



THE GDP OF THE CANDIDATE COUNTRIES OF CENTRAL AND EASTERN EUROPE AND CYPRUS

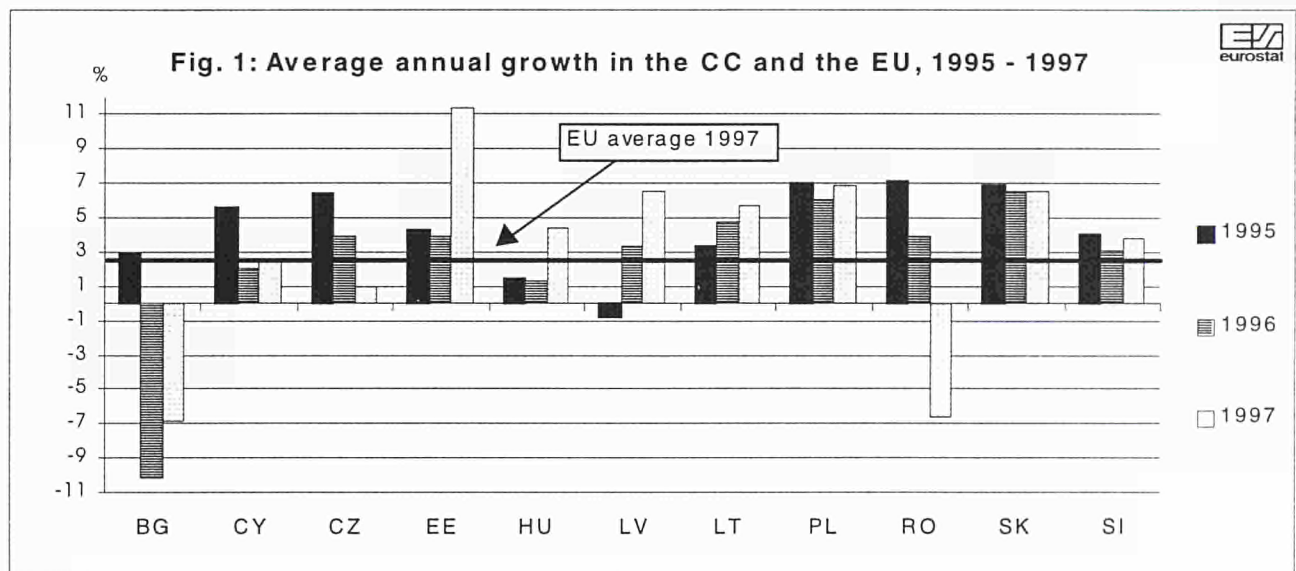
— Initial figures for 1997 and new calculations in real terms —

As part of preparations for the next round of EU enlargement, Eurostat has to provide the Commission with comparable and reliable macroeconomic data on the Candidate Countries of Central and Eastern Europe and Cyprus. ⁽¹⁾

To this end, Eurostat units B1 and B2 set about establishing close working relations, from mid-1996 onwards, with the National Accounts departments of the CCs' Statistical Offices. This cooperation, however, is aimed not only at meeting the Commission's data requirements but

also at assessing the quality of macroeconomic data and of the underlying basic data and calculation methods. Assessment is strictly geared to the "European System of Accounts 1995" (ESA 95), which is the legal framework for National Accounts in the EU.

Based on assessment results, projects have been set up in order to improve the CCs' accounts where necessary, the clear aim being to achieve full compliance with ESA 95 (see Box 2).



⁽¹⁾ These countries are : Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovak Republic, Slovenia. For the purpose of this publication they are called Candidate Countries (CCs).

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Table 1: Annual GDP growth rates (%)

	1991	1992	1993	1994	1995	1996	1997
 BG	:	-7.3	-1.5	1.8	2.9	-10.1	-6.9
CY	0.7	9.4	0.7	5.8	5.5	2.0	2.4
CZ	-11.5	-3.3	0.6	-2.7	6.4	3.9	1.0
EE	-13.6	-14.2	-9.0	-2.0	4.3	4.0	11.4
HU	-11.9	-3.1	-0.6	2.9	1.5	1.3	4.4
LV	-10.4	-34.9	-14.9	0.6	-0.8	3.3	6.5
LT	-5.7	-21.3	-16.2	-9.8	3.3	4.7	5.7
PL	-7.0	2.6	3.8	5.2	7.0	6.1	6.9
RO	-12.9	-8.8	1.5	3.9	7.1	3.9	-6.6
SK	:	:	-3.7	4.9	6.9	6.6	6.5
SI	-8.9	-5.5	2.8	5.3	4.1	3.1	3.8
Total CCs	:	:	1.1	3.8	5.6	4.1	3.6
Total EU	3.4	0.9	-0.6	2.9	2.5	1.7	2.6

: Figure not available

Note : for abbreviations, see Table 3.

