CZECH REPUBLIC 2006

Accelerated Growth

An Economic Survey
Produced by

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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THE ACADEMY OF SCIENCES OF THE CZECH REPUBLIC

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I. GENERAL INFORMATION

I.1 The Czech Republic – Economic Summary of 2005

The year 2005 was the first one during which the country was for the whole year an EU member, so it provides the first results of the effect of the enlargement that is not contaminated with out-of-EU data. The Czech Republic has experienced one of its highest economic growth years. The EU, and membership turned out to be an additional push. GDP growth was at 6.1% and 2006 should not be any different. This is better than any neighboring country (having a tie with Slovakia), but Latvia and Estonia were even able to reap the benefits of double digit growth.

Other figures do not show that much improvement, if any. Again, better than our neighbors, but we are not a leader of the new member state pack. Despite this strong economic growth, the unemployment rate has not sufficiently declined even though it is among the lower ones. The Czech Republic witnessed 8.9% unemployment at the end of 2005, which is about 0.6% lower than of a year before when growth was only 4.2%.

The Czech economy is still ranked high in terms of FDI attractiveness (number 1 according to the WCY 2006). The FDI fluctuates substantially, from 4.9 bln. USD in 2004 it peaked to 11 bln. in 2005, but 2006 is expected to be similar to 2004. To complete the picture, inflation slowed down to 1.9% in 2005 and accelerated in 2006.

Unfortunately, rapid growth and low inflation are coming hand in hand with expansionist governmental fiscal policy. The looming elections of 2006 put both the government and the opposition in the parliament on a spending spree, and the year 2005 has witnessed a deficit of public expenditure at an alarming magnitude of 3.6% with no signs of improvement for the future. All reforms were shelved and literally rather new ways of how to increase public spending are being engineered.

The promised prepared moderate fiscal reforms have been forgotten. Taking into account the fact that the Czech government was not able to fulfill its reform plans neither in the last year nor in 2003, the fulfillment of the fiscal criterion in 2004 seems more like happenstance. In fact, according to the (shelved) fiscal reform, the 3% criterion is expected to be exceeded in future years.

To sum up, EU entry was a success and no catastrophic scenario materialized. Yet, we can see the negative impact in shelving almost all reforms and self appreciation of the achieved goal. The Euro area entry is not interesting enough to foster a continuation of reforms that are vital, namely pension reform and public finances together with labor market functioning.

I.2 History and Geography

The first signs of people living in what is today the Czech Republic are as old as 1.6–1.7 million 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 appeared in 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. During the reign of the House of Luxembourg (1310–1436), Bohemia was the center of the known Holy West Roman Empire of German People, and Prague became one of the 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 armies. 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, the 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 leaders negotiated the future form of the federation. After two years of unsuccessful negotiation and following the 1992 parliament elections, the country was peacefully divided into the Czech Republic and Slovak Republic on January 1, 1993. In 1999, the Czech Republic joined NATO; it became an EU member in May 2004.

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.

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 was established.

1920 A democratic constitution was adopted.

1938 The Munich Agreement, occupation of part of Czechoslovakia by Germany and Hungary; the Second Republic, Czecho-Slovakia, was established with extended Slovak autonomy.

1939 The rest of the Czech territory was occupied by Germany, an independent Slovak state was established.

1945 Liberation, the Czechoslovak Republic was restored.

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

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

1989 The Velvet Revolution, end of the totalitarian regime.

1990 The first democratic parliamentary election in 42 years.

1991 Last Soviet military troops left the country.

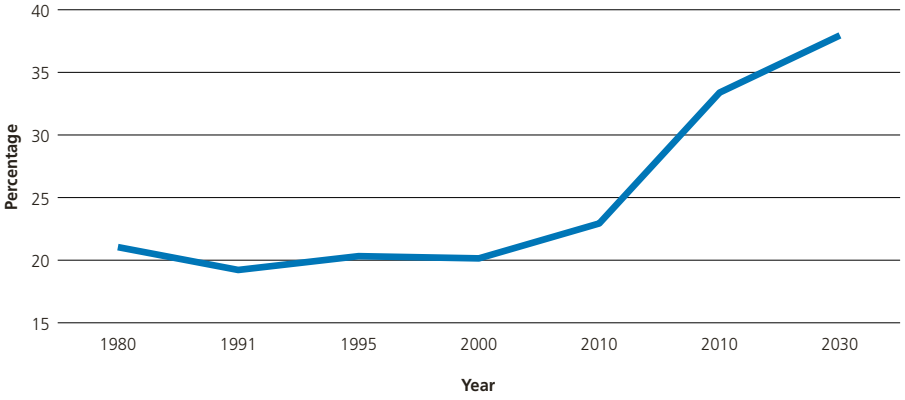
1992 The separation of Czechoslovakia, establishment of the Czech and Slovak Republics in 1993.

1999 On March 12, the Czech Republic officially joined NATO.

2004 In May 2004, the Czech Republic joined the EU.

I.3 Population

Figure I.3.1 Old Age Dependency Ratio Development Projection



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

With a population of 10.289 million (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 (see Table I.3.1 for absolute numbers). 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

Table I.3.1 Ethnic Minorities in the Czech Republic

	1991		2001	
	census	%	census	%
Slovak	314,877	3.1	193,190	1.8
Polish	59,383	0.6	51,968	0.5
German	48,556	0.5	39,106	0.5
Ukrainian	8,220	0.1	22,112	0.2
Total	**488,933**	**4.7**	**807,456**	**7.9**

Source: CSO

Table I.3.2 Age Structure of Population (in %)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
0–14	20.0	19.5	18.8	18.3	17.9	17.7	17.0	16.2	15.9	15.6	15.2	14.9
15–64	67.1	67.6	68.0	68.4	68.7	69.0	69.3	69.0	70.3	70.5	70.8	71.0
65+	12.9	13.0	13.1	13.3	13.4	13.6	13.7	13.9	13.8	13.9	13.9	14.0
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	89.0	92.0	94.0

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

Table I.3.3 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

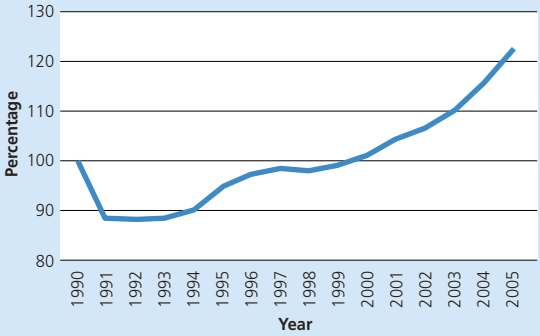
language is a part of the family of west Slavic languages (together with Polish and Slovak). The working age population (15–64 years) accounted for 69% of the total population as of 2000 (see Table I.3.2). The old age dependency ratio (the ratio of population older than 65 years to the working age population) is on a trend to reach almost one quarter by 2030, putting the current pay-as-you go system in danger of insolvency (see Figure I.3.2). The prognoses of demographic development suggest a slow decrease in the population (see Table I.3.3). The decline has temporarily slowed down due to immigration and a recent increase in the number of births. As the generation of children born in a government generated baby-boom of the 1970's (known as 'Husák's children') reaches their early 30's, they have started their families only now with a delay caused by a shift in public preferences and a greater stress on career prospects for women. The population now slowly ages as life expectancy, which is still far behind that in West European countries, increases. However, infant mortality, while not high by any standards, in 1993, fell to a level which is one of the lowest in the world.

Living standards during transition: GDP versus consumer durables

Gross domestic product of the Czech Republic in 1991 was by 12% lower than in 1990 and during nineties stayed below the level of the GDP in 1990. The dramatic fall of the real gross domestic product was caused by the transformation process of the Czechoslovak economy and later the Czech economy, respectively. A decrease of the real GDP was not surprising for the situation of the Czech economy during the early stage of its transition. The majority of the transition countries went through a recession in the beginning of the transformation process from a centrally planned economy to a market economy. Since1992, GDP has risen steadily with the exception of the year1998, but it was still below the level of 1990 during the whole decade (see Figure I.3.2).

The economy after the Velvet Revolution underwent an enormous structural change to which individuals, firms, and a newly established government had to get used to. It was to be expected that this accommodation process was accompanied by a decrease in the standard of living of the population. However, one can argue that this was a statistical illusion, in part due to the fact that a portion of production was never sold and that statistics were manipulated

Figure I.3.2. Real GDP Index (1990 = 100)



Source: computations based on OECD statistics database

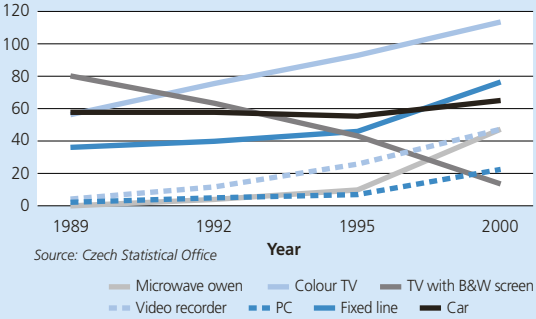
in the communist era in attempts to fulfill the infamous five-year plans. A different prospective is given if one investigates data on consumer durables, which tell a somewhat different story. Ownership of consumer durables represents an important component of the living standards of households. The ownership of durables followed a dramatically different trend than the GDP during the early 1990s.

Number of reported consumer durables per 100 households increased steadily from 1989 (see Figure I.3.3). The number of consumer durables didn't just increase, but there is a significant change in quality of these consumer durables. The most illustrative case is television. The number of color TVs in Czech households has risen, and the structure has moved towards color TVs. In 1989, only 42% of TVs were color; nowadays, 90% of TVs have a color screen, and the TVs with black and white screens have almost disappeared. This process is apparent for washing machines as well. Old mechanical washing machines were substituted by modern, fully automatic ones.

The number of video recorders and PCs per 100 households is now 20 times bigger than in 1989. It has increased from 2.7 to 47.0 in the case of video recorders and from 1.8 to 21.4 in the case of PCs. Formerly rarely used consumer durables such as microwave ovens, which had almost not been used in the Czech Republic in 1989, are nowadays common. Interestingly, the number of cars has not been rising steadily since 1989. The number of cars actually slightly decreased in the early nineties, but we observe a steady upward trend since 1995. The initial level of 1989 was reached in 1997, and in 2003 one hundred Czech households owned 68.3 cars, which is by 10 cars more than in 1989.

These figures suggest that in spite of the decrease of the real GDP during the transformation period, the living standard of Czech households was not affected if measured by the number of consumer durables. The number of consumer durables didn't just increase by a significant amount; the structure in consumer durables also shifted towards higher quality and up-to-date goods.

Figure I.3.3. Consumer Durables in 1989–2000 (per 100 households)



Source: Czech Statistical Office

II. POLITICAL AND INSTITUTIONAL DEVELOPMENT

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 limited 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 current president, Václav Klaus, was elected in February 2003. He replaced Václav Havel, the leader of the Velvet Revolution, who served as the Czechoslovak president from 1989 till 1992 and then as the Czech president from 1993 till 2003.

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 suspending veto; or suggest amendments (in both cases by a simple majority). In the latter two instances, the Lower House can vote either to 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 (or, Chamber of Deputies), Czech governments are either coalition or minority governments or both. The party system features the extreme-left Communist Party which typically controls third-highest number of seats in the House. Executive cooperation with the Communist is a political no-no among the democratic parties, so coalition building in the Czech Republic is notoriously hard. Even Social Democrats still obey their 1995 commitment not to create an executive coalition with the unreformed Communists. The last four Lower House elections (1996, 1998, 2002, and 2006) thus have led to fragile cabinets, and produced an ongoing series of political stalemates.

Between 1992–1996, the Czech government was composed of a majority coalition of the 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). In the 1996 election, the formerly safe majority coalition gained only 99 MPs in the 200-seat House. In a historic concession,

Table II.3.1. Composition of the Chamber of Deputies

Election Year	2002				2006			
Party	Votes	%	Seats	%	Votes	%	Seats	%
ODS	1,166,975	24.5	58	29.0	1,892,475	35.4	81	40.5
ČSSD	1,440,279	30.2	70	35.0	1,728,827	32.3	74	37.0
KSČM	882,653	18.5	41	20.5	685,328	12.8	26	13.0
Coalition KDU-ČSL and US-DEU	680,671	14.3	31	15.5				
KDU-ČSL					386,706	7.2	13	6.5
SZ	112,929	2.4			336,487	6.3	6	3.0
Others	484,499	10.2			319,153			
Total of Valid Votes	4,768,006				5,348,976			
Eligible Voters	8,264,484				8,333,305			
Participation	4,789,145	58.0			5,372,449	64.5		
Not Valid Votes	21,139				23,473			

Source: CSO

Social Democrats (ČSSD) tolerated the coalition in exchange for the controlling seats in the Lower House.

After the preliminary 1998 elections, the "winners' without a majority curse" fell upon the Social Democrats, who were unable to establish a coalition government with just 32% of popular votes. The resolution at that time was almost a reverse of the 1998 compromise: The ODS committed itself to tolerating a minority one-party government of the 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. In particular, the two major parties proposed changes of the electoral system, which nonetheless ended in vein due to the refusal of the Constitutional Court.

In the successive 2002 election, Social Democrats won with 30.2% of the vote. A warning sign was the rising number of votes for the Communists: They gained 18.5% percentage points, their best result since 1989, while all democratic parties lost their share of votes. This was in part due to the lowest turnout (58%) in post-communist history.

The ČSSD, KDU-ČSL, and Freedom Union (US) managed to form a government, with the weakest possible majority of 1 vote (101 against 99). The weak government went through several crises: In June 2004, after the Social Democrat's crushing defeat in the European Parliament elections, PM Vladimír Špidla was forced to resign from his position as party leader and prime minister and instead became the European Commissioner. He was replaced by 34-year-old Stanislav Gross, one of the most influential and ambitious leaders of the ČSSD. His cabinet soon broke down after a scandal involving the prime minister's family finances. The coalition found a way out of the crisis by appointing Jiří Paroubek (ČSSD) as the new prime minister.

Table II.3.2. Composition of the Upper House

	1998		2000		2002		2004	
Party	**Seats**	**%**	**Seats**	**%**	**Seats**	**%**	**Seats**	**%**
KSČM	4	4.9	3	3.7	3	3.7	2	2.5
ČSSD	23	28.4	14	17.3	9	11.1	6	7.4
KDU-ČSL	17	21.0	18	22.2	13	16.0	11	13.6
ODS	26	32.1	21	25.9	25	30.9	35	43.2
ODA (+US)	11	13.6	12	14.8	1	1.2	1	1.2
US-DEU					6	7.4	4	4.9
Independent	n.a.	n.a.	13	16.0	22	27.2	19	23.5
Others					2	2.5	3	3.7
Total	**81**	**100.0**	**81**	**100**	**81**	**100.0**	**81**	**100.0**

Source: CSO

Current Major Political Parties

The most important political parties currently 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 and openly advocates the return of the pre-1989 regime; successor to the former Communist Party of Czechoslovakia, which was founded in 1921; has had stable representation since 1989. Chairman: Vojtěch Filip.*

Czech Social Democratic Party *(Česká strana sociálně demokratická, ČSSD) – a left centrist party of traditional European social-democratic orientation; supports 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; established the minority government in 1998 and a coalition government in 2002. Chairman: Jiří Paroubek.*

Green Party *(Strana zelených, SZ) – a centrist party; albeit established in 1989, a newcomer to the Parliament in 2006 (aside from Latvia, the only Green Party in a Parliament in a post-communist country); advocates environmental tax reform, energy reform, health and social security reforms; aims at deeper European integration and stands against US dominance in NATO. Chairman: Martin Bursík.*

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 the government in periods 1990–1998 and 2002–2006; fiscally conservative advocate of a "social market economy;" opposes the recently adopted same-sex union bill; strongly supports Czech membership in NATO and in the EU. Chairman: Jan Kasal.*

Civic Democratic Party *(Občanská demokratická strana, ODS) – a right-wing conservative party; a dominating member of government coalitions between 1992–1997; under the leadership of Václav Klaus in the 1990s, the driving force of economic and political transition; nowadays advocates flat tax, healthcare reform, tuition at universities, and consolidation of government deficits; strongly supports Czech membership in NATO; holds a "Euro-skeptic" attitude toward the EU and opposes the European Constitution. Chairman: Mirek Topolánek.*

II.4 Elections of 2006

The Lower House. In the pre-election year, Jiří Paroubek (ČSSD) increased pressure upon the coalition partners and began explicit cooperation with the Communists in the Parliament. On May 24th, they jointly overturned two presidential vetoes and passed the new Labor Code as well as a bill for nonprofit hospitals. Both KDU-ČSL and US maintained their coalition, yet openly signaled willingness to join a right-centrist coalition after the elections.

The ČSSD-led cabinet under Jiří Paroubek raised tensions: on the one hand, the economy was boosted; on the other hand, deep controversies arose in healthcare, corruption scandals flourished, large procurements were debatable, an immense structural budgetary deficit emerged, and new social legislation imposed a strategic debt on the coming governments.

This contributed to a long, stressful, and expensive electoral campaign. The intensive campaign involved personal insults, verbal attacks, allegations of shady dealings, and classified material from the police. Varying opinion polls indicated a close and fierce duel of two major parties (ODS and ČSSD). The vote reduced to either of two likely options: an ODS-led, center-right coalition, or a minority government of ČSSD, explicitly backed by Communists.

The binary choice, scare tactics as well as campaign intensity raised the electoral turnout by 6.5%. The ODS won elections with a record-high 35.4%, and the ČSSD followed second with 32.3%. Surprisingly, however, neither of the two options came true, as the electoral result ended in a genuine deadlock: the right-of-center block of ODS, KDU-ČSL and Green Party (SZ) gained in total exactly 100 seats, which is exactly the representation of Social Democrats plus Communists.

In principle, the following options turn out to be the most likely: (a) a 100-seat coalition of ODS, KDU-ČSL, and SZ, tolerated by ČSSD; (b) a minority government of ODS, tolerated by ČSSD; (c) a grand coalition of the ODS and ČSSD; (d) a minority government of ČSSD, tolerated by ODS; (e) a provisional government appointed by the ODS and ČSSD; (f) a "rainbow coalition" (all democratic parties without Communists); (g) preliminary elections. Negotiations are driven by the following long-term considerations: (i) The ODS and ČSSD seek to reshape the electoral system, yet only success at the autumn Upper House election may grant them the qualified majority in both chambers which is required for constitutional amendments; (ii) President Václav Klaus favors a Parliament that would ensure his re-election in 2008; (iii) the ČSSD aims to eliminate the bargaining power of minor parties, especially of Greens tend to steal their votes.

The ODS was given a first try and launched coalition negotiations. On June 26th, the ODS, KDU-ČSL, and SZ signed a coalition agreement, splitting the posts 9:3:3. This is not yet the end as the Social Democrats so far have made no concession. Six weeks after the election, as this brochure goes to press, no further progress in deal-making is visible. In spite of that, stock markets, money markets, and foreign investors remain calm, as zero difference in key policies is expected in either of the outcomes.

II.5 Regional Administration

The local government in the Czech Republic has two layers: 6,234 municipalities and 14 regions (NUTS 3). These are self-administered units; people elect their representatives for municipal and regional councils. The municipalities are responsible for the usual kinds of local public services (elementary schools, local libraries, street cleaning, etc). In addition to that, 205 bigger towns have a special status of "municipalities with extended jurisdiction." These also carry out some administrative agendas of the central government (ID cards and passports, social security allowances, special child care, legal protection, driving licenses, etc.) not only for their own residents but also for the residents of nearby smaller municipalities. This arrangement was adopted in 2003, when the 76 county offices of the central government were abolished and their competences transferred either downstream to the "municipalities with extended jurisdiction" or upstream to the regional governments.

While the division of administrative responsibilities between the regional governments and the central government is clear, the two groups continue to clash over the division of funds, which are still largely controlled by the center. The regional offices took over some administrative duties, and, more importantly, hundreds of health, social, and cultural institutions formerly administered by the county offices. These institutions are still financed by grants from the central budget, leaving little freedom for financial management decisions by regional offices. Hospitals in particular were transferred to the regional governments, many in bad financial shape and with large debts, which the regional authorities are unable to cover from their own revenues.

Table II.5.1. Regions

Number of regions	13[a)]				
Minimum size (km²)	3,163	Minimum population	304,343	Minimum number of municipalities	132
Maximum size (km²)	10,057	Maximum population	1,269,467	Maximum number of municipalities	1,048
Average size (km²)	5,943	Average population	689,166	Average number of municipalities	473
Municipalities with extended jurisdiction					
Number of municipalities with extended jurisdiction			205		
Minimum size (km²)	48	Minimum population	9,500	Minimum number of municipalities	1
Maximum size (km²)	1,242	Maximum population	376,172	Maximum number of municipalities	111
Average size (km²)	382	Average population	44,200	Average number of municipalities	31

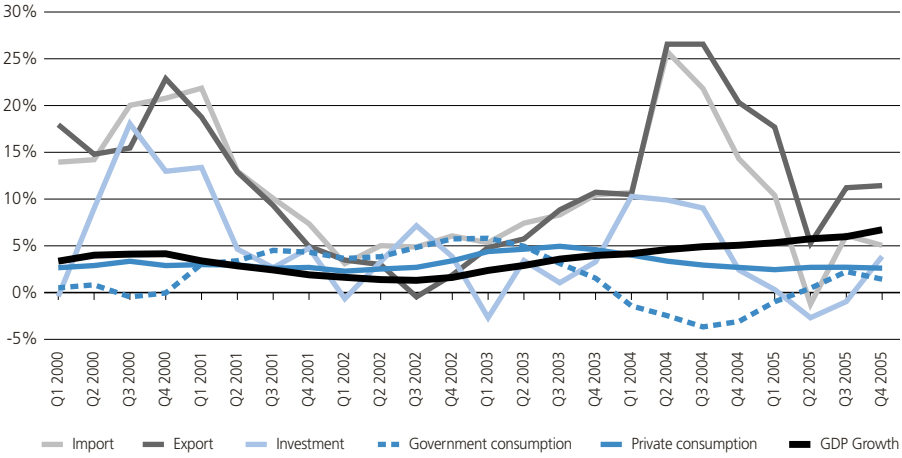
Note: a) Data for capital Prague are excluded from the tables since Prague has a specific status
Source: CSO

Secondary education had already come under the supervision of regional offices in 2002, but the funds still flow directly from the Ministry of Education. Although the regional offices have been operating for five years, their budgets are still prepared in an ad-hoc manner. Legislation that would set up stable rules for the division of tax revenues between the central government and the regions has been under preparation for years. So far, the regions have very limited sources of revenue that they directly control. As much as 86% of their revenue (101.5 billion CZK in 2004) comes as subsidies from the central government, most of which is again tied to specific purposes.

