III. MACROECONOMY

Fiscal Deficits

The main problem of the Czech economy – the growing deficit of public budgets – stems from several sources. First, there is the necessity to finance bank restructuring (for details on the unloading of non-performing, formerly soft, loans from privatized banks see Section IV). Second, the costs of the recent recession are still felt and the current government opted to help some large companies in trouble (steel, machinery, etc.). Third, the looming elections naturally make the ruling Social Democrats unwilling to limit spending just now. Yet, all of these temporary issues are secondary in importance to the structural deficit of mandatory spending, locked in by the existing legislation (including generous indexing of welfare payments) and adverse demographic development.

Netting out extraordinary budget items including privatization receipts and the costs of bank restructuring, the overall balance of the general government mushroomed to 4.3 % of GDP in 2000 and is expected to grow by another percentage point in 2001. The overall government budget includes not only the central state budget, but also local governments, public health insurance funds and various extra-budgetary funds set up by the government. The ongoing economic recovery makes clear that the deficit is not merely cyclical.

The deficit is even more alarming given that fiscal revenue of the Czech government in 2000 was already high as a fraction of GDP and at 46 % compared to that of, e.g., Germany. Indeed, wage taxes stand at 47.5 % of gross labour income, twice the OECD average, and weigh heavily on enterprise employment. Hence, the adjustment must come on the expenditure side. Yet, most categories of expenditure (including social welfare, housing, and transport) are currently locked in upward trajectories, even though maintenance activities have already been severely restricted in recent years.

Between 1994 and 1999, social security and welfare expenditures rose by 3.2 % of GDP. Public expenditure on social welfare persistently exceeds payroll revenues and the deficit is projected to grow even during the expected years of economic expansion. Worse, these deficits occur while the demographic situation has not yet deteriorated. Towards the end of the new decade it will.

The Czech Republic is headed for significant demographic aging. Elderly over 65 years will constitute almost one quarter of the total population by 2030 so that for each 10 individuals aged 15 – 65 there will be 4 individuals over 65. This is in part due to the dramatic decrease in fertility as the number of children born per woman decreased from 1.9 to 1.1 in the period 1990 – 1999. Aging will result in increasing health care costs. This is important as health sector spending is already high at 7.4 % of GDP in 1999 and 2000; see Section IV.4 and poses a formidable challenge to the current state-guaranteed pay-as-you-go pension scheme.

The ratio of pensioners to contributors has risen from around 0.47 in 1994 to 0.53 in 1998. Without further reforms, it is projected to reach over 0.6 by 2010 and

continue rising to 0.7 by 2030 (Section I.4). As a result, the deficit of the pension scheme could rise from the current 1 % of GDP to about 3 % before 2020.

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

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

III.1 Gross Domestic Product

After a dramatic decline in the three year period 1997 – 1999, when the economic growth rate bottomed at -2.2 % in 1998, economic growth resumed by the end of 2000, reaching 2.9 %, and continues in the year 2001. For the year 2001 we predict the growth rate to be about 3.4 %.

A rough look at the data suggests that recovery of the Czech economy continued throughout 2001. However, it is equally important to look at the structure of the GDP growth components in 2000 to assess the stability of this growth.

The data for components of GDP show that private consumption increased by 4.7 % while government consumption declined by 6.4 % in 2000. A stronger than expected recovery is observed in domestic demand, which resulted in a total investment increase of 10.73 %. This is a positive signal of ground-

The Annual Growth Rates of Real GDP (in %)

Year	1993	1994	1995	1996	1997	1998	1999	2000	2001e
Growth	0.1	2.2	5.9	4.8	-1.0	-2.2	-0.4	2.9	3.4

Source: CSO, 2001 CERGE-EI estimate

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

Year	1993	1994	1995	1996	1997	1998	1999	2000	2001e
GDP	1,020.3	1,182.8	1,381.1	1,567.0	1,679.9	1,837.1	1,887.3	1,959.5	2,131
Private Consumption	509.5	599.5	692.1	807.3	888.0	947.5	1,005.9	1,053.1	1,153
Government Consumption	223.4	263.0	284.7	315.5	332.5	346.5	371.9	348.0	410
Total Investment	279.3	352.0	470.0	536.7	547.4	554.3	525.7	582.1	645
Net Exports	8.1	-31.7	-65.7	-92.5	-88.0	-26.2	-27.7	-72.9	-77.0

Source: CSO, 2001 MF estimate

ed national economic recovery. On the other hand the net export worsening that deepened the current account deficit by 163 % undercuts the increase in investment activity. This is an alarming situation, which could be partially attributed to slower growth in all of Western Europe. However, the concern with the growing current account deficit should not be exaggerated, because the deficit widening is not connected with accelerated consumption.

Trust and Growth

It was big news internationally when in September 2001 Ronald S. Lauder won an arbitration ruling against the Czech government for failing to protect Mr. Lauder's Central European Media Enterprises (CME) from being pushed out of TV Nova, the Czech Republic's most popular and highly profitable television station. Mr. Lauder, however, lost the case before a London-based arbitration tribunal earlier that year. An international arbitration panel in Stockholm ordered the Czech government to pay Mr. Lauder's company "the fair market value" which, according to the Prague Post, CME estimates to be about $500 mln. It was – so far – the high point of a very public campaign that Mr. Lauder had waged through full page advertisements in newspapers such as the New York Times, warning investors to avoid the Czech Republic.

The Lauder affair came several months after the New York Times reported (July 19, 2001) that Czech authorities were cracking down on financial fraud and that they had won some significant convictions. Czech authorities were also reported to have brought some important changes in a cleanup campaign that they hope will restore investor confidence, and help revive an anemic equity market. Fat chance of that. Also in July, Transparency International released a report in which the Czech Republic scored its highest corruption mark since 1996, the first year it was permanently included in the index. In September, Freedom House released a report in which it gave the Czech Republic low marks on its law enforcement activities, claiming that law and order were deteriorating and corruption was on the rise. In November, the

Prague Post reported that U.S. authorities were unhappy with the intransparent procedures accompanying the privatization process of significant parts of the power and gas industries that the government launched in August. And, finally, in its most recent report on the accession states (released November 13), the European Union – while applauding progress in a number of areas, while blasted the Czech Republic for not doing enough to fight corruption and crime: "Fraud, money laundering, institutional theft and the phenomenon of 'tunneling' or asset stripping, remain a serious cause for concern." Whatever one thinks about some of the judgement calls in these reports, the fact that various (more or less) independent agencies and institutes come to the same damning conclusion about the state of opportunism, corruption, and law enforcement in the Czech Republic, is disconcerting.

The concerns – which long have found their expression in foreign newspaper and tourist guide warnings about opportunistic taxi-drivers and other service sector personnel – are particularly troublesome in light of accumulating evidence that the propensity to trust seems to be a major determinant of economic growth. These results and the evidence on corruption and lack of property enforcement suggest that the Czech Republic has to get serious about property rights enforcement if it wants to re-kindle investor, consumer, and visitor confidence and ultimately foreign and domestic investment and economic activity.
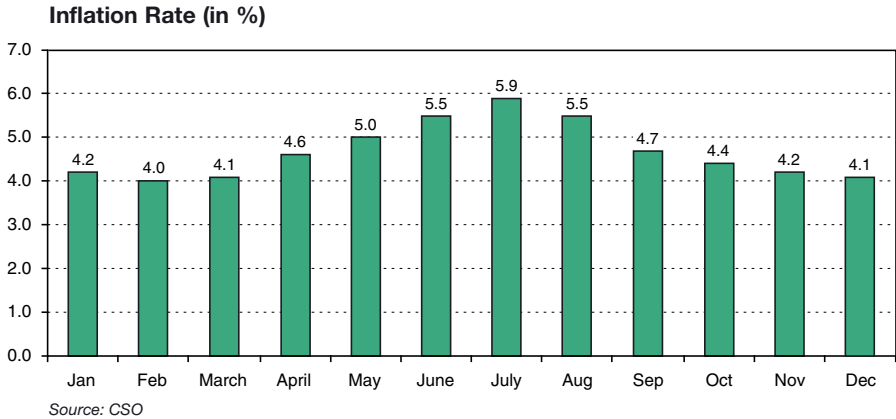
III.2 Inflation

Exogenous sources of inflationary pressures were very weak in 2001. The decrease in oil prices in combination with a fall in the USD exchange rate significantly weakened inflationary pressures on the Czech economy. Under these new conditions and further strengthened by the fact that nominal wage growth is under the 10% increase demanded by labour unions, the low inflationary environment seems to be sustainable. As a reaction to the new situation we witnessed cuts in all rates. The CNB board members decided on the rate cuts in February 2001. All key rates have been cut: the Lombard rates by 150 bps to a level of 6.0 %, the discount rate by 100 bps to 4.0 %, and also the key 2-week REPO rate by 25 bps to the level of 5.0 %.