This report sets out the main macroeconomic data of the CCs, describing the development of GDP, the main aggregates and *per capita* figures in comparison with those of the European Union. It should be borne in mind that the CCs' data are not yet fully in line with EU standards, particularly due to the weakness of the CCs' basic statistics and the need for improvements to the methods used for drawing up the National Accounts. Moreover, the situation of economies in transition makes the statistician's task particularly difficult in these countries. Improvements are being made and, for the first time, some data are now broken down by branch.

Average annual growth higher than that of the EU

As shown by the annual GDP growth rates in Table 1, the CCs have achieved fairly sustained economic growth outstripping that of the European Union over five consecutive years. Their overall growth rate is edging nearer to the EU's, however, and the individual rates vary markedly.

As can be seen from Fig. 1, the large majority of CCs recorded a growth rate for 1997 that was higher than the European Union average (+2.6%).

The only countries to fall short of this average were Cyprus, the Czech Republic, Romania and Bulgaria, with the last two experiencing a fall in growth rate compared with 1996.

In Bulgaria, GDP decreased for the second year in succession, but the 1997 fall (-6.9%) was at least lower than the one in 1996 (-10.1%).

On the other hand, seven CCs – Estonia, Hungary, Latvia, Lithuania, the Slovak Republic, Slovenia and Poland - had a 1997 growth rate which was higher than the CC average (3.6%). Estonia even reached two-digit figures.

Box 1: Data sources and methodological remarks

The data presented in this edition of "Statistics in Focus" were supplied by the CCs on the basis of a Eurostat questionnaire completed in April/May 1998. In some cases, data were updated in June 1998 for the purposes of this report. This was the second data delivery under the established regular reporting system. With each data delivery, gradual changes in calculation methods and improvements to data quality will be incorporated in the data sets. For the time being, however, statistics from the CCs 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, comparability with the respective EU statistics cannot be guaranteed.

Major data-quality and comparability problems relate to:

- country-specific adaptation of theoretical National Accounts knowledge to the complicated practical situations of economies in transition;
- exhaustiveness of the accounts;
- lack of basic data;
- reliability of basic data; a high degree of "believing in figures" is evident; it is often the case that figures emanating from very different sources are regarded as "correct" without any checks being made on reliability, completeness, definitions etc;
- consistency between the different parts of the National Accounts;
- failure to exhaust all scope for cross-checking and validating results;
- quality of the Purchasing Power Parities (PPPs) needed to express data in real terms (Purchasing Power Standards – PPSs).

In future, therefore, the CCs' National Accounts data can be expected to undergo more than minor changes. However, there is no systematic bias in the data; gaps and shortcomings occur in both directions, leading to over- and underestimation of GDP. It is currently very difficult to estimate the net effect of all these tendencies on the level of GDP, but a certain underestimation of the CCs' GDP values is more likely.

What is more, one major change to the CCs' data has already been incorporated in this edition of "Statistics in Focus". The results of the 1996 European Comparison Programme are now available (new PPPs), so that the 1993 to 1996 GDP values in real terms have been revised, and 1997 has been extrapolated on a significantly more comparable and reliable basis (see page 7/8).

Total GDP in ecus just over 4 % of EU total

In 1997, the GDP of all the CCs in terms of current prices and exchange rates was ECU 303 billion compared with ECU 7 128 billion for the EU, or 4.3 % of the EU's GDP (4.0 % in 1996). As in the European Union, there is a very wide spread of GDP figures among the CCs. In 1997, GDP ranged from ECU 4.2 billion in Estonia to ECU 119.7 billion in Poland.

Poland accounts for almost 40 % of the CCs' total GDP, with a higher figure in absolute terms than Greece (ECU 106.7 billion) and Finland (ECU 105.1 billion).