III. MACROECONOMY

III.1 Gross Domestic Product

Figure III.1.1. GDP Growth Decomposition



The growth rate of the Czech economy has accelerated in 2005 compared to previous years. A record high rate of increase in the gross value added has been registered in the 4th quarter at the level of almost 7%. The major factor contributing to such a favorable economic development was an expansion in the manufacturing sector. The improvements in industrial production, which accounted for more than 50% of the total GDP growth, resulted from a sharp increase in productivity as well as important structural changes. The latter occurred due to the significant inflow of foreign direct investments,

Table III.1.1. GDP growth rates, %

	2004	2005	2006* Q1	2006* Q2	2006* Q3	2006* Q4	2007* Q1	2007* Q2	2007* Q3	2007* Q4
with adjustments to other forecasts**	4.7	6.0	6.38	5.88	5.87	5.2	5.25	5.39	5.71	5.78
without adjustments to other forecasts	4.7	6.0	6.35	5.71	5.78	4.9	4.88	5.01	5.39	5.42

** predictions are done by CERGE-EI using time-series models*

*** after taking into account EIU and OECD predictions; it is assumed that these institutions' predictions depict systematic bias or deviation from actual figures.*

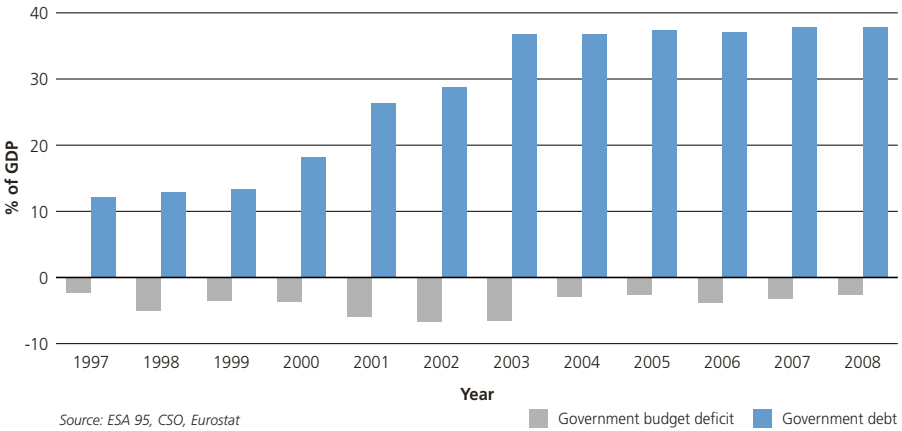
Source: CSO

favorable developments in demand, and strengthening the competitiveness of domestic goods on the market. Overall, most sectors including trade, financial intermediation, and energy added to the economic growth. The major demand-driven factor of GDP growth was a positive trend in net exports. Its negative value decreased in 2005 in comparison to 2004 and 2003 due mainly to the improvements in the trade balance. The development in final consumption expenditure through the year 2005 showed a volatile pattern with an increase in the rate of growth to 3.4% in the 3rd quarter followed by a decline to 1.6% in the 4th quarter. A slowdown in household consumption and government consumption were the most significant factors behind such dynamics.

In accordance with the CNB forecast, GDP is expected to grow further in the near future due to both net exports and investments. But, the forecasts done at CERGE-EI show that despite growth rates remaining high, a mild slow down in growth rates are expected for the 2006–2007 period.

III.2 Public Budget Deficits

Figure III.2.1. Public Deficit and Debt



Source: ESA 95, CSO, Eurostat

In the first half of the 1990s, due to the balanced and seemingly healthy public finances the Czech Republic won an image of a prosperous and stable transition country. However, political and economic crises in 1997 shattered this position and since then the public sector started to generate large deficits. These deficits will be even larger once the liabilities of the Czech Consolidation Agency are fully accounted for. In such a case, the debt to GDP ratio can reach 48% in 2006.

Over the year 2005, state debt rose by 98.3 billion of CZK, from 592.9 to 691.2 billion of CZK (see Figure III.2.1). This increase was driven by the deficits financed from

domestic medium and long term state bonds (an increase from 397.0 bln CZK in 2004 to 487.5 bln CZK in 2005) that were used to cover 70% of public debt in 2005. Since 2004, Euro denominated bonds have been used to finance deficits (an increase from 48.8 bln CZK in 2004 to 78.9 bln in 2005) and now they are used to finance almost 11% of state debt (8% in 2004). It is expected that financing via Euro denominated bonds will continue as a part of strategy to decrease the amount of short term debt from 68.7% of total debt in 2000 to 25.0% in 2004 and planned to 20% in 2006) and to finance deficits via medium and long term bonds.

As a result of this strategy, the modified duration of state debt increased from 2.8 years at the end of 2002 to 3.8 years by the end of 2005, and it reached a maximum of 4.2 in the second quarter of 2005. Regardless of the decrease in 2005, the state debt duration is in the band set by the Ministry of Finance.

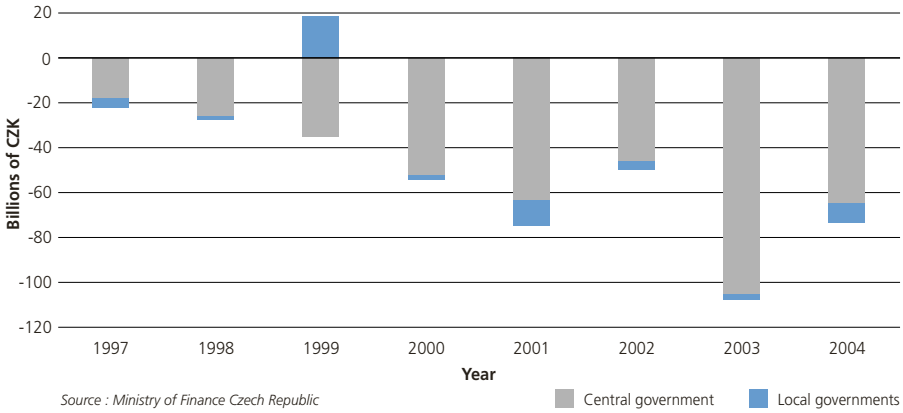
Interest costs of short term liabilities showed a decreasing trend over the first half of 2005, but this trend reversed by end of the year (in January 2.70% p.a., in June 1.68% p.a., and in September 1.83% p.a. for liabilities with a maturity of 52 weeks).

Interest costs of debt service show an increasing trend but not as dynamic as the total amount of public debt. The increase in interest costs of foreign debt is driven by newly issued government bonds denominated in Euro (30.1 CZK billon) and the Czech Republic maintains stable levels of ratings on its debt denominated in foreign currencies (Standard & Poor's, A-, stable; Moody's, A1, stable; Fitch IBCA, A-, stable).

In the beginning of the year 2006, the state budget was changed to increase spending by 5 billion of CZK to cover the costs of the spring flood which results in larger deficits than expected or forecasted.

Currently, mandatory expenditures constitute more than 80% of the state budget expenditures, and only 5 to 10% of total expenditures can be changed at the time of budget creation. This state of affairs does not allow the Czech Republic to fulfill the Maastricht criterion on public deficits. A

Figure III.2.2. Public Deficit Composition



Source : Ministry of Finance Czech Republic

proposal from the Convergence Program for the years 2006–2008 indicate that low deficits in 2004 and 2005 are not sustainable due to the consolidation of state agencies, such as the National Property Fund and the Czech Consolidation Agency, and even in a no-fiscal consolidation scenario, the deficit will reach 6.3% of GDP in 2006.

Therefore, it is expected that the fraction of the state deficit on public deficit will continue to increase due to expected deficits of the state budget (see Figure III.2.2). The Convergence Program aims to reduce the deficit, but it remains to be seen whether this objective will be achieved, especially considering the results of the 2006 elections.

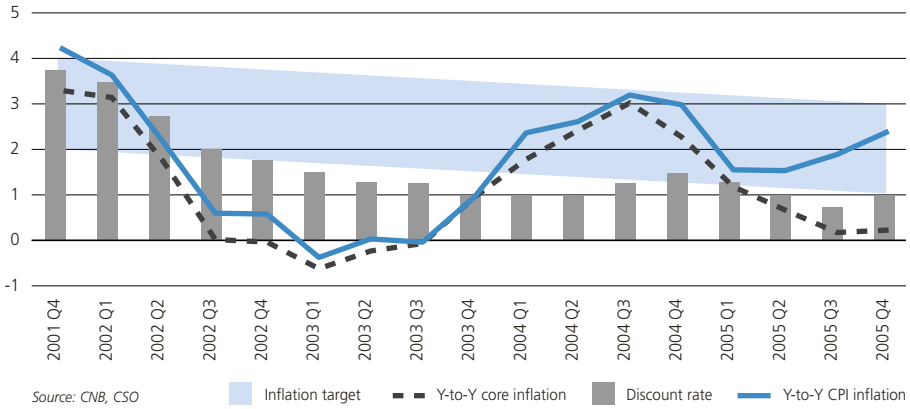
III.3 Monetary policy in 2005

Meeting the target

In 2005 the Czech National Bank (CNB) successfully kept the headline inflation within the target band of 1–3 percent, in spite of the lower core inflation (see Figure III.3.1, with the headline inflation adjusted for price deregulations). The CNB's original predictions oscillated around the lower target band. However, the headline inflation stayed within the target band particularly due to substantial price deregulations which were larger than the CNB expected. Without this exogenous factor, inflation would have moved below the target.

Over the year 2005, the CNB changed its key policy rates four times and this included a trend reversal. Until October, the rates were on their decline to their historical minimum – the discount rate decreased from 1.25 to 0.75 percent – when the CNB suddenly announced an increase to 1 percent. This sudden move was accompanied by an announcement that the monetary policy would start a period of increasing discount rates. This was not expected by financial markets and was immediately reflected in exchange rates. It also eliminated the negative interest rate differential against the main European

Figure III.3.1. Inflation Targeting



Source: CNB, CSO

Central Bank rate. There were two major factors affecting monetary policy in 2005: (i) persistent nominal appreciation of the Czech crown, and (ii) uncertainty about the development in the Euro area. While currency appreciation stood behind the arguments for the rates decline, an expected increase in the Euro area rates acted in the opposite direction, which apparently motivated the actions of the CNB.

Future challenges

The number one challenge for the monetary policy in the future remains an accession to the monetary union and adoption of the Euro in 2010. The CNB will be responsible for meeting the Maastricht criteria in terms of inflation and later in fixing the nominal exchange rate. In this regard, a question remains of when the CNB announces the beginning of focusing on the European Union target. This target is currently by one percentage point lower than in the Czech Republic, and it will be of great interest what the parity will be at which the nominal exchange rate will be fixed. The maneuvering space for monetary policy is not large, since inflation forecasts remain high (due to oil price shocks, and prepared price deregulations), and the currency permanently appreciates. There is a possibility that the CNB will attempt to cool down the economic performance to meet the Maastricht convergence criteria by 2010.

Table III.3.1. CPI Forecasts

Annual inflation rate, %		2004	2005	2006* Q1	2006* Q2	2006* Q3	2006* Q4	2007* Q1	2007* Q2	2007* Q3	2007* Q4
with adjustments to other forecasts**	average***	2.80	1.90	2.04	2.33	2.54	2.59	2.51	2.42	2.36	2.44
	end of period	3.06	2.38	2.42	2.72	2.63	2.61	2.07	2.38	2.36	2.95
without adjustments to other forecasts	average***	2.80	1.90	2.05	2.38	2.63	2.71	2.63	2.55	2.48	2.59
	end of period	3.06	2.38	2.47	2.88	2.78	2.72	2.15	2.55	2.51	3.17

* *CERGE-EI forecasts*

** *after taking into account EIU and OECD predictions; it is assumed that these institutions' predictions depict systematic bias or deviation from actual figures.*

*** *Presented average inflation rate characterizes the percentage change of average price level of latest four quarters against the average price level of previous four quarters.*

Source: CERGE-EI Forecasting Model

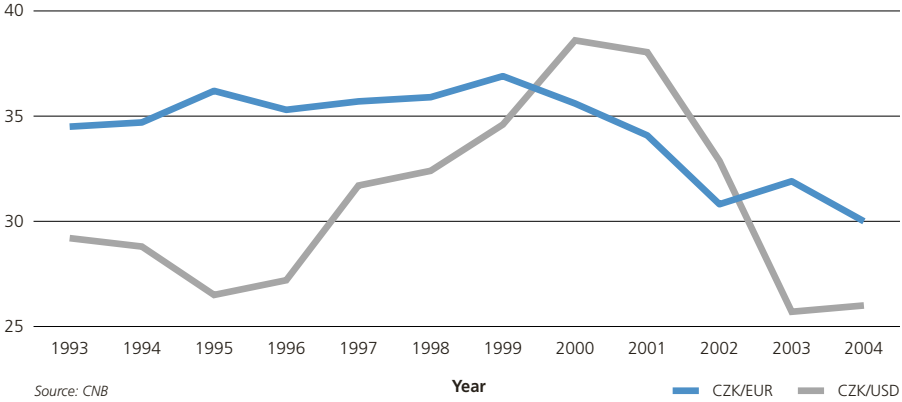
Exchange rate pass-through into Czech inflation

The new member-countries of the European Union who join the ERM-II might be viewed as balancing their monetary policy between low inflation, requested by the Maastricht Criteria, and a stable exchange rate vis-à-vis the euro imposed by the ERM-II. In this context, a link between the exchange rate and inflation or, more precisely, the pass-through effect of a variation in the nominal exchange rate on domestic inflation receives particular attention. Traditionally, exchange rate pass-through (ERPT) is defined as the percentage change in the local currency price of an imported good resulting from a 1 percent change in the nominal exchange rate between the exporting and importing countries. Recently, the definition of exchange rate pass-through was enlarged by encompassing consumer and producer prices. The estimation of exchange rate pass-through along the pricing chain allows the measuring of the relative pass-through, which means an assessment of the exchange rate pass-through to, for example, import prices compared to the pass-through to another price category, e.g. consumer prices.

Estimating the pass-through effects for the Czech Republic along the pricing chain, we find that the exchange rate pass-through to consumer prices does not typically exceed 25%. The highest pass-through is found for export and import prices, and a much lower pass-through is observed for producer and consumer prices, showing that the exchange rate pass-through decreases on its way from one stage of production to another. This can be one of the explanations why despite a high degree of openness, the exchange rate pass-through in the Czech Republic is far from complete. At the same time, the speed of the pass-through is relatively high, as expected for a small open economy. For the Czech Republic, the exchange rate shock disappears after approximately six months. In other words, the effect from exchange rate shock to other variables (price indices) attains its maximum roughly after 6 months, and at least a half of this effect occurs during the first 3 months. Thus, the speed of the exchange rate shock transmission to all prices is quite high, which could be in the case of a small open economy. However, in absolute terms, the magnitude of pass-through to domestic prices is on average about 20% of the exchange rate shock. One possible explanation is that increases in prices induced by the catching-up process dominate downward price pressures stemming from the exchange rate appreciation. Furthermore, the magnitude of exchange rate pass-through decreases by moving from the initial stage of production to final goods.

III.4 Exchange Rate

Figure III.4.1. Exchange Rates



Source: CNB

At the beginning of the economic transition in the Czech Republic, the exchange rate was used as a nominal anchor of monetary policy. It was tightly pegged to a currency basket, and the level of the nominal peg set in 1991 had not changed until May 1997. The combination of stability with the presence of an inflation differential led to fast real appreciation. The appreciation and the introduction of convertibility meant that the pegged exchange rate could no longer play its stabilization role, and after speculative attacks the crown was allowed to float in 1997. Along with this move, the Czech National Bank adopted in 1998 inflation targeting as a key monetary instrument instead of the preceding exchange rate anchor.

The (lightly) managed floating regime has remained unchanged until now, although changes must be expected as the Czech Republic is going to join the European Monetary Union (EMU) in the future. However, given the large budget deficits, the crown is unlikely to join the EMU before 2010–11. This forecast is also in line with the position of the Czech National Bank that does not want to enter the European Exchange Rate Mechanism (ERM) II regime too soon and not for longer than necessary (the exchange rate would be pegged to the Euro for at least two years).

As far as bilateral exchange rates are considered, the exchange rate of the Czech crown to the U.S. dollar has traditionally been less stable than the CZK/DEM and later CZK/EUR exchange rate: This may be attributed to close trade and investment ties between the Czech Republic and the euro area. 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 did not exceed 14% in extreme cases. The largest depreciation occurred during the period following the currency crisis in May 1997, but even the change in the exchange rate during the currency

crisis was not as dramatic as those suffered by Asian countries during the same period.

Since 2000, the crown has been steadily appreciating (see Figure III.4.1). The appreciation against the USD became extremely dramatic in the last quarter of 2004 because of the evolution of the exchange rate between the Euro and the dollar.The CZK remained at this level against the USD also during the first quarter of 2005, but later went back to the level of approximately 25 CZK/USD. The crown has experienced flat development in the first half of 2005 while hovering around 30.1. In the second half of 2005, the crown gained strength and went gradually to 28.97 CZK/EUR, observed in December 2005. With respect to the USD, the Czech crown fluctuated in the first four months around 23 CZK. In May, after an appreciation of the USD against the EUR, the exchange rate CZK/USD went back to the level of the October 2004 and remained untill the end of the year. The CZK/USD was quoted at 24.4 in December 2005.

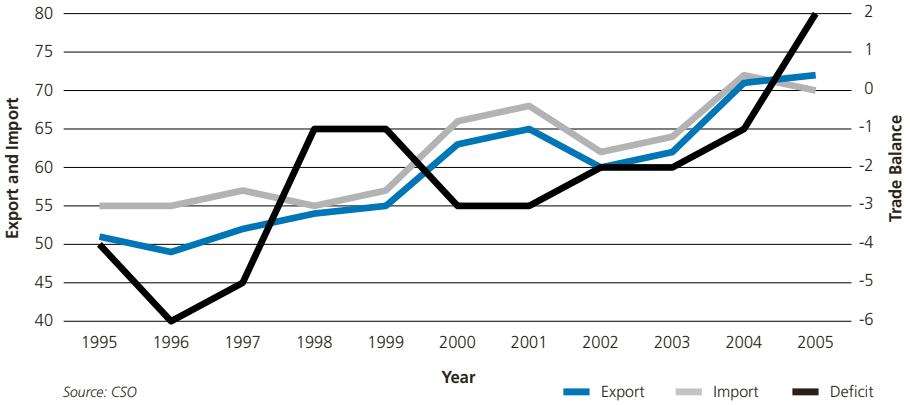
The long-term trend of gradual real appreciation of the crown, driven by convergence of productivity and institutional characteristics of the economy to the EU level, is likely to continue but at a slower pace than in previous years. In the near future, the behavior of the CZK nominal exchange rate with respect to the Euro will depend on the inflation and interest differential – if the inflation rate remains low, the CZK may even experience mild nominal appreciation. The development of the CZK/USD exchange rate in 2006 will be determined by the development of the EUR/USD exchange rate.

III.5 Foreign Trade and Balance of Payments

The Czech Republic can serve as a textbook example of a small open economy, in which international trade is an important component of its GDP (See III.5.1). The proportions of exports and imports of goods and services to the country's GDP in 2005 amounted to 72% and 70%, respectively (merchandise exports amounted to 63%). The past trend in openness has been almost invariably that of the increasing importance of international trade for the Czech economy. Exports of goods grew faster than GDP while imports did not – merchandise exports increased by 8.8% and imports by 4.9% in 2005 (in CZK and current prices) after a strong increase in 2004 where exports and imports saw a 25.7% and 21.4% growth rates. A trade deficit has turned into a surplus of 40 billion CZK (1.3% of GDP) for the first time since 1993. We expect a similar development in 2006. The overall trade development is understandably similar to that of trade in goods and services combined. This trend is likely to continue, and the trade balance is likely to remain in positive territory in the near future.

Until 2000, the current account deficit used to be lower than the trade balance deficit because of the positive balance on the services account. While the balance in services remains positive (0.6% of GDP in 2005), this positive effect is now dwarfed by a widening deficit in the income balance of the current account. Moreover, this development of the income balance is likely to continue because of the huge inflow of direct investment in recent years (see the next chapter) and consequent increases in profit repatria-

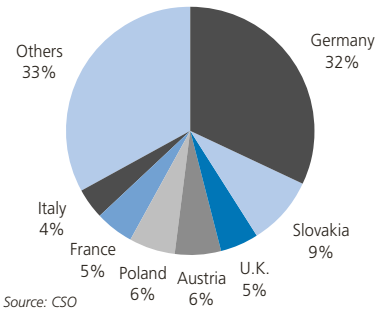
Figure III.5.1. Foreign Trade, Goods and Services (% of GDP)



Source: CSO

tion by the side of foreign multinationals (see section below). Unlike in previous years, it is therefore the current account deficit that should be watched closely, primarily because of increasing income outflows. However, if we consider the complete balance of payments, there does not seem to be any acute danger. The inflow of capital and the present exchange rate regime (managed floating) mean that any repetition of balance of payments problems similar to May 1997 is unlikely.

Figure III.5.2.
Structure of Exports by Destination



Source: CSO

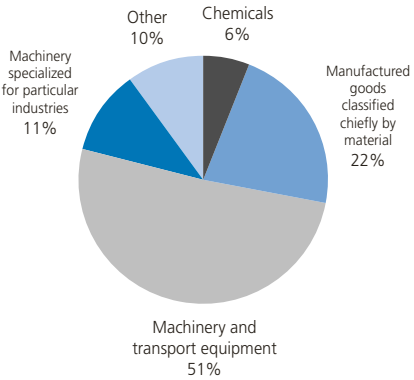
The EU remains the main trading partner of the Czech economy (see Figure III.5.2); its share of total trade turnover reached 78% in 2005 (EU25). This share increased in 2005 because several other European transition economies (Visegrad countries) that used to be important trade partners of the CR also joined the EU; the share of trade with the original EU15 slightly decreased to 66.3%. If trade with individual countries is considered, then international trade with Germany stands out clearly since it constitutes close to two thirds of the country's trade with the EU and 33% of the overall exports.

The composition of Czech foreign trade has changed dramatically during the transition. Specifically, the share in exports of machinery and transport equipment (SITC 7) has doubled since 1993, while raw materials and semi-finished products have shrunk in similar proportions. This trend continues, and it was the increase in exports of machinery and transport equipment (the opening of the TCP car factory) that helped to bring trade balance into the black in 2005. For more

details on the commodity structure of Czech exports see Figure III.5.3.

The accession to the EU in 2004 did not bring any major shift in aggregate trade patterns since the association agreements had already created a free trade area between the CR and the rest of the EU. Nevertheless, further increases in foreign trade were evident. However, the accession also means that the CR will have to accept the common trade policy with respect to third countries. This change of trade regime has substantially influenced trade, e.g., trade with China (Czech Republic's fourth biggest trade partner with 5.2% share of Czech imports) as the Czech Republic has together with other EU countries liberalized trade in textiles with China.