The monetary policy of the CNB could be viewed as an old technique with a new target. As the situation seems stable, the CNB decided to abandon net inflation targeting and announced targeting headline inflation beginning in 2002. Basically two target ranges were set. The January 2002 y/y range is between 3 % – 5 %; the December 2005 y/y interval has been set between 2 % and 4 %. The new target was set in coordination with the government and assumes that an administrative change in prices – mainly deregulation and changes in indirect taxes – will contribute to headline inflation by 1 – 1.5 % each year.

However, the expectation of the low contribution of administrative changes is already problematic due to the fact that in

the second half of 2001 inflation is likely to be at the bottom of the targeted interval, between 4.5 % and 5 % (consult the graph below). This is the result of inflation in administrative prices, which is expected to be about 2.5 %. Although the target will be very difficult to enforce with the prevailing interest-rate setting, the CNB is not expected to react to the situation with interest-rate hiking.

Inflation Rate (in %)

Source: CSO

Inflationary Bias in Mid to Late Transition Czech Republic

(Based on Burda M., Filer R. K., and Hanousek J.,: Inflationary Bias in Mid to Late Transition, CERGE-EI Discussion Paper No. 73, 2001)

In last year's issue of this publication, we speculated about the possible extent of bias in measures of inflation during transition, suggesting that biases might sum to as much as 50 % and that much smaller levels of bias, on the order of magnitude of those that had been found in many Western economies, might substantially alter the general impression of the extent of the success or failure of the first decade of the transition from communism to free markets. This year we can prove, using different estimates of the size of the inflationary bias in the Czech Republic, that conventionally reported declines in real output and living standards during transition are a statistical artifact rather than a real phenomenon.

One would expect the transition to pose a particular challenge for measuring inflation. The changes involved in moving from a planned, shortage economy to a market one will involve massive changes in the availability and relative prices of various products. Thus, the transition environment is one in which the classic problems of Consumer Price Index (CPI) measures may well be exacerbated and others, not commonly seen in more established economies, may well appear. At the same time, the necessity to obtain accurate price measurements is particularly important

in transition economies. All countries in the region need to restrain government revenues (and therefore tax rates) in order to promote economic growth at a time when political realities dictate large social programs, often indexed to inflation, to mitigate the effects of the transition. In addition, countries seeking European Union membership face considerable pressure to conform to the Maastricht criteria for accession to the European Monetary Union, among which is a low inflation rate (no more than 1.5 % above the average inflation rate of the lowest three inflation countries in the EU). Obviously, upwardly biased inflation measures increase expenditure pressures and make achieving the Maastricht criteria more difficult. Similarly, if inflation rates are overstated and, therefore, real incomes understated, citizens of accession countries will appear poorer than they really are, thereby increasing pressure for resource transfers from current members and limitations on labour mobility, making the accession negotiations needlessly difficult. Finally, upwardly biased measures of inflation that overstate apparent income declines during the transition will have clear domestic political consequences, by reducing public support for necessary reforms and increasing political instability.

In general policy makers have not fully appreciated the difference between price indices and cost of living indices. While the Czech Statistical Office has followed long established procedures for calculating price indices and has continually improved its technical capabilities over the decade, users of this data have made an implicit assumption that the consumer price index, as conventionally calculated, is informative for policy purposes. This confusion is what has led to policies that have been based on the assumption that inflation is higher than it actually is, creating excessive spending pressure and excessively tight monetary policy.

We are now in a position to evaluate the accuracy of the earlier estimates using actual data for the Czech Republic. While some sources of bias appear to be smaller than we originally supposed, overall it seems that the approximation that inflation rates during transition have been overstated by 20 to 50 % remains reasonable. Importantly, the most significant source of bias turns out to be quality improvements that have occurred in products across the spectrum of consumer goods. The authors conducted focus group research for 64 products (16.2 % of the weight in the basket) out of the 750 in the consumer basket. Table contains the results of asking consumers to report their evaluation of the relative quality of various groups of items. Across all these items (weighted by their share in the consumer price basket), the official annual inflation rate over the decade of the 1990s was 9.1 % a year after official quality adjustments (and 9.6 % a year without such adjustments). When consumers' perceptions of quality improvements are allowed for, however, the annual increase in prices is reduced to 5.2 %.

These improvements have been missed in all quantity-based measures of national output. Thus, it would appear that GDP deflators are also substantially overstated during transition. In effect, citizens of the Czech Republic are substantially better off

than they were in 1989. This improvement in living standards has, however, taken the form of the consumption of far better products than they were able to purchase earlier, while the actual quantity of products consumed has remained relatively unchanged. By focusing on quantities, measures of inflation, GDP and incomes have missed much of the improvement in living standards since the end of communism.

Relationship between Inflation and Real GDP Growth for Several Transition Countries between 1991 and 2000

Source: EBRD
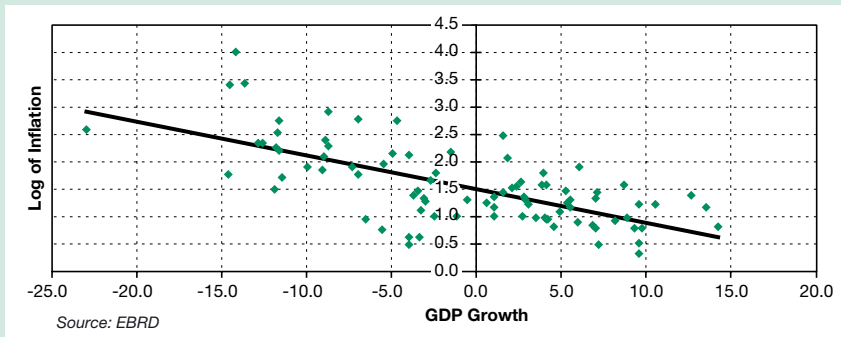
Summary of Focus Group Quality Adjustment Estimates

Product Description	Weight 1990	Number of Items Studied	% Price Increase	Index Increase	Captured Change	% Quality Change	% Actual Price Increase
Food	68.3	18	110.94	111.08	-0.14	13.72	86.29
Beverages	4.9	2	242.86	228.09	14.77	12.24	214.29
Clothing	5.6	6	259.86	229.0	30.86	165.13	47.4
Shoes	1.4	2	290.65	272.28	18.37	98.69	97.51
Accommodation	0.9	2	264.2	261.18	3.02	136.6	70.22
Furniture	9.7	4	212.56	202.89	9.66	68.66	97.91
White Goods	1.6	2	227.21	216.91	10.3	-0.97	229.09
Home Appliances	7.3	6	204.86	198.27	6.59	86.38	59.68
Electric Supplies	1.1	1	310.0	329.67	-19.67	266.84	11.76
Home Care Products	3.5	3	529.88	511.11	18.77	147.72	162.51
Transportation	27.6	4	206.61	163.09	43.52	86.72	69.33
Recreational Products	15.6	7	36.65	34.16	2.49	266.78	-50.13
Amusement Services	1.9	2	202.37	202.12	0.25	95.92	54.69
Personal Care Products	9.0	5	71.25	70.65	0.6	289.07	-33.38
Total of Studied Items	**161.9**	**64**	**149.99**	**139.41**	**10.58**	**84.17**	**65.95**

III.3 State Budget

Public budgets face a protracted period of growing deficits. Without substantial structural changes in the system of public finances, the Ministry of Finance predicts the total deficit of public budgets to reach 4.9 % of GDP. Excluding nonrecurring privatization revenues, the deficit would amount to 9 % of GDP. The actual figures could be even higher if some excluded governmental loan guarantees materialize.

