# CZECH REPUBLIC

# 2002

## Invited to the EU


**CERGE–EI**

Center for Economic Research and Graduate Education of Charles University
& Economics Institute of the Academy of Sciences of the Czech Republic

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Charles University in Prague
Center for Economic Research and Graduate Education

Economics Institute
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# I. GENERAL INFORMATION

## I.1 Overview of the First Ten Years of Economic Transition

### Early Transition Policies and Outcomes

The Czech Republic has awed observers of transition economies. Within three years of the fall of communism, the government liberalized nearly all prices, privatized much of the economy, decentralized wage setting, and opened the country to world trade while maintaining a relatively balanced budget, low inflation, and low unemployment, which was below 4 % until 1995. The Czech GDP per capita level of over five thousand US$, with a PPP adjustment factor of about two, was (and remains) high in comparison to other transition countries. Furthermore, the economy appeared to be on an accelerating growth trajectory. By 1995, the initial transformation recession and the negative impact of the split of Czechoslovakia were over and the economy grew by almost 6 %. While 1996 still recorded a robust 5 %, in 1997, it was becoming increasingly clear that the macroeconomic success was not based on solid microeconomic foundations.

In particular, mass privatization followed a tacit doctrine of economic nationalism as most property was transferred to local owners, either by offering loans to local buyers or through the voucher scheme. Privatization failed to generate sound corporate governance and often resulted in incestuous ownership relations. Large banks remained under government control in order to "fuel" transition with credit while bankruptcy and foreclosure laws were weak, making room for lax financial discipline. As a result, while the economy was growing, banks were accumulating nonperforming loans at a distressing rate. While both Hungary and Poland lowered their share of nonperforming loans on all loans from about 28 % in 1994 to less than 10 % in 1998, the Czech share stood at 33 % in 1998, comparable to that of Romania.

The local owners of privatized firms were indebted from the start and lacked the managerial capital to restructure and operate firms, which faced fierce international competition due to a high degree of openness. The loose access to bank credit coupled with a weak legal and impotent judicial system resulted in massive asset stripping (tunneling) of privatized enterprises.

Clearly, privatization was only one method of creating private sector output. Throughout the early transition period new (de novo) private firms were also being created. While early on credit to small firms may have been generous, retained profit was a major determinant of new investment. Small firms were apparently the force behind low Czech unemployment. Survey evidence suggests that small new private firms were responsible for almost all of the vigorous Czech job creation during early reforms so that five years into transition de novo firms offered more jobs than state and privatized firms combined.

**General Information**

| Year | 1997 | 1998 | 1999 | 2000 | 2001 | 2002e |
|---|---|---|---|---|---|---|
| **GDP** | | | | | | |
| GDP Growth | -1.0 | -2.2 | -0.4 | 3.3 | 3.3 | 2.5 |
| **Foreign Trade** | | | | | | |
| Exports, y/y % | 8.1 | 10.7 | 6.6 | 18.8 | 15.2 | 15.0 |
| Imports, y/y % | 7.2 | 7.9 | 5.8 | 18.7 | 13.7 | 12.0 |
| Trade Deficit as % of GDP | -8.3 | -4.4 | -3.4 | -6.3 | -5.5 | -3.5 |
| **Balance of Payments as % of GDP and Its Main Components** | | | | | | |
| Current Account | -6.2 | -2.5 | -3.0 | -4.7 | -4.6 | -5.0 |
| Capital Account | 2.1 | 5.2 | 4.7 | 6.8 | 7.1 | 13.4 |
| Inflow of FDI | 2.4 | 6.6 | 11.9 | 9.3 | 8.7 | 12.5 |
| Inflow of FDI (bln. USD) | 1.3 | 3.7 | 6.3 | 4.6 | 4.9 | 8.2 |
| **Inflation and Interest** | | | | | | |
| CPI, y/y % | 10.0 | 6.8 | 2.5 | 4.0 | 4.1 | 1.8 |
| Prague Interbank Offer Rate (PRAGUE 3M, %) | 16.0 | 14.3 | 6.8 | 5.4 | 5.2 | 3.6 |
| **Labor Market** | | | | | | |
| Unemployment, % | 4.4 | 6.1 | 8.6 | 9.0 | 8.9 | 9.9 |
| Nominal Wages, y/y % | 11.9 | 9.3 | 8.2 | 6.6 | 8.5 | 6.0 |
| Labor Productivity, y/y % | -0.3 | -0.8 | 1.4 | 8.0 | 2.9 | 2.4 |
| **Public Finance** | | | | | | |
| General Government Balance as % GDP | -1.2 | -1.5 | -0.6 | -3.7 | -3.2 | -2.9 |
| Idem, Excluding Extraordinary Items | -2.0 | -1.5 | -3.0 | -4.3 | -5.1 | -9.2 |
| **Exchange Rates** | | | | | | |
| CZK per USD | 31.7 | 32.4 | 34.6 | 38.6 | 38.0 | 34.1 |
| CZK per Euro | 18.3 | 18.3 | 18.9 | 18.2 | 34.1 | 31.3 |

*Source: CSO, CNB, Ministry of Finance, World Bank, various local sources, 2002 CERGE-EI estimate*

## The Currency Crisis and Recession of 1997

The weak corporate governance allowed wages to grow two times faster than productivity, which led to higher demand for imports of consumer durables and increasing foreign trade and current account deficits. These were financed by an inflow of short-term foreign capital attracted by high interest rates locked in by the fixed exchange rate regime.

Eventually, however, the implicit liabilities of soft loans to large old firms became explicit and the worsening performance of the economy led to an increase of the public budget deficit. Shortly after the current account deficit ballooned to 7.4 % of GDP in 1996, the imbalances – both internal and external – were noticed by capital markets and led to an attack on the Czech currency in May 1997. The attack forced the surrender of the fixed exchange rate regime and the crown depreciated by approximately 10 %. The Czech National Bank used high interest rates to stabilize the currency and also strengthened provisioning require-

ments, leading to a credit crunch. Meanwhile, the government was forced to implement a strict austerity program. All of this naturally sent the economy deep into recession.

The recession was prolonged with GDP in red numbers for three consecutive years while other Visegrad countries enjoyed substantial growth. Registered unemployment increased from 3.9 % in 1996 to 9 % in 1999 and wage growth slowed down hand in hand with government spending. The recession was driven by a decline of both private spending and investments, while net exports were mostly improving the overall picture – also thanks to the weaker currency.

The downturn shattered the illusion of successful reforms and contributed to the fall of the long-serving coalition government headed by Václav Klaus' Civic Democrats and the resulting early elections of 1998. Further, following party finance scandals, a significant number of Civic Democrats established a new liberal right-center party. The early elections of 1998 were won by the Social Democrats, who were unable to form a majority coalition. On the other hand, personal animosity among the leaders of the former right-center coalition partners blocked their majority coalition. The so-called "opposition agreement" between the Social and Civic Democrats opened a way out of the deadlock. The Civic Democrats committed themselves to tolerating a minority one-party government of the Social Democrats in exchange for a dominating role in the Lower and Upper Houses and participation on the sale of remaining large state firms.

In 2000 the two main parties introduced a set of controversial laws and constitutional changes that would limit the president's power as well as the independence of the national bank and that would alter the electoral system in favor of large parties. These attempts to change the rules of the Czech political game failed thanks to the upper chamber of the parliament (Senat) and the Constitutional Court.

## Recent Macroeconomic Development

Starting in 1998, the strict monetary policy of the currency crisis was relaxed by the central bank. Facing the recession, the new government revived structural reform and privatization, this time relying on strategic foreign partners. Further, in April 1998 the government introduced an aggressive FDI incentive package for manufacturing investors bringing more than USD 10 mln. Yet, 1999 GDP remained in red numbers.

Finally, in 2000 the economy took off. Investments started to grow, most of all thanks to the surge of foreign direct investments (FDI), but domestic firms started to invest more as well. FDI inflow continued at similar strength during 2001, thanks to both the incentive package and the expected accession of the Czech economy into the EU. Moreover, private consumption also accelerated (fueled by real wage growth that reached 4 % during 2001). While GDP statistics do not reveal fast growth of public spending, part of the government spending is of course hidden in the private demand and investments components. Overall, GDP growth stood at over 3% in 2000 and 2001.

The only macroeconomic variable that exhibited mixed performance was net export. The 1997 – 99 recession helped to limit imports and thus also the foreign trade deficit, the main cause of external imbalance, from almost 160 bln. CZK in 1996 to just above 60 bln. CZK in 1999. Yet, when

the economy started to grow in 2000 the deficit doubled again and it continued to widen in 2001. In should be noted, however, that not all of the increase was attributable to the revival of economic growth. Higher prices of oil and other raw materials have been among the significant factors behind growing imports as the Czech economy is to a large extent dependent on imported raw materials. Further, it was often the case that foreign investors imported the major part of technology when investing in the country. Finally and most importantly, the economic slowdown in the EU also limited the growth of exports. The EU is by far the largest trading partner of the Czech Republic.

Still, the current account appears worrisome, reminding one of the 1997 crisis. The deficit narrowed from above 6 % of GDP in 1997 to around 3 % in 1998 and 1999, but the year 2000 saw worsening to just below 5 % of GDP and this trend continued through 2001. The key difference from the 1997 situation, however, is in the financing of the current account deficit. While it was unstable short-term capital that financed the current account deficit prior to the 1997 crisis, the recent current deficit was financed by direct investments, which are long-term in nature. The inflow of FDI (as a share of GDP) became four times higher compared to 1996 – 97 and appeared to be able to safely finance the current account deficit.

The one macroeconomic variable that has been under control throughout the whole Czech transition is inflation. Low domestic demand during the 1997 – 99 recession, combined with relatively strict monetary policy and low commodity prices lowered the average inflation rate to 2.1 % in 1999. It also helped that the government froze the upward adjustment of regulated prices of housing and utilities. Later, the revival of domestic demand, higher commodity prices (mainly oil) and several idiosyncratic factors have been working to increase inflation, which reached the 4% mark by 2000. Interest rates followed the decline of inflation with a time lag, as did the central bank in its setting of official rates. Thus, in contrast to most of the 1997 – 99 period, real interest rates have recently been quite low.

As the recession came to an end, the exchange rate regained strength and remained relatively stable during 2000 – 2001. Strong currency combined with low real interest rates and the limited growth of bank lending cast a neutral to relaxed overall monetary policy. Recently, however, the privatization of banks and the planned privatization of the Czech telecom and utility monopolies led to an unhealthy rise in the value of the crown.

Yet, perhaps the main macroeconomic concern is the high and growing public finance deficit. The deficit only partly stems from temporary issues. Netting out extraordinary budget items including privatization receipts and the costs of bank restructuring, the overall balance of the general government mushroomed to 4.8 % of GDP in 2000 and grew further in 2001. Excluding extraordinary items, the whole 2001 deficit reached a simply unbelievable 9 % of GDP. The concurrent economic recovery made clear that the deficit was not merely cyclical. Since the fiscal revenue of the Czech government is already high as a fraction of GDP, the adjustment must come on the expenditure side. Yet, most categories of expenditure (including social welfare, housing, and transport) are locked in upward trajectories, even though maintenance activities have already been severe-

ly restricted in recent years. Between 1994 and 1999, social security and welfare expenditures rose by 3.2 % of GDP. Public expenditure on social welfare persistently exceeds payroll revenues and the deficit is projected to grow even during the expected years of economic expansion. Worse, these deficits occur while the demographic situation has not yet deteriorated. Towards the end of the new decade it will. In sum, if there is no change in the fiscal policy, the current debt of the country will increase from 20 % to almost 42 % of GDP between now and 2006 and reach the magic 60 % of GDP before 2010.

In sum, after 1999, the Czech economy successfully emerged from the recession with GDP growth rates around 3 %. The recovery was pulled by private investments, primarily FDI, which also financed the widening trade deficit. While inflation was low, real wage growth resumed after the recession and was in line with productivity growth. Unemployment stayed in the neighborhood of 9 %.

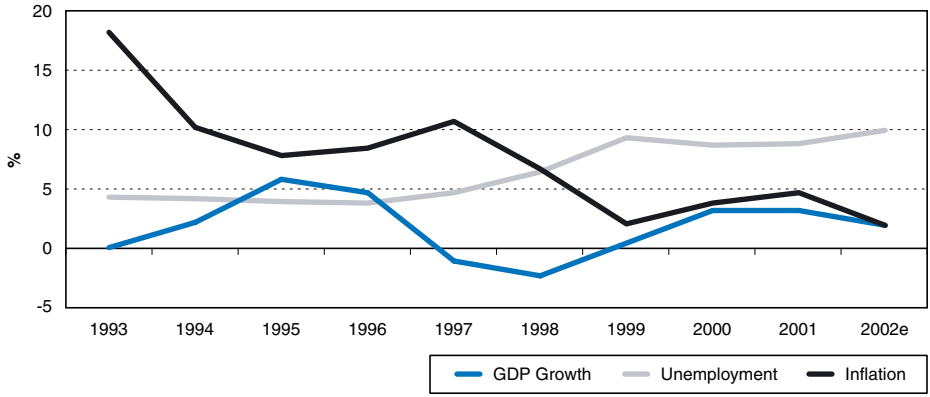
## Summary and Outlook

At the end the first transition decade, Czech economic growth depends on the (sluggish) EU performance, but a crisis similar to 1997 is unlikely if wage demands are curtailed in face of a substantial slowdown. Unfortunately, the external imbalance is again coupled with internal ones. The sorest part of the Czech economy is its fiscal deficit. The general government deficit reached the neighborhood of 9 % of GDP and presents alarming evidence of the needed reform of the public finance system. The looming aging of the population makes the fiscal outlook even more distressing.

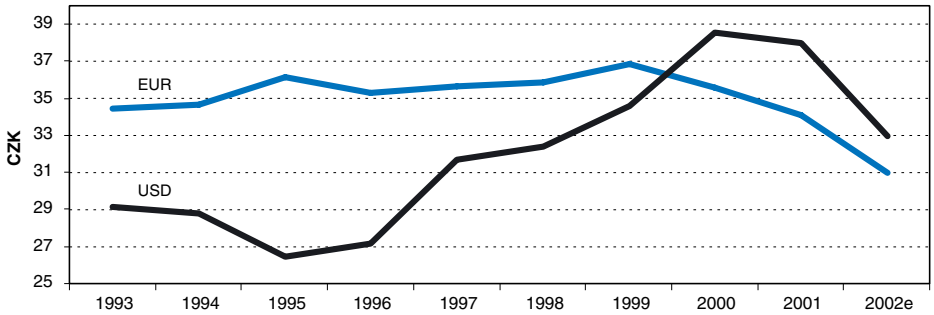
Among the other main outstanding policy challenges (also voiced in the annual pre-accession EU reports) are the inefficiency of public administration, the much-needed reform of the judicatory system, the insufficient use of public tenders by the government, and the taming of corruption.

In sum, if the Czech population votes to join the EU in the upcoming referendum in 2003 and if the Czech government manages to implement a meaningful fiscal reform (and prepares a pension reform), the country is likely to enjoy sustained economic growth. However, the situation allows for no policy failures.

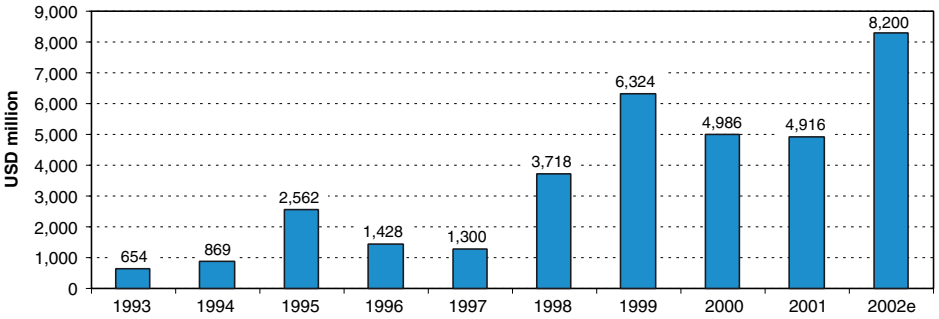
## Economic Growth, Inflation and Unemployment



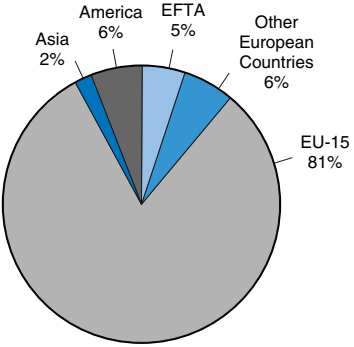

## Average Annual Exchange Rates



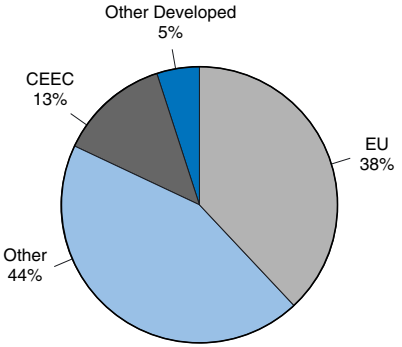

## Foreign Direct Investment Inflow



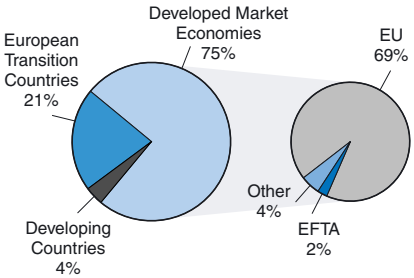
### FDI Inward Flows in 2000



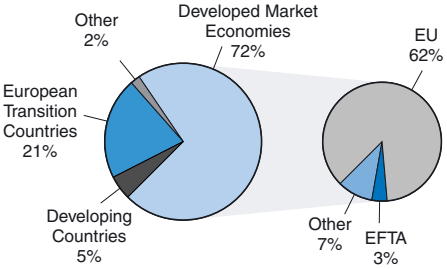

### Territorial Structure of Exports in 1990



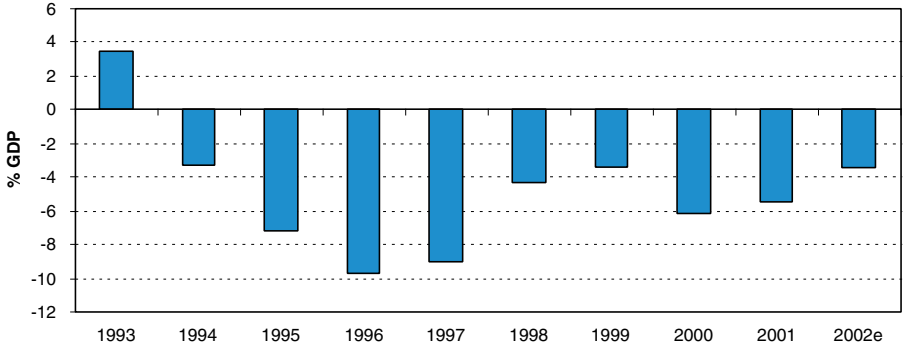

### Territorial Structure of Exports in 2000




### Territorial Structure of Imports in 2000




### Foreign Trade Balance



## *The Czech Republic – An Economic Summary of 2002*

*The year 2002 brought (only) moderate economic growth, representing a slow-down from the 3.3 % of 2000 and 2001; specifically, GDP growth is expected to close at about 2.5 %. The unemployment level has slightly worsened as well. While during the previous two years the level of unemployment stagnated with end-of-year rates slightly below 9 %, 2002 brought the figure closer to 10 %. The Czech economy received enormous FDI inflows, which had already surpassed the high 2001 level by the first half of 2002. Such massive long-term capital inflow led to a rapid currency appreciation of almost 20 %. To complete the picture, inflation fell from 4.7 % to below 2 %.*

*However, these mostly positive signals should be interpreted in light of an expansionist governmental fiscal policy. The price of this moderate growth is high: the increase in the deficit of public finances is drastic. If we exclude the nonrecurring income from privatization, the deficit came close to an unbelievable 9 % of GDP in 2002. Worse yet, the already accepted state budget for 2003 brings no fundamental improvement and public finances will remain in huge deficit. Such a rate of debt growth is not sustainable even in the medium term and its pro-growth potential has already evaporated. Europe – the main Czech export market – continues its economic slowdown and the global economic perspective for the near future does not provide much optimism either.*

*Significantly, 2002 was an election year. While the new Parliament and government emerged in the summer, the fall was devoted to Senate and municipality elections. The new government is a coalition of three parties, the Social Democrats (ČSSD), the Christian Democrats (KDU-ČSL), and the Freedom Union (US-DEU). The government relies on a majority of one vote in the Parliament and the unifying idea of EU entry in 2004. In the Senate the government is two votes short of a majority, but can typically count on seven independent Senators.*

*The European Commission's final annual report on the Czech Republic was favorable, with the conclusion that the Czech Republic is ready to enter the EU. Also, the Czech Republic closed all 31 chapters of negotiations in Copenhagen in December 2002. Still, many of the long-standing reservations of the European Commission persist. The Commission continues to criticize the government for avoiding the use of public tenders and for the unsatisfactory state of corruption. The legal system and the rule of law have to be improved as well as the fiscal situation. The European Commission points to the inefficient state administration, the need for reform of the judicatory and fiscal systems, and the inadequate taming of corruption.*

*In mid August, the Czech Republic suffered from severe floods, which started in Southern Bohemia and continued via Prague and Northern Bohemia to Germany. According to historical marks and hydrological observations, the flooding in Prague surmounted the last great centennial floodings in 1784, 1845, 1862, and 1890.*

*Alarming pictures of Prague occupied TV news and cover pages of newspapers around the globe. Despite the horrifying images, the historical and architectural heritage was not affected. Currently, the historical center of Prague is as beautiful as it used to be and Prague's subway (metro) should become fully operational by March 2003.*

### *Year 2002 in the Czech Republic – Major Political and Economic Events*

***January***

- *The privatization of ČEZ is cancelled since no bid reaches the minimal selling price of 200 bln. CZK.*
- *The ČNB cuts interest rates and intervenes against the strengthening crown (CZK).*

***February***

- *The so-called 4-coalition splits.*
- *Parliament passes a law on referendum.*

***March***

- *Ombudsman files a case on the illegality of rent regulation at the Constitutional Court.*

***April***

- *Despite ČNB's interventions, CZK appreciates and reaches the 30 CZK/EUR limit.*
- *ČNB cuts interest rates again.*

***May***

- *Government decides to subsidize interest payments on mortgages on older housing as well.*
- *The mayor of Prague resigns and leaves the Civic Democrats, claiming the party prevented him from fighting corruption.*

***June***

- *Banks start to run an interbank registry of debtors.*
- *The second half of Nuclear Plant Temelin is finished, and the testing regime is started.*
- *Parliamentary elections take place. ČSSD (Social Democrats) win 70 seats, ODS (Civic Democrats) 58 seats, KSČM (Communists) 41 seats, Coalition of US-DEU (Union of Freedom) and KDU-ČSL (Christian Democrats) 31 seats. Other parties do not surpass the 5 % vote threshold to win a mandate.*
- *The state debt increases by 30 % to 358.4 bln. CZK during the previous year.*
- *The Czech Republic GDP growth slows down to 2.5 %.*

***July***
- *The monopoly of Czech Telecom is ended.*
- *ČSSD, US-DEU, and KDU-ČSL form a government with a single vote majority in the Lower House.*
- *According to the decentennial census the Czech Republic has 10,230,060 inhabitants.*

***August***
- *Parliament approves the new government.*
- *Government approves the sale of Czech Telecom to a consortium of Deutsche Bank and Danish TDC.*
- *The greatest floods in the modern history of the Czech Republic.*

***September***
- *The Czech edition of Radio Free Europe is closed. The program and broadcasting of RFE becomes part of the Czech Public Radio service.*

***October***
- *Governmental crisis and governmental tax increase bill is not approved by Parliament.*
- *The European Commission publishes its final report on EU member candidate countries. The report recommends accepting the Czech Republic as a new member of the EU, probably in 2004.*
- *ČNB cuts rates for the fifth time during 2002.*

***November***
- *Senate elections take place. ODS wins 9 senator seats and ČSSD 7 seats; the remaining 27 seats are taken by other parties and independent candidates.*
- *Municipality elections take place together with the senate ones.*
- *Parliament approves the modified state budget at first reading with 111 bln. CZK deficit.*
- *NATO meeting takes place in Prague; 7 new countries are invited to join.*
- *Constitutional Court nullifies the governmental decree on rent regulation as unconstitutional.*
- *IMF warns that the Czech Republic will not be able to join the EMU (Euro) area with such huge public deficits.*

***December***
- *Czech Telecom privatization is called off due to contracts signed in the mid 1990s.*
- *The Czech Republic concludes its negotiations on EU accession in Copenhagen.*
- *Government imposes a 3-month price freeze on rents.*

## I.2 History

The first signs of people living in what is today the Czech Republic are as old as 1.6 – 1.7 mln. years and were found near Beroun in Central Bohemia. The first Slavonic people came in the 5th and 6th centuries. The first written references to the Czechs, Prague, and regions of Bohemia are from the 8th and 9th centuries. In about the year 870, the Czech prince Bořivoj was mentioned for the first time. He came from Prague and belonged to the house of Přemysl, which later became the royal dynasty of Bohemia. This dynasty governed the Czech kingdom until 1306. After the reign of the House of Luxembourg (1310 – 1436), Bohemia was the center of the so-called Holy West Roman Empire of German People and Prague became one of cultural centers of Europe. A short period of elected kings ended in 1526, when the Czech Kingdom (Bohemia, Moravia and Silesia) became a part of Austria, later the Austro-Hungarian monarchy.

In 1918, after World War I, Czechoslovakia emerged from the ruins of the Austro-Hungarian monarchy as a modern democratic state. Czechoslovakia consisted of Bohemia and Moravia, Slovakia and Carpatho-Russia (today a part of Ukraine). In 1939, Slovakia separated from Czechoslovakia and the Czech part of the country was occupied by the German army and incorporated as a special autonomous state into the German Empire. In 1945, Czechoslovakia was liberated by the Soviet and American army. The Czechoslovak state was restored without Carpatho-Russia which joined the Soviet Union.

In February 1948, the Communist party gained power (in a formal constitutional way), and Czechoslovakia was under the Soviet sphere of influence until 1989. After the "Velvet Revolution" in 1989, a democratic regime was restored.

In response to the Slovak desire for greater self-determination, a federal constitution was introduced in 1968. Completely controlled by the Communist Party, the Czechoslovak Federation had not satisfied the legitimate aspirations of the Slovak people. From 1990 on, Czech and Slovak political parties negotiated the future form of the federation. After two years of unsuccessful negotiation and following the 1992 parliament elections, the division of the country began. On January 1, 1993, the Czech Republic and Slovak Republic were peacefully separated and established as independent states. In 1999 the Czech Republic joined NATO; it is likely to become an EU member in May 2004.

## Milestones of the Czech Lands in the 20th Century

**1918** After the collapse of the Austro-Hungarian monarchy, the first Czechoslovak Republic as a common state of Czechs and Slovaks is established.

**1920** A democratic constitution is adopted.

**1938** The Munich agreement and the occupation of part of Czechoslovakia by Germany and Hungary; the so-called Second Republic, Czecho-Slovakia, is established with extended Slovak autonomy.

**1939** The rest of the Czech territory is occupied by Germany; an independent Slovak State is established.

**1945** Liberation: the Czechoslovak Republic is restored.

**1948** Communists take over the country, marking the beginning of a 40-year totalitarian regime.

**1968** Prague Spring, the invasion of Warsaw Pact armies, a federal constitution is adopted.

**1989** The Velvet Revolution, the end of the totalitarian regime.

**1990** The first democratic parliamentary election in 42 years.

**1991** Last Soviet military troops leave the country.

**1992** The separation of Czechoslovakia, establishing the Czech and Slovak Republics in 1993.

**1999** On March 12, the Czech Republic officially joins NATO.

**2002** Final pre-accession report of the European Commission on the Czech Republic published. The Czech Republic invited to join the EU in May 2004.

## I.3 Geography


In terms of its area (76,867 square kilometers) the Czech Republic ranks among the smaller European countries. The Czech Republic shares borders with Germany, Austria, the Slovak Republic and Poland. It has special trade relations with the Slovak Republic based on the Customs Union Treaty of 1992.

The Czech Republic is a founding member of CEFTA (Central European Free Trade Agreement, which also includes Bulgaria, Hungary, Poland, Romania, Slovakia, and Slovenia), an associated member of the EU, and has been a member of the OECD since 1995. It is a founding member of the UNO, a member of the World Bank, the IMF, the WTO and the Council of Europe. The Czech Republic submitted its application for full EU membership in 1996. The Czech Republic joined the Partnership for Peace with NATO and after the 1997 Madrid summit was invited (together with Poland and Hungary) to join NATO. It became a full member of NATO in 1999. Since the 1997 Amsterdam summit of the EU the Czech Republic has been considered one of the "first wave" countries (together with Poland, Hungary, Estonia, Slovenia and Cyprus) to negotiate entry into the European Union.

The Czech Republic has no unresolved territorial disputes with neighboring countries and it enjoys good diplomatic relations with all European countries.

## I.4 Population

**Age Structure of Population (in %)**

| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|---|---|---|---|---|---|---|---|---|
| 0–14 | 20.0 | 19.5 | 18.8 | 18.3 | 17.9 | 17.7 | 17.0 | 16.2 | 15.9 |
| 15–64 | 67.1 | 67.6 | 68.0 | 68.4 | 68.7 | 69.0 | 69.3 | 69.0 | 70.3 |
| 65+ | 12.9 | 13.0 | 13.1 | 13.3 | 13.4 | 13.6 | 13.7 | 13.9 | 13.8 |
| Average Age | 36.6 | 36.8 | 37.0 | 37.3 | 37.6 | 37.9 | 38.3 | 38.8 | 39.0 |
| Median Age | 35.9 | 36.0 | 36.2 | 36.4 | 36.6 | 36.8 | 37.0 | 37.6 | n.a. |
| Index of Aging* | 64.3 | 66.8 | 69.6 | 72.3 | 75.3 | 78.1 | 80.5 | 85.5 | 87.0 |

*Sources: CSO Statistical Yearbook of the Czech Republic 2000, http://popin.natur.cuni.cz, CSO*

* Index of aging – number of persons aged 65 or over for 100 children aged 0–14

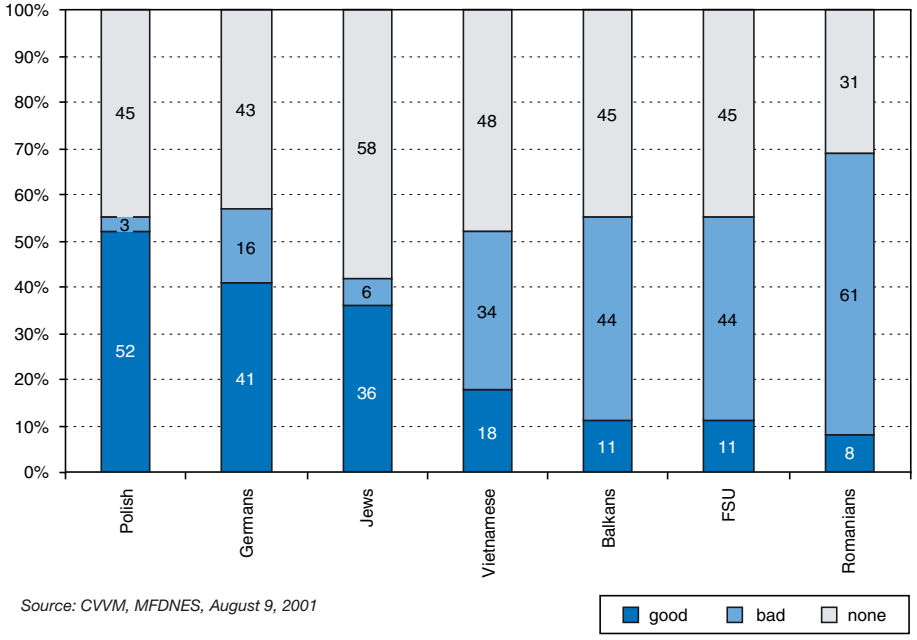
With a population of 10.289 mln. (2001 census), the Czech Republic is similar in size to Austria, Belgium or Hungary. Its population is ethnically homogeneous with an overwhelming majority of Czechs (94.8 %), a Slovak minority (3.1 %) and small Polish (0.6 %) and German (0.5 %) minorities. However, there is also a large and socially segregated ethnic minority of Romanies. The total size of this minority is hard to estimate. The Czech language is a part of the family of west Slavic languages (together with Polish and Slovak). The working age population (15–59 years) accounted for 69 % of the total population as of 2000. The prognoses of demographic development suggest a slow decrease in the population. The population now slowly ages as life expectancy, which is still far behind that in West European countries, increases.