Table 2: GDP at current prices and exchange rates

EU eurostat	Total (in billion ECU)								
	1990	1991	1992	1993	1994	1995	1996	1997	
BG	:	6.5	6.6	9.2	8.1	11.0	7.8	9.0	
CY	4.4	4.7	5.3	5.6	6.2	6.7	7.0	7.5	
CZ	:	:	:	29.4	33.5	38.8	44.5	45.9	
EE	:	:	:	1.4	1.9	2.7	3.4	4.2	
HU	0.0	27.0	28.7	33.0	34.9	34.1	35.6	39.6	
LV	:	:	:	1.9	3.1	3.4	4.0	4.9	
LT	:	:	1.5	2.3	3.6	4.6	6.2	8.4	
PL	46.3	61.7	65.0	73.4	77.8	91.0	106.0	119.7	
RO	30.0	23.3	15.1	22.5	25.3	27.1	27.6	30.6	
SK	:	:	:	10.2	11.6	13.3	14.8	17.2	
SI	:	:	9.6	10.8	12.1	14.3	14.9	16.1	
Total CCs	:	:	:	199.7	218.2	247.2	271.9	303.0	
% of EU	:	:	:	3.4	3.5	3.8	4.0	4.3	

: Data not available

Note: The data for Lithuania has been corrected since the August 97 publication. Unfortunately, in August 97 Eurostat used incorrect exchange rates. Eurostat apologises for any problems caused by this mistake.

Five of the CCs (the three Baltic states, Cyprus and Bulgaria) had a GDP of less than ECU 10 billion each. Together, they represent just over 11 % of the total for the CCs, equivalent to barely 0.5 % of the EU's total GDP.

The main GDP components

In 1997, the share of GDP accounted for by final consumption of households and NPISH varied among the CCs from 50.0 % in the Slovak Republic to 75.4 % in Romania. This matches the situation among the EU Member States: Ireland accounts for the lowest share, at 52.1 %, and Greece the highest, at 72.4 %. Among the CCs, as among the EU Member States, the countries at the lower end of the economic performance scale are the ones where the highest share of GDP is accounted for by household and NPISH final consumption. This is because a larger proportion of the limited GDP is needed to satisfy the population's basic needs.

With regard to final consumption of general government, there was a gap of over 12 percentage points in 1997 between the lowest share of GDP, in Romania (10.1 %), and the highest, in Estonia (22.9 %). This is a slightly narrower range than among the EU Member States, of which Germany (12.0 %) has the lowest share of government consumption and Sweden the highest (26.9 %). Interestingly, the proportion has now stabilised in the Baltic states between 19.6 % (Lithuania) and 22.9 % (Estonia), following a jump in this figure in 1992 due to the establishment of a governmental infrastructure after independence (see "Statistic in Focus" 29/1997).

In terms of gross fixed capital formation in 1997, two countries stand out: in Bulgaria this component accounted for a very low share of GDP (11.3 %), which comes as no great surprise given the current economic situation in that country.

The Slovak Republic, on the other hand, recorded a very high level of investment as a proportion of GDP for the second consecutive year (1996: 36.9 %, 1997: 38.6 %), and the figure is now approaching 40 %. By way of comparison, the highest share of GFCF in GDP among the Member states is 25.6 % in Portugal.

Table 3: GDP per capita at current prices and exchange rates

EU eurostat	ECU					EU-15=100				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
Bulgaria (BG)	1 100	1 000	1 300	900	1 100	7	6	8	5	6
Cyprus (CY)	8 900	9 800	10 400	10 700	11 400	56	59	60	59	60
Czech Republic (CZ)	2 800	3 200	3 800	4 300	4 500	18	19	22	24	23
Estonia (EE)	900	1 300	1 800	2 300	2 800	6	8	11	13	15
Hungary (HU)	3 200	3 400	3 300	3 500	3 900	20	20	19	19	21
Latvia (LV)	700	1 200	1 400	1 600	2 000	4	7	8	9	10
Lithuania (LT)	600	1 000	1 200	1 700	2 300	4	6	7	9	12
Poland (PL)	1 900	2 000	2 400	2 700	3 100	12	12	14	15	16
Romania (RO)	1 000	1 100	1 200	1 200	1 400	6	7	7	7	7
Slovak Republic (SK)	1 900	2 200	2 500	2 800	3 200	12	13	14	15	17
Slovenia (SI)	5 400	6 100	7 200	7 500	8 100	34	36	42	41	43
Total Candidate Countries (CCs)	1 900	2 100	2 300	2 600	2 900	12	12	14	14	15

Note: For the calculation of per capita GDP, the data for the total population is taken from the National Accounts; it may differ from that obtained via demographic statistics.