Medium Term Fiscal Outlook (As a % of GDP, Passive Scenario)

	1998	1999	2000	2001	2002	2003
Total Revenues	39.3	41.4	40.9	41.8	39.9	39.5
Expenditures [1]	41.7	43.0	48.7	48.6	46.8	45.8
Total Public Deficit	-1.6	-0.6	-5.2	-4.9	-4.5	-5.1
Total Public Deficit (W/o Privatisation Revenues)	-2.4	-2.0	-7.6	-9.0	-7.3	-6.8

Source: MF CR, http://www.mfcr.cz/Rozpocet/FiscalVyhled/

1) Excluding Net Loans

Mandatory Expenditures Squeeze

Growing deficits of public budgets are mainly due to structural, not business cycle, problems. Expenditures which were at direct governmental discretion have been displaced by legally prescribed so-called mandatory expenditures which grew at an

Mandatory Expenditures: Medium Term Outlook (mln. CZK, Passive Strategy)

Expenditure	1999[2]	2000	2001[3]	2002[4]	2003[4]
Public Pensions	177,854	185,900	197,786	212,171	226,855
Sickness Insurance	19,337	27,778.61	28,803.8	31,630	34,260
Social Support	35,108	36,593.7	37,950	39,505	41,150
Employment Policy	7,650	10,250	10,770	11,900	13,400
Pension Saving Subsidy	1,900	2,300	3,200	3,300	3,400
Health Insurance Constribution	27,424	27,754	28,012	28,250	28,500
Mandatory Expenditures, Total[1]	**274,253**	**297,976**	**314,135**	**334,456**	**354,965**
Mandatory Expenditures (% GDP)	**14.9**	**15.7**	**15.7**	**15.6**	**15.5**
Mandatory Expenditures (% Tax Revenues)	**37.8**	**38.6**	**38.2**	**39.1**	**39.2**

1) Total includes also several other minor items not listed in the table
**2) Realised figures   3) Expected figures   4) Passive strategy forecasts**

Source: MF CR, http://www.mfcr.cz/Rozpocet/FiscalVyhled/

average rate of 10 % during the 1990s. The willingness or ability of the previous and current government to reconsider the scope and structure of mandatory expenditures has been minimal. Problems have been strengthened by growing debt service payments and growing expenditures on the ill-conceived support of individual housing savings. Looming fiscal problems have been openly criticized by the EU, OECD and IMF. By the end of 2001, six months before general elections, no measures to prevent the situation from worsening are even being considered.

The Evolution and Prospects of Tax Evasion in the Czech Republic
(Based on Hanousek J., mimeo CERGE-EI, 2001)

Participation in Unofficial Economy, Simulations


Source: Author's computation
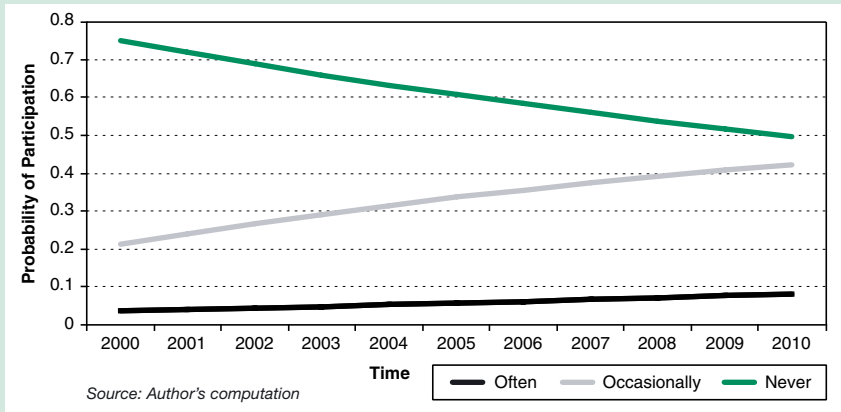
   The economic study of tax evasion is still a young field, and most research efforts have focused either on measuring the size of the underground sector which evades taxes, or in explaining why people evade taxes. Each year government revenues take a bump from mln.s of individuals slipping in and out of the shadows of evasion. If we could know how likely an individual is to slip between tax-paying and tax-evading status we could draw a line to the future that traces the size of the community of tax evaders. To find the likelihood of tax evasion we surveyed 1,600 Czechs in 2000. We asked them to put themselves in one of three categories: I evade taxes never, sometimes, frequently. We asked them this question for 1995, 1999, and 2000. By asking the question for different years we were able to form an idea of how people drift between different categories of tax evasion. Our estimate of the drift allows us to infer how people will move between categories over the next decade.

Our results suggest that unless the probabilities of moving between categories changes, a growing number of Czechs will become hardened tax evaders. To discover how governments might slow the slide to tax evasion we estimate an equation that seeks to explain why an individual would evade taxes. The individual's morality, age, income, sex, and town or village size all bear on his decision to evade. We show that as the population ages, tax evasion will rise. The government could counter tax evasion either by lowering taxes or by increasing the perception that it is delivering public goods of increasing quality for the crowns taxpayers see lifted from their wallets.

The first table shows the frequency with which people answered affirmatively to evading taxes in 1995, 1999, and 2000. We calculated 95 % confidence intervals for each category of evasion. The table shows a significant upward trend in the number of those who say they evaded sometimes, an upward but insignificant trend in those who say they evaded often, and a significant downward trend in those who say they never evade.

The survey results can be interpreted by different participation rates and transition probabilities in 1995, 1999 and 2000, but the outcomes are best understood if we use them to make projections of tax evasion and examine the figures which result. The figure below uses the transition matrix between 1999 and 2000 to project 5 years into the future the percentage of people in each evasion category. As the figure indicates, the Czech Republic will suffer from a growing number of occasional and frequent tax evaders. The figure also uses long-term transition probabilities between

Participation in Unofficial Economy, Simulations

Source: Author's computation
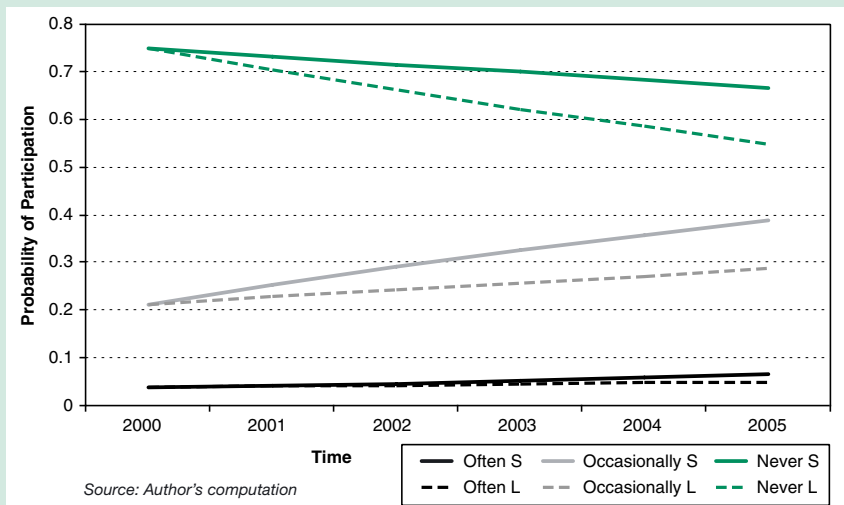
1995 and 2000 to make projections which go in the same direction but are less radical than those using the short-term stage-transition matrix between 1999 and 2000. That the results using the long-term stage-transition matrix are less pronounced than those using the short-term matrix may be due to chance. A long-term matrix includes five years of shifting in and out of particular states and may hide the fact that for four of the last five years an individual was a frequent evader but only shifted to occasional evasion in his last year.