**Descriptive Statistics of Population**

| Year of Census | | 1961 | 1970 | 1980 | 1991 | 2001 |
|---|---|---|---|---|---|---|
| Number of Municipalities | | 8,726 | 7,511 | 4,778 | 5,768 | 6,258 |
| Total Population | | 9,571,531 | 9,807,697 | 10,291,927 | 10,302,215 | 10,292,933 |
| Population – Men | | 4,640,631 | 4,749,511 | 4,988,095 | 4,999,935 | 5,019,381 |
| Population – Women | total | 4,930,900 | 5,058,186 | 5,303,832 | 5,302,280 | 5,273,552 |
| | in % | 51.5 | 51.6 | 51.5 | 51.5 | 51.2 |

*Source: CSO*

### Relation to Other Nationalities, 2000




*Source: CVVM, MFDNES, August 9, 2001*

### Ethnic Minorities in the Czech Republic

| | 1991 | | 1995 | | 2001 | |
|---|---|---|---|---|---|---|
| | Census | % | Estimate | % | Census | % |
| Slovak | 314,877 | 3.1 | 300,000 | 2.9 | 193,190 | 1.8 |
| Polish | 59,383 | 0.6 | 60,000 | 0.6 | 51,968 | 0.5 |
| German | 48,556 | 0.5 | 48,000 | 0.5 | 39,106 | 0.5 |
| Hungarian | 19,932 | 0.2 | 21,000 | 0.2 | 14,672 | 0.1 |
| Ukrainian | 8,220 | 0.1 | 12,000 | 0.1 | 22,112 | 0.2 |
| Russian | 5,062 | 0.1 | 5,000 | 0.1 | 12,369 | 0.1 |
| **Total** | **488,933** | **4.7** | **746,000** | **7.2** | **807,456** | **7.9** |

*Source: Lidové noviny, May 5, 1998, CSO*

### *Aging of the Czech Population*

*Czech demographic development is not positive. During the nineties, the population of the Czech Republic stagnated, and even decreased (in 1990 10.363 mln.; in 1999 10.283 mln.; the last census taken in the first quarter of 2001 recorded 10.298 mln.).*

*The main factors influencing the demographic development have affected it in different ways: the number of deaths steadily sinks, from 129.2 thousand in 1990 to 109.0 thousand in 2000; the infant mortality rate is, together with Slovenia, the lowest among EU candidate countries; the net migration is positive. But the number of births is declining very quickly (the number of live births in 1990 was 130,564, but since that year it constantly decreased until 1999, when it sank to 89,471. In 2000 the number of live births increased to 90,910 and in 2001 this positive tendency has seemed to continue. Nevertheless, the birth rate is very low. In 1992 it was 12.6, while in 2000 only 8.9. This will influence the aging of the population in the future.*

*Together with individual aging, i.e. steadily increasing life expectancy, the share of the population in older age groups has grown and shapes the dependency ratio, the share of the population aged 65 + on the group of "working age" population aged*

**Age Structure Development and Projection (% of Total Population)**

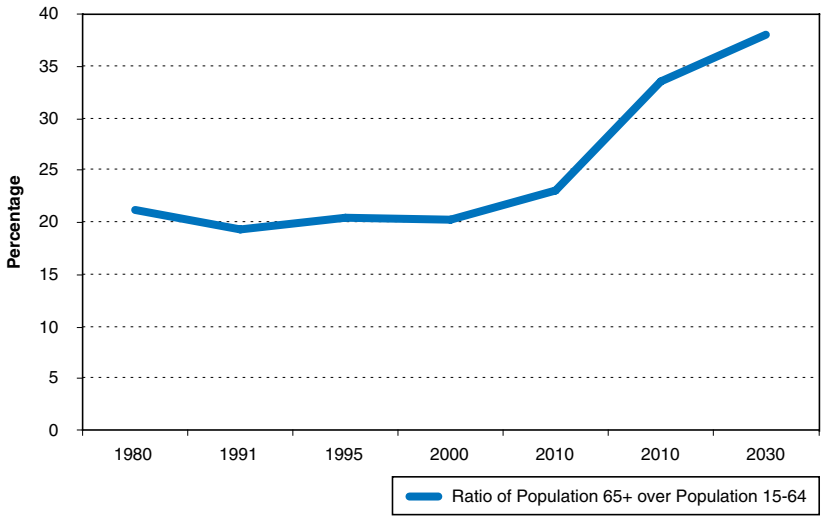
| Age | 1980 | 1991 | 1995 | 2000 | 2010 | 2010 | 2030 |
|---|---|---|---|---|---|---|---|
| 0–14 | 23.5 | 20.6 | 18.3 | 16.2 | 13.7 | 13.7 | 12.4 |
| 15–64 | 63.2 | 66.6 | 68.4 | 69 | 70.2 | 64.7 | 63.5 |
| 65 + | 13.3 | 12.8 | 13.9 | 13.9 | 16.1 | 21.6 | 24.1 |

*Source: Czech Republic Population Development (CSO, 2001), Projection: Statistical Yearbook 2000, CSO, middle variant*

*15 to 64 – the standard indicator of population aging. Even if at present the share of the elderly in the Czech Republic is lower than in most European countries (in 1998, the average share of people aged 65 and over reached 16.2 % in the EU–15, but only 13.7 % in the Czech Republic), demographic projections show a high increase of this share in the future.*

*Demographic factors of aging deeply influence the number of people who benefit from age-related social programs, especially pensions. This is why many countries are advocating reforms that would modernize pension systems and strengthen private pensions savings. On the other hand, life expectancy will be increased by better living conditions of the elderly. This is the true reason for prolonging the*

**Old Age Dependency Ratio Development Projection**




*Source: Czech Republic Population Development (CSO, 2001), Projection: Statistical Yearbook 2000, CSO, middle variant*

*eligibility of pension age. These facts call for an active policy of offering schooling programs, half time employment, etc. to the elderly.*

*Also the birth rate will begin to grow in those societies where many families have decided to postpone their first child for some years. The postponement should last about seven years in the Czech Republic. And for those families who decide to have fewer children or none at all, the adults will have relatively more means of providing for their own old age.*

# II. TEN YEARS OF POLITICAL TRANSFORMATION

## II.1 Constitutional System

The constitutional system of the Czech Republic consists of the Parliament and the President. The Parliament of the Czech Republic has two chambers: the Lower House *(Poslanecká sněmovna)* and the Upper House *(Senát)*. The president is elected by both Houses of Parliament for five year terms and has restricted and mostly representative responsibilities. He appoints the Prime Minister and the members of the Government, the Governor of the Central Bank, ambassadors and the Chief of Staff of the army and signs laws. He can return laws to the Lower House, but his veto can be overridden by an absolute majority of all the members of the Lower House.

The Lower House is the most important legislative body. It has the power to pass laws by a simple majority of the members present during any given session (providing the quorum is met), to cast a no confidence vote against the government, and to override a veto of the President and of the Upper House.

According to stipulations in the constitution the Upper House has limited legislative action and is only authorized to act upon Lower House legislation. The Upper House has three options when faced with bills approved by the Lower House and must act within 30 days: accept by default (take no action); reject with a suspensive veto; or suggest amendments (in both cases by a simple majority). In the latter two instances, the Lower House can vote to either accept or reject the Upper House action by an absolute majority of all members of the Lower House. The Upper House can also initiate legislation. If the Lower House is dissolved, the Upper House assumes its functions until new elections are held.

## II.2 Electoral System

The Lower House of Parliament has 200 members elected for four-year terms. A proportional electoral system is used for the Lower House which discriminates against small parties: to enter the parliament a party has to attain at least 5 % of the total number of valid votes cast nationally. The country is divided into 8 voting districts and each party nominates an ordered list of candidates for the Lower House in each voting district.

In contrast, the Upper House of Parliament uses the majority system (plurality run-off) to elect its 81 members with one representative for each constituency. The Upper House members are elected for six years with a periodic replacement schedule in which 27 members are elected every two years. Each political party can nominate one candidate in each of the 81 constituencies. Also, independent candidates can participate providing they submit a statement of support

signed by at least 1,000 eligible voters from the relevant electoral constituency. A candidate is elected on the first ballot if he/she receives a simple majority of valid votes (at least 50 % plus one vote). If no candidate receives a majority on the first ballot, then the two candidates who receive the most votes from the first ballot rerun on the second ballot, and the majority winner on the second ballot is elected.

## II.3 Electoral History of the Czech Republic

Given the proportional system used for the Lower House, Czech governments are either coalition or minority governments or both.

Since 1992 the first Czech-only government coalition has consisted of four right-centrist parties: the Civic Democratic Party (ODS), the Christian Democratic Party (KDS), the Christian-Democratic Union (KDU-ČSL) and the Civic Democratic Alliance (ODA). After the 1996 parliamentary election these three parties formed a minority coalition government.

Electoral preferences for political parties significantly changed during 1997 as growing criticism of the internal political and social development, and of the economic problems that were for a long time neglected by the ruling coalition. Economic recession, a decrease in real incomes, the exchange rate crisis, and the crisis in the banking sector dashed false expectations raised by overly optimistic government propaganda and in November 1997 the culmination of these problems led to the dissolution of the government coalition. While the immediate reason for the government crisis was related to the fishy financing of the Civic Democratic Party, indicating possible corruption during privatization, the November collapse of the government reflected the partial failure of the economic reforms and the general instability of the Czech political environment.

President Havel appointed Mr. Josef Tošovský, the Governor of the Czech National Bank with no party affiliation, as the new Prime Minister in December 1997 and a new government was established. The new government was explicitly committed to hold premature parliamentary elections in the spring of 1998.

In January 1998 the Civic Democratic Party and its parliamentary faction split. The opposing fraction left the party and established a new party called the Union of Freedom. In June 1998 a premature election of the Lower House was held. While the Czech Social Democratic Party achieved historical success as the party with the strongest popular support (almost one third of the voters cast their votes for the ČSSD), the Civic Democratic Party ranked as the second strongest party, losing only 2 % of electoral support compared to the 1996 election. Personal animosity among the leaders of the former coalition partners, the Civic Democratic Party, the Christian and Democratic Union and the Union of Freedom, proved to be an obstacle to establishing a right center majority coalition. President Havel authorized the chairman of the winning Social Democrats, Mr. Zeman, to negotiate the composition of the new government. As a grand coalition of the ČSSD and ODS seemed to be explicitly excluded by the electoral programs of both parties, they

formed the so-called "opposition agreement" between ČSSD and ODS. ODS committed itself to tolerating a minority one-party government of ČSSD in exchange for a dominating role in the Lower and Upper Houses and participation in preliminary consultations on important issues between the ČSSD and ODS. Having together a qualified majority in both Houses of Parliament, the ČSSD and ODS declared their intention to work together to stabilize the Czech political environment and to change the constitution and electoral law "to strengthen majority elements in proportional electoral system." The arrangement ended with the 2002 elections.

The general dissatisfaction of the Czech public with the practice of the "opposition agreement" and economic and social development increased public support for the Czech and Moravian Communist Party (KSČM). By the end of 1999, just ten years after the Velvet Revolution, the party ranked as the second most popular. In the last 2002 elections, it scored a third place with 18.2 % of the votes, thanks, in part, to a low turnout of voters of democratic parties.

### *Current Major Political Parties*

*The currently most important political parties are listed below and ordered according to their positions on the traditional "left-right" ideological spectrum.*

***Czech and Moravian Communist Party** (Komunistická strana Čech a Moravy, KSČM) – an extreme leftist unreformed communist party; opposes Czech membership in NATO; founded in March 1990; successor to the former Communist party of Czechoslovakia, which was founded in 1921; has had stable representation since 1989.*

***Czech Social Democratic Party** (Česká strana sociálně demokratická, ČSSD) – a left centrist pro-reform party of standard European social-democratic orientation; supports the membership of the Czech Republic in NATO; strongly advocates the Czech entry into the EU; successor to the former Czechoslovak social democratic party which was founded in 1878 and forced to merge with the Communist party in 1948; restored in March 1990; established a minority government in 1998 and is the leader of the current majority coalition government.*

***Civic Democratic Party** (Občanská demokratická strana, ODS) – a right-wing conservative party; a dominating member of government coalitions in 1992 – 1997; the driving force of economic and political transition during the first years after the establishment of the Czech Republic; supports Czech membership in NATO; holds a "Euro-skeptic" attitude toward the EU; founded in April 1991 by long-time prime minister Václav Klaus who stepped down at the end of 2002.*

***Christian and Democratic Union – Czechoslovak People's Party** (Křesťanská a demokratická unie-Československá strana lidová, KDU-ČSL) – a centrist party of Christian-democratic orientation represented in government from 1990 to 1998*

*and a member of the current coalition; advocate of a "social market economy"; supports Czech membership in NATO and in the EU; reformed successor of the former Czechoslovak People's Party which was founded in 1918.*

***Union of Freedom** (Unie svobody-Demokratická unie, US-DEU) – a liberal right-center party established in January 1998 by former members of the Civic Democratic Party who left the party after the governmental crisis at the end of 1997; advocate of radical economic transition with an appropriate legislative framework and of regional self-administration, along with Czech membership in NATO and in the EU; represented in the government during the first half of 1998 and a current coalition member.*

## II.4 Elections of 2002

The year 2002 was a year of elections in the Czech Republic. Three different elections took place this year: elections to the Chamber of Deputies (Lower House) in June, Senate (Upper House) elections in October/November and municipal elections in November.

**Lower-House Elections:** The elections for Lower-House representatives were crucial for forming a new (majority) government. The practice of the opposition agreement when the previous Social-Democratic minority-government was supported by the main would-be opposition party (Civic Democrats) led to a general sense of political malaise. Hence, the turnout of 58 % has been the lowest since 1990. Coalition building in Czech lands is notoriously hard because of the stable position of the extreme-left communist party, which has had no coalition potential in the first 13 years of the Czech post-communist history. It was therefore important news when the new 3-party majority coalition appeared from the first 2002 elections.

ČSSD won the elections with 30.2 % of the vote. Second was ODS with 24.5 %, third KSČM with 18.5 % and fourth Coalition (of KDU-ČSL and US-DEU) with 14.3 %. No other party reached the 5 % threshold. A striking result emerged: all democratic parties lost compared with the 1998 elections. In particular, ČSSD lost 1.9 %, ODS 3.2 % and Coalition 4.9 % of votes. Only the communists' share grew by 7.5 percentage points, resulting in the best result of the Stalinists since 1989. Counting the deputies, ČSSD acquired 70, ODS 58, KSČM 41 and Coalition 31 mandates.

The upshot of the election was a coalition of ČSSD with KDU-ČSL and US-DEU that secures the weakest possible majority of 1 vote (101 representatives in a 200-seat Lower House). The government consists of 11 members of ČSSD (including the prime minister), and has 3 ministers from KDU-ČSL and US-DEU each. Two out of the 17 members of the government are women.

**Upper-House Elections:** The November Upper-House elections were important for two reasons. First, the government could have lost its majority in the Upper House,

and second, the upcoming presidential elections, in which all representatives of both chambers of the Parliament will cast their votes in search of a replacement for Václav Havel, whose second term ends in 2003. The ODS and independent candidates were successful: out of 27 available mandates, 9 went to ODS and (only) 7 to the ruling ČSSD. KDU-ČSL, KSČM and US-DEU each got one new senator. However, the important news was that 8 new senators were independent or represented parties currently not present in the Lower House. Parties of the government coalition lost their majority in the Senate (ČSSD lost 4 and KDU-ČSL 5 mandates) and have now only 34 out of 81 mandates. However, the independents are likely to vote with the current coalition. The participation in the (first round of) Upper-House elections was 24 %.

**Composition of the Lower House**

| | 1998 | | | | 2002 | | | |
|---|---|---|---|---|---|---|---|---|
| Party | Votes | % | Seats | % | Votes | % | Seats | % |
| ČSSD | 1,928,660 | 32.3 | 74 | 37.0 | 1,440,279 | 30.2 | 70 | 35.0 |
| ODS | 1,656,011 | 27.7 | 63 | 31.5 | 1,166,975 | 24.5 | 58 | 29.0 |
| KSČM | 658,650 | 11.0 | 24 | 12.0 | 882,653 | 18.5 | 41 | 20.5 |
| Coalition KDU-ČSL and US-DEU | | | | | 680,671 | 14.3 | 31 | 15.5 |
| KDU-ČSL | 537,013 | 9.0 | 20 | 10.0 | | | | |
| US | 513,596 | 8.6 | 19 | 9.5 | | | | |
| Others | 675,575 | 11.3 | | | 597,428 | 12.6 | | |
| Total of Valid Votes | 5,969,505 | | | | 4,768,006 | | | |
| Eligible Voters | 8,116,836 | | | | 8,264,484 | | | |
| Participation | 6,008,926 | 74.0 | | | 4,789,145 | 58.0 | | |
| Not Valid Votes | 39,421 | | | | 21,139 | | | |

**Composition of the Upper House**

| | 1998 | | 1999 | | 2000 | | 2002 | |
|---|---|---|---|---|---|---|---|---|
| Party | Seats | % | Seats | % | Seats | % | Seats | % |
| KSČM | 4 | 4.9 | 4 | 4.9 | 3 | 3.7 | 3 | 3.7 |
| ČSSD | 23 | 28.4 | 23 | 28.4 | 14 | 17.3 | 9 | 11.1 |
| KDU-ČSL | 17 | 21.0 | 17 | 21.0 | 18 | 22.2 | 13 | 16.0 |
| ODS | 26 | 32.1 | 25 | 30.9 | 21 | 25.9 | 25 | 30.9 |
| ODA (+US) | 11 | 13.6 | 11 | 13.6 | 12 | 14.8 | 1 | 1.2 |
| US-DEU | | | | | | | 6 | 7.4 |
| Others | | | | | | | 2 | 2.5 |
| Independent | n.a. | n.a. | 1 | 1.2 | 13 | 16.0 | 22 | 27.2 |
| **Total** | **81** | **100.0** | **81** | **100.0** | **81** | **100.0** | **81** | **100.0** |

*Source: CSO*

| Party | Political Preferences TNS Factum % | Political Preferences STEM % | Elections Prediction TNS Factum % | Elections Prediction STEM % |
|---|---|---|---|---|
| ČSSD | 16.2 | 26.0 | 28.2 | 27.7 |
| ODS | 14.8 | 29.3 | 28.2 | 32.2 |
| KSČM | 10.6 | 13.1 | 20.0 | 13.5 |
| KDU-ČSL | 4.9 | 8.1 | 8.4 | 8.9 |
| US-DEU | 2.4 | 3.7 | 4.2 | 3.8 |
| Others | 7.1 | 8.5 | 10.9 | n. a. |
| Not Decided | 15.0 | 6.0 | n. a. | 3.4 |
| Participation | n. a. | n. a. | 71 | 71 |

*Source: TNS Factum and STEM*

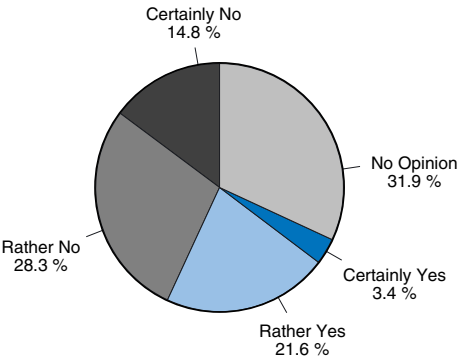
**Municipal elections:** Finally, similar to the Upper-House voting, the municipal elections were won by Civic Democrats, who gained strong positions in most large cities, and independents, who claimed the majority of the small towns and villages. Overall, the independents and the parties not represented in the Lower House got over 82 % of mandates. Out of the political parties, first came KSČM with almost 6 % of mandates followed by ODS with almost 5 %, ČSSD with 4 % and KDU-ČSL with 3 %. The average turnout was 43.4 %, with Prague being at the low end (35.3 %).

**Current situation:** In the second half of 2002, ČSSD continuously lost its preference and dominant position, while ODS appeared to be getting ahead. On the other hand, the preference for KSČM and KDU-ČSL were quite stable, indicating that these parties have a stable core of voters. Finally, US-DEU lost a significant part of its voters and would have problems to enter the Lower House if elections were staged now.

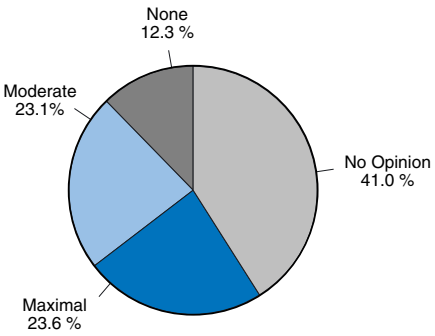
## II.5 Regional Administration

**Regional Reform:** The Czech Republic is now undergoing an extensive reform of regional governance and local public administration. Until recently, the intermediate administrative level in the Czech Republic has been the district *(okres)*. The country was divided into 77 districts plus the capital Prague. A typical district had about 120,000 inhabitants and covered about 1,000 square kilometers. District offices were responsible for state administration and their heads were appointed by the central government. Below the district level there are 6,196 rural and urban municipalities, some 6 % of which have the status of towns or cities. (The extraordinary position of the capital city of Prague is reflected in the fact that the internal territorial organization and administration of the capital is regulated by a separate legislative act.)

**Is the Existence of Regions Useful for Your City/Municipality?**




**What Shall Be the Rate of Self-governance and Independence of Regions?**

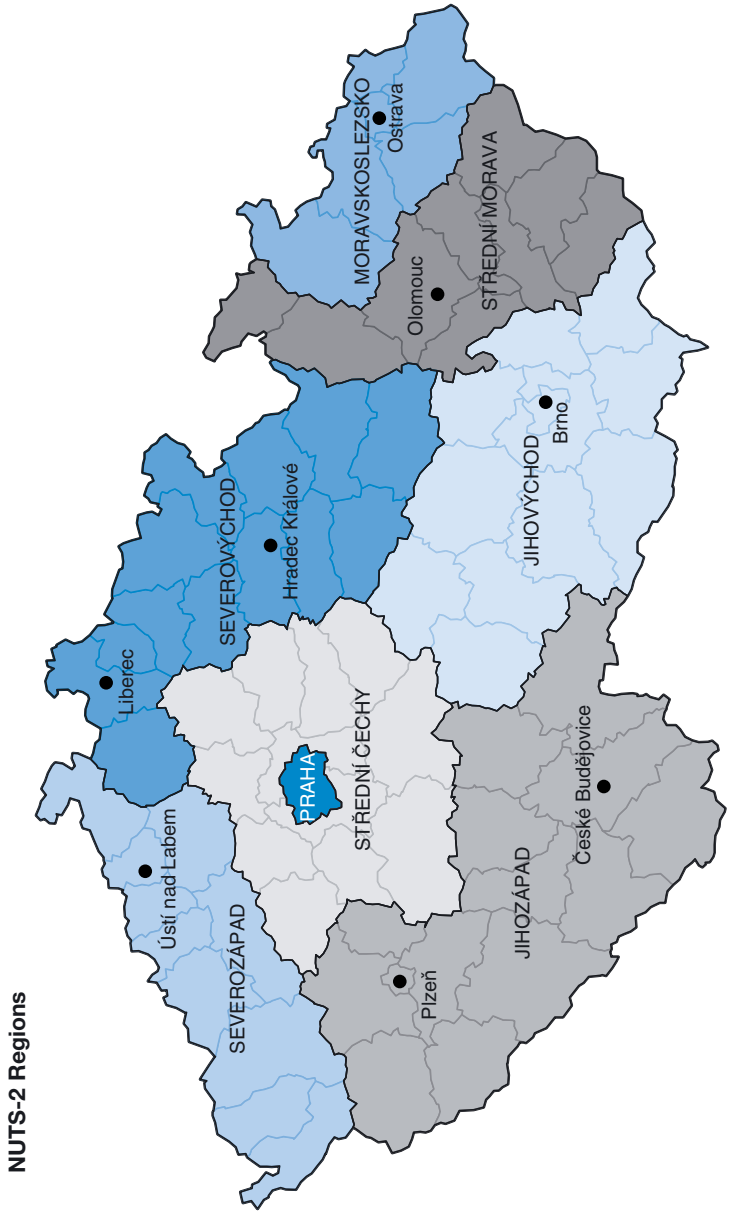



*Source: survey by TNS Factum in March 2002.*

The district system was inherited from communism and exhibited no features of self-governance. Further, the district borders set up by communists often did not correspond to natural spatial and/or historical boundaries. Thus a regional reform was proposed to establish meaningful territorial units and to bring back self-governance at the local level in order to achieve efficient and transparent public administration. During the first phase of the reform, in 2001, the Czech Republic was divided into 13 + 1 new regions with elected governing bodies. During the second phase, starting in 2003, the current system of 77 districts (run by central authorities) will be replaced by 205 so-called "extended" municipalities, essentially bringing public administration closer to the local level. The new "extended" municipalities shall take over about two thirds of the work and authority of current districts while the rest shall be transferred to the new 14 regions. The new administrative territorial units differ a lot in their size: There are over 15 new districts with populations over 100 thousand (the largest being the city of Brno with 385 thousand inhabitants) and about 10 districts with populations under 20 thousand people.

In the end, five territorial levels can be distinguished in the Czech Republic:

- The local level: municipalities, so-called NUTS 5 level in EU statistics *(NUTS = Nomenclature des Unités Territoriales Statistiques)*.
- The 205 "extended" municipalities, taking over most of the agenda of the 77 districts.
- The lower intermediate level: districts (77 in 1999), NUTS 4 level.
- The upper intermediate level: regions/provinces (14 regions since 2001), corresponding to the NUTS 3 level.
- Finally, since 2000, eight regions corresponding to the NUTS 2 level were introduced for the purposes of European statistics only.


NUTS-2 Regions
SEVEROZÁPAD
Ústí nad Labem
Liberec
SEVEROVÝCHOD
Hradec Králové
PRAHA
STŘEDNÍ ČECHY
JIHOZÁPAD
Plzeň
České Budějovice
JIHOVÝCHOD
Brno
STŘEDNÍ MORAVA
Olomouc
MORAVSKOSLEZSKO
Ostrava

**Public Attitudes:** The existence of new regions is viewed as being useful for local city or municipality by only one quarter of the Czech population. Almost one quarter of the population would like regions to have maximum authority, including decision power about their budget and legislative authority. About the same number of respondents would give the new regions only limited authority that would be defined and controlled by state. More than 40 % of respondents do not have a specific opinion on this issue.

**Rivalries between Center and Regions:** The new regional system is only slowly beginning to function. The ongoing transfer of funds and competencies from the central ministries is slow as central authorities resist giving up power. Similar rivalries were present in the Lower House when, under legislative time pressure set up by the government, it approved the creation of 14 new regions (13 regions and the capital Prague). The government again used time pressure to push its version of the second part of the regional reform. In spring 2000 the Lower House decided to abolish the district system and set the time of this change to January 1st, 2003. The government presented the implementation bills only in November 2001 and left the Parliament with less than a year to discuss them. Despite this pressure the Lower House made significant changes, including, e.g., rejecting strict state control over regions.

The finance necessary for the new administrative bodies to function is slowly coming in: 1.2 billion CZK was allocated in the 2002 state budget to finance material equipment for the "extended" municipalities and 1.4 billion CZK is allocated for this purpose in the 2003 state budget. More interestingly the costs of delegated state administration performed by the "extended" municipalities are not intended to be fully financed from the state budget. Instead, a contribution from the state shall cover only about 60 – 80 % of the costs, thus forcing the local authorities to achieve greater efficiency.

### *Regional Councils*

*The new regional corporations elected regional councils (executive bodies) and their heads (Hejtman) at their first session in spring 2001. ODS acquired the most influence, closely followed by KDU-ČSL and US-DEU. The Council has 9 members in 8 out of 14 regions and 11 members in other 6 regions and capital Prague. The number of Deputy Chairs varies from 1 to 4.*

**Political Structure of Regional Councils**

| | | ODS | 4-Coalition | ČSSD | Others (Independent) | |
|---|---|---|---|---|---|---|
| Hejtman | Chair | 9 | 5 | | | |
| Zástupce | Deputy Chair | 15 | 16 | 9 | 2 | |
| Členové | Members | 41 | 28 | 7 | 8 | |
| Council total | | 65 | 49 | 16 | 10 | 140 |
| Number of regions where party has its deputies in the regional council | | 14 | 11 | 6 | 7 | |

Data for all 14 regions including capital Prague.

**Political Structure of Regional Councils (Excl. Prague)**

| | | ODS | 4-Coalition | ČSSD | Others (Independent) | |
|---|---|---|---|---|---|---|
| Hejtman | Chair | 8 | 5 | | | |
| Zástupce | Deputy Chair | 13 | 16 | 7 | 2 | |
| Členové | Members | 37 | 28 | 5 | 8 | |
| Council total | | 58 | 49 | 12 | 10 | 129 |
| Number of regions where party has its deputies in the regional council | | 13 | 11 | 5 | 7 | |

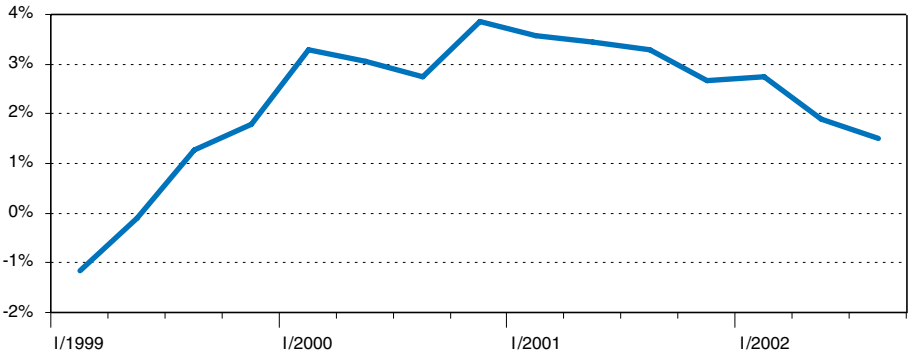
Data for 13 regions excluding Prague.

*Source: Web pages of regional corporations.*

# III. MACROECONOMY

## III.1 Gross Domestic Product

**Growth of Real GDP (Quarterly)**




*Source: 1999–2001 Czech Statistical Office; 2002 CERGE estimate*

After a dramatic decline in the three-year period of 1997–1999, when the economic growth rate bottomed at -1.0 % in 1998, growth quickly resumed, reaching its top rate of 3.3 % in 2000 as well as in 2001. Since then, the economy experienced a gradual slowdown. The 2002 growth rate is estimated at 2.5 % since it attained only 2.5 % annual growth in the third quarter. The slowdown of 2002 could have been harder, given the sluggish performance of the neighboring economies (especially Germany, which is the largest export target of the Czech Republic), but growth was propped by an increase in domestic demand. The governmental expectations are that during 2003 the economy will rebound, thanks to an expected revival of the EU economy, and reach an annual growth rate of between 3.0 and 3.5 %. However, since the prospects of Western Europe are still gloomy, the 2003 growth can be well below 3 % (2.7 % is the latest upper estimate of the CNB).

The data for components of GDP show that private consumption increased by 4 % during 2002 while government consumption increased by about 5 %. Private con-

**The Annual Growth Rates of Real GDP (in %)**

| Year | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002e |
|---|---|---|---|---|---|---|---|---|---|---|
| Growth | 0.1 | 2.2 | 5.9 | 4.3 | -0.8 | -1.0 | 0.5 | 3.3 | 3.3 | 2.5 |

*Source: CSO, 2002 CERGE-EI estimate*

**The Breakdown of Nominal GDP into the Components of the Aggregate Demand (in bln. of CZK)**

| Year | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002e |
|---|---|---|---|---|---|---|---|---|---|
| GDP | 1,182.8 | 1,381.0 | 1,567.0 | 1,679.9 | 1,839.1 | 1,902.3 | 1,984.8 | 2,157.8 | 2,270 |
| Private Consumption | 599.5 | 692.1 | 807.3 | 888.0 | 952.0 | 1,006.6 | 1,059.6 | 1,141.2 | 1,210 |
| Government Consumption | 263.0 | 284.6 | 323.4 | 344.5 | 356.6 | 385.9 | 402.8 | 429.5 | 447 |
| Total Investment | 351.9 | 470.0 | 536.7 | 547.4 | 552.6 | 534.1 | 588.7 | 646.4 | 650 |
| Net Exports | -31.7 | -65.7 | -100.4 | -100.0 | -22.1 | -24.3 | -66.3 | -59.2 | -37 |

*Source: CSO, 2002 estimate*

sumption was driven by a hefty 6 % growth of real wages on the background of unexpectedly low inflation. The share of private consumption on GDP is now above 50 %, while government consumption takes another 20 %. During the 1st half of 2002, investments were growing due to a high inflow of foreign investments (FDI); indeed, the FDI inflow of the first two quarters of 2002 exceeded the total FDI of 2001. In sum, during 2002 the Czech economy outpaced the EU growth, but only for the fourth time during the last 12 years. As a result, it will remain at about 61 % of the EU GDP level.

### *Floods of 2002*

*In mid-August, the Czech Republic suffered a severe flood. The first, minor, wave of flooding that endangered the upper part of the Vltava river area occurred a week before the second wave, which was disastrous. The second wave started with continuous massive rainfalls especially in Sumava and Southern and Western Bohemia. The increased levels of the upper parts of the Vltava and Berounka rivers flooded the major cities on their banks, spilled over dams, met near Prague and continued through Prague and Northern Bohemia to Germany. According to historical marks and hydrological observations, the flood in Prague was greater than the floods in 1784, 1845, 1862, and 1890. Alarming pictures of Prague were featured on TV news and the front pages of newspapers around the globe. At the peak of the flood, the Vltava river was 45 times its normal flow.*

*Nationwide, evacuations affected 220,000 people and 17 causalities are attributed to the flood. The damages to public and private property are estimated at 70 bln. CZK, which amounts to approximately 3 % of GDP. The Prague subway was badly hit, accounting for almost one tenth of all damages (6 bln. CZK).*

*The assessment of the indirect economic influence of the floods on the Czech economy is based on the comparison with the 1997 flooding in Moravia, which caused damages of 63 bln. CZK on public and private property. In one word, the economic*

*impact is estimated to be almost nil. Yet, there are two major effects to be discussed. First, the effect on prices is estimated to be neutral, as the temporary price pressures are likely to be compensated with the suppressed demand. Second, the effect on the GDP is estimated to be slightly negative; estimates vary between 0 % to -0.5 % with a most likely effect between -0.2 to -0.3 % (CNB).*

*The increased governmental and private demand motivated by replacing the damaged property is unlikely to fully offset the lost production capacity and holdups in the production. This may already be reflected in the slowdown of GDP in the third quarter. However, the slowdown is probably not fully attributable to the floods because the level of stocks has actually been increasing while floods would be expected to decrease stock because of the write off of damaged products. Further, damage on production sites would likely lead to immediate layoffs, but employment appears to have been little affected by the floods.*

**Flood Costs by Region in Billions of CZK as of October 2002**

| | |
|---|---|
| Praha | 24.0 |
| Jihočeský kraj | 15.7 |
| Středočeský kraj | 14.3 |
| Ústecký kraj | 11.8 |
| Plzeňský kraj | 3.8 |
| Other Regions | 0.5 |
| Total | 70.1 |

*Despite the horrifying images, the historical and architectural heritage of the Czech Republic was not affected (except for some libraries and art depositories). Currently, the historical center of Prague is as beautiful as it used to be and Prague's subway should be fully operational by March 2003.*

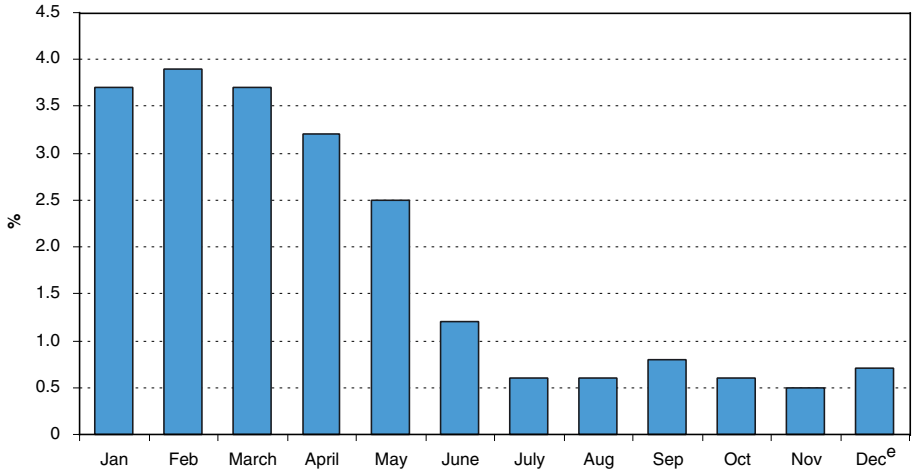
## III.2 Inflation

Both consumer and producer prices showed great stability during 2002 so that at the end of the year inflation reached historical lows. During 2002, CPI grew by only 1.8 % and PPI even decreased by 0.5 %. This was mainly driven by the sizeable appreciation of the Czech Crown (CZK) during 2002 (9.7 % against Euro and 13.6 % against USD) as prices in a small open economy, such as the Czech Republic, are to a large extent influenced by the evolution of the exchange rate. While 2002 inflation was low, rent deregulation and changes in indirect taxes could soon push prices up.

