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

The Impact of EU Accession on the Speed of Convergence

(Based on Kejak M., Seiter S., and Vávra D.: Accession and Growth in Transition Economies. CERGE-EI Working Paper, forthcoming, 2001)

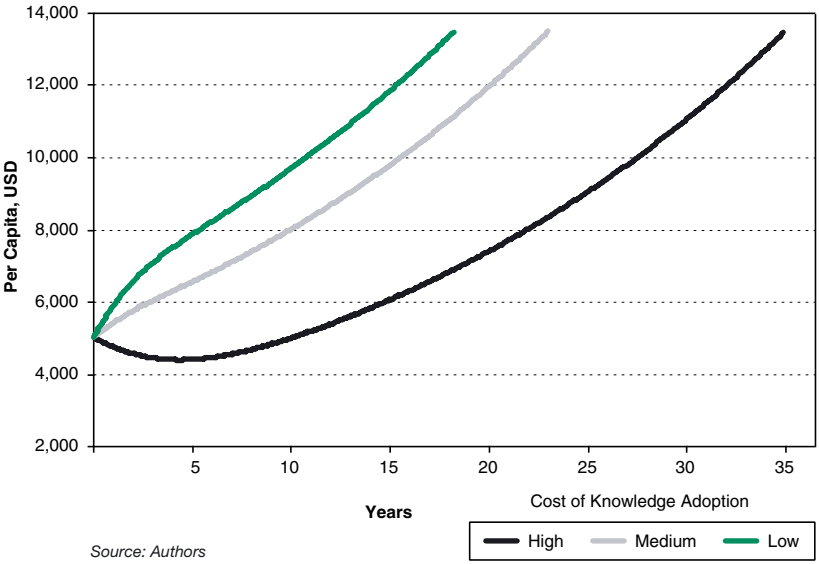
One of the main objectives of accession to the European Union (EU), in addition to the fulfillment of its legal and regulatory systems, is the convergence in per capita incomes of potential member countries to the standards achieved by the EU. There are several theoretical approaches that explain convergence processes. Neoclassical growth theory predicts that countries converge to their steady state growth path and that the international mobility of capital and technological knowledge can lead to identical long-term growth rates and identical levels of income. The empirical evidence documents both convergence and divergence. Discussion of the catching-up hypothesis reveals that investment in physical capital is a necessary but not a sufficient condition for reaching higher per capita incomes. Moreover, countries must possess social capability besides human capital, infrastructure capacities and institutional settings to use and adopt new technologies.

The authors build an endogenous growth model of a small open economy with human (knowledge) capital. They hypothesize that their model has the ability to capture key aspects of development in transition economies (TEs), which makes the model suitable for analyzing the effect of EU accession. The model, with adjustment costs in physical capital investments and imperfect credit market in the form of an upward-sloping debt supply curve, enable the authors to analyze transitional dynamics as well as structural adjustment.

The model is validated through calibration to stylized facts of economic development in the EU periphery and the available data on three CEE countries – Czech Republic, Hungary and Poland. The authors provide not only quantitative assessment of the speed of convergence to the EU average, but also discuss the appearance of such phenomena as an accession boom or accession recession.

They use several scenarios in order to analyze the effects of accession on the structure of CEE economies and simulated their transition process to compare the speed of their convergence to the EU average. These scenarios were parametrized (i) by the level of accessible frontier knowledge with a direct effect on the long-run growth rate of the accession country; (ii) by the speed of knowledge diffusion – a catch-up

Output Trajectories for Different Values of the Social Infrastructure Parameter – Czech Republic



Source: Authors

factor – capturing the quality of the institutions and infrastructure; or (iii) by the degree of capital market openness. Using alternative scenarios in these three dimensions they simulated the development of CEE countries from different initial conditions. The interplay of initial conditions and parameters of the accession generated different transition patterns and also rather different speeds of convergence to that of the EU average.

