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Catching Up and EU Accession - Conditions for Fast Real Convergence in the Candidate Countries

Benacek, V. and Gacs, J.

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International Institute for
Applied Systems Analysis
Schlossplatz 1
A-2361 Laxenburg, Austria

Tel: +43 2236 807 342
Fax: +43 2236 71313
E-mail: publications@iiasa.ac.at
Web: www.iiasa.ac.at

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Catching Up and EU Accession - Conditions for Fast Real Convergence in the Candidate Countries

Vladimír Benáček (benacek@iiasa.ac.at)
János Gács (gacs@iiasa.ac.at)

Approved by

Leen Hordijk
Director

October 2002

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Abstract

This is a report about the fifth workshop from the seminar series of IIASA's Economic Transition and Integration Project entitled "The Process of EU Accession: Preparation by Learning and Exchange". The workshop was held in Bratislava on 7-9 February 2002.

The first two sections summarize the opening of the workshop and two introductory presentations dealing with economic policies of Slovakia on its way to the EU accession and the historical perspectives of growth, integration and recommended policies for catching-up in transition countries. The next section presents an outline of recent developments in the accession process in ten individual candidate countries.

The fourth section concentrates on the analysis of factors determining savings and investments in accession countries and the role of banking intermediation, as illustrated on the case of Hungary. The fifth section is dedicated to questions of competitiveness – to the alternative ways of its measurement and policies that support exports and/or the ability of domestic producers to substitute imports, stressing that policies on the company and industry level are more important than national policies.

The sixth section deals with the problems of macroeconomic financial convergence and the requirements on national performance for becoming a member of the European Monetary Union. Its first paper discusses alternative policies of central banks from Eastern and Central Europe for a smooth monetary integration of their countries with the euro-zone. Its second paper tests the empirical evidence on the speed of economic convergence in various transition countries. Its third paper analyses the aspects of the so-called nominal and real convergence and the potential scope of alternative monetary policies in accession countries in order to retain their external balance.

The seventh section presents the summary of three presentations that dealt with international institutions. The first one is dealing with the policies and the support for catching up provided by the World Bank. The second paper describes the experiences of Ireland, Latvia and Estonia in preparing the national development plans and in the usage of structural and cohesion funds provided by the European Commission. The third paper concentrates on the problems of domestic agricultural policies and the EU Transfers, as based on the comparison of Slovakia with some other EU candidate countries and with the EU incumbents.

The next two sections discuss the questions associated with the R&D, foreign direct investment, human capital and their spillovers. In the first of them the lessons from the Irish experience are summarized and compared with the present situation in accession countries. The paper, that follows next, analyses the data on education, compares the EU candidate countries with some less developed EU member countries and draws conclusion about policies for the human capital development and their association with growth.

The last (tenth) section is based on the comparative analysis of the empirical evidence from transition countries on the indicators of human development and the policies for a more comprehensive convergence of these countries to the levels of present EU member states.

Foreword

In 1996, the Economic Transition and Integration Project (ETI) at IIASA initiated a seminar series on the accession of the Central and East European countries (CEECs) to the European Union (EU). The title of this series is “The Process of EU Accession: Preparation by Learning and Exchange.”

This initiative was a logical one, since in recent years ETI has been active in research and policy advice on the international economic relations of transition economies. Moreover, several recent ETI research projects, such as the one on “Output Decline in Eastern Europe,” “Impediments to Exports in Small Transition Economies,” and “Catching Up and EU Accession” have had strong implications for the CEECs’ integration into the EU.

EU enlargement is a complex process whose importance for the countries concerned can hardly be overestimated. This probably justifies the large number of ongoing academic research projects on the topic. A distinctive feature of ETI’s seminar series is that it is intended to promote an exchange of views and understanding among the transition countries aspiring to EU membership. IIASA, with its diverse composition of members from both parts of Europe (among other countries), including older and newer members of the EU, as well as the Central and East European (CEE) candidates for EU membership, is an ideal research institution for realizing this goal.

The organization of the seminar series is supported by an advisory committee with changing composition, in which the most stable and active members have been András Inotai (Director, Institute of World Economics, Hungarian Academy of Sciences, formerly also Coordinator of the Strategic Task Force for European Integration, Hungary) and Danuta Hübner (Executive Secretary, UN Economic Commission for Europe, formerly Head of the Chancellery of the President of the Republic of Poland).

The first meeting in the series was concerned with the “Strength and Advantages of Eastern Europe: EU’s Net Gains from Accession,” and was held in Laxenburg, Austria, in December 1996. That workshop was intended to help make the CEE applicant countries aware of their strengths and weaknesses in the context of EU membership and build up their self-confidence before negotiations started. The meeting had an interdisciplinary character; in addition to issues of purely economic importance, problems related to the environment, foreign policy, and national security were discussed. A summary of the workshop can be found on the World Wide Web at <http://www.iiasa.ac.at/Publications/Documents/IR-97-019.pdf>.

A second meeting was held in Budapest on December 4-6, 1997, on the “The European Union and the Rest of the World: Complements or Substitutes for Central and Eastern Europe?” The seminar investigated the impact that accession will have on applicant countries’ relations with the rest of the world, with respect to trade, flows of capital and labor, research and technology, environment, administration, and culture. A crucial issue discussed was whether an increased focus on the EU region, as manifested in the adoption of the common external tariff and common health and environmental

standards, distribution of structural and cohesion funds, and provision of agricultural transfers, will enhance only the applicant countries' relations to EU member-states, or there will also be effects for their interaction with the rest of the world. The seminar in Budapest was characterized by substantive presentations, lively debates, and participation not only from the Visegrád countries, Slovenia and EU members-states, but also from the Baltic states, Bulgaria, and Croatia. A summary of the workshop can be found on the World Wide Web in an Interim Report at <http://www.iiasa.ac.at/Publications/Documents/IR-98-020.pdf>.

A third seminar was held in Laxenburg on December 5-7, 1998, on "The Time Pattern of Costs and Benefits of EU Accession." This workshop analyzed the emergence of various costs and benefits in a timeline characterized by the following milestones: the start of the transition, the signing of the Europe Agreements, the start of accession negotiations, accession to the EU, and accession to the euro-zone. The discussion focused primarily on the CEEC side and went beyond the strictly economic factors. Separate session dealt with the lessons from former accessions, the implications of the need to comply with EU's environmental standards, the special issues of agriculture, future adoption of the euro and the results of the relevant computable general equilibrium model calculations. A summary of the workshop can be found on the World Wide Web in an Interim Report at: <http://www.iiasa.ac.at/Publications/Documents/IR-99-015.pdf>.

The fourth seminar was held in Prague on 9-11 November 2000 on "EU Structural Support: Its Macroeconomic and Distributional Effects and Social Environment". The workshop's structure was based on the perception that a substantial part of long term benefits of EU accession is related the various kinds of EU transfers before, but particularly after EU membership. While the enthusiasm for the coming transfers is obvious, there seems to be limited understanding of the mixed blessing of the structural transfers and the administrative burden the acquisition and management of these transfers will require. In order to clarify the complicated and controversial issues of the system of structural funds the seminar summarized the experience of establishing regional institutions for structural support funds in the newest EU members countries such as Austria, Finland, and Sweden; surveyed the tasks of planning, monitoring and evaluation of EU financed programs; analyzed the macroeconomic effects of past and future such programs; discussed the impact of EU funds on national and regional convergence; and finally dealt with the special problems of two heavy weight sectors in EU programs: agriculture, as well as transport and infrastructure. A summary of the workshop can be found on the World Wide Web in an Interim Report at: <http://www.iiasa.ac.at/Publications/Documents/IR-01-032.pdf>

The fifth seminar was held in Bratislava on Prague on 7-9 February 2002 on "Catching Up and EU Accession – Conditions for Fast Real Convergence in the Candidate Countries". This report summarizes that seminar.

The underlying idea of the seminar was as follows. The accession of the Central and East European countries (CEECs) to the EU is likely to lead to conflicts between these countries and the incumbent members unless there is a rapid narrowing of the gap in per capita incomes between them. The CEECs are much poorer and have proportionately much larger agricultural sectors than the average EU country, and their combined populations make up between one-fourth and one-third of that of the current

EU. Due to these characteristics there is concern in the EU member states about a mass migration from the East following accession, about social and environmental “dumping” from CEECs, and about an increased demand by the CEECs on the EU's Structural and Cohesion Funds, as well as on the funds provided under the Common Agricultural Policy.

These concerns, however, are counterbalanced to a large degree by a “catching up” predicted by both theory and some empirical evidence: poorer countries, unless their development is impeded by institutional barriers, usually develop faster than richer ones, and there is a tendency toward convergence in levels of GDP per capita. In recent years, this catching up process seems to have started. In addition, trends in capital inflows suggest that the expected return on capital in the region is sufficiently high to support the build-up of stronger production capacities.

Recent studies on the macroeconomic development of the CEECs have shown that in Eastern Europe, closer relations with the EU, such as the Europe Agreements and the accession process, have already contributed much to reforms and restructuring, indirectly supporting the acceleration of economic growth. The workshop attempted to identify the patterns according to which preparations for membership and the first active years in the EU can trigger further changes that will affect the growth process.

In 2000-2002 the ETI project carried out an ambitious research project with the title “Catching Up and EU Accession”. Many of the papers of that activity were published as IIASA's Interim Reports (see <http://www.iiasa.ac.at/Research/ETI/docs/Catching-Up/publications.html>) and will appear in the journal *Empirica* and other professional journals. Originally, the organizers of the seminar in Bratislava wanted that a number of these recently finished studies would be presented in Bratislava, however, due to the unavailability of the authors this was possible only in one case. The original topics of the project, however, were retained, mostly with new presenters, and copies of the relevant Interim Reports of the IIASA research project were distributed.

The mix of participants at the seminar in Bratislava was beneficial both for scholarly discussions and understanding choices that policy makers face in the course of the accession process. Researchers and government experts gathered from nine candidate countries and Croatia, as well as from several EU member countries. Among the scholars researchers related to central banks were strongly represented, duly reflecting the core location of EU related macroeconomic research in both East and West European countries. The seminar had two prominent government officials, the Deputy Prime Minister of Slovakia, Ivan Mikloš, and the Undersecretary of State from the Polish Office of the Committee of the European Integration; presentations by these politicians were the highlights of the meeting.

This report is structured into ten sections, which deal with the following issues:

- Domestic and general policies in EU applicant countries of Central and Eastern Europe for catching up with the EU member states.
- Recent developments in the accession process in ten individual candidate countries.
- Factors determining savings and financial intermediation of banks in support of investments.

- Competitiveness in international trade.
- Macroeconomic convergence and monetary policies for entering the European Monetary Union.
- International institutions and their support of growth and economic cohesion.
- The role of R&D, foreign direct investment, education and human capital in catching up.
- Comparative analysis of accession and EU countries on the indicators of human development and the convergence policies.

About the Authors

Vladimír Benáček is research scholar in the Economic Transition and Integration project at the International Institute for Applied Systems Analysis (IIASA).
Telephone: +43-2236-807251, fax +43-2236-71313 (benacek@iiasa.ac.at).

János Gács is leader of the Economic Transition and Integration (ETI) project at the International Institute for Applied Systems Analysis (IIASA).
Telephone: +43-2236-807326, fax +43-2236-71313 (gacs@iiasa.ac.at).

List of Key Acronyms

CAP	Common Agricultural Policy
CEE	Central and Eastern European
CEECs	Central and Eastern European countries
CEFTA	Central European Free Trade Agreement
CSF	Community Support Framework
EBRD	European Bank for Reconstruction and Development
ECB	European Central Bank
EMU	European Monetary Union
ERDI	Exchange Rate Deviation Index
ERM	Exchange Rate Mechanism
EU	The European Union
EUR	Euro
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
IDA	Industrial Development Agency of Ireland
ILO	International Labor Organization
IMF	International Monetary Fund
ISPPA	Instrument for Structural Policies for Pre-accession
MNC	Multinational Companies
NPC	Nominal Protection Coefficient
OCA	Optimum Currency Area
OECD	Organization for Economic Cooperation and Development
PPP	Purchasing Power Parity
R&D	Research and Development
SAPARD	Special Accession Program for Agriculture and Rural Development
TFP	Total factor Productivity
USD	US Dollar
WB	The World Bank

Catching Up and EU Accession - Conditions for Fast Real Convergence in the Candidate Countries

Vladimír Benáček
János Gács

1. Introduction to the Workshop ¹

After telling some details about IIASA's history, its original and current mandate the presenter drew the attention of the audience to some of the institute's recent policy-relevant activities. In April 2001 IIASA, together with the World Bank, organized two conferences about the pension systems and pension reforms in the EU member countries and the candidate countries. For a great number of participants coming from the member countries the meeting brought about a surprise that in many respects the candidate countries are better developed with regard to the reform of their pension systems than the member countries. This was partly possible because the current generation of retired people in the candidate countries paid the price for the disfunctioning of their old pension system. At the same time, in the current member countries of the EU promises have been made and are being made for the provision of pensions which, given the demographic and other changes, are to be hardly sustainable in the future.

Coming from Sweden, a relatively new member of the EU, the Swedish experience of joining the EU offers two striking experiences. First, that with regard to agricultural policies Sweden had to go backwards. After long and complicated discussions within the country a deregulation of the agricultural system had occurred. Sweden, however, had only one year of deregulation before the country had to step back to a much more complex EU system. Naturally this is one of the hot topics for the candidate countries to discuss in the near future.

Another interesting experience from Sweden is that, except for a few months around the referendum and around the recent period of launching the euro, public opinion about the EU in the country was always very negative. The referendum did not help: soon after it public opinion became negative, and after joining the integration, even more so. This adverse attitude has very little to do with the economy or politics. It has to do with three particular things: cucumber, strawberries and bathing water quality. While these awkward issues may seem anecdotal, they are very characteristic of public psychology.

Here is the explanation for these sources of public discontent with the EU: There are quality norms in the community and there are such norms for cucumbers as well: they have to be, among others, straight. The problems with cucumbers is that if they grow in a climate

¹ This section summarizes the introductory speech by Arne Jernelöv, the acting director of IIASA at the time of the workshop.

where there is more than 14 hours of daylight, as it is in Sweden, they do not become straight, but rather show a curve. Accordingly, in EU terms they cannot be called cucumbers, what hurts the national esteem of the Swedes. While Sweden would never be an important exporter of cucumbers, the public opinion on this kind of EU classification is very negative.

Similar to this in nature is the case with strawberries. Wild strawberries that grow in Sweden, in fact the title of a famous film by Ingmar Bergman, have a symbolic value for Swedish identity. In the EU, the quality norms on strawberries prescribe that they have to achieve certain size. However, wild strawberries in Sweden, but even cultivated strawberries in the Swedish climate, do not reach the size enlisted in the EU norms. So strawberries grown in Sweden cannot be called strawberries in the EU and that makes the Swedes uneasy.

According to the EU, the bathing water quality in Sweden is the worst within the whole European Union. Swedes find this extremely hard to believe. This astonishing evaluation has to do with the system of measuring the quality of bathing water, which prescribes taking samples to measure the relevant parameters throughout the bathing season. Measuring this quality is done by the Swedes regularly and the values that are reported are normally quite good. However, there is also a rule in the EU that for the periods when the country fails to take samples and give reports, the worst possible quality has to be assumed. And, according to the EU, the bathing season starts in late March. At that time, however, lakes in Sweden are still covered with ice and no samples and measures are made: late March, except for some adventurous sauna practitioners, there is no bathing in the country. The message of these anecdotal evidences is that the public opinion does not necessarily reflect the big picture, but may respond to small, particular details.

Finally the presenter recalled the lessons from a IIASA project called PIN, Processes of International Negotiations, lessons that have relevance for the EU accession process. This project, a large network of 4000 scholars from around 50 countries, analyzes negotiation processes and their lessons after the international agreements, laws and treaties were concluded. In many cases, negotiations take place between partners of comparatively equal strength, but sometimes between asymmetric partners: one very big and strong side, and a small and weak side. One of the recent studies of the PIN project, which may be relevant for this workshop was Andorra's negotiation with the EU. Andorra is a tiny entity, a province of Spain and a province of France in the Pyrenees with about 60 some thousand inhabitants. The EU is obviously a large and powerful organization. Normally in this context one would expect that the strong partner would push through its will (this is why small countries, like Sweden, prefer negotiations with superpowers in a multilateral, rather than in a bilateral framework). The Andorra case was, however, totally different. Comparison of the original intentions of the Andorran negotiators and the results show that the weak side, in fact, did not give up a single demand. The question naturally arises, how could this happen? Three factors came out of the study as explanation. Firstly, Andorra had plenty of time for the negotiations, while the EU was eager to conclude an agreement. Secondly, Andorra is small, so the costs of accepting Andorra's requests were insignificant for the EU. Thirdly, there are no entities in the world similar to Andorra, so the favors granted to this province would not spill over to other countries that could use the example as a precedent. May be some of these lessons from Andorra's success could be used by the candidate countries in their accession negotiations.