Table 4: Main GDP aggregates (%)

	Final consumption						GFCF			Exports			Imports		
	of households and NPISH			of general government											
	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
BG	70.7	76.6	71.8	15.3	11.9	12.4	15.3	13.6	11.3	44.7	62.9	61.3	46.3	59.8	55.7
CY	59.8	61.5	62.2	16.5	18.0	18.8	19.4	19.5	18.2	46.6	46.8	46.1	50.3	53.3	51.9
CZ	49.5	50.4	51.4	20.9	21.1	20.2	32.8	33.0	30.7	56.0	53.4	57.6	60.5	60.4	63.0
EE	61.2	60.7	57.3	25.4	24.1	22.9	26.0	26.7	26.5	72.3	66.6	72.9	80.4	78.7	85.2
HU	53.8	52.2	51.2	23.6	22.0	21.4	20.0	21.4	22.3	37.3	38.9	46.4	38.5	39.9	46.9
LV	62.6	66.8	65.2	22.2	21.9	21.3	17.6	18.1	18.7	46.9	54.5	56.2	49.3	61.3	61.4
LT	67.4	66.5	67.1	19.7	18.9	19.6	23.0	23.0	22.0	53.0	53.4	54.6	64.8	63.2	64.8
PL	63.1	65.1	65.5	17.6	17.5	17.6	16.9	19.0	20.8	25.9	24.8	26.4	24.6	27.6	31.5
RO	67.6	72.1	75.4	13.7	11.6	10.1	21.4	23.1	19.2	27.6	28.4	29.7	33.2	36.7	36.7
SK	49.6	50.3	50.0	20.3	22.4	21.7	27.4	36.9	38.6	63.0	58.0	56.4	61.2	70.0	63.5
SI	57.9	57.3	:	20.2	20.1	:	21.2	22.5	:	54.2	54.3	:	55.5	55.2	:

: Data not available

The CCs also exhibit major differences with regard to their foreign trade activities. In 1997, Estonia exported the equivalent of 72.9 % of its GDP and imported the equivalent of 85.2 %. At the other end of the scale, the value of Poland's exports amounted to 26.4 % of GDP, and that of its imports to 31.5 %. Nine of the ten countries for which 1997 data are available had a negative trade balance, importing more goods and services than they exported. The only exception is Bulgaria.

GDP in real terms

GDP, particularly as expressed per inhabitant, is one of the main indicators used for economic analyses involving comparisons over time and/or between regions. For international comparisons, a country's GDP expressed in a common currency does not always give a good indication of the actual volume of component goods and services. In order to resolve this problem, the GDP for each country is expressed in an artificial currency known as the "Purchasing Power Standard" (PPS), which eliminates the effects of different price levels from one country to another (concerning the availability and reliability of PPPs, please refer to the pages 7 and 8)⁽¹⁾.

Tables 5 to 8 show the total and *per capita* GDP figures, in PPSs, for the CCs and the EU.

In 1997, the total GDP of the CCs (excluding CY) stood at PPS 792.0 billion, or around 11.1 % of the EU's total GDP (compared with only 4.1 % in ecus).

Of the CCs, it was Poland that achieved the highest GDP in 1997, at PPS 291.2 billion, or around 37% of the total GDP of the CCs. On the other hand, four countries (Estonia, Latvia, Lithuania and the Republic of Slovenia) contributed only 8.8 %.

Table 5: GDP at current prices and purchasing power standards

	Total - Bn PPS				
	1993	1994	1995	1996	1997
BG	37.6	39.3	40.9	38.5	36.7
CZ	:	102.7	111.4	119.8	123.8
EE	7.8	7.8	8.3	9.0	10.3
HU	73.3	77.5	79.5	84.5	90.3
LV	10.3	10.7	10.7	11.6	12.7
LT	:	:	17.9	19.7	21.3
PL	204.7	221.2	239.2	266.0	291.2
RO	109.5	116.8	126.5	137.9	131.8
SK	34.0	36.6	39.5	44.2	48.2
SI	19.7	21.3	22.4	24.3	25.8
Total CCs⁽¹⁾	:	:	696.3	755.4	792.0

