to data quality and comparability concern:

- the country specific adoption of theoretical National Accounts knowledge to the complicated practical situations in economies in transition.
- the exhaustiveness of the accounts
- the lack of basic data
- the reliability of basic data; a high degree of "believing in figures" can be realised. Often, the figures coming from very different sources are taken as "right" without any checks for reliability, completeness, definitions etc.
- the consistency between the different parts of the National Accounts.
- not using all possibilities of cross-checking and validating the results.

For these reasons, in future, major changes to the Candidate Countries National Accounts data have to be expected. However, there is no systematic bias in the data; gaps and shortcomings tend to both directions, over- and underestimation of GDP. The net effect to the level of GDP of all these tendencies is currently very difficult to estimate.

An average annual growth higher than that of the Union

The average annual GDP growth rates in the Candidate Countries, as shown in Table 1, reflect fairly sustained economic growth at a level higher than that of the European Union for the third year running. However, the rates vary from one country to another.

As can be seen from Fig. 1, the big majority of the Candidate Countries saw an average growth rate for 1995 which was higher than the average for the European Union (+2.4 %).

The only countries where the growth rate was below this average were Bulgaria, Hungary and Latvia, the last two also experienced a fall in growth rate compared with 1994. In addition, Latvia, where growth had resumed in 1994 to achieve the first positive rate since 1991, again showed a negative rate of around 0.8 %.

On the other hand, four Candidate Countries -Romania, the Slovak Republic, Poland and Cyprus had a 1995 growth rate which was higher than the average for the Candidate Countries (5.2 %).

In Lithuania, the Republic of Slovenia, the Czech Republic and Estonia, the growth rates were between the averages for the two groups of countries under consideration, i.e. 2.4 % for the European Union and 5.2 % for the Candidate Countries.

Table 1: Annual GDP growth rates

	1990	1991	1992	1993	1994	1995
BG	:	:	-7.3	-1.5	1.8	2.1
CZ	-1.2	-11.5	-3.3	0.6	2.7	4.2
CY	7.4	0.6	9.3	0.4	6.3	5.8
EE	:	-13.6	-14.2	-8.5	-1.8	4.3
HU	:	:	-3.1	-0.6	2.9	1.5
LV	2.9	-10.4	-34.9	-1 4.9	0.6	-0.8
LT	:	:	:	-30.4	1.0	3.0
PL	:	-7.0	2.6	3.8	5.2	7.0
RO	-5.6	-12.9	-8.8	1.5	3.9	7.1
SK	:	-14.6	-6.5	-3.9	5.0	7.0
SI	:	-8.9	-5.5	2.8	5.3	4.1
Total CC	:	:	:	1.0	4.0	5.2
Total EU	3.0	3.4	1.0	-0.5	2.9	2.4

: Figure not available

Note: for abbreviations, see Table 2.

Total GDP in ecus lower than 4 % of that of the EU

In 1995, the GDP of all the Candidate Countries in terms of current prices and exchange rates was ECU 243.7 billion compared with ECU 6 441.5 billion

for the $EU^{(2)}$, or 3.8 % of the GDP of the Union (3.4 % in 1993). As in the EU, the Candidate Countries have a very wide range of GDPs. In 1995, the GDP varied from ECU 2.8 billion in Estonia to ECU 91.0 billion in Poland.

								Per in				Per inh	habitant
		Total (in billion ECU)						ECU					EUR15= 100
	1990	1991	1992	1993	1994	1995	1990	1991	1992	1993	1994	1995	1995
Bulgaria (BG)	:	5.8	6.6	9.2	8.1	9.9	:	674	776	1 090	965	1 175	7
Czech Republic (CZ)	:	:	:	29.4	33.4	37.8	:	:	:	2 843	3 231	3 658	21
Cyprus (CY)	4.4	4.6	5.3	5.6	6.2	6.7	7 563	7 815	8 673	8 983	9 820	10 416	60
Estonia (EE)	:	:	:	1.4	2.0	2.8	:	:	:	939	1 306	1 855	11
Hungary (HU)	:	27.0	28.7	33.0	34.9	33.8	:	2 608	2 780	3 202	3 400	3 308	19
Latvia (LV)	:	:	1.1	1.9	3.1	3.4	:	:	403	723	1 212	1 360	8
Lithuania (LT)	:	:	1.2	2.0	2.9	3.5	:	:	325	525	784	933	5
Poland (PL)	46.3	61.7	65.0	73.4	77.8	91.0	1 215	1 614	1 694	1 909	2 020	2 359	14
Romania (RO)	30.0	23.3	15.1	22.5	25.1	27.3	1 294	1 004	662	989	1 106	1 203	7
Slovak Republic (SK)	:	:	:	10.2	11.6	13.3	:	:	:	1 920	2 158	2 469	14
Republic of Slovenia (SI)	:	10.2	9.6	10.8	12.1	14.3	:	5 202	4 834	5 437	6 08 1	7 210	42
Total Candidate Countries (CC)	:	:	:	199.4	217.2	243.7	:	:	:	1 880	2 048	2 301	13