2. Opening Presentations:

2.1. Catching up and the EU Accession: The Experiences of Slovakia ²

Slovakia can be taken as a good example when speaking about the catching up and the strategies for growth. Soon after the country gained independence in 1993, it got into relative international isolation. It was excluded from the first group of candidates for the EU enlargement and its entry into NATO and the OECD was rejected. However, in the last three years, the breakthrough on the international scene was quite remarkable.

First the government had to avert the progressing macroeconomic instability, as the economy stood in November 1998 at the edge of a financial crisis. In the years 1996-98 the current account deficit was higher than 10% of the GDP, the interest rate was climbing to unacceptable heights, and the inflow of foreign direct investments was extremely low. In response to these tensions macroeconomic stabilization measures were taken followed by a structural reform. The most important priority thus became the policy of catching up with first wave transition countries such as Czechia, Hungary and Poland.

The macroeconomic stabilization that commenced in May 1999 with the disciplining measures of the “stabilization package”. Negotiations about OECD membership were reopened, leading to the process of adjustments requested by the OECD, which were tougher than the original conditions imposed on the first three transition countries (i.e. Poland, Hungary and Czechia) entering the OECD in 1996. Actually in these years there were three serious international financial crises (the crises in Mexico, South East Asia and finally in Russia), which brought the OECD to a decision to raise the economic preconditions for new entrants. Finally, in December 2000, Slovakia was ready to be accepted as the OECD’s 30th member state.

Negotiations about the EU accession were also renewed, in order to make up for the two years delay compared to the other Visegrad countries. Slovakia’s catching up in that field can be illustrated on the number of 23 closed chapters in the accession negotiations (by 21 March, 2002), which was only by one less than in Hungary or Czechia, and by one more than in Poland. Slovakia’s priority is to close all chapters in 2002, so that in 2004 Slovakia can expect its entry into the EU. The reason why it is of crucial importance for Slovakia to be in the first wave of enlargement is that it is one of the most open economies in Europe and its economic dependence on international cooperation is very high. 60% of its present exports are with the EU, 17% with Czechia, 6% with Poland and 5% with Hungary, so after the first wave of enlargement 88% of its trade would be with the enlarged union..

What can Slovakia offer in its cooperation with other countries? Slovakia offers the lowest labor costs among the Visegrad countries, while at the same time its skills and education do not lag behind the average in that group. The structure of the Slovak labor force offers an additional premium because of the exceptionally high birth rate during 1970s and 1980s. Since at present there is a public consensus to carry on with reforms, the enterprises

² This section summarizes the presentation by Ivan Mikloš, Slovak Deputy Prime Minister for the Economy, opening the workshop.

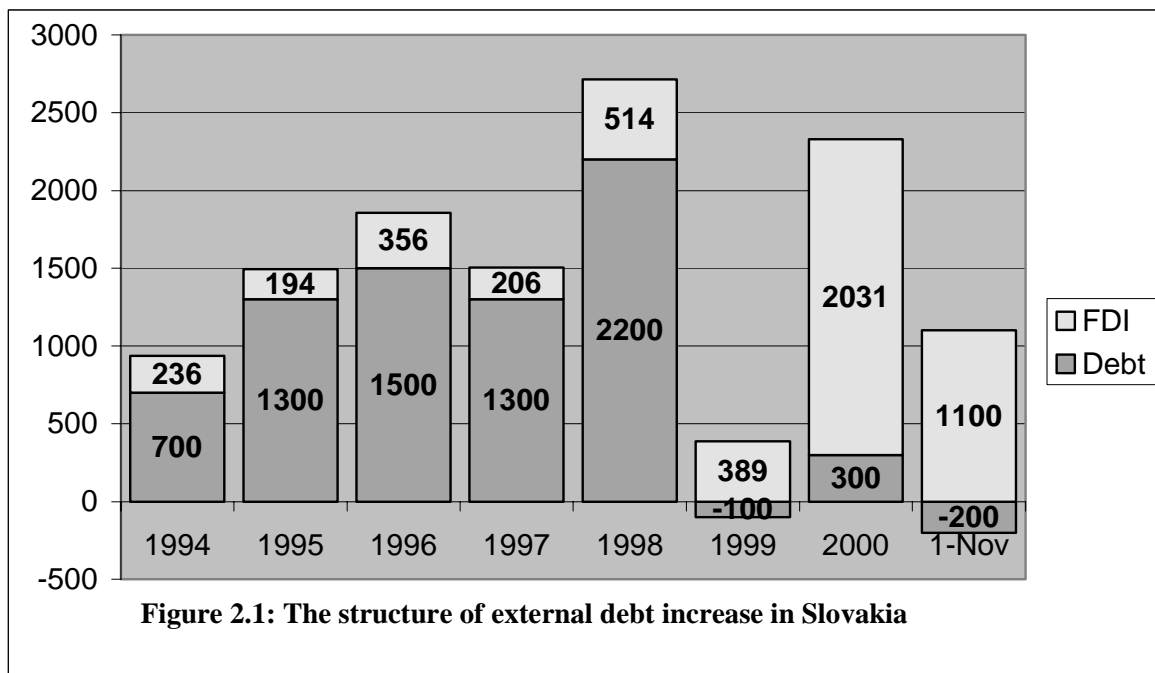
continue with restructuring, and inflows of foreign capital are high, we can expect that the rates of growth in the Slovak economy will remain for a while higher than in the EU.

If we attempted to make a forecast based on the present domestic trends in the macroeconomy, the sustained speed of transformation of enterprises, the continuing institutional reforms and the positive scenario in the EU accession, then, according to our estimates, it is realistic to expect the long-term growth rate of the GDP to be between 4% and 5%. It is also expected that the present nominal exchange rate of the Slovak koruna to the euro will be sustained, while the inflation will continue in the medium-run to be above the Maastricht criterion – fluctuating between 5% and 6%. Based upon these assumptions, we can estimate that Slovakia will reach the level of 75% of the GDP per capita in the enlarged EU, approximately by year 2010, compared to the current level of 52% of the GDP per capita of the current EU. Of course, it all depends on the assumptions one makes. For example, in January 2002, a forecast was published by the European Commission where Slovakia was expected to reach the level of 75% in the year 2020.

Let us therefore look closely at some more recent developments, which could shed more light on the achievements of the Slovak economy. The financial sector went through some of the most intensive changes related to its restructuring and privatization. Three years ago, the largest Slovak banks were still state owned and their corporate governance was in a very difficult situation. During 1994-98, the banking sector was abused for political purposes, and it suffered from bad loans and under-capitalization. The process of their restructuring was far from easy and the initial direct costs of the debt relief were around 12% of the GDP. More recently, after having recovered some of the debts, the net costs of the government can be estimated to be 6-7% of the GDP. It is still significant, but at this moment the whole Slovak banking, insurance and other financial sector is restructured and 90% of it privatized to foreign strategic investors, the most important among them coming from Austria (Die Erste), Italy (BCI Bank), Hungary (OTP Bank) and Germany (Allianz). The supervision of the commercial banks was at the same time strengthened.

Another important activity of the government was to speed-up and help in the restructuring of enterprises. A new bankruptcy law had to be introduced where the role of creditors was strengthened. There is also a new commercial code, which incorporates the OECD principles of governance. The accounting, auditing and income tax laws had to be substantially revised and the collateral law is now undergoing a thorough reform. The government has also initiated the privatization of public utilities. Among them are the entry of Deutsche Telekom AG into the Slovak Telecom, the privatization of Transpetrol (the network of pipelines transporting oil from Russia), the production and the distribution of electricity, and the distribution network of natural gas. At present approximately 87% of the GDP is created in the private sector.

The changes in the policy to the international sector that started in 1999 are illustrated in Figure 2.1. The structures in the columns depict the composition of the country's external debt. The new policies attracted more FDI and eliminated the growth of more liquid types of foreign debts. In 2000 Slovakia was the second most successful beneficiary of FDI per capita among the transition economies. An even more intensive inflow of FDI is expected in 2002. Even though a significant part of the proceeds was due to the privatization, approximately a half of the inflows in 2000 was channeled by green-field investments and new investments to previously privatized companies.



One of the major achievements in the Slovak government policies was the decrease in the public expenditure relative to the GDP, which is also related to the decrease in total taxation. While in 1996 the public expenditure represented 49% of GDP, in 1999 it was 45.1%, in 2000 42.6% in 2000, and the estimation for 2001 is below 40%. The profit (corporate income) tax was decreased from 40% to 25% and a more moderate cut was made with the personal income tax as well.

Another factor that promotes growth are the institutional improvements to decrease corruption, especially in the public services. Corruption is high especially in such areas as privatization, management of private firms, trade register, courts and banks. A comprehensive national program for the fight of corruption was launched with the cooperation of NGOs, international organizations and the general public. The public surveillance over the program was a necessary condition so that it became a widely supported policy. The recent surveys of the public perception of corruption show that in many areas significant improvements were achieved, while in some other areas there was less success. The index of perceived corruption decreased in the period 1998-2001 more than twice in the banking sector and in the administration of the trade register. The perception of corruption associated with the privatization decreased from 22% to 12%. An improvement was also reported in the management of the private sector. In all these cases one of the reasons of the success was that the transformation in these areas was very intensive. For example, the transparency of the privatization procedures became compatible with international standards of competition and control, and the conditions for corporate governance in both banks and firms improved significantly. The former close links between banks and enterprises on one hand, and the politics, on the other, were subjected to public supervision.

Progress was also achieved in the work of tax and customs authorities and in the labor offices. Unfortunately, no improvement was seen in terms of corruption in the functioning of regional governments, education, healthcare, police and the courts. The reforms in the public

sectors, which are the largest beneficiaries of the public spending, together with the pension system (or the social system as a whole) and agriculture, should become the next priority of the government. Without reforms in these areas it will be impossible to sustain macroeconomic stability and a balanced growth. For example, the obligatory social security and other related contributions in Slovakia are the highest in the region – becoming a barrier to both the competitiveness of producers and the fiscal stability.

In concluding his presentation, Ivan Mikloš expressed his hope following the next negotiations of NATO in Prague, Slovakia will also become a NATO member. Integration into the European and the world economic networks is a typical example of a win-win strategy, which offers gains to all participants. In the case of the EU, the enlargement will offer benefits to both the new entrants and the incumbents. It will also speed up necessary reforms in both the candidate countries and the present EU. Currently, Europe faces problems in its competitiveness vis-à-vis its competitors on the world markets. The reallocation of labor suffers from inflexibility, and the reforms in the common agricultural policy have been proceeding too slowly. Without reforms in these highly sensitive areas, the EU enlargement will lose its momentum, if not becoming an outright unrealistic undertaking. The occasion of the present EU enlargement by transition countries can offer in that regard a valuable potential for mutual European progress.

Discussion of the Presentation by Ivan Mikloš

A participant from Slovakia asked the presenter if he could comment on the policies for the development of Slovak science and technology, and, in addition, on the promotion of employment, since Slovakia suffered for a long period of unemployment whose present rate is above 18%. A participant from Hungary posed a question: how fragile and irreversible are the recent economic changes in relationship to the present tensions in the political situation in Slovakia. Another participant pointed out that the experience from the Czech Republic during 1997-2001 shows that the restructuring policies require that the government has a long-term strategy. Does Slovakia have such a strategy in regard to the restructuring of manufacturing, which for a long time suffered from low competitiveness? The fourth question concerned the Slovak constraints in the admission of university students. Since a large number of highly talented local secondary school leavers are denied the entry into Slovak universities, they are often forced to apply for the anonymous admission at some Czech university. There, surprisingly, they comply with the standards and get accepted. The question is: how beneficial is it for Slovakia if a non-negligible part of its young human capital is brain-drained abroad, and what local policies can preclude that?

In his answers Ivan Mikloš touched first the questions about education and science. In the transition period the demand for university education in Slovakia sharply increased, so increased the capacity, but is still low in proportion. The excess demand thus spilled over to the studies abroad and from there, most naturally, to Czechia. The potential of young, well-educated people at the level of secondary and university learning is the most valuable asset for growth that Slovakia has. Unfortunately, the country has used it, due to various constraints, only by 50-60%. Approximately 26% of the present young cohort studies at the universities and an additional 10% receive additional education at the extensions of secondary schools for payment. It is clear that in this field reform is inevitable. For example, there is a need for significant financial injections, for which the funding should be found both in the public budgets and in the form of co-financing from other, generally private, sources. At the moment 0.7% of the GDP is transferred to the higher education, while in comparable EU countries this

rate is approximately 1%. However, the core of the problem is not in the funding alone, including the introduction of fees and loans. The whole education sector has to be at the same time subject to a reform that would motivate both the schools and the students for higher efficiency, which will result in increasing the numbers of those able and willing to study.

The problem of education is closely related to the challenges in performance of the sector of science, technology and R&D. Here, too, further imminent reforms are pending. Improvements in the fields of education and science will attract more FDI, its structure will be also more progressive, and it will have an impact on the employment. Slovakia has had serious problems with unemployment that is close to 20% at present. There were many reasons for that: structural changes in the economy, global downturn in the European countries, and the deformations on the labor market, among others. As to the latter, sub-optimal parameters of the social system motivate a large part of the labor force to abuse unemployment benefits. There are indications that out of the 530,000 officially unemployed, approximately 100,000–130,000 are actually working illegally, i.e. without proper contracts and contributions to fiscal or social funds. The structure of the population is another problem. Due to an exceptionally high natality during the 1970s and 1980s, there are too many young people that enter the labor force, which is not counterbalanced by demand. Here one can make a good comparison with Hungary. During 1990-2000, the number of people in productive age increased in Slovakia by 330,000. In Hungary, in the same period, the number of people in productive age declined by 415,000 people. If we combine this demographic factor with other mounting economic problems, such as the need for a reallocation of whole industries and the delayed restructuring of enterprises, no wonder that many new young entrants to the labor market, especially those ones with lower skills and no working experience, are not matched by a the supply of appropriate jobs.

As to the question about the brain-drain - it is a natural risk that students getting their education abroad also find employment abroad, especially if their home country offers them very little in exchange for their human capital. However, the presenter thought that this was the case neither of the present, nor of the future Slovakia. The country is becoming attractive enough to motivate the majority of students studying abroad for returning. Let us look at some other countries for an illustration. The problem of brain drain was a setback to Ireland for years until the mid 80s, when the economic reforms commenced. However, the past trends in labor outflows got suddenly reversed, and Ireland became attractive for both capital and labor resources. Nevertheless, it is clear that the educational system in Slovakia must be reformed, so that its capacity as well as its quality is enhanced.

If one looks at the strategic orientation of the Slovak economic development, there are two things, which must be made clear. The orientation on economic openness and integration with the EU are of paramount political importance. The presenter doubted if the small parties, that did not have that orientation, could ever find coalition partners for forming a government.. The other thing is a strategic orientation of the local manufacturing industry. The Slovak government does not have a strategic plan that would explicitly concentrate on the support of particular industries. There are two reasons for that: firstly, it is not a role of the government to pick the winners. Secondly, it is such a burden on the public finance that the government cannot afford it by abandoning its other (and more rational) objectives. The dominant policies for the restructuring of industries are the creation of stable legal and political conditions for entrepreneurial decision-making, the attraction of foreign direct investments, stable macroeconomic foundations, sound commercial banking, and the quality educational system that will build human capital.

2.2. Historical Perspectives of Growth, Integration and Policies for Catching-up in Transition Countries³

The importance of reverting to history in order to look forward to our future is quite different for different kinds of social scientists. The majority of “abstract” economists, due to their deductive methodology aiming at formally logical descriptions of events that are exempted from “coordinates” such as concrete time and space, are not particularly fond of looking back. For them, the pure theory is the right instrument, which leaves the outcomes to be independent from particular random institutions and irregularities caused by bounded rationality of local economic agents. On the other hand, sociologists and “humanists” like to take lessons from history, even though their conclusions are rather intuitive. Their inductions, drawn from very particular cases, often miss the point of legitimacy when applied to other concrete cases. Nevertheless, being aware of our history and the history of our neighbors makes it easier to us to understand to what extent the inherited assets and liabilities determine our present decisions and the prospects for our future economic growth.