The 2002 growth of CPI can be decomposed into administrative price measures, which contributed 0.8 percentage points, and market forces responsible for the remaining 1.0 percentage points. Among the goods with decreasing prices were food and drinks, gas, and vacation packages. The decrease in producer prices is attributable to petroleum products and metal products.

Was inflation affected by economic policy? The primary monetary policy objective of the Czech National Bank (CNB) is maintaining price stability using inflation targeting. In 2002, CNB started with targeting

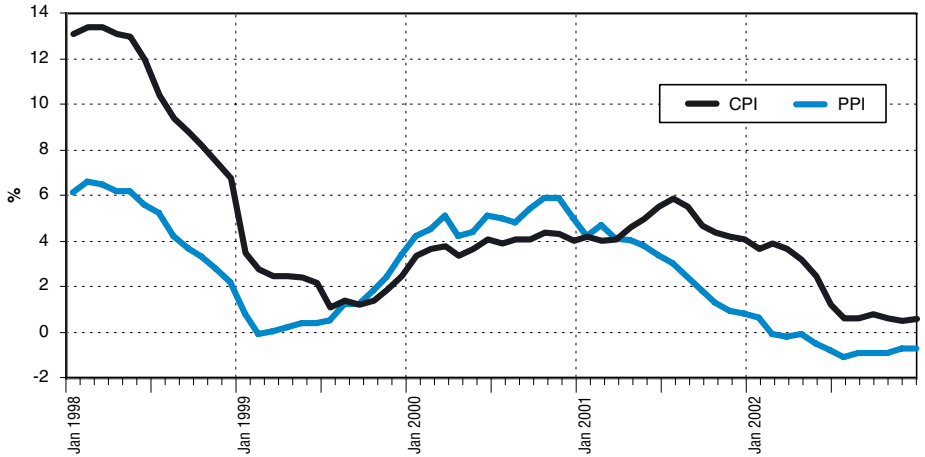
**Consumer Price Index (Y-on-Y) 2002**




*Source: CSO, CERGE-EI estimate*

headline inflation as opposed to net inflation. The target set for 2002 in January was 3 – 5 %; at the end of 2002, the target band became 2.8 – 4.8 %, still well above the actual CPI growth of 1.8 %. The main justification for undershooting the inflation target is the strengthening of the Crown, which is apparently not based on economic fundamentals and which hurts the exporters. In 2002, the CNB was therefore forced to decrease the REPO rate from 4.75 % in January to 2.75 % in December 2002.

**Consumer and Producer Price Indexes (Y-on-Y) 1998–2002**



## III.3 Public Budgets (Deficits)

The main problem of the Czech economy – the growing deficit of public budgets – stems from several sources, including, until 2000, the necessity to finance bank restructuring. Yet, temporary issues are dwarfed by the structural deficit of mandatory spending, locked in by the existing legislation (including generous indexing of welfare payments) and adverse demographic development. The ongoing economic recovery makes clear that the deficit is not merely cyclical, but that it will worsen no matter how fast the economy may be growing.

There are several common definitions of the state/public budget deficit. The narrowest definition, that the state budget deficit (however defined) ignores the local government and municipal deficits and various off-budgetary funds. The (consolidated) public deficit should include state and local budgets as well as off-budgetary funds and public health insurance companies. This latter definition approximately corresponds to the Maastrich definition of public deficit. In addition, the consolidated public deficit may account for various additional items. It is important to consider the one-shot nature of privatization revenue, as well as the (hidden) deficits of various transformation institutions, which, in the end, all have to be covered from the central budget.

Starting with the narrowest definition, the state budget deficit of 2002 reached 66.7 bln. CZK (3.1 % of GDP) and the approved 2003 state deficit is enormous at 111.3 billion. (Part of the increase in the deficit level is due, however, to more transparent accounting practices introduced by the new government.) Next, netting out extraordinary budget items such as privatization receipts and the costs of transition, the negative balance of the general government mushroomed to over 5 % of GDP in 2002. During 2003, this overall public deficit will increase to 6.3 %. The most meaningful figure, however, is that summing up all incurred expenses of the public finance system and subtracting all receipts. In 2002, the total public deficit (without privatization income) was in the neighborhood of 9 % – a deficit level that is simply not sustainable.

The deficit is even more alarming given that the fiscal revenue of the Czech government in 2000 was already high at 46 % of GDP compared to that of, e.g., Germany. Indeed, labor taxation stands at close to 50 % of gross labor income, twice the OECD average, and weigh heavily on enterprise employment. Hence, the adjustment must come on the expenditure side. Yet, most categories of expenditure (including social welfare, housing, and transport) are currently

**Consolidated Public Deficits, % GDP**

| Year | 1997 | 1998 | 1999 | 1990 | 2001 | 2002e | 2003p |
|---|---|---|---|---|---|---|---|
| Without Privatization Income | -2.1 | -2.4 | -2.8 | -4.4 | -5.1 | -9.0 | -7.8 |
| Without Privatization &Transformation Institutions | -1.4 | -1.4 | -2.4 | -3.4 | -2.8 | -5.7 | -6.3 |
| With Privatization Revenues | -1.2 | -1.5 | -0.6 | -3.1 | -2.4 | -2.9 | -5.7 |

*Source: MFCR, e-estimate, p-projection*

**Revenues 2003**

| | |
|---|---|
| Social Security | 275.6 |
| VAT and Excise Taxes | 188.7 |
| Income Tax | 90.6 |
| Profit Tax | 81.8 |
| Other Non-tax Revenues | 20.3 |
| Other | 27.1 |
| **Total** | **684.1** |

**Spendings 2003**

| | |
|---|---|
| Pensions | 225.9 |
| Education | 88.9 |
| Wages of State Employees | 54.2 |
| Social Benefits | 44.4 |
| Health Care | 44.2 |
| Defense | 44.1 |
| Sickness Benefits | 34.4 |
| Police and Security | 31.8 |
| Unemployment Benefits | 10.4 |
| Other | 217.1 |
| **Total** | **795.4** |
| **Deficit** | **111.3** |

*Source: State Budget Proposal 2003*

locked in upward trajectories, even though maintenance activities have already been severely restricted in recent years. Between 1994 and 1999, social security and welfare expenditures rose by 3.2 % of GDP. Public expenditure on social welfare persistently exceeds payroll revenues and the deficit is projected to grow even during the expected years of economic expansion.

The situation is truly horrifying: if there is no change in the fiscal policy, the current debt of the country is set to increase from the current 20 % of GDP to over 40 % by 2006 and reach the magic 60 % of GDP by 2010. Worse, these deficits occur while the demographic situation has not yet deteriorated. Towards the end of the new decade it will.

The Czech Republic is headed for significant demographic aging. Elderly over 65 years will constitute almost one quarter of the total population by 2030 so that for each 10 individuals aged 15 – 65 there will be 4 individuals over 65. This is in part due to the dramatic decrease in fertility as the number of children born per woman decreased from 1.9 to 1.1 in the period 1990 – 1999. Aging presents a formidable challenge to the current state-guaranteed pay-as-you-go pension scheme. Aging will also result in increasing health care costs. This is important as health sector spending

**Mandatory Expenditures (Thousand CZK)**

| Thousand CZK | 1997 | 1998 | 1999 | 2000 | 2002[1)] | 2002[2)] |
|---|---|---|---|---|---|---|
| Mandatory Expenditures | 266,593 | 299,588 | 310,713 | 335,899 | 355,786 | 386,591 |
| Quasi Mandatory Expenditures | 118,606 | 125,861 | 135,106 | 141,142 | 175,032 | 193,426 |
| State Budget Expenditures | 524,668 | 566,741 | 596,909 | 632,268 | 662,594 | 694,241 |
| GDP in c.p. (bln. CZK) | 1,680 | 1,837 | 1,887 | 1,960 | 2,131 | 2,296 |
| **Shares on State Budget Expenditures [%]** | | | | | | |
| Mandatory Expenditures | 50.8 | 52.9 | 52.1 | 53.1 | 53.7 | 55.7 |
| Quasi Mandatory Expenditures | 22.6 | 22.2 | 22.6 | 22.3 | 26.4 | 27.9 |
| Mandatory and Quasi Mandatory | 73.4 | 75.1 | 74.7 | 75.4 | 80.1 | 83.5 |

*Source: MF, authors' calculation*

1) Preliminary
2) Budget

**Structure of Public Debt**

| % of GDP | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|
| Gross Public Debt | 23.6 | 25.6 | 27.8 | 31.3 | 34.7 |
| Central Government (excl. ČKA) | 16.9 | 17.9 | 22.8 | 28.5 | 32.3 |
| ČKA | 4.8 | 5.5 | 2.8 | 0.7 | 0.5 |
| Health Insurance Companies | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Local Governments and Municipalities | 2.3 | 2.2 | 2.2 | 2.1 | 1.9 |

*Source: PEP 2002*

is already high at 7.4 % of GDP in 1999 and 2000; see Section IV.4.

The ratio of pensioners to contributors has risen from around 0.47 in 1994 to 0.53 in 1998. Without further reforms, it is projected to reach over 0.6 by 2010 and continue rising to 0.7 by 2030 (Section I.4). As a result, the deficit of the pension scheme could rise from the current 1 % of GDP to about 3 % before 2020.

This calls for a major reform. Minor adjustments have already been made but provide no effective help. The current pension payment formulas are already egalitarian as individual pension levels depend only slightly on the amount of previous personal contributions. The statutory retirement age for both sexes is already being steadily increased. However, the adoption of this gradual increase in 1996 has been accompanied by the introduction of (actuarially unfairly advantageous) early retirement up to three years before the statutory retirement age. In 1996 early retirements constituted only 18 % of old age retirements. By 1998, early retirements had increased by a factor of five so that early retirements in 1998 constituted almost half of all old age retirements. The fiscal effects of early retirements more than outweighed the expected benefits of extending the statutory retirement age. In light of the demographic outlook and growing unemployment of older workers, early retirements could become even more important.

A pension reform has been under consideration for several years now. The government and independent experts sharply disagree on the necessity of a fundamental reform. The current administration is apparently planning to rely on partial adjustments of the existing pay-as-you-go system and supplementary pension insurance. Under the current scheme, this will require further increases in the retirement age and most likely hikes in the already high pension insurance contributions. This would, however, further increase labor costs and deteriorate work incentives. And work incentives are already low, see Section V.

**Consolidated Public Debt**

| % of GDP | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Public Debt | 15.3 | 13.2 | 12.9 | 13.0 | 14.5 | 16.7 | 18.7 | 20.3 | 24.0 | 30.6 | 36.4 | 41.7 |

*Source: Ministry of Finance, Czech Republic*

**Note: Liabilities of ČKA are not fully included. Otherwise the public debt would be approximately 28 % of GDP in 2002 and 45 % of GDP in 2006.**

## III.4 Fiscal Reform

Finally, towards the end of 2002, the Ministry of Finance announced its plans for fiscal reform aiming to lower the deficit level closer to the Maastricht criteria by 2006. Although the 3 % of GDP deficit limit target will be out of reach even under the more auspicious version of the reform, the reform plans are likely to face fierce political opposition (especially from the powerful Ministry of Labor and Social Affairs). The plan consists of measures aimed to increase revenues and cut spending. Yet, a major part of the fiscal problem, the needed pension reform, has not been considered. Below, we survey the principles of the reform and list most of the actual reform steps contemplated at this point.

**1. Taxes**

■ The Czech Republic should adopt the EU tax legislation by May 2004. This includes increases in indirect and excise taxes, and moving of some commodities to higher VAT rates, while profit tax should be reduced. Further, market valuations should be used in calculating real estate taxes and the tax rates on alcohol and cigarettes should increase as well.

■ The Czech tax system ought to be simplified, which together with stricter enforcement should reduce tax evasion. Tax evasion undermines the principles of equal taxation; hence, the government intends to implement a minimal tax and a minimal social security contribution for small entrepreneurs and self-employed. Other minor adjustments include closing of duty-free shops, and the introduction of property declarations and cash registries.

**2. Mandatory Expenditures**

■ The pay-as-you-go pension scheme must be redesigned lest it collapse due to population aging.

■ The health care system lacks a self-adjusting mechanism and government covers its deficits. To limit abuse of the system, sickness benefits should be paid by the employer during the first 2 – 3 weeks and the level of benefits should be reduced during the first 2 – 3 days.

■ The system of unemployment benefits distribution does not motivate active job search. However, the major problem is that unemployment benefits are usually lower than the minimum subsistence level (social/welfare benefits). Moreover, social benefits do not target those in need.

■ Subsidized savings plans, which were supposed to help people finance their own housing, are primarily used as plain long-term savings accounts.

**3. Off-budgetary Institutions**

■ National Property Fund should cease to exist at the end of 2006 and various other funds (State fund of transportation infrastructure, State fund of housing development, State cultural fund, State fund for Czech cinematography, State fund of land irrigation) should be integrated into the state budget.

■ The amount of funds needed to close the remaining transformation institutions should be clarified. While many of the existing institutions were recently transformed into a single institution, the Czech Consolidation Agency (CKA), the possibility of "postponed" losses in the accounting of the CKA is still not fully clear.

■ The principles guiding the issuance of state guarantees should be unified for all budgetary and off-budgetary institutions with the aim to minimize the burden to the state budget. So far there are many state institutions that can issue state guarantees. The environmental guarantees provided by FNM during privatization are not clearly evaluated yet.
■ The government should set up principles that would help prevent the recent occurrence of unsustainable debt in local and municipal budgets.

Although the reform is quite ambitious, given the political landscape, it cannot lead to a sustained public deficit evolution. Even if the more radical version of the reform is implemented, public deficits will still be above the Maastricht criteria. Furthermore, increasing the tax burden is likely to lead to an increase in the size of the shadow economy, and, consequently, lowers tax revenues.

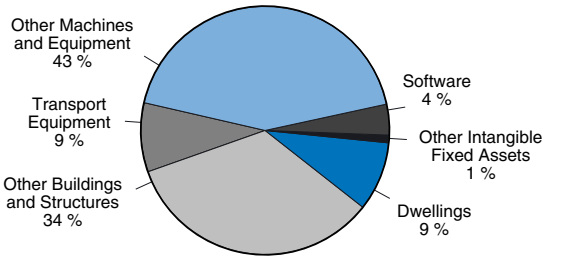
The reform material proposes many desirable changes such as avoiding the welfare trap of the social benefits or making unemployment benefits motivate job search. However, a successful implementation of such changes is unlikely. Similarly, the reform proposes to cut down the number of government employees. Yet, none of the recent attempts to reduce state bureaucracy led to any improvements (as a matter of fact, some of such attempts increased the public-administration employment).

Finally, the fiscal reform does not directly address the outdated parameters of the pay-as-you-go pension system, which will not be able to cope with the upcoming changes in the demographic structure of the population. In the mid 1990s, the system was balanced. However, already in 2002, before the first aging wave, the pension system alone had a yearly deficit of about 25 bln. CZK (1 % of the GDP).

## III.5 Investment

The level of investment activity in 2002 has apparently remained stable in the Czech Republic. The 2001 share of gross fixed capital formation on GDP is about 28 % and the corresponding share in 2002 is likely to be slightly higher (29 %). However, the effect of the floods is still not clear and the replacement investment can push this figure higher. The ratio of gross fixed capital formation to GDP in the Czech Republic is

**Type of Fixed Capital Investment**




*Source: CSO*

**The Ratio of Gross Fixed Capital Formation to GDP (in %)**

| Year | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002e |
|---|---|---|---|---|---|---|---|---|---|---|
| Ratio | 28.4 | 28.7 | 32.0 | 31.8 | 30.8 | 28.3 | 26.8 | 28.3 | 28.3 | 29.0 |

*Source: CSO, 2002e CERGE-EI estimate*

about 30 % higher than the typical corresponding value for developed countries. The enclosed table also suggests that investment in the Czech Republic exhibits a business-cycle pattern similar to that observed in developed countries. Consistent with the business cycle theory, Czech investment is highly pro-cyclical.

## III.6 Foreign Direct Investment

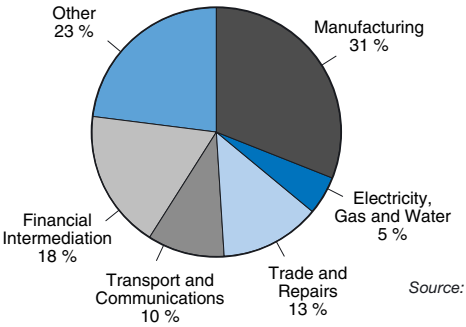
Foreign direct investment (FDI) inflows to the Czech Republic increased considerably in recent years; indeed, FDI reached its peak in 2002. The Czech Republic attracted about USD 34 bln. of foreign direct investment during 1989 – 2002, while maintaining the highest per capita FDI within the Central and Eastern European Countries (CEECs). Large-scale privatization transactions have fuelled a steady rise in FDI and the expected EU accession boosted the inflow significantly. The inflow of FDI during 2002 is estimated at more than 8 bln. USD. Nearly half of this inflow (3.9 bln. USD) comes from the sale of 97 % of Transgas, the country's natural gas pipeline network, to RWG of Germany. The sale included majority stakes in the country's eight regional gas distribution companies.

Moreover, FDI inflows could have been even higher if several other privatization plans would not have failed. Government approved a sale of a 63 % stake in petrochemical conglomerate Unipetrol to a domestic investor for USD 326 mln., but after 10 months of (skillful) hesitations the investor refused to pay and handed the company back to government's hands. Unipetrol may have a similar fate as other large sales to domestic investors, such as heavy machinery works Škoda Plzeň, ČKD, and Tatra truck works. These companies have been privatized jointly to a domestic investor, and now they are bankrupt.

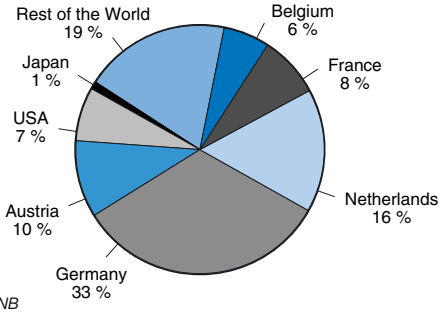
Next, the sale of the national electricity monopoly ČEZ has been postponed to 2003, because the bid received from Enel, Italy (4.54 bln. USD) was considered low. It is expected that Electricité de France could join the second round of bidding for ČEZ because contrary to Enel, it could take on the troubled Temelín nuclear power plant as part of its bid. In addition, recently the sale of 51 % of Czech Telecom to Deutsche Bank and Danish company TDC for 55.3 bln. CZK (USD 1.8 bln.) has failed as well.

Government decisions were so far in favor of large cross-border mergers or acquisitions and sales of enterprises as completely integrated complexes. The (supposedly independent) Office for the Protection of Economic Competition (ÚOHS), which has the authority to approve or reject mergers, has currently cleared the controversial cash-and-swap

**Cumulative FDI in the Czech Republic, 1993–2002 by Economic Activity**




**Cumulative FDI in the Czech Republic by Region, 1993–2002**



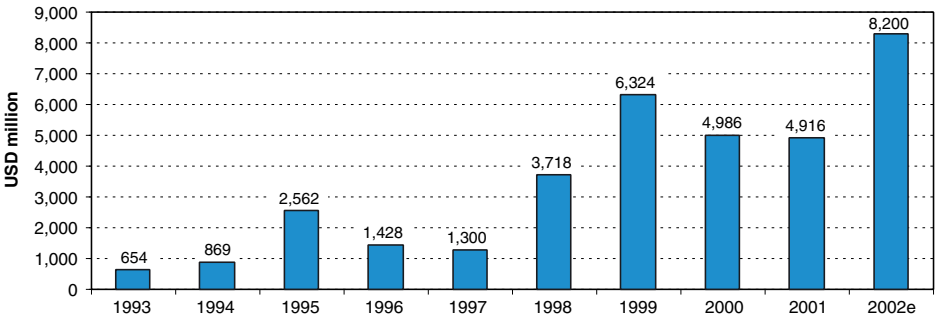

*Source: CNB*

deal under which ČEZ will control most of the regional distribution companies in return for a cash payment and control of transmission company ČEPS. Thus the chances to create competition in this sector have been largely lost.

The share of EU countries on Czech FDI reached 80 % in 2002 and has an increasing tendency. Germany has the strongest position, followed by the Netherlands, Austria, and France. There is relatively little investment from Japan and the US in the Czech Republic, although part can be hidden in the Netherlands FDI as multinationals often establish companies in Netherlands through which they invest abroad. It can be expected that FDI from the EU will be further strengthened as the date of accession approaches and will grow quickly after accession, which was the case of Spain and Portugal.

The coming EU accession has an impact on the sectoral breakdown of the economy since foreign direct investment contributes to a shift in the product structure to become more similar to the more developed EU countries. Despite recent massive foreign penetration into banking and public utilities,

**Foreign Direct Investment Inflow**




*Source: CNB, CERGE-EI estimate*

the dominant position of manufacturing remains unchallenged. Foreign penetration, however, varies considerably according to manufacturing industries and is showing a different structure of investment from domestic businesses. A similarity between foreign- and domestic-dominated industries appears to grow over time. As far as intensive industries are concerned, foreign investment is negligible in industries that have excess capacity and require extensive restructuring, such as steel, large machinery, chemicals, and refineries. Almost 60 % of the assets of foreign investment enterprises are concentrated in three industries: motor vehicles, food products, tobacco and non-metallic minerals.

Foreign penetration in manufacturing increased rapidly between 1993 and 2000, reaching 42 % in sales and 28 % employment by 2000, however there is still a lot of room for further expansion. In Hungary 70 % of manufacturing sales came from foreign investment enterprises that employed 45 % of the manufacturing labor force already by 1998.

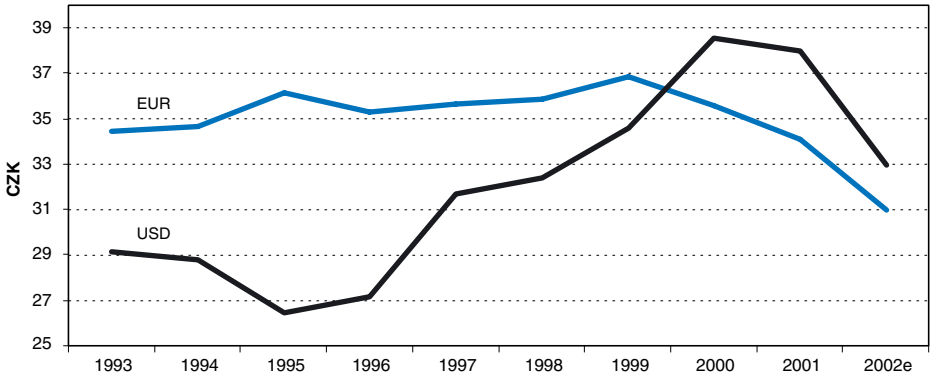
There have recently been numerous green field investments in manufacturing attracted by the existing investment incentives. For instance Toyota and PSA Peugeot Citroen started a major joint venture for the manufacture of automobiles. This investment should generate about three thousand jobs and should increase competition in the car market, which is dominated by Škoda-VW. Green field investments benefit from investment incentives relatively generously allotted to investors that meet certain requirements.

There is however risk involved in providing such incentives. Some investors would not invest in a country that creates unequal conditions via bureaucratic decision making about subsidies since incentives are discriminatory. Incentives may be counterproductive: small and medium-size firms may not be able to meet the minimum investment and employment requirements to become eligible for incentives. Last but not least some investors come, use the incentives and leave. Such was the case of the company Flexotronic, which committed itself to create three thousand jobs by mid-2005 but recently announced withdrawal. As most of green field investment has an assembly character, the withdrawal threatens other green field investment that has been attracted by incentives as well.

The reasons for investors' decision to invest abroad are complex and take into account many criteria. *Ceteris paribus,* FDI incentive policies can drive investors' decisions only in case of favorable economic and political conditions. If, however, investors expect instability in the economy and political system of the country, or if labor costs grow above a certain level, such investors leave the country very quickly. To sustain a high FDI inflow, more attention has to be devoted to the functioning of the legal system, its economic predictability and transparency.

## III.7 Exchange Rate

**Czech Koruna Exchange Rate to Euro and US Dollar**




*Source: CNB, 2002 CERGE-EI estimate*

The exchange rate was chosen to be a nominal anchor of monetary policy at the beginning of the economic transformation. It was tightly pegged to a currency basket that consisted of the US dollar (35 %) and the Deutsche mark (65 %) during its last stage. The stable exchange rate in the mild inflationary environment caused the crown to continually appreciate in real terms, thus worsening the country's terms of trade. After speculative attacks in late May of 1997, the Central Bank abandoned the original regime and the crown was allowed to float. The Central Bank consequently opted for inflation targeting to conduct its monetary policy.

During the transition period the exchange rate of the Czech crown to the Euro evolved in a relatively stable manner. Differences between points of temporal appreciation and depreciation do not exceed 14 % in extreme cases. The largest depreciation occurred during the period following the currency crisis in 1997. However, the change in the exchange rate during the Czech currency crisis was not dramatic compared to those that Asian countries suffered during their currency crises. The exchange rate of the Czech crown to the U.S. dollar showed less stability: this may be attributed to the strengthening of the dollar against the Euro in recent years.

**Average Annual Exchange Rates**

| Year | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002e |
|---|---|---|---|---|---|---|---|---|---|---|
| CZK/EUR | 34.5[D] | 34.7[D] | 36.2[D] | 35.3[D] | 35.7[D] | 35.9[D] | 36.9 | 35.6 | 34.1 | 30.8 |
| CZK/USD | 29.2 | 28.8 | 26.5 | 27.2 | 31.7 | 32.4 | 34.6 | 38.6 | 38.1 | 32.8 |

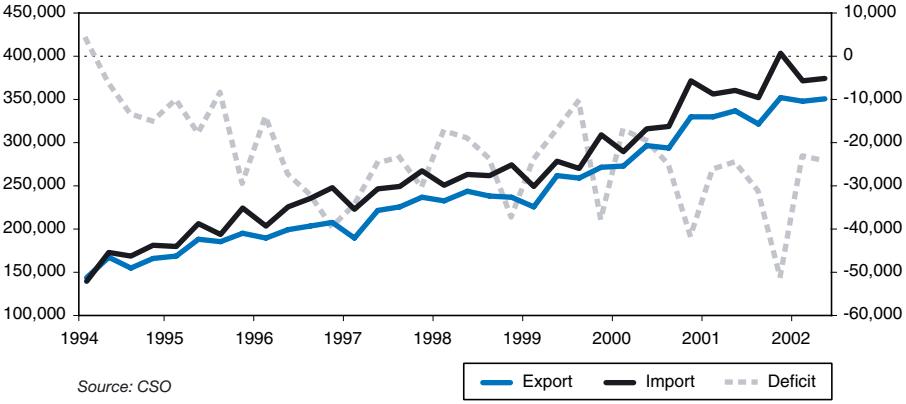
*Source: Czech National Bank, (D) exchange rate calculated through DEM/EUR fixed rate, 2002 CERGE-EI estimate*

During the first half of 2002 the Czech crown appreciated at a steady rate against both the Euro and US dollar. In summer it even broke the magic mark of 30 crowns for both currencies by almost reaching 28 crowns for one dollar. In early fall, the crown lost some of its value but has since then leveled off. The ongoing process of European integration has affected the crown both positively and negatively, depending on the nature of the news. Negative information about the development of the US economy in mid fall resulted in the crown's gaining strength, mimicking a similar development of the Euro with respect to the dollar. The end of the year can be characterized as a crawling depreciation of the crown against the Euro, while more stable development can be seen with respect to the dollar.

The recent strengthening of the crown does not appear to be fully driven by economic fundamentals. Czech currency is expected to appreciate as the country catches up with its developed neighbors and joins the EU; the speed of the 2002 appreciation, however, was too harsh for many exporters and led some economists to discuss the possibility of accepting the Euro as a way of protecting the economy against speculative attacks.

## III.8 Foreign Trade and Balance of Payments

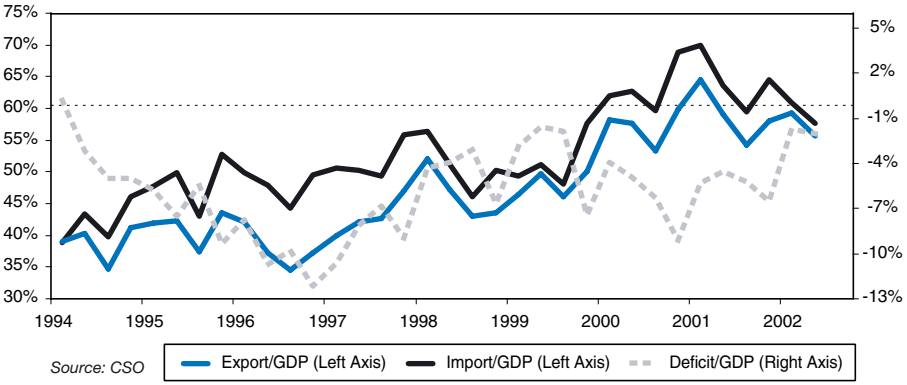
**Total Exports and Imports (mil. CZK in 1995 Prices)**




*Source: CSO*

The Czech Republic is a textbook example of a small and open economy. It relies heavily on international trade as an important contributor towards its GDP. The plots of the proportions of exports and imports to the country's GDP for the period 1994 – 2002 illustrate the extent of such involvement. The trend shows an almost invariably increasing importance of international trade for the Czech economy. Over this time the composition of Czech foreign trade changed as well. Specifically, the share of machinery and transport equipment on exports more than doubled since 1993,

**Ratios of Export/GDP, Import/GDP, and Deficit/GDP**




*Source: CSO*

while raw materials and semi-finished products shrank in similar proportion. However, the graph also shows the decline in trade in 2002 and the growing trade deficit. This development raises caution and illustrates the dependence of the Czech economy on the health of the German market and on the evolution of the crown exchange rate.

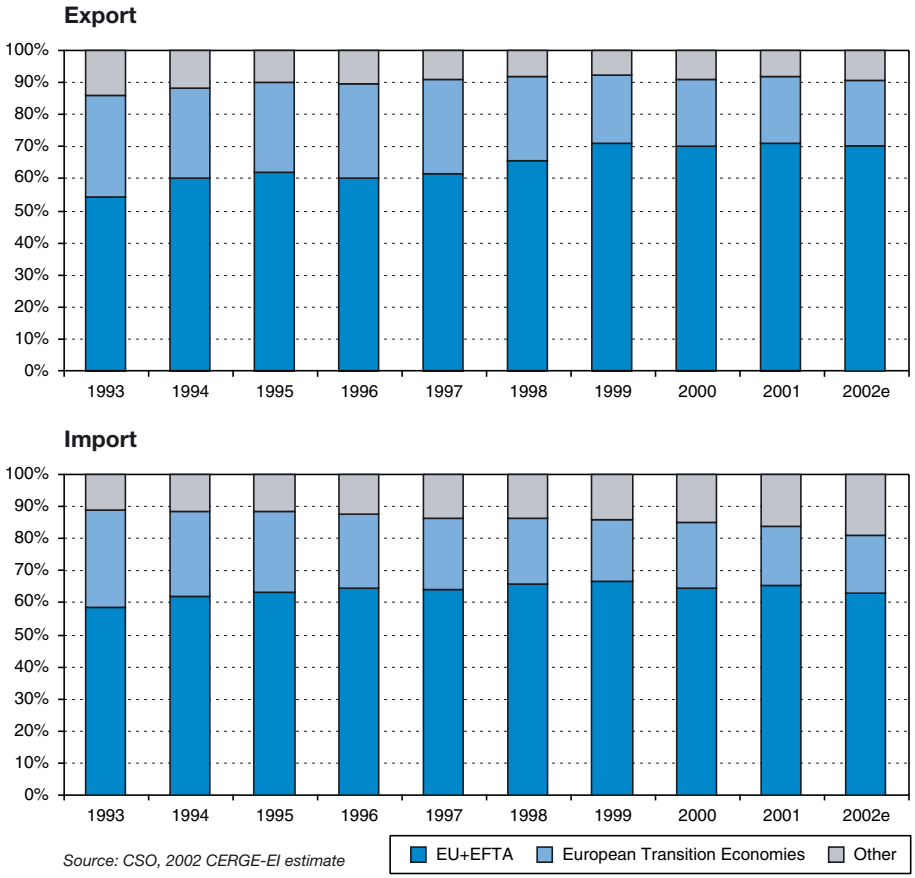
The EU is the main trading partner of the Czech economy. Since 1993 trade with the EU increased by 50 %. During the period from 1999 to 2002, exports to the EU have amounted to almost 70 % of all Czech exports while imports from the EU lag only slightly behind. Since 1998 exports to the EU outnumber imports. International trade with Germany stands out clearly since it constitutes close to two thirds of the country's trade with the EU. Austria is the second most important EU destination (8.4 %).

The second largest group of trading partners consists of other European transition economies. International trade arrangements among these countries were institutionalized in March 1993 in the form of the Central European Free Trade Agreement (CEFTA). The founding countries were the Czech Republic, Slovakia, Hungary, Poland, and Slovenia. Romania joined CEFTA in 1996, and Bulgaria became a member in

**Balance of Payments – Quarters**

| | 2001 | | | | 2002 | |
|---|---|---|---|---|---|---|
| mil. CZK | I. Q | II. Q | III. Q | IV. Q | I. Q | II. Q |
| Current Account | -23,838.1 | -24,592.1 | -28,126.2 | -23,277.3 | -15,460.4 | -18,226.1 |
| Capital Account | -43.0 | -22.5 | -13.1 | -252.1 | 22.0 | 25.4 |
| Financial Account | 32,871.9 | 35,305.3 | 18,411.7 | 66,721.5 | 40,078.2 | 177,034.3 |
| FDI | 38,669.6 | 58,420.6 | 25,182.5 | 64,728.6 | 23,030.1 | 163,777.3 |
| Current + Capital + Financial | 8,990.8 | 10,690.7 | -9,727.6 | 43,192.1 | 24,639.8 | 158,833.6 |

*Source: CNB*



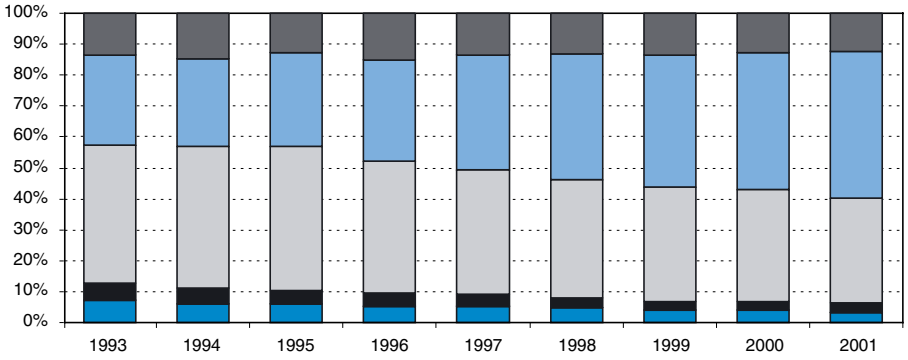

*Source: CSO, 2002 CERGE-EI estimate*

1998. The Czech Republic's share of trade with these European transition countries steadily declining from about 30 % in 1993 to approximately 20 % in 1999. Since then, however, this share has remained stable. Slovakia is the most important destination of Czech exports among the transition countries (8.4 %), while Poland ranks second (5.6 %).