Figure III.5.3. Commodity Structure

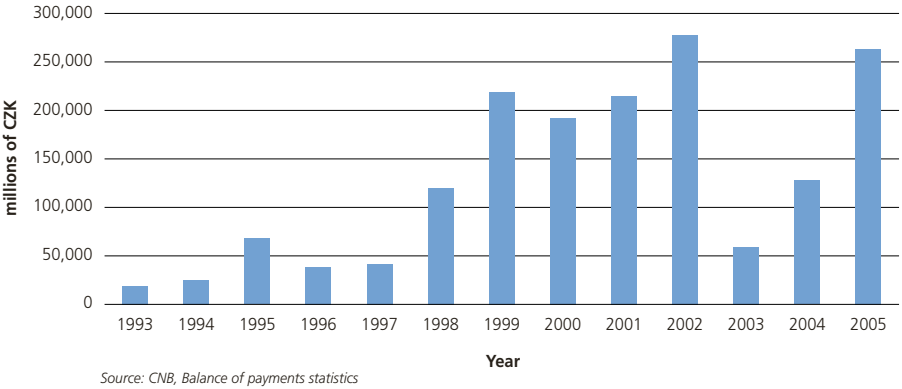


Source: Eurostat

III.6 Foreign Direct Investment (FDI)

FDI started to accelerate dramatically after the financial crises of 1997, mainly thanks to the privatization of three big banks and Transgas during 1998–2002 (see Figure III.6.1). However, years 2003 and 2004 saw no major one large-scale investment project and the increase in FDI have been significantly lower and spread across a number of economic activities. According to the Czech National Bank, the amount of FDI in the

Figure III.6.1. Total Inward FDI in to the Czech Republic, 1993–2005



Source: CNB, Balance of payments statistics
Note: Until 1997 data included FDI in equity capital, starting from 1998 data on reinvested earnings and other capital have been included in FDI flows, year 2005 – preliminary data

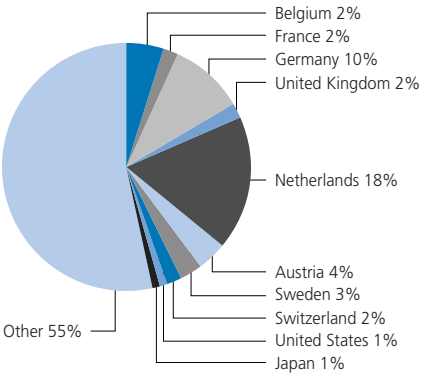
Czech Republic at the end of 2004 reached 57.3 billion USD.

In 2005, the Czech government finally sold its 51% stake in the major telecommunication company to Spain's Telefonica. The deal with the price of 3.5 billion US dollars was one of the largest privatizations of the post-communist era. In 2005, another big, controversial government privatization project is the sale of oil and gas giant Unipetrol. This was finally resolved with the majority stake of 63% acquired by Poland-based PKN Orlen. A part of the agreement was a three-year restructuring program. Due to these large deals, FDI inflow was close to 11 bn USD in 2005.

There still remains a large state share in the electricity monopoly CEZ, which should be privatized in the future. Meanwhile, CEZ contributes to the FDI outflows with its investment into a Bulgarian distribution company. By the end of 2005, Czech investment abroad reached about 4.6 bn USD. This is still rather low, but it can be expected that the recent surge in inward FDI will be followed with a certain lag by growth of outward FDI in the future. While most of the outward investment is directed to other Central and Eastern European or to Asian countries, about 80% of inward FDI comes from old EU members (see Figure III.6.2).

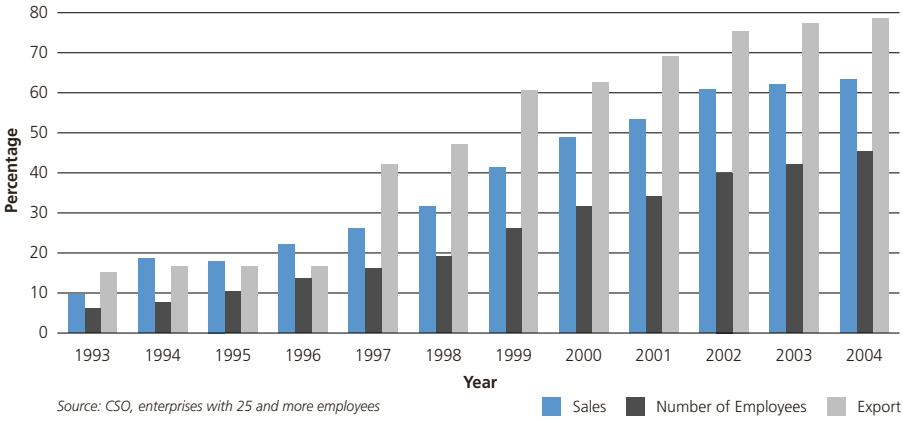
The role of foreign capital in manufacturing has been steadily growing, and recently, foreign owned manufacturing firms were estimated to produce 65% of total sales, to

Figure III.6.2.
FDI to the CR by Geographical Zones in 2005 (% of Total FDI)



Source: CNB, Balance of payments statistics

Figure III.6.3. Share of Foreign Firms in Manufacturing



Source: CSO, enterprises with 25 and more employees

provide 45% of employment and to produce 80% of total exports (see Figure III.6.3). Foreign direct investment is an important component of transformation in Czech manufacturing and helps to facilitate a rapid change. Moreover, in many companies, improvements in performance are the key to competitiveness in global markets.

The Attractiveness of Czech Firms to Foreign Investors in the Post 1995 Period

(Based on: Tóth P., and P. Zemčík (2006) "What Makes Firms in Emerging Markets Attractive to Foreign Investors? Micro-Evidence from the Czech Republic", Working Paper 294, CERGE-EI, Prague.)

Looking at patterns in FDI flows from developed countries to the Czech Republic during the post 1995 period (see Figure III.6.1), we see an upward trend in the last three years. There are two potential explanations for this trend, relatively low employee compensation and Corporate Income Tax. Comparing the average employee compensation across Visegrad countries (see Table III.6.1), the Czech Republic had a slight but gradually fading comparative advantage over Hungary during the late 1990s. However, Slovak employers paid out on average only 70% of the amount their Czech counterparts paid to their workers during the whole post 1995 period. Despite low labor costs, Slovakia struggled with a bad international renomé due to political and

Table III.6.1. Employee compensation rate (foreign country/Czech Republic)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Austria	6.02	5.13	5.04	5.28	4.70	4.68	4.40	4.01	3.77	3.60
Belgium	7.17	6.14	6.02	6.25	5.69	5.62	5.29	4.88	4.59	4.43
Denmark	6.76	6.14	5.84	6.10	5.55	5.62	5.32	4.83	4.60	4.40
Finland	5.78	4.99	4.87	5.27	4.73	4.77	4.57	4.12	3.90	3.77
France	6.49	5.57	5.40	5.59	5.00	4.94	4.63	4.21	3.96	3.81
Germany	6.23	5.32	5.11	5.31	4.70	4.66	4.31	3.89	3.63	3.43
Greece	2.28	2.14	2.27	2.45	2.30	2.35	2.25	2.14	2.04	2.02
Hungary	1.48	1.14	1.13	1.19	0.94	1.08	1.08	1.14	1.18	1.09
Ireland	4.71	4.05	4.10	4.36	4.05	4.13	3.96	3.64	3.41	3.36
Italy	5.12	4.53	4.46	4.55	4.09	4.08	3.82	3.49	3.31	3.18
Luxembourg	7.20	6.14	5.97	6.28	5.76	5.88	5.55	5.10	4.74	4.56
Netherlands	5.00	4.29	4.18	4.47	4.05	4.10	3.90	3.67	3.48	3.32
Poland	0.88	0.91	0.93	1.01	0.96	1.00	1.11	1.09	0.86	0.71
Portugal	2.38	2.19	2.17	2.33	2.13	2.21	2.11	1.95	1.85	1.78
Slovak Republic	0.71	0.63	0.67	0.79	0.67	0.76	0.70	0.69	0.67	0.70
Spain	4.17	3.72	3.67	3.87	3.48	3.50	3.32	3.09	2.97	2.91
Sweden	6.33	6.06	6.05	6.32	5.14	5.93	5.45	4.67	4.45	4.36
Switzerland	7.69	7.06	6.13	6.58	5.86	5.87	5.82	5.37	5.05	4.45
United Kingdom	5.11	4.17	4.67	5.59	4.87	5.66	5.42	5.10	4.56	4.15
United States	6.07	5.02	5.14	6.27	5.41	6.54	6.60	6.37	5.10	4.13

Source: OECD

economic instability through the late 1990s. As for CIT-s (see Table III.6.2), Hungary was an absolute leader in the region with a stable rate of 19.6%. The remaining three of the Visegrad-4 (V-4) started with a rate of about 40%. Even though Poland and Slovakia gradually reached 20% by 2004, the Czech Republic did not go below 28% by the same year.

The story is markedly different once contrasting the above indicators between Western Europe and the group of V-4. German employers, for example, paid out on average six times higher compensations to their employees than Czech workers earned in 1995 (see Table III.6.1). Though the German-Czech, Austrian-Czech, and Dutch-Czech compensation ratios settled at an approximate ratio of 3 by 2004. CIT-s were also substantially higher in the three main Western European FDI source countries (see Table III.6.2). German CIT topped the list with 56.8% in 1995 while dropping to 38.3% by 2004. The latter number is roughly comparable to the S-CIT-s in Austria and the Netherlands of the same year. To sum up, the main foreign investors in the Czech Republic on average benefited from more than three times lower labor costs and about 10 percentage points lower corporate income tax rates compared to their home countries.

Table III.6.2. Country Corporate Income Taxes (CIT) rates

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	Difference 2004–1995
Austria	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	0.0
Belgium	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	34.0	34.0	-6.2
Denmark	34.0	34.0	34.0	34.0	32.0	32.0	30.0	30.0	30.0	30.0	-4.0
Finland	25.0	28.0	28.0	28.0	28.0	29.0	29.0	29.0	29.0	29.0	4.0
France	36.7	36.7	36.7	41.7	40.0	36.7	36.4	35.4	35.4	35.4	-1.2
Germany	56.8	56.7	56.7	56.0	51.6	51.6	38.3	38.3	39.6	38.3	-18.5
Greece	40.0	40.0	40.0	40.0	40.0	40.0	37.5	35.0	35.0	35.0	-5.0
Ireland	40.0	38.0	36.0	32.0	28.0	24.0	20.0	16.0	12.5	12.5	-27.5
Italy	52.2	53.2	53.2	41.3	41.3	41.3	40.3	40.3	38.3	37.3	-15.0
Luxembourg	40.9	40.9	39.3	37.5	37.5	37.5	37.5	30.4	30.4	30.4	-10.5
Netherlands	35.0	35.0	35.0	35.0	35.0	35.0	35.0	34.5	34.5	34.5	-0.5
Portugal	39.6	39.6	39.6	37.4	37.4	35.2	35.2	33.0	33.0	27.5	-12.1
Spain	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	0.0
Sweden	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	0.0
UK	33.0	33.0	31.0	31.0	30.0	30.0	30.0	30.0	30.0	30.0	-3.0
Cyprus	25.0	25.0	25.0	25.0	25.0	29.0	28.0	28.0	15.0	15.0	-10.0
Czech Republic	**41.0**	**39.0**	**39.0**	**35.0**	**35.0**	**31.0**	**31.0**	**31.0**	**31.0**	**28.0**	**-13.0**
Estonia	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	0.0
Hungary	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	19.6	17.7	-2.0
Latvia	25.0	25.0	25.0	25.0	25.0	25.0	25.0	22.0	19.0	15.0	-10.0
Lithuania	29.0	29.0	29.0	29.0	29.0	24.0	24.0	15.0	15.0	15.0	-14.0
Malta	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0	0.0
Poland	40.0	40.0	38.0	36.0	34.0	30.0	28.0	28.0	27.0	19.0	-21.0
Slovakia	40.0	40.0	40.0	40.0	40.0	29.0	29.0	25.0	25.0	19.0	-21.0
Slovenia	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	0.0

Source: European Commission

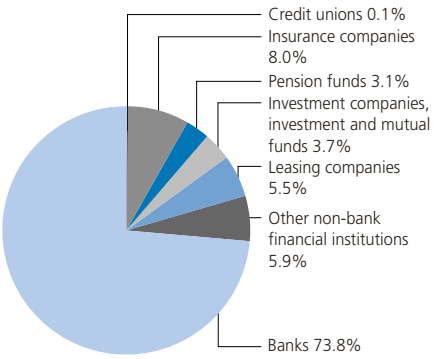
IV. FINANCIAL AND BUSINESS ENVIRONMENT

IV.1 Financial Sector

The Czech Republic has a relatively large financial sector for a middle-income country, with total assets equivalent to 136 percent of GDP as of end 2005. This reflects in good part the smaller inflationary erosion of banks' balance sheets in the early transition years, compared to other new EU countries. The Czech financial sector still has a substantial scope in which to grow: the ratio of total financial sector assets to GDP in the Euro Area, for example, is about 2.5 times higher than in the Czech Republic.

The banking sector still dominates the financial sector (see IV.1.1), even though its share in total financial sector assets has declined from about 90 percent in the mid-1990s to 74 percent as of the end of 2005. This decline reflected the removal of poor-quality assets from banks' balance sheets (which contributed to a relatively slower pace of growth of banking assets in absolute terms) and a rapid growth in non-bank financial institutions, such as insurance companies, pension funds, and leasing companies. The present share of banks in the financial sector is close to the Euro Area average.

Figure IV.1.1.
Structure of the Czech Finacial Sector



Source:

As in other emerging markets in Central and Eastern Europe, the Czech financial sector is dominated by foreign-owned financial institutions. In the banking sector, for example, institutions with majority foreign ownership accounted for 96 percent of total assets as of the end of 2005. This is a result of a privatization of the four large state banks between 1997 and 2001, entry by foreign banks, and an impressive process of consolidation, reflecting improvements in prudential regulations and the elimination of weak financial institutions through withdrawal of licenses, liquidations, and mergers (for example, the number of licensed banks was reduced from 55 in the mid-1990s to 36 in 2005, and the number of licensed non-bank institutions has also declined, by more than 50 percent in most sectors except insurance).

The financial sector has been highly profitable and generally sound in the last four years. The position of the sector strengthened further in 2005, aided by the growth of the domestic economy. The average return on equity (ROE) was 25 percent in banks and 52 percent in insurance companies in 2005. These values are comparable with other emerging markets, and substantially above those in advanced countries (ROEs for Austrian and Belgian banks were about 15

percent in the same period, for example). The quality of lending, which was very weak in the 1990s, triggering several bank failures and major bail-outs, has improved throughout the first half of the first decade of the 21st century. This trend continued in 2005, with the share of non-performing loans in total non-bank client credit reaching 4.1 percent at the end of 2005. Stress tests, performed by the central bank, suggest that the banking system is resilient to moderate external shocks.[1]

One of the most pronounced banking sector developments has been a rapid growth in household lending. Household credit has been growing at an average annual rate of 25 percent since 2002, outpacing credit to enterprises by a wide margin. Overall, private sector credit growth in the Czech Republic has been relatively modest in comparison with other new member states, but higher than in advanced economies. Like in other emerging market economies, rapid credit growth in the Czech Republic largely reflects financial deepening. The initial level of credit to the private sector in the Czech Republic has been significantly below what would be justified by the country's level of economic development, and most empirical analyses project that the level of financial intermediation will continue to increase. Privatization and the increase in foreign ownership facilitated financial deepening. Disinflation and the associated trend decline in policy rates also supported credit growth. Government policies and regulations (such as generous subsidies for construction saving, a favorable tax treatment of housing loans, and, more recently, a relaxation of rules on the use of mortgage loans) provided a boost to growth in household credit, and in particular to mortgages, which currently account for about two thirds of loans to households.

The financial sector has become more interconnected with the external environment, which has many positive aspects for the domestic market. In particular, the dominance of foreign-owned institutions in the market has led to improvements in profitability, risk management, governance, as well as range, quality, and availability of financial services. Also, cross-border competition has strengthened with a number of financial entities that are currently operating under the single European license system. Hundreds of other banks, insurance companies, and investment firms have made notifications and can offer their services in the Czech Republic under the principle of free cross-border provision of services. Banks from outside Europe are also considering establishing branches in the Czech Republic.

The increased interconnectedness also brings about some challenges. In particular, the growing internationalization of the financial market creates challenges for effective supervision of the financial sector, and increases the need for good cross-border supervisory co-operation. For example, the dominance of foreign ownership, while yielding substantial benefits for Czech customers also brings new potential risks in particular by creating new channels of transmission of foreign shocks. Also, the Czech koruna has been recently used as a cheap financing currency for investment in other currencies, which increases the risk that global or regional turbulences spill over to the Czech financial market and into financial stability.

[1] See Czech National Bank, *Financial Stability Report* 2005, available at www.cnb.cz.

An important feature of the financial sector is substantial ownership and functional links between institutions in its individual segments. At the end of 2005, there were nine banking regulated consolidated groups and a significant insurance company financial group. The presence of conglomerates creates the need for effective financial sector supervision across the segments of the financial sector. Responding to these challenges, the Czech authorities have established an integrated agency for financial sector supervision within the central bank (CNB), by merging CNB's banking supervision with insurance and securities supervision. The new integrated supervision started operating in April 2006.

Interdependence of Central and Eastern European Stock Markets

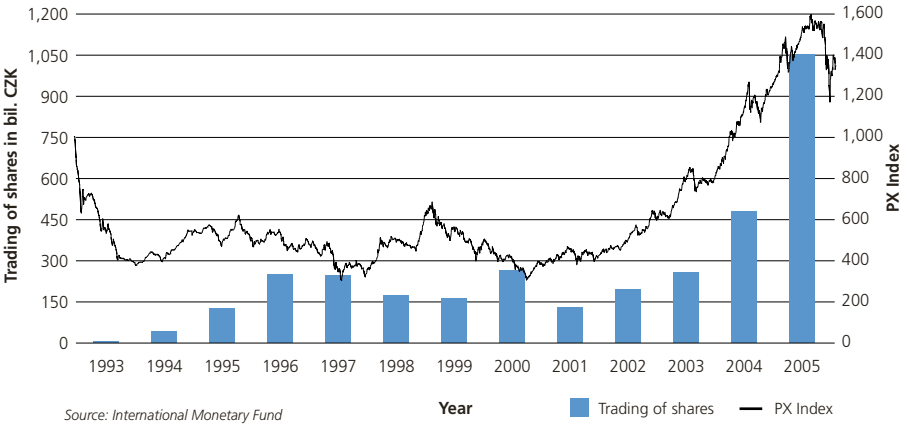
(Based on: Egert, B., Kočenda, E., 2005. Contagion Across and Integration of Central and Eastern European Stock Markets: Evidence from Intraday Data. William Davidson Institute Working Paper, No. 798, University of Michigan Business School.)

Stock markets in Central and Eastern Europe (CEE), especially those in Budapest, Prague, and Warsaw, underwent some remarkable developments both in terms of market capitalisation and daily trade volumes from the very beginning of the economic transformation. Although the financial system of these countries largely remains bank dominated, the stock exchanges appear to be well integrated with world financial markets following the lifting of restrictions on portfolio capital movements. However, given that these markets are small compared to the stock exchanges of the largest OECD countries, they are sensitive to shifts in regional and world-wide portfolio adjustments of large investment funds and other market participants, even though the amount of capital involved in such moves are by no means very large by global standards. This underpins the popular wisdom according to which these markets are more volatile than well-established stock markets.

Recent studies focus on the intra-day data, which were not previously available. Potential links and spillover effects for stock returns and stock volatilities among markets in Budapest, Prague, and Warsaw are investigated. Also studied are their interactions with selected major markets in the EU on the basis of intraday data recorded in five-minute intervals for the period from mid-2003 to early 2005. Given that this period does not cover any major crisis, the focus is on interdependence rather than on contagion. While there does not seem to be any long-term relationship for any of the stock index pairs, short-term spillover effects are identified both in terms of stock returns and stock price volatility. In general, spillover effects are stronger from volatility to volatility as compared to spillover effects from a return to return series.

IV.2 Czech Capital Markets

Figure IV.2.1. Development of Prague Stock Exchange (1993–2005)



Source: International Monetary Fund

Development of the Czech capital market has been rather non-standard due to the way privatization was conducted at the beginning of the 1990s. Mass privatization created about 1,700 companies that were directly placed in the newly established Prague Stock Exchange (PSE). Unfortunately, the market could not cope with such a huge number of illiquid shares, and the expectations of establishing a strong market within a short period of time did not materialize. Instead, insider trading, price manipulation, fraud in the investment funds industry, and abuses of minority shareholder rights prevailed in the mid-1990s. A small office in the Ministry of Finance which was supposed to regulate the market did not manage it, and even the creation of the Czech Securities Commission in 1998 did not significantly improve the situation due to the weak enforcement of the new rules. The market was not transparent because most transactions were not carried out on the centralized, price-setting market, but either outside the PSE or at the PSE but as so-called "block or direct trades" that do not perform a price discovery function. Such a situation did not lead to investors' confidence, and market liquidity as well as the development of the whole market suffered.

There were numerous attempts to improve the conditions on the market, especially by the PSE. They included a division of the market into several tiers with different capitalization and information obligations, delisting of the illiquid share issues, introducing a new trading system (System for support of share and bond market – SPAD) for blue chips, and prohibiting its members to trade these titles outside of the PSE. Despite the reforms and the adoption of the EU legislation, the situation in the capital market has been improving only gradually, and the market still does not serve as a source of capital for enterprises.

Nevertheless, the development of the total value of trades as well as the PX index is

positive[2] (see Figure IV.2.1). The growth from the previous years continued also in 2005. Total volume of trade has risen by approximately 25% and according to the statistics of the Federation of European Stock Exchanges (FESE) based on its trading results PSE took first place in the Central European region. Increase in trade value was driven by a surge in trading with shares on the main market, which accounts for more than 95% of the total trading with shares. Unfortunately this lively trading on the main market is only represented by several blue chips that are part of the SPAD system.

This development also points out that the old problems are still present. The number of liquid shares is very low, and new issues are not coming. The only good news was the IPO of Zentiva (a pharmaceutical firm) that took place in June 2004. Zentiva is traded in SPAD; it also became part of the PX index. Nevertheless, there was no IPO on the PSE in 2005 if we do not take into account the dual listings of the ORCO and CME shares[3]. Even though thanks to the high prices and the enthusiasm of investors, the situation for IPOs is in fact very favorable, but companies seem not to be willing to open up to the public. Another problem is the fact that the primary emission of the shares can be profitable only if it is large enough[4]. Despite the fact that some firms consider an IPO, the market is still only waiting for new companies to enter. Moreover, 18 companies decided to leave the market in 2005, and thus, there are only 39 share issues traded on the PSE.

In 2006, there are new investment opportunities coming to the PSE. These include the trading of futures that started in October and the possibility to trade investment certificates. Moreover, based on the demand for a market segment without strict information duties, the unregulated free market has been set up on the PSE. The application for trading on this market can be submitted either by the issuer or by a different party, and securities are admitted to trade based on the decision of the PSE general manager. The unregulated free market is thus similar to the free market that was launched by the RM-system last year. If the stock exchange succeeds in attracting new companies this way remains a question of time.

[2] From March 2006 the PX index has replaced PX-50 and PX-D. PX index will be the continuation of the PX-50 index and includes the most liquid share issues included in the SPAD system.

[3] In comparison to this, there were 35 IPOs last year in Poland.

[4] The experts estimate that its size needs to be at least 1 billion CZK.

Protection of Minority Shareholders

(Based on Jan Bena and Jan Hanousek (2006):"Rent Extraction by Large Shareholders: Evidence Using Dividend Policy in the Czech Republic," CERGE-EI working paper no. 291)

Failures in corporate governance have recently attracted wide attention around the world. In the US, where most corporations have dispersed ownership, corporate governance researchers and practitioners concentrate predominantly on how to align incentives of management with those of atomistic shareholders. In contrast, the predominant form of

ownership in Europe and East Asia is control by a large shareholder, which often supplies top management. Reflecting such very different ownership structure, the attention of corporate governance is shifted from solving management-shareholder conflict to solving the one amongst shareholders themselves. The key agency costs in firms with concentrated ownership arise because a dominant shareholder has incentive to consume private benefits and extract rents at the expense of minority shareholders. The question of interest is whether rent extraction takes place, how significant is it, and whether minority shareholders are able to monitor large shareholders in order to preclude it in the Czech Republic. The decisions taken by large shareholders about how corporate profits are distributed can be documented by analyzing the dividend policy of more than 1,500 large Czech firms in the period 1993–2003. This analysis is the first comprehensive empirical study of dividends from a transition country in Central and Eastern Europe.