If we look at Central and Eastern Europe, which was for a large part of the 20th century dominated by totalitarian regimes and central planning, we can find out that this part of Europe revealed clear core-periphery relationships, even for much longer period. In the last 250 years, in the West, the economic growth in many countries profited from the Atlantic trade system. This system was gradually spreading to the East when it suddenly got stuck at the East-West divide, that later settled at the border with Communist countries. Thus the peripheral nature of the East European economies remained conserved for much longer until their authoritarian and semi-autarchic regimes collapsed during 1989-91. We should be also aware that the core-periphery trading arrangement is a theoretical concept that was developed mainly due to the pioneering works of Paul Krugman. It has certain implications for the way, in which modern patterns of specialization in trade and production are formed.

According to Iván Berend, Central and Eastern Europe has been burdened with a mysterious “spell” resulting in their low growth: their GDP per capita in the last 200 years has been never more than 55% of the average values achieved in the industrially developed West European countries. Now we are in the year 2002, having overcome more than 10 years of intensive transformation on a path of transition to market economies, but the GDP per capita in the post-communist countries did not break through the 55% barrier even in the most successful cases, with the single exception of Slovenia. At the same time, there are many countries, especially those ones coming from the former Soviet Union, whose GDP per capita is in the range of 25 to 30% of the EU average at the purchasing power parity level and whose net growth in the past 12 years was actually sharply negative.

There is a series of questions, which must be raised as a consequence:

- Why, after adopting the market system, didn't the accession countries experience a fast growth along a convergence path leading to the catching-up with such peripheral countries like Portugal or Spain?
- Could we accept a hypothesis that the potential steady-state output in the transition countries was and will remain lower than in Portugal or Spain?

³ This section summarizes the presentation by Vladimír Benáček, IIASA.

- If we do not accept the former, what kind of barriers have there been in the accession countries that effectively precluded them from narrowing the gap between them and the EU average?

Although the reply to the above questions can be most varied, there have been lately four answers, which dominated the discussions about the fundamental causes of lagging behind. They addressed four gaps in the crucial areas determining the economic performance of the emerging market economies:

- Legal system gap
- Property rights gap
- Education gap
- Technology gap.

We can even see from the history that some of the transition countries came from an environment where high institutional standards were introduced in all four of these areas. Such is especially the case in countries whose economic roots go back to the former Austro-Hungarian Empire – Czechia, Slovakia, Hungary, Slovenia, Croatia and Bosnia, and parts of Poland, Romania and Ukraine. Most of them were experiencing ups and downs in the inherited competitive advantage after 1918, but definitely the biggest shock came after 1945. In many other transition countries, however, the traditions of the legal system and the property rights never reached standards required for a functioning free-market economy and democracy.

Another big problem is associated with education. Literacy and schooling were in the majority of transition countries high and they were also supported widely by the communist system. Although the formal education, as a rule, was very intensive, its practical economic impact on the creation of human capital was low. Thus the economic paradox of the transition countries is such that these are the countries with relatively highly educated labor, but with low contents of human capital. There are not many signs yet in the majority of transition countries of a break-through in the education standards that would lead to a narrowing of the comparative disadvantage in human capital endowments.

It is a general consensus that in modern economies there cannot be fast growth without progress in the area of human capital and its association with R&D, and the technological upgrading. The technological gap is an amalgamated outcome of several factors: gaps in education, low human capital endowment, lack of financial resources for investments, and a slow restructuring of existing resources. The status of all these factors is intensively dependent on institutional conditions inherited from the past, showing the so-called “path dependency”. The most common way of quantifying the technology gap is by means of the technical efficiency estimated by production functions and interpreted as a “total factor productivity” (TFP) ⁴.

In Table 2.1 there are historical values of the growth rates, and estimations how the growth can be attributed to the mere multiplication of factors and to changes in the TFP. As we can see, the growth rates for 1971-97 were very low in all of the accession countries,

⁴ Total factor productivity (TFP) can be estimated as the residual from the Cobb-Douglas production function with two exogenous input factors – labor and physical capital. Thus any growth that is not directly associated with the changes in these two factors is interpreted as a growth in TFP and attributed to the gains in technical progress.

except for Slovenia, and there was a steady decline in growth throughout the three analyzed periods in the majority of them. With the exception of Hungary and Slovenia, the problems in the growth during 1991-97 were not only caused by low levels of factor growth, but mainly by the widening of the technological gap.

The historical legacy of growth can be even extended deeper into the past. In Table 2.2 we can see the economic evolution in many countries including four candidate countries, as based on historical statistics for 1913, 1929, 1938, 1950, 1996 and 1999. Apart from Slovenia, Czechia, Hungary, Slovakia and Poland are judged as the leading accession countries. The data confirm that slow growth and decline in the relative position of the GDP per capita have been troubling the economies of CEECs for a long time. However, what is of crucial importance, is that some economies were able to climb in the ranking ⁵ very fast (such as Japan, Norway, Austria or Spain), while some others experienced a series of declines (such as Britain, Sweden, Canada or Czechia). Special attention should be devoted to Ireland, since its economic breakthrough is generally taken as a showcase of growth.

Table 2.3 concentrates more on the growth rates in the period 1950-1999. The GDP estimations are in constant US dollars of 1980. None of the studied four accession countries has experienced high growth, which only partially can be attributed to the slump during the early transition period. These countries, together with Argentina, had the slowest growth among the industrially advanced countries of the world, even if this is measured at purchasing power parity. What is even more disturbing is these countries' extremely poor performance if the GDP is estimated at the commercial exchange rates. Here we can see a negative Balassa-Samuelson effect of slow growth: as some countries' GDP was growing at a rate lower than the average, and as the competitiveness of their exports was losing ground, their real exchange rates were weakening, which widened the existing economic gap in real terms by adding to it a gap in nominal terms.

Here we can see two of the major challenges that the accession countries should overcome in the course of their real and nominal convergence. First, they must get their economy on a track of a fast real growth measured at purchasing power parity exchange rates. Second, they should abandon the reliance of their growth on the depreciation of the real exchange rate, and actually revert it to a real exchange rate appreciation. Although the latter is a derived factor of growth (with less intensive contributions to "growth"), the process of catching-up is hardly manageable without this effect, as is shown in the last column of Table 2.3. There we indicate the net contribution of nominal growth to total growth at the commercial exchange rate to dollars. It is clear that the countries, which were most successful in the catching-up, combined both factors for their advantage. Here the attention should be paid not only to Japan, Switzerland or Norway, but also mainly to Austria that comes from the same historical and geographical region as our four transition countries. It is clear that the spell of the legacy of slow growth in Central and Eastern Europe can be broken. We can hardly expect a more appropriate time for that than now.

⁵ See the last two columns of Table 2 where the ranking of the GDP per capita in purchasing power parity for 1999 is compared with the ranking in 1913 and 1950.

Table 2.1: Annual growth factors in 11 accession countries during 1971-97

Country	Average in years	Output growth	TFP growth	Factor growth
BULGARIA	1971-97	1.1	0.8	0.3
	1971-80	6.9	4.6	2.3
	1981-90	1.9	2.1	-0.2
	1991-97	-8.8	-6.2	-2.6
CROATIA	1971-97	1.1	1.1	0
	1971-80	5.7	3.3	2.4
	1981-90	-0.8	0.9	-1.7
	1991-97	-4.2	-3.2	-1.0
CZECHIA	1971-97	0.5	-0.6	1.1
	1971-80	3.4	1.7	1.7
	1981-90	0.8	0.2	0.6
	1991-97	-4.2	-5.1	0.9
ESTONIA	1971-97	1.1	0.2	0.9
	1971-80	3.8	1.4	2.4
	1981-90	1.6	0.5	1.0
	1991-97	-3.4	-2.2	-1.2
HUNGARY	1971-97	2.8	2.4	0.4
	1971-80	4.9	3.2	1.7
	1981-90	1.1	2.1	-1.0
	1991-97	1.9	1.6	0.3
LATVIA	1971-97	-0.1	-0.4	0.3
	1971-80	3.6	1.4	2.2
	1981-90	2.3	1.3	1.0
	1991-97	-8.6	-5.3	-3.4
LITHUANIA	1971-97	0.8	-0.3	1.1
	1971-80	2.8	0	2.8
	1981-90	3.7	2.3	1.4
	1991-97	-6.3	-4.5	-1.8
POLAND	1971-97	2.7	0.9	1.8
	1971-80	5.9	2.7	3.2
	1981-90	0	-0.3	0.3
	1991-97	1.8	0.1	1.7
ROMANIA	1971-97	3.1	1.9	1.2
	1971-80	9.4	5.6	3.8
	1981-90	0.4	1.3	-0.9
	1991-97	-2.4	-2.4	0
SLOVAKIA	1971-97	2.1	0.8	1.3
	1971-80	5.1	2.9	2.2
	1981-90	1.5	0.8	0.7
	1991-97	-1.6	-2.3	0.7
SLOVENIA	1971-97	3.7	2.6	1.1
	1971-80	5.7	2.7	3.0
	1981-90	-0.9	-0.3	-0.6
	1991-97	8.9	7.9	1.0

Source: Campos N., Coricelli F.: Growth in Transition: What We Know, What We Don't, and What We Should. Journal of Economic Literature, September 2002

Table 2.2: International Comparison of GDP Per Capita in US \$

Years 1913, 1929 and 1950 are in constant US \$ at prices of 1980; 1938, 1996 and 1999 are in current prices)

Country	1913	Rank	1929	Rank	1938	Rank	1950	Rank	1996	Rank	1996	Rank	1999	Rank	1999	Rank	Change	Change
									CER		PPP		CER		PPP		1913-99	1950-99
USA	3772	1	4909	1	521	1	6697	1	28020	7	28020	1	30600	5	30600	1	0	0
Switzerland	2474	5	3672	2	367	5	4589	3	44350	1	26340	2	38350	1	27486	2	3	1
Norway	1573	18	2184	12	255	11	3436	10	34510	3	23220	4	32880	2	26522	3	15	7
Denmark	2246	8	2913	7	316	9	3895	6	32100	4	22120	6	32030	4	24280	4	4	2
Belgium	2406	6	2882	8	275 [~]	10	3114	11	26440	8	22390	5	24510	9	24200	5	1	6
Japan	795	23	1162	23	112	23	1116	23	40940	2	23420	3	32230	3	24041	6	17	17
Austria	1985	9	2118	14	179	15	2123	17	28110	6	21650	7	25970	6	23808	7	2	10
Canada	2773	4	3286	4	377	4	4822	2	19020	16	21380	9	19320	16	23725	8	-4	-6
Netherlands	2400	7	3373	3	323	8	3554	8	25940	10	20850	11	24320	10	23052	9	-2	-1
Australia	3390	2	3146	6	380	2	4389	4	20090	13	19870	14	20050	14	22448	10	-8	-6
Germany	1907	11	2153	13	354	6	2508	15	28870	5	21110	10	25350	7	22404	11	0	4
France	1934	10	2629	9	236 [~]	13	3038	12	26270	9	21510	8	23480	12	21897	12	-2	0
Finland	1295	20	1667	18	178	16	2613	14	23240	12	18260	16	23780	11	21209	13	7	1
Britain-UK	3065	3	3200	5	378 [~]	3	4164	5	19600	15	19960	12	22640	13	20883	14	-11	-9
Sweden	1792	13	2242	10	327 [~]	7	3874	7	25710	11	18770	15	25040	8	20824	15	-2	-8
Italy	1773	14	2089	15	167	18	2104	18	19880	14	19890	13	19710	15	20751	16	-2	2
Ireland	1680	16	1900	17	252	12	3450	9	17110	17	16750	17	19160	17	19180	17	-1	-8
Spain	1590	17	1620	19	132	21	1683	22	14350	18	15290	18	14000	18	16730	18	-1	4
Czechia	1890	12	2205	11	206	14	2909	13	4740	20	10870	19	5060	20	12289	19	-7	-6
Argentina	1770	15	2036	16	172	17	2324	16	8380	19	9530	20	7600	19	11324	20	-5	-4
Hungary	1340	19	1598	20	141	19	1847	19	4340	21	6730	22	4650	21	10479	21	-2	-2
Slovakia	1075	21	1375	21	138	20	1785	21	3410	22	7460	21	3590	23	9811	22	-1	-1
Poland	810	22	1360	22	128	22	1827	20	3230	23	6000	23	3960	22	7894	23	-1	-3
OECD Countries	2224	50	2727	57	282	51	3553	57	25870	14	22390	32	25730	16	24430	38	↑ Change in ↑ ranking for data in PPP	
		%%		%%		%%		%%		%%		%%		%%		%%		

Comment for Table 2.2: Since the sources of this table are numerous, see the background paper of the author (V. Benacek) at <http://www.iiasa.ac.at/Research/ETI/docs/whats-new/vb-eti.pdf> for more details.

Table 2.3: Growth of GDP per Capita in 1950-1996 - An International Comparison

All data for GDP are in constant prices, i.e. in constant US \$ at prices of 1980)

(CER = commercial exchange rate; PPP = purchasing power parity rate)

Country	Rank in 1996 (at PPP)	1950 const. prices	1996 CER const. p.	1996 PPP const. p.	1950-96 CER growth in %	Rank in growth CER	1950-96 PPP growth in %	Rank in growth PPP	Net contribution of nominal growth to total growth at CER
USA	1	6697	15430	15430	1.81	17	1.81	18	0
Switzerland	2	4589	24422	14504	3.63	5	2.50	11	1.13
Japan	3	1116	22544	12896	6.53	1	5.32	1	1.21
Norway	4	3436	19003	12786	3.72	4	2.86	9	0.86
Belgium	5	3114	14559	12329	3.35	10	2.99	6	0.36
Denmark	6	3895	17676	12181	3.29	11	2.48	12	0.81
Austria	7	2123	15479	11922	4.32	2	3.75	2	0.57
France	8	3038	14466	11845	3.39	8	2.96	7	0.43
Canada	9	4822	10474	11773	1.69	18	1.94	17	-0.25
Germany	10	2508	15898	11624	4.01	3	3.33	5	0.68
Netherlands	11	3554	14284	11481	3.02	12	2.55	10	0.47
Britain (UK)	12	4164	10793	10991	2.07	15	2.11	15	-0.04
Italy	13	2104	10947	10953	3.59	6	3.59	3	0
Australia	14	4389	11063	10942	2.01	16	1.99	16	0.02
Sweden	15	3874	14157	10336	2.82	13	2.13	14	0.69
Finland	16	2613	12797	10055	3.45	7	2.93	8	0.52
Ireland	17	3450	9422	9224	2.18	14	2.14	13	0.04
Spain	18	1683	7902	8420	3.36	9	3.50	4	-0.14
Czechia	19	2909	2610	5986	-0.24	23	1.57	21	-1.81
Argentina	20	2324	4615	5248	1.49	19	1.77	20	-0.28
Slovakia	21	1785	1878	4108	0.11	21	1.81	19	-1.7
Hungary	22	1847	2390	3706	0.56	20	1.51	22	-0.95
Poland	23	1827	1779	3304	-0.06	22	1.29	23	-1.35
OECD	5b	3553	14246	12329	3.02	11 b	2.70	9 b	0.32

Sources: see the background paper of the author at <http://www.iiasa.ac.at/Research/ETI/docs/whats-new/vb-eti.pdf>

Table 2.4: GDP per capita in the candidate countries and in some EU members, and their exchange rate deviation index (ERDI)

Country	GDP per capita (EU-15=100%)		GDP per capita in US\$		ERDI
	at purchasing power parity	at current exchange rate	at purchasing power parity	at current exchange rate	
	1990 1999	1999	1999	1999	
Bulgaria	32.5 23.8	6.3	4914	1380	3.56
Czechia	70.3 59.5	23.1	12289	5060	2.43
Estonia	44.2 37.9	15.9	7826	3480	2.25
Hungary	55.1 50.7	21.2	10479	4650	2.25
Latvia	49.1 28.8	11.3	5938	2470	2.40
Lithuania	50.5 29.5	12.0	6093	2620	2.33
Poland	32.2 38.2	18.1	7894	3960	1.99
Romania	37.1 27.3	6.9	5647	1520	3.72
Slovakia	51.8 47.5	16.4	9811	3590	2.73
Slovenia	70.1 72.9	45.2	15062	9890	1.52
Austria	105.9 108.7	118.6	22448	25970	0.86
France	109.6 106.0	107.3	21897	23480	0.93
Germany	101.0 108.5	115.8	22404	25350	0.88
Greece	57.7 70.7	53.8	14595	11770	1.24
Ireland	72.0 92.9	87.5	19180	19160	1.00
Italy	102.2 100.5	90.0	20751	19710	1.05
Netherlands	100.8 111.6	111.1	23052	24320	0.95
Portugal	60.8 73.4	48.4	15147	10600	1.43
Spain	73.6 81.0	64.0	16730	14000	1.20
U. Kingdom	100.2 101.1	103.4	20883	22640	0.92
EU-15	100.0 100.0	100.0	20649	21889	0.94

Sources: Own calculations from Statistics of World Bank Development Report, The World Bank (2000), National Accounts of OECD countries (2001) and Dobrinsky (2001).