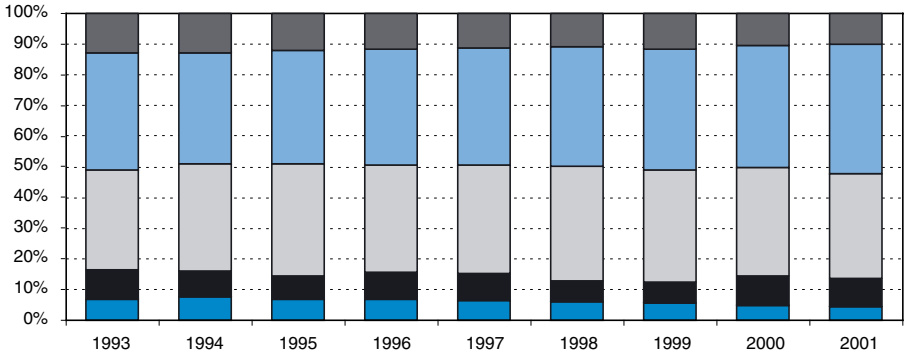
Finally, Czech international trade with the rest of the world exhibits a clear pattern. Exports consistently diminished and in 2001 amounted to only 8 % of total exports. Imports from other countries have been increasing and are now at 15 %. Trade with the USA ranges in the 2 – 3 % interval and business transactions are concentrated in the area of FDI.

The evolution of the exchange rate, FDI, and of domestic and EU demand reflect themselves in terms of the **balance of payments**. Most transition countries face large current account deficits, most often due to high investment demand and con-

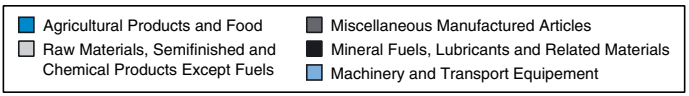
**Export by SITC**




**Import by SITC**




*Source: CSO*




sumption demand. For the Czech Republic, the largest current account deficit occurred in 1997 (6 % of GDP). Current account deficits in 1998 and 1999 had lower magnitudes (2.5 % and 3 % of GDP, respectively). The year 2000's current account deficit saw again an increase (4.7 % of GDP) mainly due to high mineral fuel import prices. Nevertheless, unlike many other transition countries, the current account deficit of the Czech Republic has always been balanced by the surplus of the financial account.

The trade deficit and current account deficit of early 2002 mirrored the development of the previous years. Fortunately, the financial account saw huge FDI inflow during the first three quarters of 2002, so that the overall balance showed positive growth in comparison with 2001.

# IV. MICROECONOMY

## IV.1 Privatization and Restructuring

The Czech Republic has an important history of early-transition privatization. While privatization of small firms was completed successfully in the early 1990s, the so called large-scale privatization of the mid 1990s was plagued by asset striping or "looting" and resulted in insufficient restructuring. Many of the old Czech firms continued to receive subsidies hidden as (soft) commercial loans. A state owned bank (Consolidation Bank) set up to clear non-performing loans from the large bank portfolios in the Czech Republic was transformed from a temporary hospital for bad loans inherited from the communist era to a state-run commercial debt-alleviation agency. The largest banks had long-standing creditor relationships with the voucher-privatized enterprises and also made equity investment in these firms through their voucher investment funds. Such joint stock companies exhibited worse performance and higher indebtedness than privately held limited liability firms.

The privatization of many large companies, including banks, was thus much slower than it appeared – despite the significant share of these companies distributed to the public in voucher privatization. In fact, in 1998, most large strategic companies were still under state control – either directly or indirectly through state-owned banks.

***Firm-Size Convergence as a Driving Force in Early Transition***

*(Based on Jurajda, Š. and Terrell, K.: Job Growth in Early Transition: Comparing Two Paths, CERGE-EI WP No. 201, 2002)*

*The "transition" of the productive structure in the countries of Central and Eastern Europe (CEE) and the former Soviet Union was a process aimed at achieving efficiency through (1) restructuring enterprises that were created during central planning (e.g., by privatization), and (2) reallocating capital and labor from these post-communist firms to new start-up private ones. While much research has analyzed the process of privatization and whether it has resulted in efficiency-inducing restructuring, relatively little work has focused on new start-up firms.*

*In this note, the authors analyze the growth of the new sector in two countries whose paths of transition have been very different: the Czech Republic and Estonia. Their earlier research demonstrated that the new sector was an impressive sole engine of job creation in both countries at the start of transition: In only three to five years more jobs were provided by de novo (start-up) firms than by the firms inherited (and potentially transformed) from communism. This massive new-sector growth occurred*

## Industry Firm-size Distribution

| Firm Size | Agriculture and Forestry | Mining and Utilities | Manu-facturing | Construc-tion | Wholesale and Retail Trade | Hotel and Restaurant | Other Private Services | Banking and Insurance |
|---|---|---|---|---|---|---|---|---|
| **Austria 1998** | | | | | | | | |
| <20 | 65 | 8 | 22 | 35 | 42 | 67 | 55 | 11 |
| 20–100 | 29 | 18 | 25 | 38 | 28 | 23 | 21 | 25 |
| 101–500 | 6 | 28 | 32 | 22 | 20 | 9 | 18 | 33 |
| >500 | 0 | 46 | 22 | 5 | 9 | 2 | 7 | 31 |
| **West Germany 1995** | | | | | | | | |
| <50 | 85 | 21 | 24 | 66 | 58 | 53 | | 22 |
| 50–99 | 8 | 9 | 9 | 13 | 13 | 14 | | 12 |
| 100–499 | 6 | 24 | 27 | 17 | 21 | 22 | | 31 |
| > 500 | 1 | 46 | 40 | 4 | 9 | 11 | | 35 |
| **East Germany 1995** | | | | | | | | |
| <50 | 50 | 23 | 47 | 61 | 67 | 50 | | 29 |
| 50–99 | 21 | 9 | 14 | 17 | 14 | 12 | | 16 |
| 100–499 | 18 | 16 | 27 | 22 | 17 | 22 | | 40 |
| > 500 | 11 | 51 | 12 | 0 | 3 | 17 | | 14 |
| **Czech Republic January 1991** | | | | | | | | |
| <25 | 9 | 4 | 7 | 23 | 44 | 56 | 25 | 7 |
| 25–100 | 29 | 20 | 14 | 20 | 21 | 19 | 21 | 51 |
| 101–500 | 49 | 26 | 34 | 35 | 25 | 14 | 29 | 23 |
| >500 | 13 | 50 | 45 | 22 | 10 | 10 | 25 | 19 |
| **Czech Republic December 1996** | | | | | | | | |
| <25 | 23 | 12 | 18 | 43 | 67 | 67 | 42 | 22 |
| 25–100 | 31 | 17 | 21 | 24 | 19 | 16 | 21 | 26 |
| 101–500 | 43 | 23 | 29 | 25 | 10 | 11 | 19 | 33 |
| >500 | 3 | 48 | 32 | 8 | 3 | 6 | 18 | 19 |
| **Estonia January 1991** | | | | | | | | |
| <20 | 6 | 4 | 4 | 10 | 20 | 20 | 14 | 0 |
| 20–100 | 6 | 15 | 9 | 21 | 26 | 27 | 20 | 100 |
| 101–500 | 50 | 21 | 28 | 39 | 30 | 32 | 34 | 0 |
| >500 | 37 | 60 | 59 | 30 | 25 | 22 | 32 | 0 |
| **Estonia March 1995** | | | | | | | | |
| <20 | 33 | 9 | 15 | 21 | 54 | 48 | 28 | 13 |
| 20–100 | 19 | 21 | 22 | 37 | 25 | 29 | 25 | 73 |
| 101–500 | 26 | 19 | 26 | 28 | 15 | 17 | 24 | 7 |
| >500 | 22 | 50 | 37 | 13 | 6 | 6 | 23 | 7 |

*on different policy backgrounds. While early transition in Estonia was characterized by massive job destruction of the old firms in the absence of an effective social security net, Czech reallocation proceeded at a more gradual pace, involved relatively generous social support, and featured extensive voluntary moves from the old firms to the new sector.*

*The authors study the industrial structure of new-sector growth and old-sector decline and find that not only was the growth of the new sector somewhat similar in our two countries at the aggregate level, but the importance of start-up firms within industries was almost identical. The authors also find that start-ups grow in importance not only in expanding, but also in declining industries.*

*Why is it that new jobs were created not only in the niches left open by central planning (e.g. in services) but within all branches of the economy? And why is it that the share of new jobs on industry employment is so similar across two different macroeconomic scenarios? It is a well-known fact that one of the main distortions of central planning was to do away with small firms. Given that almost all new job creation in early transition occurs in small firms, one natural interpretation of these reallocation patterns is that they are driven by convergence to "normal" industry-specific firm-size distribution.*

*While different open economies specialize in different industries given their comparative advantage, it is more natural to expect the firm-size distribution within an industry to be similar across countries. For example, Kumar, Rajan, and Zingales (1999) "What Determines the Firm Size?" NBER Working Paper No. 7208, analyzes European data on average firm size by country and industry; they find that industry identity explains most of the differences in firm size while such industry-specific firm-size differences are almost identical across countries. This finding is confirmed in the top panel of the enclosed table, which provides a summary of the firm-size distribution over broad groups of industries from Austria in 1998 and East and West Germany in 1995. Indeed, comparing the fraction of workers employed in firms in the upper two categories (the lower two are not always strictly comparable) suggests a striking similarity of firm-size distribution in Austria and West Germany. These distributions provide one possible benchmark against which one can measure transition reallocation.*

*The bottom four panels of the table contain industry firm-size distributions in the Czech Republic and Estonia at the start of transition and then again in mid-transition. The initial distortion towards large firms is clear, especially in manufacturing, construction, and services. It is also equally clear that there was a substantial shift toward western distributions and this shift roughly "explains" the growth of the share of the new-sector employment within each industry. Correlating the share of the new sector on an industry employment in the Czech Republic with the corresponding employment share of firms with less than 100 workers across the categorization of industries in 1996 results in a correlation of 0.93. This suggests that natural "evolutionary" forces are largely responsible for the growth of the new small firms in early transition.*

Privatization activities were resumed at the beginning of 2000, after the minority social-democratic government and the largest opposition party ODS agreed to complete the remaining privatization of large enterprises within the next two years. Most importantly, all large banks were sold to foreign investors (including the sale of Česká spořitelna to the Austrian Erste Bank Sparkassen and the privatization of Komerční banka to Societé Generale).

IPB, the bank privatized "as is" in 1998 to the Japanese Nomura, was facing serious problems with maintaining its capital adequacy ratio and with deposit outflow in the first half of 2000. Given that IPB was then dealing with the second largest amount of payments in the economy, the Czech National Bank imposed administration on the bank. This was shortly followed by a quick sale of the IPB business to ČSOB owned by Kredietbank of Belgium. To complete the deal, the government agreed to provide protection against the credit risk of a large part of IPB's loan portfolio. Both sides (Nomura and the Czech Republic) are now suing each other for the costs of the incident. Recently, a London arbitrage court ruled that the case should be examined within the Czech judicial system.

The total cost of bank restructuring was substantial. Not surprisingly, the state is seeking to maximize privatization revenues. However, the recent privatization attempts generated some spectacular failures. Most importantly, the privatization of the main electricity generator ČEZ and the electricity distributors failed in 2002. Second, the sale of Český Telecom, the long-protected monopolistic provider of fixed-line telecommunication services, has been under preparation for years. In 2002 it also failed, due to ill-written contracts with the previous strategic partner from the early nineties. Third, Unipetrol, a large chemical conglomerate, was sold for the second highest bid of 11.75 bln. CZK to domestic Agrofert, which deferred to pay in 2002 (the government refused the highest bid of 14.5 bln. CZK submitted by British Roche in 2001). In the end, Agrofert refused to pay the agreed price and returned the company to the government, after having control of the firm for an extended period of time. The only successful privatization was therefore the sale of Transgas, the gas distribution company, to German RWE.

### *Liberalization of the Energy Sector: Electricity and Gas*

*In 2000 the government decided to privatize ČEZ and Transgas – the gigantic state-owned energy monopolies –, and a new Energy Act was approved that should create conditions for the opening up of the electricity and gas sector to competition. The major novelty of the new act was that it should allow consumers to choose their supplier, in accordance to EU requirements. The process of opening up the market is gradual, starting with large consumers. In the electricity sector this process should continue until 2006; in the gas sector it should start in 2005.*

*The privatization of ČEZ and Transgas has been the subject of a protracted and heated debate between the Ministry of Finance and Ministry of Industry and Trade. While the Ministry of Finance was strongly in favor of "per-partes" privatization in which producers would be privatized independently of regional distribution companies, the Industry and Trade Ministry advocated "pooled" privatization – the sale of majority shares of both the producer and the distributor companies to the same owner. Eventually, the government opted in the case of ČEZ and Transgas for the pooled variant. Additional requirements were put forth, including that the new owner should not only be familiar with nuclear power generation (because of Temelín) but would also have to agree to buy a certain amount of brown coal during the next 25 years. Such privatization is at best dubious since separate sales would surely attract more potential buyers and so drive up prices. Originally, the government expected 500 bln. CZK revenue in total. German RWE offered 133 bln. CZK for gas utilities and won the call. The highest bid for ČEZ, 135 bln. CZK, by Italian Enel was not satisfactory. The government decided to allow Electricité de France and Enel into the second round; however, none of the bidders met the governmental price floor of 200 bln. CZK and the privatization (as predicted by all independent analysts) failed.*

## IV.2 Czech Capital Markets

The coupon privatization scheme drove the design and functioning of the Czech equity markets. It was very rapid at the outset, as about 1,700 companies were floated within two years of market establishment. The regulation of the market, however, lagged significantly behind. In the mid-1990s, insider trading, price manipulation, fraud in the investment funds industry, and abuses of minority shareholder rights eroded investor confidence to a large extent. In recent years, regulation has improved somewhat, but enforcement still appears to be rather weak and the Prague Stock Exchange (PSE) does not serve as a primary source of firms' financing.

In its 1999 Country Study, the World Bank pointed out that "The capital market needs to be further strengthened to recover credibility and to be a real source of corporate financing" (Summary Report, page 17). It is also illustrative that, unlike both the Budapest and Warsaw Stock Exchanges, the PSE has long been unable to become a member of the Federation of European Stock Exchanges. Finally, in June 2001 the PSE become an associate member of the federation. The fact that the quality of regulation and investors' perception of PSE has been improving towards the end of the first transition decade is also illustrated by the fact that PSE signed a Memorandum on Mutual Cooperation with the London Stock Exchange in May 2000, which will assist closer cooperation between the two exchanges.

The over-reliance on the banking sector to provide credit to enterprises in the Czech Republic raises questions of the role of

**Listing Requirements**

| Trading Group | Requirements* |
|---|---|
| Tier One | Public offer > 200 mill. and at least 25% of the total capital<br>Duration of the business activities at least 3 years |
| Tier Two | Public offer > 100 mill. and at least 25% of the total capital<br>Duration of the business activities at least 3 years |
| Tier Three | To be set by the Exchange Committee for Exchange Trades |
| New Market | The following and possibly additional requirements to be set by the Exchange Committee for Exchange Trades:<br>Registered capital > 10 mill.<br>Expected market capitalization > 20 mill.<br>Public offer > 15% of the total capital<br>Duration of the business activities at least 1 year |

* Requirements vary for investment trusts and units

capital markets in enterprise restructuring and, consequently, in industrial production growth. Enterprises in the Czech Republic have been unusually highly leveraged and established significant links to the banks, which often became active shareholders and influenced the decision-making in the enterprises. Since the opening of the PSE the tradable equity markets have been a negligible source of finance for industrial enterprises, and remained illiquid for all but a handful of shares. The only attempt by a local company to raise equity via a domestic IPO failed in the first half of 2001 due to low investor interest.

The high number of securities, traded in varying volumes and frequencies, market capitalization, varying information disclosures, and the non-transparency of the market in general, resulted in several attempts to restructure the PSE:

1. **Segmentation.** New segments of the PSE were introduced on September 1, 1995, when the PSE market was split into three main tiers. In addition, the so-called "New Market" was introduced in 1999, but no firm belongs to this group. The listing requirements for each trading group are summarized in the table above.

2. **Delisting.** The following criteria were applied: volume of trade, market capitalization, number of days traded per year. By September 1997, 1303 companies had been de-listed. Recently, fewer than 100 companies were trading on the PSE (only 8 is traded in the SPAD system).

3. **Dealers' Market.** The SPAD is a trading system in which market makers maintain continual quotations of bid and ask prices for selected issues. Trading under SPAD is divided into two parts: the open phase with an obligatory quotation of prices by appointed market makers; and the closed phase without an obligatory quotation of prices by appointed market makers. Traders wishing to conclude a trade in one of the SPAD securities have the option of choosing either another trader as its

counter-party or the market maker. Currently only blue chip companies are included under the SPAD system.

It was expected that the above introduced market segments and trading groups (1), supported by delisting (2) would increase the transparency of the market, attract foreign investors and significantly increase liquidity. Probably the main reason this attempt failed was that shares were quite heavily traded off-market. The SCP Control Department noted that the vast majority of off-market trades were actually settled by registered brokers. Therefore, since mid-1997 PSE members were not authorized to conduct trades at the SCP. Nevertheless, this motion did not increase liquidity at the central market either. The only change observed was that a significant part of off-market transactions turned into direct trades; in other words, transactions occurred in an off-market nature without any influence on the central market price.

The introduction of a market-maker system (SPAD) for the most liquid shares during 1998 has substantially increased trading on the central floor of the Prague Stock Exchange. Nevertheless, the PSE and RM-System (over-the-counter system) has yet to provide transparent trading systems (a consolidated price display, co-ordinate settlement and freedom in order-routing) and to assure unified pricing. There are also other considerations affecting further development of the Czech stock markets.

In order to make the Czech capital markets more transparent and liquid, an amendment to the Securities Act took effect on January 1, 2002, which set the minimum volume of a publicly traded issue at CZK 33 million and requires at least 25 % of the shares to be floated. This severely limits tradeability of the affected shares and their value to the small shareholders.

The privatization of government stakes in large Czech corporates (like ČEZ or Český Telecom) also represents a significant risk for future trading at the PSE as these shares account for a half of the PSE turnover.

Despite several reforms and organizational changes the Czech capital market does not yet behave as a standard market. Due to the lack of investors' confidence and resulting low liquidity, its prospects as a stand-alone trading place are not very bright in the longer term.

### *Central European Stock Exchanges and Foreign Investment*

*Significant effort has been devoted to studying the development and functioning of the Central European stock markets and their role in restructuring and economic growth in the transition countries. Given the various ways the stock markets of CEE countries were established and developed (starting with a small number of issues in Poland and Hungary, then flooded with large number of privatized shares via the voucher scheme in the Czech and Slovak Republics), evidence from these markets has been used to analyze the impact of the stock markets on the country's economic development.*

*Interestingly, little relationship has been found between stock market activity and future economic growth. For example, many complaints have surfaced in recent years*

*about the functioning of the Czech equity market, and this market has been viewed as less liquid and considerably less transparent than stock markets in neighboring countries.*

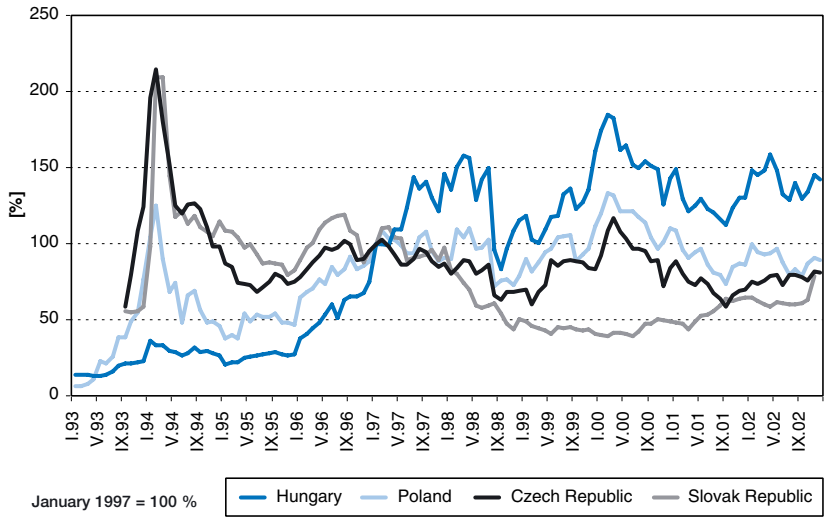
*Yet this perception is not directly reflected in the aggregate statistics. In terms of number of stocks listed on main and secondary markets, Prague ranks equal to Budapest with 57 and 58 issues, compared to 225 issues listed in Warsaw and just 7 issues in Bratislava. Also, the number of issues has been continuously increasing in Poland and stagnating / decreasing in the other three countries. Despite being the largest in absolute terms with a total market capitalization exceeding USD 30 billion, the Warsaw Stock Exchange capitalization (18.9 % of GDP) is lower in relative terms than that of the stock markets in Hungary (26.1 %) and the Czech Republic (19.2 %), but significantly higher than that of the Slovak market (2.3 %). However, in terms of liquidity, Bratislava ranks highest with trading volume to market capitalization of 122.7 %, and Budapest ranks second with 101.6 %. Prague and Warsaw follow with trading volume to market capitalization below 70 %.*

**Market Capitalization in 2000 (% of GDP)**

| | |
|---|---|
| Czech Republic | 19.2 % |
| Hungary | 26.1 % |
| Poland | 18.9 % |
| Slovak Republic | 2.3 % |

*Source: National Exchanges and International Federation of Stock Exchanges*

**Stock Market Indices**



*The market evidence suggests that the Warsaw Stock Exchange is relatively successful in attracting both issuers and investors. This is often attributed to high-quality market regulation and a privatization policy of block sales to strategic investors. While 27 new companies were introduced to the Warsaw Stock Exchange in the last two years, the only IPO of a Czech company failed in 2001 and no company went public during the year 2000 in Hungary. Generally, recent developments indicate a lack of interest in these markets and darken the perspectives for some CEE stock markets.*

*Though the stock markets are the most researched financing channel, and their development is most closely followed by both investors and public, their role in foreign capital inflow is relatively limited. Also, a direct link between the perceived quality of a given stock market (in the sense of its liquidity and transparency) and the foreign investment inflow cannot be easily established when evaluating the empirical evidence from CEE countries during the past six years. Although, the Czech Republic's stock market has been viewed as the least transparent one, still the absolute amounts of foreign capital invested in equities, bonds, and portfolio investments are about the same for Poland, Hungary, and the Czech Republic.*

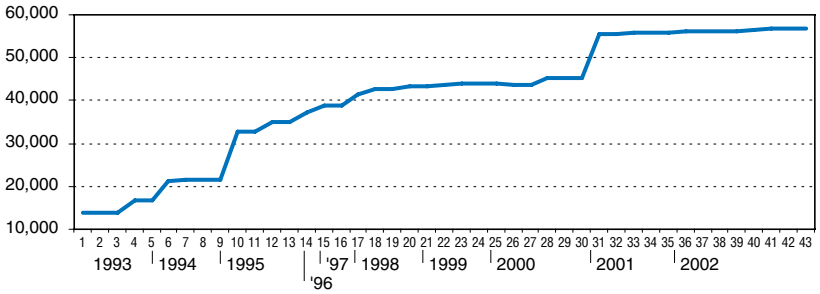
*Foreign direct investments (FDIs) and other investments (primarily loans and trade credits) dominate the inflow of foreign capital in most CEE countries.*

## IV.3 Taxes

The tax law is one of the most important policy tools of the Czech government. The modern post-communist tax law system came into force in January 1993 and for most of the citizenry, as well as for the public administration, the tax system was completely novel. The overhaul of the tax system came with the introduction of a value-added tax and the new income tax. Perhaps not surprisingly, regulatory institutions and enforcement procedures developed gradually and the tax laws were amended many times. In line with the evolution of the business and public administration environment, tax evasion by citizens became widespread; see the feature stories below. Given the ability of small businesses and self-employed to avoid taxation, the state is relying heavily on payroll taxation of salaried employees.

## *Income Tax Law*

**Number of Words in the Czech Income Tax Law**

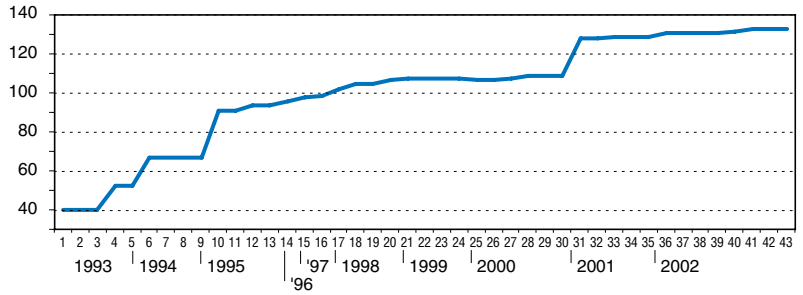



*Source: Act No. 586/1992 Coll., as amended*

*In hindsight, the Czech income tax law seems excessively complex. During 1993–2002, there were 43 amendments (novels) – approximately one modification every quarter. Not only did the income tax law change substantially in character, it also became extensive. The first version of the law contained less than 14 thousands words, whereas the last one examined was composed of nearly 57 thousand words: a four-fold increase. The number of words rose fairly quickly until the end of 1995, with another relatively big increase in 2001.*

*The income tax law modifications were typically introduced to correct previous mistakes or to launch new policies, though sometimes they emerged in reaction to lobbying. In addition to the income tax law, there are many regulations issued by*

**Number of Phrases "with exception of" in the Czech Income Tax Law**




*Source: Act No. 586/1992 Coll., as amended*

*ministries that explain certain paragraphs of the law in more detail. The word count of these regulations is nearly as heavy as that of the income tax law itself. Naturally, as the income tax law increased in size, it allowed for more and more exceptions. In the graph we show the frequency of phrases "with exception of" that appeared in the text of the law.*

*The original income tax law of 1993 mentioned the phrase "with exception of" 40 times; by 2002 the figure more than tripled. The growth pattern in both graphs looks very similar. Currently, even tax experts and tax advisors complain that the law is too difficult for them to follow, so that the ordinary public has little chance of grasping it. What will happen in the future is difficult to predict, but we expect further income tax law changes. Presently, the Czech accounting system is undergoing a transition: Instead of being based on law and regulations issued by ministries, it will be based on simpler laws and national accounting standards. This change should happen within two years and will undoubtedly affect the tax law as well.*

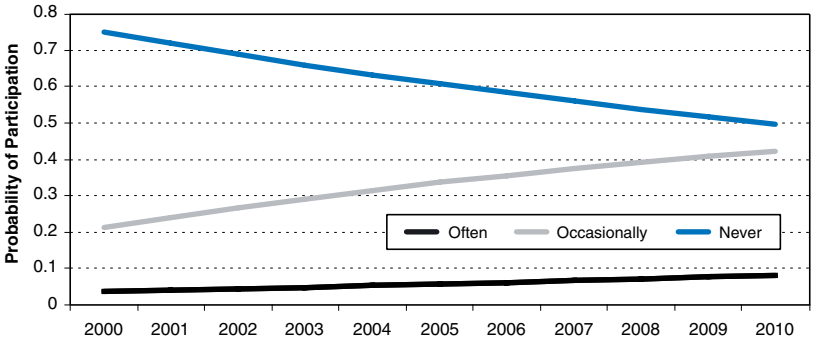
### *The Quality of Government Services and Tax Evasion*

*(Based on Hanousek, J. and Palda, F.: CERGE-EI DP No. 85, 86, and 96, 2002)*

*Tax evasion is one of the central problems facing the governments of transition countries. Corrupt tax officials, lack of resources to collect taxes, and populations versed in skirting rules, force transition countries to adopt systems of taxation that unduly target those narrow groups from who money can be extracted. This narrow targeting violates the central principle of efficient taxation, which is to tax at low rates on a broad base. Governments of transition countries have attacked the problem of tax evasion by cracking down on evaders. A supplementary approach might be in order. In a survey of the Czech Republic, the authors find strong evidence that citizens will avoid taxes if they do not believe they are getting quality government services for the taxes levied upon them.*

*A survey of more than one thousand Czechs in 2000 and 2002 was conducted to find the likelihood of tax evasion. The respondents were asked to put themselves in one of three categories: I evade taxes never, sometimes, frequently. This question was asked for 1995, 1999, 2000 and 2002, allowing one to form an idea of how people drift between different categories of tax evasion. The estimate of the drift allows one to infer how people will move between categories over the next decade. The survey method also allows one to ask respondents what they believe is the probability of being caught evading and what penalties they believe they face, whether they believe evasion to be moral, whether they believe their wealth needs to be safeguarded by tax evasion, and whether government is giving them quality services for the taxes they pay. These subjective data allow one to probe the effects of incentives on the*

**Participation in the Underground Economy, Simulations**




*Source: authors' calculation*

*decision to evade. Survey data suffer from the lies respondents tell. Even though lying may pervade the data, solid relations emerged between the questions we asked and whether people evaded.*

*The main problem was to find out how much tax people evade. The obvious problem when asking people about their participation in the underground economy is that they will be reluctant to confess their participation. The survey tackles this problem in stages. First, it asks respondents whether they know of anyone who has participated in the underground economy. Respondents might not feel ashamed about answering this question honestly. Knowing people who participated in the underground economy could be a weak signal that the respondent also participates. Next, it asks whether the respondent has ever bought goods or services in the underground economy. Finally, and this is perhaps the question to which respondents will give*

**Values and 95%-confidence Intervals for Relative Frequencies of Different Level of Tax Evasion. Czech Republic 1995, 1999, 2000 and 2002**

| Year | Often | Occasionally | Never |
|---|---|---|---|
| 1995 | 3.2%<br>(2.0%, 4.4%) | 12.6%<br>(10.5%, 14.7%) | 84.2%<br>(81.9%, 86.5%) |
| 1999 | 3.7%<br>(2.4%, 4.9%) | 16.7%<br>(14.3%, 19.0%) | 79.7%<br>(77.1%, 82.2%) |
| 2000 | 3.9%<br>(2.6%, 5.1%) | 21.3%<br>(18.7%, 23.9%) | 74.9%<br>(72.1%, 77.6%) |
| 2002 | 3.7%<br>(2.5%, 4.9%) | 20.2%<br>(17.7%, 22.7%) | 76.1%<br>(73.4%, 78.8%) |

*Source: authors' calculation*

**Spearman's Correlation Coefficients of Measures of Government Services with Participation in Underground Economy**

| **Scale questions 1 to 5** (1=very satisfied, absolutely agree; 2=satisfied, agree, etc.) | Working Underground | Buying Underground |
|---|---|---|
| Satisfaction with country economic development | **-0.07** | 0.02 |
| Legal system now and ten years ago (1=much improved; 5=much worse) | **-0.05** | **0.04** |
| Law and order should be always obeyed | **-0.19** | **-0.27** |
| Is corruption the major problem of your country? | **-0.11** | **-0.13** |
| Satisfaction with government services | **-0.11** | 0.02 |
| Is tax evasion moral? | **0.31** | **0.36** |
| Is a misuse of social benefits moral? | **0.25** | **0.37** |

Bolded – statistically significant at conventional level

*the least honest reply, it asks whether they have themselves ever participated in the underground economy and what is the nature of this participation.*

*The results suggest that people who think well of their government are more inclined to pay their taxes than are people who bear a grudge against the state. The only possible discrepancy is that those who believed corruption was a big problem tended to evade less than those who believed corruption was not a problem. However, this is a "possible" discrepancy because one can could also surmise that those who see corruption as a major problem could also be those who would like to evade taxes but who do not have ability or knowledge to bribe tax officials.*

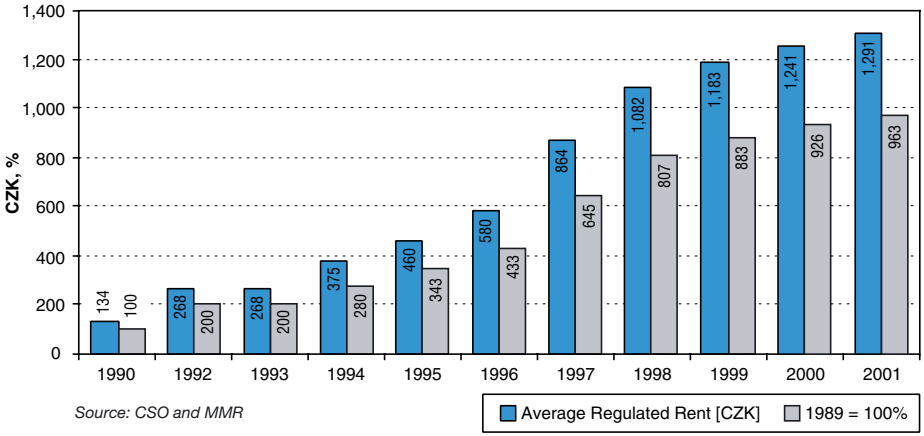
*The prevailing thinking in government and among academics has been that coercion is the way to get people to pay. Tax withholding already takes away much choice from individuals and the threat of audits and penalties is sustained by thousands of civil servants who form an elite caste of government with extraordinary powers of coercion. Economists by and large have made punitive enforcement the subject of their theoretical studies. Very few are those who have suggested that people may be convinced to pay their taxes without being prodded by inspectors. Friedrich Schneider is among the few to have suggested that tax evasion may be a form of protest against government. Indeed, all of the surveys suggest that those who believe they are getting quality government services also tend to evade much less than those who do not believe they are getting quality services. A government keen on reducing tax evasion cannot just bark commands at its subjects. Governments are constrained in their tax collection by the perceptions people have of the quality of government services they receive. The study suggests that governments that pretend to provide quality services will preside over a mass that pretends to respect the tax code.*

## IV.4 Rent Control and Housing

Since the liberalization of prices in the early nineties, rental housing has been one of the few sectors (like utilities) where direct price control was not abolished. But unlike the case of utilities, rent deregulation was perceived as political hara-kiri. Unfortunately, politicians did not take timely advantage of widespread public support for economic changes to advocate a move from regulated prices to market ones. The major problem with the adopted scheme of rent deregulation was the idea of uniform percentage increases, since the original rents were set arbitrarily over several decades and reflected nothing but the time they were set. The average rent in 1990 was just slightly above 134 CZK (USD 5). It is no wonder that there existed (and still exists) enormous excess demand. Although the rents have risen nearly tenfold since 1989, the average household spends only about 16 % of its income on housing, including all utilities.