Legally, all shareholders have the same cash flow rights in the Czech Republic. Paying dividends follows this principle as distributed cash reaches all shareholders proportionally, but a dominant shareholder exerting effort to seek private benefits associated with ownership does not. The finding is that corporate dividend policy in the Czech Republic depends on concentration and domicile of ownership. Firms with a dominant majority owner pay dividends less often and their target payout ratio is small. In contrast, firms with a majority owner and at least one strong minority owner (monitored majority) pay dividends more often and the target payout ratio is large. The probability that a firm with a dominant Czech majority owner pays a dividend is 0.09. If the Czech majority owner is accompanied by a significant minority shareholder (Czech monitored majority) the probability increases to 0.16. The same pattern holds for foreigners. The probability that a firm with a dominant foreign majority owner pays a dividend of 0.26 is a lot lower than the same probability if the majority owner is accompanied by a significant minority shareholder 0.58 (foreign monitored majority). The associated target payout ratios for these ownership structures are as follows: positive but very close to zero for the dominant Czech majority ownership structure; 0.82 for the Czech monitored majority ownership structure; 0.61 for the dominant foreign majority ownership structure; and 0.86 for the foreign monitored majority ownership structure.

The above set of results for ownership concentration supports our hypothesis that, first, dominant shareholders extract rents from firms and do enjoy private benefits of control and, second, significant minority shareholders limit rent extraction by increasing the probability that a dividend is paid and increasing the target payout ratio. The presence of strong minorities shifts the dividend policy in the same direction both for Czech as well as for foreign largest owners and we highlight those minority shareholders plays a key role in determining dividend policy in the Czech Republic. Such results indicate that rent extraction and dilution of minority shareholders seems to be associated predominantly with Czech owners as foreigners pay higher dividends relative to Czechs in all cases.

Expropriation by corporate insiders is not simply a matter of redistribution amongst shareholders only. It is damaging more generally as corporate insiders might choose to invest in projects with low or negative returns just because they create opportunities for expropriation. Investment decisions are hence distorted and corporate growth is slower than it could be. Such

inefficient investment behavior, if undertaken by a large number of firms, has adverse effects on the whole economy. This is of an exceptional interest in countries like the Czech Republic which struggle to catch up with developed economies of Western Europe. Each dollar available for investing should be allocated to growth opportunities with the highest returns, and the investment decision should not be based on what projects make expropriation easy. To address these problems regulators should, first, strengthen the rights of minority shareholders to enable them to limit expropriation. Second, and more importantly, regulators should support the development of sound and transparent financial markets prevalent in Western Europe as they seem, based on extensive both anecdotal and research evidence, to police dominant owners more effectively, comparatively better than countries like the Czech Republic.

IV.3 Legal Framework and Bankruptcy

Corporate bankruptcy is an important institution of a market economy. Its function is to free scarce resources from unproductive uses and put them into the most productive ones, respecting to a maximum extent the pre-bankruptcy arrangements between the debtor and his creditors. In the Czech Republic, resolution of corporate insolvency represents a weak link in the legal and institutional framework. Czech bankruptcy procedures have long been egregious for their lengthiness, low returns to creditors, liquidation bias, and, sometimes, questionable competency and integrity of bankruptcy trustees and judges.

The situation should change with the introduction of the new insolvency law (the "Law") that ended its path through the legislative process, after some five years of debates and preparations, on April 14th, 2006 when it was signed into law by the president. The Law will become effective on January 1st, 2007. The new Law will completely replace the current Law on Bankruptcy and Composition which was introduced in 1991 and has been amended twenty times since then. The new Law differs from the previous one in many respects of which we shall focus on the most important ones here. Conceptually, the Law represents a more modern and market-compatible regulation. It treats the resolution of insolvency not only as a procedural problem but also as a problem of corporate governance of an insolvent firm, and it is built on the assumption that creditors are residual claimants, giving them the right to make crucial business decisions facing the bankrupt firm.

As for the individual features, the most important are the introduction of the reorganization chapter, giving secured creditors full priority, giving creditors the right to choose a bankruptcy trustee, and introducing disincentives for various disruptive actions. We now describe the individual features.

The reorganization chapter is inspired mainly by Chapter 11 of the U.S. Bankruptcy Code but is modified to account for certain differences of the Czech legal and institutional environment. Its purpose is to adjust the capital structure of an insolvent firm, reorganizing the claims on the firm's value,

and let the firm continue under the same legal entity (and, possibly, management). This procedure should help save value when there is significant asset specificity or when the industry or the whole economy is in recession and a market sale would not yield the maximum value for creditors. The problem is, however, how to prevent debtors (and/or their managers) from abusing the reorganization chapter to maintain control over the business even when this harms the creditors. Incidence of this perverse behavior has been indicated even in the U.S., thus – given the infamous track record of the Czech bankruptcy profession – it could be much more of an issue in the Czech Republic. As a result, the major difference between the Czech reorganization chapter and the U.S. Chapter 11 is the right of the creditors to decide whether reorganization should be used or not. This should ensure that reorganization will only be used when it makes sense and that it will not represent a way for the debtor to escape creditors, which would have undesirable ex-ante effects on the credit market in the form of a higher interest rate and credit rationing.

Under the current legislation, secured creditors are entitled to receive in bankruptcy only up to 70% of the value of their collateral, whereas out of bankruptcy they are entitled to full value of the collateral. This situation leads to various disruptive types of behavior. First, banks, as the major secured creditors, are ex-ante motivated to over-securitize their claims so that the 70% of the collateral value is enough to cover the whole claim. This behavior in turn reduces the debt capacity of firms. Should one accept the arguments made by various bankruptcy scholars (e.g. Lucian Bebchuck or Alan Schwartz) for less-than-full priority of the secured debt, one would rather have to formulate the rule in such a way that the secured creditor would be entitled to receive 70% of the minimum of the collateral value and the value of his claim. Second, knowing that he is entitled to obtain only 70% of the collateral value in bankruptcy (given this value is not high enough), the secured creditor prefers to avoid bankruptcy, which reduces the credibility of a bankruptcy threat and, potentially, gives the debtor a means how to hold the secured creditors up (by threatening to declare bankruptcy on himself). Giving secured creditors full priority in bankruptcy, the new Law attempts to avoid these problems.

The current bankruptcy law does not give creditors a right to choose their own bankruptcy trustee. This crucial person in the bankruptcy procedure is selected by the judge, and the creditors can only file a motion to dismiss him which the judge, however, does not need to follow. Such regulation creates space for cronyism and corruption, as documented by several uncovered corruption scandals. The new Law will enable the creditors to choose their own trustee, but they will not be able to dismiss him at their will, only with the approval of the judge and following some misbehavior. The reason for the creditors' limited discretion over the trustee is to provide him with a reasonable degree of independence and to guarantee the continuity of the procedure.

The new Law also tries to tackle the problem of various disruptive actions by both the debtors and the creditors. On the side of the debtor, a common problem is delaying the bankruptcy filing as much as possible because this leads to the loss of control over the firm. Between the moment a bankruptcy filing should be made and the moment it actually is made, the firm value may fall sig-

nificantly and the creditors may suffer a loss as a result. To induce the debtor to file in time she is made personally liable for the difference between a creditor's actual compensation and the face value of his claim, provided a willful delaying of the filing may be shown. There is also a liability of a creditor for damage caused by a fraudulent bankruptcy filing. Also important are sanctions for creditors who submit an obviously overvalued claim in order to assure themselves control over the bankruptcy procedure.

IV.4 Developments in the Telecommunications' Industry

The year 2005 can be characterized as the year of Czech telecoms consolidation and globalization. Furthermore, the regulatory and legislative environment in the sector of telecoms, newly named the sector of electronic communications together with digital TV broadcasting, had to adopt fully the set of EU Directives, known as the "New Regulatory Framework", in 2005.

In the fixed line telecoms, a massive consolidation took place. The major consolidating operator on the "alternative operator scene" was GTS Czech that acquired in the end of 2004 a similarly sized operator Aliatel. By formalizing this acquisition in February 2005, a clear No. 2 fixed line operator with the name GTS Novera was formed. In July, the main acquisition of the decade – the sale of 50.1% majority stake of the incumbent operator Český Telecom to the Spanish incumbent Telefonica – was finally completed. Together with Český Telecom, Telefonica also gained 100% control of the mobile operator Eurotel that was fully acquired by Český Telecom in 2004. Apparently, a dominant position of Český Telecom in both fixed and mobile telecoms has been one of the main motives of Telefonica for their first acquisition in the Central European region. Later in the autumn 2005, the consolidation in the fixed line sector continued with GTS Novera acquiring Contactel, Nextra, and Telenor Networks that strengthened GTS Novera positions mainly in the segment of small offices and home offices and small and medium enterprises segment. This, in turn, has enabled GTS Novera to compete with Telefonica / Český Telecom across all business segments. In the residential segment, the dominant position of Telefonica / Český Telecom has remained unchallenged with several smaller competitors, e.g. Czech On Line, Radiokomunikace, Tele2 playing a marginal role.

In mobile telecoms, the Czech market became from 2005 a battlefield of global players – Telefonica O_2 controlling Eurotel, Vodafone acquiring Oskar in spring 2005 and, finally, T-Mobile. T-Mobile claimed in 2005 surpassing its rival Eurotel and gaining the market leader position in the number of SIM cards. In 2005, also preparations for converged fixed and mobile services started in Telefonica's Český Telecom/Eurotel and that were sped up by Telefonica's pan-European acquisition of the mobile operator O_2.

In terms of market value, the Czech telecoms market reached a total revenue value of around 120 billion CZK in 2005 with mobile services creating almost two-thirds of the total value.

From a customer perspective, the year 2005 does not present a significant milestone for a completely new end-user service; however, several new services started in a trial or

pilot regime and are expected to be launched fully in 2006. Among others, Eurotel launched video calls based on high-speed Internet service known as "third generation" (3G) and Český Telecom started a pilot project on IP TV using ADSL lines. A common trend in telecoms is bundling traditional telecommunication services, mainly connection to Internet, with Internet and TV content – IP TV on fixed ADSL lines or TV in mobile handsets using DVB-H standard.

In the regulatory area, the new Act on electronic communications came into effect from May 2005, which has implied duties on the regulator regarding the implementation of a new regulatory regime and telecoms market analysis. By February 2006, the regulator should have finished the analysis of the main telecoms markets (17 relevant markets) that included fixed and mobile telephony, data services, and broadcasting. In the markets, where distortions to free competition (mainly due to a dominant position) were identified, the regulator was obliged to impose remedies by May 2006 and decide on keeping, increasing or canceling regulatory obligations on dominant players imposed by the previous "ex-post" regulation. There have been delays in completing the analysis of most relevant markets, which induced criticism from the European Commission and also some personnel changes in the regulatory authority later in 2006.

Overall, the year 2005 significantly changed the competitive structure and the regulatory environment of the Czech telecommunications industry. It was also the year of major investments in new technologies and network coverage for new services both in the fixed and mobile sectors. In 2006, it should become clear whether these structural changes and new investments will materialize in more beneficial services to customers and contribute to the growth not only in telecom sector, but to the growth of the Czech economy.

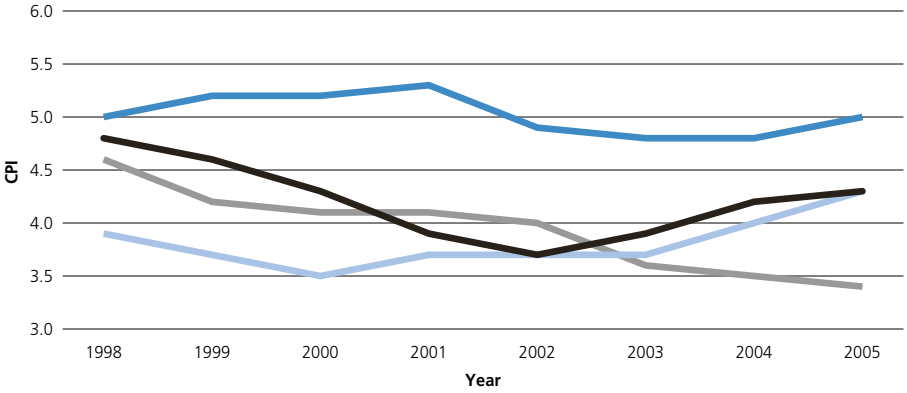
IV.5 Corruption

In early 2005, the Czech daily Mladá Fronta Dnes reported that 67 percent of the Czech population believed that corruption is an alarming problem in need of a solution. In late 2005, the Prague Post reported about another poll according to which nearly 70 percent thought that corruption increased in 2005, while only 3 percent thought that corruption was in retreat. A recent survey of the SC&C agency for Mladá Fronta Dnes [24. 4. 2006] found that 36 percent of the Czech population admitted having paid a bribe and 21 percent claimed that they were offered a bribe.

While Tranparency International's latest numbers did not bear out this increasingly dark picture of the state of corruption – the Czech Republic roughly maintained its pitiful TI ranking and score from the previous year (see Figure IV.5.1), beating out only Latvia and Poland among the EU countries – there were plenty of reports of corruption activities, and demonstrations of a lack of will to address the corruption problem, that left the public with little hope that corruption is a problem that will go away any time soon.

Throughout 2006, for example, the investigation into the largest corruption scandal

Figure IV.5.1. Corruption Perception Index



Source: Transparency International Czech Republic

in Czech soccer history continued. Eleven soccer referees, club representatives, and officials received suspended sentences and financial penalties (30–900 thousand CZK), all of them have appealed [MFD, July 13, 2006] – none of the cases have been decided yet. In addition, the Soccer Association of the Czech Republic (ČMFS) punished 16 referees, club representatives, and officials by suspension from function for 2 years and/or financial penalty (50 thousand CZK for the vast majority).

Almost predictably, the closure of two (out of five in 2005) major privatization deals – the sale of petrochemical company Unipetrol and of steel company Vítkovice Steel – were connected with (allegations of) major corruption scandals. The allegations swirling around the Unipetrol deal inolved Poland's PKN Orlen which bought the Czech government's share in the company for 14.7 billion CZK (609.7 million USD) during the summer months. Apparently, the deal required PKN Orlen to sell some subsidiaries to Czech company Agrofert for 3 billion CZK. Curiously, these subsidiaries were worth 5.3 billion CZK on the books, so new management at PKN Orlen refused to sell them. Which led Agrofert to initiate several suits (and a Polish State prosecutor and a Polish parliamentary committee to investigate whether the sale of Agrovert was meant to be a payback). Specifically, it was alleged that Agrovert head Andrej Babis – known to be a close friend of former prime minister Gross [The Prague Post, September 7, 2005; February 08, 2006; July 12, 2006] (who himself was forced to resign over questions how he and his wife could afford a couple of luxury apartments well beyond their means) – influenced the outcome of the original deal. None of these suits has been decided yet. The privatization tender for Vítkovice steel was won by Russian company Evraz although their bid of 7.1 billion CZK was not nearly the highest. Czech Penta Investments which offered 9 billion CZK filed a complaint with the European Commission. This complaint has not been decided yet.

Not surprisingly, the usual accusations were made about police officers (e.g. two millionaire foreign police officers accused and convicted in Karlovy Vary in spring 2005); customs officers (19 customs officers from Břeclav accused yet in 2004 from extracting rents from truck drivers); taxi drivers (altogether 50 people accused from corruption and falsification of documents regarding license issue in Prague); and city mayors (manipulations regarding donations, public tenders or allocation of municipal apartments).

The disputed circumstances of the firing of Supreme State Attorney Marie Benešová – who had held the post since 1999 – also kept the public entertained for awhile. She was dismissed – under an obvious pretext – after she dared to publicly criticise Justice Minister Pavel Němec – well known for having spent his honeymoon in Qatar – for his handling of the extradition of a Qatari prince who had been convicted of, and sentenced for, child molestation. She also had demanded that her budget be no longer under the control of the Ministry of Justice. As a parting shot, Benešová suggested that the true reason for dismissing her was Němec's concerns about the outcomes of various investigations of his ministry that Benešová had launched. The press seemed unanimous in its judgement that Benešová had been too outspoken for her own good.

Police Chief Jiří Kolář also, finally, was let go after billionaire Radovan Krejčíř, suspected of plotting fraud and murder, among other criminal acts, managed to escape during an anticorruption police search of his house. A few months before he had to resign because of this snafu, Kolář – in an interview with The Prague Post (January 6, 2005) identified corruption as the biggest problem that his force faced.

The last-minute, highly unusual cancellation in November of a long-planned visit of a group of OECD anticorruption inspectors, raised eye-brows nationally and with the OECD which did not mince words in expressing its irritation. The Justice Ministry explained that the visit was postponed due to logistical reasons.

A new, and overdue, conflict-of-interest law approved in March 2006 was quickly criticized for its shortcomings (the requirement to disclose financial statements, for example, does not apply to spouses of politicians) and then in June 2006 overturned by the Constitutional Court due to procedural mistakes during the approval process. A code of ethics proposed more than a year ago was not implemented, as politicians argued that new legislation would not stop corruption. And a law regulating lobbying activities, clearly much needed, is also not likely to materialize any time soon.

According to a poll conducted by SC&C agency in fall 2005, 81.5% of the Czech population doubts that the government can solve the problem of corruption (MFD, November 23, 2005). In light of the events of the past year, it is easy to understand such sentiments. The question is: If not the government, then who?

IV.6 Nonprofit Sector

In the Czech Republic, the private nonprofit sector that started to emerge only in the 1990's after the fall of the communist regime continues in steady growth. Taking into account the four major nonprofit legal forms (civic organizations, foundations, foundation funds, and religious organizations), the number of nonprofit organizations has increased from 60,000 in 2004 to 64,000 in June 2006. The major increase has been experienced by civic organizations – the most popular legal form. In addition, there are other types of nonprofit entities such as organizational units of civic organizations that increase the total number of nonprofit organizations even further. According to estimates of the Czech Statistical Office (CZSO) there were about 75,000 active entities in 2004 suggesting that the increase in the period 2004–2006 raises the number of active units toward 80,000. Most recent data on employment and volunteer input (CZSO) indicate that in the period 2002–2004, the number of full time employees remained about 32,000, the number of persons working under contracts other than contracts of employment decreased from 147,000 to 106,000, while the number of volunteers decreased from 530,000 to 490,000.

The structure of the private nonprofit sector continues to preserve the focus on culture and sport, while the traditional nonprofit fields of education, health and social care play a minor role. As estimated by Czech Nonprofit Sector Research (CVNS), about one-tenth of galleries, museums, and memorials, one-fifth of galleries with expositions, and 40 percent of music ensembles are nonprofit. However, only 1 percent of all health organizations, 2 percent of pre-school and 3 percent of primary education facilities are nonprofit. In secondary and tertiary education, the role of nonprofit organizations is more significant. More than one-fifth (quarter) of secondary schools (universities) are nonprofit. These institutions are typically smaller than public schools and their share of the student body is significantly smaller. In social services, the fraction of nonprofit entities exceeds one-quarter. However, in the case of activities targeted to specific groups, the fraction is much higher, e.g. facilities for foster care (100%); homes for mothers with children (70%); or facilities for handicapped youth (51%).

Nonprofit entities in the Czech Republic have three main sources of income: fees and charges (47%); public funding (39%); and philanthropy (14%), as reported by USAID for the year 2002. The income structure, however, depends on the type of services provided by particular organizations. For instance, public benefit organizations providing health care live on fees and charges, with less than 10% income coming from other sources. In contrast, schools and entities providing social care receive respectively more than one-half and one-third of income from the state (CVNS).

The nonprofit sector, mostly under the auspices of Donors Forum, the Czech based umbrella organization for foundation-like organizations and corporate philanthropy, responded to a 25% decrease in foreign financial support in 1997–2002 (USAID) by several initiatives mobilizing domestic giving. To support individual giving, donation text messages (DMS) were introduced in 2004. The project, which significantly simplifies small giving, has been very successful. In the first two years, about 4.3 mil. DMS was sent,

representing more than 116 mil. CZK. Successful was also an initiative to exempt DMS from VAT. For several years, Donors Forum in cooperation with other organizations proposed tax assignation that would allow each taxpayer to assign 1 percent of her tax liability to a nonprofit organization of her choice. Although the initiative has citizens' support, the legislation was not yet approved.

After the first 15 years of existence, the Czech nonprofit sector seems to be supported by a basic working framework. Current activities focus on legislative amendments, professionalization, and transparency of nonprofit entities. The legislative framework still lacks a definition of terms such as "nonprofit organization" and "publicly beneficial activity," making the interpretation of acts related to nonprofit entities problematic. Another re-occurring topic is the adjustment of the income tax law that currently forces nonprofit entities to do separate book-keeping for main and business activities, thus restricting cross-subsidization of their publicly beneficial activities.

The need for professionalization of the Czech nonprofit sector is strongly emphasized in the report by USAID. Nonprofit organizations are still run more often by enthusiastic people, who are devoted to the cause, but have neither education nor experience necessary to do the job. Thus, most of the organizations lack experts for strategic planning, financial management, human resource management, and marketing. One of the consequences is, for example, insufficient development of fundraising among non-anonymous individuals, or work with volunteers. Lack of professionalism and experience is present also among board members, who do not meet requirements of the job as those in the nonprofits in Western countries. One important example is that they do not bring in funds; their role in fundraising is minor if any – usually this task is delegated to executives. Nonprofits understand the need to change the present situation (several organizations exist that offer courses developing management skills for managers in nonprofits). The major problem until recently were the costs of this training, which were too high for the majority of organizations. This is possibly changing after the accession to the European Union, which requires a professional approach and is willing to support its development.

The recurring topic of the sector is transparency and accountability. Initially it has been motivated by several scandals in the sector (e.g., cooperation between foundations and casinos; abuse of the foundation status) which had a negative impact on the public image of the sector. In May 2006, the Czech branch of Transparency International in cooperation with CERGE-EI organized a workshop suggesting certification by an independent agency as a possible solution to the problem. The idea was coldly received. At this point a certification system for nonprofits seems far away.

Nonprofits, though, realize the importance of transparency and accountability, but they prefer to improve it via increased self-reporting and self-regulation. This issue is pushed forward also by a new project initiated by four local nonprofits at the beginning of 2006. The focus of the project is on the processes in the organizations and provision of information above the extent required by law. The project has started with an evaluation of the situation, and an on-line discussion of the topic (www.vitaova.cz/transparentnost).

V. LABOR MARKET

V.1 Human Capital

The Czech Republic boasts one of the highest upper secondary school completion rates in the OECD and in this respect already achieved one of ambitious Lisbon agenda goals. In 2002, 88 percent of the Czech population aged 25 to 64 had completed at least upper secondary school. In contrast, only a very small proportion of the Czech population has completed university: Only 12 percent of the population aged 25 to 64 has a university degree, compared to an OECD average of 23 percent.

The structure of the Czech educational and training systems parallels those of other European countries. However, a very high percentage of secondary school students were and still are traditionally enrolled in vocational programs. For example, in 1995, only 16 percent of Czech secondary school students were in an academic secondary program, compared with 47 percent in a typical OECD country. While the size of the general secondary programs has been on the whole almost fixed and a substantial supply gap has persisted over the last years, the rapidly declining size of the youth cohorts has allowed an increasing fraction of each cohort to enrol in a general secondary education program and to subsequently enter a university or a lower-tertiary-education program.