Regardless of which stage-transition matrix we wish to use, we see an alarming upward tendency in tax evasion. Such a tendency could be predicted from transition probabilities between different stages of tax evasion. The standard computation procedure indicates that the chance an individual finds himself in a particular state of tax evasion in the future is a function of the chances of finding himself in any of three states in the previous period and the chance of transition between these states. If the chance of transition to a certain state is low at the outset, the survey result suggests that the future probability of finding oneself in that state will fall over time. Such an imbalance in transition probabilities alerts us to the possibility of a bad equilibrium in which tax evasion persists.

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

Year	Often	Occasionally	Never
1995	3.2% (2.0%, 4.4%)	12.6% (10.5%, 14.7%)	84.2% (81.9%, 86.5%)
1999	3.7% (2.4%, 4.9%)	16.7% (14.3%, 19.0%)	79.7% (77.1%, 82.2%)
2000	3.9% (2.6%, 5.1%)	21.3% (18.7%, 23.9%)	74.9% (72.1%, 77.6%)

Source: Author's computation

III.4 Investments

Investment activity in the Czech Republic in 2001 continued in its growing trend started in 1998 – 1999. The share of the gross fixed capital formation in GDP is presented in the table. The prediction for 2001 is 31.3 %. This figure supports the widely accepted belief of the resumed economic growth with solid grounds in fixed capital investment. A comparison in the ratio of gross fixed capital formation to GDP to an average fixed capital investment ratio in a developed country shows that the gross fixed capital formation in the Czech Republic exceeds the average by 30 %. This is a positive sign that the Czech Republic can catch up in economic life standards.

From the macroeconomic point of view, the presented data show that investment in the Czech Republic exhibits a pattern similar to that in developed countries. The character of the gross fixed capital formation with respect to a business cycle is consistent with the business cycle theory and is highly pro-cyclical. A similar characteristic of investment can be found in all developed countries.

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

| Year	1993	1994	1995	1996	1997	1998	1999	2000	2001e
Ratio	28.4	28.7	32.0	31.8	30.8	28.3	26.8	28.3	31.3

Source: CSO, 2001e CERGE-EI estimate

III.5 Foreign Direct Investment and Privatization

During the past decade the Czech economy experienced an increasing rate of internationalization not only due to the growth of trade but also thanks to the growth of foreign direct investment (FDI). Such increasing FDI flows into the Czech economy took the form of large foreign acquisitions during privatization. However, even before the privatization program started in 1991, several deals had been concluded including the joint venture VW-Škoda car factory, for which VW paid in several installments altogether 1.24 bln. USD.

During the 1991 – 1995 large-scale privatization program, foreign investors acquired out of about 5,000 enterprises 144 mainly small and medium size enterprises, which accounted for a mere 10 % of the property valued in excess of 35 bln. USD (based on book value). The most important transactions were Phillip Morris' acquisition of a tobacco factory for 0.42 bln. USD and Asea Brown Boweri acquisitions with a total value of 0.45 bln. USD. In the framework of the above mentioned privatization program about 30 % of the property has been either sold to domestic investors via direct sales or tenders or transferred to municipalities. Some tenders have been open only to domestic investors. Given the discrimination against foreign investors during the large-scale privatization program, there prob-

FDI Stock 1993 – 2002 (bln. USD)
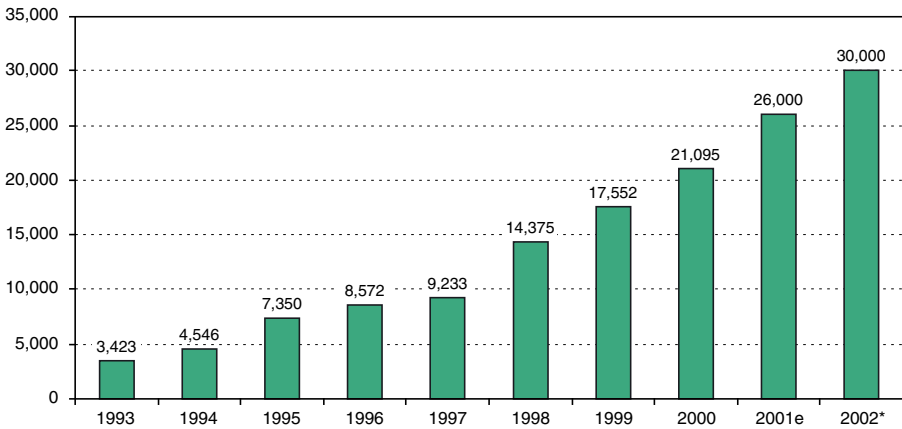
Source: CNB, 2001e - CERGE-EI Estimate; 2002 CERGE-EI Forecast*

ably could have been far more Greenfield investments in the Czech Republic had there not existed enormous bureaucracy relating to the establishment of a new plant.

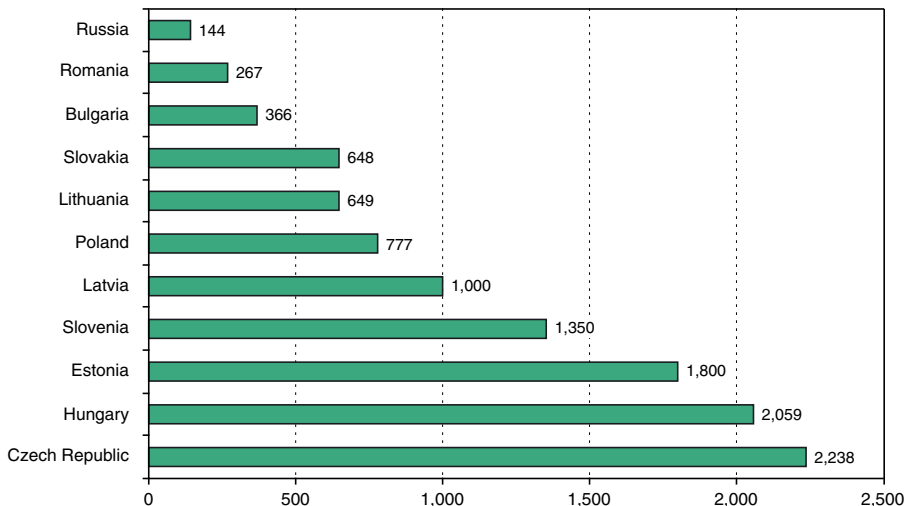Other large transactions were negotiated on a case-by-case basis: In 1995, the national telecommunications company was privatized along with other public utilities and a large oil refinery. Acquisition of 27 % of SPT Telecom by the Dutch-Swiss consortium TelSource for 1.46 bln. USD in the same year was the largest foreign investment to date.