There are two opposing exchange rate policies, which may be associated with growth. The first one is to have an undervalued exchange rate and use the Marshall-Lerner-Robinson effect for expanding exports and fending-off imports. Romania, Bulgaria, and partially Slovakia and Czechia, are countries where this “soft” policy prevailed. On the other extreme, there is a policy of a “hard” (overvalued) currency that was in the past characteristic for Croatia and partially for Poland. The alternative theories of real exchange rates attempt to assess the rigor of these policies. Nevertheless, due to highly complicated links between the real and the monetary matters, and between the micro- and macro-economy, it is very difficult to say with certainty whether also in the short-run either of these extreme exchange rate policies are supporting or damaging the growth. In Table 2.4 ten accession countries are compared with the average GDP per capita in the EU. We can see that in the period 1990-1999 there were only two transition countries, Poland and Slovenia, in which the gap of trailing behind the EU did not widen. The lagging behind in growth is especially visible if we compare the accession countries with the so-called cohesion countries, among which Portugal and Ireland experienced a much faster growth than Poland – the fastest growing accession country. The index of ERDI (exchange rate deviation index) quantifies the relative gap between the GDP at PPP and commercial exchange rate levels. It is evident that even the most

advanced accession countries (Slovenia and Czechia) have followed a softer exchange rate regime than the weakest among the EU incumbents, and that there are reserves for a faster nominal growth to serve catching-up.

Speaking hypothetically, the target of the accession countries should be a long-term real growth above the 3.2 % rate (in constant domestic prices), accompanied with a real appreciation in the magnitude of 2% in the medium-term and close 1% in the long-term. With the growth rates of GDP in Euro around 5% in the next 10 years, the catching-up with Greece and Portugal also in the nominal values of GDP per capita can become a reality sooner than would be expected if we extrapolated the growth figures in Table 2.4.

Here the presenter returned to Table 2.1 and commented on policies sustaining growth. Though the availability of the two basic production factors – labor and capital – can be influenced by mere factor growth (i.e. higher natality or higher domestic savings and investments), much more important are the policies which increase their efficiency.

Here the crucial policies are those supporting the discipline of capital and those supporting the quality of labor. For example, it is the encouragement of the education that builds the human capital associated with labor. The quality of secondary education is especially supposed to be the key element here. On the other side the disciplining of the banking intermediation and the corporate governance are associated with the gains in the efficiency of capital. The encouragement of the buildup of institutions that decrease the transaction costs in production, marketing and development of new businesses, and subjecting the existing firms to market discipline and competition should also run in parallel, accompanied by the discouragement of the institutions that actually do the opposite.

So finally, the main problem here is not economic, but a political one: the inability of the society to cooperate on clear strategic policies. Politics in transition countries are extremely powerful because they control, by means of the public finance, approximately a half of the GDP. The abuse of their powers is very difficult to control since democracy in the post-communist countries is often at its infancy. Entrenched mutually exclusive interests of owners, managers, politicians, bank officials, bureaucrats, trade unionists, labor, and various other provisional stake-holders can bring the fragile social consensus to a havoc, replacing the collective policies conducive to restructuring and improved enterprise performance by policies oriented to rent-seeking. The growth and the catching-up thus end up in stagnation.

In order to sum up this introduction to the policies of growth, the presenter outlined his own interpretation of the “Golden Rules of Competitiveness” propagated by the World Competitiveness Yearbook 2002 ⁶ :

1. Create a stable and predictable LEGISLATIVE ENVIRONMENT:
 - enforcement of property rights;
 - low transaction cost in production and trade.
2. Focus on quality, speed and transparency in GOVERNMENT AND PUBLIC ADMINISTRATION:
 - provision of public goods without bureaucracy and rent seeking;
 - low taxation;
 - policies encouraging markets.

⁶ See <http://www01.imd.ch/wcy/> for your reference.

3. Invest heavily in EDUCATION, especially at the secondary level, and in the life-long training of the labor force.
4. Develop a sound ECONOMIC STRUCTURE:
 - location of factors in traded commodities according to comparative advantages; development of modern service sector and information technologies;
 - combination of traditional and technological infrastructure.
5. Create environment supporting the SPILLOVERS from multinational enterprises, imports and exports to viable domestic large enterprises and small and medium-sized enterprises.
6. Encourage PRIVATE SAVINGS AND INVESTMENTS:
 - effective financial intermediation;
 - low transaction cost, pro-investment environment;
 - attractiveness for foreign direct investment.
7. Create a COMPETITIVE ENVIRONMENT:
 - subject the private sector to market discipline;
 - wealth creation incentives should dominate over the motives for wealth re-distribution.
8. Promote the SOCIAL COHESION AND HUMAN DEVELOPMENT:
 - guard cautiously the nature of your political system and challenge its tendencies to rent-seeking, corruption and collusion between parties, businesses and public administration by the checks and balances of the civil society;
 - dismantle the barriers for the development of the de novo private sector (small and medium-sized enterprises);
 - strengthen the middle class;
 - control income disparity and social inequity;
 - cultivate the value systems of the society (quality of life; healthcare; environment; principles of solidarity; national culture; NGOs; democracy).

The main problem in catching up of transition countries does not rest in the lack of potential resources or in the lack of ideas of how the development can be orchestrated. The crux of the matter rests in an inability of these societies to separate their future from their past legacies and to get the society united behind a very clear strategic collective action. This looks like a failure in politics, at both the central and the local levels. Unfortunately it happened too often that new democratic politics was not able to go beyond its very partial vested interests, the entrenched hierarchies and networks. The development in transition countries is generally seen locally as a trade-off between social structures where the alleged losers defend themselves by effectively blocking the moves to a progress. Transition is therefore not conceived as a cooperative repeating game open to social dialog where all participants can gain. That is definitely an incorrect strategy that should be avoided.

Discussion of the Presentation by Vladimír Benáček

The question of what production factors and what kind of data were used in the production function for the estimation of the residual interpreted as the TFP was raised by one of the participants. For that the answer is rather difficult since the data come from official national time series, which could not have been methodologically homogenous. The final sources were the studies of IMF (De Broek and Koen) and CEPR (Estrin and Urga). The problem rests with both the labor and the physical capital. The former was not adjusted for the hours worked and the latter for the capacity utilization and its market value. Thus the slump in the output could be assigned to the negative TFP “residual”, because a large part of the completely useless inherited capital (which became a sunk cost) remained in the statistics. Since Slovenia suffered less of that problem, its estimated TFP looks more favorable. Nonetheless, though not unimpeachable, the estimations of Campos and Coricelli are the best approximations we have.

A discussant commented on the importance of education and the question on which level the education adds most to the development of the human capital. Some years ago, there was a debate on whether medical care in the world was best promoted by educating doctors instead of nurses. Today, if we look at the two major developing countries – China and India – we can see a different approach to the policy of education. In a debate whether we should educate a fairly small part of population to a high level or a large part to a medium level - the latter has been gaining ground. Also in other parts of the world the quality of secondary education became the crucial factor. Another discussant added to the discussion on the importance of human capital by pointing to the developments in the Asian South East countries. General conclusions from studies trying to explain why some of them became successful and why some others failed, was that the major factor was the level of education and especially the level of the secondary education. The prime examples for that were South Korea on one hand, and the Philippines, on the other.

A participant from Ireland pointed out why the figures for Ireland in Table 2.2 actually build a mistaken impression that the Irish economy in 1999 should be counted as one of the failures. The problem is in the absolute values of GDP. While in 1950 the gap between the top and Ireland was nearly 100%, in 1999 it was below 63%, while eight additional countries moved into this middle-income space where the absolute differences between them were very small. At the same time Ireland made the largest progress in the last 12 years only, thus overcoming its long unsuccessful period after 1950. The convergence dynamics of Ireland and many other middle-income countries is what matters, and not their momentary relative ranking.

The Irish participant also commented on the list on Rules of Competitiveness, mentioning those items which were important for the Irish breakthrough: except for the low taxation, it was also crucial how the public infrastructure developed in general, not only in its narrow sense as the educational infrastructure. At that moment there can arise a tradeoff between low taxation and infrastructure, so that not both of them can be actually satisfied at the same time. This is visible on the wealthy North European countries whose prosperity seems to be consistent with high levels of taxation and the assistance that the state provides for achieving high levels of social cohesion and human development. We should therefore talk about various models of development: it may be the “Boston model” on the one hand, where the low taxation is preferred, while on the other hand there are alternative strategies in

public policy-making which we can call like “Brussels”, “Berlin”, “Netherlands” or “Scandinavian” models.

The presenter of the paper responded that what concerns the theoretical argument for the support of the higher levels of taxation it all depends on the beliefs in public goods. If there is evidence in some countries that 40-50% of their GDP is taxed, we must assume that there is a proportional high demand for the provision of public goods. But then one must ask such questions like “what is the quality of the intermediating political system?”, “how does its democracy function?”, “is the process of public goods procurement transparent?”, “are the externalities from the past public expenditures estimated?”, “are those externalities positive and high enough?”, etc. Only with positive and satisfactory answers to such provisos the expenditures on alleged public goods are economically justified. We know that in the Scandinavian countries democracy and the civil society are highly developed, so that their model may work. On the other hand, many other countries do not satisfy the above-mentioned conditions and the public expenditure just crowds out the more efficient private activities while at the same time virtually neglecting the proper fields of public goods. The corruption of both the public and the private sectors became so notorious that a political reversal towards a public efficiency becomes impossible. Then the introduction of a simple “Boston model” is a way for increasing the growth, even though it does not use the full potential for the human development. This could last for so long until the society matures and higher levels of taxation are compatible with the criteria of efficient expenditures on public goods.

A discussant raised the question whether we can consider the bulk of social transfers as public goods. In his response the presenter stressed the importance of the 8th point in the list of Rules of Competitiveness and especially its last four bullets. Social cohesion and human solidarity are values deeply rooted in the European culture from the ancient times. Their economic meaning is essentially associated with externalities and the public goods. No modern market economy can rely exclusively on the unfettered power of the markets. Social transfers are a complementary mechanism for the support of sustained human cooperation and against its degradation to predatory coalitions and social resignation. The problem is to keep democratic checks and balances of that process so that its public good aspects are not abused and overturned into becoming an all-embracing public corruption.

A participant from Slovakia referred back to the issue of education, human capital and growth, which are a theoretical focus point on one hand but a point of practical controversy on the other hand. In Slovakia, as is the case in many other transition countries, the schools offer a very extensive training process. That means keeping the students at least for 5 years at the university, irrespective for which specialization they study. By offering lower degrees and thus simply reducing the average number of years studied the capacity could be increased. Thus, by making simple organizational changes, even without much investment, the educational capacities can be increased in a relatively short time. In the USA the pyramid system of higher education offers more capacity for absorbing the secondary school leavers, while 70% of them leave the university with a bachelor’s degree. Another highly disturbing fact in Slovakia is that 30% of the university graduates are unemployed. The question is whether it is due to a low quality of education or due to an improper structure of programs offered at universities. One can have doubts that it might have been due to the emerging structure of comparative advantages in production that would not require the human capital.

3. Latest Developments in the Process of Accession – Updates from Applicant Countries

3.1. Country report on Lithuania⁷

The idea of fast catching-up in the EU negotiations and the accession process became a reality, what was mainly due to the EU summit in Nice. Lithuania became one of the big beneficiaries of this process. In 1999 only very few optimists believed that Lithuania would make such progress. At the beginning of 2000 the country had only seven provisionally closed chapters, thus the lagging of Lithuania behind all other candidate countries looked so big that getting into the first wave of enlargement looked impossible.

In February 2002, with the 23 chapters closed, Lithuania caught up with the most advanced candidate countries, which started negotiations two years earlier. It firmly established its position among the 10 candidate countries, which are in a position to conclude the negotiations at the end of 2002 and to become members of the EU in 2004. It is important to stress that the number of the closed chapters should be viewed not as a numerical progress, but as a progress in real adjustments in the Lithuanian economy. This is not a progress grounded only on Lithuanian promises and naïve trust from the European Commission. To this moment Lithuania successfully implemented commitments taken up in the course of the negotiations.

We can ask a question what made such an unexpected break-through possible? Partially it was due to substantial administrative measures, taken both in Brussels and Vilnius, which concentrated on speeding-up the negotiations. Another second step was changing the international image of Lithuania as the least developed Baltic state, lagging behind both in reforms and in the terms of negotiations. That required applying better negotiation skills and new approaches to both real restructuring and institutional changes. Qualitative changes could also be experienced in the private management that increased the competitiveness of Lithuanian production. On the side of public policies it was the introduction of strategic planning elements, more efficient budgeting and a breakthrough in important domestic reforms.

Policies for convergence to the EU were based on analytical studies carrying out accession-related impact assessments. They included the impact analyses of accession on the state regulatory institutions, socio-economic impacts of the Single Market on Lithuanian companies and company-level regulatory systems. During 2001, the European Committee commissioned 22 impact assessment studies, of which 13 have been already completed.

Over the past years, Lithuania's EU Accession Program (NPAA) has become the single fundamental instrument for planning, monitoring and reporting of progress towards the EU membership. It has been included into the Government's Action Plan as a Lithuania's membership program, providing for the transposition and implementation of an essential part of the *acquis*, as well as for the completion of remaining structural reforms. Key part of the NPAA, i.e. the most important measures related to Accession Partnership and commitments

⁷ This section summarizes the presentation by Darius Zeruolis, European Committee under the Government of Lithuania.

undertaken during the negotiations, are subjected to a political monitoring and monthly reports of the chief negotiator to the Cabinet. Implementation rate in legal approximation almost doubled - from 43% in 2000 to 82% in 2001.

A multi-party agreement on the strategic priority of the EU integration and necessary reforms helped to convert the agreements into practical legislative actions in the Seimas (Parliament). The Seimas by joint effort and without delay adopted the legislation vital to attaining progress in Lithuania's negotiations. In 2001, two special sessions devoted to Lithuania's EU accession were held. 38 important "integration laws" have been approved and other 19 are put on the agenda.

Initially, Lithuania asked for 35 transition periods with a length of altogether 1977 months. Out of them 11 were concluded and 16 were withdrawn. Only six withdrawals were classified as "forced withdrawals" because the EU refused to accept them. For example, the EU refused to accept the exemption of the excise duty on diesel fuel, and the compulsory insurance against third party liability for the users of motor vehicles. Long negotiations have been conducted about the restructuring and modernization of the environment sector, the functioning of the customs system, the system of financial control and audit, and the competition policy. They were conducive to the speeding-up of domestic reforms.

The issues that are being negotiated at present, such as taxation, energy, agriculture, and regional policy, are highly sensitive not only to the EU member states but to Lithuania as well. For the general public, the most discussed issues are a change of the constitution regarding the sale of agricultural land to foreigners, and the introduction of an additional excise duty on cigarettes, which will increase cigarette prices by 200%. The expected increased smuggling from neighboring Belarus and Russia, however, will have negative impacts on the public finance since prices on these foreign markets are one fourth to one seventh of in Lithuania.

The chapter on energy is also a difficult one since Lithuania operates a huge nuclear power plant Ignalina, inherited from the Soviet era. There are considerable economic, social, technical and political costs of decommissioning and closing down of its two units. The decision-making conditions should be more definite when the Joint Lithuanian-EU Working Group will deliver its conclusions. The problems with the plant had their impact on the very low support for the EU accession among the public. In 1998 the public opinion polls indicated a support of around 36% only. At present the public support is reaching the 50% mark, and it is taken for a government priority to inform the public more intensively about the aspects of the EU entry, so that the citizens receive an objective picture of the matters for the national referendum.

3.2. Country report on Slovakia ⁸

As was already mentioned in the presentation by Ivan Mikloš, Slovakia was delayed in opening negotiations with the European Commission about the EU accession. However, once the negotiations commenced, the country tried to turn the delay into its advantage by following the successful strategies in other accession countries. For example, in the

⁸ This section summarizes the presentation by Anton Marcinčin, Slovak Foreign Policy Association.

commercial code, Slovakia gained mainly from the experiences that were accumulated in the Czech Republic in the last six years.