While private secondary schools, established only in the early 1990s, now provide about one-fifth of the total of secondary education in the country and are allowed to charge tuition on top of their public subsidy, public universities and colleges, which are

Table V.1.1 Fraction of population that has attained at least upper secondary or tertiary education (2002)

Type of education	Upper Secondary		Tertiary	
Age group	25–64	25–34	25–64	25–34
Australia	61	73	31	36
Austria	78	85	14	15
Belgium	61	77	28	38
Canada	83	89	43	51
Czech Republic	**88**	**94**	**12**	**12**
Denmark	80	85	28	29
Finland	75	88	33	39
France	65	79	24	36
Germany	83	85	23	22
Greece	50	72	18	24
Hungary	71	82	14	15
Iceland	59	64	26	29
Ireland	60	77	25	36
Italy	44	60	10	12
Japan	84	94	36	50
Korea	71	95	26	41
Luxembourg	57	64	19	23
Mexico	13	21	6	11
Netherlands	66	76	24	28
New Zealand	76	82	30	29
Norway	86	95	31	40
Poland	47	53	12	16
Portugal	20	35	9	15
Slovak Republic	86	93	11	12
Spain	41	58	24	37
Sweden	82	91	33	39
Switzerland	82	88	25	26
Turkey	25	31	9	11
United Kingdom	64	70	27	31
United States	87	87	38	39
Country mean	65	75	23	28

Source: OECD (2004) Education at Glance

tuition-free by law, continue to dominate the production of tertiary education and continue to be highly oversubscribed. Private college students, in contrast, do not get any public support. Over the last decade, approximately one-half of the applicants to the public tertiary system has been rejected each year.

Admission to Selective Schools, Alphabetically

(Based on Stepan Jurajda and Daniel Münich: Admission to Selective Schools, Alphabetically. CERGE-EI Working Paper No. 282, 2006.)

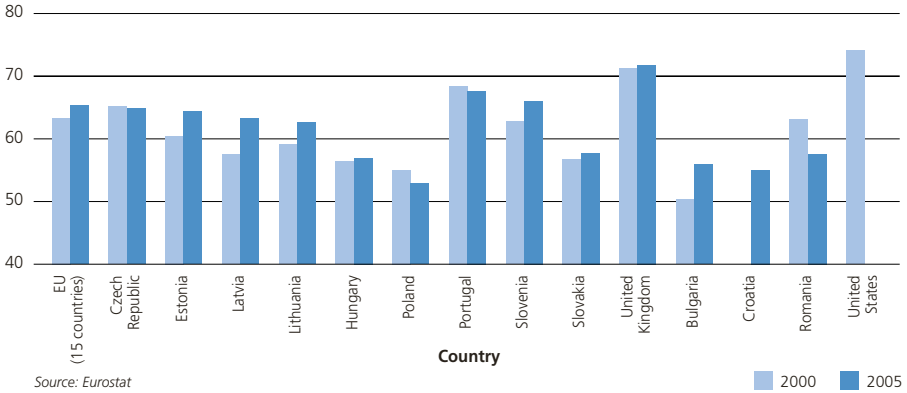
Sorting based on 'alphabetical order' is a fact of everyday life. Yet, so far there is little evidence on the potential real effects of such sorting, thanks in large part to lack of data with individual names or initials. The question of non-discriminatory sorting is particularly important when distributing a rationed good or oversubscribed public service, even when the allocation mechanism is based on applicants' characteristics. In this study, motivated by the continued rationing of college applicants in the Czech Republic, we ask whether students with last names sorted high in the alphabet enjoy higher chances of being admitted to selective schools. Such an effect may exist when applications are evaluated based on multiple criteria in absence of a clear summarizing measure, and when marginal cases at the top of the list obtain a more favorable treatment compared to marginal applicants toward the bottom of the list, where constraints on total number of possible admissions become more binding.

We find empirical support for this hypothesis using data on student applications to Czech universities in 1999 and also confirm the existence of a specific name initials-ability sorting that one would predict if schools did indeed use alphabetical sorting. In particular, the presence of alphabet-affected admission practices implies that among students admitted to selective schools, those with last names in the bottom part of the alphabet have on average a higher ability. Throughout our analysis we also test for the importance of the alphabetical position of the first-name initial, thus providing a natural check on our main results. It is reassuring that we do not find the first-name-initial position in the alphabet to play any important role.

Should our interpretation of the empirical findings be correct, there would be a non-negligible negative effect of apparently discriminatory practices for individuals with last names towards the bottom of the alphabet. Rationing of public services based on a lottery is optimal, but the use of a fixed "lottery ticket" (one's last name initial) throughout many lotteries (many schooling levels) is not fair. A simple remedy is to assign each application a numerical code at random and base sorting on this alternative lottery, as many schools already do. We believe that our results motivate future research into the use of alphabetical listings in public decision making.

V.2 Employment, Unemployment, and Wages

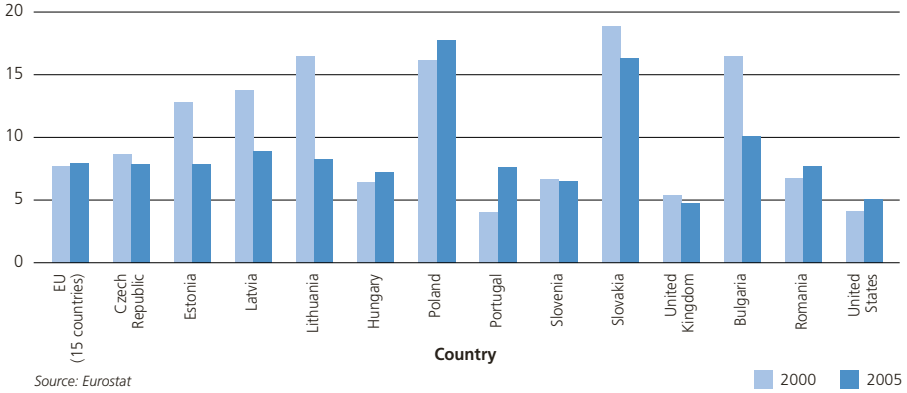
Figure V.2.1. Employment (%)



Source: Eurostat

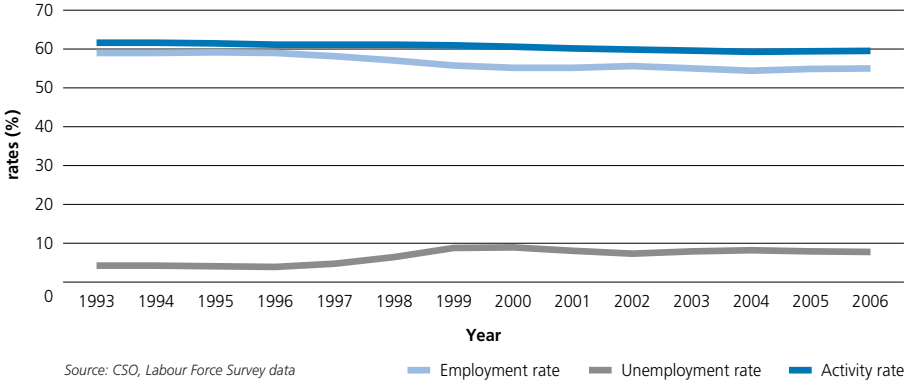
The Czech labor market traditionally boasts a high employment rate (i.e. the fraction of population employed) in comparison to both EU-8 and EU-15 countries, as witnessed by the graph, which also shows the Lisbon target employment rate (in red). Even though some EU-8 economies, e.g. Hungary, have lower unemployment rates (the fraction of labor force without work and searching for work), these occur with the background of a much lower labor market participation. The Czech employment rate was traditionally high in comparison to EU-15 mainly because of the high employment rate of Czech women aged 25–54 with less than tertiary level education. Another unusual feature of Czech employment with respect to that of the EU-15 economies are the very high share of manufacturing on total Czech employment and an extraordinary low incidence of part-time work.

Figure V.2.2. Unemployment (%)



Source: Eurostat

Figure V.2.3. Key Labour Market Indicators for the Czech Republic



Source: CSO, Labour Force Survey data

There has been some decline in Czech aggregate employment rates between 2000 and 2004. The most important factor behind this drop are declining employment rates for those aged 16–24 with less than tertiary level education, which is related to their longer participation in education. However, during 2005, sustained economic growth finally started to show on the labour market. The 2005 Czech employment-rate growth of 0.4 of a percentage point recovered losses from the previous two years and the (ILO) unemployment rate also returned to its 2003 level of just below 8 percent. These changes correspond to a total 2005 employment growth of 1.2 percent.

This recent improvement in employment and unemployment indicators occurred, not surprisingly, while wage growth has been slow. The 2005 all-year Czech wage growth was 5.5 and 3.5 percent in nominal and real terms, respectively – the lowest annual wage growth in over a decade. Importantly, anecdotal evidence suggests that collective wage bargaining, which covers over 80 percent of enterprises with over 250 employees, is flexible and reflects industry and firm-specific product demand trends.

The sectors contributing the most to growing employment were manufacturing, private services, and the public sector. Contrary to a new former (recurring) plans to make the public sector more efficient, its total employment grew in the last two years. While a part of the rise in the number of state bureaucrats corresponds to new EU-related agenda at the central level, much is apparently due to the partial transfer of the administrative agenda to the regional governments, where the establishment of new offices at the regional level was not accompanied by a corresponding slashing of central-level administration staffing. Finally, we would also blame the employment hikes in the public sector on the little effective pressure it faces to improve its productivity.

The high employment rates, in comparison to most other EU-8 economies, is in large part likely related to the low level of Czech labor costs, relative to productivity, even though this advantage has been shrinking in recent years due to the crown's continuous appreciation. Czech total labor costs (measured in Euro using exchange rates) are only somewhat higher than those of most EU-8 economies and con-

Table V.2.1. Aggregate Productivity, Labor Costs and their Structure

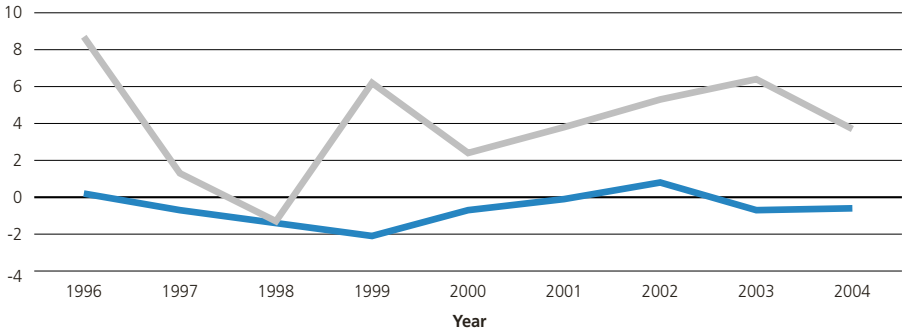
	Czech Rep.	Slovak Rep.	Poland	Hungary	Germany	Portugal
Labor Costs						
Total hourly labor costs in EUR	5.4	3.6	5.3	4.5	26.9	9.0
Productivity						
GDP per hour worked (EU-15 = 100%, PPS) [a]	45	50	38		103	59
GDP per worker (EU-15 = 100%, PPS)	57	55	47	62	94	64
Structure of Labor Costs						
Total social security contribution rate, 2003 [b]	47.5	50.8	45.4	49.6	42.0	34.8
Total tax wedge = contribution rates + income tax rate [c]	59.1	57.1	51.6	62.6	62.9	40.4

Sources: Eurostat, OECD (Taxing Wages)

Notes: [a] Values as of 2002, [b] Summation of pension, employment policy, health insurance and other contribution rates
[c] Last two rows relate to an average-wage non-married childless production worker

tinue to be far below the labor costs typical of EU-15. At the same time, a Czech worker's total output (measured by GDP per worker *in purchasing power standard*) is, thanks to the lower Czech price level, closer to the EU-15 average than the Czech labor cost. However, according to the OECD's Taxing Wages, the structure of labor costs in Czech lands is very similar to that of most developed economies and is characterized by high contribution rates and a high total tax wedge. The Czech tax wedge (defined as the ratio of income tax and social security contributions of both employer and employee to total labor costs) is particularly high in international comparison when calculated not for the average production worker, but for a worker making only two-thirds of the average wage. Given the limited downward wage flexibility among low-earners, this tax burden may be work-discouraging for low-education low-earners. Finally, labor costs in Euro grew not only because of the Crown appreciation but also because of the steady growth of real Czech crown wages.

Figure V.2.4. Wage and Employment Annual Growth Rates (%)



Source: CSU

Wages of Czech Female Managers

(Based on Stepan Jurajda and Teodora Paligorova: Female Managers and Their Wages in Central Europe. CERGE-EI Working Paper No. 296, 2006.)

There is growing international evidence that women face a 'glass ceiling' – a barrier to career prospects, which precludes them from holding high-paying positions. Of particular general public as well as academic interest is the representation of women among top-level managers and their relative wage position. There is so far no evidence on this issue from the post-communist economies of Central Europe, even though the relative pay position of women among the employee workforce has been extensively studied there.

We therefore analyze the representation of women and their relative pay in a large sample of Czech top- and lower-level managerial employees from 2000–2004. Our managerial gender wage gap decompositions appear to be the first available outside of the most developed economies. Furthermore, unlike the existing literature on gender pay differences among executives, they recognize the adverse consequences of the low and uneven representation of female managers for the standard parametric Oaxaca-Blinder decomposition technique. Parametric assumptions lead to an over-estimation of the 'unexplained' component of the gap, i.e. the part of the gap attributable to differences in rewards to individual characteristics and often interpreted as an upper bound to the extent of gender discrimination. We therefore employ a nonparametric matching wage gap decomposition approach.

We find that at 7% women are severely under-represented in top managerial positions in the Czech Republic, and that there is a clear gender divide between lower and top-level managerial ranks, given that the raw average pay gap between men and women increases with firm hierarchy level. However, our wage-gap decomposition analysis suggests that the size of the wage gap that cannot be linked to observable differences between men and women is quite similar across hierarchies. In other words, after comparing the wage rates of women and men who are comparable in terms of basic demographic characteristics, employer type and within-firm hierarchical position, there remains a gender wage gap of about 20 percent. The key reason for why the relative wage position of Czech female top managers is worse compared to lower-ranking female employees is that they tend not to be present at the top of the highest-paying companies. The policy implication of these findings is that equality-enhancing policies aimed at the highly visible group of executives are more likely to be effective in equalizing wages of male and female top managers if they focus on promotion policies in the most prestigious companies.

V.3 Labor Market Institutions and Policy

Internationally comparable indices of flexibility traditionally suggested that the Czech labor market remains to be somewhat more flexible than those of most EU countries and many transition economies. However, this comparison has become less favorable since neighboring Slovakia introduced a number of flexibility-promoting policies (pro-work structure of support, flexible Labor Code), while there has been little improvement in the Czech labor market. First, there were too few pro-flexibility changes in the new Czech Labor Code to be put into effect in 2007, championed by the trade unions and their political representatives in the government. For example, laying off a single worker due to inadequate effort remains very costly and difficult.

Second, there has been arguably little progress in diminishing the disincentive effects of the Czech welfare system. The extensive Czech system of social assistance successfully alleviates poverty, but makes the comparison of market wages with the total level of available social benefits work-discouraging especially for families with children (details were provided in previous versions of this survey). Recently, a set of legislation that aims to reduce the inactivity traps has been passed in parliament, although the legislators have introduced a number of generous spending increases. The main disadvantage of the proposed new system is that is will remain very complicated; it is supposed to correct some of the labour-supply disincentives faced by larger families and to shift some of the budgetary and 'activation' responsibility from the central administration to municipalities.

Another key area of labor market policy is immigration. Given low fertility, the high Czech employment rate, and the particularly low tertiary education attainment rate of the Czech labour force, (skill-based) immigration is one of the key possible channels of increasing aggregate labour supply. As of the end of 2005, there were about 280,000 officially registered foreigners (about 2.7 percent of the total population), of which about 110,000 had permanent residency. The largest two nationality groups are Slovaks and Ukrainians. Ukrainians now hold the majority of all working permits. Unfortunately, the administration of working permits is corruption-prone and exceedingly hostile, and there are no plans for major changes proposed to the working permit system. The only legislative improvement in the immigration area is a new bill, recently approved by the Senate, which allows foreigners living and working in the Czech Republic the possibility of being granted permanent residence after five years, as opposed to the currently used minimum of ten years. The bill could affect about 38,000 foreigners living in the country. Meanwhile, the main government programme aimed at supporting (skill-biased) migration has finished its pilot years, during which it failed to attract a significant number of workers. Starting in 2006, it now covers not only a few small countries, but also Ukraine. However, until June 2006, the programme could accommodate a maximum of 300 Ukrainians, a negligible fraction of the dozens of thousands of Ukrainian immigrants, both legal and illegal.

Admission of Students to Secondary Schools: Crazy Matching

(Based on forthcoming CERGE-EI Working Paper by Daniel Münich and Ondrej Knot. Partly based on D. Münich and J. Myslivecek "Transition of pupils to high-schools: demand-supply discrepancies and consequences," in Mateju, P. and J. Strakova (eds.), in (Ne)rovne sance na vzdelani: Vzdelanostni nerovnosti v Ceske republice [(Un)equal Study Opportunities: Educational Inequalities in the Czech Republic], Academia, 2006].

In 2005, a nationwide dispute broke out over modifications of the admission procedure into secondary schools. The modification to an already flawed admission procedure emphasized existing deficiencies. Public outcry also led to constitutional complaint which has not been concluded yet.

Under both the old and the modified rules, a 15-year-old pupil chooses a single school in the first round of the admission procedure. Schools then select among applicants based on ability – on entrance examinations and/or marks in the elementary school. This ability based selection contrasts with ability blind mechanisms employed in the US and in a number of other countries. Pupils not admitted in the first round compete for the remaining seats in the following rounds.

The major problem of the mechanism is that good pupils who overestimate their admission chances or ad hoc fail in the 1st round of admission cannot choose their 2nd best school but only from schools with remaining slots. As a result, the process of school choice and admission requires a lot of strategizing on the side of parents and pupils, is psychically burdensome, and outcomes are unfair to many. There is also empirical evidence that the scheme discriminates against especially promising applicants who have a weaker social background because many of them are not able to strategize properly.

The aforementioned setbacks of the admission scheme have also efficiency implications. Strategic behavior of applicants biases observable information on demand for various schools and school types. In particular, the demand observed misleadingly indicates demand-supply balance while it is not so. Hidden discrepancies benefit underperforming schools and old-fashioned school types, and it contributes to the rigidity of the whole schooling system.

The modifications introduced in 2005 were minor: one positive the other negative. The former implies that second round school applications are no longer submitted before the 1st round but after it, when information on still available school slots is already available. This change should facilitate choice because when students decide about the school for the second round, they already know how many free seats each of the schools have. The latter one implies that applications and admission to non-state schools are to be newly governed by the existing rules too. This reduces choice and increases the anxiety of students about the admission procedure and decreases the interactivity of private schools.

VI. PUBLIC SECTOR

VI.1 Pensions in Central Europe: Threat or Opportunity

Introduction

Public pension systems represent the largest expenditure item in almost all developed countries. The European Union spends a whopping 10.6% of its GDP on public pensions. Indeed, Austria and Italy manage to spend as much as 13–14% of their respective GDPs on public pension schemes. The new EU members – namely the eight post-communist countries in Central Europe – struggle with pension systems beset by a combination of a socialist legacy, which shows a high population reliance on public pensions and near non-existent, long-term private savings; and with fast approaching of low fertility rates prevalent in west European countries that translates into rapid aging. This combination burdens central European governments' budgets as witnessed by Table VI.1.1. If there were no reform in Hungary, it could spend as much as 20% of its GDP on old-age pensions in 2050. Slovenia would come second, with 17.5% of GDP spent on pensions, and several other countries (including the Czech Republic) do not lag far behind.

Central European countries have reacted very differently to the pension challenge. Some enacted bold reforms, earlier seen only

Table VI.1.1. Public pension expenditures in CEE countries

Country	Old age dependency ratio*		Public pension expenditures (% of GDP)		Replacement rate	
	2004	2050	2004	2050	Total in 2004**	2nd pillar in 2050#
Czech Republic	**19.7**	**54.8**	**8.5**	**14.0**	**61%**	**0%**
Estonia	23.8	43.1	6.7	6.6	33%	21%
Hungary	22.6	48.3	10.4	20.3	66%	19%
Poland	18.6	51.0	13.9	9.3	63%	n.a.
Latvia	23.6	44.1	6.8	8.3	61%	19%
Lithuania	22.3	44.9	6.7	10.4	40%	0%
Slovakia	16.3	50.6	7.2	11.2	49%	n.a.
Slovenia	21.4	55.6	11.0	17.5	64%	0%
Germany	26.8	51.7	11.4	13.1	43%	15%
France	25.2	45.4	12.8	14.8	65%	0%
Ireland	16.4	45.2	4.5	11.1	67%	33%
Italy	28.9	62.2	14.2	14.7	79%	15%
Netherlands	20.5	40.6	7.7	11.2	71%	39%
Sweden	26.4	40.9	10.5	11.2	68%	15%
Austria	22.8	52.4	13.4	12.2	64%	0%

Source: OECD, European Commission (2006)

* Number of people aged 65 and over as a percentage of people aged 15–64.

** Theoretical replacement rate of a male worker with 40 years full-time work at average earnings, retiring at the age of 65 in 2005.

Expected pension paid from the 2nd pillar in 2050.

in Latin America; some pretended that everything was OK. The Czech Republic was actually a frontrunner when it launched (voluntary) private pension funds in 1994 and reformed its pension system in 1996 (retirement age was increased, pensions were linked to life-time labor income). But in late the 1990s, Hungary and then Poland reformed their respective pension systems in a more comprehensive way. Following the relative success of these two reformers, other countries followed suit and in 2006, eight post-communist countries (five of them already EU members) have implemented pension reform based on partial privatization. The region thus has become the other hotbed of so-called "structural" pension reforms (Latin America being the first one).This brief survey looks at central European pension systems' main characteristics and their developments and also analyze possible remedies and actual policy actions of governments. Furthermore, it is discussed how the pension systems have reacted to recent reforms in several central Europeans countries, and we sketch challenges for future.

Pension landscape

Central European countries inherited pension systems firmly rooted in their communist past. The main role of pension systems was the prevention of poverty, the increasing dependence on government, and the manipulation of the labor force. These political objectives resulted in pension systems with a low retirement age, little variation in pension benefits, and no private pension savings.

In the 1990s, most Central European countries modernized their pension systems, separated them from the central government budget, increased the retirement age and made pension benefits more dependent on pension contributions. The Czech Republic implemented such a reform in 1994, complemented by a creation of voluntary private pension funds.

However, these "first-wave" pension reforms proved very quickly to be insufficient as Central European societies experienced the ageing phenomena whereby mortality dropped due to better health care and improved eating (and drinking) habits. At the same time, the fertility rate collapsed as women faced both increased opportunities in labor markets but also higher uncertainty. The fertility rate fell as low as to 1.17 children born per woman in the Czech Republic. At such a rate, the population of the country would shrink by 30% in a generation, a demographic equivalent of a nuclear attack.

