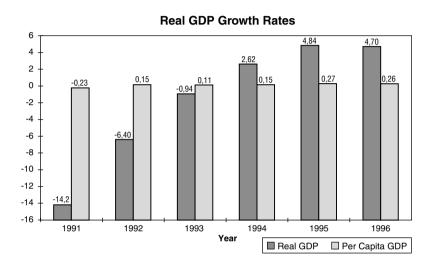
# III. MACROECONOMY

## III.1 Gross Domestic Product



Sources: ČNB, Vienna Institute of Comparative Studies, 1996 CERGE estimates

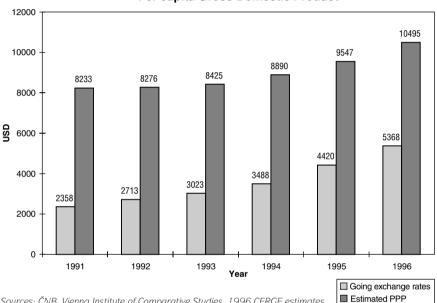
The turmoil of the transformation was most evident in 1991 when the economy suffered an unparalleled decrease in aggregate output. Such a decline continued for two years. Moderate revitalization started in 1994. In real terms the Gross Domestic Product (GDP) declined by more than 21% in comparison with 1989. In 1996, the GDP is still more than 11% below its real level in 1989. Per capita dollar GDP and its growth offer a similar picture; however, in this case the tendency is slightly blurred by the fact that the nominal dollar exchange rate did not fluc-

tuate much while Czech inflation has risen steadily since 1990.

#### **Gross Domestic Product**

Year	Constant prices	Current prices
	bil. of CZK (1994)	mil. of USD
1991	1090.38	24308.00
1992	1020.59	37990.00
1993	1011.01	31234.00
1994	1037.50	36049.00
1995	1087.71	45667.00
1996	1138.83	54002.00

## **Per capita Gross Domestic Product**



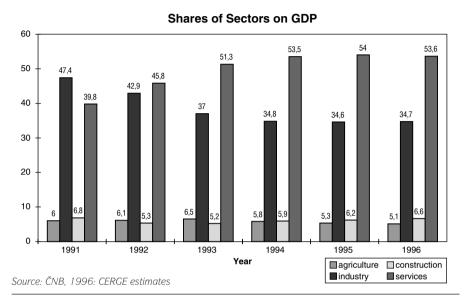
Sources: ČNB, Vienna Institute of Comparative Studies, 1996 CERGE estimates

## Real GDP Growth Rates (in %)

Year	Czech Republic	Hungary	Slovenia	Slovakia	Poland
1990	-1.20	-3.5	-4.7	-2.5	-11.6
1991	-14.20	-11.9	-8.1	-14.5	-7.0
1992	-6.40	-3.1	-5.4	-6.5	2.6
1993	-0.94	-0.6	1.9	-3.7	3.8
1994	2.62	2.9	4.9	4.9	5.2
1995	4.84	1.5	3.5	7.4	7.0
1996	4.70	2.1	3.2	6.3	6.9

Sources: ČNB, UNO, 1996 CERGE estimates

# III.2 Division of Gross Domestic Product



Since the beginning of the transformation the service sector has experienced the largest boom. Services currently contribute to more than half of the GDP. The service sector has increased its share by more than 30% since 1991. Agriculture

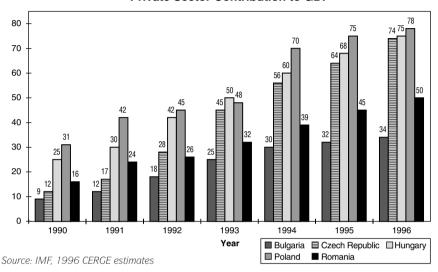
has declined slightly responding to a weaknesses in the government agricultural policy. At first look, construction is not exactly having a hey-day. However, its steady share following its original decline and eventual increase in the growth of output