FDI Flow 1993 – 2002 (bln. USD)
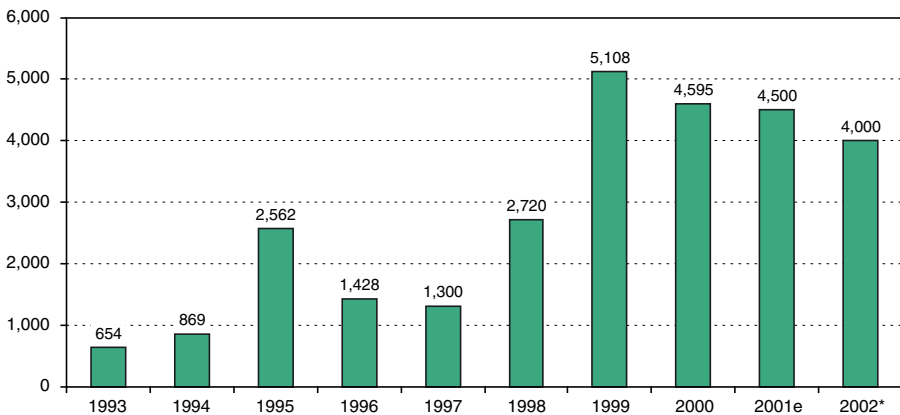
Source: CNB, 2001e - CERGE-EI Estimate; 2002 CERGE-EI Forecast*

Cumulative FDI Influx 1990-2000 Per Capita (in USD)

Country	Value
Russia	144
Romania	267
Bulgaria	366
Slovakia	648
Lithuania	649
Poland	777
Latvia	1,000
Slovenia	1,350
Estonia	1,800
Hungary	2,059
Czech Republic	2,238

Source: Business Central Europe

Large banks were included in voucher privatization. The government, however, retained strategic stakes in partially privatized banks and bank privatization started only in 1998 when Japan Nomura bank acquired 36 % of IPB for 0.038 bln. USD. The Czech government sold its share in ČSOB (65.7 %) to Belgian KBC bank for 1.11 bln. USD in June 1999. By February 2000 a share of 52 % of Česká spořitelna was acquired by Erste Bank der Oster-reichishen Sparkassen for 0.5 bln. USD. In June 2001 a 60 % stake in the last large bank, Komerční banka, was sold to Société Générale for 1.03 bln. USD.

In the whole Central and Eastern Europe region, FDI inflows increased in 2000 to a record level of 27 bln. USD and the FDI stock to CEE totaled about 125 bln. USD by 2000. CR absorbed about 1/6 of the total FDI in the region (WIR 2001, CEE includes Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, the Former Yugoslav Republic of Macedonia, the Republic of Moldova, Poland, Romania, the Russian Federation, Slovakia, Slovenia, Ukraine, and the Federal Republic of Yugoslavia (Serbia including Kosovo and Montenegro). In per capita terms, the Czech Republic remains the leader among other Central and Eastern European countries.

Foreign Investors in the Privatization

Privatization-related FDI transactions will most probably remain a key determinant of FDI inflows into the country and should stay on a high level for another few years. The pace and extension of privatization of residual state property is however

**Participation of the National Property Fund in Strategic Companies
as of November 15, 2001**

Company		Share in %	Privatisation Plan
	Financial Sector		
Česká pojišťovna, a.s.	Czech Insurance Company	30.25	Sold to PPF
	Telecommunications		
České radiokomunikace, a.s.	Czech Radiocommunications	51.19	Sold
Český Telecom, a.s.	Czech Telecom	51.10	Attempt to sell in 2001
	Energy sector		
ČEZ, a.s.	Electricity Generating	67.58	Attempt to sell in 2001
8 Regional Companies	Electricity Distribution	46.7–58.29	Attempt to sell in 2001
Transgas a.s.	Gas Transmission	100.00	Sold in 2001
8 Regional Companies	Gas Distribution	45.8–49.20	Sold in 2001
Unipetrol, a.s.	Oil and Chemical Holding Company	62.99	Sold in 2001
Čepro, a.s.	Sales/Storage of Refined Oil Products	100.00	No
MERO CR, a.s.	Oil Transport and Storage	100.00	No
Severočeské doly, a.s.	North Bohemian Coalmines	54.73	No
OKD, a.s.	Ostrava-Karvina Coalmines	45.88	No
Sokolovská uhelná, a.s.	Sokolov Coal Company	48.69	No
	Heavy Metallurgy		
Nová huť, a.s.	Steel Works	49.00	Yes
Vítkovice, a.s.	Steel and Heavy Engineering	67.31	Yes
	Manufacturing		
Jan Becher – KV Becherovka, a.s.	Beverage Factory	59.00	Sold in 2001
SEVAC, a.s.	R&D and Pharmaceuticals	78.86	Liquidation
Plzeňský Prazdroj, a.s.	Brewery	0.00	1 Golden Share
Škoda Praha, a.s.	Engineering Works	54.77	No
Aero Holding, a.s.	Aero Holding	61.83	Liquidation
	Transport		
České aerolinie, a.s.	Czech Airlines (CSA)	56.92	Yes [1]
	Water Processing and Distribution		
Pražské vodovody a kanalizace, a.s.	Prague Water and Sewage	36.00	Yes [2]

1) Not Before 2002
2) Already approved free transfer of the share to the City of Prague in 2001

Source: NPF, 1) not before 2002, 2) already approved a free transfer of the shares to the City of Prague in 2001

relatively slow and the privatization of the majority of strategic companies is still in the stage of preparation as illustrated by the table. Due to the delay of the privatization of network industries, FDI inflows into the Czech Republic in 2000 did not reach the expected level. The delay has been caused by discussions in the government on how best to privatize. The government plan was in 2001 to privatize Česká pojišťovna, Becherovka, České radiokomunikace, ČEZ and 8 distribution companies, Unipetrol, Telecom, and Pražské vodovody. During 2002 – 2003 Vítkovice and Nová Huť should undergo similar privatizing, yet the privatization of these industries is more difficult as it requires the creation of a regulatory and legislation framework allowing for full liberalization of these industries. Dates of privatization are therefore tentative and depend on developments on the political scene as well on the performance of the whole economy.

In the past and during the Czech privatization process the role of FDI has been underestimated. A method of direct sales to strategic foreign investors has not been fully exploited and rather the "Czech way" of privatization has been pursued despite the fact that it has not proved as beneficial as FDI. Recently, the government has not only targeted foreign investors in the residual privatization but also in May 2000 it codified the national investment incentive package, which includes corporate tax relief for up to 10 years, financial support for the creation of new jobs, grants for retraining new employees and a provision for low-cost building land or infrastructure. Incentives apply equally to both foreign and domestic investors and are provided in the case of mergers and acquisitions as well as Greenfield investment. By mid 2001, 73 firms had been awarded incentives, and a further 50 applications are being processed. The value of Greenfield projects mediated by the responsible agency for FDI support (CzechInvest) rose from 523 mln. USD in 1999 to 1.1 bln. USD in 2000.

III.6 Balance of Payments

Most of the transition countries face large current account deficits, most often due to high investment demand and consumption demand. For the Czech Republic, the largest current account deficit occurred in 1997 (6.2 % of GDP). Current account deficits in 1998 and 1999 had lower magnitudes (2.5 % and 3 % of GDP). The year 2000's current account deficit saw again an increase (4.7 % of GDP) mainly due to high mineral fuel import prices. Nevertheless, unlike many other transition countries, the current account deficit of the Czech Republic was always balanced by the surplus of the financial account.

Developments in the 2001 Czech balance of payments illustrates the course of the Czech economy as an emerging market economy and as part of the global economic evolution.

In the first half of 2001 (and especially in the first quarter), the deficit of the trade

balance and consequently of the current account sharply widened, following the trend of the previous year. In the first quarter, the major contributing factors to the widening of the trade deficit were mineral fuel import prices, and increasing imports of machinery and transport equipment, connected with a recovery in investment activities and imports of raw materials and chemicals. As in the previous year, the surplus of trade in consumer goods had a positive impact on the current account.