Due to fast aging, most pension systems in Central Europe dived into deficits in the mid 1990's. This pressure led to the first attempt to change the pension system structurally, i.e. to introduce private pension savings. Hungary adopted such a "three-pillar" pension system actively supported by the World Bank in 1998. Poland followed (with even a more comprehensive reform) in 1999, Latvia in 2001 and so on. At the same time, pension systems were reformed in some other post-communist countries that were not the EU members (Kazakhstan, Croatia, Russia) – see table VI.1.2.

Pension challenges

The different approach to pension reform has transformed into different outcomes. The vigorous reformers – namely Poland, Estonia and, since 2005, Slovakia – witnessed much more benign developments in their current pension spending and, more importantly, they may avoid stark increases in pension expenditures that are projected for more

Table VI.1.2. Pension reforms in CEE countries

Country	Reform started	Total pension contribution (% of wages)	Contribution to the funded pillar (% of wages)	Pension fund assets (% of GDP in 2004)
Czech Republic	?	28	0	3.6
Estonia	2002	22	6	2.8
Latvia	2001, FF increasing until 2010	25.51	2–10%	0.3
Lithuania		26	0	0.3
Hungary	1998	26.5	8	4.0
Poland	1999	32.52	7.3	7.1
Slovenia		24.35	0	1.4
Slovakia	2005	24	9	n.a.
Kazakhstan	1998	0	10	n.a.
Russia	2002	22	6	n.a.
Croatia	2002	14.5	5	n.a.
Italy		32.7	0	2.6

Source: OECD Global Pension Statistics, European Commission (2006)

apathetic countries as the Czech Republic and Slovenia. For example, public pension expenditures are set to remain stable in Estonia at about 7% of GDP. The expenditures will fall in Poland from 14% of GDP in 2004 to some 9% in 2050. On the other hand, pension expenditures will explode to 17% of GDP in Slovenia and to 15% in the Czech Republic. Hungary then demonstrates that an imperfect pension reform complemented by government inconsistency and political maneuvering may even exacerbate the long-term outlook – see Table VI.1.1 – Pension systems do not, however, interact with the fiscal system only. Their impact is felt throughout the economy, most profoundly in labor and capital markets. Table VI.1.2 shows the total contributions to the pension systems in respective countries. Beyond any doubt, contribution rates around 30% of the wage bill render labor less competitive in these countries and increases unemployment. The countries that have implemented pension reforms have channeled a part of this burden to private savings, i.e. eliminated a part of the deadweight loss associated with the apparent tax nature of pension contributions. Also, pension reformers tend to have a larger stock of assets accumulated in pension funds, albeit the depth of assets is still minuscule. This building up of savings makes domestic capital markets more efficient and helps countries to limit current account deficits associated with large capital inflows.

A pension crisis, as it is often described, neatly illustrates that challenges may be turned into opportunities if governments take early and well designed action. Aging is not something we should try to prevent, but it is a wonderful triumph of humankind. What turns aging into a threat is an ancient, ineffective and perverse-incentive pension system created by a series of governments in the past. If the system is modernized, its incentives are set straight to stimulate labor market participation and not to encourage inactivity; aging will lose most of its negative connotations. The ways to do so are known and tried; it is up to governments to take them.

VI.2 Tax-Benefit system in the Czech Republic. How Does It Influence Incentives to Supply Labor?

The Tax-Benefit system in the Czech Republic hasn't been considerably changed since 1995 when the law on State Social Support had been novelized dramatically. In 2006, however, there have been changes to the system by a relatively high degree. These new changes should yield changes to the incentives of agents to supply labour. This can be measured by calculating a so-called Net Replacement Rates (NRR). NRR is a ratio of net income a person receives when she is unemployed and net income the same agent receives when working for a particular wage. The higher the NRR the lower are the incentives of households to look for a job and vice versa.

Before 2006, the taxation side of the system could be described as follows:

- Direct Taxes
  - Income Tax
  - Real Estate Tax
- Indirect Taxes
  - Value Added Tax
  - Excise Taxes
  - Road Tax
  - Estate tax, benefaction tax and tax on transfer of real estate
- Social contributions
  - Contributions for social insurance and state policy of employment
  - Contributions for public health insurance

Also before the changes to the system in 2006, social benefits may be described using the following scheme:

- Social insurance benefits
  - Unemployment benefits
  - Sickness benefits
  - Pensions
- State social support
  - Means-tested: child allowance, social allowance, housing benefit
  - Non-tested: parental allowance, foster care benefit, funeral grant, birth grant
- Social assistance
  - Social necessity benefits
  - Social care benefits

The system is organized around a key parameter – known as the minimum living standard (MLS). Before 2006, this amount was calculated at the personal and household level and is intended to reflect the cost of living. Most types of benefits are then defined as given fractions of the family-level MLS.

In 2006, there has been the following changes to the system:

1. The household's part in MLS has been abolished. The personal part of MLS was, on the other hand, increased proportionally. The Existential Minimum (EM) was introduced. Depending on cooperation with social officers regarding re-qualification or other attempts to join the labour force. The base for calculation social benefits is now EM, MLS, or some fraction between the two.

2. The Housing Benefit of State Social Support changed considerably. There is now a called Socially Respectable Cost of Living, and a Normative Cost of Living dependent on the region where the household lives and the number of persons living in the household and defined by law.

3. Social Necessity Benefits are replaced by two types of benefits: namely the Livelihood Benefit and the Housing Supplement. The Livelihood Benefit should serve as a source of last resort. However, it now depends on

participation of agents on re-qualification etc as the base for calculation can now be EM or MLS depending on the decision of social officer. The Housing Supplement is now defined as a function of Socially Respectable Cost of Living, and a Normative Cost of Living. Before, as a part of Social Assistance, it was fully a decision of the social officer.

4. Income Tax changed in a way that marginal tax rates for the two lowest taxation brackets decreased. Also Tax Exemption per taxpayer and spouse are now replaced by Tax Allowance. Tax Allowance means that a taxpayer deducts a fixed amount not from her Tax Base, but from the calculated Tax. The Tax Allowance and Tax Bonus per child are left unchanged. Tax Bonus is paid to Taxpayers with children who after deducting tax allowance for children, have a negative tax duty.

5. For the most types of social benefits, the tested income for eligibility decreased, since now only 80% of wage income and 80% of Unemployment Benefits is considered as income, when testing eligibility for social benefits.

6. The maximum amount of the Unemployment Benefit has been increased from 2,5 MLS to 69% of the Average Wage.

Net Replacement Rates have been calculated since 1995. There are two types of NRR. Namely a called short-term NRR, where it is assumed that the agent looking for a job receives unemployment benefits, and a long-term NRR, where the underlying assumption is that the agent doesn't receive unemployment benefits and receives only social benefits. Also, the NRR for Average Production Wage are calculated, meaning that an agent is able to find a job with a wage as high as the Average Production Wage, and NRR for 66% of Average Production Wage. It is also assumed that in a household with two or more members, there is only one member who is looking for a job while the other is long-term unemployed and not eligible for unemployment benefits. These assumptions are made according to the OECD methodology of calculating Net Replacement Rates. Table VI.2.1 and Table VI.2.2 show the results.

Table VI.2.1. Long-Term Net Replacement Rates

	Average Production Wage:			66% of Average Production Wage:		
	Single	Couple	Couple (2 children)	Single	Couple	Couple (2 children)
1995	38	66	80	55	90	80
1996	37	63	76	53	85	78
1997	36	63	77	53	85	79
1998	37	63	77	55	86	80
1999	38	63	78	55	85	82
2000	36	60	78	52	81	79
2001	36	59	78	52	80	78
2002	34	55	74	49	78	75
2003	32	52	71	46	74	77
2004	30	49	70	43	69	74
2005	34	48	70	42	69	83
2006	**43**	**56**	**65**	**56**	**69**	**71**

Table VI.2.2. Short-Term Net Replacement Rates

	Average Production Wage:			66% of Average Production Wage:		
	Single	Couple	Couple (2 children)	Single	Couple	Couple (2 children)
1995	55	66	80	60	90	100
1996	55	65	76	60	85	99
1997	55	64	77	60	85	100
1998	55	63	77	55	86	98
1999	46	63	78	55	85	95
2000	46	60	78	52	81	91
2001	46	59	78	52	80	90
2002	46	57	74	50	78	87
2003	46	57	71	50	74	83
2004	46	54	70	50	69	85
2005	46	58	70	50	75	83
2006	**61**	**69**	**78**	**66**	**84**	**82**

The results show that the system introduced in 2006 is more generous (i.e. gives higher benefits) to single-person families but substantially less generous to larger families.

Further, the new system is more generous to short term unemployed than the old system, but is less generous to long-term unemployed. Overall, the spread of NRR's across family types and income levels decreases with the introduction of the new system, and we can also notice a general tendency towards lower NRR levels, especially for families with a higher number of children.

Also, in the old system, especially for families with a higher number of members, there is little difference between short-run and long-run NRRs. This agent is indifferent between receiving Unemployment Benefits and being unemployed for more than 6 months (where she receives only social benefits) because in the end she receives the same total amount of benefits. The new system differentiates the benefits between short-term and long-term unemployment. This is due to the fact that only 80% of unemployment benefits are considered as income for the purpose of calculating of the most types of social benefits.

VI.3 Rent Control

The shape of the housing rent control system in the Czech Republic started to be formed by the policy of the communist regime, which was targeted at the liquidation of private ownership of rental dwellings. In addition, this policy strictly regulated rent levels by the law (e.g. Civil Code No. 40/1964 Coll.), and it enforced the complete allocation of all vacant rental dwellings. After the fall of communism, a part of state-owned rental units were returned to former owners or their successors. This gave rise to the private regulated rental housing market in the country. In addition, in 1992 a Civil Code amendment

excused all new leasing contracts from rent regulation, which started to create the unregulated market. However, the Decree of the Ministry of Finance (No. 176/1993 Coll.) determined further regulation of rents for leasing contracts signed prior to the enactment of 1992 amendment to the Civil Code. Furthermore, the regulated leasing contracts were made inheritable by tenant successors if they were registered as living in a rented dwelling.

While in theory rent control may be justified by a possibility to maintain affordable rents for people who need social protection, a need to give more bargaining power to tenants if the rental market is highly monopolized, or by the goal to decrease rents and stimulate labor market mobility, these reasons are probably not applicable for current rent control in the Czech Republic. First of all, Czech rent control is not well-targeted at people with low incomes, old people, or other categories, who need social protection because inheritable leasing contracts have led to the devolution of rental dwellings to tenants who are not necessarily socially disadvantaged. Moreover, the problem of the lack of targeting is strengthened by the fact that 40 percent of regulated dwellings (around 300,000 out of total 750,000 regulated rental units[6]) are owned by private proprietors. Thus, the state is using rent control to pass a part of its social protection obligations in the housing sector onto private landlords.

It is difficult to argue whether there is a need to increase bargaining power of tenants in the Czech Republic, but even in case of such need, the rent received as a result of a bargaining mechanism should at least cover the maintenance costs of landlords. However, according to estimates of the Association of Building Owners, in many cities, regulated rent is lower than the maintenance costs of rental units. In addition, the current design of rent control diminishes labor mobility rather than increase it. This occurs because tenants in the regulated sector are not willing to terminate leasing contracts even if they are not living in a dwelling, which leads to a decrease in the supply of rental units. This in turn results in an increase in unregulated rent, which reduces labor mobility due to the higher costs of working in a region other than the region of permanent residence.

The situation in reforming rent control is further worsened by the political deadlock to this question. The existing rent control regulation was found as violated principles of the Bill of Rights by the Constitutional Court of the Czech Republic, and several attempts to conduct minor changes in this system did not alter this decision. Moreover, the Association of Building Owners and several members of the Senate of the Czech Republic have sent an application to the European Court of Human Rights protesting against regulated rents which do not cover maintenance costs and shift social protection costs from the government to private house owners. While at the moment the decision on this case is pending, there is a very high probability that this decision will be positive for house owners due to a precedent set with the positive resolution in a very similar case with Polish landlords.

There are several possible ways of solving the rent control problem in the Czech Republic. The first possibility is the complete elimination of rent control without paying compensation to any tenants in the regulated

[6] According to the information of the Ministry of Finance of the Czech Republic.

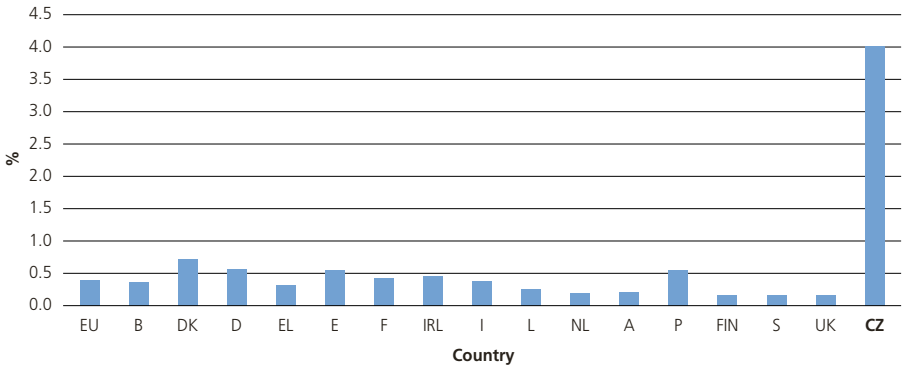
sector. While this plan may solve all problems, it might not receive much support because of its "unsocial" nature. Thus, the second option could be the elimination of rent control with payment of direct housing subsidies for people who need social protection. The only drawback of this option is that it would require government to pay for social protection from the budget rather than shifting these costs onto house owners. The third alternative is a major reform of rent control with making it applicable only to low-income tenants, negotiating rents between landlords and tenants which would make these rents at least higher than maintenance costs, and eliminating the inheritability of leasing contracts. Although this last alternative may work in theory, it is difficult to judge whether it would solve the practical problems of the current rent control mechanism.

VI.4 State Aid

Principle of the state support of firms is an essential part to building a market economy. Government subsidies to enterprises distort the strategic environment as they distort the signal generated by the market in terms of competitor decisions and therefore, they have long lasting economic consequences and effects. The negative effects can be expected in markets where dynamic effects are important because of technical infrastructure requirements or customer loyalty.

Defining what constitutes state aid is not always clear therefore, any quantification of state aid is relative. In addition, information on the amounts approved by government for a company or sector is often not public. No systematic evidence exists on state aid provided up to 1997 in the Czech Republic. Beside direct state aid through the state budget, quasi-fiscal operation through transformation institutions has been frequently used. During 1997–2003, officially registered

Figure VI.4.1. Share of Subsidies to Enterprises on GDP 2002



Source: europa.eu.int/comm/competition/state_aid/scoreboard, CR – ÚOHS, CSO

state aid reached 362 bn. CZK, of which more than 90 percent went in the form of reward for the rescue and restructuring of enterprise purposes. It can be roughly estimated that during 1997–2000, state aid was twice as high as officially registered. In the Czech Republic, subsidies to enterprises during the transformation were not only non-transparent but also well above the European Union average. The negative effects on public budgets are obvious. From the point of view of opportunity costs, state aid to rescue and restructure caused a limitation in education, R&D, and culture, that are fields where one can expect more positive externalities from state aid than in commercial enterprises.

Since 1998, a special investment incentive scheme has existed in the Czech Republic. Such a scheme is in its nature nothing else but a state subsidy scheme. The actual effects of such a state subsidy or investment incentives on a particular enterprise that receives the subsidy can be positive as well as negative. Expected positive effects are the support of an incumbent in a high technology industry; the restructure of an enterprise, and job creation. At the same time any state subsidy to an enterprise will be necessarily accompanied by negative effects on its competitors and negative spillovers to other industries; hence, a distortion of market signals and industrial structures in the long term. Providing a subsidy should be therefore fully transparent and accompanied by a careful analysis of an ex ante evaluation of positive and negative externalities and effects and then compare them to the extent of market failure that should be corrected by the respective subsidy.

Such an approach would limit the probability that a company will receive state subsidy since, as the evidence shows, many of these firms that used to receive state aid went bust and were shut down eventually. In addition, the logical consequence of state subsidies to enterprises is the increase of the tax burden and thus a decrease of investment incentives. It is therefore rather counter productive to construct incentive schemes for investors that will be selected by a state bureaucrat and that might cause distortions of trade and fair competition, while at the same time decrease the incentive for other successful investors selected by the market.

VII. ENVIRONMENT

VII.1 The Environmental Success of Transition

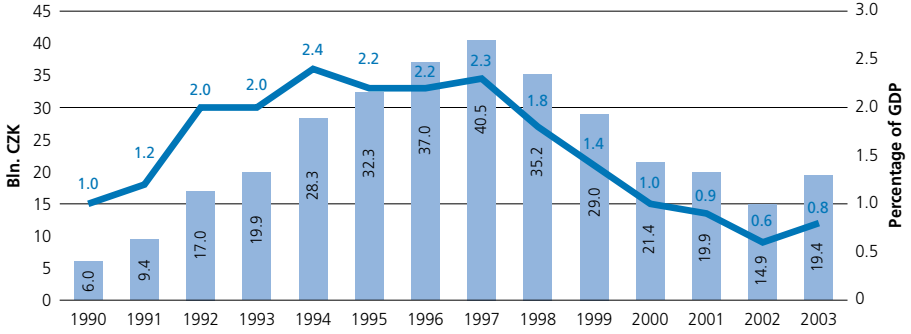
Significant improvements in environmental protection took place during the pro-market reforms. Between 1989–1992 new regulations were passed quickly and new institutions to support environmental protection were established. The economic transformation connected with cuts or shutdowns in some energy-intensive and polluting productions, resulted in lower emissions released into the air and water, especially from point sources. The amount of emissions reflected more and less the lower economic performance expressed as the GDP. In this period approximately 8,000 insecure landfills were closed down and new landfills were built, complying with the relevant environmental safety parameters and European regulations.

In the period 1993–1998 the effects of new legislation became visible and the country experienced so-called decoupling (separation of GDP which was growing again and pollution, which was decreasing or in other words the level of pollution does not follow GDP growth any more). This period finished with the improvement of the basic environmental indicators which did not show any substantial differences from the EU 15 or OECD averages. Between 1993 and 1998, the decrease in air pollution was achieved via emission reduction measures. The emission reduction of dust and sulphur dioxide can be viewed as an extraordinary success since the emission of dust into the air was reduced by an order of magnitude. The change in nitrogen oxides emission was less pronounced: the positive influence of measures striving for emission reduction in stationary sources was partially compensated with a transport increase. In 1997, a second generation of legal waste regulations was approved, which brought a certain liberalization of waste movements (colored lists of waste according to their risk level). Over the whole period 1993–1998, the total environmental expenditures were 2% of GDP. The number of adopted changes slowed down in the period 1999–2003, and the environment situation was not improving as fast as a consequence. The only exception was a 50% drop in lead emissions caused by the prohibition of leaded petrol distribution effective from January 2001.

The current state of the environment of the Czech Republic is still not completely satisfactory. Target limit values for the protection of human health and vegetation regarding tropospheric ozone are exceeded in the CR (as well as in many European countries), and the Czech Republic also faces a high percentage of soil endangered by erosion, forest degradation, and a high number of endangered species. Noise from transportation is also an area where future improvements are necessary. In Prague, almost 40% of the population is exposed to noise levels greater than 65dB during the daytime, in other areas, between 10–30% of the population are exposed to such noise levels.

The conceptual framework of the Czech environmental protection policy over the last sixteen years has been gradually formulated by the Czech government in 1990, 1995, 1999, 2001, and 2004. As the environmen-

Figure VII.1.1. Investment in Environmental Protection



Sources: CSO, MZPCR, 2001 preliminary data

tal situation was improving, the emphasis was shifted from the protection of human health to nature conservation and biological diversity. The currently adopted policy basically reflects the 6th EU Action Program of the Environment.

The first part of the legislation framework regarding the protection of environment in the Czech Republic was established after 1989. During a relatively short period of time, not only were laws issued in areas that were formerly not regulated, but most of the former, obsolete regulations were replaced. In recent years, environmental legislation has been significantly affected by the process of harmonizing Czech law with the legislation of the European Communities. One negative consequence of rapid legislation developments is the lack of interconnection among the legislation in the individual areas of environmental protection. The principles of environmental protection, the institutions of the legislation, procedures, etc. are not dealt with in a uniform manner. The usefulness and potential for further codification of environmental law is currently under discussion.

The improvement in the quality of the environment in the Czech Republic has been brought about not only by the promotion of mandatory measures prescribed by law, but also by voluntary activities of industry and public administration. The voluntary instruments of environmental policy comprise:

- Ecolabelling (in mid-2005, more than 300 products of 75 producers have been labeled as environmentally friendly products according the National Program for Labeling Environmentally Friendly Products in 41 product categories);
- Responsible Care (in the Czech Republic, this instrument was named "A Responsible Enterprise in Chemistry", 29 companies of the chemical industry are entitled to use the Responsible Care trade mark);
- Cleaner Production (during the 12-year history of Cleaner Production in the CR, 118 projects were implemented in business from the different fields, 32% of these projects resulted in financial savings);
- National Environmental Management and Audit Program – 1,332 firms have been certified by ISO 14001, and 18 companies have implemented the Environmental Management

and Audit Scheme – EMAS, among these enterprises manufacturing enterprises prevail; and

- Additional voluntary agreements.

The quality of the environment could not have been improved without a significant increase in the funds spent on its protection – see Figure VII.1.1 and Table VII.1.1. The basis for the significant growth of investment in the environment was laid down by new legislation created after 1989. Not only demanding goals (e.g. the amount of emissions), but also deadlines for the achievement of these goals were determined. In the 1990s, the amount of investment in air protection was given priority. Since 1998, the focus was on the investment in water protection ensuring pollution decrease. The largest amount of investment in environmental protection was reached between 1995 and 1997 (over CZK 40 billion in 1997) due to events aimed at air pollution reduction (esp. desulphurization). After 1998, the amount of funds spent on environmental protection was reduced, as the most important environmental problems of the 1990s had been solved.

For the time being, the environmental protection became an inseparable component of international relations in the political and economical sphere. The development of the state of the environment in past years has been positively influenced by the EU accession process of the Czech Republic and by the development of multilateral cooperation within international organizations, especially the UN Economic Commission for Europe; the UN Environmental Program (UNEP); UNESCO; and the OECD. The Czech Republic became a contracting party of most of the important global and regional environmental multilateral agreements and established an effective system of bilateral cooperation with European as well as developing countries.

Table VII.1.1. Environment Protection Expenditures from National Sources [a] (Current Prices, bln. of CZK)

	National Environmental Fund	State Budget	National Property Fund	Total
1998	2.3	4.7	2.2	**9.2**
1999	2.6	5.5	1.8	**9.9**
2000	2.9	5.0	2.1	**10.0**
2001	3.8	4.3	2.7	**10.8**
2002	4.1	5.0	3.2	**12.3**
2003	4.6	6.0	2.6	**13.2**
2004	4.6	6.6	3.5	**14.4**

Sources: SFŽP, MF ČR, FNM

Note: [a] Excluding expenditures on drinking water since 1998

ECO-Industry in Czech Republic

At present, the European Union and its policy makers have expressed strong interest in a new sector of the economy consisting of enterprises specialising in producing environmental goods and services and clearing-up environmental pollution (to be known as the „Eco-industry"). This is widely seen as a rapidly growing sector, generating wealth, creating new jobs, as well as playing a major role in the transition of economies towards a sustainable development.