Shares of Sectors on GDP (in %)

Year	agriculture	industry	construction	services
1991	6.0	47.4	6.8	39.8
1992	6.1	42.9	5.3	45.8
1993	6.5	37.0	5.2	51.3
1994	5.8	34.8	5.9	53.5
1995	5.3	34.6	6.2	54.0
1996	5.1	34.7	6.6	53.6

Source: ČNB, 1996, CERGE estimate

#### Private Sector Contribution to GDP



suggests yet unexplored possibilities of this sector. Industry paid the heaviest toll due to structural changes and the breakup of long-lasting manufacturing and trade patterns. Its continuously declining share should not leave us in sweet macroeconomic dreams because not only theoretical macroeconomics has its foundations in microeconomics.

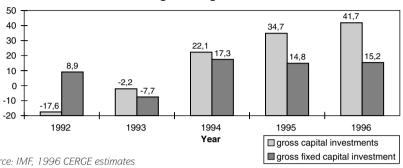
#### Private Sector Contribution to GDP (in %)

Year	Bulgaria	Czech Republic	Hungary	Poland	Romania
1990	9	12	25	31	16
1991	12	17	30	42	24
1992	18	28	42	45	26
1993	25	45	50	48	32
1994	30	56	60	70	39
1995	32	64	68	75	45
1996	34	74	75	78	50

Source: IMF, 1996 CERGE estimates

#### III.3 Investments





Source: IMF 1996 CFRGF estimates

Economic growth is not possible without investments. After some hesitation. connected with the beginning of the transformation, investments started to rise steadily. Fixed investments have recently grown at a very high rate. The rate of gross investments has been even higher. indicating a substantial positive increase in stocks. New investments in machines. and equipment have been more frequent than those in buildings and construction. Lately, the largest investment increases

have been registered in communications and mining. An especially promising revitalization has recently occurred in the manufacturing industry. Strong investment activity has emerged, particularly, in the paper industry, metallurgy and electrical engineering. Textile, food, and chemical industries have recorded some investment acceleration as well: however, a decline was registered in non-financial firms: construction, catering and accommodation.

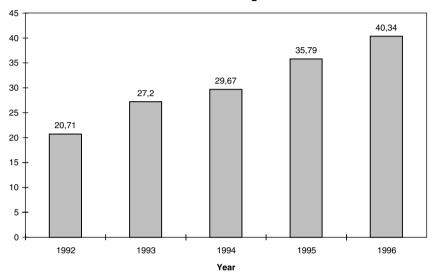
# Machinery and Equipment as a Share of Total Investment (in %)

Year	Bulgaria	Czech Republic	Hungary	Poland	Romania	Slovakia
1990	45	46	46	34	43	46
1991	47	46	46	30	39	51
1992	46	46	48	38	38	50
1993	36	50	48	38	48	48
1994	36	52	46	41	43	44
1995	35	53	49	42	42	49
1996	35	54	48	43	42	48

Source: IMF, 1996 CERGE estimates

### III.4 Debt





Source: ČNB, Vienna Institute of Comparative Economic Studies, 1996 CERGE estimates

The current account deficit is larger than policy makers would like. However without running a deficit in this stage of transformation the country would not be able to acquire enough badly needed investments to restructure the economy and foster growth. Gross external debt in absolute as well as per-capita value is increasing over time, though at a slower rate due to higher amounts of foreign repaid debt. Gross external debt as a ratio of the GDP is increasing as well, but so far it is a lower percentage than is common within the European Union.