As an example we present here the second set of scenarios with improved social infrastructure which clearly shows that lower costs of knowledge adoption are associated with a faster catching-up process. The transition process is protracted due to accession recession when the adoption costs are high, but it is most painful for the Czech Republic and the least for Hungary. An initial accession boom (driven by capital inflow) will be followed by a recession.

VII.1 The Czech Republic and Convergence Criteria

One of the easiest ways to compare economic performance of countries seeking membership in the EU is to measure their distance from the four convergence criteria set in the Maastricht Treaty. Two are related to monetary issues, one is fiscal, and one is currency oriented. **(1) Convergence in inflation** is satisfied when inflation is not higher than 1.5 % above the average of the three best-performing countries. **(2) Interest rate convergence** defines the maximum interest rate as 2 % above the average of the three lowest interest rates among EU states. **(3) EMR convergence** requires two years without currency revaluation or devaluation. **(4) Convergence in deficit** stipulates a maximum budget deficit at 3 % of GDP a year and governmental debt at 60 % of GDP. The performance of the Czech Republic in 2000 and 2001 is summarized in:

Maastricht Criteria

	Inflation	Deficit of Public Budgets (% of GDP)	Public Debt (% of GDP)	Interest Rate
EU Reference Value 98	2.7	-3.0	60.0	7.8
CR 2000	4.0	-4.3	17.3	5.4
CR 2001	4.7	-9.0	20.1e	5.3

Source: EURO 1999, European Commission Report, March 25, 1998, CERGE-EI Estimates

As we can infer from the data, the distance from the reference numbers in 1998 is widening in almost all four criteria except for interest rate and currency developments. Inflation is still too high, although acceptable with respect to the recent dynamics of the Czech GDP. The deficit in public budgets seems to be the most crucial problem together with increasing public debt. On the other hand interest rate development looks optimistic, as does the relatively stable Czech currency.

Migration of Labor to the EU

The income differential between the Czech Republic and its close EU neighbors Germany and Austria are the smallest among CEEC but still substantially large vis-à-vis differences within the EU. Since trade and capital flows to and from the EU have only a moderate impact on wages, the convergence of per capita incomes to levels prevailing in the EU is likely to take decades. As a result, the incentives for migration will reduce slowly. Historical evidence also demonstrates that it takes many years for migration to adjust to income differential. This can be traced back to the high transaction costs involved with migration and the limited capacities of labor markets to absorb immigration.

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

and proximity. These low figures certainly reflect restrictive immigration regulations in the EU Member States. Therefore, the uncertainty of future labor mobility is much higher than it is in either the goods or the capital market.

We provide only a summary of key findings of Boeri et. al* study, numbers for the Czech Republic in brackets. See the study for the assumptions for the projections, and next subsection for our own forecasts.

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

Quantitative predictions agree with the majority of experts' opinions, finding that the fears that the EU will be flooded by immigration from the CEEC is ill-founded. Nevertheless, in some industrial branches and regions blue-collar workers may be negatively affected if immigration increases fast and targets relatively small territories. Although the formal education of CEEC migrants is above the education of migrants

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

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

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

from other regions, most are unable to transfer their human capital to host labor markets due to language and cultural barriers. While at the present stage immigrants from the CEEC compete similarly as other foreigners for blue-collar jobs and low-skilled jobs in the service sectors, in the medium and long term they might affect white-collar workers more than in past labor migration. In general, a balanced distribution of skills among immigrants from the CEEC would mitigate labor market tensions.

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

Convergence Progress and Outlook

The Commission of the EU in its "Czech Republic's Report 2001" about progress toward convergence found an improved macroeconomic situation: The Czech economy resumed economic growth in 2000 and continued in 2001. The progress in adopting structural reforms – and more importantly further progress in catching up to the EU, for example in average per capita income and regional differences – have slowed down.