Already in the second quarter of 2001, the trade deficit showed signs of stabilization (- 650 mln. USD in the first quarter of 2001 versus - 710 mln. USD in the second quarter of 2001). This was mainly due to better import and export prices (import prices increased by 0.3 % whereas export prices increased by 1.1 %). Besides the widening of the trade deficit, the deficit of the income balance was higher in the first half of 2001 compared with the same period of the previous year (-1.7 mln. USD in the first half of 2001 versus -1.5 mln. USD in the first half of 2000). Most probably this was the result of previous foreign direct investments in the Czech Republic (investors returned to their countries part of the resulting benefits). Despite the relatively large and increasing (comparatively to the same period) current account deficit, the positive development of the financial account determined a surplus in the balance of payments. The major contributor to the high surplus of the financial account was the large FDI inflow that, despite recent negative global economic signals maintained the increasing trend of the previous years. A large share (27 %) of FDI (1.385 bln. USD in the first half of 2001) was due to revenues from the sales of state holdings by the Czech National Property Fund.

The third quarter of 2001 saw also an improvement in the current account's evolution; the trade deficit was under the 2000 levels for the same period. The year-to-year growth rate of exports was higher than that of imports mainly due to better import and export prices for the Czech Republic. In September, the balance of trade was positive for the first time since September 1999. Also, the balance of trade with Germany, which is the most important trade partner of the Czech Republic, turned again positive after a period of negative development. This evolution should be regarded as a big achievement of the Czech economy given the strong slowdown in global economic activity.

III.7 Czech Capital Markets

Driven by the coupon privatization scheme, the development of the Czech equity market was very rapid at the outset, as about 1,700 companies were floated within two years of market establishment. The regulation of the market, however, lagged significantly behind. In the mid-1990s, insider trading, price manipulation, fraud in the investment funds industry, and abuses of minority shareholder rights eroded investor confidence to a large extent. In recent years, regulation has improved somewhat, but enforcement still appears to be rather weak. Although the traditional price indicators suggest that securities are correctly valued and that equity prices are to some extent integrated with international equity markets, these indicators do not capture the divergence of security prices across different marketplaces.

The Economist (April 1996) and the Wall Street Journal (May 1996), among others, reported on "dealing in Prague as a losers' guide to investment," and characterized the Czech capital market as "a muddy market" and as "anarchy to the outsider, sweet profit to those in the know." The Economist (March 1997) quoted an investor as saying "…[the government should] fight the perception that the Prague stock exchange is just a vehicle for select insiders to enrich themselves at the expense of the ordinary shareholder." In its 1999 Country Study, the World Bank pointed out that "the capital market needs to be further strengthened to recover credibility and to be a real source of corporate financing" (Summary Report, page 17). It is also illustrative that, unlike both the Budapest and Warsaw Stock Exchanges, the Prague Stock Exchange has long been unable to become a member of the Federation of European Stock Exchanges. Only in June 2001 did the Prague Stock Exchange become an associate member of this federation.

The fact that the quality of regulation and perception by investors has been improving in recent years is also illustrated by the fact that the Prague Stock Exchange signed a Memorandum on Mutual Cooperation with the London Stock Exchange in May 2000, which will assist closer cooperation between the two exchanges.

The over-reliance on the banking sector to provide credit to enterprises in the Czech Republic raises questions of the role of capital markets in enterprise restructuring and, consequently, in industrial production growth. Enterprises in the Czech Republic have been unusually highly leveraged and established significant links to the banks, which can become active shareholders and influence the decision-making in the enterprises. Since the opening of the Prague Stock Exchange (PSE) and RM-System (an over-the-counter system) the tradeable equity markets have been a negligible source of finance for industrial enterprises, and remained illiquid for all but a handful of shares.

During 1999 the PSE created conditions which enabled a "New market" to operate. The New market, based on a 1996 agreement on New markets, should be an alternative for dynamic young companies which have a viable business plan and want to finance growth via capital market. However, by the end of 2001, not one of this type of

Table Listing Requirements

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

* Requirements vary for investment trusts and units

company was trading on the New market. The only attempt by a local company to raise equity via a domestic IPO failed in the first half of 2001 due to low investor interest.

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

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

2. **Delisting.** The following criteria were applied: volume of trade, market capitalization, number of days traded per year. By September 1997, 1303 companies had been de-listed from the PSE in the following steps: March 1997 – 100, April 1997 – 391, June 1997 – 509, September 1997 – 303. Recently, fewer than 120 companies were trading on the PSE.

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

It was expected that the above introduced market segments and trading groups (1), supported by delisting (2) would increase the transparency of the market,

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

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

In an effort to make the Czech capital markets more transparent and liquid, an amendment to the Securities Act that will take effect on January 1, 2002 sets the minimum volume of a publicly traded issue at CZK 33 mln. and requires at least 25 % of the shares to be floated. This amendment forces RMS to exclude 585 of the current 976 issues from trading by 2001

year-end. This severely limits tradeability of the affected shares and their value to the small shareholders (the shares to be excluded are kept by about one million people). Delisting of about 120 of these shares has been appealed by these shareholders and they are to remain on the market until such appeals are addressed by the Securities Commission. Yet, the probability of keeping the shares on the market is relatively low.

The privatization of government stakes in large Czech corporations (i.e., ČEZ, Unipetrol, Český Telecom) also represents a significant risk for future trading at the PSE as these shares account for more than half of the PSE turnover. The amendment to the Commercial Code may potentially force the buyers of these state companies to purchase all shares of minority shareholders at the price paid to the state. A verdict by the Constitutional Court on the validity of the amendment is expected to be issued in early 2002. Approval of the amendment and delisting of the shares would lead to a substantial decrease in the liquidity of the PSE and further decrease investors' interest in this market.

Despite several reforms and organizational changes (initiated primarily by the World Bank missions in 1998 and 2000) the Czech capital market does not yet behave as a standard market. Due to the lack of investors' confidence and resulting low liquidity, its prospects as a stand-alone trading place are not very bright in the longer term.

Central European Stock Exchanges and Foreign Investment

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

Interestingly, little relationship has been found between stock market activity and future economic growth. For example, many complaints have surfaced in recent years about the functioning of the Czech equity market, and this market has been viewed as less liquid and considerably less transparent than stock markets in neighboring countries.

Yet this perception is not directly reflected in the aggregate statistics. In terms of number of stocks listed on main and secondary markets, Prague ranks equal to Budapest with 57 and 58 issues, compared to 225 issues listed in Warsaw and just 7 issues in Bratislava. Also, the number of issues has been continuously increasing

Stock Markets in Visegrad Group: 1995–2000

	1995	1996	1997	1998	1999	2000
Number of Domestic Companies Listed						
Czech Republic	54	82	91	92	74	57
Hungary	42	44	47	53	64	58
Poland	65	83	143	198	221	225
Slovak Republic	15	14	10	10	8	7
Market Capitalization (in % of GDP):						
Czech Republic	20.00	26.70	24.40	19.30	22.60	19.20
Hungary	5.80	12.20	35.20	29.40	35.90	26.10
Poland	3.70	6.20	9.10	13.00	19.90	18.90
Slovak Republic	6.50	6.40	6.90	3.20	2.40	2.30
Trading Volume (in % of Market Capitalization):						
Czech Republic	28.60	44.00	52.70	44.90	37.90	69.00
Hungary	13.80	29.80	47.90	116.50	83.90	101.60
Poland	60.70	62.10	61.20	43.40	36.30	65.10
Slovak Republic	69.40	215.50	174.20	155.60	103.90	122.70

Sources: National Exchanges and International Federation of Stock Exchanges

in Poland and stagnating / decreasing in the other three countries. Despite being the largest in absolute terms with a total market capitalization exceeding USD 30 bln., the Warsaw Stock Exchange capitalization (18.9 % of GDP) is lower in relative terms than that of the stock markets in Hungary (26.1 %) and the Czech Republic (19.2 %), but significantly higher than that of the Slovak market (2.3 %). However, in terms of liquidity, Bratislava ranks highest with trading volume to market capitalization of 122.7 %, and Budapest ranks second with 101.6 %. Prague and Warsaw follow with trading volume to market capitalization below 70 %.