Slovakia, with its GDP per capita at approximately 50% of the EU average, is ranking approximately in the middle among the accession countries. At the same time, it has the highest unemployment rate (at present at around 19%) not only among them, but also among the OECD members. This is a chronic malaise of the Slovak economy that started in 1991, and which reflects the deep structural problems of this economy. The current rate of inflation, ranging between 5-8%, is a result of delayed reforms in the deregulation of prices in the early 1990's and their speeding-up in the last couple of years. The higher inflation is therefore a temporary phenomenon.

The share of agriculture on total employment in Slovakia is the third lowest among the 12 accession countries. In 2001 Slovakia had the largest FDI inflow measured as a percentage of the GDP among all transition countries. It amounted to 11% of GDP, and was mainly the result of massive privatization of Slovak banks in the hands of investors from the EU, but partially also due to significant foreign investments into the industrial sector. On the other hand, with its 60% of exports going to the EU, Slovakia ranks among the less pro-EU trade orientation accession countries.

Table 3.1: Basic macroeconomic figures for Slovakia

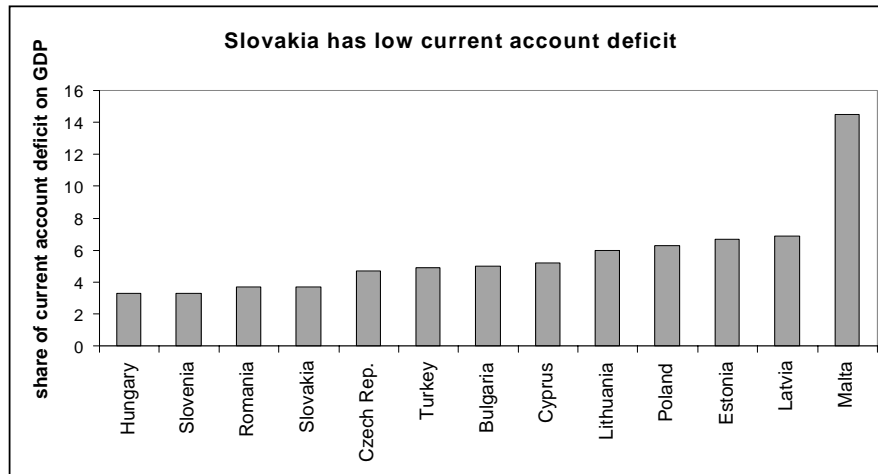
Source: Statistics of the National Bank of Slovakia, 2001

Indicator:	1966	1997	1998	1999	2000
GDP	6.2	6.2	4.1	1.9	2.2
Inflation	5.8	6.1	6.7	10.6	12.0
Fiscal deficit	8.1	5.7	4.9	5.7	6.7
Current account deficit	11.2	10.0	10.4	5.8	3.5
Unemployment	11.3	11.8	12.5	16.2	18.6

If we look back at the growth performance of Slovakia, we can see that during 1996-98 there was a high GDP growth around 6% accompanied by relatively prudent monetary policy that impressed many external observers. However, at the same time there were weird economic policies in the fiscal sector and with regard to privatization, postponed structural reforms, and low inflow of FDI and industrial know-how. As a partial outcome of that, Slovakia suffered a heavy external disequilibrium and one of the highest rates of indebtedness in banks and enterprises among the transition countries. Table 3.1 indicates the macroeconomic indicators for 1996-2000.

In 1999 the new government had to impose fiscal, banking and legislative discipline, subject the privatization to a competitive environment, decrease the domestic aggregate demand, and press for the necessary restructuring in enterprises. Devaluation and the introduction of the import surcharge were measures assisting to bring the current account to a sustainable balance (see Figure 3.1). As a global result of the austerity measures, investment fell and unemployment rose. If we assess the extent of structural reforms, in the first place we should mention the changes in the governance in the banking sector, due to the recent intensive privatizations to foreign strategic investors. That at the same time introduced higher payment discipline into the enterprise sector.

Figure 3.1: Current account deficit in accession countries in 2000 (IMF statistics)
(Source: IMF Statistics, 2001)



Slovakia is a country where the lack of capital and the lavish way in which it was distributed through banks, both restricted and boosted its growth. The structural changes after 1998 were aimed at bringing new quality into capital investments. That was the most difficult task because the majority of banks had to be bailed-out from their heavy indebtedness. At the end of 1999, 67% of bank loans fell into the classified category. In the extent of that Slovakia differed most from other countries in transition. It is estimated that approximately 150 billion SKK (16% of GDP in 2001) is the value for the clearance of portfolios. A long debate preceded the privatization of banks: should we bail-out the banks or would it be better to bail-out the enterprises? A new restructuring agency (SKA) was created with an objective to manage the liquidation and the recovering of the bad debts. The rate of return on the debt recovery is expected to be, however, very low. The banks were privatized very quickly and their new style of governance raised the credibility of the economy. The price of credits was gradually decreasing and the volume of credits lent in a prudent environment increased. The newly established banking supervision and institution development were assisted by the expertise from the IMF, the World Bank, the OECD and the European Commission.

Table 3.2: Summary of the balance sheets of enterprises (in SKK billion)

	1997	1998	1999	2000
Profit	73.4	66.9	66.3	90.6
Loss	-92.3	-129.9	-193.2	-149.9
Total	-18.9	-63.0	-126.9	-59.3

(Source: Enterprise statistics of the Slovak Statistical Office, 2001)

As Table 3.2 indicates, the bad situation in enterprises culminated in 1998-99 when the net losses reached nearly 15% of GDP. After the changes in 1999 the situation recovered and this favorable process kept progressing.

The recent influx of FDI was another of the strategic changes in the Slovak economy. Macroeconomic stabilization, gains in credibility of the government policies, more prudent legislation and more efficient enforcement of property rights resulted in a better perception of Slovakia in the world business community, which was reflected in foreign financial inflows. Notwithstanding the recent FDI inflows, the Slovak economy is still “undercapitalized” by foreign capital. While in Czechia in 2000, 35% of GDP was produced in enterprises with foreign ownership, in Slovakia it was only 19%. Foreign capital, at the same time, caused well-known problems to the national bank that had to accumulate reserves, sterilize the money supply and face the appreciation pressures on the foreign exchange market.

When speaking about the expected policy and institutional reforms in the near future, let us mention the following:

- Continued reforms in the fiscal system
- Stabilization of the external balance
- Improving policies that raise the efficiency of the labor market and the demand for labor
- Further revamping of the legal and institutional framework
- Bringing the banking supervision into compliance with the EU standards
- Pension reform
- Healthcare reform
- Public administration reform Continued adoption of the *acquis communautaire* and improving the ways of its enforcement.

3.3. Country report on Romania⁹

The presenter carried out a comparison of Romania with other accession countries on grounds of nominal and real criteria for convergence, and elaborated on the chances Romania has for the catching-up.

Romania comes to the negotiation table for the accession from further behind than most of the accession countries. If we look at Table 2.1 (see p. 11) presented by Vladimír Benáček, we can see that globally for 1971-97 Romania had the second highest average growth rate after Slovenia. In total factor productivity gains, Romania was the 3rd after Slovenia and Hungary. Despite having these high rates, it still has one of the highest differentials between the GDP per capita measured at the purchasing power parity and at the commercial exchange rate (3.7 for the index of ERDI). Romania’s performance during the 1990’s was not very encouraging either.

It must be stressed that the official external help to Romania has been much smaller in relative terms than for any other accession country. Romania lost half a decade between 1990-95 in the hesitation about reform policies, and this enabled the country to get locked-in to a pattern of counter-productive equilibria that are hard to eradicate. From the point of view of a central banker, one has to mention inflation as one element of such patterns.

⁹ This section summarizes the presentation by Valentin Lazea, National Bank of Romania.

Table 3.3 compares Romania to other accession countries. We can see that in some of the indicators Romania did not function badly. For example, in the deficit and the stock of public debt, it is around the average of the accession countries, while in inflation it is lagging badly. In Table 3.4, if we consider the real convergence criteria, we see again that Romania is not that far away from the accession countries' average, particularly if we look at the share of industry in GDP. Although the share of agriculture remains still high, it is declining and, also due to its improving performance, it is not considered so much a problem now as it was thought a couple of years ago. In terms of exports to and imports from the EU, Romania is also fairly comparable to other countries. The problem, again, is the level of GDP per capita.

So, to sum up, Romania has two large problems. One is related to high inflation, and the other is low GDP per capita. What is the answer of a macroeconomist to these two problems? One of the most common ideas in this respect is the appreciation of the exchange rate. If you appreciate the exchange rate in real terms, you can on the one hand reduce inflation, and, on other hand, you can assure faster catching up in the GDP per capita.

Unfortunately, for the first ten years of transition, Romania did not appreciate its real currency as quickly as the other transition countries did. We can look at the example of Poland, which more than doubled its GDP in dollar terms only because of an appreciation of the Zloty, in addition to the real GDP growth measured in domestic currency. At the same time Romania during these 11 years only achieved only a cumulative 11% of appreciation (see Table 3.5). What was the reason of that?

First, the reserves of the central bank, at the end of the Communist regime, were very low, and the country continued to have problems with foreign exchange liquidity throughout the 1990's. Romania achieved 3 months' equivalent of imports only in the year 2000. So the Central Bank was never in a position to pursue deliberately a real appreciation as its policy. The substance of the problem is hidden in the micro-economy. The firms started to re-structure themselves as late as in the second half of the 90's. That is also the explanation for why FDI hesitated so much in coming during that period. So, the first half of the 90's was lost also, because the unrestructured economy was unable to withstand the real appreciation.

Nevertheless, in the last few years, the real appreciation became effective. In 2000 Romania experienced a 3 % real appreciation, and in 2001 the appreciation was 5 %. If we add that 5% of real appreciation to the 5% of real GDP growth, it means that Romania has had 10 % of a sustainable growth, which is of a crucial importance for foreign investors. It should be stressed that the productivity in the industrial sector has grown even quicker than this.

Table 3.6 concentrates on two factors of catching up: the FDI and human capital. Due to a breakthrough in the conditions for the FDI inflows in the more recent period, FDI was important not only in amounts, but also in the way that FDI affected the current account balance. As we can see, most of the transition countries financed their current account deficits through FDI, and not through credits, which is highly favorable. The only exception was Slovakia, for the first 2 years in the table. The general tendency here is to have more than a half of the current account financed through such stable financial transactions, as is FDI. So in terms of this macro-economic factor, Romania succeeded in becoming comparable to the other accession countries.

Table 3.3: Nominal convergence in selected accession countries

Country	Inflation (average CPI, in %)				Consolidated budget deficit (-) (% GDP)				Stock of public debt (% GDP)			
	1997	1998	1999	2000	1997	1998	1999	2000	1997	1998	1999	2000
Bulgaria	1082	22.2	0.7	9.9	-2.1	0.9	-0.9	-1.1	116.6	100.7	96.6	94.1
Czechia	8.5	10.7	2.1	3.9	-1.7	-2.0	-3.3	-4.9	13.0	13.4	15.0	17.5
Hungary	18.3	14.3	10.0	9.8	-6.6	-5.6	-5.7	-3.5	63.9	62.3	60.7	57.6
Poland	14.9	11.8	7.3	10.1	-3.1	-3.2	-3.7	-3.2	49.8	43.2	44.5	42.5
Romania	154.8	59.1	45.8	45.7	-4.6	-5.0	-3.5	-3.7	27.9	30.6	34.7	31.6
Slovakia	6.1	6.7	10.6	12.0	-5.2	-5.0	-3.6	-3.6	23.7	26.0	28.4	30.4

Source: EBRD – Transition Report, 2001

Table 3.4: Real convergence in selected accession countries

Country	GDP per capita (US \$)				Share of industry (% of GDP)				Share of export to EU (% of total export)			
	1997	1998	1999	2000	1997	1998	1999	2000	1997	1998	1999	2000
Bulgaria	1230	1490	1513	1476	25.3	25.5	24.6	25.1	n.a.	50.4	52.2	51.3
Czechia	5109	5412	5148	4797	35.9	36.9	35.5	36.0	59.9	64.1	69.2	68.7
Hungary	4495	4641	4775	4552	25.0	25.9	26.9	n.a.	71.2	73.0	76.2	75.2
Poland	3511	4066	3987	4108	28.1	28.1	28.2	29.0	64.2	68.3	70.5	70.0
Romania	1551	1688	1512	1644	35.6	27.5	27.8	27.6	56.6	64.5	65.5	63.8
Slovakia	3802	3970	3650	3556	26.8	25.5	24.2	25.8	41.7	55.7	59.4	59.1

Sources: EBRD – Transition Report, 2001 and CESTAT, Statistical Bulletin, 2001/1

Table 3.5: Real appreciation of the exchange rate in some accession countries

Country	Hungary			Poland			Romania		
	Inflation rate (%)	Nominal deprec. (%)	Real apprec. (+)	Inflation rate (%)	Nominal deprec. (%)	Real apprec. (+)	Inflation rate (%)	Nominal deprec. (%)	Real apprec. (+)
1991	34.2	18.2	13.5	76.7	11.3	58.8	170.2	254.2	-23.7
1993	22.5	16.3	5.3	36.9	32.9	3.0	256.1	146.7	44.3
1995	28.3	19.5	7.4	28.1	6.6	20.2	32.3	22.8	7.7
1997	18.3	22.4	-3.3	15.1	21.5	-5.3	154.8	132.5	9.6
1999	10.0	10.6	-0.5	7.3	14.1	-6.0	45.8	72.7	-15.6
2000	9.8	29.0	-7.7	10.0	9.6	0.5	45.7	41.5	3.0
Cumulative 1991-2000	521	346	39.0	992	358	138.3	111693	100232	11.4

Sources: IMF, International Financial Statistics, 2001 and National Bank of Romania, 2001

Table 3.6: Relative importance of FDI in financing the current account (CA) deficit

Country	Current account deficit (-) (in US \$ mil.)				FDI (in US \$ mil.)				Percentage of CA deficit financed by FDI (in %)			
	1997	1998	1999	2000	1997	1998	1999	2000	1997	1998	1999	2000
Bulgaria	1048	-62	-652	-701	503	537	836	1000	48	866	128	143
Czechia	-3211	-1336	-1567	-2273	1275	3591	6234	4477	40	269	398	197
Hungary	-981	-2298	-2081	-1495	1741	1555	1720	1167	177	68	83	78
Poland	-4312	-6858	-11569	-9892	3041	4966	6348	9299	71	72	55	94
Romania	-2137	-2917	-1296	-1400	1267	2079	1025	1009	59	71	79	72
Slovakia	-1952	-2059	-1083	-713	84	374	701	2058	4	18	65	289

Sources: EBRD – Transition Report, 2001

Table 3.7: Human capital in selected accession countries

Country	Number of college students per 100,000 inhabitants			Public expenditure on education (% of GDP)		
	1989	1993	1996	1989	1993	1996
Bulgaria	1756	2529 ^c	3146	5.5	5.6	3.2
Czechia	1193 ⁺	1604 ^c	2006	5.4 ^{a+}	5.9	5.1
Hungary	956	1312	1906 ^d	6.0	6.4 ^c	4.6
Poland	1328	1952	1866 ^d	4.6	5.5	7.5
Romania	1036 ^b	1626 ^c	1568	3.5 ^b	3.0 ^c	3.6

Remarks: a = 1988, b = 1992, c = 1994, d = 1995, + indicates data for Czechoslovakia

Source: Romanian Statistical Yearbook, 1999

However, the bad part of the message for a successful catching-up still remains. For Romania, and also for many other accession countries, human capital is an issue. We often hear that accession countries are well endowed with human capital and that this capital is available at a very low price. If taken with a qualified view, one can question this belief. Table 3.7 presents two indicators: the number of college students per 100,000 inhabitants, and the public expenditure on education or research - no country in the table comes close to what is required for a successful catching up. Here Romania is faring worse than other accession countries. It is generally agreed that if some West European countries have been more successful in their development, than others – Ireland or Finland being among them – it was their investment into human capital that was behind their successful catching up.

Discussion of Previous Three Country Presentations (SK, LT, RO)

An Irish participant expressed an observation that in the presentations of Lithuania, Slovakia and Romania there was one important thing in common: for all three countries the adjustment after 1990 was slower than in many of the other transition countries. This raises a question — is there now a relatively shorter period of time during which these accession countries have to adjust to the EU membership? The problem is more general: the transition countries had only 10 years to arrange for the present catch up (what all of them tried to do, even though not always successfully), compared to 35 years that Ireland had. That has generated extraordinary pressures, as we have seen, and this might be a theme for further consideration.