: Data not available
(¹) excluding Cyprus

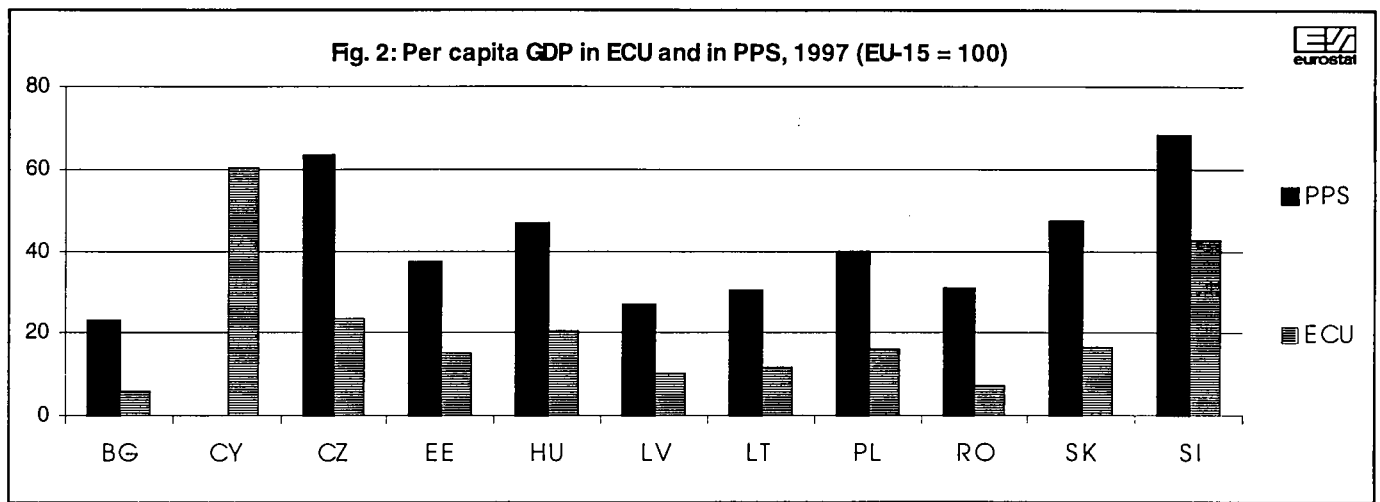
Table 6: GDP per capita at current prices and purchasing power standards

	in PPS					EU-15=100				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
BG	4 400	4 700	4 900	4 600	4 400	28	28	28	25	23
CZ	:	9 900	10 800	11 600	12 000	:	60	62	64	63
EE	5 100	5 200	5 600	6 100	7 000	32	31	32	34	37
HU	7 100	7 600	7 800	8 300	8 900	45	45	45	46	47
LV	4 000	4 200	4 300	4 700	5 100	25	25	25	26	27
LT	:	:	4 800	5 300	5 800	:	:	28	29	30
PL	5 300	5 700	6 200	6 900	7 500	33	34	36	38	40
RO	4 800	5 100	5 600	6 100	5 800	30	31	32	34	31
SK	6 400	6 800	7 400	8 200	8 900	40	41	43	45	47
SI	9 900	10 700	11 300	12 200	13 000	62	64	65	67	68
Total CCs⁽¹⁾	:	:	6 600	7 200	7 500	:	:	38	40	40

: Data not available
(¹) excluding Cyprus

For the calculation of per capita GDP, the data for the total population is taken from the National Accounts; it may differ from that obtained via statistics.

(¹) An interesting example illustrating the impact of different price levels on *per capita* GDP is Poland. In ecu terms, this country has a *per capita* GDP (ECU 3 100) around seven times smaller than its neighbour Germany. In real (PPS) terms, the difference is far smaller, with the Polish figure of PPS 7 500 around three times lower than Germany's PPS 20 900 (cf. Tables 3 and 6).



The average *per capita* GDP of the Candidate Countries, expressed in current PPSs, was PPS 7 500 in 1997 compared with PPS 19 000 for the EU, or the equivalent of 40 % of the EU average, compared with 38 % in 1995.

The Republic of Slovenia was the CC with the highest *per capita* GDP in 1997, at PPS 13 000. This almost matched the level of Greece, the Member State with the lowest *per capita* GDP, and equalled 97 % of the level of Portugal, the EU Member State ranking just above Greece.

Bulgaria, with a *per capita* GDP of PPS 4 400, had the lowest GDP of all the Candidate Countries, corresponding to only 34 % of the lowest *per capita* GDP, in PPS terms, in the EU.