The analysis of the development of eco-industry in the Czech Republic is based on the definition in „The Environment Industry Manual", OECD/Eurostat, November 1998. The analysis does not work with a broad view of eco-industry but concentrates on these NACE groups, which are eco industries entirely („core industries"). This narrow definition encompasses the following NACE groups: ***„Core industries"****: Retreading and rebuilding of rubber tyres (25.12); Recycling of secondary raw materials (37.00); Collection, purification and distribution of water (41.00); Wholesale of waste and scrap (51.57); and Sewage and refuse disposal, sanitation and similar activities (90.00).*

The total number of firms in NACE groups which create the "core" of the eco-industry increased rapidly from 1990 to 2004 (see Table VII.1.2). During the last three years, the number of economic subjects in the eco-industry as a whole has relatively stabilized. The development in the Czech Republic has followed a similar trend noted in advanced European countries.

A recent statistical survey of the Register of economic subjects studied all enterprises with more than 100 employees and some selected companies with 29–99 employees. The enterprises included in the statistical survey employed approximately 48,000 employees, from which Sewage and refuse disposal, sanitation and similar activities (NACE 90) was 44% and Collection, purification and distribution of water (NACE) 41.00 42%, respectively. When comparing the current situation (2004) with that of 1999, we can see two major tendencies: (i) a drop in employment in Water collection, treatment and distribution, which is connected with the privatization of these enterprises by foreign firms, which improved their management

Table VII.1.2. Number of Firms in Eco-industries

NACE	1990	1999	2000	2001	2002	2003	2004
Retreading and rebuilding of rubber tyres	53	313	319	313	307	303	295
Recycling of secondary raw materials	246	1,303	1,393	1,483	1,551	1,607	1,648
Collection, purification and distribution of water	165	405	414	416	417	412	420
Wholesale of waste and scrap	26	367	396	398	401	402	399
Sewage and refuse disposal, sanitation and similar activities	894	3,903	4,096	4,282	4,574	4,812	5,018
Total	**1,384**	**6,291**	**6,618**	**6,892**	**7,250**	**7,536**	**7,780**

Source: Register of economic subjects (RES)

systems, and helped to make their production more efficient, and (ii) a growth of employment in Wastewater and waste material disposal, and city cleaning, which is connected with new municipal wastewater treatment plants and an enhanced effort to keep cities clean. This is similar to development in Western countries.

The average wage in the eco-industry is lower than the nationwide average: by 5.7%. The highest average wages are in NACE 41 (water collection, treatment and distribution) with 18,235 CZK/month in 2004, and the lowest average wage in NACE 90.00 (wastewater and waste material disposal, city cleaning) with 15,576 CZK/month. The evaluated firms in the eco-industries also show an upward trend in revenues from sales of own products and services to external customers especially in Collection, purification and distribution of water (NACE 41.00) and in Sewage and refuse disposal, sanitation and similar activities (NACE 90.00). (See the Table VII.1.3).

Table VII.1.3. Revenues in Eco-industry (CZK million, VAT free)

NACE	1999	2000	2001	2002	2003	2004
Retreading and rebuilding of rubber tyres	241.8	355.0	453.7	245.8	302.2	805.9
Recycling of secondary raw materials	1,692.9	2,216.7	2,400.3	2,261.7	2,612.1	4,147.6
Collection, purification and distribution of water	5,077.7	5,407.0	5,504.9	5,943.1	6,352.0	6,548.2
Wholesale of waste and scrap	2,110.8	2,588.2	1,266.4	1,119.0	1,651.6	2,806.5
Sewage and refuse disposal, sanitation and similar activities	3,992.2	3,452.2	3,981.1	4,232.5	5,171.0	6,338.7
Total	**13,115.4**	**14,019.1**	**13,606.4**	**13,802.1**	**16,088.9**	**20,646.9**

Source: Register of economic subjects (RES)

VIII. THE CZECH REPUBLIC AND THE EUROPEAN UNION

VIII.1 The Czech Republic – two years in the EU

Czech Economy – From the CMEA to EU

The Czech Republic was created in 1993 when Czechoslovakia split into two parts; its history is much longer. Its economic history has been no less complicated than its political history. Having been the industrial center of the Austrian-Hungarian Empire before 1918, it was severely hit by the Depression in 1930s and became an economic colony of Germany during WWII. After WWII, it became a part of the Soviet block and started experimenting with central planning. It ended up with one of the most rigid and centralized systems of central planning in Central and Eastern Europe, but thanks to its industrial traditions and good initial position, it still managed to maintain standards of living at a higher level than in other CEE countries.

In its more recent economic history, it has experienced ebbs and flows as well. After the 1989 "Velvet Revolution" and the beginning of reforms in 1990, it suddenly changed from a faithful member of Council of Mutual Economic Assistance (CMEA) and a centrally-planned economy into one of the most liberal countries in the world – at least at the verbal level. Its government introduced ambitious economic reform and a program of mass privatization ("voucher privatization", it took place in several waves during 1992–94) that almost overnight turned a large part of state-owned companies into stock companies with private owners, and the majority of population into stockholders (there were more than 6 million participants in a nation of 10 million). F. A. von Hayek and the liberal Austrian Economic School were declared official inspiration for the government's policies; both the country and the architects of the reform were widely praised for their achievements, and their experience was recommended by international financial institutions as an inspiration for reformers in other countries. While the real economic development was not bad (the economy experienced substantial structural changes and foreign trade reorientation without any dramatic welfare impacts), many reforms were not completed at all, and the performance of the economy could not live up to inflated expectations. The break point came in 1997. The Czech Republic struggled with a high balance of trade deficit and a banking crisis; it finally had to give up defending the pegging of its currency, and to introduce restrictive policies that together with the effects of incomplete reforms drew the country into recession. The opinions on the country's previous policies took a turn for worse too – instead of being an official success story it became a cautionary tale about the importance of development of proper economic institutions.

Alongside the process of economic transition the country has decided to return "back to Europe" and renew its traditional economic and political ties with other European countries. The Czech Republic signed an association agreement with the EU in 1993 (the most important economic parts of the agreement had been put into effect in 1992 as an Interim agreement) and it declared

membership in the EU as its main long-term political aim. The official application to the EU was submitted in 1996, and after prolonged negotiations, gradual adaptation of laws and institutions, and the liberalization of mutual trade, it joined the EU in May 2004 together with 9 other new entrants.

Two Years in the EU – What Next?

Two years have passed since the official accession of the Czech Republic to the EU (May 1st, 2004). The accession was also in general viewed as a symbolic end of the transition phase; this has been emphasized by the country's graduation from recipient to provider status in the World Bank (April 2005). The membership led to no sudden economic shock thanks to the long pre-accession period and the gradual adaptation of institutional and legal systems, but it has contributed to the relative high economic growth that the Czech Republic has been experiencing during the last three years (see the next section).

When the celebrations of the accession were over, Czech citizens woke up as members of the EU and started asking and comparing the effects of the membership with their daily life. While the overall macroeconomic numbers (see the next section) are with the exception of public finance very favorable, the public seems to view the situation through different eyes. The campaign for the EU membership had in some cases lead to exaggerated expectations of rapid changes in the standards of living; the confrontation with reality had a sobering effect (see Figure VIII.1.1). The pendulum of the public opinion has even swung in the other direction to some extent, to a belief that EU accession achieved relatively very little and that the Czech Republic (and other Central and Eastern European new members) have got a very similar position as before, i.e. a poorer CEE country not treated as completely equal by its EU partners. Current public opinion is therefore rather lukewarm; most Czechs claim to be neither satisfied nor dissatisfied with membership (see Figure VIII.1.2).

The attainment of EU membership also influenced the political scene. The accession

Figure VIII.1.1.
April 2006: Has EU Membership Improved your Standards of Living?

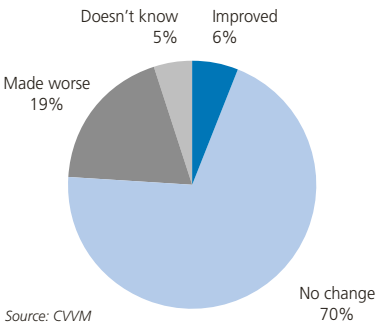
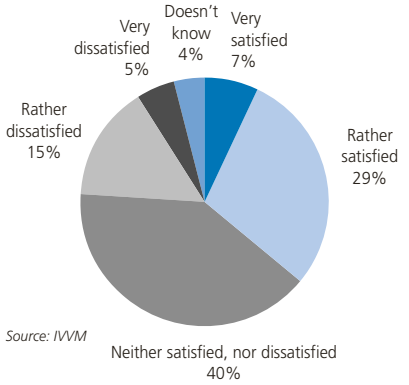


Figure VIII.1.2.
April 2006: Czech Satisfaction with Membership in the EU



had been the main official aim for more than 8 years (the official application was submitted in 1996), and it had been the aim on which main political parties and elites could agree. There seems to be no such unifying aim for the near future – neither the introduction of the Euro, nor the coming Czech presidency of the EU (in 2009), nor the necessary reforms of the social security system, nor the threat of international terrorism seem to be able to generate some consensus on the Czech political scene, which is assumed to remain fragmented.

Czech politics has been shattered by the results of the June 2006 election. The House of Deputies of the Czech Republic (the Lower House of Parliament) uses the proportional representation system of election. This results into the fact that several (typically about 5) parties are usually represented in the Lower House and any government that is to have a sufficient majority in the 200 member House is almost necessarily a coalition. The results of the 2006 election resulted into a stalemate – the only coalition that includes the "winning" party (ODS, Civic Democratic Party), and does not contradict the fierce pre-election rhetoric, and does not strictly violate promises made to the voters has only 100 votes out of 200. This is neither sufficient for succeeding in a confidence vote nor for passing a bill in the Lower House. Complicated negotiations on the next government are still underway at the time of writing, but it seems to be clear that the next government is likely to be weak and unstable, and the Czech Republic will experience an early election. However, given the distribution of political preferences, even an early election may not be a solution, and a change of election system that could bring about a change requires a consensus of the main political parties.

As far as EU membership per se is concerned, further program remains relatively clear. The Czech Republic will be preparing for its EU Presidency in 2009, and it is also preparing for the future adoption of the common currency: the Euro. Although the incumbent as well as the previous government have declared the preparation for the adoption of Euro as one of their priorities, the Czech Republic is still struggling with preparation for meeting the Maastricht convergence criteria. It is the fiscal issues (deficit of the state budget) that cause the problems and given the expected weakness of the next government, there is a danger that the Czech Republic will adopt the Euro later than other new members. The Czech Republic has been also trying to normalize its position in the EU and get more equal status for its citizens – especially with respect to the mobility of labor, services, and the membership in the Schengen Agreement that introduces a single visa and a removal of border controls for its full members. Progress in these issues is likely to remain slow; it was planned the Czech Republic will become a full member of the Schengen zone in 2007, but full membership is likely to be postponed to 2008, and it is even possible that unlike other countries, it will not lead to a complete removal of border controls.

Recent Economic Development

The Czech economy has been growing incessantly since 1999. After overcoming a minor slowdown to 1.9% in 2002, the rate of growth of its GDP increased up to 6.1% in 2005. Similar rates of growth are expected in 2006 (the estimates of GDP real growth rates for the first two quarters were 7.1% and 6.2% respectively) and in 2007 if the development of world economy remains

favorable. While the current GDP growth is comparable with other new member countries, it is substantially higher than in the old member countries (see Figure VIII.1.3). This difference in growth rates together with gradual appreciation of the Czech currency also means gradual convergence of the Czech GDP per capita (and standards of living) to the levels typical for the original EU members.

The high growth seemed to be pulled by increasing exports, and it can be at least partially attributed to the positive effects of foreign direct investment (FDI) and the EU accession that has increased the motivation for the inflow of FDI. For more details on the development of foreign trade see the next section.

The inflow of FDI and increasing exports have also changed the shape of the current account. Although the Czech Republic had been struggling with a high balance of trade deficits in the past, it is now for the first time in its independent history experiencing a balance of trade surplus (+41.9 billion CZK in 2005). However, the inflow of FDI also leads to increasing pressure on the income account. The current account balance as a whole therefore remains in red numbers. Although the current balance improved to only 2.1% of GDP in 2006, it is likely to

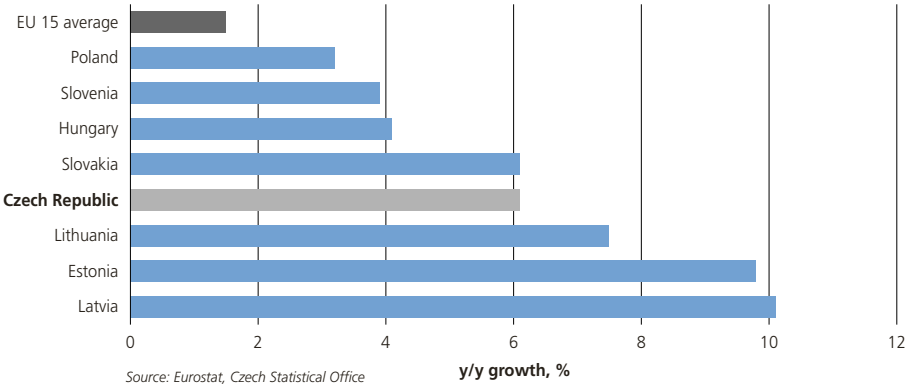
Table VIII.1.1. Main Economic Indicators

Year	1998	1999	2000	2001	2002	2003	2004	2005
GDP								
GDP Growth	-0.8	1.3	3.6	2.5	1.9	3.6	4.2	6.1
Foreign Trade								
Exports, real y/y %	10.4	5.4	16.5	11.2	2.1	7.2	21.1	10.6
Imports, real y/y %	8.3	4.9	16.3	12.8	5.0	8.0	18.2	4.9
Trade Deficit as % of GDP	-4.2	-3.2	-5.5	-5.0	-2.9	-2.7	-1.0	1.4
Balance of Payments as % of GDP and Its Main Components								
Current Account	-2.0	-2.4	-4.8	-5.3	-5.5	-6.2	-6.0	-2.1
Inflow of FDI	6.0	10.5	8.8	9.1	11.3	2.3	4.6	8.8
Inflow of FDI (bln. of USD)	3.7	6.3	5.0	5.6	8.5	2.0	5.0	11.0
Inflation and Interest Rates								
CPI, y/y % *)	6.8	2.5	4.0	4.1	0.6	1.0	2.8	2.2
PRIBOR 2T	14.2	6.8	5.3	5.2	3.6	2.3	2.2	2.0
Labor Market								
ILO Unemployment, %	6.5	8.7	8.8	8.1	7.3	7.8	8.3	7.9
Employment, y/y %	-1.4	-2.4	1.3	0.6	0.0	-0.4	-0.4	0.7
Real Wages, y/y %	-1.4	6.2	2.4	3.8	5.4	6.5	3.7	3.4
Public Finance								
General Government Balance as % of GDP	-1.5	-1.4	-2.1	-2.9	-1.9	-4.2	-3.4	-1.9
Exchange Rates								
CZK per USD	32.3	34.6	38.6	38.0	32.7	28.2	25.7	23.9
CZK per EUR **)	36.2	36.9	35.6	34.1	30.8	31.8	31.9	29.8

Sources: CSU (Czech Statistical Office) – Macroeconomic indicators, http://www2.czso.cz/csu/redakce.nsf/i/cr:_makroekonomicke_udaje
CNB – data on FDI, PRIBOR rates, exchange rates, http://www.cnb.cz
MFCR (Ministry of Finance of the Czech Republic (Macroeconomic Prediction)
Trade deficit as % of GDP calculated from CNB (deficit) and CSU (GDP) data

*) As in the previous editions, December/December index
**) ECU rate for 1998

Figure VIII.1.3. Real GDP Growth Rates in 2005



Source: Eurostat, Czech Statistical Office

remain in deficit, and the deficit is likely to return to values typical for years before 2006. The inflow of FDI was again at record levels in 2005 (11 billion USD), though more than half of the total FDI came from reinvested earnings of companies that are already active in the Czech market (see the Section 3, Macroeconomics for more on FDI). The balance on portfolio investment and other capital was negative, but the financial account as a whole remains in surplus caused by the high inflow of foreign direct investment.

In spite of the relatively high growth and the development of oil prices, inflation has remained low, thanks to the development of prices of food and agriculture produce and thanks to the gradual strengthening of the Czech currency. During the last five years inflation has been at comparable and even lower levels as in the EMU countries. In spite of possible effects of hikes in oil prices and expansionary pressures of the deficit budget, it seems that the Czech Central Bank will be able to meet its inflation target, i.e. 3% growth in consumer price index (±1%) in the near future, although this may require gradual upward adjustments of the bank's rates. The Czech Central Bank claims that it will use the same inflation target until the moment of the adoption of the Euro. Inflation is unlikely to become a real economic problem in the near future but it is not likely to be a major obstacle to the adoption of the Euro.

Unfortunately, the same cannot be said about the fiscal issues. Although the Czech economy has been in an expansionary phase of the cycle since 1999 and a reform of public finance officially started in 2004, there has been a central government's budget deficit during the whole period. Moreover, the structure of expenditures and revenues is unbalanced. (see Section 3, Macroeconomics for more on the fiscal stance). On the expenditure side, the budget is burdened by a high regular mandatory social expenditures, while the government has been trying to improve the revenue side by one-off gains from privatization. The deficit decreased to 1.9% of GDP in 2005, the original projection was 4% of GDP. The decrease was caused by higher than expected revenues (especially corporate taxes and consumption taxes); the limit set by the Convergence Program for 2006 is 3.8% GDP (ESA 95). The program aims to

decrease deficits gradually with compliance to the Maastricht convergence criteria being the final target.

In spite of the high growth predicted for 2007, a deficit (CZK 88 billion) has also been proposed for 2007 as well. While the total public debt is so far well below the limits set by the Maastricht criteria and it even slightly decreased in relative terms in 2005 (it amounted to 23.2%), without structural reforms it could easily get out of control in case of an unexpected slowdown and subsequent recession.

Economic Effects of EU Membership

Direct effects of EU membership are not easy to estimate and enumerate. The accession to the EU was not a one-off shock; it was preceded by a long pre-accession period and a gradual adaptation of policies and institutions. Besides the complex time dimension there are other important aspects that were influencing economic development during this period, such as economic reforms per se (e.g. processes of privatization) and changes in the world economy.

The economic effects of accession worked via several channels:

Liberalization of access to the EU goods markets. In spite of generally shared opinion, the EU accession did not mean overall shock liberalization for foreign trade, because the Czech Republic already had a free trade agreement with the EU. From the point of view of trade policy the accession was a change from a free trade area to customs union. What could play a more important role in the decision-making of investors is the fact that accession makes this liberalization irrevocable by removing the threat of introduction of additional protective measures or antidumping duties.

Partial liberalization of the movement of labor. Again this did not come as a sudden shock as the barriers were not excessively high for selected professions before the accession (e.g. in the IT industry), and the barriers were not removed completely (only selected countries – UK, Ireland, Sweden) allowed the inflow of labor from CEE new member countries initially. Additional countries joined the club in 2006 (Finland, Portugal, Greece and Spain). Moreover, substantial real barriers to mobility (language barriers, low willingness to move) persist.

Partial liberalization of the movement of services. Full liberalization in the service sector remain a sensitive topic – on the one hand it is crucial for entrepreneurs from new member countries, without it they will now have a level playing field; on the other hand, old member countries consider it as a potential loophole that could be used to circumvent restrictions on the mobility of labor.

Irrevocable adoption of acquis communautaire and the precedence of EU norms. Again, although prospective members had been adapting their laws and norms gradually before entry, the accession changes the situation by making it irrevocable and stable.

Adoption of common commercial policy of the EU that has changed trade policy with respect to third countries, especially China and USA.

Reputation effect. The accession was understood as a final signal that the situation in the CEE countries is really standard and stable.

Access to EU funds. The Czech Republic could use up to 2.6 billion EUR in 2004–2006, and up to 26.7 billion EUR should be available during 2007–2013. The real use of the funds, however, depends on the ability to pre-

pare adequate projects and meet stringent administrative criteria.

When we consider the experience of all new CEE EU members, it seems that it was the combination of the effects, namely of the reputation effect, lower production costs and irrevocability of market access liberalization and norm harmonization that mattered. The new members have experienced high inflow of FDI before and at the time of accession – both from the old member countries and from non-members. They play a double role: (1) For producers from third countries that are a lower cost entry point to the common market, entry point that shares basic technical, health and safety norms with the EU; (2) for producers from "old" member countries the new members represent an opportunity to enjoy the combination of lower production costs (though not at the level comparable with the rest of Eastern Europe or China) with more or less standard European political, legal, and economic environments.

The immediate effects of membership have therefore been positive – the high inflow of FDI has stimulated growth of GDP; decreased in unemployment (see Table VIII.1.1 and Figure VIII.1.3); and increased in the participation rate. The impact of improved access to EU funding does not seem to have a pronounced effect so far – new members are struggling with meeting all the administrative criteria for really getting access to the funds and a relatively high share of the funds has not been used at all.

EU Membership in Near Future

The Czech Republic as well as other CEE new members are still adjusting to the accession and they are trying to find their role in the EU. The new members are at present focusing on equalizing their position with the position of the "old" members, especially in the fields of the mobility of labor, services, the access to funds, and influencing of the EU policy. The EU will have to solve the conundrum of the reform of its decision-making which was paralyzed when the proposed EU Constitution was refused in the 2005 referenda in the Netherlands and France. The inefficiency of the current arrangement is obvious, but any attempts at streamlining will necessarily further restrict national sovereignty of the individual members. This, together with perceived inequality of position of "old" and "new" members can lead to a further increase in Euroskeptic tendencies in the Czech political system.

The Czech Republic is preparing for two important events directly related to EU membership:

Czech presidency of the EU, which will start in January 2009 and the necessary preparations have already started. A successful presidency can help improve the position of the country in EU structures and also comfort the public opinion.

Adoption of the Euro. The Czech Republic (and other new members) agreed to join the Euro when they are ready, and no opt-out clause applies to them. However, the countries still have to meet the convergence criteria, and they are able to influence the time when they will meet the convergence criteria.

The Czech Republic has had a Strategy of Accession to Eurozone since 2003, but the Euro and its early or late adoption have not so far sparked any more important political debates. It seems that main political parties and the public on the one hand do not have a major objection against the common currency, but on the other hand, they do not consider the issue as too topical (adoption of the Euro before 2009 is unlikely). This may

change when the first new members adopt the common currency earlier than the Czech Republic (e.g. Slovenia intends to switch to the Euro in January 2007). From an economic point of view, the adoption of the Euro means two basic problems: (1) the need to consolidate the government's budget so that the fiscal criteria are met; and (2) the need to enter the ERMII first, i.e. the danger of reintroducing a soft peg to the Euro.

The Need for Further Reforms versus Political Stalemate

Even though the Czech economy started its economic reforms in 1990, and it is now often described as a post-transition economy, there are several important interconnected problems that need to be tackled and that will require substantial changes in laws and government policies:

Czech economic and political life seem to be plagued with **corruption**; even possible links between political elites and organized crime have been implied recently. Although the position of the Czech Republic according to the corruption perception index published by Transparency International may not look so dramatic (in 2005 the Czech Republic ranked 47th, on par with Slovakia and better than Latvia or Poland), it is still worse than the position of stable, developed democracies, and it is most probably contributing to the problems of public finance and slower convergence.