A discussant commented on the Slovak presentation. We can see certain inherent macroeconomic imbalance in Slovakia. If you put together the corporate profitability, which has been in red for the aggregate of all enterprises over the last 4 years, there might be a hope for the better because the tendency for improvement is apparent. Nevertheless, these enterprises need help. But here it seems that the Slovak inflation rate is somehow artificially low, what is not instrumental for the viability of the corporate sector. We cannot claim that higher inflation is the only way for reassuring the profitability in the corporate sector, but it is the experience from many countries that, in order to regain the overall profitability for the corporate sector, some price increases may help with frictions in adjustments and to revive the growth.

Another thing, that could be questioned, is to base the domestic institutional development on mere imitation of the EU's *acquis communautaire*. It should not be used mechanically as a “stick” and treated as a doctrine exogenous to the country. There should be a consensus among the major political parties, as well as a public opinion that EU membership is a long-term strategy and that the local conditions are reflected in the domestic policies.

The Slovak presenter replied about the comment on the short time for adjustments given to the present accession countries, and especially to those ones that hesitated with reforms and restructuring during a large part of 1990s'. One should realize that a deferment of reforms or an intentional procrastination of negotiations could not be taken for an excuse in slow catching-up. The EU accession is a race among applicant countries for becoming members in a privileged club of European countries – any initial hesitation should be compensated for by a more intensive adjustment at the later stages. Being late has also some advantages: by means of learning from more

successful countries and imitating, one can avoid the dead-ends and sub-optimal policies for catching-up.

With regard to the comment on profitability and inflation the Slovak presenter mentioned that one could question whether the past low profits or losses were generated under hard budget constraints and ask what were the incentives for such perverse behavior? Actually the profit reporting can be biased, as can be seen by comparing the numbers of the Slovak Statistical Office (INFOSTAT) with the data coming from tax authorities. The real losses are most probably less gloomy than what is reported. The nominal exchange rate depreciation (from 35-40 SKK to almost 50 SKK) has offered the exporters and the domestic producers competing with imports wider leeway for profitability.

Finally the Slovak presenter addressed the issue of accession countries using the *acquis* as an imperative. This mechanistic approach to creating an economic environment is as old as the setup of the European Economic Communities. It reflects the weak bargaining position of applicant countries that have no power to influence the decision-making in the EU prior their entry. They can only rely on an assumption that the *acquis* has some time-tested rationale behind itself and that it is, on average, an arrangement superior to the domestically contrived laws.

A discussant raised a question to the Romanian presenter expressing his doubt whether the real appreciation versus the real depreciation is something that a country can opt for freely. He believed that the exchange rate equilibrium phenomena are a structural reflection of fundamental economic developments in those countries. If policy-makers took steps against the real appreciation development, their economies had to pay a high price for that.

Another participant had a question to the Romanian presenter about the importance of the human capital. In the verbal presentation it was said that the developments in human capital situation have not been satisfactory in Romania. But by looking at the figures, the tertiary enrollment rates were increasing dramatically. What is the reason for this contradiction?

Valentin Lazea first addressed the question of how governments or national banks can fight real appreciation. Of course, they cannot play at their will. They have to account for two other things – the wages policy and the productivity growth. For instance, in 1998, Romania tried to rely on these instruments in order to slow-down the appreciation. Nevertheless, it failed because productivity growth was negative that year, while wage policy was lax. So all three factors actually worked against international competitiveness, and resulted in a current account deficit. As a general rule, we can accept that real appreciation which is compensated with productivity gains, is usually also accompanied by the FDI inflows that can finance the current account deficit. This is the case of Romania today where, in addition to the mentioned conditions, prudent wage policies are practiced. Only then the appreciation of the real exchange rate can be accepted as a natural balanced development.

Concerning the question of human capital, there can be mentioned several points. Tertiary enrolment numbers are influenced, in the Romanian case, by many private universities and colleges, which were created recently. Although the quality of the private faculties sometimes falls behind that of the state universities, it is important to have as large a number of college students as possible. This is true for two reasons:

- We must increase the innovation capability, which higher enrolment can bring about;
- The flexibility of the political consensus in the society is increasing with the higher enrolment figures.

As to the latter my point the presenter added that in a country where you have a relatively large portion of the population well educated, you can afford to have reformist policies that target the restructuring of enterprises. Whereas in a country with a low level of education the labor adjustment and mobility is low, even at a relatively low rate of unemployment, the educated population is not only more mobile, but it can support more progressive reforms. The political economy aspect of higher and better-trained human capital has been neglected so far in many transition countries.

The Lithuanian presenter, Darius Zeruolis, returned back to the issue of the “EU as a stick”. The political argument is that the EU membership is not an end in itself. It can be treated as a means for domestic development and, evidently, there may be conflicts with that by introducing unilaterally some EU norms that were designed under a different environment. However, the changes to a better global (social) arrangement need not be Pareto-efficient. There is always some party (or vested interest) that is hit. Therefore the Lithuanian government had to take decisions, which, without the EU pressure, would not be undertaken. The third party liability insurance, which in Lithuania was to be introduced from April 1st, 2002 only upon the pressure from the EU accession negotiations, is one of the examples. But Lithuania was most probably the last country in Europe that did without it.

Another problem to be mentioned are the political party collusions on various hot issues, including the EU accession strategies. In most accession countries this became a standard political arrangement. However, we should realize that the public trust in political parties is so low in many countries that one must not overplay this argument. That might lead to a demagogic argument that the EU accession is just a conspiracy among political elites. As far as the public opinion on the EU accession is concerned – except for Romania and Bulgaria – no country can take it for granted that in their referendum the votes approving accession will get a clear majority.

An Irish participant pointed out that while listening to the presentations we can hear a lot about fiscal and monetary policies, but we miss the description of industrial strategies. Drawing from the experiences of small, less developed EU states, like Ireland or Portugal, there is one important message to be said. If you do not succeed in dramatically transforming your manufacturing sector, you will not converge. Abstracting from the short-term issues in policy-making (such as the level of excise tax, or the exchange rate interventions) that are momentarily important but about which nobody would care in two years time, once you are in the EU, you should concentrate on fundamentals. The question that deserves to be stressed is like this: What is the vision in each of accession countries of the development in the manufacturing sector for the next 5-10 years? What niche on the domestic and the world markets will they carve out? That was a feature of the Irish process that commenced way back in the 60's. There was a clear understanding that, having emerged from behind protective tariff barrier, the Irish manufacturing sector was distorted. It was a similar distortion like that of accession countries in the early 90s. For that reason it was not rational to expect that Ireland could have a development process built on a continuation of the structure and

the managerial culture that reflected the situation in 1970s and 1980s. It was recognized that textiles, clothing and other old fashioned manufacturing were going to vanish. There had to be a niche strategy, which in the Irish case happened to be high-tech. It took 25 years to bring it about. Let us ask what is the industrial strategy in each of these three countries, particularly for Slovakia and Lithuania, whose circumstances are similar to Ireland's. On the other hand, Romania has always been a much bigger country and its strategy of development can follow a slightly different path.

The Lithuanian presenter's response to the previous discussion was that the issue of strategic decisions in the manufacturing sector were a part of the pre-accession dialogue with the European Commission and the EU member states. Unfortunately, the debate inside of Lithuania was dominated by a discussion of selecting priority industries for government support, which is unacceptable from the EU point of view, and even from a modern economic policy point of view. Therefore, Lithuania wasted 7 or 8 years, discussing what would be priority sectors and how we could support them. Fortunately, now, the policy makers are thinking in more modern terms. The particular niche targeted for 2010 are not yet clear, but public investments are supporting research and development, and various types of infrastructure.

The Slovak presenter mentioned that there is evidence that the approach to strategic decision-making has already started in Slovakia. There are two dominant manufacturing companies in the country: Volkswagen that provides 10% of exports and the US Steel. Both of them may fall into the same recession because they have a linked product. Under these circumstances the government is forced to think of a strategy how to avoid putting eggs into one basket. But we should stress that the primary role of the government is to build the institutional and infrastructural foundations of the economy. Only then the government can intervene, following the market signals.

A discussant responded with a suggestion that we should not underestimate factors outlined by psychology and political economy when we judge why industrial policies in accession countries in general were either weak or antiquated. These countries, 10-12 years ago, just got rid of central planning. If you try to establish some strategic planning, that in its form seems to be in many ways similar to the old discredited activities, the people in control of reforms might think it will bring them back to the old-fashioned way of thinking. It is very difficult to put new contents and to re-phrase the new policies in the context of the discarded old policies. On the other hand, we should not forget that central planning was associated with cronyism. In the new context there could be always found lobbyists among the enterprises that would support their approach to industrial strategies.

The Romanian presenter, Valentin Lazea joined the discussion by saying that in qualitative terms, the strategic decision-making in industries depends on exogenous demand and supply. So even if we could invest into the best technical capacities in the world, if they were not based on effective demand or on an access to the markets, they would boil down to nothing. In this respect we should not be ashamed of having textiles and clothing as our major exports. This is precisely where our comparative advantages actually are at present, and where the producers can penetrate on world markets, notwithstanding that these are low value-added sectors and that the world competition is very fierce there. Indeed, the second major exporting industry of Romania, starting from 2000, was the production of machinery and equipment. It is not the metallurgy, which

used to be the second one. Here we should stress the success of shipbuilding, where Romania stands second to Poland. As a strategy per se, we can mention software – the information technologies – for which the government has proposed a lot of incentives. But again, until this development is validated by a foreign demand, our unilateral strategies will fail. It is a question of having two actors engaged successfully in the game before the third actor (the government) can step in.

3.4. Country report on Hungary¹⁰

Hungary, as other countries, shows a mixed picture: good and bad sides of performance. The controversial development of economic policy can be partly explained by the fact that 2002 is an election year. As a consequence, already in 2001 politics quite often contradicted economic rationality.

The last 3-5 years highly benefited from the fruits of the austerity program applied in 1995-1996. Starting 1997-1998 Hungary had one of its best periods of economic performance for many decades. Last year brought about a certain type of change in economic policy, though. The government sold it as a “new economic policy”, but in fact it was more or less a logical implication of the processes that were going on for a while. There was a change in the exchange rate regime from crawling peg to floating, and in the monetary policy from exchange rate targeting to direct inflation rate targeting. These policy changes determined the ensuing dilemma of real appreciation versus competitiveness. The country experienced even nominal appreciation, but this development has not pushed down the inflation rate the way the government had hoped. The new exchange rate regime needed a relatively strict wage policy if the country wanted to avoid the adverse consequences on economic growth.

The coalition government led by the party FIDESZ has promised very high, 5-7%, growth rate for the GDP, and a doubling of GDP per capita in 15 years; accordingly, its priority has clearly been growth. Needless to say, these ambitious targets have not had much connection to reality. The actual data shows a GDP growth of about 5% in 2000, and 3.8% for 2001. One reason for this deceleration was of course the fall of growth rates in the world markets. Industrial production – a drop from 18% growth in 2000 to 4% in 2001 – also reflects this tendency. The government has tried to ease the problem of growth deceleration with expansionary fiscal policy to boost both investments and consumption. Wage policy has become looser than it probably should have been, and tensions in the wage structure prevail.

Hungary's foreign trade showed surprisingly good performance in 2001: despite the real appreciation of the forint exports increased by 13%, while the growth of import was 10% only. True, the moderate growth of imports can be partly explained by the expected and experienced deceleration of growth of domestic demand (producers using up stocks rather than importing the inputs for production). Tourism, or what is accounted as tourism in Hungary, also showed favorable developments. This was a consequence of the introduction of the euro, as a tangible currency, which induced many Hungarian to change their schillings and deutsche mark savings to Hungarian

¹⁰ This section summarizes the presentation by Kálmán Dezséri, Institute for World Economics, Hungarian Academy of Sciences.

forints leading to increased revenues coined as “revenues from tourism”. The bad news is that the investment rate dropped to 10% of the GDP, one of the lowest in the past years.

In the framework of the European accession process, in the past year the negotiations went on as planned, although in terms of the number of chapters closed at the negotiations, Hungary lost its relative advantage achieved in the previous years. As of February 2002, Hungary has practically three important chapters open: the chapters on agriculture, regional policy, and budget and financial policy. There are three further chapters open, but they have either no economic importance (justice, home affairs and the audio-visual chapter), or they are straightforward (tax harmonization). As far as the progress of negotiations in the agricultural, regional policy and budgetary policy chapters are concerned, here much will depend on the future collaboration or rivalry between the candidate countries when they prepare and change their positions vis-à-vis the EU member countries.

3.5. Country report on Bulgaria ¹¹

In a recent analysis the Argentinean crisis was characterized by saying that Argentina is an example of how bad economic policy can make a rich country poor. Applying this to Bulgaria till 1997, we could say that Bulgaria was an example of how bad economic policy can make a poor country even poorer.

From this point of view, the requirements imposed by the EU on the candidate countries have turned out positive: these requirements provide some framework for the countries that are fragile or vulnerable to internal and external shocks, present an anchor for the general direction of their development. Bulgaria was considered a laggard in transition until 1997, as stated openly in the Opinion of the European Commission published in 1997. In terms of implementation of the economic criteria of accession, Bulgaria was evaluated highly negatively. However, in its Regular Report in 2001, the Commission presented a very different evaluation: this report gave credit to the Bulgarian government for restructuring the Bulgarian economy. It was stated that Bulgaria is close to being a functional market economy, and it should be able to cope with the competitive pressure and market forces within the Union in the medium term. The Report also praised Bulgaria for the efforts of aligning the Bulgarian legislation with the *acquis*. The change in the evaluation of Bulgaria in the Commission documents reflected a remarkable progress in Bulgaria in a few years.

Since Bulgaria's invitation for negotiations about EU membership in 1999, position papers were deposited for all chapters, of which 14 chapters were provisionally closed and, in February 2002, 13 chapters were open for negotiations.

The achievements in the period 1997-2001 were due to several factors. First, it was crucial that the government's ambitious economic program was based on a broad political consensus about the fundamental principles of reform. The second key element was the introduction of the currency board arrangement. As an implication of this arrangement, monetary policy was controlled by very strict restrictions with the result of, among others, a substantial increase in the foreign currency reserves of the country.

¹¹ This section summarizes the presentation by Mariella Nenova, Bulgarian National Bank.

The operation of the currency board regime was supported by a very restrictive fiscal policy that helped to keep the consolidated budget close to balance. In fact, this provided a sort of lesson for the future: the Maastricht fiscal criteria will probably be similarly useful and favorable for the overall direction of the economic policy. Further elements of the changes have been structural reforms introduced in the real sectors and the banking sector. By now the banking sector is quite sound, while in the real sector almost all the loss-making companies were closed down through either privatization or liquidation. These latter measures inevitably created social tensions such as rising unemployment. However, financial discipline improved, and it contributed to the overall stability of the economy.

The most important indicators of the success of the reforms are: stable interest rate (reducing it from three digit or high two digit rates to 12% as far as lending/borrowing rates are concerned for long and short term); low inflation (down from over 1000 percent in 1997, to one digit in 2002); and what is crucial, the country achieved solid growth, around 5% on average in the past two years. Private sector growth rates are particularly high and investments to fixed assets are also at high level. In 2001, the contribution of investments into fixed assets to growth was especially sizable. In recent years, foreign direct investments also increased considerably. Exports, particularly to the EU, are growing, which is a crucial factor for a sustainable growth and convergence.

The presenter briefly summarized her vision for the future of Bulgarian economic development. Macro-economic stability has to be maintained, based on the currency board arrangements as long as the country does not become the member of the euro-zone. Structural reforms have to be completed, including restructuring of the natural monopolies and by privatizing of what has been left of former state property. It is expected that economic growth will accelerate - based on privatization, higher labor productivity, export led growth, and high rate of investments. As a consequence, the living standard of the population will increase. Then Bulgaria will be ready for joining the European Union, and the accession will be a success.

3.6. Country report on Latvia ¹²

Integration of Latvia to the EU requires bridging the gap between Latvia and the member countries in many dimensions, including political, legal, institutional, and economic aspects. In the economic dimension, particularly macroeconomic convergence, both real and nominal are of primary importance. Latvia's experience of high growth rates in GDP, the result of "first generation reforms", has established strong macroeconomic fundamentals. Convergence in indicators of standard of living can be attributed to "second generation economic reforms", including the continuation of sound macroeconomic policy, but also to structural reform carried out by the government.