In PPS terms, the CCs' average *per capita* GDP on the base EU-15 = 100 tended to rise slightly between 1995 and 1997 (+2 percentage points) while still remaining well below the EU average. However, this rise did not take place at the same rate in all countries. Poland, the Slovak Republic and Estonia are catching up more quickly (+4 to +5 percentage points). The increase was somewhat less

pronounced in Hungary, Latvia, Slovenia and Lithuania (+2 to +3 percentage points), while two other countries (Romania and Bulgaria) fell short of the EU average, the latter by 5 percentage points (cf. Table 6).

Table 7: GDP at current prices and purchasing power standards for the European Union


EUROSTAT	Total - Bn PPS				
	1993	1994	1995	1996	1997
EU-15	5908.6	6202.0	6447.9	6770.6	7128.2
B	184.1	193.6	199.0	207.4	218.4
DK	90.5	96.7	102.2	108.4	114.8
D	1394.0	1495.6	1557.7	1640.3	1712.2
EL	106.3	113.7	120.2	129.0	138.2
E	486.9	500.3	522.1	552.8	586.0
F	994.6	1034.5	1071.7	1104.2	1161.5
IRL	46.9	52.5	57.6	61.0	67.1
I	936.7	993.7	1037.5	1079.3	1126.8
L	10.4	11.3	11.9	12.2	13.3
NL	250.9	265.8	284.9	292.7	309.6
A	142.1	149.6	154.3	164.4	172.6
P	106.7	115.2	120.6	125.6	133.3
FIN	73.4	77.3	85.1	89.0	96.2
S	136.8	144.4	154.6	160.4	165.4
UK	914.0	959.9	973.5	1044.6	1116.0

Table 8: GDP per capita at current prices and purchasing power standards for the European Union

EUROSTAT	in PPS					EU-15=100				
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
EU-15	15 900	16 700	17 300	18 100	19 000	100	100	100	100	100
B	18 300	19 100	19 600	20 400	21 500	115	115	114	113	113
DK	17 400	18 600	19 600	20 600	21 800	109	111	113	114	115
D	17 200	18 400	19 100	20 000	20 900	108	110	110	111	110
EL	10 200	10 900	11 500	12 300	13 100	64	65	67	68	69
E	12 500	12 800	13 300	13 900	14 800	78	77	77	77	78
F	17 300	17 900	18 400	18 900	19 800	108	107	107	105	104
IRL	13 200	14 700	16 100	16 800	18 300	83	88	93	93	96
I	16 100	17 100	17 800	18 500	19 200	101	102	103	102	101
L	26 100	28 100	29 000	29 400	31 500	164	168	168	163	166
NL	16 400	17 300	18 400	18 800	19 800	103	104	107	104	105
A	17 800	18 600	19 200	20 400	21 300	112	112	111	113	112
P	10 800	11 600	12 200	12 700	13 400	68	70	70	70	71
FIN	14 500	15 200	16 700	17 400	18 700	91	91	96	96	99
S	15 700	16 400	17 500	18 100	18 700	98	99	101	100	98
UK	15 700	16 400	16 600	17 800	18 900	99	99	96	98	100

For the calculation of per capita GDP, the data for the total population is taken from the National Accounts; it may differ from that obtained via demographic statistics.

Table 9: Gross value added by branch (% of total) in 1995

	Agricult., fishing...	Industry, incl. energy	Construction	Service activities ⁽¹⁾
	AYA+AYB	AYC_AYE	AYF	AYG_AYQ
BG ⁽²⁾	15.4	25.9	4.3	54.5
CY	5.4	15.1	9.0	70.5
CZ	4.6	33.6	8.1	53.7
EE	7.9	23.1	5.9	63.1
HU	6.7	26.3	4.6	62.4
LV	10.8	28.1	5.1	56.0
LT	11.7	26.1	7.1	55.0
PL	7.5	33.8	6.0	52.7
RO	20.7	34.5	6.9	37.9
SK	6.0	28.0	4.7	61.3
SI	4.4	32.0	5.6	58.0
Total CCs	8.7	31.2	6.2	53.8
EU-15	2.3	25.8	5.4	66.5
EU min country	D	L	S	IRL
EU max country	EL	IRL	E	L


(¹) Statistical discrepancy included.
(²) BG: data refer to 1996

GVA and GFCF by branch

For the first time, some of the CCs provided figures broken down by branch. Table 9 shows GVA by branch, Table 10 branch-specific GFCF.