Year	Debt <sup>a</sup>	Debt⁵	Debt <sup>c</sup>
1992	762	7869	20.71
1993	822	8496	27.20
1994	1035	10694	29.67
1995	1584	16346	35.79
1996	2022	20897	40.34

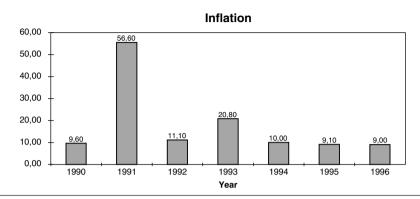
<sup>&</sup>lt;sup>a</sup> Gross debt per capita in USD

Source: ČNB, Vienna Institute of Comparative Economic Studies, 1996, CERGE estimates

<sup>&</sup>lt;sup>b</sup> Gross debt in millions of USD

<sup>&</sup>lt;sup>c</sup> Gross debt as % of the GDP

## III.5 Inflation



Inflation was proclaimed to be nil in former Czechoslovakia because it did not conform with the official view of the system. It was present all the time, though, and referred to by various appropriate "newspeak" expressions. After the messy pre-reform period in 1990, when prices were still more or less under state control, a steep increase came as no surprise. Freeing prices in February, 1991 accounted for almost the entire increase in inflation

for that year. The introduction of the Value Added Tax caused a similar but not that profound increase in 1993. Later, the Central Bank executed generally tight monetary policy which resulted in relatively low inflation and it aims to push it down further. However, the prospects of dramatically lowering inflation should be reviewed cautiously even though the situation looks optimistic when compared with that in other countries

#### Inflation (in %)

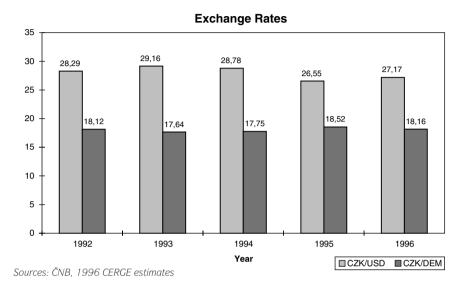
Year	Czech	Republic	Hun	igary	Po	land	Slov	/akia	Slov	enia
	a	b	а	b	а	b	а	b	а	b
1990	9.6	18.4	28.9	33.4	585.8	249.0	10.4	18.4	551.6	105.0
1991	56.6	52.0	35.0	32.2	70.3	60.4	61.2	58.3	115.0	247.1
1992	11.1	12.7	23.0	21.6	43.0	44.3	10.0	9.1	207.3	92.9
1993	20.8	18.2	22.5	21.1	35.3	37.6	23.2	25.1	32.9	22.9
1994	10.0	9.7	18.8	21.2	32.2	29.4	13.4	11.7	19.8	18.3
1995	9.1	7.9	28.2	28.3	27.8	21.6	9.9	7.2	12.6	8.6
1996	9.0	8.8	27.5	22.0	24.7	19.0	10.1	5.9	9.9	9.5

a) Moving average change in CPI

Source: ČNB, EBRD, 1996 CERGE estimates

b) End of the year change in CPI

# III.6 Exchange Rate



From the beginning of the economic transformation the role of the exchange rate could not be downplayed as it was in the former centrally planned economy. The originally undervalued exchange rate pegged to a currency basket was chosen as a nominal anchor. Monetary separation with Slovakia did not affect the Czech crown, but the Slovak counterpart suffered some devaluation. Three changes in the composition of the basket resulted in the current basket consisting of the US dollar (35%) and the German mark (65%) to represent their weights in Czech foreign trade. Full convertibility of the crown was implemented on October 1, 1995: however, this step was not paired with any change in the exchange rate regime. The former fluctuation band of ±0.5% was ex-

tended to  $\pm 7.5\%$  on February 28, 1996. A stable exchange rate in a mild inflationary environment means that the crown continually appreciates in real terms. Recently, the crown has been under attack by different lobbies calling for its devaluation or revaluation in slightly unbalanced proportions.

# Exchange Rates of CZK to USD, DM and SKK

	CZK/USD	CZK/DEM	CZK/SKK
1993	29.160	17.640	0.920
1994	28.780	17.750	0.850
1995	26.550	18.520	0.800
1996	27.170	18.160	0.810

Source: ČNB, 1996 CERGE estimates