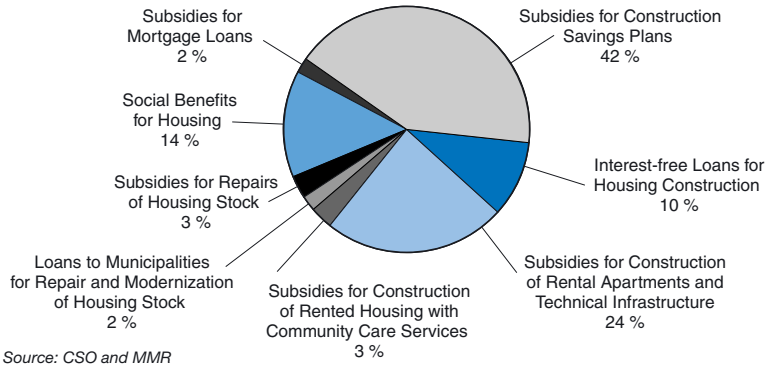
Regulated and unregulated (a significant portion also belongs to the shadow economy) rental housing causes hoarding, but also causes paradoxical situations. In the 2001 census 12.4 % of the total housing units were reported as vacant. Many units are used for recreational purposes, although this is truer for the rural areas. Yet even in Prague the census discovered that 9.4 % of housing units are empty. The shadow market in Prague is estimated in billions of CZK; this money does not enter GDP, nor is taxed or used for the improvement of the housing. The unregulated yearly rent (on the tight market) is currently about 9 % of the market value of the property (while in the EU this is only 7 %); after the full liberalization the unregulated prices are expected to fall by one third. The European Commission noticed the problem and criticized the situation stating that it undermines investment into the housing market and reduces labor mobility.

**Regulated Rents**




*Source: CSO and MMR*

**Form of Housing Support, 1999, 14.7 bln. CZK**

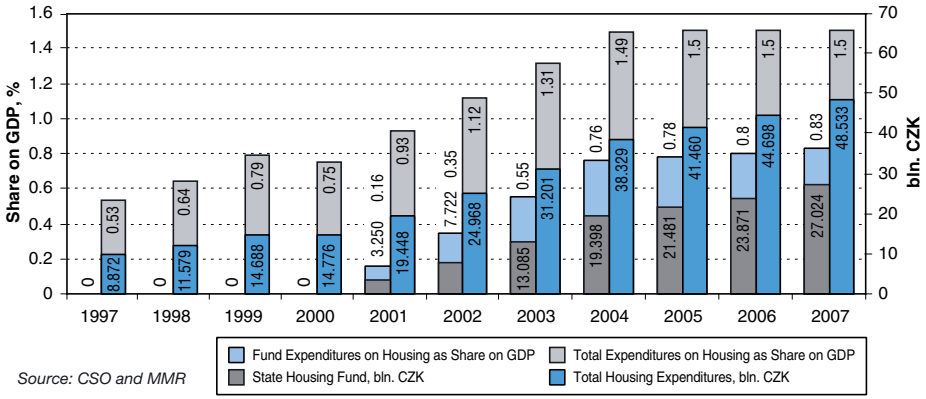



*Source: CSO and MMR*

The government focuses on the increase of housing supply in general. It wants to double the existing annual flow of resources to housing to 1.5 % of GDP, although no one really knows what the target situation is on the housing market, nor what kind of aid is sufficient. The heavily subsidized construction savings plans, for example, are used as ordinary long-term savings contracts with higher returns, since there is no requirement to ensure that the resources are allocated to housing construction.

In the past the constitutional court declared that the existing rent control is a violation of proprietors' rights and ordered rent regulation to be void as of January 1st, 2002. The court also claimed regulation immoral since it transfers state responsibility in the social arena to private entities without compensating them for their services. Although the court has allowed the unconstitutional laws to remain in effect for more than one year in order to allow the government and political parties to prepare

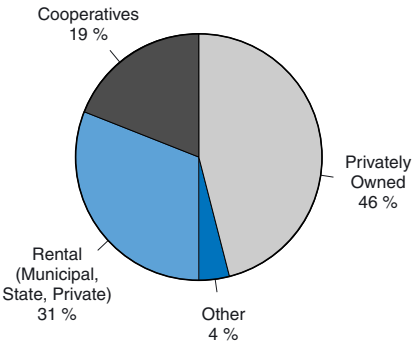
**State Housing Aid**




*Source: CSO and MMR*

a new social aid scheme and pass a law governing the rents, nothing has happened. The government utilized a law on prices in monopoly segments to continue the practice of housing price regulation by means of governmental decrees. The Ombudsman and 18 senators filed other cases. While the constitutional court indicated it would suspend the particular governmental decree; the Ministry of Finance issued a new price decree (on November 15, several days before the scheduled final hearing on November 20) of almost exact reading as the one the constitutional court was ready to suspend. The court has reacted quite swiftly, and suspended both old and new decrees with a message that the current law governing rent procedures is from the communist past and helps neither tenants nor landlords to solve any disputes on contract matters.

**Housing Units**



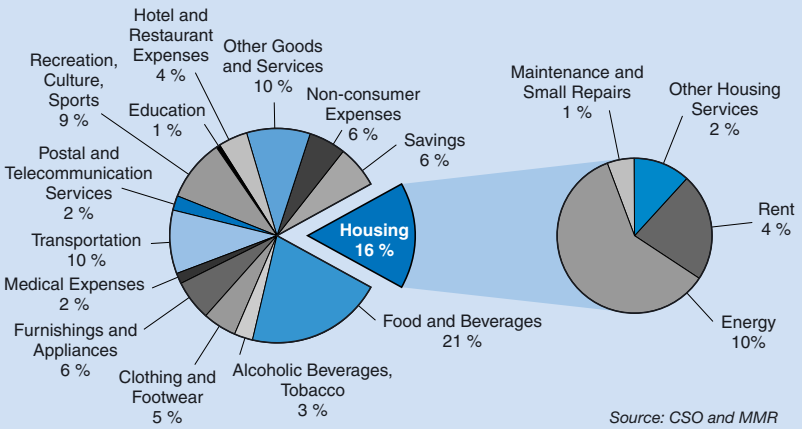

*Source: CSO and MMR*

### *Rent Deregulation*

*Time-table of rent regulation limit changes:*

- *July 1992 – Rent increase by 100 %*
- *January 1994 – Approximately 40 % increase, the municipalities can set up increases differently according to location*
- *February 1995 – the rent increase is a combination of three coefficients (inflation, size of the town and governmental coefficient), these changes should be automatic every July.*
- *July 1995 – maximal increase 29 % (in Prague)*
- *July 1996 – maximal increase 30–35 % (in Prague, Brno and Pilsen)*
- *July 1997 – maximal increase 100 % in Prague, Brno and Pilsen limit was 62 %*
- *July 1998 – average 27 % (41 % in Prague, elsewhere usually between 10–25 %)*
- *July 1999 – maximal increase of 9.3 % (Social democrats in government from fall of 1998)*
- *June 2000 – constitutional court declares rent control decrees unconstitutional, gives the government 1.5 years to solve the situation (till January 2002). The government uses a law on price control to replace the suspended decrees later.*
- *July 2000 – maximal increase 4.9 %*
- *July 2001 – maximal increase 4 %*
- *March 2002 – Ministry of Finance announces maximal increase of 1 %*

**Estimate of Expenditures in an Average Household**




*Source: CSO and MMR*

- *March 2002 – Ombudsman and group of 18 senators file two cases at the constitutional court regarding the rent regulation*
- *November 15 – Ministry of Finance replaces the decree in question with another one*
- *November 20 – Final ruling of the Constitutional Court immediately suspending all rent regulation based on the price law*
- *December 19 – Government imposes a 3-month price freeze on rents*

## IV.5 Health Care

The health sector in the Czech Republic has undergone major changes in the last decade. The General Health Insurance Act (Act 550) of 1991 shifted financing from the government budget to the population in the form of a payroll tax of 13.5 %. Employers pay 4.5 % of gross wages, and employees 9 %. The government contributes only for the unemployed, the elderly, and children under 18. The money is transferred to health insurance companies which are not allowed to make any profit. Any surplus they make goes to a special account called the Reserve Fund. The government contributions are paid to the government-owned General Health Insurance Fund.

The rules of the functioning of the insurance market were specified in Act 280/1992. The idea behind this arrangement was to make health insurance coverage compulsory and promote competition among health insurance funds. By 1993 there were 27 competing non-profit insurance companies. After several bankruptcies of the funds,

competition was partially reduced in the amendment of 1997 (Act 48). Now there are 10 insurance companies.

Some medical service providers have also been privatized. Most of the general practitioners, specialists, and dentists are now private. About 95 % of pharmacies have been privatized. The situation in the hospital sector has not changed that much. Around 75 % of hospitals are still public. The percentage of public beds is even higher. However, most of the doctors in the hospitals are employed on a contractual basis, which enables better control of the quality of medical service.

The Ministry of Health also manages specialized institutions for research and postgraduate education. It partially covers the costs of training medical personnel and specialized health programs such as AIDS prevention, drug control, etc.

Medical service providers contract with insurance companies. Doctors and hospitals are paid based on the number of service "points" they provide to their customers (with a fixed number of points per procedure depending on the difficulty of the service provided). The monetary value of a point is partially set by the insurance company, so those which are more efficient are able to offer higher payments per point, and attract more health care providers. There is a maximum amount of total point payments, so if overall activity levels increase, the value of a point decreases. Insurance companies are obliged to cover the costs of a predetermined set of medical services. They may also decide about additional services to be covered. This way they can compete to attract more consumers.

These changes in the health care system, together with improvements in the economy as a whole, resulted in an improvement in health indicators. Since 1990 life expectancy rose from 71.6 years in 1990 to 74.8 years in 1999. Infant mortality dropped from 10.8 per 1000 live births in 1990 to 4.6 per 1000 live births in 2000.

### *Administering Costs of the System*

*Health care expenditures as a percentage of GDP remained relatively stable during the last decade. Gradually, the budget's role in financing health care provision is being reduced, while health insurance companies and patients themselves pay a bigger percentage of the health care bill. Such a combination usually leads to a more effective use of health care and a possible reduction in health care spending. However, the effectiveness of the health care system in the Czech Republic still remains low, and the spending is high compared to countries with relatively similar income levels.*

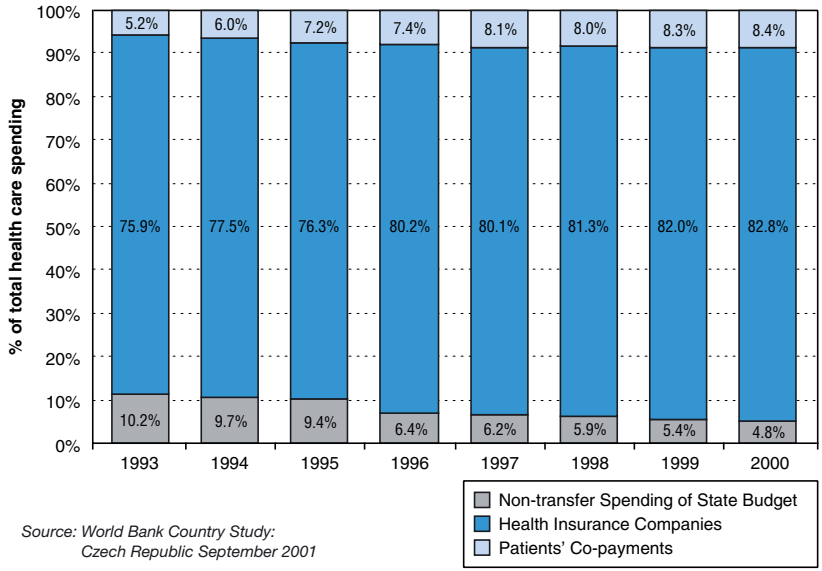
*One of the main problems of financing the health care system is the overuse of health care by the population. Since the amount the patient pays in most cases does not depend on the amount and complexity of the service, there is no tendency to limit the use of the services. The actual co-payments of the patients, even though increased during the last decade, still constitute less than 10 % of the total expenditure. More-*

*over, these co-payments are mainly limited to pharmaceuticals and dental services. Similarly, health care providers have little incentive to reduce the costs of health care. Being paid according to the point system, they have an incentive to exaggerate the complexity of the care.*

*In order to reduce inefficient incentives, a more effective cost-sharing system should be introduced. Direct payments of a proportion of the actual costs of the services would reduce the moral hazards (and eventually the costs) for both care providers and care receivers. However, the introduction of a direct co-payment mechanism is likely to meet serious political difficulties. The low-paid or unemployed part of the population would not be willing to increase their expenditures for health care. Thus, the government would have to design a system of refunds and co-payment waivers for poorer people and change the tax system for the employed in order to maintain overall expenditures on a similar level. This is not an easy task.*

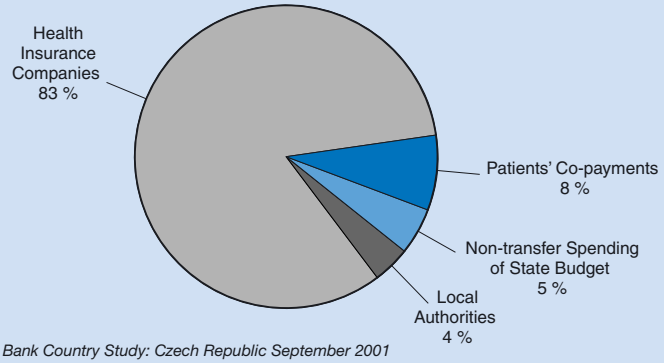
*The other way to increase the effectiveness of health care spending lies in the increased role insurance companies can play in diminishing costs. Until now insurance firms have little interaction with health care providers or their customers besides financial operations. Closer co-operation, which would lead to the management of health care arrangements, can increase the effectiveness of the health care system.*

**Financing Health Care, 1993–2000**




*Source: World Bank Country Study: Czech Republic September 2001*

**Composition of Health Expenditures, 1999**




*Source: World Bank Country Study: Czech Republic September 2001*

*One example of such an arrangement may be the increasing role of general practitioners as a screening device before the patient is referred to a more specialized and more expensive doctor.*

## IV.6 Business Environment

Early Czech transition was characterized by problems in ensuring the rule of law, extensive credit fraud, ineffective judicatory system, insider dealing, insufficient use of public tenders, and a general spreading of corruption in public administration and commercial courts. While some studies suggest that the Czech Republic is comparable in this regard to other Central European economies, others imply that legal enforcement and bankruptcy procedures are weaker in Czech lands then elsewhere in the Visegrad region (see feature story below).

These findings reinforce the criticism stated by the European Commission in its last *Regular Report on Czech Republic's Progress towards Accession* from October 2002. According to the Report, "further efforts are needed to improve the overall business environment, in particular through the more efficient operation of the company register and more effective enforcement of judgements by the commercial judiciary." The Commission further criticized "unsatisfactory bankruptcy legislation which has not been changed since May 2000" and "the ineffectiveness of combating 'white collar' crime and corruption."

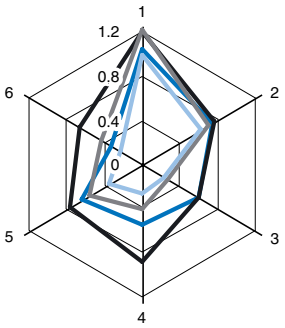
While the government notes in its own report from April 2002 that bribery in the public administration and fraud in the private sector continue to be significant problems, the government itself often comes under fire for avoiding the use of public tenders in distributing mammoth public contracts.

## *Problems of the Czech Business Environment*

*In 1999, the World Bank Institute (WBI) introduced the concept of **Aggregate Governance Indicators** (AGI) in order to measure the quality of business environment. The results of the study are available for 1999 and 2002. Operating with the broadest data sources from the field of governance and corruption, the WBI approximated the quality of business environment as the quality of governance, defined broadly as "the traditions and institutions by which authority in a country is exercised." Aggregate Governance Indicators measure six clusters of governance: (1) voice and accountability, (2) political instability and violence, (3) government effectiveness, (4) regulatory burden, (5) the rule of law and (6) graft, i.e. corruption. The results are standardized on scale from -2.5 (the worst) to + 2.5 (the best). The point estimates for the Czech Republic in 2002 are not significantly statistically different from those in 1999. Similarly, the differences between Czech, Slovak, Polish and Hungarian indicators are not statistically significant at any reasonable level. However, it is interesting to see that in all of these countries, corruption and government effectiveness belong among the weakest areas of governance, while political voice and accountability represent the best assessed area.*

*Another attempt to evaluate the quality of business environment in Central Europe is represented by the **Corporate Governance Risk** (CGR) index designed by Crichton-Miller and Worman from the Institute of International Finance, based on the OECD Principles of Corporate Governance. The methodology distinguishes four elements of corporate governance risk: corporate law, legal processes, regulatory regime, and ethical overlay. The scores are based on questionnaires (and interviews with local top managers) consisting of twenty-eight questions, i.e., seven questions per element. The data for the Czech Republic, Slovakia, Poland and Hungary were collected by Merit Research, Prague, between 2000 and 2002. While the absolute*

**Aggregate Governance Indicators 2002**

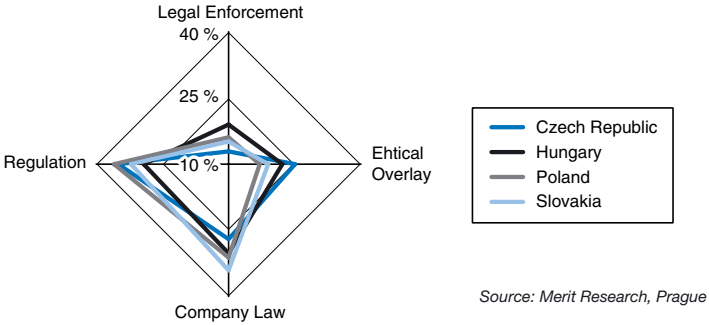



Czech Republic
Hungary
Poland
Slovakia

1 Voice and Accountability
2 Political Instability and Violence
3 Government Effectiveness
4 Regulatory Burden
5 Rule of Law
6 Graft, i.e., Corruption

*Source: World Bank Country Institute*

**Corporate Governance Risk 2000-2002**




*Source: Merit Research, Prague*

*evaluations on the scale from 0 to 28 do not possess a large explanatory power due to methodological limitations, the composition of the risk in the four countries plausibly identifies relative problems and relative successes of the countries' business environments.*

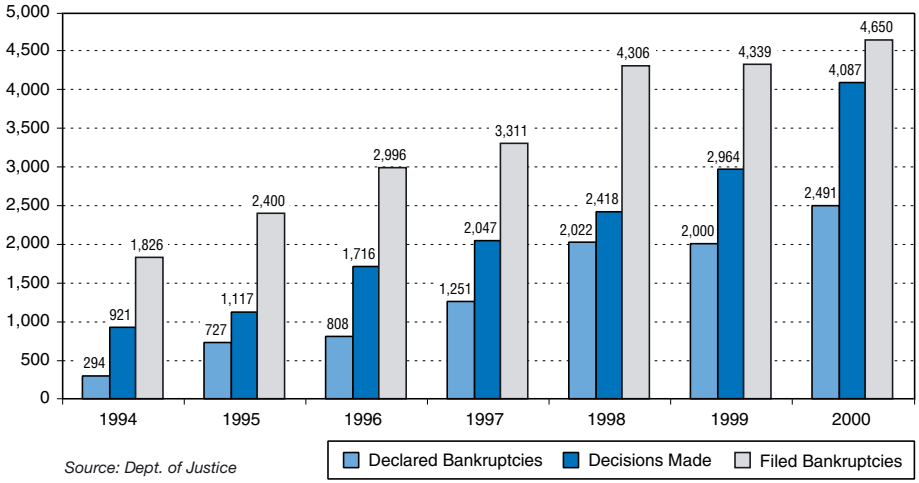
*The figure illustrates the relative assessment of the four clusters. In a well-balanced case, the diagram would be a regular square with corners at 25 % levels. However, the results for all Visegrad countries are biased towards a relatively better position of the definition of elementary rights in business and the operation of the regulatory system, as law enforcement and ethical overlay remain to be the biggest problems of the business environment in the region. More specifically, in all three countries legal processes are extremely slow and cost-ineffective, commercial arbitrage is perceived as weak, combating organized crime as inefficient and public tenders as opaque and biased. In addition to these common features, we can find relative successes and failures of the Czech business environment compared to the Polish, Slovak and Hungarian ones. One of the most obvious relative failures is* bankruptcy law *(and related procedures), the weakest part of otherwise relatively strong area of company law. This aspect is very well assessed in Hungary, but much worse in Poland and even worse in the Czech and Slovak Republics. Second,* law enforcement *which is in general a crucial problem of the region proves to represent an even larger problem in the Czech Republic. Other distinguishing features can be seen within the area of regulatory regime which is in general the least problematic. In the Czech Republic, the functioning and independence of banking regulation and protection of market competition are assessed very positively, while the capital market regulation and reliability of company records (the* company register operation *in particular) received much criticism. The situation is similar in Slovakia but almost opposite in the other two countries. Finally, what represents a smaller relative problem in the Czech Republic is the ethical overlay.*

## IV.7 Bankruptcy

Bankruptcy should volley unproductively allocated resources back to productive sectors. In the Czech Republic there was substantial growth in bankruptcies until recent years when the number of declared bankruptcies stagnated. This rapid growth basically copies the evolution of the legal framework of bankruptcy procedures in the Czech Republic. Initially, bankruptcy was almost impossible since the government feared massive layoffs and economic collapse. As these fears faded and the law converged towards a standard law for the market economy, bankruptcies were more likely to happen. Nevertheless, the long-term problem is that, although theoretically possible, the Czech bankruptcy law practically does not allow for restructuring (like the well-known US Chapter 11). All filings lead either to bankruptcy procedure or refusal to declare, but almost never to restructuring. Therefore, a completely new Bankruptcy and Composition Act is being prepared.

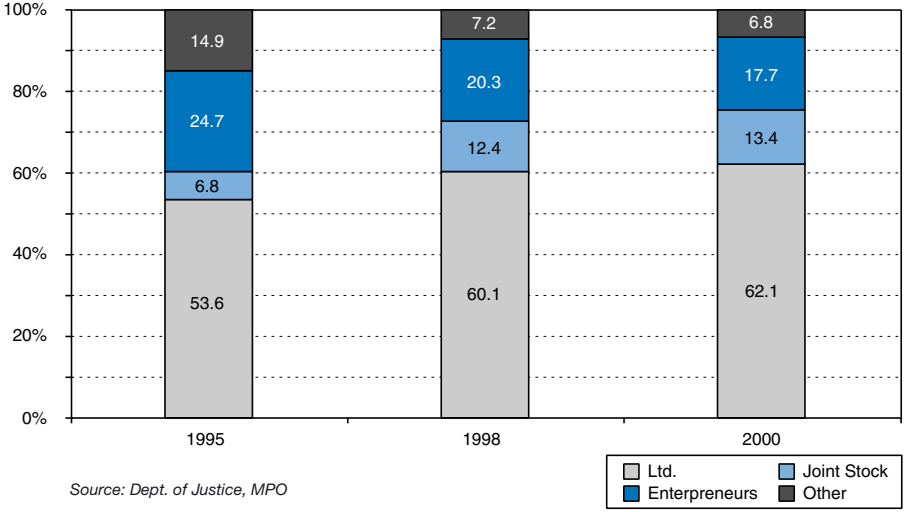
After rapid growth in the mid-nineties, the pace of filed and declared bankruptcies stagnated and the actual growth from 1998 to 1999 was 0.8 %. In 1999 there were 4339 filings in total, while from 1997 to 1998 there was approximately 30 % growth. Moreover, the declared number of bankruptcies lowered by 1.1 % to exactly 2000 in total in 1999. In 2000, there was a 7.2 % increase in the number of filings. The success rate was 46.1 % in 1999 compared to 47 % in 1998 and grew to 53.4 % in 2000. A major change can be observed in the rate of rulings made by the courts. While in the middle nineties the rate was approximately 50 % and slowly increased to 60 % in 1997 and then to 70 % in 1999, in 2000 it reached 88 %. This is clear evidence that the bankruptcy code was slowing down the

**Bankruptcies**




*Source: Dept. of Justice*

**Bakruptcy Composition**



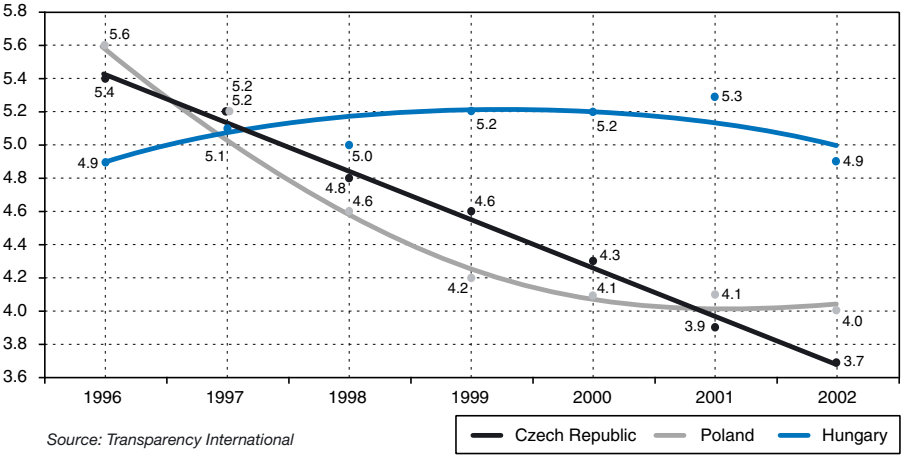

*Source: Dept. of Justice, MPO*

decision process and the last amendment made in 2000 achieved its goal, since the economy started to grow and the recession was over. Over the whole period 1993–2000 there were 25,286 filed bankruptcy petitions. In the period 1994–2000 there were 23,828 petitions filed with an overall success ratio of 40 %, with the courts deciding on 64 % of cases.

As far as the regional distribution is concerned, the majority of bankruptcies were declared in Prague, where a substantial portion of all firms is also registered. This data is based on the registry, not the actual establishment location. The graph depicts the distribution of bankruptcies (filings) across the major legal categories. The major group consists of limited liability companies, which typically represent SMEs. The other category comprises cooperatives of various kinds (the most frequent are agricultural ones) and special types of companies (e.g., societé comandité). Over time there is a clear pattern of a growing share of companies with limited liability and joint stock companies, while the remaining types are becoming less visible.

## IV.8 Corruption

**Corruption Perception Index**




*Source: Transparency International*

The country corruption perception index (CPI), collected by Transparency International, measures the degree of corruption perceived by business people, risk analysts and the general public; it ranges between 10 (highly clean) and 0 (highly corrupt). The state of corruption in the Czech Republic, as measured by the CPI, poses a serious problem since no improvement has been observed during the course of transition.

Since the ranking may vary year to year due to different compositions of the sample, the main indicator is the index. The table juxtaposes the Czech Republic's index to those of Hungary and Poland, neighboring transition countries. For all years the index for the Czech Republic is declining, similar to that of Poland. On the other hand, Hungary's index exhibited a stable pattern. Indeed, the relatively large gap between Hungary's index and those of the other two countries widens over time. Given the same starting position of all the countries in the mid-nineties, such a development should be alarming.

Looking at the Czech Republic alone, the pattern of development of the CPI is even more disturbing. Over the last years the index fell from 5.4 to 3.7. The downward trend is statistically significant and the constantly declining pattern for the Czech Republic is distressing. Although the starting point 5.6 and endpoint 4.0 of Poland gives the same absolute index decline as in the case of the Czech Republic, the Polish trend contains a significant component of the reverse trend. Indeed, during the last three years the corruption perception in Poland has remained at a constant level. While the CPI time series is rather short, it gives a statistically decisive answer to the observed pattern for the Czech Republic, which is the worst of all three countries.

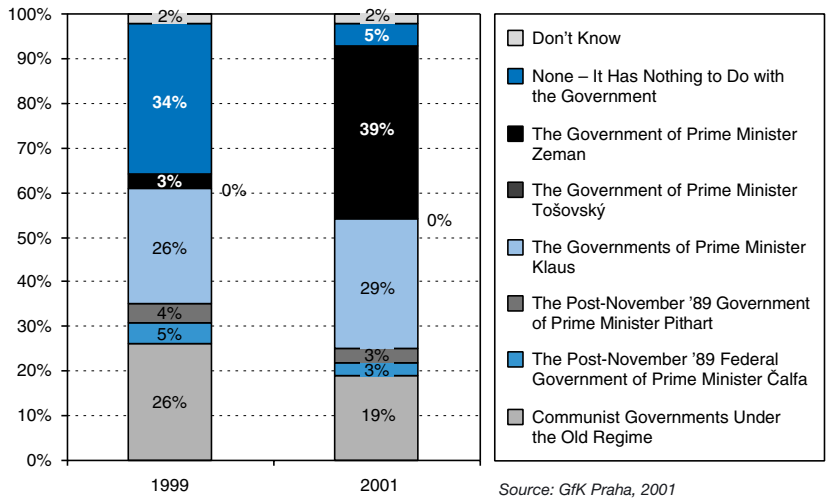
## *Corruption during Transition*

*(Based on Lízal, L., and Kočenda, E.: The Paradox of Czech Crusaders: Will They Ever Learn the Corruption Lesson? (Corruption and Anticorruption in the Czech Republic), CERGE-EI Working Paper No.171, 2001)*

*Corruption has a negative impact on society and the economy. The transition process in Central and Eastern Europe (CEE) uncovered dormant possibilities for corruption and the necessity for appropriate steps to be taken. The state of corruption in the country as measured by the Corruption Perception Index (CPI) presents a serious problem since the index deteriorates as the transition process advances.*

*As the CPI is based on surveys and opinions, it is of general interest to see how opinions are changing. First of all, the most important issue is what people believe. In a recent opinion poll by GfK, 52 % of citizens responded that they live in a corrupt state. So, a simple majority of inhabitants do not have basic trust in society. But who are to blame except the people themselves if 55 % of the respondents also state that they would not be willing to support the fight against corruption in the Czech Republic, for example, by taking part in public demonstrations? On the other hand, 48 % state that corruption could be eliminated; that is, they do not believe the fight against corruption is useless.*

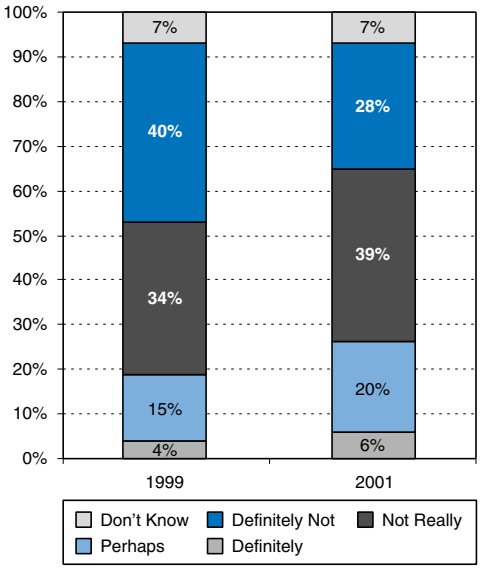
**Which Government or Governments Do You Think Have Played the Greatest Role in Spreading Corruption and Bribery in the Czech Republic?**




*Source: GfK Praha, 2001*

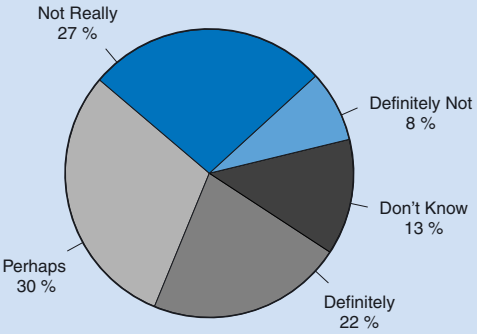
*One source upon which people form their beliefs is the role of government. Originally, 34 % believed that the government has nothing to do with corruption. This figure has recently dropped to one seventh, 5 %. In this light we should also interpret the changes in the assessments of past governments. The government believed to be the least corrupt seems to be the clerical government of former CNB governor Mr. Tošovský. The government perceived to be most contributing to corruption was the minority Social Democratic government headed by Milos Zeman. Originally, only 3 % of respondents believed this government was corrupt. However, in only two years, 39 % of respondents perceived this government as contributing to corruption. As of the time of the survey, on the eve of the parliamentary elections, most of the respondents, 58 %, also did suspect that the government of Prime Minister Zeman had no interest in fighting corruption. The new coalition government has been in the office only for several months; hence, it is not possible to make a fair judgment of its anti-corruption efforts.*

**To What Extent Do You Agree With the Opinion That Giving Bribes Is Not as Immoral as It Is Sometimes Made Out to Be?**




*Source: GfK Praha, 2001*

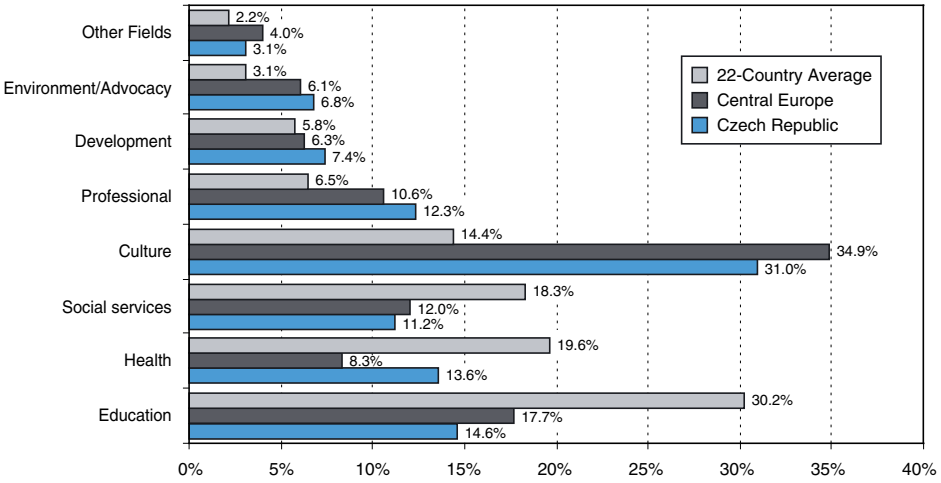
**Do You Agree That the Czech Republic Is a Corrupt State?**




*Source: GfK Praha, 2001*

## IV.9 Nonprofit Sector

**Composition of the Nonprofit Sector**




*Source: Salamon and Anheier, 1999*

**Note: Central Europe includes Czech Republic, Slovakia, Hungary, and Romania. 22 countries: countries of Central and Western Europe, the U.S., countries of Latin America, Australia, Israel, Japan**

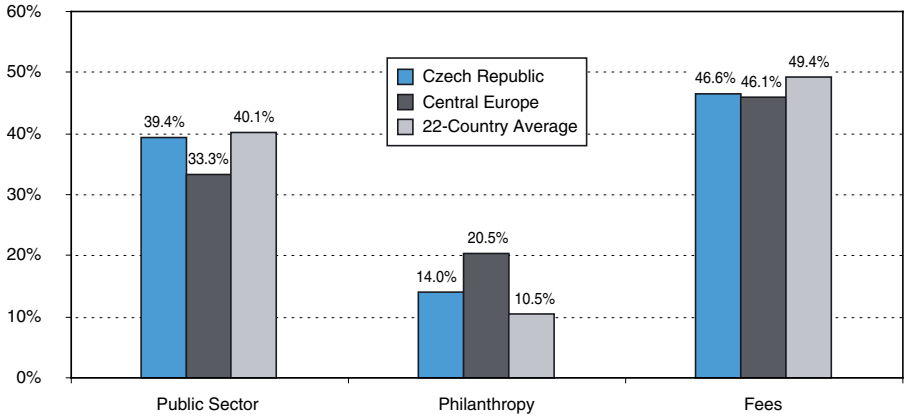
The non-profit sector represents an industry that is growing worldwide in importance. Called also the voluntary or third sector, it accounts, for example, in the USA for about 7.8 % of total paid employment. The number clearly indicates the importance of this sector, which often and significantly relies on volunteer labor.