Deep changes in fiscal policy are needed. The fiscal policy is getting into increasing problems and deficits caused by mandatory social expenditures. These changes therefore cannot be accomplished without concurrent reforms of the social security (and healthcare) and the pension system.

Social security system is getting increasingly expensive to run, and it does not achieve many of its aims. While the incumbent government has substantially increased minimum wages, hoping that they will make employment a more attractive option than unemployment, it has also substantially increased social security payments that have nullified the effect.

The Czech pension system is of the Pay-As-You-Go type. While the revenues are at present sufficient to cover the expenditures, the changing demographic structure (ageing of the population) means that the system can get into serious troubles in future.

The Czech healthcare system based on public insurance is constantly struggling with the need to finance care corresponding to European standards from resources that are substantially lower. Indebtedness, payment arrears, differences in salaries between the Czech market and other EU countries and the resulting threat of a future lack of qualified personnel in the future lead to constant struggles among the government, health-insurance companies, and providers of healthcare.

The situation is far from being really critical at the moment, and this will not change in the immediate future as long as the relatively high economic growth persists. Nevertheless, it would be prudent to start with the reforms as soon as possible.

Yet, any far-reaching reforms are highly unlikely to materialize in the near future, although some reform steps (tax reform) have been suggested by the political party (ODS) that got the highest share of votes in the June 2006 parliamentary election. The election ended in a political stalemate in which no realistically conceivable coalition seems to be able to form a stable majority in the

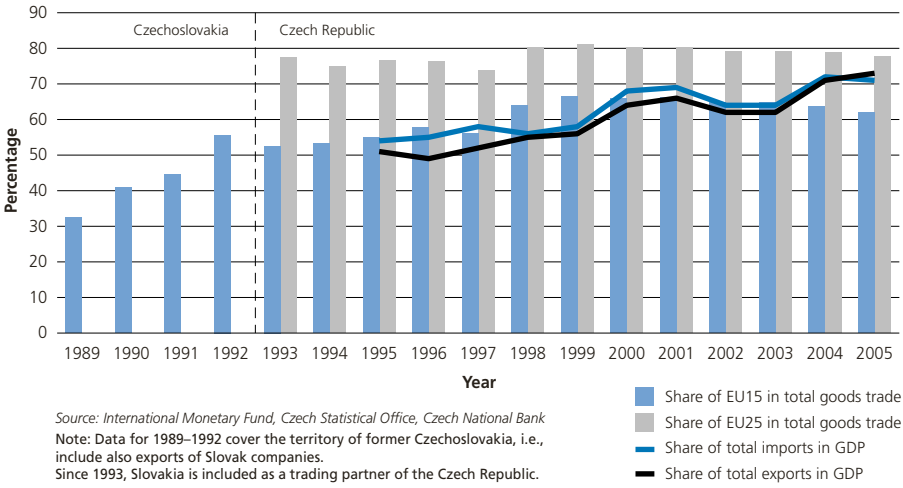
House of Deputies (the Lower House of the Czech Parliament). This situation is unlikely to change in the near future; even if the political parties can agree on the creation of some compromise coalition, the resulting government will be fairly weak, and it will be in constant expectations of a very probable early election. Populistic decisions that will further worsen the state of public finance are thus more probable than any structural reforms.

VIII.2 The Role of International Trade in Reaping the Benefits of EU Membership

The Czech Republic has the characteristics of a small and open economy, and its integration into international trade has fairly intensified since the beginning of its economic transition. During the period 1995–2005, the share of foreign trade in GDP increased from around 50% to approximately 70%. The years of growing openness of the economy were marked by a parallel upsurge in imports and exports, a growing importance of highly competitive western European markets, as well as changes in the commodity structure of trade. The share of EU15 in foreign trade grew most intensively in the first years of transition; the growth continued up to 1999, and the share has been more or less stable since then. Currently, about 70% of exports and 60% of imports are executed with the EU15 markets. The share of trade with EU25 markets, close to 80%, has been relatively stable since 1993 when the former Czechoslovakia split.

As a consequence of the gradual liberalization of mutual trade based on the EU Association Agreement, the trade in goods between the Czech Republic and the EU15 states was mostly free of barriers in 2004, the year of accession for the Czech Republic to the European Union. Upon EU accession, the

Figure VIII.2.1. Openness of the Czech Republic



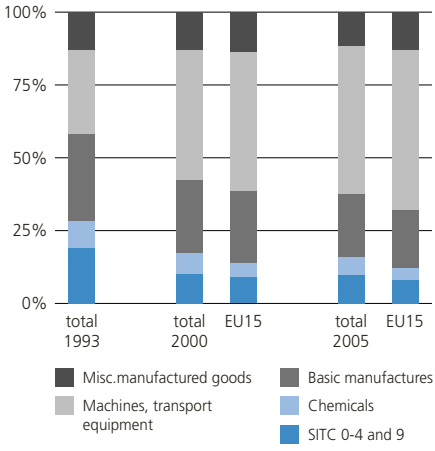
Source: International Monetary Fund, Czech Statistical Office, Czech National Bank
Note: Data for 1989–1992 cover the territory of former Czechoslovakia, i.e., include also exports of Slovak companies.
Since 1993, Slovakia is included as a trading partner of the Czech Republic.

remaining barriers were eliminated, and the Czech Republic became a part of the European single market; at the same time, trade and investment relations with other accession countries were also liberalized. The year 2004 thus saw an extraordinary foreign trade performance (certain methodological changes connected with EU accession, however, partly obscure the developments). Also in 2005, Czech exports grew by double-digit rates, but compared to 2004, the growth rates clearly came closer to the pre-accession ones. The level shift of exports thus was evident, but it is too early to conclude about any change in the trend.

Alongside the expansion of export activity and a growing share of exports to the western European markets, there were also important developments in the commodity structure of trade. In particular, the export of machines and transport equipment have been accounting for a growing part of total export, with its share increasing from 30% in 1993 to 50% in 2005. This increase took place mostly to the detriment of all other commodity groups. In relation to the EU15 markets, Czech exports have developed even more specialized in machinery and transport equipment, whose share accounts currently for 55%. This development has been a reflection of the inflow of foreign direct investment and building capacities in these industries.

Looking to the future, the characteristics and intensity of international trade are crucial determinants to the benefits the Czech Republic can reap when joining the European single currency area.[7] Possible gains from the common currency include, above all, the elimination of the exchange rate risk in economic relations (even though, this risk can be to a certain extent eliminated also via financial markets), and if the exchange rate is more a shock creator than a shock absorber, it will also mean the elimination of one source of economic instability. The introduction of the common currency, hence, reduces the transaction costs of foreign trade and foreign investment, brings positive market effects via increasing the comparability of prices and competition, and can lead to further economic integration. It can be hence assumed that higher openness and trade integration would be associated with greater economic benefits of a common currency since the efficiency gains from a common currency will tend to grow with the intensity of mutual trade and investment. In addition, a large external sector may moderate the effects of the loss of independent

Figure VIII.2.2 Development of the Commodity Structure of Czech Exports



Source: Czech National Bank, Eurostat

[7] The cost of adopting the Euro include, abstracting from the one-off cost incurred upon the adoption, most importantly, the loss of the independent exchange rate and an interest rate policy in a phase of ongoing real convergence of the Czech economy.

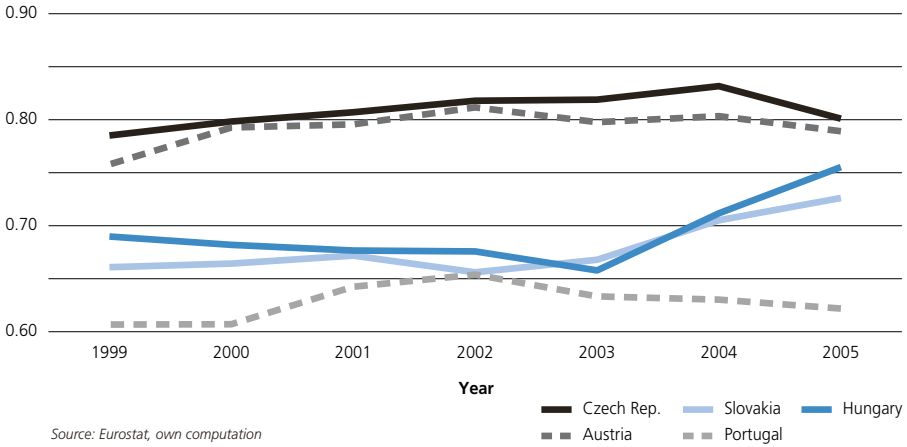
monetary policy that is inevitably linked to a common currency area entry since a high proportion of tradable goods within a consumption basket may decrease the effectiveness of a monetary policy.

For the Czech Republic, the high degree of openness thus creates a certain potential of economic gains related to entering entry to the euro area. Furthermore, according to a known "endogeneity hypothesis" (Frankel and Rose, 1997), a high intensity of economic links can be conducive to similarity of the business cycles of trade partners. By this argument, getting rid of frictions in international trade and ensuing further intensification of trade can also allow the countries to become closer in terms of possible introduction of a common currency. On the other hand, the "specialisation hypothesis" (Krugman, 1993) states that greater openness of the economy can result in greater specialisation, which will increase structural differences and increase the likelihood of asymmetric shocks.

To gauge which phenomenon is more important for an Czech economy, one can look at the structure of trade. Trade among the same industries of different countries, or industries that are influenced by the same demand developments (possibly reflecting some close vertical and horizontal links among suppliers), in general, provides for similar cyclical fluctuations of the economy. Different specialisation of the economies, reflected in more trade among different industries, will, on the other hand, fuel different economic cycles.

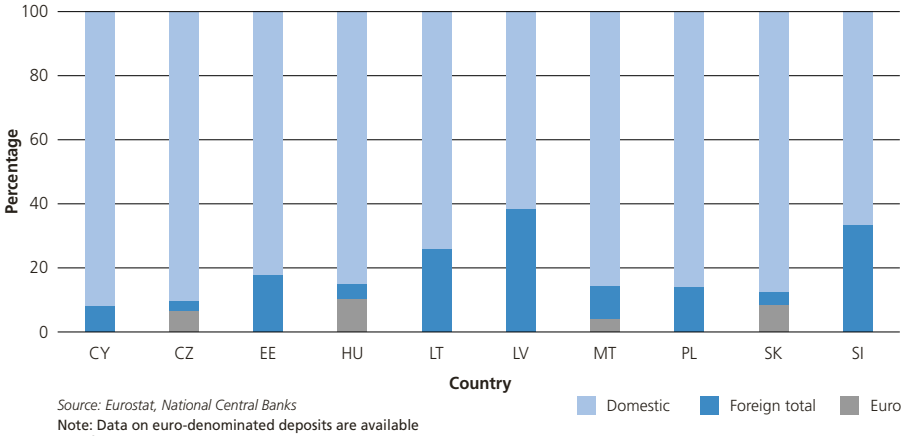
The intensity of intra-industry trade (i.e., trade between the same industries) between two countries can be evaluated by quantifying its share in total foreign trade turnover. This can be measured, for instance, by the Grubel-Lloyd index, which is the complement of the ratio of a sum of net exports in all industries over the sum of trade turnovers in each industry. The index takes values between zero and one; high values reflect a high share of intra-industry trade, which will indicate that supply and demand shocks affecting particular industries will affect the economies in a symmetric way.

Figure VIII.2.3. The Grubel-Lloyd Index of Intra-industry Trade



Source: Eurostat, own computation

Figure VIII.2.4. Currency Structure of Deposits Held by Residents (in % of Total MFI Deposits Held by Residents; End-2004)



Source: Eurostat, National Central Banks

Note: Data on euro-denominated deposits are available only for the Czech Republic, Hungary, Malta and Slovakia

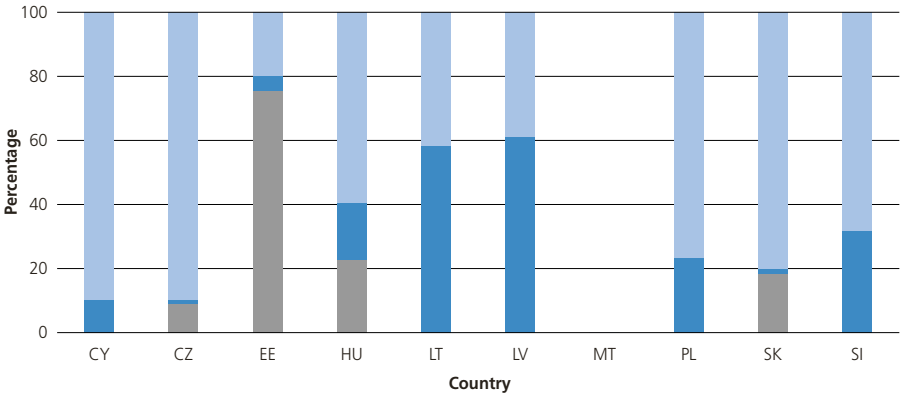
The Grubel-Lloyd index is expressed as the intensity of the intra-industry trade with three core euro-area economies (Germany, France, and Italy). The share of intra-industry trade between the Czech Republic and the three economies is very high; a comparison with selected Euro-area economies and new EU member states shows that the index is on the upper boundary of the distribution. This can signal that international trade can potentially contribute to a growing similarity of economic cycles with the core Euro area countries since the economic shocks affecting the Czech industries will probably be the same or similar as in the economies that account for almost 70% of the Euro area GDP.

The openness and international trade arguments would thus speak in favour of relatively early adoption of the Euro. One has to keep in mind, however, that the adoption of a single currency embodies also cost for the economy, represented, in particular, by the loss of an independent monetary policy, which can be amplified if the economy does not have effective alternative adjustment mechanisms available. This can potentially off-set the gains from international trade.

International trade goes often hand in hand with some degree of currency substitution, which makes it useful to elaborate also to some extent on the role of foreign currencies in domestic financial transactions. To improve trading relations and to reach smoother and better trading conditions, a smaller country is often willing to accept the currency of its bigger trading partner.

Evidently, the main substituting currencies are generally the Euro and the US dollar. The external trade of the Czech Republic, as well as that of the other new EU member states, is very much oriented on trade with the Euro area, and therefore, the degree of substitution with the Euro (euroisation) in these countries is in focus. Substituting the domestic currency with the Euro, followed by a reduction of transaction costs and exchange rate risks might help to increase competitiveness of domestic companies on the European

Figure VIII.2.5. Currency Structure of Loans to Residents



Source: Eurostat, National Central Banks
Note: Data for Malta are not available. Data on euro-denominated loans are available only for the Czech Republic, Estonia, Hungary and Slovakia.

markets. On the other hand, this would cut down the potential gains of introducing the Euro.

The euroisation is perceived here as an unofficial (i.e. spontaneous) process, when increasing use of the Euro is evoked by market forces, as a result of business concerns and not of a purposeful government policy of unilateral adoption of the Euro. In this respect, a higher degree of euroisation might positively affect the integration of financial markets, due to cost reduction of international financial transactions, lowering market risks and diversifying asset portfolios. Moreover, euroisation in the new EU member states may itself be facilitated by the progress in financial markets integration, the harmonization of legislation, as well as the increasing freedom of the movement of capital and labour. When economic conditions are stable, euroisation may be interpreted as a rather positive process, reflecting integration of markets and supporting faster convergence of the countries toward the Euro area.

The degree of currency substitution is measured by a share of foreign-currency denominated assets of residents in the total amount of their asset holdings. The degree of euroisation is expressed by the share of the Euro denominated assets of residents in total assets held by residents and is presented for the Czech Republic and other new EU member states, for which the data are available.

Based on the share of foreign-currency denominated deposits of all deposits held by residents, the analysed countries can be divided into two groups –those with the share less than 20% and the rest. The same division can be used also in the case of the share of foreign-currency denominated loans in total loans of residents. In both cases, the Czech Republic is reaching the lowest shares of less than 10%. Similar results can be found also for Cyprus. Likewise, the rest of the new EU member states, except for Latvia, Slovenia and Estonia, are within the interval of up to 20%. For the Baltic countries and Slovenia (as

well as Hungary, in the case of loans), foreign currency plays, in general, a more important role. In Estonia, for instance, bank lending since 1990s has predominantly (up to 80%) been either denominated in foreign currency or linked to foreign currency (the German mark until 1999 and the Euro thereafter). Due to a country specific risk, the interest rates on the Euro-denominated loans have always been considerably lower than on the domestic-currency denominated loans. A similar situation can be observed also in Latvia, Lithuania, and Slovenia. Looking at the development in Estonia, Lithuania, and Slovenia over time, no substantial change as a response to the ERMII accession in late-June 2004 was realized.

To sum up, according to the findings presented above, neither in the Czech Republic nor in the rest of the new EU member states doing the international trade within the Euro area invoked an overall high intensity of currency substitution. Arguably, foreign currency denomination is more pronounced in the countries with a history of fixed exchange rate regimes and past experience with the substitution of domestic currency with a foreign one during the pre-transition times.

Wage Flexibility in the Enlarged EU

(Based on Babetskii, I. (2006): "Aggregate Wage Flexibility in Selected New EU Member States." Czech National Bank Working Paper, No. 1/2006.)

After the enlargement of the European Union (EU) in May 2004, joining the European Monetary Union (EMU) is the next challenging step on the agenda of the ten new member states (NMS). Six of them – Cyprus, Estonia, Latvia, Lithuania, Malta, and Slovenia – have already been participating in the Exchange Rate Mechanism (ERM) II for more than a year and have ambitions to adopt the euro by 2007. The remaining four new EU members – the Czech Republic, Hungary, Poland, and Slovakia which recently entered the ERM II – plan to be ready to join the euro area by 2009–2010.

Various studies suggest that there is a need for higher labor market flexibility in the context of the EMU, of a currency board arrangement, or of a less rigid exchange rate peg such as the ERM. Since the independent exchange rate policy is no longer available under fixed exchange rate arrangements, adjustment through the labor market should be of a higher magnitude in countries with fixed exchange rates than with flexible ones.

Due to limited and even declining mobility of workers within the new member states, and given the formal restrictions on the free movement of labor for new EU members, it is unlikely that migration can be considered an efficient tool for coping with adverse shocks. Therefore, we focus on aggregate wage adjustment.

The macroeconomic data over the past decade do not seem to support the argument that the degree of wage adjustment is significantly higher for countries which already participate in the ERM-II. In addition, a complementary comparison of wage flexibility across countries is done based on institutional characteristics of labor markets. The pattern of rigidities at

the micro level does not differ much from the estimated macroeconomic indicators of wage flexibility.

Several policy implications follow from the analysis. First, an increase in unemployment is one possible outcome of wage rigidities. A lack of wage flexibility is then considered to be one of the costs of euro adoption. Second, results of our study suggest that joining the euro area is not likely to lead automatically to higher wage flexibility. Rather, the opposite effect could occur. Therefore, there is a call for adopting more flexible labor market policies in the monetary union in order to be better able to address asymmetric shocks. Third, in a low-inflation environment, real wage flexibility becomes almost synonymous with nominal wage flexibility, and both terms characterize the cost of disinflation. However, if nominal wages are rigid, especially downward, then the adjustment to shocks would go more quickly via real wages at higher inflation rates. Consequently, a decline in inflation in the new member states over the past decade may have naturally contributed to the observed decrease in real wage flexibility, or the absence of such. Therefore, if the central bank sets its inflation target at too low a level, there might not be enough room for real wage adjustments. When the ability of wages to adjust is limited, the productivity channel may be viewed as an alternative shock absorber. In particular, if productivity grows faster than real wages, this creates some margin for coping with shocks.

IX. COMPARATIVE STATISTICS

Comparison of Selected Economic Indicators for CEFTA Countries*

General Characteristics

	CZ	HU	PL	RO	SK	SL
Surface	78,886	93,030	312,685	238,391	49,034	20,273
Population (in thousands)	5,267	4,183	17,161	9,119	2,644	985
Urban share (%, 2004)	75	65	63	55	58	49
Economically active (%, 2003)	51	41	45	42[a)]	49	49[a)]

Note: [a)] Forecast

Level of Development in 2005

	CZ	HU	PL	RO	SK	SL
GDP total (current prices, mln of EUR)	99,733	88,800	243,398	79,314	38,113	27,634
GDP per capita (EUR)	9,700	8,800	6,400	3,700	7,100	13,800
GDP per capita (EU25=100)	42	38	27	16	30	59
GDP per capita in PPS[b)] (EU25=100)	74	61	50	35	55	81

Note: [b)] Purchasing power standard

Real Growth Rates in 2005

	CZ	HU	PL	RO	SK	SL
GDP	6.1	4.2	3.2	4.1	6.0	4.0
Gross fixed capital formation	1.3	5.6	6.2	13.0	13.8	1.5
Industrial production (NACE classification)	6.7	7.3	4.6	2.1	3.9	4.0
Construction	2.5	16.1	9.1	8.6	14.7	3.0

* CZ – Czech Republic, HU – Hungary, PL – Poland, RO – Romania, SK - Slovakia, SL – Slovenia

Unemployment, Wages and Prices

	CZ	HU	PL	RO	SK	SL
Unemployment rate (2005)	7.9	7.2	17.7	7.7	16.3	6.5
Average gross monthly wage EUR (2004)	524	567	515	206	395	1,118
Real growth rate of wages (2004)	6.0	7.5	4.1	16.1	12.0	6.8
Consumer Price Index (2005)	1.6	3.5	2.2	9.1	2.8	2.5
Producer Price Index (2004)	5.7	8.4	7.6	18.5	3.4	4.3

Government Deficit, Current Account and Debt in 2005

	CZ	HU	PL	RO	SK	SL
Deficit as % of GDP	-3.6	-6.5	-2.5	-0.4	-3.1	-1.4
Gross government debt as% of GDP	30.4	57.7	42.0	15.2	34.5	28.0
Current account (2003) as % of GDP	-2.1	-6.8	-1.7	-8.7	-5.4	-2.0

Exports and Imports in 2005

	CZ	HU	PL	RO	SK	SL
Imports (mln of EUR)	69,630	60,198	90,897	34,430	31,388	18,000
Growth rate of imports	4.8	6.8	3.4	17.2	16.6	7.0
Exports (mln of EUR)	71,541	58,965	90,139	26,203	29,453	17,849
Growth rate of exports	10.4	11.6	7.1	7.6	13.8	10.5
Trade balance (mln of EUR)	-4,247	77	3,333	-12,352	-448	-252

Source: Eurostat

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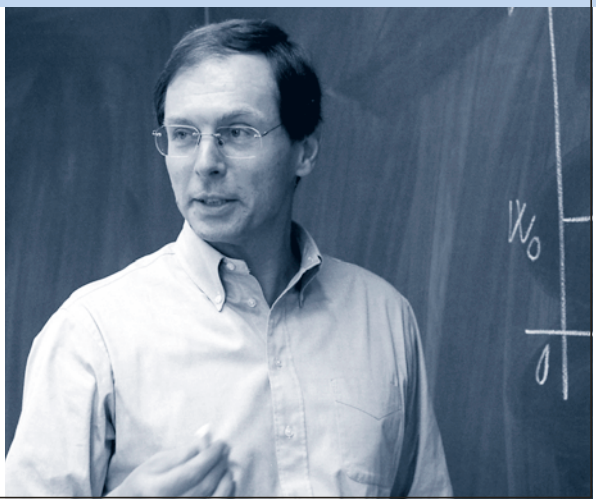

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