Table 2: GDP of Candidate Countries at current prices and exchange rates

For the calculation of per capita GDP, the data for the total population were taken from the national accounts; the data for certain countries may be different from those obtained via demographic statistics.

Poland accounts for almost 37 % of the total GDP of the Candidate Countries, with a higher figure in absolute terms than Greece (ECU 87.4 billion) and just below that of Finland (ECU 95.6 billion).

Five of the Candidate Countries (the three Baltic countries, Cyprus and Bulgaria) had a GDP of less than ECU 10 billion. Together, they represent a little less than 11 % of the total for the CC and barely 0.4 % of the total GDP of the EU.

The main GDP components

Between 1990 and 1995, the share of final consumption by households and NPISH in GDP increased in all the Candidate Countries except Estonia (-6.3 points) and the Slovak Republic (-4.6 points); for Hungary and Bulgaria no 1990 data was available for comparison.

In the three Baltic countries, the share of GDP accounted for by general government final consumption increased substantially between 1990 and 1995. In Latvia, for example, public consumption expenditure rose from a mere 8.8 % GDP in 1990 to over 20 % in 1995. In all these countries, this change in the GDP structure mainly resulted from the introduction after independence of infrastructure and public services such as the police, the customs and the army.

Gross fixed capital formation (GFCF) fell as a percentage of GDP in all the countries between 1990 and 1995, except in Slovenia and Romania where it increased by about two percentage points.

In Slovenia, the reduction in the share of exports and imports in GDP is partly due to the fall in trade with the countries of former Yugoslavia.

² Cf. Statistics in Focus, Economy and finance 1997 No 22 "Gross Domestic Product and its components - first values for 1996", which has just appeared.

		Final cor	sumption		GFC)F	Expo	rts	Impo	orts
	priva	private		public						
	1990	1995	1990	1995	1990	1995	1990	1995	1990	1995
BG (2)	54.1 (1)	70.3	19.0 (1)	15.5	18.2 (1)	14.2	43.5 (1)	44.7	39.2 (1)	44.9
cz	50.6	57.8	19.4	19.5	28.6	28.0	:	51.1	:	56.3
СҮ	60.1	60.3	17.4	16.5	24.7	19.9	51.6	46.6	57.1	53.4
EE	64.4	58.1	13.2	23.8	30.2	25.6	:	75.8	:	84.0
HU	54.8 (1)	54.0	25.7 (1)	24.0	20.9 (1)	19.1	32.8 (1)	34.4	33.7 (1)	36.6
LV	52.0	59.0	8.8	20.3	23.0	16.6	47.9	47.3	49.0	49.4
LT	54.9	69.5	11.0	19.8	28.8	21.4	54.2	53.6	63.0	65.4
PL	48.5	63.1	18.7	17.6	21.0	16.9	28.6	25.9	21.5	24.6
RO	65.9	68.6	13.3	12.2	19.8	21.9	16.7	27.8	26.2	33.0
SK	53.9	49.3	21.9	20.3	31.3	29.4	:	63.5	:	61.7
SI	53.2	57.9	17.4	20.2	18.8	21.2	90.8	54.2	78.5	55.5

(1) 1991 figure

(2) In Bulgaria, the domestic concept was used for calculating expenditure, which is contrary to the ESA 95 recommendations. This means, for example, that purchases by non-residents in Bulgaria have been included under final consumption rather than exports. The data for Bulgaria in this table are therefore not comparable with the data for the other countries.