The Czech nonprofit sector started to evolve in 1989, after the fall of the communist regime. While it has experienced a rapid increase both in the number of nonprofit institutions and in the number of people involved in the activities of these institutions (employees, volunteers, and donors), it has not yet reached the size of similar sectors in developed countries; it is also structurally quite different from nonprofit sectors in developed countries – a fact that reflects its origin and history.

The sector is dominated by organizations that focus on culture and recreation. These fields were supported and encouraged by the previous regime and, perhaps not surprisingly, their importance surpasses the more traditional nonprofit industries in developed countries such as health, education, and social services.

Since the Czech nonprofit sector has emerged in a rather short period of time, lagging legal regulation and a weak enforcement of law have led to undesirable developments. Clearly, the sector has attracted its share of profit-motivated entrepreneurs

**Sources of Nonprofit Cash Revenue**




*Source: Salamon and Anheier, 1999*

**Note: Central Europe includes Czech Republic, Slovakia, Hungary, and Romania. 22 countries: countries of Central and Western Europe, the U.S., countries of Latin America, Australia, Israel, Japan**

who want to exploit the advantages of non-profits and have entered their industries under the nonprofit status.

Apart from weaknesses in legislation and the weak enforcement of law, the Czech non-profit sector also faces a severe financing problem. The provision of state subsidies is decided on a yearly basis, making strategic planning often difficult for nonprofit entities. In addition, foreign donations have begun to dry up because of the re-channeling of charitable funds in the wake of the events of September 11, 2001, and also because of the perception that donations are needed more urgently elsewhere (in Russia or Africa) than in Central Europe and that in any case the Czech nonprofit sector has matured enough to sustain itself and/or be sustained by local donors. Indeed, individuals do contribute financially. However, corporate giving is less than that in comparable countries, forcing non-profits to rely on their own commercial activities or state support. Not surprisingly, then, the Czech nonprofit sector is classified as fee-dominant, i.e. the majority of resources (46.6 %) comes from fees and charges. The public sector contributes 39.4 %, whereas private philanthropy accounts for 14 %.

Within little more than a decade, the Czech nonprofit sector has come a long way. However, it still has a long way to go before it can claim that, in structure and importance, it is on par with the third sectors in developed countries. Here, it is important that the year 2002 brought several changes to the legislation of the Czech nonprofit sector. Most notably, amendments to the Act on Foundations and Foundation Funds and the Act on Public Benefit Corporations were approved in April and became effective in July 2002. A long-expected act on voluntary service was approved in May and will become effective in January 2003.

### *New Legislation for the Non-Profit Sector*

*The amendments to the Act on Foundations and Foundation Funds (Act No. 210/2002 Coll.) broadens the access to modern investment tools and the constraints on their use (e.g., foundations can now buy for their endowment portfolio bonds, certificates, and other securities from any capital market in any country that is a member of the OECD). Although foundations still cannot engage in commercial activities in their own name, the amendments do allow them to establish a public benefit corporation (which is allowed to perform commercial activities). The amendments also address the problem of weak foundations. If a foundation's endowment falls below a minimum level and the foundation is not able to reach that minimum level within one year, it must either be merged with another foundation or liquidated. The courts may also initiate liquidation when a foundation does not serve its purpose for more than two years.*

*The amendments to the Act on Public Benefit Corporations (Act No. 208/2002 Coll.) bring changes of a formal character and remove discrimination against foreigners. Foreigners can now establish a public benefit corporation and can also serve without restrictions on its board of directors or supervisory board.*

*Act No. 198/2002 Coll., on voluntary service, specifies voluntary activities, required contracts and breaks for volunteers. The state should pay for health insurance during the period of volunteer work. The period of volunteer work is to be included in the period of previous employment in the case of unemployed volunteers.*

*In sum, the new legislation addresses some of the problems that have afflicted the nonprofit sector, but other problems such as dependence on state funds remains. It will be interesting to see what the incentive effects are of some of the new regulations (e.g., the relaxation of constraints on the investment of foundation endowments). We note in closing that a number of courses on the management of non-profits have sprung up – an unmistakable sign of a maturing industry. A list of such courses, with links to the web-sites of providers, may be found at http://home.cerge-ei.cz/brhlikova/npos.*

# V. WORK AND PAY

## V.1 Social Security

As highlighted in the macroeconomic section, the main problem of the Czech economy is the enormous increase in public deficits. Most of the mushrooming expenditures that cause these deficits (and that limit the remaining government's fiscal policy to a bare minimum) are locked in the Czech system of social security and hence related to the labor market. The key mandatory expenditures are pensions (37.1 % of all mandatory expenditure), sickness insurance (5.4 %), social welfare (5.7 %), and social care (2.2 %). The major quasi-mandatory expenditures are on public sector wages and defense representing an additional 21.3 % and 7.4 %, respectively. Clearly, mandatory expenditures are getting out of control. Furthermore, the government should be spending more on education and research to improve the future competitiveness of the country (see also section V.2).

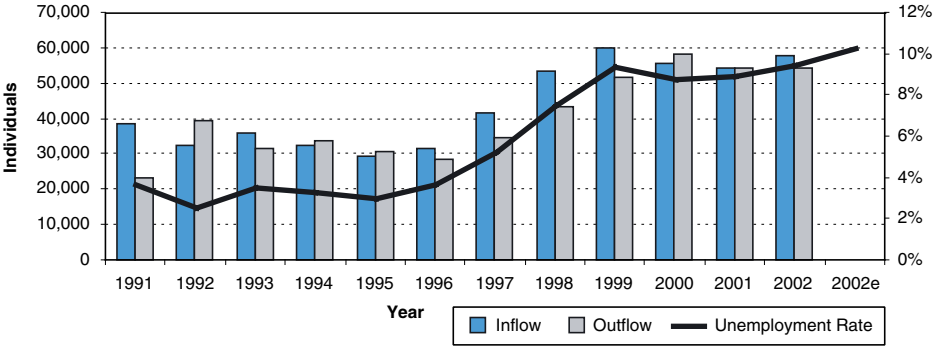
The Czech system of social protection therefore needs to be retooled from a massive redistribution scheme to one focusing on poverty alleviation. The high level of state-guaranteed minimum income defining eligibility for social support benefits results in a large number of benefit recipients. The total sum of various welfare benefits represents a welfare trap for specific types of households. To give but one striking example, the head of a family with two children where the spouse does not work is better off collecting welfare than working at the average national wage rate. Further, especially low-skill workers are likely misusing the sickness insurance scheme.

While some of these issues may be addressed in the proposal of the fiscal reform (see Section III.4), a badly needed pension reform is still nowhere in sight. Pension reform is needed because of the population aging. The dependency ratio measuring the share of citizens 60 years of age and older on the working age population 20 – 60 years of age reached its minimum in 2000. The dependency ratio is expected to grow steadily for the next few decades. While the ratio is about 30 % now, it will reach 40 % in 2010 and steadily rise to 50 % and 60 % in 2020 and 2030. This trend will impose drastic fiscal pressures on the current pay-as-you-go pension system.

## V.2 Unemployment and Long-term Unemployment

The Czech unemployment rate reached its historical maximum (9.7 %) at the beginning of 2000. Since then, the unemployment rate has dropped to stabilize slightly below 9.0 % at the end of 2001. Unfortunately, during 2002 unemployment started to grow again such that the rate of joblessness is now set to reach new highs. The quantitative forecast is that the 2003 unemployment rate will surpass 10 % for

**Unemployment Rate and Flows**



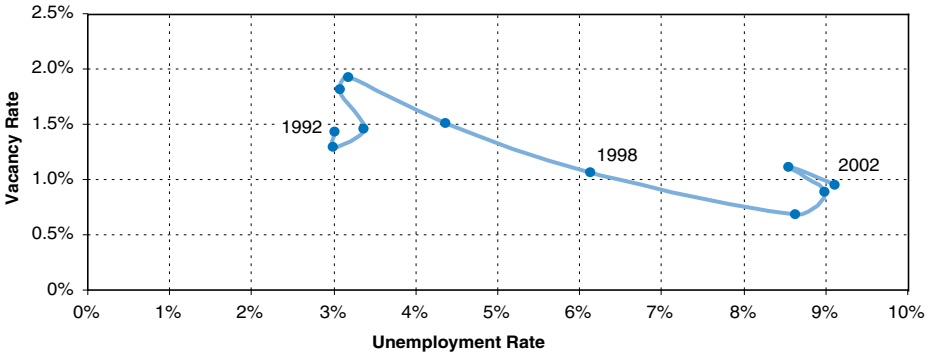

*Source: MPSV and authors' calculation*

**Note: Annual average monthly flows, end-year unemployment rate except 2002 (September 2002).**

the first time in the history of the Czech Republic. The first figure illustrates the time evolution of unemployment together with the underlying time series of annual inflows and outflows. The next figure illustrates the joint evolution of unemployment and job vacancies: While in 2001 the economy reversed the negative trend of the recession in terms of both unemployment and vacancies, this upward movement was thwarted on both fronts in 2002.

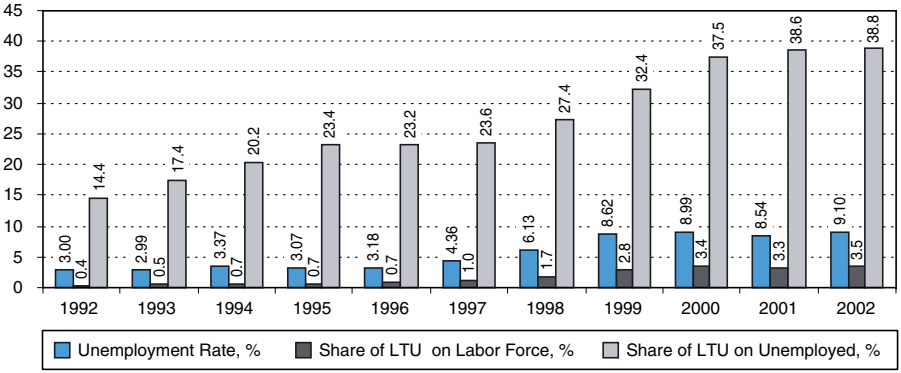
It is also important to note that in 2002, for the first time in a decade, the unemployment rate based on the number of workers registered at the labor offices (and typically collecting unemployment or social benefits) exceed the unemployment measure based on the labor force survey. This discrepancy may suggest a growing importance of misuse of the unemployment and welfare programs if individuals who report working in the labor force survey are

**Unemployment-Vacancy Rate Trajectory**




*Source: MPSV registry data and authors' computations, 2002 September data*

**Unemployment and Long-term Unemployment (Registered Unemployment), %**




*Source: Source: MPSV and authors' computations*

**End-year data except for 2002 (September 2002).**

reporting as unemployed in the government registers and collect benefits.

Perhaps even more important than unemployment evolution is the growth in **long-term unemployment** (LTU). Long-term unemployed are those job seekers who are unemployed for longer than a year. The share of LTU on all unemployed (the so-called incidence of long-term unemployment) has been growing steadily since the early 1990s and reached almost 40 % in the unemployment registry data and well over 50 % in the labor force survey data. The key determinants of long-term unemployment are low educational attainment and high welfare generosity for larger families with low-educated parents. (Low-educated Czech workers may prefer to stay on welfare rolls given the low wage level of manual occupations. Foreign workers, especially those from former Soviet states, have become a significant substitute for local low-skill labour, especially in the construction industries.) Here, it is also important to note that the

**Total Unemployment Rate and Long-term Unemployment Rate (2001)**

| | Unempl. Rate | LTU Rate |
|---|---|---|
| B | 6.6 | 3.8* |
| DK | 4.3 | 0.9 |
| D | 7.7 | 4.0* |
| EL | 10.5 | 5.4 |
| E | 10.6 | 5.1 |
| F | 8.5 | 3.7* |
| IRL | 3.9 | 1.3 |
| I | 9.4 | 5.9 |
| L | 2.0 | 0.5* |
| NL | 2.5 | 0.8 |
| A | 3.6 | 0.9 |
| P | 4.1 | 1.5 |
| FIN | 9.1 | 2.5 |
| S | 4.9 | 1.2 |
| UK | 5.0 | 1.3 |
| EU15 | 7.4 | 3.2 |

Notes: * 2001 values
Total unemployment rate – Unemployed persons as a share of the total active population
Long-term unemployment rate – Long-term unemployed (over 12 months) as a percentage of the total active population aged 15-6

*Source: http://europa.eu.int/comm/eurostat/Public/datashop*

labour market participation rate is very low among the Romany minority because of their lack of education and because of the ethnic prejudices of employers.

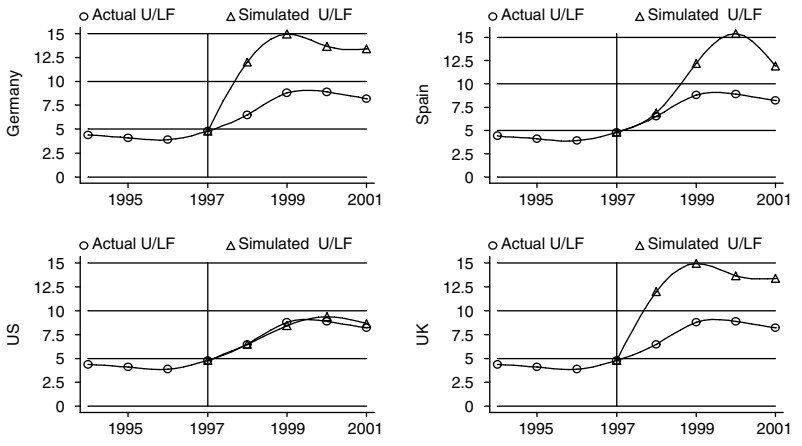
By the end of 2003, we expect that the proportion of the active population being long-term unemployed will reach 4 %. This level of LTU is above the current EU average of 3.2 %. In its second decade of economic transition and on the advent of accession to the EU, the Czech labor market seems to suffer the same kind of sclerosis that appeared in the EU more than two decades ago.

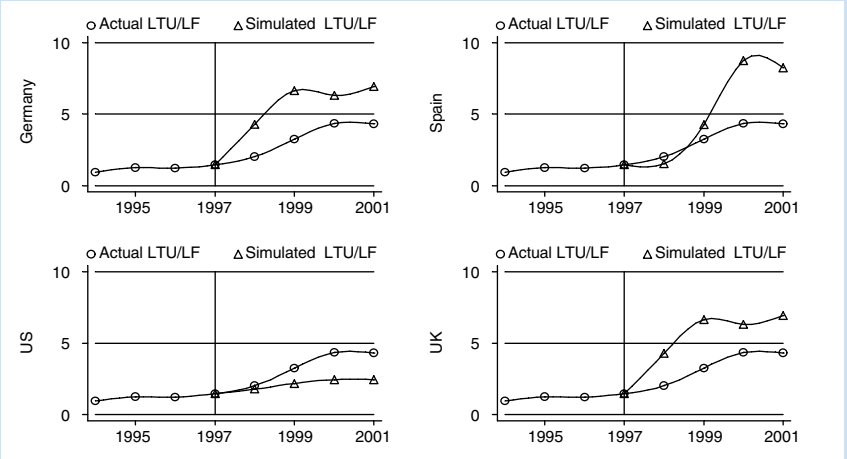
### *How High Is Czech Long-Term Unemployment?*

*(Based on: Jurajda, Š., and Münich, D.: Understanding Czech Long-term Unemployment, CERGE-EI Discussion Paper No. 91, 2002)*

*To say how high Czech LTU is in comparison with other countries, one should ideally condition on the phase of the business cycle. During an economic slump, the incidence of LTU typically first decreases due to a strong inflow of short-term unemployed, but then rises as the large inflow cohorts find it difficult to leave unemployment. One should therefore perform comparisons of LTU level whilst matching on similar business cycle episodes or using long-term averages. The comparison offered by LTU rates in a given year may therefore be quantitatively misleading in that it does not condition on the same size of the recession (GDP decline). LTU levels in other countries might have been higher if they were facing a recession as severe as the one experienced by the Czech economy in the late 1990s.*

*To gain a more easily interpretable cross-country comparison of the extent of the hysteresis, the authors simulated the behavior of western economies if they were*





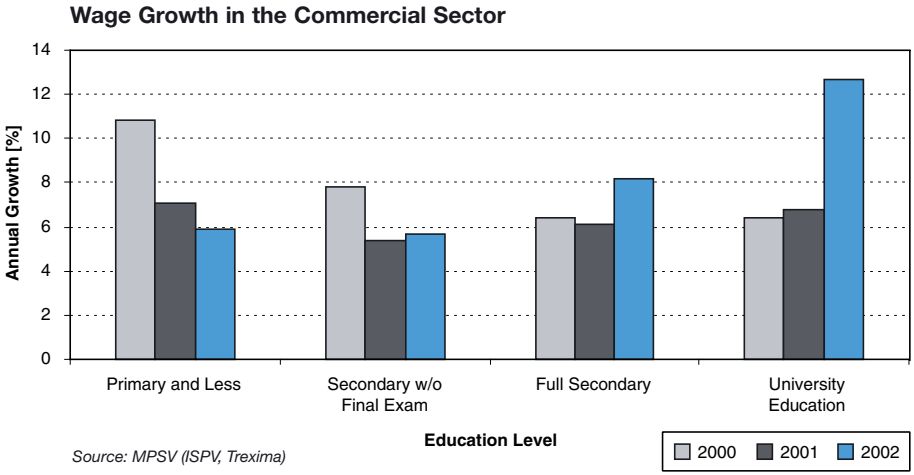

*to start with Czech initial conditions and undergo a similar decline in GDP as the Czech Republic in 1997.*

*This experiment was performed by estimating a VAR (vector auto-regression) system with unemployment rate, long-term unemployment rate and GDP growth for a western economy, where a sufficiently long time series of LTU is available, and then imposing the Czech values of the three variables as of 1997 as well as the Czech GDP evolution of the late 1990s on the estimated system. The predicted evolution of unemployment and LTU rates can then be compared to the actual Czech data to obtain a more meaningful quantitative comparison of the LTU increase related to a given GDP.*

*The simulations were done for four countries: Germany, the UK, the US, and Spain. The UK and Spain contrast two European countries with high and low labor-market flexibility, respectively. The US is an example of a very flexible labor market and Germany is the closest and largest EU member state.*

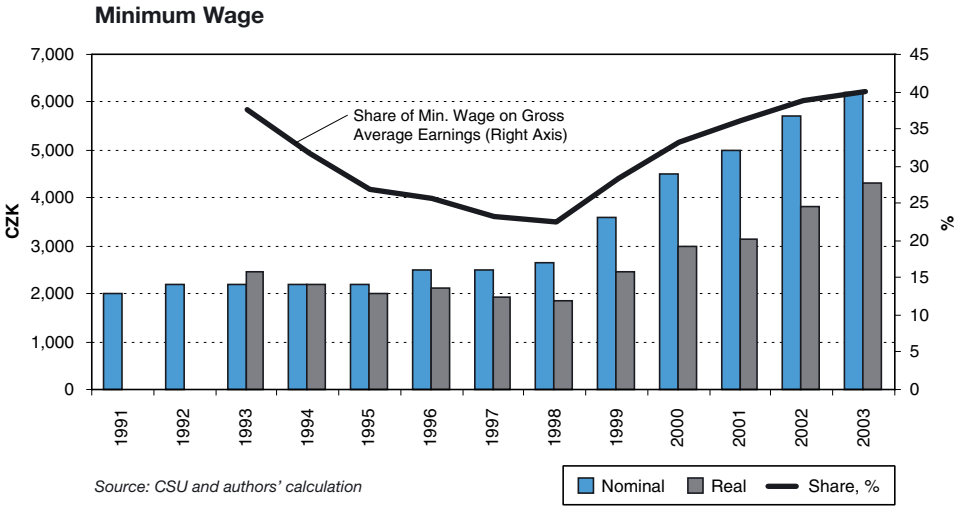
*The figures present the results of all simulations. The first figure focuses on the simulated evolution of overall unemployment, while the second one displays the predicted LTU rates. Each graph of each figure then contrasts the Czech actual evolution of unemployment during the late 1990s with the model prediction for western countries under the Czech GDP scenario. For example, focusing on the upper right graphs, the simulations suggest that were Spain to experience the Czech recession of 1997, both its unemployment and LTU rates would have increased almost twice as high compared to the Czech actual evolution. On the other hand, the US is predicted to experience a similar rise in unemployment accompanied by a much lower increase in LTU. The Czech labor market also appears somewhat inferior to that of the UK in its ability to avoid unemployment and LTU in reaction to a severe GDP slump.*

## V.3 Wages




*Source: MPSV (ISPV, Trexima)*

The nominal annual wage growth in the non-public (enterprise) sector as of the third quarter of 2002 was between 5.5 % (using worker-level wage information, Ministry of Labor and Social Affairs) and 6.7 % (using firm-level wage bill information, Czech Statistical Office). Given CPI growth of about 2 %, this translates to a hefty 4 % growth in real wages (similar to the 3.3 % real wage growth in the same period of 2001). High




*Source: CSU and authors' calculation*

wage growth does not seem to initiate wage inflation given the more important factors we survey in the macroeconomic section.

The year 2002 also saw another increase in the level of the national **minimum wage**. The real minimum wage drastically deteriorated during mid 1990s during the reign of right-center governments so that the role of the wage floor was actually played by the (generous) social welfare benefits (the state-guaranteed subsistence level of income). Once the Social Democrats took power, they started increasing the minimum wage so that the 1999 minimum wage reached 1993 real levels. While having a minimum wage exceeding the level of welfare benefits helps in avoiding work disincentives, it may also lead to an increasing share of informal jobs.

### *Czech Wage Curves*

*(Based on: Galuščák, K. and Münich, D.: Microfoundations of the Wage Inflation in the Czech Republic, CERGE-EI Working Paper, forthcoming)*

*The negative relationship between unemployment and wages at the regional level, coined as the "wage curve", has been documented by a growing empirical literature for most developed and many developing countries. A broad interpretation of this relationship is that there are short-run equalizing forces at work at the local level. The presence of labor-market adjustment at a local level effects regional convergence within countries. This issue is important for the Central European economies completing the transition from central planning to market and hoping to soon join the European Union. Even if EU accession accelerates growth and brings convergence across countries, it can exacerbate within-country regional disparities. In particular, regions specialized in traditional sectors may find themselves increasingly lagging in their economic development. If the local wage level in such regions does not decrease in response to negative labor demand shocks, these regions may never attract the investors needed for recovery. Local wage adjustment, on the other hand, can help in avoiding such a Mezzogiorno scenario. This issue is particularly important in Central Europe because territorial labor mobility there is notoriously low despite the widening regional unemployment differentials*

*Most empirical studies from developed economies find that a 10 percent increase in the unemployment rate decreases wages by about 1 percent. The authors provide new estimates of the wage curve for the Czech Republic suggesting that the Czech regional adjustment mechanism is similar to that found in other countries. (This is in contrast to previous studies, which claimed that the regional wage elasticity of unemployment in the Czech Republic is relatively low.)*

*The new study finds a negative and significant wage elasticity for short-term unemployment. However, the wage curve does not exist or is weak in districts with high long-term unemployment and in districts with high unemployment. The authors argue that wages do not adjust to changes in local unemployment in high unemployment*

*rate districts due to the relatively generous welfare system, which effectively blocks wage level decreases. Further, the wage curve effect is found to be weak in districts with a high share of employment in the public sector. This is not surprising because public sector wages are determined at the economy-wide level and do not reflect regional unemployment.*

## V.4 Labor Force Skills

The share of the Czech population with secondary-level (esp. vocational) education is extraordinarily high. Yet, the enrolment in general secondary programs is among the lowest in the OECD and, despite the high proportion of the population with secondary education, the (growing) share of workers with tertiary-level education also remains low compared to the OECD average. Not surprisingly, university level education has become highly valued in the Czech labour market. The demand for education in state universities is persistently twice the size of the available supply of classroom seats, but the introduction of tuition (and loan system) that would both increase supply and help limit demand has so far been politically infeasible. The problems of Czech tertiary education have partly to do with finance. The sector is in dire need of increased funding because of the relatively low share of college-educated Czechs and because the pay level of Czech university professors and researchers is simply dismal.

### *School Quality*

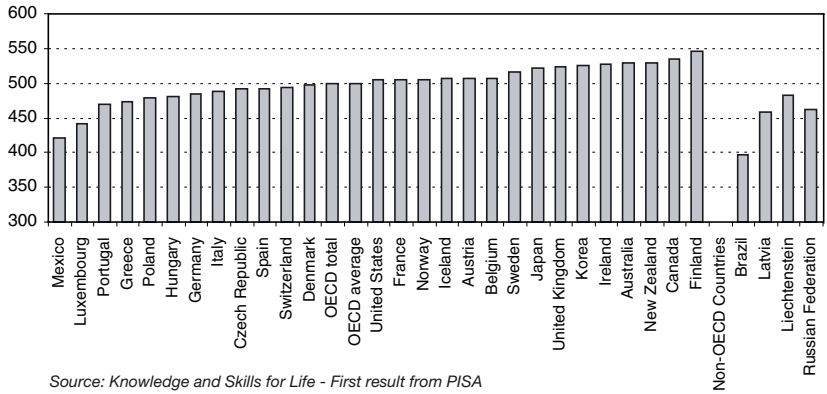
*The widespread opinion that workers in countries of the former Soviet block inherited a high level of human capital has been challenged by several recent studies going beyond the indicators based on simple school attainment indicators. The most recent results of the PISA 2000 OECD study underscore this changing opinion. PISA scores are based on standardized tests of pupils' capacities to apply knowledge and skills in reading, mathematics and science. The study is different from many previous studies by its focus on real-life use of knowledge instead of testing formal knowledge. 15-year old Czechs performed below the OECD average on reading literacy. In math literacy they showed average performance and only in terms of scientific skills do they belong to the above average group. Although not disastrous – note that Czechs still performed better compared not only to transition neighbors such as Hungary and Poland but also to Germany – the results will inevitably erode the old local wisdom about the top quality of the Czech schooling system and will open space for well-based debates.*

**Student Performance on the Combined Reading, Scientific and Mathematical Literacy Scales and National Income**

| Country | Performance on the Combined Reading Literacy Scale | Performance on the Scientific Literacy Scale | Performance on the Mathematical Literacy Scale | Gross Domestic Product (GDP) per Capita (US dollars converted using PPPs) (1999) | Cumulative Expenditure on Edu. Institutions per Student (US dollars converted using PPPs) (1998) |
|---|---|---|---|---|---|
| | Mean Score | Mean Score | Mean Score | | |
| Australia | 528 | 528 | 533 | 24,400 | 44,623 |
| Austria | 507 | 519 | 515 | 24,600 | 71,387 |
| Belgium | 507 | 496 | 520 | 24,300 | 46,338 |
| **Czech Republic** | **492** | **511** | **498** | **13,100** | **21,384** |
| Denmark | 497 | 481 | 514 | 26,300 | 65,794 |
| Finland | 546 | 538 | 536 | 22,800 | 45,363 |
| France | 505 | 500 | 517 | 21,900 | 50,481 |
| Germany | 484 | 487 | 490 | 23,600 | 41,978 |
| Greece | 474 | 461 | 447 | 14,800 | 27,356 |
| Hungary | 480 | 496 | 488 | 10,900 | 20,277 |
| Ireland | 527 | 513 | 503 | 25,200 | 31,015 |
| Italy | 487 | 478 | 457 | 21,800 | 60,824 |
| Japan | 522 | 550 | 557 | 24,500 | 53,255 |
| Korea | 525 | 552 | 547 | 15,900 | 30,844 |
| Mexico | 422 | 422 | 387 | 8,100 | 11,239 |
| Norway | 505 | 500 | 499 | 27,600 | 61,677 |
| Poland | 479 | 483 | 470 | 8,100 | 16,154 |
| Portugal | 470 | 459 | 454 | 16,500 | 36,521 |
| Spain | 493 | 491 | 476 | 18,100 | 36,699 |
| Sweden | 516 | 512 | 510 | 23,000 | 53,386 |
| Switzerland | 494 | 496 | 529 | 27,500 | 64,266 |
| United Kingdom | 523 | 532 | 529 | 22,300 | 42,793 |
| United States | 504 | 499 | 493 | 33,900 | 67,313 |
| **OECD total** | **499** | **502** | **498** | | |
| **OECD average** | **500** | **500** | **500** | | |
| **Non-OECD Countries** | | | | | |
| Brazil | 396 | 375 | 334 | 6,840 | 9,231 |
| Latvia | 458 | 460 | 463 | 6,164 | n.a. |
| Liechtenstein | 483 | 476 | 514 | 22,235 | n.a. |
| Russian Federation | 462 | 460 | 478 | 6,930 | n.a. |

*Source: Knowledge and Skills for Life - First result from PISA 2000, http://www.pisa.oecd.org/*

**Mean Score of Student Performance on the Combined Reading Literacy Scale**




*Source: Knowledge and Skills for Life - First result from PISA 2000, http://www.pisa.oecd.org/*

*The Czech Republic is indeed an exceptional case (together with Denmark and Liechtenstein) in that its pupils perform above average in one of the skills tested and bellow average in another skill. This suggests misbalance in the curriculum and teaching methods.*

*The changes in Czech education after 1989 were substantial (including the massive introduction of private schools at the secondary level). However, the main features of the Czech education system remain unchanged: it is based on encyclopedic knowledge, the ability to remember and reproduce facts.*

## V.5 Welfare

The state social assistance scheme is still based on a two-income household model. It provides transfers to increase households' income to guarantee an official *minimum standard of living*. The standard is indexed to inflation and changes whenever inflation (CPI) rises by more than 5 % since the previous adjustment period. The level of the minimum standards of living reflects the household size and the age of household members. Some benefits (child allowances, social allowances, housing contribution, and transport contribution) are provided conditionally depending on the household income, while others are not (parental allowances, birth or funeral bonuses, etc.) In particular, state support of maternity care has a long tradition in this country. The system is not well targeted to individuals and households in need. For instance, approximately 75 – 85 % of all the dependent children in the country receive child allowances. Equally importantly, the system creates strong work disincentives for average and below-average income families..

**Earnings and Social Welfare**

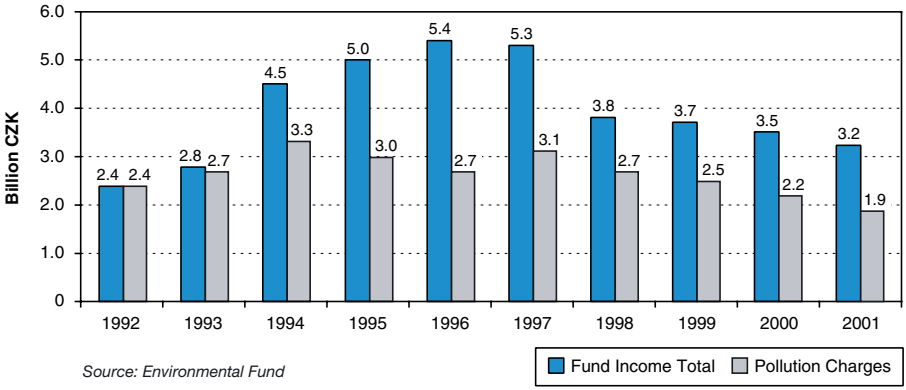
| | |
|---|---|
| Unemployment Benefits Rules | 50 % (40 %) of prev. wage during first (second) 3 months of unemployment |
| Sickness Insurance Rule | 50 % of wage during first 3 days, 69 % for next days up to cca 460CZK per day including weekends; not taxed; paid from state budget payments |
| Sickness Expenditures (expected 2002, CZK) | 31 bil. CZK |
| **Guaranteed Minimum Living Standard** | |
| a) household 1 adult, 1 child (11–15 years of age) | 6,870 CZK |
| b) household 2 adults, 2 children (11–15 years of age) | 11,980 CZK |
| Minimum Wage (monthly, effective January 2003) | 6,200 CZK |
| Average Wage (1st Q. 2002, gross) | 14,749 CZK in commerce,<br>12,047 CZK in public sector |
| Average Eldery Pension (June 2002) | 7,033 CZK, not subject to taxation |

*Source: Sociální politika, No. 11/2002, MPSV*

# VI. ECOLOGY

## VI.1 First Ten Years of Transition

**Environmental Fund Income**



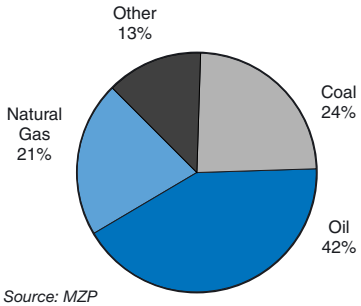

*Source: Environmental Fund*

Ten years after the fall of the socialist bloc, significant improvements in environmental protection can be observed. Not only are the new legal standards comparable to those in the EU being implemented, but huge reductions in emissions and significant improvements in environmental quality can be noticed in everyday life.

From 1989 the usage of hard fuels fell almost exactly by a half. In 2000, consumption was 51 % of its 1990 level. The unleaded fuel share in gas consumption rose from a mere 1 % in 1990 to 81 % in 2000. From 2001, the import and sale of leaded gas has been prohibited. In addition, due to new regulations the total share of cars with catalytic converters increased from 1 % in 1990 to 32 % in 2000; while a significant portion of cars without the catalytic converter were designed to use unleaded fuel.