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

The Structure of Foreign Capital Inflows, Bln. USD, 1995–1999

	Equities	Bonds	Portfolio	Other Investment	FDI	FDI/GFCF (in %)
Czech Republic	3.43	1.83	5.26	13.58	13.1	16.3
Estonia	0.57	0.22	0.79	1.59	1.5	24.5
Hungary	3.11	1.78	4.89	1.22	12.9	26.9
Latvia	0.04	0.21	0.25	2.32	1.8	29.9
Lithuania	0.07	0.69	0.76	0.63	2.0	19.0
Poland	3.31	1.69	5.00	7.56	26.7	16.7
Slovak Republic	0.13	0.29	1.42	5.10	1.7	5.3
Slovenia	0.06	1.30	1.36	1.97	1.2	5.5

FDI = Foreign Direct Investment   GFCF = Gross Fixed Capital Formation.

Source: International Financial Statistics, IMF.

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

Stock Market Indices
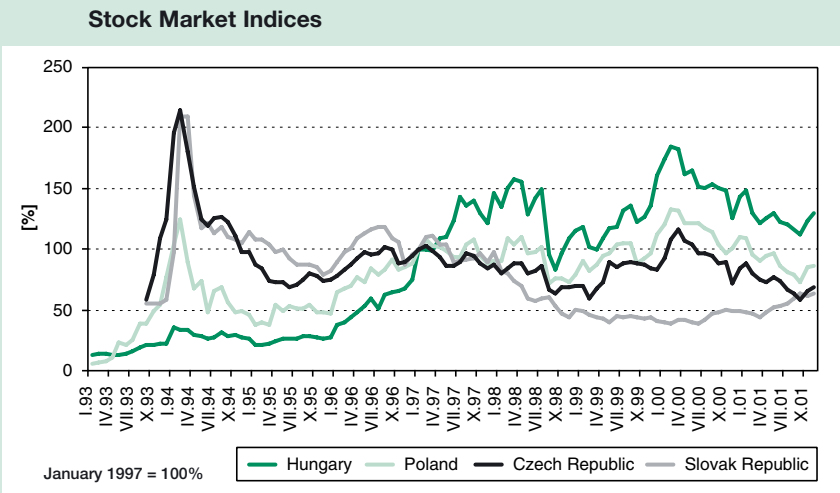
of foreign capital invested in equities, bonds, and portfolio investments are about the same for Poland, Hungary, and the Czech Republic.

Foreign direct investments (FDIs) and other investments (primarily loans and trade credits) dominate the inflow of foreign capital in most CEE countries.
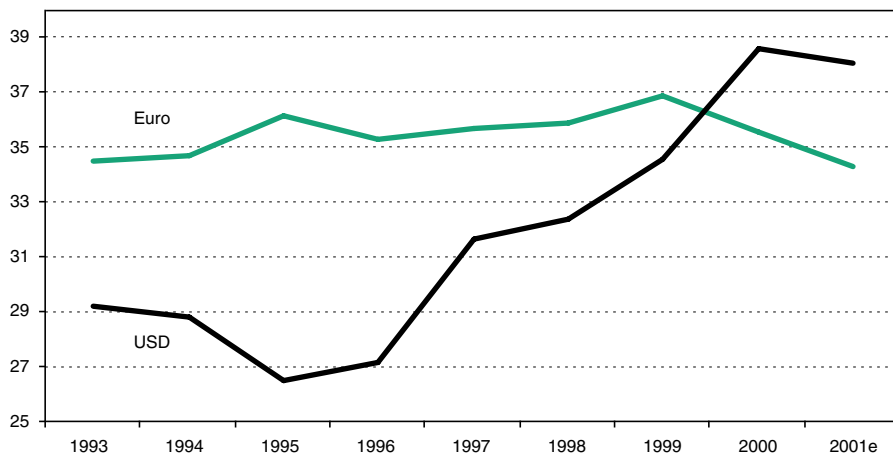
III.8 Exchange Rate

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

The table shows the evolution of the exchange rate of the Czech crown relative to the U.S. dollar and the Euro from 1993 to 2001. The exchange rate of the Euro for the period of 1993 – 1998 is constructed using the official irrevocable parity of the Deutsche Mark to the Euro. The adjoining figure shows a familiar pattern of the U.S. dollar and the Deutsche Mark (represented by the Euro) exchange rates moving in traditionally opposite directions.

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

Czech Koruna Exchange Rate to Euro and US Dollar

Source: CNB, Exchange Rate Calculated Through DEM/EUR Fixed Rate, 2001e CERGE-EI estimate

and depreciation do not exceed 14% in extreme cases. The largest depreciation occurred during the period following the currency crisis in 1997. However, the change in the exchange rate during the currency crisis was not dramatically large as compared to those in Asian countries, which suffered a currency crisis during the same period. The exchange rate of the Czech crown to the U.S. dollar showed less stability: this may be attributed to the strengthening of the dollar against the Euro in recent years.

During 2001 the Czech crown quite steadily appreciated against the Euro, with a short period of reversal in the autumn.

With respect to the U.S. dollar the crown depreciated until the middle of the year and then began to strengthen. The autumn was marked by a depreciation period similar to that of the Euro. This was due largely to the intervention of the Czech National Bank. The effect of such a step, however, evaporated after a couple of weeks. For the next year the crown is expected to gain in strength due to large amounts of foreign capital inflows. A large part of the foreign capital should be attributed to the privatization of the residual state property that was formally privatized within the voucher scheme but in reality was kept in the hands of the state.
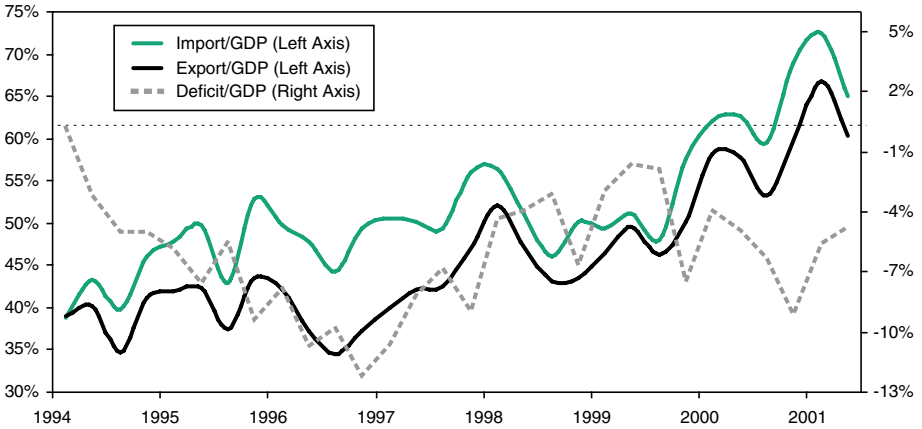
Average Annual Exchange Rates

Year	1993	1994	1995	1996	1997	1998	1999	2000	2001
CZK/EUR	34.5[D]	34.7[D]	36.2[D]	35.3[D]	35.7[D]	35.9[D]	36.9	35.6	34.1[e]
CZK/USD	29.2	28.8	26.5	27.2	31.7	32.4	34.6	38.6	38.0[e]

Source: CNB, (D) Exchange Rate Calculated Through DEM/EUR Fixed Rate, CERGE-EI estimate