The branch structures of the CCs and the EU differ most noticeably in Agriculture and Service activities. On average, the CCs generate 8.7 % of their total GVA in agriculture, compared with an average figure for the Member States of only 2.3 %. In each individual CC, the share of total GVA accounted for by agriculture is higher than the EU average. Bulgaria (15.4 %) and Romania (20.7 %) have the largest shares, exceeding that of Greece (14.2 %), the EU Member State with the largest agricultural component in total GVA.

Table 10: Gross fixed capital formation by branch (% of total) in 1995

	Agricult., fishing...	Industry, incl. energy	Construction	Service activities ⁽¹⁾
	AYA+AYB	AYC_AYE	AYF	AYG_AYQ
CY	4.2	12.1	2.2	81.5
EE	6.0	25.2	4.5	64.3
HU	2.7	29.1	1.6	66.6
LT	5.9	28.6	5.4	60.1
PL	3.2	38.2	4.4	54.2
SK	4.2	32.9	8.6	54.3
SI	0.9	38.6	3.0	57.5
EU-15	3.0	20.9	1.8	74.4
EU min country	UK	F	UK	S
EU max country	IRL	S	P	L

(¹) Statistical discrepancy included.

The average share of Service activities in the GVA of Member States (66.5 %) is 12.7 percentage points higher than in the CCs (53.8 %). Among the latter, Romania recorded the lowest share, at 37.9 %, followed by Poland (52.7 %), the only other country which posted a value below the lowest percentage in the EU, that of Ireland (53.2 %). With Service

activities accounting for 70.5 % of total GVA, however, Cyprus comes close to the EU's maximum figure of 75.3 % recorded by Luxembourg.

Data on the branch breakdown of GFCF are only available for the countries featured in Table 10. For these countries the branch-specific shares in total GFCF largely match the contributions of the respective branches to total GVA. In Cyprus, for example, 70.5 % of total GVA is generated by Service activities and the lion's share of GFCF (81.5 %) also originates in this branch.


Exchange rates and Purchasing Power Parities

Table 11 shows the exchange rates of the CCs' currencies against the ecu, while Table 12 indicates the number of national currency units corresponding to one PPS.

The exchange rates given in this publication are the ones officially provided by the Eurostat unit responsible, B4. They are supplied to the Commission on a regular basis by the central banks of the Candidate Countries.

On a number of occasions between 1993 and 1997 the CCs experienced turmoil on the money markets. The Hungarian, Polish, Slovenian and particularly the Bulgarian and Romanian currencies fell steadily and substantially vis-à-vis the ecu.

Table 11: Ecu exchange rates, annual averages 1 ECU=...national currency units

	1993	1994	1995	1996	1997
	BG	32.3899	64.5315	80.0110	223.2474
CY	0.5820	0.5846	0.5917	0.5920	0.5828
CZ	34.1382	34.2403	34.7159	34.4636	35.9108
EE	15.4841	15.4531	14.9963	15.2802	15.7427
HU	107.6535	125.0899	164.6378	193.6749	211.5546
LV	0.7929	0.6641	0.6896	0.6996	0.6595
LT	5.0870	4.7313	5.2320	5.0790	4.5362
PL	2.1213	2.7029	3.1719	3.4234	3.7189
RO	890.0186	1968.7627	2659.5506	3920.7021	8159.4934
SK	36.0317	38.1182	38.8649	38.9229	38.1200
SI	132.6040	153.2221	154.9189	171.7948	180.9649


In ecu terms, the value of the Bulgarian currency in 1993 was nearly sixty times higher than in 1997, while the Romanian currency decreased in value by a factor of nine. Over the same period, the Latvian lat and the Lithuanian litas appreciated against the ecu. The currencies of the other CCs remained more or less stable.

Calculations of GDP in real terms are affected by two main sources of error: the uncertainties inherent in GDP data at current prices (see Box 1) and the limitations of the PPP used to translate GDP into real volume terms.

PPP calculations are based on major price surveys covering a basket of goods and services which are both comparable and representative for the countries included in the comparison. These two requirements make it particularly difficult to establish reliable PPPs for economies in transition.

In 1993, the ten Eastern European countries covered by this publication (no PPPs are currently available for Cyprus) participated in the European Comparison Programme for the first time. In 1996 they were involved for a second time.