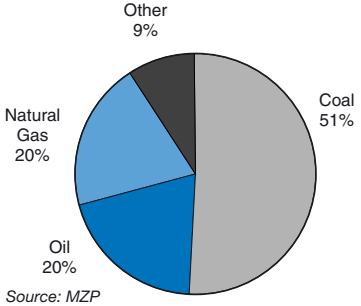
The Czech Republic is now a signatory of both the Vienna and Montreal treaties on the protection of the ozonosphere. Although there was a sharp decline in the emissions of sulphur dioxide and carbon oxides during the last ten years and the current emissions per inhabitant are similar to OECD and EU averages, the emissions per square kilometer are still two times higher than the EU average and three times higher than the OECD average. In addition, the relative emissions of carbon dioxide are higher than the EU and OECD averages. We should also note the high portion of coal as a primary energy resource. However, these figures give a more mixed result in comparison with the original Visegrad countries. The Czech Republic has a favorable position especially in the case of relative emissions of sulphur dioxide; its figures are about half of those

**Composition of Primary Energy Resources OECD**




*Source: MZP*

**Composition of Primary Energy Resources in the Czech Republic**



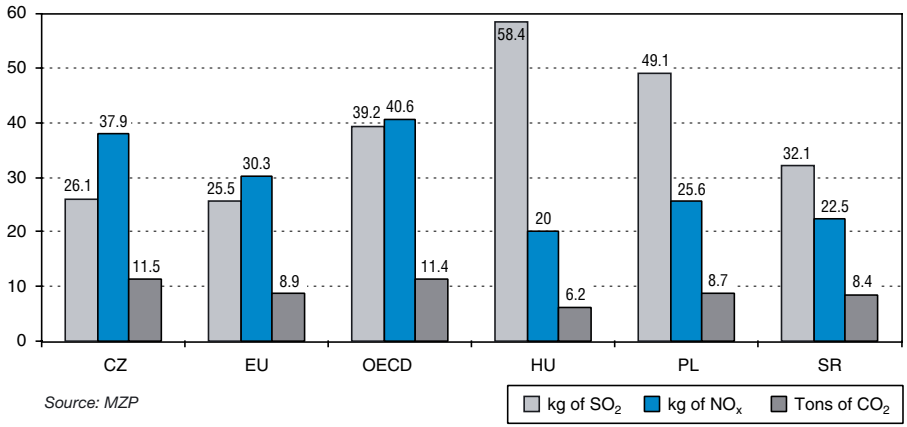

*Source: MZP*

of Hungary and Poland. Slovakia's level of emissions are between those of the Czech Republic on the one side, and Poland and Hungary on the other.

Just the opposite is the case with nitride oxides. The Czech Republic produces more of these pollutants because of the number of registered passenger cars is 36 per 100 inhabitants – much closer to the EU and OECD average of 50. In the remaining Visegrad countries, meanwhile, the average is only around 23 per 100 inhabitants. Unlike Poland and the Czech Republic, Slovakia and Hungary rely much less on coal energy.

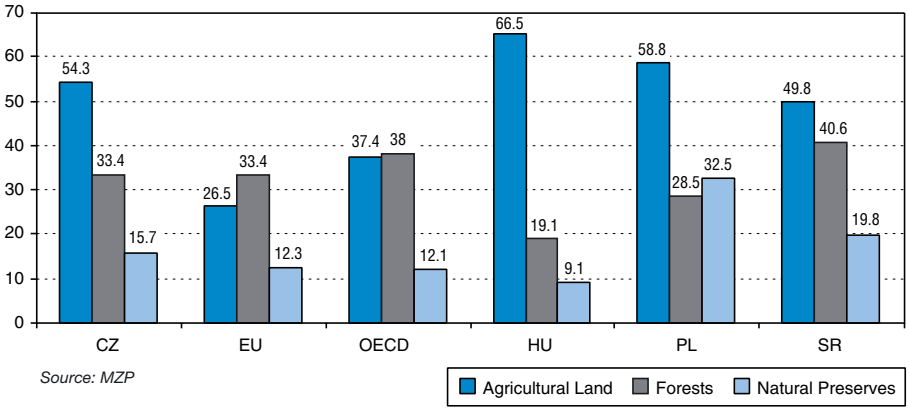
Major air polluters of sulfur and carbon dioxides (e.g., power plants) had a temporary exemption from the emission limits until January 1999. From that time on, all major polluters have been expected to utilize new technologies. Indeed, sulfur dioxide emissions dropped to one-eighth of the level of the 1980s and even dust emissions were reduced by nineteen times. Moreover, a further reduction is predicted by the MPO

**Emissions per Inhabitant**




*Source: MZP*

**Areas (% of Total Area of the State)**

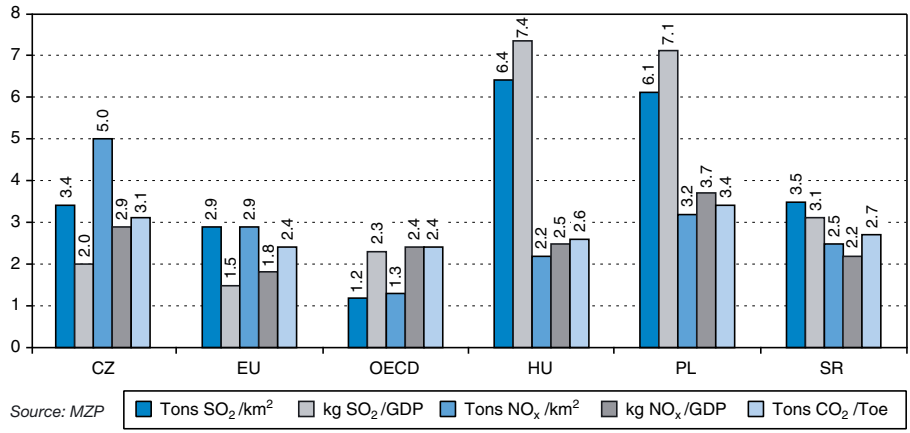



*Source: MZP*

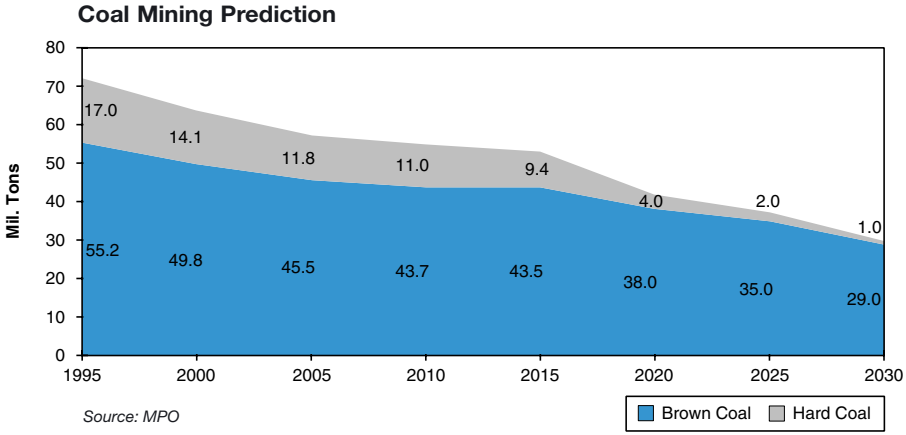
once the newly finished nuclear plant near Temelín is in full operation. The other nuclear power plant in Dukovany currently produces about 20 % of the country's total electricity supply. The MPO estimates that both nuclear plants would reduce the emission of carbon dioxide to 17 % of the total emissions. The future share of nuclear energy consumption is estimated to be about 38 %. According to these predictions, coal mining should decline as outlined in the graph.

Note the high portion of agricultural land in all the Visegrad countries in comparison to the EU and OECD. In 1999, a new national park, České Švýcarsko (Czech Switzerland), was established. Investment in environmental protection peaked in the mid-nineties when firms were facing new environmental standards and had to

**Relative Emissions**

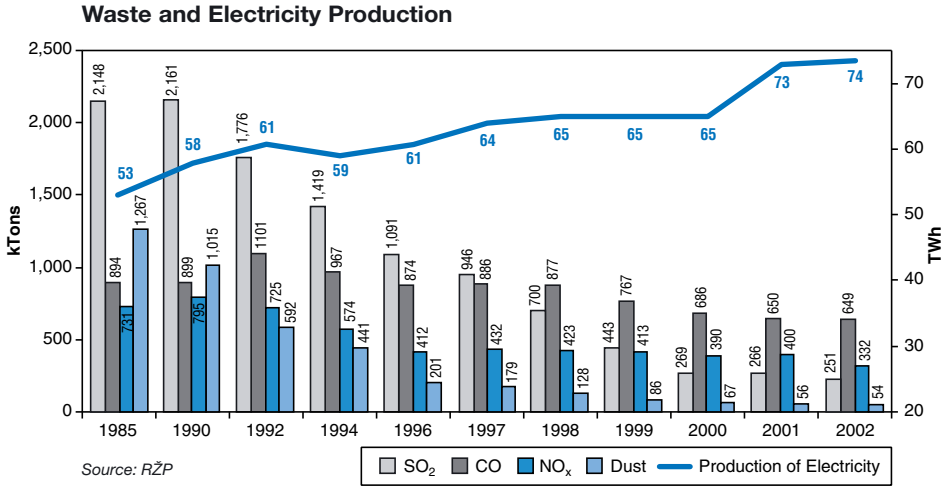



*Source: MZP*

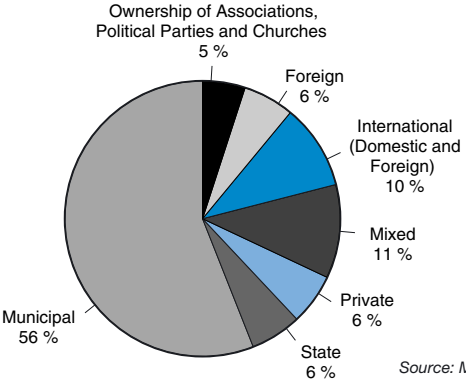



modify their technologies. New standards were enforced and the temporarily-granted exceptions expired. Currently, the environmental protection investments are back below 1 % of GDP.

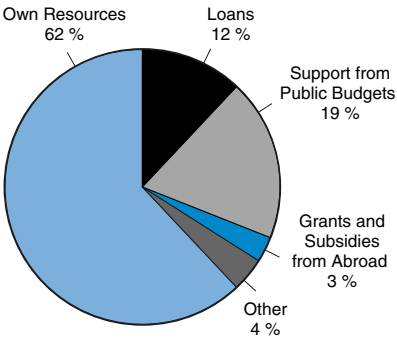
Noise from transportation is an area where future improvements are necessary. A large portion of the population of the Czech Republic continues to be exposed to excessive noise from transportation. In Prague, almost 40 % of the population is exposed to noise levels greater than 65dB during the daytime, in other areas, levels are 10 – 30 % of the population, depending on the size. In the Czech Republic, about 4.5 % of the population is exposed to a risk of detriment to health from noise from the outdoor environment.



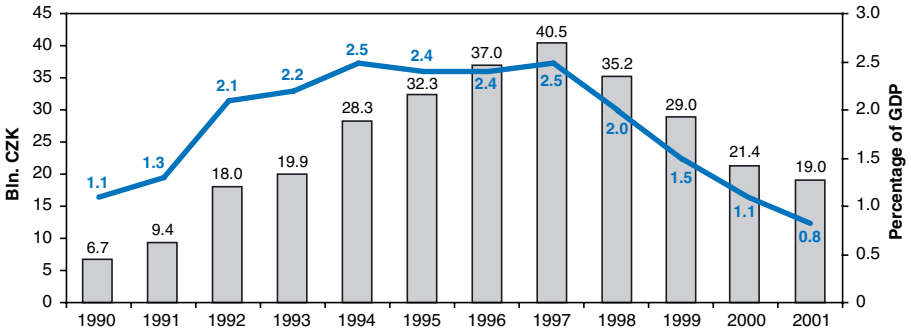
## Sources of Investment in Environment Protection in 2001




Source: MŽP

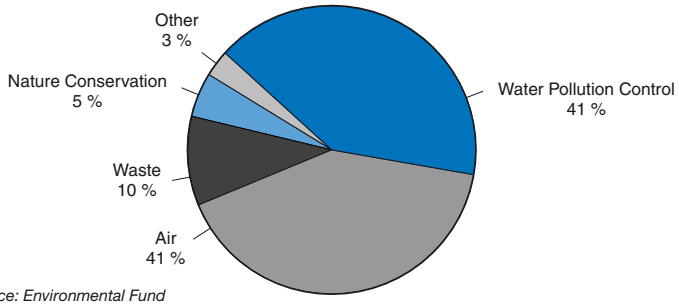



## Investment in Environmental Protection




Sources: CSO, MZPCR, 2001 preliminary

## Total Expenses Structure of Enviromental Fund 2001




Source: Environmental Fund

### *Flooding Environmental Damages*

**Damage to the Waste Water Treatment Facilities and Sewerage (Regional Data):**

| | |
|---|---|
| Jihočeský | 446.8 mil. CZK |
| Plzeňský | 388.6 mil. CZK |
| Středočeský (w/o Prague) | 272.5 mil. CZK |
| Ústecký | 34.4 mil. CZK |
| **Total (w/o Prague)** | **1,142.3 mil. CZK** |

*Source: Ministry of the Environment, Prague, 2002*

*The damages caused by the floods of 2002 that fall within the competence of the Ministry of the Environment were estimated at approximately 1.7 bln. CZK (out of the total damages of 70 bln. CZK). The major part of these damages is related to water treatment. The wastewater treatment facilities and sewerage damages amount to 1.1 bln. CZK outside of Prague, while the city of Prague estimated the damages between 250 mil – 500 mil. CZK; however, before the floods the city planned to replace the old wastewater treatment facility with a new one (estimated costs were about 15 bln. CZK).*

### *Environmental Protection and Firms' Finance*

*(Based on Earnhart, D., and Lízal, L.: CERGE-EI WP No. 203, 2002)*

*This article examines the link between corporate financial performance and corporate environmental performance and explores the effects of ownership structure on environmental performance. The effect of lagged financial performance on emissions is negative or insignificant, indicating that strong financial performance leads to better future environmental performance (i.e., lower emissions) or does not affect emissions at all. Therefore, financial success either begets or does not undermine better environmental performance. This finding is quite different from those already cited in the literature.*

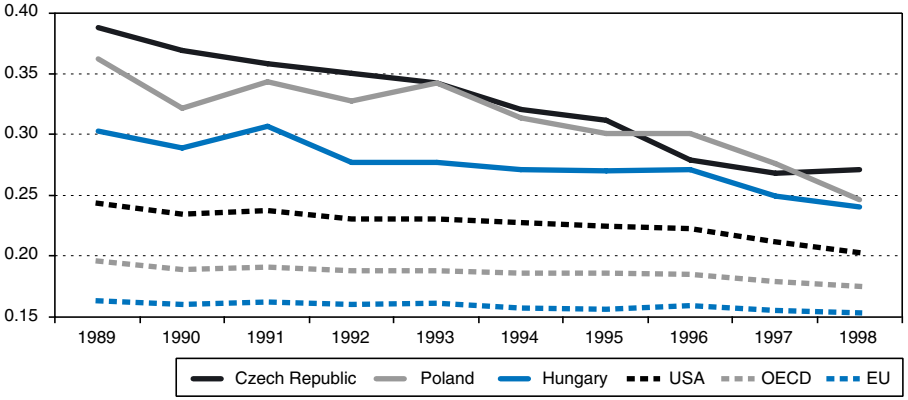
*Production significantly affects emissions; as expected, greater production generates more emissions. Oddly, greater relative production also generates more emissions. Thus, we can safely conclude that the technology employed has increasing returns to scale with respect to generated pollution.*

*Ceteris paribus, the major differences are in the effect of the financial status among firms on average, where the link between financial status and pollution is significantly negative. On the other hand, within a firm the effect of financial performance is marginally significant, indicating that higher profits lead to employment of better technology, and therefore a firm produces relatively lower emissions.*

*Moreover, our analysis finds that state owned enterprises (SOE) have lower environmental performance relative to all other investor types; however, the state does hold less environmentally friendly firms. Indeed, during privatization in the early nineties the Czech state kept a significant portion of assets in so-called "strategic" firms, which also included large SOEs from heavy industry. Our analysis also finds that concentrated ownership is positively correlated with environmental performance, contrary to our expectations that the concentration should not play a role.*

## VI.2 Energy Intensity Is Still High

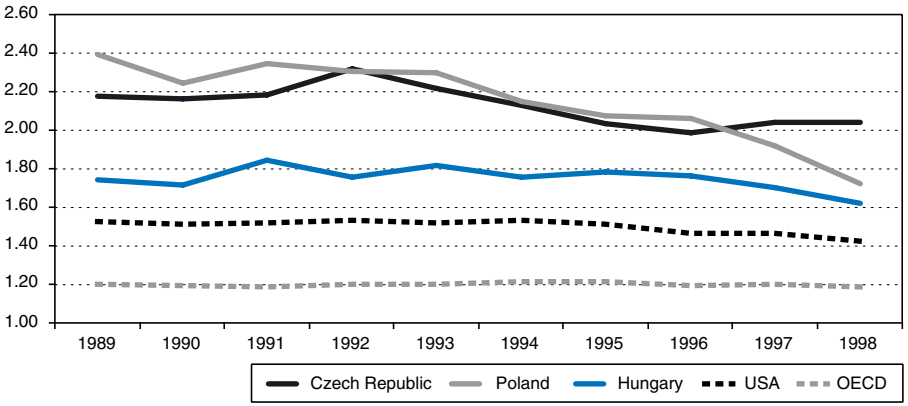
**Total Final Energy Consumption per GDP**




*Source: International Energy Agency, Energy Balances of OECD Countries (Paris: OECD)*

How efficiently economies manage energy resources can be expressed on an aggregate level by the total final energy consumption or supply of primary energy resources per unit of GDP – energy intensity. Energy intensity is measured as the total final consumption in toe per USD 1,000 of GDP at 1990 prices and using exchange rates expressed in purchasing power parity (1 toe = 41,868 MJ). The Czech Republic managed to decrease its energy consumption rapidly over the 1990s, but as of 1998,

**Total Primary Energy Supply per GDP (Relative Lag to the EU Values, EU = 1.00)**




*Source: International Energy Agency, Energy Balances of OECD Countries (Paris: OECD)*

the Czech economy still used 1.8 times more energy to produce USD 1 of GDP than the EU countries did.

It is more illustrative to compare the countries relative to each other, selecting the EU as a base. Relative lag is computed as the ratio of total primary energy supply for a given country and the same value for the EU and expresses how many times more intensive the particular country's production is. The development of the time series reflects the combined effects of structural changes in industry, efficiency improvements, imports/exports of primary energy resources, and fuel substitution.

The Czech economy uses two times more primary energy resources to produce USD 1 of GDP than the EU. The values for the Czech Republic are quite close to that of Poland, but considerably higher than for Hungary. The relative position of Hungary and developed countries remained the same over the 1990s: Hungary operates at 1.7 times, the USA 1.5 times, and the OECD 1.2 times the EU level. During the 1990s Poland managed to decrease the lag from 2.4 to 1.7 whereas the Czech Republic only from 2.2 to 2.0.

The big difference between total final consumption and total primary energy supply in the Czech Republic is caused by oil imports and considerable electricity exports. The Czech economy is still biased towards more energy intensive industries, particularly to those that consume primary energy resources. Currently, the prices are not fully liberalized. The new modern Energy Act was approved in 2000, however, the privatization of state-owned monopolies failed during 2002.

### *Temelín Case*

*In 1980 the Czechoslovak government decided to build a new nuclear power plant by selecting a site near the town of Temelín. Two years later, in 1982, a contract was signed with the Soviet Union to provide the necessary technology. The final construction permit was issued in 1986; however, the site preparation had already started in 1983. The total planned output of four 1000 MW units was obviously too large to be finished and justified under the new economic conditions which followed the 1989 events, so in 1990, the Czechoslovak government decided to cut the capacity by one half and to reduce the originally planned four units to only two. Due to economic and political changes after 1989, the dates for completion were adjusted several times.*

*Later the original Soviet-controlled technology was replaced with more modern Western technology to meet the highest safety standards. In 2000, after 20 years of construction and 100 bln. CZK spent, the first unit was finished and ready for testing. By this time, environmental and pressure groups had succeeded in involving a part of the general public in Austria in protests against the power plant and its proximity to the border. This has subsequently widened the political gap between the two countries. The Czech Republic and Austria agreed in Melk on a way to solve the problem. In 2002, the second unit of the power plant was finished and tests have started. In the end, the "Temelín" case was not opened by Austria in the EU accession negotiations.*

## VI.3 EU Environmental Legislation

In June 2001 the Chapter 22 (Environment) EU accession negotiations were closed, with two transitional periods:

■ Council Directive 91/271/EEC of 21 May 1991 concerning urban wastewater treatment. The Czech Republic will have to create sewage systems and waste water treatment plants for between 2000 and 10 000 inhabitants.

■ European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste. The Czech Republic is not able to fulfill the percentage set for the recycling of waste (25%) and for the re-using of waste (50%). The percentages will gradually grow on the basis of the voluntary agreement and the new Act on Waste and Act on Packaging.

Another current hot issue is the so-called Integrated Pollution Prevention and Control (IPPC). The principle behind IPPC is that pollution should be seen in an integrated way so that it is minimized for the environment as a whole and does not allow for transfers between media. IPPC is also intended to cut bureaucracy by coordinating the actions of authorities responsible for different environmental media. The Directive 96/61/ EC applies a source-based regulatory approach by seeking to limit the environmental impacts of specific industrial activities by requiring the use of the best available techniques.

Regarding the situation in the Czech Republic, the EU has accepted the argument that fully integrated permits for the operation of a new installation, according to the Directive 96/61/EC on IPPC, can only be issued after the entry into force of the Act on IPPC in the Czech Republic (1 January 2003). The length of the period needed for issuing of permits is not exactly specified but it is expected that it should not exceed September 2004.

Until now the Czech Republic has almost solely focused on Directives and other elements of the “hard law”. However, there are also important elements of the “soft law” that are shaping European policies perhaps even more fundamentally (6th Environment Action Programme and Strategy of Sustainable Development of the EU).

### *Environmental Impact Assessment (EIA)*

| Branch | Activities Assessed at the Ministerial Level | |
|---|---|---|
| | Number | % |
| Roads/Railroads | 233 | 31.0 |
| Waste Management | 133 | 17.7 |
| Energetic | 89 | 11.9 |
| Chemical Industry | 114 | 15.2 |
| Mining Industry | 83 | 11.1 |
| Other | 99 | 13.2 |

*Source: Ministry of the Environment of the Czech Republic*

*A major legislative achievement was the introduction of the necessary Environmental Impact Assessment (EIA) of all major constructions and activities affecting the environment in 1992. It is a systematic process by which the impacts of a planned activity on the environment are identified and assessed using both qualitative and quantitative assessment techniques. The outcome of an EIA usually takes the form of an environmental impact statement (EIS). The EIS provides the means of conveying to the decision makers the nature, magnitude and significance of the proposed activity's environmental impacts. The EIA process is an important element in the system of preventive environmental protection instruments.*

### *The Benefits of Compliance with the Environmental Acquis*

*(Based on: ECOTEC in association with EFTEC, IEEP, Metroeconomica, TME & Candidate Country Experts, final report, July 2001)*

*The monetary effects of the compliance of the accession countries with the environmental chapter of the acquis communautaire are not negligible. Such assessment provides a measure of the monetary benefits that follow from the implementation of the environmental directives, but it does not include the full range of benefits and provides only a partial indicator of the consequences.*

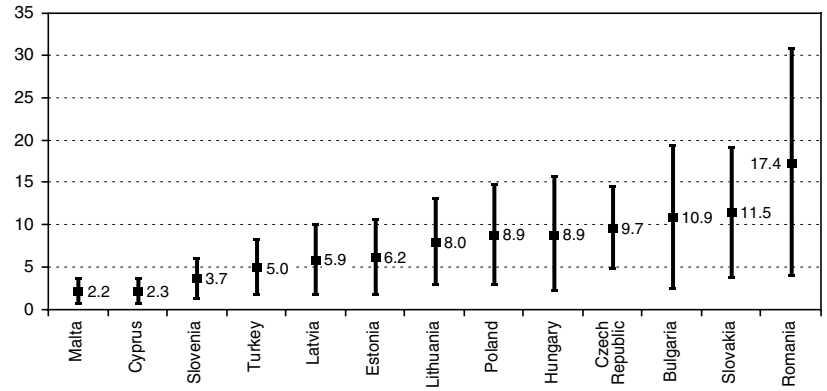
*The monetarization of the benefits is based on three approaches:*

*1. The application of unit pollution damage costs to estimated reductions in given pollutants – this is the approach applied to the estimation of benefits from waste directives.*

*2. The application of unit receptor damage costs to estimated reduction in damage to given receptors or receptors' valuation of damage using a willingness to pay analysis.*

*3. The calculation of a completed dose-response function, relating pollution changes to effect for particular receptors capable of valuation in monetary terms – this is the approach applied to the estimation of health benefits from air directives.*

**Ratios of Annual Benefits of Full Compliance, Benefits as % of GDP**




*Source: ECOTEC in association with EFTEC, IEEP, Metroeconomica, TME & Candidate Country Experts, final report, July 2001.*

*The findings are that benefits from reduced air pollution account for about a half of the total benefits. (However, it should be kept in mind that the benefits from water and waste directives are not exhaustively captured by the monetary valuation and that the benefits from nature protection are not covered.) The benefits from reducing air pollution relate mainly to improved public health through fewer respiratory diseases and, most importantly, fewer cases of premature deaths. There are also significant benefits from a reduced burden on agricultural crops and avoided damage to buildings. The benefits from implementing the EU's water related directives include improved access to clean drinking water, bathing water, and rivers. The benefits of implementing EU waste directives included reduced methane emissions, which benefit public health and global warming, and a reduced impact on the environment through increased recycling and the lower use of primary materials.*

*It is important to note that the Czech Republic is one of the accession countries that benefit from full implementation the most. The benefits as a proportion of GDP and per capita are based on a purchasing power parity comparison (PPP). The range of values across countries reflects several factors – the difference in actual benefits, variations in data availability allowing benefits estimation, variations in the meaning of the data across the candidate countries, and differences in purchasing power parities across countries. The high result in the Czech Republic is strongly influenced by the significant benefits from improvements in river water quality.*

# VII. THE CZECH REPUBLIC ON ITS WAY TO THE EUROPEAN UNION

## VII.1 The Progress toward EU Accession in 2002


Perhaps the most important news of the year 2002 is that the Czech Republic completed its negotiations on the terms of the EU accession. The country was formally invited to join the European Union in May 2004. The crucial next step is a nation-wide referendum in which the population has to agree to the accession. The popular support hovers somewhat above 50 %, which is low relative to most other pre-accession countries. The media coverage of the accession focuses on the potential costs of joining the EU and on controversial points of the negotiation. (This is perhaps particularly true for the dominant commercial TV station Nova that features in the arbitrage case set against the Czech Republic for lack of investment protection by the U.S. investors who started the TV station but lost control to its local manager, Vladimir Zelezny, a senator as of 2002.)

What were the rough spots during the final year of negotiations? Key issues that

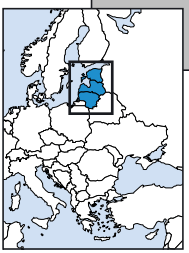
**The Situation of the Candidate Countries (Data for 2001)**

| | CR | Hungary | Poland | Slovakia | Slovenia |
|---|---|---|---|---|---|
| Surface (km²) | 78,866 | 93,033 | 312,685 | 49,036 | 20,254 |
| Population (thousands) | 10,230 | 10,161 | 38,644 | 5,379 | 2,000 |
| Number of Votes in EP | 20 | 20 | 52 | 13 | 7 |
| GDP per Capita (in Euro) | 13,300 | 11,900 | 9,200 | 11,100 | 16,000 |
| GDP Growth (%) | 3.3 | 3.8 | 1.1 | 3.3 | 3 |
| Unemployment (%) | 8.9 | 5.7 | 18.2 | 19.2 | 11.6 |
| Inflation Rate (%) | 4.1 | 9.1 | 5.6 | 7.3 | 8.4 |
| Share of Agriculture in GDP (%) | 4.2 | 4.3 | 3.4 | 4.6 | 3.1 |
| Life Expectancy (Men/Women) | 71.5/78.6 | 67.5/76.5 | 69.5/78.1 | 70.2/78.4 | 71.4/79.4 |

*Source: Eurostat*

got public play were agricultural subsidies (which the EU tries to fade out and, in any case, tries to bestow to a lesser degrees on the current crop of entrants) and issues of labor mobility (this having been a controversial topic for a while and it is discussed in detail in Section VII.5). Early in the spring, the issue of the Beneš decrees was also in the headlines but faded away later in the year, especially after a right-wing partner left the governing coalition in Austria. All came to a relatively happy end: the invitation during the EU summit in Copenhagen December 12 – 13, 2002.


The bargaining for **agricultural subsidies** was complicated by the fact that the actual level of subsidies in the future has become a moving target in the EU itself, with some countries (e.g., Germany and the UK) trying to reduce the level of subsidies significantly and others (e.g., France) trying to preserve the current levels of the common agricultural policy as long and high as possible. The starting point of the negotiations was an offer by the EU to give to the farmers of new member states 25 % of the subsidies (whatever the ultimate level would be), gradually



**The Situation of the Candidate Countries (Data for 2001)**

| | Estonia | Lithuania | Latvia |
|---|---|---|---|
| Surface (km²) | 45,215 | 65,200 | 64,589 |
| Population (thousands) | 1,400 | 3,491 | 2,360 |
| Number of Votes in EP | 6 | 12 | 8 |
| GDP per Capita (in Euro) | 9,800 | 8,700 | 7,700 |
| GDP Growth (%) | 5 | 5.9 | 7.7 |
| Unemployment (%) | 13 | 16.5 | 7.8 |
| Inflation Rate (%) | 5.6 | 1.3 | 2.4 |
| Share of Agriculture in GDP (%) | 5.8 | 7 | 4.7 |
| Life Expectancy (Men/Women) | 64/76.3 | 63.5/75.6 | 63.1/75.2 |

*Source: Eurostat*

rising to full subsidies over a period of 10 years. The latest offer in early December spoke of 40 % of the subsidies. Farmers made their displeasure with these offers of the EU known through protests in Prague in October and December, demanding better agricultural terms for accession. In last-minute negotiations during the Copenhagen summit, the Czech delegation succeeded in increasing those numbers, to 55, 60, and 65 percent of the EU levels given to incumbents in 2004 – 2006; however a part of the additional increase has to be paid for from the Czech state funds, and will not be borne by the EU.

The Czech Republic will also receive 87 million Euro from EU **structural funds** in 2004 – 2006 and an additional 100 million Euro as direct budget compensations. The net amount the country will receive


**The Situation of the Candidate Countries (Data for 2001)**

| | Cyprus | Malta |
|---|---|---|
| Surface (km²) | 5,896 | 315 |
| Population (thousands) | 750 | 372 |
| Number of Votes in EP | 6 | 5 |
| GDP per Capita (in Euro) | 18,500 | 11,700 |
| GDP Growth (%) | 2.6 | -0.8 |
| Unemployment (%) | 4 | 6.5 |
| Inflation Rate (%) | 2 | 2.5 |
| Share of Agriculture in GDP (%) | 3.9 | 2.4 |
| Life Expectancy (Men/Women) | 74.8/79.5 | 75.8/80 |

*Source: Eurostat*

from the EU is the lowest among the ten candidates; this result can be attributed to the country's relative prosperity and the fact that the Czech Republic will be completely surrounded by member states after enlargement so that it will not have to protect its borders with non-EU countries. Furthermore, unlike other candidate countries, the Czech Republic fought hard to prove that its nuclear power plants are safe enough to be operated; hence, the country will receive no subsidies for closing Soviet power plants.

**Maximum Enlargement-related Appropriations for Commitments (mil. Euro 1999 Prices) 2004 – 2006 for 10 New Member States**

| | 2004 | 2005 | 2006 |
|---|---|---|---|
| Heading 1 Agriculture | 1,897 | 3,747 | 4,147 |
| Of which: 1a – Common Agricultural Policy | 327 | 2,032 | 2,322 |
| 1b – Rural Development | 1,570 | 1,715 | 1,825 |
| Heading 2 Structural Actions after Capping | 6,095 | 6,940 | 8,812 |
| Of which: Structural Fund | 3,478 | 4,788 | 5,990 |
| Cohesion Fund | 2,617 | 2,152 | 2,822 |
| Heading 3 Internal Policies and Additional transitional expenditure | 1,421 | 1,376 | 1,351 |
| Of which: Existing Policies | 882 | 917 | 952 |
| Transitional Nuclear Savety Measures | 125 | 125 | 125 |
| Transitional Institution Building Measures | 200 | 120 | 60 |
| Transitional Schengen Measures | 286 | 286 | 286 |
| Heading 5 Administration | 503 | 558 | 612 |
| **Total Maximum Appropriations for Commitments (Heading 1, 2, 3 and 5)** | **9,952** | **12,657** | **14,958** |

*Source: Presidency Conclusions, Copenhagen European Council, 12 and 13 December 2002*

No clear-cut progress has been made on the contentious issue of labor mobility and on allowing Czech transportation companies to operate within the EU. Germany and Austria in particular want a gradual transition to free **labor mobility** (which has its mirror in a gradual transition to free capital and property purchases preferred by the Czech Republic). For more detail on the mobility issue see below.

***The Common Agricultural Policy (CAP)***

*The CAP consists of enormous subsidies for farmers. Among economists, it is widely considered to be a disaster. According to estimates, the CAP may cost EU member countries as much as 3 % of their total GDP per year when the indirect costs that farm protection imposes on other sectors (manufacturing, trade, and services) are taken into account (see Gylfason 1995 "The Macroeconomics of European Agriculture",* Princeton Studies in International Finance, *No. 78). Georganta (1997) "The Effect of a Free Market Price Mechanism on Total Factor Productivity,"* International Journal of Production Economics, *suggests that had the CAP not applied to Greece in the years after it joined the EU, the growth rate of total factor productivity in agriculture would have been approximately four times what actually occurred under the CAP. The impact of CAP in the Czech Republic is likely to be similar, locking un-competitive farmers into an unproductive sector while preventing the efficient or environmentally friendly ones to grow.*

## VII.2 How Will the EU Benefit from the Enlargement?

The enlargement of the EU brings benefits both to the countries invited to join the EU in 2004 and to the current EU-15 members. While the new entrants will be net financial receivers of EU transfer funds for the first several years, the most important stream of benefits received by both entrants and incumbents occurs in terms of improved safety, regional stability and will be manifested throughout the whole EU economy.