In Latvia, the Ministry of Economy developed several growth scenarios particularly in view of building up a knowledge-based economy and society. As assumptions for the external environment, particularly Latvia's relations to the EU were

¹² This section summarizes the presentation by Tatyana Muravska, University of Latvia.

taken into account. Also assumptions about Russian development and the country's likely relations to Russia were analyzed. Structural policies should also take into account the revealed comparative advantages of the country. Recently, we see that the pre-war trade pattern has been re-established, particularly as far as the product composition of trade is concerned: wood and wood products dominate exports and the production of these is also makes a decisive contribution to the growth of GDP in the recent years.

This particular direction of development prompts the question if the emerging structure of production in Latvia will be complementary or competitive to the general average structure prevailing in the EU? It is not yet clear, which sectors should be developed in order to benefit the most from EU membership. Latvia's National Development Plan puts the emphasis on the development of knowledge-based industries, which might turn out where Latvia may have comparative advantages. This complements the traditional timber industry with such sectors as biotechnology, timber-chemistry, both of which require high technology. Here Latvia's cheap labor force which is also relatively well-educated can be taken as valuable assets.

A crucial factor improving the competitiveness of the Latvian economy is foreign direct investments, most of which originates in the Scandinavia countries. Another potential external source of investments could be the structural funds of the European Union, however, the utilization of these needs massive administrative capacity.

Convergence has to be viewed in two ways: it is the outcome of EU integration, but it is also a precondition to it, because each country has to reach a certain level of development before it can become a member of the European Union.

3.7. Country report on Czechia ¹³

The process of real convergence should be associated with the fulfillment of the Copenhagen criteria, since they both deal with creating a functioning market economy and its ability to cope with the competitive pressures and market forces within the EU. The economic level of the Czech Republic is still at the fore of the other transition economies (see Table 3.8), nevertheless, it experienced certain loss of the position during the transformation period.

¹³ This section summarizes the presentation by Karel Zeman, Institute of Integration of the Czech Republic into the European and World Economy.

The full paper prepared for this presentation is available at IIASA's web pages at:
<http://www.iiasa.ac.at/Research/ETI/docs/Occasional/Occasional.html?sb=16>

Table 3.8: Comparison of the GDP per capita in selected countries

Country	GDP per capita in USD (at PPP)			In per cent of the EU average		
	1996	1998	2000	1996	1998	2000
Czechia _{b)}	13200	13200	14300	65	62	60
Slovakia _{b)}	9300	10600	11500	46	49	48
Hungary _{b)}	9300	10500	12100	46	49	50
Poland _{b)}	7400	8200	9000	37	38	38
Austria	22542	23587	26419	112	110	110
Belgium	22542	23803	26662	112	111	111
Finland	19699	21856	25207	98	102	105
Germany	21720	22938	25449	108	107	106
Ireland	18887	22721	28842	94	106	120
Portugal	14419	15797	17936	72	74	75
Greece	13403	14282	16239	67	67	68
Spain	16043	17095	19632	80	80	82
EU – 15	20102	21423	23995	100	100	100

Sources: Prediction of the basic macroeconomic indicators in the Czech Republic till 2002 (in Czech), Ministry of Finance, Prague, July 2001 (for rows indicated as _{b)}) and Main Economic Indicators, OECD, Paris, 2001, No.4

A sound development requires that the fast growth should be sustainable for a long period without generating macroeconomic imbalances through domestic (fiscal) or external (current account) sources. In this respect the Czech economy was involved in its first post-transitional recession in the period 1997-1999. As a result, Czech GDP per capita gap with the EU average has been widening from 64 % in 1996 to 60 % in 2000. Nevertheless, the macroeconomic situation has improved significantly afterwards and the present economic prospects offer new signs of optimism. Recent economic growth has been stimulated mainly by domestic demand (especially by gross fixed capital formation), accompanied by a remarkable wave of FDI inflows. Due to a high openness to trade (approximately 70% of GDP), the important short-term risk factor for the Czech economic growth is the present deceleration of growth in the economies of the main trading partners (especially of the German economy).

The basic task of future economic policy aimed at closing the gap with the EU is to establish the prerequisites for economic growth at a level higher by 2 to 3 percentage points than is the EU average. Gains in competitiveness of the Czech enterprises and concomitant growth of labor productivity are an indispensable part of the catching-up. Active government policies are seen as an important instrument for promoting such growth. Here we must mention the structural policies for supporting the institutional framework that encourages restructuring on all levels (on micro, mezzo and macro levels). The objective is to create an environment favorable for the development of private initiative

The macroeconomic structural changes in the Czech economy during the transformation process reveal that changes in comparative advantages in international trade encouraged the producers to shift away from labor and low skill-intensive production and concentrate more on production requiring more capital and skill-

intensive factors. In parallel, the high investments into plants and equipment and the development of human capital altered the relative endowments of unskilled labor, skilled labor, natural resources and physical capital.

Key role in the Czech catching-up is seen in the manufacturing. This may reflect the strong position of big manufacturing enterprises in the Czech economy and the tradition that manufacturing enjoyed there in the last 120 years. The new specialization profile of the manufacturing was stimulated by the changing pattern of investment into this sector during the second half of 1990s. It should be stressed that the Czech economy retained throughout the transition period exceptionally high investment rate. It was around 35% of GDP annually throughout 1996-2000, notwithstanding the recession in 1997-99. While on average total investments increased by 1.7% annually during this period, investments to machinery grew at an average rate of 4.3%. In 1996-2000 the highest increase in investment to equipment was experienced in the production of radio, TV and communication industries where the average investment increase was 49% per year, and the production of motor vehicles and medical, precision and optical instruments with an annual average increase of 32%. Among other fast growing industries we can mention rubber, plastics and electrical machinery. The contracting industries included business machines, leather products, textiles, wood and mineral products.

Growing shares of investments to manufacturing procured via imports accelerated the establishment of new technologies. The share of investments from imports on total investments reached about 40.6 % in 2000, in comparison to 23.5 % in 1995. This trend with growing share of investment into machinery on total investment supported the competitive ability of Czech manufacturing. In this connection it is important to stress the key influence of FDI inflows.

The results of an analysis comparing the structure of the Czech manufacturing industry with selected EU-15 member-states indicate that during the second half of nineties a marked process of the production structure of the Czech manufacturing approaching the structures common in the group of developed EU-15 countries took place.

Detailed information with respect to structural comparison between Czechia and selected member states of EU-15 (using the structure of 22 industries in ISIC nomenclature or 100 industries of NACE nomenclature) support this conclusion. These tendencies can be identified also by dividing the 14 manufacturing industries into three subgroups according to technology and input intensities: low-tech group (including food products, beverages and tobacco, textiles, clothing and leather products); medium/high-tech group (including machinery and equipment, electrical and optical equipment and transport equipment); resource- (and scale-) intensive group (including wood and wood products, coke, refined petroleum products, nuclear fuel, chemicals, chemical products, man-made fibers and other non-metallic mineral products).

The general pattern is that catching-up (convergence) in the structure of Czech manufacturing production is strongest in the medium/high-tech group. There is still a strong inherited position of basic metals and machinery and equipment in the Czech manufacturing. But very strong new specialization is taking place in the direction to electrical machinery, equipment, rubber and plastics and vehicles. The recent intensive

FDI inflows into electronics indicate that the list of rapidly growing industries will be extended by the TV and communications equipment production.

Also according to the analysis of the Czech manufacturing structure in which industries (100 NACE branches) are clustered by factor inputs combination, we can identify a convergence to the structure of production in some member states of the EU-15 (see Table 3.9).

Table 3.9: Value added shares in total manufacturing by inputs requirements in selected countries. (In percentages of the total manufacturing in current prices)

Country	Year	Main-stream	Labor-Intensive	Capital-intensive	Marketing-Driven	Technology-driven
Czechia	1995	25.6	18.9	22.7	23.7	9.1
	2000	27.2	20.5	18.5	21.2	12.6
EU – 15	1997	25.5	15.3	15.6	21.3	22.5
Austria	1997	26.4	18.8	16.3	24.6	13.9
Finland	1997	22.8	15.0	28.6	17.5	16.1
Germany	1997	28.1	14.1	15.5	16.2	26.1
Ireland	1997	12.1	6.2	12.6	31.5	37.6
Portugal	1997	19.6	17.7	19.3	35.3	8.1
Greece	1997	21.9	23.6	13.9	29.9	10.7
Spain	1997	21.2	20.8	16.5	26.7	14.8

Sources: Panorama of the Czech industry 2000, Ministry of Industry and Trade, Prague, 2001 and The Competitiveness of European industry, 1999 Report, European Commission, 6 October 1999

According to its share of mainstream manufacturing branches the Czech Republic is near to Austria and Germany. Also the shares of marketing and technology driven branches are close to the share in Austria. Only the group of labor-intensive industries is higher in the Czech Republic than in all three highly developed countries in the table being closer Spain and Portugal.

Discussion of Previous Four Country Presentations (H, BG, LV, CZ)

A participant raised a question about the recent Hungarian national development plan (so called “Széchenyi Plan”). How the economists look at this plan? Are its objectives feasible and how will it be financed?

Kálmán Dezséri explained that the Széchenyi Plan is a financial package of the government, which is intended to boost investment and consumption. Here we should distinguish between the political aspect of the initiative and its economic contents. Plans for the modernization of industries, improved infrastructure, and education leading to subsequent growth and higher living standards are always appealing to the public. Economists, however, can be more skeptical about the credibility and real outcomes of such proposals. Back in 1995, during the Socialist-Liberal government an austerity package was introduced, along with the devaluation of the currency, introduction of a crawling peg, there were problems of inflation and deteriorating living standards due to

a decline in real income by 30%. The memory of these times remained in many people's minds. The present government (the Conservative government of 1998-2000) wants to show the public two pictures: on the one hand the unpopular effects of the past austerity program,, and the new constructive initiative of the present right-wing government that helps building the economy, on the other hand. They build on the image of the progressive nobleman Széchenyi who in the first half of the 19th century became a leading figure in Hungarian economic and social revival. The current Széchenyi Plan can be described as a Keynesian demand-side policy that is providing various financial incentive schemes, for example the schemes for rebuilding municipalities and households being some of them.

Since it is just a plan at its initial stage we cannot judge at the moment how effective its implementation can actually be. In 2001 only 5 billion forints (USD 20 million), out of 120 billion forints (USD 480 million) declared, were disbursed. The real development thus depends very much on the elections in June 2002. In February 2000 the plans is just a promise to the public. The skeptics argue that the fiscal sources for this program are fictitious, so that it will never reach its proposed magnitude. Another question is whether the stimulation of the demand side is the proper policy at the current situation of the Hungarian economy or what will be the impact of the increased government demand on the activities of private enterprises. The projects have to be co-financed from non-government resources, and the government provides at least 30% of the whole budget. Thus the scheme depends to a large extent on private initiative that is also difficult to foresee at this moment.

A participant asked Mariella Nenova if she found some common features between the currency board management in Argentina and the ways how currency board functions in Bulgaria. Firstly, was there some response to the Argentinean crisis in the Bulgarian National Bank by taking precautionary measures in order to avoid anything similar to happen with the lev?. Secondly, the currency board based on the euro is the nearest substitute for a fully-fledged acceptance of the euro as a domestic currency. Does the absence of active monetary policy imply some constraints on the Bulgarian growth? Would it not be better for Bulgaria to ease its fixed exchange rate system in the later stages of EU accession, as the macroeconomic stabilization is achieved? Similar questions can be given to Tatyana Muravska in order to inquire into the future of Latvian exchange rate arrangements.

Another participant mentioned that in the initial period after the currency board was introduced there was a tendency that Bulgarian banks were reluctant to lend to domestic businesses. Could it be explained how this evolved in the later periods when the enterprise sector was more transparent and when the provision of investment funding was essential for restructuring?

Mariella Nenova in answering the questions on the Bulgarian currency board commenced by pointing on Hong-Kong developments where local monetary authorities started already in early 2000 announcing to the public that their currency board arrangement was quite different from the one in Argentina. Thus they were able to anticipate the potential dangers of the Argentinean management with a clear foresight and see the measures that avoid the currency board crisis. A similar proviso applies to Bulgaria. Its currency board is also structured in a different way than in Argentina. For example, there is a full backing of the currency. Another difference is in the perspective

of the currency board. There is a vision of preparing Bulgaria for the entry to the euro-zone, which by itself has strict macroeconomic conditions for that act. The Bulgarian National Bank has adopted a “passive policy” in managing the currency board. It is not involved in any type of monetary intervention and thus also no monetary precautionary measures are needed. On the other hand, the importance of fiscal prudence became even more important. Fiscal indiscipline is the act that is most dangerous to the credibility of the currency board. The Ministry of Finance has now a medium-term strategy to keep the budget balanced. The Bulgarian debt to GDP ratio has been falling in the last four years. In 1996 the debt to GDP ratio was at a level higher than one, what was extremely high. Now it stands at 0.75. This gives a signal to the world economy that Bulgaria’s servicing its debt is sustainable and thus its currency board credibility remains high. The Bulgarian economy has also shown that the impact of real privatization on restructuring has positive long-term effects, which are shown in increasing productivity and growth. Thus the stabilization of the enterprise sector is instrumental in supporting the currency board stability.

As far as the question of restrained lending to the enterprise sector is concerned, it should be stressed that since the macroeconomic stabilization started, after 1997, there arose a pressure for a substantial restructuring of the asset portfolio in commercial banks. At the same time the requirements of the public sector for loans sharply declined, while the maturing government securities had to be disbursed. Thus the banking system was provided with new liquidity that should be allocated into the real economy. A short period of restrained lending has been understandable due to intransparent governance in enterprises, but, with the changes in ownership and on-going restructuring, the provision of credits was increasing fast. Nevertheless, it is still relatively low, as it represents only 30% of the assets in the banks.

In the second round of questions a discussant commented on the problems associated with the currency board. The crisis in Argentina shows that no exchange rate regime is an automatic salvation of the external balance problem and no substitute for appropriate monetary and fiscal policies. At the same time Argentina was exposed to an adverse exogenous shock and it had no policy to counterbalance it because the fiscal policy was under severe constraint. Actually no alternative regime would be able to avoid the ensuing crisis. Going back to the Bulgarian currency board, one should not be over-confident that the Argentinean crisis has no relevance for Bulgarian monetary stability. The Bulgarian indebtedness is still very high and some part of it can be denominated in foreign exchange. So it would be recommendable to have an emergency exit strategy ready when the currency board would be subjected to an unexpected strong exogenous shock. The Latvian case is a bit easier since that country’s fiscal constraints are not as tight as those of Bulgaria.

Mariella Nenova agreed that the plan for an emergency exit from the currency board is something what should be considered and actually it became a widely discussed topic in the media after the currency crisis in Argentina. Thus analysts in the Bulgarian National Bank have studied closely the history of currency board in Argentina. In 1995 the Mexican crisis had a negative impact on Argentina that went into recession. But soon the real economy recovered and was able to grow. Nevertheless, the government was not able to put the fiscal policy under control during 1998-99 and the debt almost doubled. It was too easy for them to borrow at international markets.

Finally, as investors lost confidence in further lending in 2000, the crisis was under way until the government of Argentina defaulted in late 2001.

In Argentina the basic problem was not in the exchange rate regime. It was mainly the lack of discipline in the fiscal policy that undermined the confidence of a whole spectrum of economic agents, including its own citizens who turned to a panic. In its history Argentina has several times expropriated the deposits of its citizens by means of a galloping inflation. Here we see a unique phenomenon making the economy fragile to sudden changes in confidence of the households. Nothing of that magnitude can be expected to happen in Bulgaria where the confidence in the government and the banking system is now high. That is reflected in the growing savings in domestic currency. In reality the Bulgarian currency board has 200% backing in foreign reserves. There are two facilities for cushioning the external shocks. First is the fiscal reserve requirement, which keeps the proceeds from privatization (at present value of over 1 billion dollars) in a separate fund. The budget may use this fund only in case of a temporary shock on the economy when there is also a drastic reduction in the money supply caused by the contracting mechanism of the currency board. The other facility includes the deposits of the banking sector, which can be used only if some bank gets into liquidity problems. The National Bank is supervising the commercial banks and is ready to take precautionary measures in order to solve the problems in banking within the domestic system. The most problematic case is when the external shock is permanent. Then it is on the real sector that has to absorb the shock. It is one of the essential principles of the currency board. Permanent shocks cannot be simply “postponed” by government intervention without real reallocation of resources. The sooner the real economy adjusts, the better it is for the whole society.