: Data not available

GDP in real terms

GDP, particularly GDP by inhabitant, is one of the main economic analysis indicators for comparisons time and/or space. For international over comparisons, the GDP of a country expressed in a common currency does not always give a good indication of the actual volume of goods and services which make it up. In order to offset this problem, the GDP for each country is expressed in an artificial currency known as "purchasing power standard" (PPS), which eliminates the effects of different price levels from one country to another (cf. box 2).

Tables 4 and 5 show the GDP/GDP per capita in PPS for the Candidate Countries and the EU.

In 1995, the GDP of the Candidate Countries was PPS 589.1 billion, or around 9.1 % of the GDP of the European Union (compared with a mere 3.8 % in ECUs).

Of the Candidate Countries, Poland had the highest GDP in 1995, with PPS 205.2 billion, or around 35 % of the total GDP of the Candidate Countries. On the other hand, four countries (Estonia, Latvia, Lithuania and the Republic of Slovenia) contributed only 8.4 %.

The per capita GDP of the Candidate Countries, expressed in current PPS was PPS 5 561 in 1995 compared with PPS 17 264 for the EU, or the equivalent of 32 % of the average for the EU, compared with 30 % in 1993.

An interesting example illustrating the effects of differences in level on the values of per capita GDP expressed either in ECUs or PPS is Poland. This country has a per capita GDP (ECU 2 359) around ten times smaller than its neighbour Germany. In real terms, this difference is far smaller since Poland has a per capita GDP of PPS 5 318, around four times lower compared with PPS 19 066 for Germany (cf. Tables 4 and 5).

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In 1995, of the Candidate Countries, the Republic of Slovenia has the highest per capita GDP in PPS (10 199). This is almost 90 % of the level for Greece, the Member State with the lowest per capita GDP (PPS 11 324).

Latvia, with a per capita GDP of PPS 3 144, has the lowest GDP of all the Candidate Countries, corresponding to only 28 % of the lowest per capita GDP in PPS in the EU.

Box 2: Reliability and availability of the PPPs

Concerning the GDP calculations in real terms, it has to be said that they are affected by two main error sources, the one coming from the uncertainties of the data at current prices (see box 1) and the other due to the weaknesses of the PPPs themselves. The PPP calculations are based on large price surveys for comparable and representative goods and services. These requirements make it difficult to calculate reliable PPPs in economies in transition.

The data in PPS presented here are based on price surveys for the year 1993 and they have been extrapolated to the years 1994 and 1995 using the relative deflator of GDP. In 1996 Eurostat will again compile PPPs based on new surveys; the results will be available at the earliest in 1998.

	Tota	al - Bn PPS		Per capita								
					in PPS		EUR 15 =100					
	1993	1994	1995	1993	1994	1995	1993	1994				
BG	32.9	33.4	35.4	3 887	3 960	4 210	25	24				
CZ	88.8	94.8	101.8	8 596	9 179	9 857	54	55				
СҮ	:	:	:	:	:	:	:	:				
EE	5.3	5.4	5.8	3 509	3 612	3 876	22	22				
HU	57.1	61.1	65.4	5 544	5 954	6 390	35	36				
LV	7.4	7.7	7.9	2 867	3 045	3 144	18	18				
LT	12.7	13.4	15.3	3 412	3 592	4 129	22	22				
PL	166.6	182.2	205.2	4 331	4 728	5 318	27	28				
RO	78.0	84.3	94.3	3 428	3 707	4 159	22	22				

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8 559

4 684

: Data not available

SK

SI

CC(10)

For calculating per capita GDP, the data for the total population are taken from the national accounts; the data for certain countries may differ from those obtained via demographic statistics.

6 3 2 3

9 386

5 0 4 4

7 0 3 6

10 199

5 561

Compared with the average for the EU, the development in per capita GDP in PPS in the Candidate Countries tended to rise slightly between 1993 and 1995 (+2 percentage points) while remaining very far from the Union average. However, this did not take place at the same rate in all the countries. Poland, the Slovak Republic and the

33.9

18.7

534.8

37.8

20.3

589.1

31.0

17.0

496.8

Republic of Slovenia are catching up most quickly (with 4 to 5 points). The increase was somewhat less in Hungary, the Czech Republic, Lithuania and Romania (with +2 to +3 points) while two other countries (Estonia and Latvia) stayed at the 1993 level. Only Bulgaria went slightly away from the EUaverage. (cf. Table 4).