Following the Copenhagen criteria that prescribe requirements for EU membership, the Commission's assessment of November 2001 verified the existence of a functioning market economy and the capacity to cope with the competitive pressure and market forces of the Union. The general finding of the Commission is that "The Czech Republic is a functioning market economy…" that should be compatible with the Union in the near term. The basic plan for accession, the "Pre-accession Economic Programme" (PEP), a joint program of the Ministry of Finance and Czech National Bank, addresses commitment to negotiated fiscal and monetary issues. In addition, domestic enterprises should be stimulated by the "Big-Bang Plan" that was accepted in June 2001 as a strategy for promoting economic growth. This should further contribute to the economic growth resumed in early 2000. Since GDP grew in 2001 by 3.4 %, economic growth does not belong to the problematic spheres. The same is true for inflation; monetary policy makers have targeted the range for inflation at 3% – 5% for January 2002. Although the Czech koruna has continued to appreciate against the euro, Czech exports have not been adversely affected. The governmental deficit has widened and is expected to reach 9 % of GDP. Although this evidence is not alarming because the acceleration is not supported by governmental consumption, the biggest lack in the convergence process is in medium-term fiscal consolidation and implementation of structural reforms. Only modest improvements resulted from the amended Bankruptcy Law and financial sector transparency only slowly improved.

In terms of ability to cope with the market forces in the EU, the Czech Republic is recognized as having a well-skilled labor force, labor market flexibility, and a relatively

high level of gross fixed capital formation with strong FDI. Structural issues such as uneven restructuring of businesses, with export-oriented businesses in front, together with external funding for small and medium enterprises are continuing problems. The Commission's main call then is for an improvement in structural reform implementation and in fiscal matters.

The convergence might be accelerated mainly through access to pre-accession funds. In the Czech Republic's case the funds are used for stimulation of rural and agricultural development (SAPARD) and support for infrastructure and environmental projects (ISPA). For the Czech Republic resources are also available through the Research and Technological Development Framework as well as through Education and Enterprise. Funds are also available for adopting the acquis. All these funds are available only if the Czech Republic continues its strong commitment to fulfilling the Copenhagen criteria.

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

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

In PPS, the Czech GDP per capita in the year 2000 reached 60 % of the EU average. So far, the published data on economic growth suggest that the country has not trimmed much from the income gap between itself and the EU. However, there is substantial argument that this is not true and that, on the contrary, the Czech Republic has made a great leap towards the income level of the EU member states. To assess such a claim, several factors in computing real economic output that will result in misleading conclusions if omitted must be considered.

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

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

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

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

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

Will Czech Workers Flood EU Labor Markets?

While the average wage in the EU countries was 1814 euro in the year 2000, in the Czech Republic it was less than a quarter of this sum. Although living in the EU is about two-and-a-half times more expensive, an EU citizen can still buy about twice as much as a Czech citizen. An even worse situation exists in other Central European countries.

The relatively large wage gap between the EU-15 average and the would-be members has evoked concerns that opening the labor market to new members after their

accession will create a flood of cheap labor coming from the East to the West, crowding out EU labor and decreasing wages and social standards. Therefore, the European Commission has proposed restrictions on the free movement of labor, such that new member citizens will not be allowed complete access to the job markets of Western countries for up to seven years after they join the EU.

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

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

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

For an analogy we can look at the experience of the Southern enlargement in the 1980s, when Portugal, Spain and Greece joined the EU. Restrictions on labor movement similar to the ones outlined for potential Central European members were also imposed on these countries. When they were eased, no large labor migration occurred. Recent analyses show that a similar pattern can be expected also for the Eastern enlargement. European workers are in general not very flexible; they mostly like to stay in their home country where they enjoy the language advantage, knowledge of the environment, and their cultural identity. The same holds true for the Czech workforce. Ironically, in 2000 there were more Germans legally working in the Czech Republic than Czechs in Germany – the difference was 2,000 people.

After the opening of the EU labor market, some flow of workers from the Czech Republic to the EU member states can be expected, but such flows will be of minor importance, as Czech workers have already shown low flexibility and mobility even within their home country where earning opportunities significantly differ by region. Therefore, the impact of Czechs relocating to work in the European Union for employment possibilities, wages and social benefits of the EU residents will also be insignificant.

In this respect, the labor force restriction negotiated during the accession talks seems to be counterproductive.