III.9 Foreign Trade

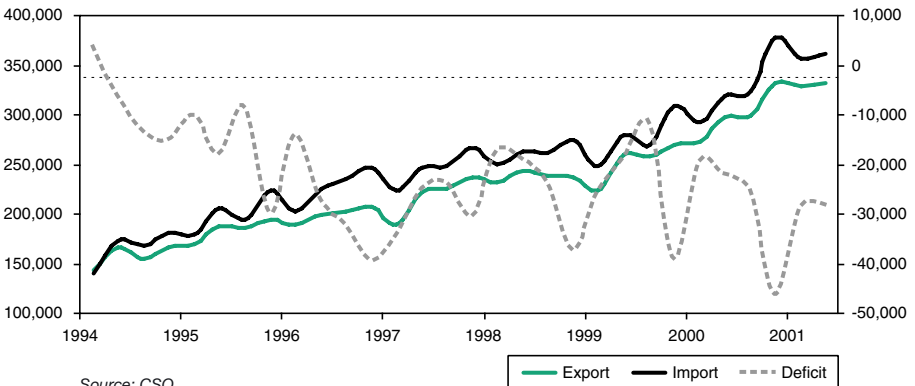**Ratios of Export/GDP, Import/GDP, and Deficit/GDP**

Source: CSO

The Czech Republic is a textbook example of a small and open economy. It relies heavily on international trade as an important contributor towards GDP. The proportions of exports and imports to the country's GDP for the period 1993 – 2000 illustrate the extent of such involvement. The trend shows an almost invariably increasing importance of international trade for the Czech economy. A growing trade deficit is present as well and should be considered with caution.
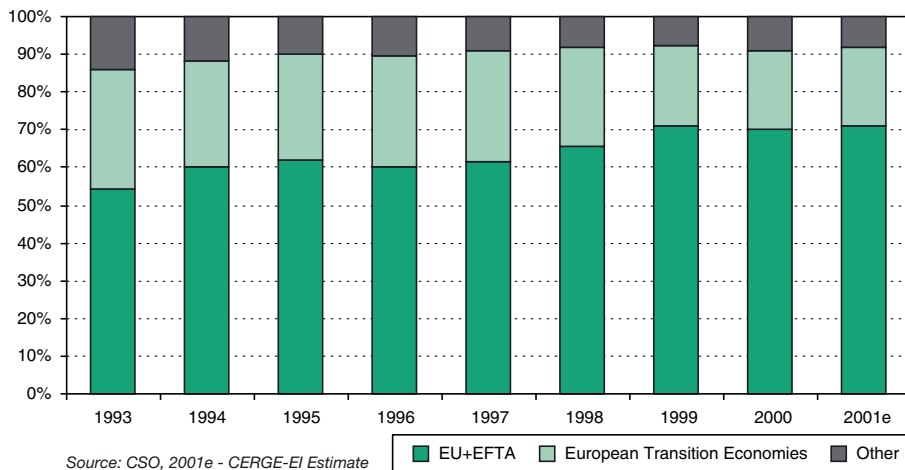
The values of indicators that measure the openness of the Czech economy increased

Total Exports and Imports (Mln. CZK in 1995 Prices)
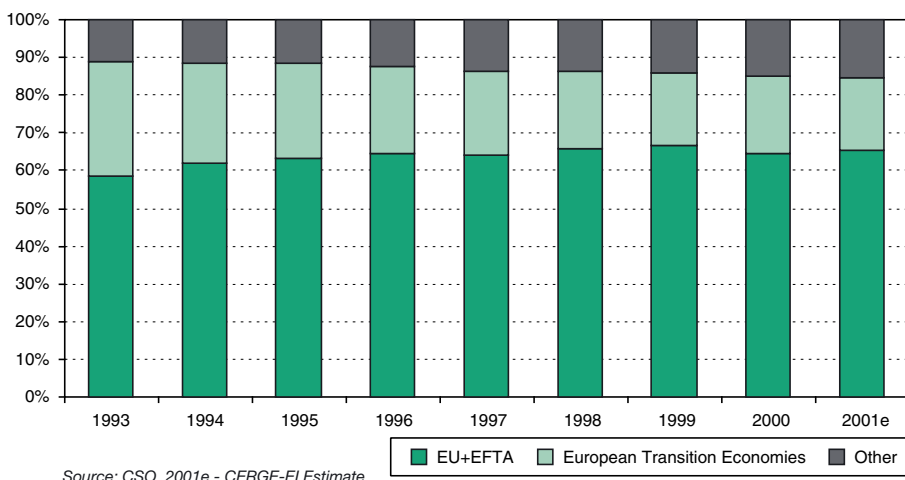

Source: CSO

61

Exports: Territorial Structure

Source: CSO, 2001e - CERGE-EI Estimate
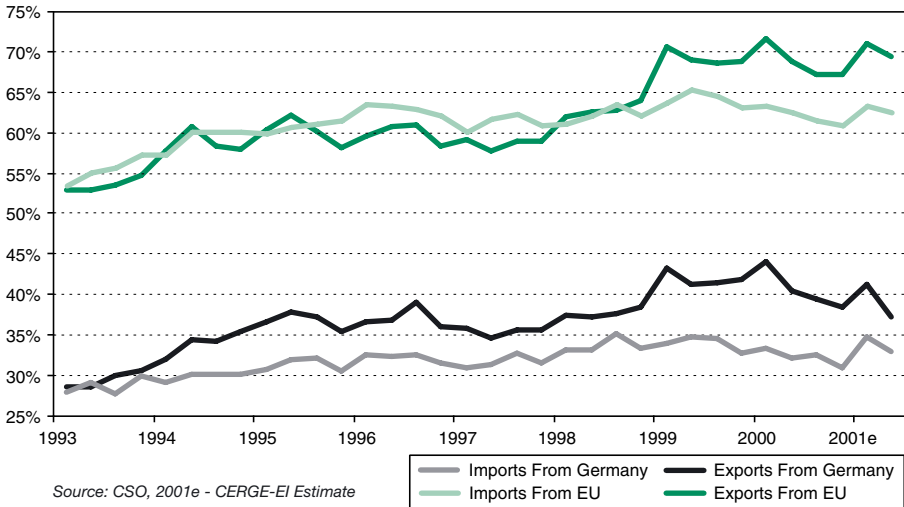■ EU+EFTA □ European Transition Economies ■ Other

substantially during the transition period. The evolution of foreign trade and its current orientation towards developed countries is in sharp contrast with the past. During the early years of transition the country – at that time still Czechoslovakia – focused its international attention and dependency on the former Soviet Union and its satellites. As if the country accepted the "go west, young man!" slogan, it started to abandon its previous trade order and shifted towards the European Union. Such

Imports: Territorial Structure

Source: CSO, 2001e - CERGE-EI Estimate
■ EU+EFTA □ European Transition Economies ■ Other

Territorial Structure of Imports and Exports: EU and Germany (% Share of Total Trade)

Source: CSO, 2001e - CERGE-EI Estimate

Imports From Germany · Exports From Germany
Imports From EU · Exports From EU

a change was abrupt at the beginning of transition but later became a pattern. Since 1993 trade with the EU has increased by 50 %. In 2001, exports to the EU amount to 70 % of all Czech exports while imports from the EU lag only slightly behind. Since 1998 exports to the EU outnumber imports. International trade with Germany stands out since it constitutes close to two thirds of the country's trade with the EU. Czech exports to Germany alone reached 38 % of all exports in 2001, with imports at 33 %.

The second largest group of trading partners are other European transition economies. International trade arrangements among these countries were institutionalized in March 1993 in the form of the Central European Free Trade Agreement (CEFTA). The founding countries were the Czech Republic, Slovakia, Hungary, Poland, and Slovenia. Romania joined the CEFTA in 1996, and Bulgaria became a member in 1998. The Czech Republic's share of trade with the European transition countries is not of a scale comparable to that of the EU. It has been steadily diminishing from about 30 % in 1993 to approximately 20 % in 1998. However, this share has not principally changed up to now.

Czech international trade with the rest of the world exhibits a clear pattern. Exports consistently diminish and in 2001 amount to only 8 % of total exports. Imports from other countries have been increasing and are now at 15 %. Trade with the U.S.A. ranges in the 2 – 3 % interval and business transactions are concentrated in the area of Foreign Direct Investment.