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Table 5: Per capita GDP in the Union, at current prices and exchange rates

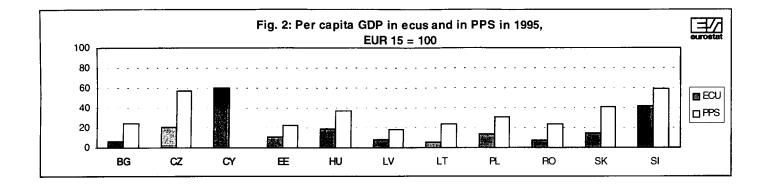
		ECU			PPS						
	1993	1994	1995	1996	1993	1994	1995	1996			
В	17 928	19 140	20 307	20 497	18 029	18 932	19 340	20 186			
DK	22 191	23 575	25 260	26 136	17 769	18 992	19 962	21 005			
D	20 090	21 189	22 595	22 642	17 146	18 329	19 066	19 912			
EL	7 571	7 911	8 362	9 214	10 225	10 801	11 324	11 941			
E	10 454	10 399	10 918	11 669	12 357	12 670	13 232	13 949			
F	18 504	19 389	20 197	20 750	17 311	17 923	18 516	19 255			
IRL	11 652	12 722	13 739	15 348	13 139	14 709	16 024	17 852			
I	14 495	14 690	14 245	16 357	16 130	17 064	17 766	18 455			
L	27 576	30 454	32 368	33 284	26 110	28 079	29 138	30 976			
NL	17 483	18 465	19 573	19 920	16 515	17 450	18 392	19 455			
Α	19 511	20 814	22 176	22 256	17 774	18 832	19 321	20 020			
Ρ	7 075	7 198	7 774	8 272	10 565	11 161	11 621	12 336			
FIN	14 220	16 223	18 717	19 066	14 503	15 197	16 546	17 605			
S	18 184	19 029	19 970	22 283	15 638	16 384	17 388	18 131			
UK	13 900	14 736	14 412	15 397	15 767	16 474	16 581	17 475			
EUR 15	15 935	16 667	17 264	18 074	15 842	16 667	17 264	18 074			

For calculating per capita GDP, the data for the total population are taken from the national accounts; the data for certain countries may differ from those obtained via demographic statistics.

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Exchange rates and purchasing power parities

Table 6 shows the exchange rates for the currencies of the Candidate Countries against the ecu while Table 7 shows how many units national currency comply with one PPS. Between 1991 and 1995 there were a number of disturbances on the money Candidate Countries. markets in the More

specifically, the Hungarian and Polish and particularly the Bulgarian and Romanian currencies fell progressively and substantially compared with the ecu. On the other hand, three countries managed to stabilize their currencies between 1993 and 1995. The stable currencies were the Czech koruna, the Cyprus pound and the Slovak koruna. During the same period, the Latvian lat and the Estonian kroon even increased their value against the ECU.

Table 6: Ecu exchange rates, annual averages 1 ECU = national currency units

	BG	cz	CY	EE	HU	LV	LT	PL	RO	SK	SI	
1990	:	:	0.5822	:	80.4881	:	:	1.2098	28.5629	:	:	
1991	23.3230	:	0.5741	:	92.6085	:	:	1.3105	94.6593	:	34.1636	
1992	30.2951	:	0.5844	:	102.5346	0.9554	2.7869	1.7688	399.7510	:	105.5228	
1993	32.3758	34.1381	0.5820	15.4841	107.6534	0.7904	5.6752	2.1213	890.0175	36.0316	132.6039	
1994	64.5268	34.2403	0.5846	15.4530	125.0898	0.6661	5.8204	2.7029	1980.6553	38.1181	153.2219	
1995	87.8557	34.7159	0.5915	14.9963	164.3920	0.6906	6.8762	3.1719	2659.5506	38.8649	155.0253	
: Data not	available											