Table 12: GDP-parities (PPP)
1 PPS=...national currency units

	1993	1994	1995	1996	1997
 BG	7.9468	13.3614	21.5351	45.4002	466.1003
CZ	:	11.1795	12.1118	12.7944	13.3230
EE	2.7742	3.7778	4.9263	5.8202	6.3726
HU	48.3811	56.2932	70.6105	81.6025	92.6919
LV	0.1418	0.1910	0.2192	0.2436	0.2535
LT	:	:	1.3433	1.6025	1.7920
PL	0.7610	0.9514	1.2070	1.3640	1.5286
RO	183.0153	425.9660	570.2970	786.2634	1894.8221
SK	10.8708	12.0423	13.0790	13.0377	13.5779
SI	72.7359	86.8255	98.9570	105.2190	112.7891

: Figure not available

Preliminary results of the 1996 exercise are now available. They show some significant differences compared with the PPPs extrapolated for 1996 on the basis of the 1993 results. The principal reasons for this divergence are as follows:

1. PPPs represent spatial comparisons that can be thought of as snapshots of a particular moment in time: they are not intended to be used for creating time series - and are subject to limitations when so used. Between periodic PPP calculations, methodology and practice are often changed significantly in an attempt to ensure the best snapshot.
2. The 1993 PPPs for the CCs were calculated as individual bilateral (i.e. non-transitive) comparisons with Austria. Comparison with other EU countries was done via Austria, which also participated in the 1993 multilateral EU comparison. The 1996 calculations were genuine multilateral comparisons involving Austria and all the CCs; Austria was still used as the bridge for comparisons with other EU countries.
3. The baskets of goods and services used for the surveys in 1993 and 1996 were completely different, in recognition of the market developments which had taken place over the intervening period in the countries participating in the comparison.
4. Compared with 1993, goods measuring up to Western European standards were more widely available in 1996. Expenditure patterns are also thought to have displayed greater similarity in 1996.
5. In 1996, unlike in 1993, no productivity adjustments were made when calculating the PPPs for government final consumption in CCs. This is consistent with the treatment in the multilateral EU comparison. It is also justifiable in relation to the changes which are believed to have occurred in the public sector administrations of the CCs between 1993 and 1996.

Box 2: Eurostat's activities relating to the Candidate Countries' National Accounts

In the spring of 1996, the European Commission requested Eurostat to provide macroeconomic statistics on Candidate Countries together with a quality assessment of the underlying data and compilation methods.

Under the work plan defined by the non-financial **National Accounts Working Party**, created in conjunction with the Candidate Countries in 1996, data collection was initiated and the first steps taken towards improving data quality in terms of reliability, exhaustiveness and compliance with the ESA.

Fact-finding missions based on replies to a Eurostat assessment questionnaire identified a list of common gaps and shortcomings in the countries concerned. This list has been used to define **task forces and other activities** needed to support Eurostat's assessment work and to improve calculation methods and data quality. Spearheaded by experts from the Member States and Eurostat, these projects **got underway in 1997**. They address the following subjects:

1. Estimation methods at constant prices
2. General government and NPISH
3. Private household consumption
4. Banking and insurance, FISIM
5. Exhaustiveness of the National Accounts
6. Use of registers for National Accounts purposes
7. Dwelling services

Most of these projects will be continued in 1998. In addition, 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. Development/improvement of estimates for holding gains
4. Calculation of a small IOT (for CCs with no previous IOT).
5. Development of an NA database using EDI for data transmission (GESMES)
6. Borderline between intermediate consumption and final uses
7. Exports, imports and the transition between GDP and GNP

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

Based on missions and project reports provided by experts, Eurostat is currently drawing up **assessment reports** on the National Accounts of each CC. These reports, together with a set of improved macroeconomic data and **proposals for future work** (as not all problems can be overcome in the short term), will be submitted to the Commission by September 1998 to support the start of enlargement negotiations.

In general, the 1996 PPP figures are considered to be of higher quality than those resulting from the 1993 exercise. Consequently, Eurostat decided to reinterpolate the PPPs for 1995, 1994 and 1993 on the basis of the 1996 results. This methodological approach makes an implicit assumption that the 1996 expenditure pattern is also applicable for these other

years. It also assumes a degree of spatio-temporal price consistency which may not exist in practice.

As a result of this methodological change, the level of 1993 to 1996 GDP in real terms has increased for each of the CCs – but the CCs ranking according to the *per capita* GDP has not been affected (see page 4).

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