1. **Economic benefits**

The new enlarged EU will become the largest zone of free trade in the world in terms of the number of consumers and will be comparable to the United States in terms of the total volume of GDP. The current EU firms will get direct access to additional 70 million new consumers without any quota or tariff limitations. Independent studies estimate the neighboring countries will gain additional 0.5 % of GDP growth after the enlargement. Due to the lower labor costs in the new countries the EU firms from high labor costs areas could gain from investing in the new member countries and hence be able to compete with the low-cost American and Asian firms. In addition, as the new entrants will grow richer, they will become a natural additional

outlet for sophisticated design and high value-added products that are hard to find a new market for.

2. **Safety**

As the new members of the EU club will be part of the developed Europe, they will have incentives to protect the common values against both external and internal threats. The common immigration and safety policies enable both new and old members to fight organized crime, money laundering and terrorism more effectively. The closely watched borders will move eastward from the current members as the current border countries will become surrounded by EU members.

3. **Stability**

Although the risk of war in the accession countries is quite low, it will become almost nil after the accession and hence further increase regional and global stability. During the period of negotiation the new members had to adopt the legal and business standards of the current EU members. This ultimately led to the improvement of their business environment and political culture, and a decrease of corruption; the process will continue after the entry of the new members. Therefore, these countries become less risky and more stable. In addition, as a byproduct, conducting business in the new countries will become cheaper.

## VII.3 The Czech Republic in the Enlarged EU

The coming enlargement of the EU has brought about a need for a change in its institutional system. The foundations of the current system were laid down in the 1950s, when there were only 6 member states. Since then, the number of states increased substantially (to 15 at present) but, apart from the introduction of direct elections to the European Parliament, no major change occurred in the EU's institutional setup. In 2004 the number of members will likely increase to 25, introducing dramatic dispersion in the level of economic development. Thus, it was generally accepted that an institutional reform must be agreed upon before the enlargement takes place. The process leading to such an agreement was completed at the Nice conference, where the so called Treaty of Nice was signed.

The Treaty legislates reforms for all the major EU institutions and determines the position of individual states (both current members and candidate countries) within these institutions. Important changes were also made to the institute of Enhanced Cooperation, which enables EU members to go beyond the generally accepted consensus (e.g., in harmonization efforts). The most important change is that the right of each individual member state to veto this initiative was repealed.

The main reforms in the EU's institutions are the following:

**The European Parliament**

- Its role in the legislative process was enhanced.
- Foundations for the functioning of political parties on the European level were laid down.
- The maximum number of members was set at 732 and the seats were allocated among both current states and candidate countries. The Czech Republic was given 20

seats, the same as Hungary. In this respect it is interesting to note that three of the current member states with population very close to that of Czech Republic and Hungary – Belgium, Greece and Portugal – were allocated 22 seats. Such a differentiation between the incumbent and prospective members is hard to justify. Slovakia will have 13 seats and Poland 50.

**The Council**

■ The number of cases when the Council decides by qualified majority rather than unanimously was substantially increased.

**Position of Individual Members in the EP and in the EU Council of 27 Members**

| Country | Population in mil./pct. | Seats in EP | Votes in Council |
|---|---|---|---|
| **Current Members** | | | |
| Austria | 8.06 mil. / 1.68% | 17 | 10 |
| Belgium | 10.16 mil. / 2.12% | 22 | 12 |
| Denmark | 5.26 mil. / 1.1% | 13 | 7 |
| Germany | 81.9 mil. / 17.08% | 99 | 29 |
| Greece | 10.48 mil. / 2.19% | 22 | 12 |
| Finland | 5.13 mil. / 1.07% | 13 | 7 |
| France | 58.38 mil. / 12.18% | 72 | 29 |
| Ireland | 3.63 mil. / 0.76% | 12 | 7 |
| Italy | 57.4 mil. / 11.97% | 72 | 29 |
| Luxembourg | 0.42 mil. / 0.09% | 6 | 4 |
| Netherlands | 15.53 mil. / 3.24% | 25 | 13 |
| Portugal | 9.93 mil. / 2.07% | 22 | 12 |
| Spain | 39.27 mil. / 8.19% | 50 | 27 |
| Sweden | 8.84 mil. / 1.84% | 18 | 10 |
| United Kingdom | 58.8 mil. / 12.27% | 72 | 29 |
| **Candidate Countries** | | | |
| Bulgaria | 8.36 mil. / 1.74% | 17 | 10 |
| Cyprus | 0.74 mil. / 0.15% | 6 | 4 |
| **Czech Republic** | **10.32 mil. / 2.15%** | **20** | **12** |
| Estonia | 1.47 mil. / 0.31% | 6 | 4 |
| Hungary | 10.19 mil. / 2.13% | 20 | 12 |
| Latvia | 2.49 mil. / 0.52% | 8 | 4 |
| Lithuania | 3.71 mil. / 0.77% | 12 | 7 |
| Malta | 0.37 mil. / 0.08% | 5 | 3 |
| Poland | 38.62 mil. / 8.06% | 50 | 27 |
| Romania | 22.62 mil. / 4.72% | 33 | 14 |
| Slovakia | 5.37 mil. / 1.12% | 13 | 7 |
| Slovenia | 1.99 mil. / 0.42% | 7 | 4 |

30 cases were moved from the latter category to the former. The definition of the qualified majority itself was changed. It will be achieved if two conditions are met: (1) the decision receives a required number of votes, and (2) it is, at the same time, approved by the majority of states. In addition, each member state may ask for confirmation that the qualified majority represents at least 62 % of the population of the Union. If this is not the case, the decision will not be adopted.

■ New weighting of votes was introduced, effective 1 January 2005. The Czech Republic shall have 12 votes, again the same as Hungary, Slovakia 7 and Poland 27. In this case, the more favorable treatment of the current members was not used and the Czech Republic and Hungary were assigned the same weight as Belgium, Greece and Portugal.

**The Commission**

■ By 2005, each member state shall have only one commissioner. The ceiling of 27 for the total number of commissioners was introduced. Should the Union have more members, the nationality of the commissioners would be determined by a system of rotation.

■ The powers of the President of the Commission were increased, reflecting the increased difficulty to coordinate the activity of more than 20 commissioners. He will now be entitled, for example, to demand a commissioner's resignation if the Commission as a whole agrees.

**The Court of Justice and the Court of First Instance**

■ More effective sharing of tasks between the Court of Justice and the Court of First Instance was introduced to relieve the workload of the Court of Justice and to shorten the waiting times for judgments.

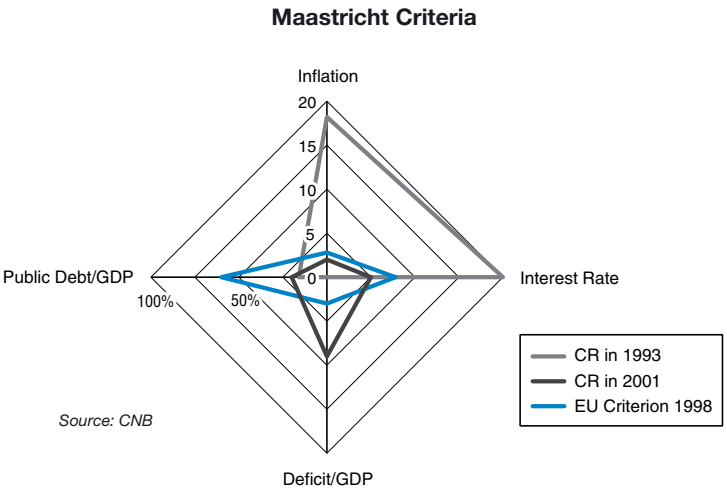
■ It will be possible to create special Chambers for particular areas (e.g. the disputes involving EU officials).

■ The Court of Justice shall be allowed to sit in a Grand Chamber of 13 judges, instead of always requiring plenary sessions attended by all the judges (the principle of one judge per one member state was preserved).

## VII.4 Convergence?

One of the easiest ways to compare the economic performance of countries seeking membership in the EU is to measure their distance from the four convergence criteria set in the Maastricht Treaty. Two are related to monetary issues, one is fiscal, and one is currency oriented. **(1) Convergence in inflation** is satisfied when inflation is not higher than 1.5 % above the average of the three best-performing countries. **(2) Interest rate convergence** defines the maximum interest rate as 2 % above the average of the three lowest interest rates among EU states. **(3) EMR convergence** requires two years without currency revaluation or devaluation. **(4) Convergence in deficit** stipulates a maximum budget deficit at 3 % of GDP a year and governmental debt at 60 % of GDP.

While inflation has recently become acceptable, the distance from the reference numbers is widening in the public deficit




criterion. Further, unless a fiscal reform takes place soon, the public debt threshold will be broken as well.

## Convergence Progress and Outlook

While the Czech Republic has a functioning market economy with the capacity to cope with the competitive pressure and market forces of the Union, the country has made little progress in catching up with the EU GDP per capita levels, primarily because of policy failures resulting in the 1997 currency crisis and recession. If the Czech Republic fails to overhaul its fiscal expenditures, it is unlikely that it will be able to move closer to the EU's level of economic performance. Yet, the potential for convergence (in absence of further policy failures) is strong, thanks to a well-skilled labor force and a relatively high level of gross fixed capital formation with strong FDI.

**Maastricht Criteria**

| | Inflation | Deficit of Public Budgets (% of GDP)* | Public Debt (% of GDP) | Interest Rate |
|---|---|---|---|---|
| EU Reference Value 98 | 2.7 | -3.0 | 60.0 | 7.8 |
| CR 2000 | 3.9 | -4.2 | 17.3 | 5.4 |
| CR 2001 | 5.1 | -7.0 | 20.3 | 5.3 |
| CR 2002e | 2.7 | -9.0 | 24.0 | 2.8 |

*Source: EURO 1999, EC Report, March 25, 1998, 2002 CERGE-EI estimates*

* Excluding Extraordinary Revenues (not the EU methodology)

**Deficits of EU-Accessing Countries' Public Budgets (% of GDP)**

| EU Methodology (Maastricht) | Pre-Accession Economic Programs in 2002 | | | |
|---|---|---|---|---|
| | 2002 exp. | 2003 est. | 2004 est. | 2005 est. |
| Bulgaria | -0.8 | -0.7 | -0.5 | 0.0 |
| Cyprus | -2.6 | -1.9 | -0.6 | -0.3 |
| **Czech Republic** | **-6.4** | **-6.0** | **-5.7** | **-5.5** |
| Estonia | -0.2 | 0.0 | 0.0 | 0.0 |
| Hungary | -6.0 | -4.5 | -3.0 | -2.5 |
| Latvia | -1.8 | -2.5 | -2.2 | -2.0 |
| Lithuania | -1.9 | -1.7 | -1.6 | -1.5 |
| Malta | -5.2 | -4.6 | -3.9 | -3.1 |
| Poland | -4.1 | -3.6 | -3.3 | -2.2 |
| Romania | -2.7 | -2.4 | -2.4 | -2.4 |
| Slovak Republic | -4.6 | -4.1 | -3.1 | -2.6 |
| Slovenia | -1.8 | -1.3 | -1.0 | 0.8 |
| Turkey | -13.2 | -5.9 | -3.0 | -0.5 |

*Source: Preparation of the Candidate Countries for Participation in Economic Policy Co-ordination; Brussels 2002*

### *Can a Country with Such Low Growth Rates Ever Catch Up with the EU?*

*The European Union itself is rather heterogeneous as regards the level of development of particular countries and regions. If economic development is measured by GDP per capita, this criterion for the EU countries ranges from 68 % to 169 % of the average EU GDP per capita. This dispersion is expected to further increase with the eastern enlargement of the EU, as the candidate countries have a much lower GDP per capita (ranging from 26 % to 67 % of the EU average, measured by PPS – Purchasing Power Standard). In order to achieve the European average, these countries will have to show rather enormous growth rates in the following years.*

*In PPS, the Czech GDP per capita in the year 2000 reached 60 % of the EU average. During 2002 the Czech economy outpaced the EU growth, but only for the fourth time during the last 12 years. As a result, it will remain at about 61 % of the EU GDP level.*

*Hence, the published data on economic growth suggest that the country has not trimmed much from the income gap between itself and the EU during the first decade of economic transformation. However, there is substantial argument that this is not true and that, on the contrary, the Czech Republic has made a great leap towards the income level of the EU member states, at least in the first few years of transi-*

*tion. To assess such a claim, several factors in computing real economic output must be considered that will result in misleading conclusions if omitted.*

*Economists have already addressed the fact that statisticians may have significantly neglected the improvements in quality and variety of products available on the markets in measuring inflation. It is natural that prices increase when a good perfectly satisfies the needs and tastes of consumers; therefore such an increase should not be included in inflation. If it is, even a minor overstatement of inflation can lead statisticians to report negative, instead of positive, economic growth. Therefore, the huge real declines of GDP reported by the transitional economies may be only a statistical illusion rather than a real phenomenon.*

*Another approach is to compare the growth in GDP converted to EUR. This approach is based on purchasing power parity (i.e., comparability of the consumer baskets in both countries) and also on the full flexibility of the domestic currency (that it devalues according to the "right" inflation). Although the exchange rate of the Czech crown was fixed until 1997, it did not significantly devalue afterwards. The currency is internationally traded in large amounts, so its rate cannot be influenced domestically over a period as long as ten years.*

*While the average real growth rate of the Czech Republic between 1990 and 1999 was -0.4 %, when the inflation bias is considered, this growth rate would be strictly positive up to 5 %, which would mean that the Czech economy converged about 3 percentage points per annum. The rate of convergence will even increase to 7 % yearly, if the Czech GDP is transferred to DM (as a representative of euro). In any case, over ten years of transition, the Czech Republic has succeeded in bridging part of the economic gap between itself and the European Union.*

*The problem of price levels is another important convergence issue. In 1998, the average price level of the Czech Republic was 39 % of the average price level of the EU. This gap raised fears that the Czech Republic will experience a large price shock on entering the EU. This problem will gradually be solved by the abandoning of the remaining price regulation, an increase in the productivity of Czech labor and the further arrival of investors in the economy. The increasing competitiveness of the Czech market will also work in favor of eliminating persisting relative price differences between the Czech Republic and the EU countries. Czech economists computed that reducing the relative price differences to the level of the least developed EU countries by the year 2010 will account for up to a half of the price difference, which is consistent with the yearly reported inflation of 3 – 6 %.*

*The current reported income and price gaps between the Czech Republic and the European Union will not be a significant obstacle for the country in coping with the consequences of EU membership. Looking at statistical data critically we see that the Czech Republic has already succeeded in reducing the gaps, and it is most likely that accession to the European Union will act in favor of their further contraction.*

## VII.5 EU Accession and Labor Migration

The average monthly wage in the EU is about four times higher than the average wage in the Czech Republic while living in the EU is only about two-and-a-half times more expensive. The large wage gap between the EU-15 average and the would-be members has evoked concerns that opening the labor market to new members after their accession will create a flood of cheap labor coming from the East to the West, crowding out EU labor and decreasing wages and social standards. Therefore, the European Commission has proposed restrictions on the free movement of labor, such that new member citizens will not be allowed complete access to the job markets of Western countries for up to seven years after they join the EU.

Yet, the expectations of such a large mobility of Eastern European labor after opening the markets are most likely exaggerated for several reasons. First, all EU countries maintain a minimum wage that cannot be legally undercut. Legal workers from Eastern Europe will compete mostly with other East European workers for the blue-collar positions in industrial production or in low-skilled service positions. Cheap illegal workers from the East have already found their way to the West, because of visa-free travel to the European Union.

Secondly, the European labor force is known for its immobility, and this extends also to the Central European countries, the Czech Republic included. Even the in-country mobility of labor is low, which is documented by the huge differences in regional unemployment. While there is hunger for labor in Prague, several regions have two-digit unemployment. Even in the region most severely affected by floods in 1997, where many families lost their homes and had to start from scratch, no large emigration was reported.

The countries potentially most threatened by Czech labor migration are Germany and Austria. The European Integration Consortium estimated that the critical period would be the first four years of labor market liberalization, during which the strongest migration from the Czech Republic to Germany will occur. Still, a flood of Czech workers into the western EU countries is not expected. Economists estimate that the flow will not be very significant even for the German labor market: the upper bound is predicted to be 35,000 workers during the four-year period, but the actual number is expected to be well below.

For an analogy we can look at the experience of the Southern enlargement in the 1980s, when Portugal, Spain and Greece joined the EU. Restrictions on labor movement similar to the ones outlined for potential Central European members were also imposed on these countries. When they were eased, no large labor migration occurred. Recent analyses show that a similar pattern can be expected also for the Eastern enlargement. European workers are in general not very flexible; they mostly like to stay in their home country where they enjoy the language advantage, knowledge of the environment, and their cultural identity. The same holds true for the Czech workforce.

After the opening of the EU labor market, some flow of workers from the Czech Republic to the EU member states can be expected, but such flows will be of minor importance, as Czech workers have already

shown low flexibility and mobility even within their home country where earning opportunities significantly differ by region. Therefore, the impact of Czechs relocating to work in the European Union for employment possibilities, wages and social benefits of the EU residents will also be insignificant.

### *Estimated Migration to Germany*

*The current migration stocks from the Central and East European Countries (CEEC) in the EU-15 states are well below those of other countries with comparable income levels and other EU countries. At present, the share of nationals from the CEEC in the EU population (0.2 %) and the EU workforce (0.3 %) is negligible. The corresponding share of Czechs is even lower, given its size and proximity.*

*A study by Boeri et al. ("The Impact of Eastern Enlargement on Employment and Wages in the EU member states," EU DG-V), provide quantitative forecasts of the migration flow from CEEC to Germany during the period of the next 30 years. The numbers for the Czech Republic are shown in brackets. See the study for the assumptions for the projections.*

*In the baseline medium projection, the number of foreign residents from the CEEC in Germany is estimated to grow at around 220,000 [11,000] persons per year initially if free movement of labor is introduced for all ten candidate countries in 2002. This number should fall to 96,000 [5,000] persons per year by the end of the decade. The number of residents from the CEEC in Germany is estimated to be 1.9 mln. [90,000] in 2010, 2.4 mln. [120,000] in 2020 and 2.5 mln. [120,000] in 2030. This implies that the share of migrants from the CEEC-10 in the German population increases from 0.6 % in 1998 to 3.5 % in 2030. The number of employees can be estimated at around 35 % of these figures in the beginning and is likely to decline over time. After 30 years, return migration will be higher than immigration, so that the net migration reaches negative values.*

*Quantitative predictions agree with the majority of experts' opinions, finding that the fears that the EU will be flooded by immigration from the CEEC is ill-founded. Nevertheless, in some industrial branches and regions blue-collar workers may be negatively affected if immigration increases fast and targets relatively small territories. Although the formal education of CEEC migrants is above the education of migrants from other regions, most are unable to transfer their human capital to host labor markets due to language and cultural barriers. While at the present stage immigrants from the CEEC compete similarly as other foreigners for blue-collar jobs and low-skilled jobs in the service sectors, in the medium and long term they might affect white-collar workers more than in past labor migration. In general, a balanced distribution of skills among immigrants from the CEEC would mitigate labor market tensions.*

*Thus, the study concludes, immigration from the CEEC after the introduction of free movement of labor is likely to have – similar to trade and capital mobility – only a minor impact on the EU labor market, if actual migration flows are in line with projections. Uncertain public opinion about the possible scope of future migration flows and impact makes a case for the requirement of transitional periods by current EU members. To avoid labor market tensions, the objective of regulating migration should be to smooth immigration flows rather than to suppress them.*

**Number of Residents from the CEEC-10 in Germany (Baseline Projection)**

| | Start Value | 2002 | 2003 | 2005 | 2010 | 2015 | 2020 | 2030 |
|---|---|---|---|---|---|---|---|---|
| Bulgaria | 38,847 | 61,659 | 82,251 | 117,526 | 178,472 | 212,235 | 228,967 | 235,022 |
| **Czech Republic** | **18,327** | **29,351** | **39,341** | **56,565** | **86,905** | **104,504** | **114,069** | **120,093** |
| Estonia | 2,509 | 6,500 | 10,114 | 16,339 | 27,269 | 33,562 | 36,933 | 38,915 |
| Hungary | 56,748 | 72,877 | 87,398 | 112,158 | 154,353 | 176,937 | 187,292 | 188,513 |
| Latvia | 4,624 | 12,933 | 20,444 | 33,340 | 55,774 | 68,407 | 74,880 | 77,855 |
| Lithuania | 4,800 | 17,010 | 28,095 | 47,262 | 81,309 | 101,438 | 112,760 | 120,949 |
| Poland | 276,753 | 343,054 | 403,200 | 507,103 | 691,207 | 799,631 | 860,409 | 904,552 |
| Romania | 109,256 | 175,772 | 235,998 | 339,697 | 521,595 | 626,079 | 681,793 | 713,857 |
| Slovakia | 6,707 | 16,532 | 25,464 | 40,950 | 68,672 | 85,365 | 95,080 | 103,050 |
| Slovenia | 17,328 | 18,641 | 19,826 | 21,859 | 25,377 | 27,340 | 28,330 | 28,750 |
| CEEC-10 | 535,899 | 754,329 | 952,131 | 1,292,799 | 1,890,933 | 2,235,498 | 2,420,513 | 2,531,556 |
| Residents from CEEC-10 in % of Home Population | | | | | | | | |
| | 0.51% | 0.72% | 0.91% | 1.25% | 1.84% | 2.18% | 2.37% | 2.52% |
| Residents from Czech Republic in % of Home Population | | | | | | | | |
| | 0.18% | 0.29% | 0.39% | 0.57% | 0.87% | 1.05% | 1.14% | 1.20% |

*Source: Boeri T., et al. "The Impact of Eastern Enlargement on Employment and Wages in the EU Member States," EU DG-V.*

**Illegal Migration from and to the Czech Republic**

| Citizenship | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|---|
| Czech | 1,537 | 1,648 | 2,040 | 2,526 | 2,014 | 1,715 | 1,948 | |
| Foreigners | 41,765 | 18,832 | 17,132 | 21,179 | 27,325 | 42,957 | 30,377 | |
| From the Czech Republic | 41,327 | 17,030 | 15,374 | 18,680 | 22,011 | 37,142 | 26,951 | 27,585 |
| To the Czech Republic | 1,975 | 3,450 | 3,798 | 5,025 | 7,328 | 7,350 | 5,374 | 6,134 |
| Crossing the Border with | | | | | | | | |
| Austria | 1,663 | 1,320 | 1,114 | 1,762 | 2,251 | 3,480 | 4,535 | 3,660 |
| Germany | 40,133 | 16,047 | 14,407 | 16,654 | 20,860 | 32,859 | 19,820 | 20,021 |

*Source: Ministry of Interior*

An important form of Czech labor migration to Austria and Germany is **cross-border commuting**. Commuting was especially prevalent in the early 1990s. For instance, the reported number of commuters at the German border reached a high of 12,400 in 1992, but it has continuously decreased since then and at present it is assessed by experts at a maximum of 5,000. The decrease in this form of migration is partly caused by improved regulation (quotas) and monitoring. The major concern of the Germans and Austrians is the possible growth in the number of legal immigrants looking for employment after the accession of candidate countries to the European Union, when the border controls are lifted. An overview of migration from the Czech Republic to Austria and Germany during 1989 – 1999 is given in the table. The number of migrants seems to decrease in 2000 and 2001; however, the statistics are not yet complete.

**Legal Migration from and to the Czech Republic**

| | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **From the Czech Republic to Austria (Emigrants), from Austria to the Czech Republic (Immigrants) – Number of Persons** | | | | | | | | | | | | |
| Emigrants | 127 | 226 | 182 | 29 | 26 | 16 | 41 | 57 | 59 | 137 | 92 | 93 |
| Immigrants | 19 | 138 | 255 | 444 | 281 | 314 | 307 | 201 | 178 | 144 | 122 | 102 |
| **From the Czech Republic to Germany (Emigrants), from Germany to the Czech Republic (Immigrants) – Number of Persons** | | | | | | | | | | | | |
| Emigrants | 832 | 1,226 | 1,393 | 205 | 79 | 108 | 195 | 207 | 237 | 245 | 361 | 379 |
| Immigrants | 38 | 430 | 1,286 | 1,671 | 1,391 | 1,374 | 1,198 | 942 | 859 | 688 | 560 | 537 |

*Source: Statistical Yearbooks of the Czech Republic*

### *Survey Evidence*

*To learn about the potential for future migration, a recent study by the RILSA institute administered a survey inquiring about workers' intention to migrate. (This work is available at http://www.vupsv.cz/ in Czech, English and German.) A sample of more than 4.5 thousand citizens from all regions of the country showed that a large majority of respondents (86 %) are not interested in working and living abroad. On the part of citizens who would consider emigration, only 12 % have taken concrete steps to get information about it. Among them are mainly young people, who want to study, travel, and get experience. Most of them prefer temporary emigration. The most preferred countries for emigration, in order of preference, are Germany, the USA and Canada. It is also important to note that a short distance to neighboring countries does not seem to play a significant role in the reasoning for long-term stays. Today's young generation prefers English-speaking countries.*

While the EU-15 countries worry about potential in-migration of Czech workforce there, once the Czech Republic joins the enlarged EU, it must also worry about the **immigration to the Czech Republic** of non-EU citizens. Currently, the Czech Republic has a relatively low share of foreign inhabitants, namely 2.1 % of the total population and 2.9 % of the labor force. This share is low relative to that of the EU (9 % in Austria and Germany), but is higher than that of other pre-accession Central European countries.

The total number of foreigners holding residence permits in 2001 amounted to 210,794 persons, most of them being Slovaks (24.6 %) and Ukrainians (also 24.6 %), as well as Vietnamese (11.3 %), Poles (8 %), and Russians (6 %). The number of immigrants to the Czech Republic grew during the early 1990s, but recently it dropped due to changes in legislation, which made the entry and residence conditions for most foreigners stricter. Only in 2001 did the number of foreigners increase again, when a novella alleviated some of the provisions of the Immigration Act (see the table above). By March 2002, the number of foreigners reached 222,329. From the total number of foreigners in the Czech Republic, 79.5 % are employed, among them 38.2 % holding a valid trade license, most of them Ukrainians (one third) and another third Vietnamese. Free labor movement is permitted to the citizens from the Slovak Republic who only need to register at the employment offices.

### *Managing Immigration*

*The key positive aspect of in-migration is that it improves the age structure of the rapidly aging Czech population. The immigrants are about four years younger than average Czechs. Further, immigrants can fill gaps in the skill-specific labor supply on the Czech labor market. The government intends to make the most of the immigration potential with the help of active management of immigration: a Pilot Project 2002 was worked out on how to find foreign workers with qualifications in excess demand on the Czech labor market. (The aim of the project is that a position should not be occupied by a foreign worker if there is a Czech worker qualified for this job.) The Pilot Project states criteria for the choice, quotas, administrative procedures and financial costs of finding needed skilled workers from abroad. In the test stage, the Project's approach will be used to issue about 500 employment permissions for immigrants from three countries: Bulgaria, Croatia and Kazakhstan. Depending on the results of the test, the approach can be extended to more source countries.*

# VIII. COMPARATIVE STATISTICS

## Comparison of Selected Economic Indicators for CEFTA Countries [x]

### General Characteristics in 2000

| | CZ | HU | PL | RO | SL | SK |
|---|---|---|---|---|---|---|
| Surface Area in km$^2$ | 78,866 | 93,030 | 312,685 | 238,391 | 20,273 | 49,035 |
| Population (Thousands), End of Year | 10,206 | 10,188 | 38,641 | 22,408 | 1,992 | 5,380 |
| Urban Population, % of Total | 73.9 | 65.1 | 61.7 | 54.6 | 50.1 | 56.1 |
| Women, % of Population | 51.3 | 52.5 | 51.4 | 51.2 | 51.1 | 51.4 |
| Economically Active Population, % of Total | 50.4 | 40.2 | 44.6 | 51.1 | 49.2 | 49.1 |

### Level of Development in 2001

| | CZ | HU | PL | RO | SL | SK |
|---|---|---|---|---|---|---|
| GDP Total (Current Prices, Bln. of National Currency) | 2,157.8 | 14,876.4 | 721.6 | 1,154,126.4 | 4,566.2 | 989.3 |
| GDP Total (Bln. USD) | 56.8 | 51.9 | 176.3 | 39.7 | 18.8 | 20.5 |
| GDP Per Capita, USD ER* | 5,558 | 5,095.9 | 4,561.5 | 1,771.4 | 9,442.9 | 3,803.2 |

Notes: *ER – Using Yearly Average Exchange Rate

### Real Growth Rates in 2001

| | CZ | HU | PL | RO | SL | SK |
|---|---|---|---|---|---|---|
| GDP | 3.3 | 3.8 | 1.0 | 5.3 | 3.0 | 3.3 |
| Gross Capital Formation | 8.9 | -1.4 | -13.6 | 18.5 | -5.7 | 16.5 |
| Industrial Production (NACE Classification) | 6.5 | 3.6 | 0 | 5.5 | 2.9 | 6.9 |
| Construction | 4.1 | 0 | -8.1 | 1.5 | -6.1 | 1.0 |

[x] CZ – Czech Republic, HU – Hungary, PL – Poland, RO – Romania, SK – Slovakia, SL – Slovenia

*Source: CESTAT*

### Unemployment, Wages and Prices in 2001

| | CZ | HU | PL | RO | SL | SK |
|---|---|---|---|---|---|---|
| Unemployment Rate, % LFS | 8.1 | 5.7 | 18.2 | 6.6 | 6.4 | 19.2 |
| Average Gross Monthly Wage, USD ER* | 384.9 | 361.4 | 503.7 | 147.3 | 883.9 | 255.7 |
| Real Growth Rate of Wages | 3.6 | 6.4 | 3.3 | 4.4 | 3.2 | 0.8 |
| Consumer Price Indices (COICOP) | 4.7 | 9.2 | 5.5 | 34.5 | 8.4 | 7.3 |
| Industrial Producer Index | 2.9 | 5.2 | 1.6 | 41.0 | 8.9 | 6.5 |

*ER – Using Yearly Average Exchange Rate

### Government Deficit, Current Account and Debt in 2001

| | CZ | HU | PL | RO | SL | SK |
|---|---|---|---|---|---|---|
| Deficit as % GDP | -2.4 | n.a. | -4.5 | -3.3 | -1.4 | -4.6 |
| Foreign Debt Per Capita, USD | 2,112 | 2,450 | 1,833 | 513 | 3,370 | 2,053 |
| Current Account (%GDP) | -4.6 | -2.1 | -4.1 | -5.8 | 0.2 | -8.6 |

### Exports and Imports in 2001

| | CZ | HU | PL | RO | SL | SK |
|---|---|---|---|---|---|---|
| Imports, USD mln. | 36,472 | 33,682 | 50,275 | 15,552 | 10,148 | 14,763 |
| Growth of Imports | 14.0 | 4.0 | 3.2 | 23.9 | 0.5 | n.a. |
| Exports, USD mln. | 33,397 | 30,498 | 36,092 | 11,385 | 9,252 | 12,641 |
| Growth of Exports | 13.5 | 7.7 | 11.8 | 12.0 | 5.2 | n.a. |
| Trade Balance, USD mln. | -3,075 | -3,184 | -14,183 | -4,167 | -896 | -2,122 |

# IX. FORECASTS

**Forecasts**

| | CERGE-EI | | MF | | Patria | |
|---|---|---|---|---|---|---|
| | 2002 | 2003 | 2002 | 2003 | 2002 | 2003 |
| GDP (% Change, Constant Prices) | 2.5 | 3.0 | 2.7 | 3.3 | 2.0 | 2.5 |
| Industrial Production (% Change, Constant Prices) | 4.3 | 4.8 | n.a. | n.a. | 4.4 | 5.0 |
| CPI (% Change, Nominal) | 1.2 | 2.0 | 1.5 | 3.0 | 0.8 | 2.9 |
| PPI (%) | -0.3 | 1.5 | -0.2 | 2.1 | -0.4 | 3.1 |
| Wages (% Change, Nominal) | 6.0 | 6.5 | 6.2 | 5.4 | 7.4 | 6.5 |
| Unemployment Rate (%, End of Period) | 9.9 | 10.5 | 9.9 | 10.3 | 9.8 | 9.6 |
| State Budget Balance (bln. CZK) | -70.0 | -130.0 | -62.5 | -109.4 | -73.0 | -118.6 |
| Foreign Trade Balance (bln. CZK) | -70 | -90 | -84 | -78 | -108 | -120 |
| Current Account Balance (% GDP) | -5.0 | -5.5 | -4.6 | -4.2 | -5.6 | -5.7 |
| Exchange Rate (CZK/USD, Average) | 34.1 | 31.3 | 32.7 | 30.4 | 34.1 | 30.4 |
| PRIBOR 3M (%, Average) | 3.5 | 3.3 | 3.6 | 3.4 | 3.55 | 3.15 |

*Source: MF, CNB, CERGE-EI, as of December 2002*

*Editors' Note:*
*In January 2003, while this book was being typeset, the Czech Statistical Office announced a major revision in its GDP estimates for the second half of 2002. The revised annual GDP growth for the third quarter of 2002 is likely to be about 1.2 percentage points higher than previously indicated, due to an error in foreign-trade accounting of about 40 bln. CZK. This information could not be fully reflected throughout this book, but we did update the main macroeconomic indicators using the latest available estimates when possible.*

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## List of Abbreviations

**AV CR**
Akademie věd České republiky
Academy of Sciences of the Czech Republic

**BCA**
Bankruptcy and Composition Act

**CEE**
Central and East Europe

**CEEC**
Central and East Europe Countries

**CEFTA**
Central European Free Trade Agreement

**CESTAT**
CESTAT Bulletin of CSO

**CNB**
Czech National Bank

**CPI**
Consumer Price Index

**CSO**
Czech Statistical Office

**ČS**
Česká spořitelna

**ČSOB**
Československá obchodní banka

**ČTK**
Česká tisková kancelář
Czech Press Agency

**ČVUT**
České vysoké učení technické
Czech Technical University

**EU**
European Union

**GDP**
Gross Domestic Product

**IMF**
International Monetary Fund

**IPB**
Investiční a poštovní banka

**KB**
Komerční Banka

**KCP**
Komise pro cenné papíry
Czech Securities Commission

**MF**
Ministry of Finance

**MPO**
Ministerstvo průmyslu a obchodu
Ministry of Industry and Trade

**MPSV**
Ministerstvo práce a sociálních věcí
Ministry of labor and social affairs

**MZP**
Ministerstvo životního prostředí
Ministry of Environment

**NATO**
North Atlantic Treaty Organization

**NUTS**
Nomenclature des Unités Territoriales Statistiques

**OECD**
Organization for Economic Cooperation and Development

**PPP**
Purchasing Power Parity

**PSE**
Prague Stock Exchange

**WTO**
World Trade Organization

CERGE-EI

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