Table 7: GDP PPS-parities 1 PPS = national currency units

	BG	CZ	СҮ	EE	HU	LV	LT	PL	RO	SK	SI	
1993	9.0782	11.2921	:	4.1450	62.1820	0.1994	0.8728	0.9353	256.8352	11.8979	84.2306	
1994	15.7162	12.0547	:	5.5885	71.4421	0.2652	1.2704	1.1547	590.7248	13.0072	99.2583	
1995	24.5198	12.8815	:	7.1768	85.0886	0.2987	1.5537	1.4069	769.2559	13.6380	109.5957	
: Data not	available											

Table 8: Price level indices (PPS/ECU)

	BG	CZ	CY	EE	HU	LV	LT	PL	RO	SK	SI
1993	28	33	:	27	58	25	15	44	29	33	64
994	24	35	:	36	57	40	22	43	30	34	65
1995	28	37	:	48	52	43	23	44	29	35	71

A comparison of exchange rates against the ecu and PPS parity shows that the real purchasing power is much higher in all the countries than would appear from the exchange rates. For example, in 1995 in Romania one ecu cost 2 659.5 lei, whereas a mere 769.2 lei were enough to purchase the volume of goods and services corresponding to one PPS.

Price indices

The PPS/ecu ratio enables price indices to be calculated for each country. These indices give an idea of the extent to which a currency is over- or undervalued. Table 8 shows that all the currencies in

Box 3: Eurostat's National Accounts work with the Candidate Countries

In Spring 1996, Eurostat was requested by the Commission of the European Union to make arrangements, by end 1997, for the provision of adequate macro-economic statistics from Candidate Countries together with an assessment of the quality of these data and the compilation methods behind.

In the framework of the work plan defined by the nonfinancial National Accounts, a **Working Party** created in 1996 with the Candidate Countries, data collection from the countries was started and first steps were made for improving the data quality in terms of reliability, exhaustiveness and correspondence with the ESA.

The answers to the assessment questionnaire prepared by Eurostat were the basis for fact-finding missions in the countries which made it possible to identify a list of common gaps and shortcomings. This list has been used to define **task forces and other activities** needed to assist Eurostat's assessment work and to improve calculation methods and data quality. These projects, which are lead by experts of the Member States and of Eurostat **started in 1997**, they concern the following subjects:

- 1. Estimation methods at constant prices
- 2. General government and NPISH
- 3. Private household consumption
- 4. Banks and insurances

the Candidate Countries are undervalued compared with the ecu - by 72 % in the case of Bulgaria to 29 % in the case of Slovenia in 1995.

Under- or overvaluing are obviously of great relevance to the reliability of the PPS data (cf. also box 2 on purchasing power parities).

- 5. Exhaustiveness of the National Accounts
- 6. Borderline between intermediate consumption and final uses
- 7. Use of registers for National Accounts purposes
- 8. Changes in inventories and holding gains
- 9. Exports, imports and the transition between GDP and GNP
- 10.Domestic property rental
- 11.Quarterly National Accounts, sector accounts and IOT.

Most of these projects will be continued in 1998. Besides that, the following **new projects**, dealing with common problems will start **in 1998**:

- 1. Calculation of capital stock and consumption of fixed capital at replacement costs
- 2. Estimates for shuttle trade and tourist expenditure
- 3. Developing/improving the estimates for holding gains
- Calculating a small IOT (for CC not having IOT yet).

In addition, **country specific projects** will be defined in order to tackle particular problems of individual Candidate Countries.

Based on the missions and the project reports provided by the experts, **assessment reports** on the National Accounts of each CC will be written. These reports, together with a set of improved macroeconomics data and **proposals for the future work** (as not all problems can be overcome in the short term horizon) will be provided to the Commission services by the end of 1997/ mid 1998 to support the start of the enlargement negotiations.

For more information on data quality and assessment, please contact:

Ms Silke Stapel, Eurostat B2 APC building, office A5/11. tel. 352.4301.32547 E-mail: Silke.Stapel@cec.eurostat.be

This report has been prepared with contributions from Aline Bouzergan and Sebastian Reinecke.

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GDP per capita in PPS in the Candidate countries and in the Union, 1995

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