A discussant posed a question concerning the structure of Latvian international trade. According to the presented statistics, Latvian exports depend significantly on natural resources. Is this structure of trade compatible with modern views on specialization, especially for small countries, which stress the importance of human capital, technologies and marketing?

A discussant mentioned that the Latvian economy is highly dependent on the internationally linked service sector, such as the provision of transit services related to Russian gas and oil exports. His second question concerned the impact of FDI that, according to the statistics, has not revealed a pressure on changing the structure of production in favor of sectors providing higher value-added. Does Latvia have policy incentives for changing the past structural orientation?

Tatyana Muravska in response to questions on the monetary regime in Latvia mentioned that the Latvian lat has been a stable currency from its introduction. The domestic supply of money has 100% foreign exchange reserves coverage, even though formally the system was not declared as a currency board. Informally the rules for sustainable exchange rate management are strictly followed – therefore the Argentinean crisis did not influence the way how the whole arrangement was conceived. As to the question of structural viability of the Latvian economy, the servicing function for the Russian trade comes from the geographical position of the country, which is expected to last and even to grow in time as the cooperation and trade among Baltic countries will intensify. After 1998 Latvian economy managed to re-adjust to the Russian decline in trade (especially in Russian imports) and now the exports to Russia constitute mere 4%

of all exports. The search for new trade partnerships found new markets in Germany, Scandinavia and in accession countries.

As far as the FDI inflows are concerned, their role for the restructuring of the Latvian economy is crucial. Although FDI has been targeted mostly into the financial sector and other services, the manufacturing sector has also received substantial foreign funding. FDI to manufacturing is not so much concentrated in natural resources, such as forestry and wood processing. Thus the structural changes are expected to continue in supporting more modern industries.

A commentator expressed his opinion that Latvia's currency arrangement is striking in one aspect: it accepted SDRs as the base for the exchange rate pegging. It may have had an impact on the competitiveness of Latvian manufacturing exports that are directed on euro-denominated markets. However, as a large part of Latvian exports are in wood products, the over-valuation of the exchange rate to the euro can harshly limit the competitiveness of Latvian products. A change in the exchange rate pegging to the euro is another moment where public debate should be involved since there are various interpretations what the appropriate parity should be. Does the present arrangement allow for an exchange rate depreciation prior to linking lat to the euro?

Tatyana Muravska agreed that the fluctuation of the lat around both the euro and the dollar may have adverse effects on economic agents trading in those currencies. SDRs are not used as a contract currency. Nevertheless, the positive aspects of the credible fixed exchange rate outweigh its disadvantages. In order not to disturb the present balance in confidence the government is not expecting a need for a radical change in the pegging system, namely a re-pegging to the euro.

3.8. Country report on Estonia ¹⁴

The Estonian economic transition can be divided into four stages:

- Establishment of the independent state, stabilization policies aimed at recovering from the shock of the weakened links with the post-Soviet economies and the introduction of basic market principles for decision-making (1990-94).
- Economic growth (1995-97) characterized by macroeconomic disequilibria (relatively high inflation, unemployment, and current account deficit).
- An intermediate crisis period (1998-99) requiring a secondary adjustment due to financial instability caused both externally (Russian contagion) and internally (bad debts in the banking sector, problems with corporate governance, and institutional rigidities).
- Secondary recovery and growth starting in 2000.

Estonia is a unique economy in its scope of liberal policies. Trade openness deserves a special attention since until now there was no tariff protection of the domestic market. Only with the EU accession drawing near, the introduction of some tariffs is considered. Also the prices were liberalized very soon and there is a minimum level of state subsidies. Instead of an independent monetary policy, the Estonian

¹⁴ This section summarizes the presentation by Erik Terk, Estonian Institute for Future Studies.

monetary system is based on the currency board, which represents the strictest form of fixed exchange rate. All these moves were not without social costs and a higher exposure of the Estonian economy to the business cycle. Notwithstanding the Argentinean crisis, the credibility of the Estonian currency board remained unimpeachable. The National Bank prepared a study showing that in six basic features the Estonian currency board is different from the Argentinean one, features that caused bringing the Argentinean peso to a collapse.

Another fundamental characteristic of Estonia is that the growth has been based on the openness to foreign direct investment, both through privatization acquisitions and green-field investments. The development was based not only on the growth of manufacturing industries, but also on the advances in service sectors. The positive balance in internationally traded services is an important source for financing the deficit in commodity trade.

The GDP growth figures, which were 6.9% in 2000 and 5.4% in 2001, have shown recently first the signs of a relative decline, what is common for all three Baltic countries. The production of information technologies and their highly developed subcontracting have suffered from a downslide in the advanced countries (especially in Finland and Sweden). Otherwise Estonia has not been hit harshly by the recession in the world economy. The present limits to growth and employment are more internal than external. As was also mentioned in the presentation of Jan Frait (see p. 80), the sharp increases in the real exchange rate is a factor that curbs domestic growth and challenges the skills of entrepreneurs for the restructuring in order to retain competitiveness. The statistics reveal that in Estonia the real exchange rate appreciation was nearly 200% between 1993 and 2002. The response in the enterprises was to improve productivity and concentrate on such exportable products that bring higher value added per worker. Surprisingly, the examples of real technological innovations did not come from large enterprises owned by foreign capital, but from smaller spin-off firms owned by indigenous capital. Their constraint is less in technologies than in their access to finance and foreign markets.

Among other constraints to development, there should be mentioned education and R&D. While public expenditure on education (as a percentage of GDP) is comparable to levels of advanced European countries, the R&D expenditure lags behind. Here the currency board induces the government to adhere to strict fiscal discipline and the monetary policy is completely endogenous to the National Bank. The situation can improve when the EU's structural and R&D funds will be more available after the EU accession. Although the rates of secondary and tertiary education are high, there is a problem with their structure. Higher education is often in areas, which do not show a high demand for labor. Accession to the EU will have many effects on the Estonian economy. The majority of changes are expected to be positive, with dominant effects of the institutional developments. One of the challenges will come from the higher price level that the accession will bring about. It requires a substantial restructuring at the product level. Estimations show that at present the Estonian price level is approximately at 60% of the EU average, and it will rise to 72% within six years of the accession period. The export structure will have to adjust to these changes, what also requires creating institutional conditions instrumental to the new situation.

3.9. Country report on Croatia¹⁵

As is well known, Croatia is not yet a candidate country for the EU membership. The reasons for that are political and not economic: the legacies from unfortunate Balkan events during the 1990s. Croatia's economic development is comparable with that of the accession countries. Its present GDP per capita is almost US\$ 4700, what at the nominal exchange rate ranks close to Czechia or Hungary. On the other hand, the same indicator at purchasing power parity ranks Croatia closer to less developed accession countries. After the election in 2000 and the introduction of new democratic politics, the international relations with the EU improved substantially. At the same time Croatia became the member of WTO and signed an association agreement with NATO under the "Partnership for Peace" accord. At present Croatia is preparing for the accession to CEFTA and the signing of free trade agreement is expected in the near future.

In regard to the association process with the EU, it is expected that Croatia will become a candidate country in the first half of 2003. The Interim Agreement, which pertains to trade relationships with the EU, is already active and the EU has liberalized unilaterally its trade with countries in South-Eastern Europe in November 2000. Similar steps were taken recently from the Croatian side when, in January 2002, the barriers to imports from the EU started to be gradually dismantled.

At the beginning of the 1990s Croatia was involved in the war with Yugoslavia, as well as in the military conflict in Bosnia-Herzegovina. In the period of 1991-93 there was a rapid slump in the GDP. Since 1994, after a stabilization program, there was a recovery with rates of growth around 6% until 1997. In the next two years there was again a slowdown ending in a slump associated with bankruptcies of many small and medium-sized banks. Since 2000 the economy was rebounding with growth figures above 3.5%. If we look at sectors that contributed most to growth, we should mention tourism that became the most important economic sector. High growth rates were reported also in trade, transport and manufacturing. The biggest challenge to the government comes from high unemployment, which is estimated to around 15% by ILO, or to 22% if stricter alternative methodology is taken. Unemployment is partially caused by fiscal consolidation and austerity measures, because after 1998 there developed a tendency to high government deficits associated with extra-budgetary financing of pension and healthcare funds. The pension system is now reformed, and since 2002 a three-pillar system is in operation. The budget deficit is expected to come down to 4.25% in 2002 and to 1% in 2003.

The monetary policy is characterized by currency substitution, as is illustrated in Figure 3.2. Croatia belongs to those countries of the world where euroization, in the sense of euro being used as a parallel currency, is very high. Hence, the National Bank has little maneuvering space for independent monetary policy. The present monetary system can be therefore labeled as a "quasi currency board", even though the introduction of a real currency board was never considered an official program and the kuna was never pegged to any currency. But the fact is that the asset side of the National Bank is by 99% denominated in foreign currency, what effectively means that the central bank creates the domestic money supply exclusively through the purchases of

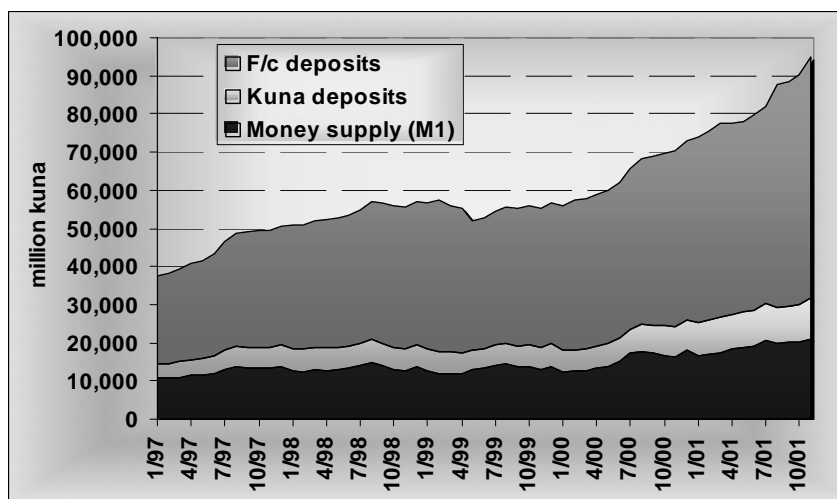
¹⁵ This section summarizes the presentation by Boris Vujčić, Croatian National Bank.

the foreign currency. That is the feature that, as a rule, characterizes the currency board arrangements.

The fluctuation of the exchange rate of the kuna to the euro is kept thus within the band of 6.5% intervention points. The reason for refraining from an officially guaranteed fixing of the currency was to leave the (minor) risk in the commercial sector, instead of hedging the economic agents with taxpayers' money. The credibility of the fiscal system and the macroeconomic policies is thus higher. The real effective exchange rate had a tendency to depreciate since 1994 until the beginning of 2000, even though the nominal exchange rate was fixed, due to very low inflation of the kuna. If we take the inflation record since 1994, Croatia was the least inflationary transition country in that period. Liberalization of the prices will be complete after the wave of liberalization that started in 2001 will be concluded in 2002. The rising ratio of non-traded to traded commodities will then come to a halt.

The Croatian National Bank's international reserves are now close to US\$ 5 billion, what represents a double value of the national money supply (M1). Taking it purely theoretically, Croatia can adopt any kind of exchange rate system without any adjustment period, with the exception of changes in the interest rate. For example, it would be quite easy to adopt the euro even unilaterally. A quick official switch to the euro is one of the possibilities of the Croatian monetary policy in the future. Though the European Commission and the European Central Bank are not generally encouraging such quick developments, it is a matter of yielding to practical reality, once a country has 75% of its broad money supply in euro.

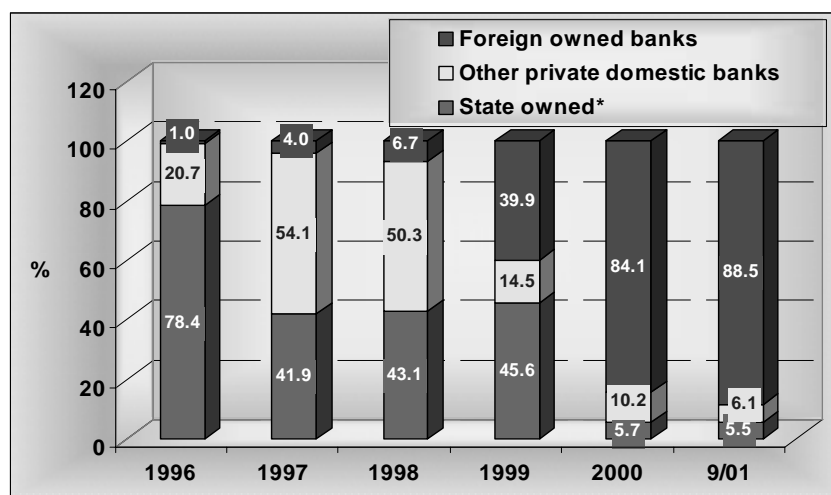
Figure 3.2: Croatian domestic banks' liabilities
(Source: Croatian National Bank, 2002)



The external position of Croatia was in surplus until 1994, what was caused by suppressed aggregate demand during the war period. During 1995-99 it slipped to a deficit that was close to 8% of GDP. The prudent policies after this period brought the deficit to a decline. The improvement was also caused by higher exports of goods and services, which benefited from the opening up of Croatian borders and a better access to

the markets in the EU and Central and Eastern Europe. Since the end of 1997 there was a tendency in decreasing the unit labor costs what helped to raise the competitiveness of Croatian exports and domestic import substitution. During the same period there was a substantial change in financing the current account deficit. Before 1998, the financing was mainly through foreign loans, after that FDI took that role, even in excess of the current account deficit, what for the macroeconomic policy-makers is always a more comfortable position.

Figure 3.3: Croatian banking system by ownership, in % of total assets



Tourism is of crucial importance for the Croatian economy. While it was harshly hit by the Balkan crisis, its recent recovery has been very fast. There is still a large space for catching up with the pre-war levels and for a large modernization of its facilities. 70% of the tourist industry is still in state hands and its privatization has been initiated only recently. Modernization here needs a great deal of resources, since in the last 11 years there was heavy dis-investment in the sector. It is clear that the government cannot provide the required funds. The banking sector went through a usual transition history: legal transformation of large state banks burdened with bad loans from the pre-transition times; creation of a myriad of small private banks; accumulation of new classified debts; a series of banking crises both in the state and the private banks; rehabilitation of some of these banks and their sale to strategic foreign investors; and finally, consolidation and concentration of the banking sector (see Figure 3.3).

Discussion of Estonian and Croatian Presentations

A discussant asked about the differences of the Estonian currency board system and the Bulgarian currency board. In Bulgaria in case of adverse outside shocks there are two buffer funds in order to absorb the asymmetric disturbance. Does Estonia have a similar arrangement? Another question is whether the Estonian economy is exposed to a particular monocultural shock like Latvia, where 37% of the exports are forestry and wood products?

Eric Terk mentioned in his reply that in 1997 Estonia established a “Stabilization Fund” that was covered from privatization revenues. It could have been used in

emergency for monetary stabilization, but its actual use for that purpose was not needed and the fund was closed. The privatization revenues are now used for supporting technological innovations. The risk of asymmetric shocks in Estonia can potentially come from production concentrated in some large non-diversified sectors. It is the large revenues from shopping by Finish tourists that can be hit by introducing the EU system of indirect taxation, and also the Russian transit trade that can be hit by Russian political decisions. The rising production in the IT industries can countervail these two potential shocks since their exports are much less liable to unilateral fluctuations.

Another question addressed the issue that Estonia applies tariffs on imports. But once Estonia becomes an EU member, the tariffs will have to be introduced. That will have an impact on the trade commodity structure and its geographic flows. Do Estonian researchers have any forecasts for such changes? Eric Turk replied that the decision about dismantling all tariffs was taken at the beginning of transition, when the exchange rate was heavily undervalued, and that was sufficient for defending the internal market. It is not the case now and tariffs are seen as a standard instrument that can be more efficient than some casual government interventions. The expected tariffs will hit, for example, the imports of steel from Russia and Ukraine. However, in general the impact on the price level will not be large, since the Estonian trade with outside of the EU and the accession countries is small. Estonia has asked for derogations in these matters, but it is not a topic that would be in the forefront of negotiations, because Latvia and Lithuania, two important neighbors, are now accession countries, and the free trade with them will continue.

A participant asked about the recent introduction of a zero corporate income tax on re-invested profits in Estonia, what seems to be a unique policy innovation. How was it implemented and did its results meet the expectations? Erik Turk replied that there are various interpretations of the zero corporate income tax. The rhetoric of businesses circles is that this is a major policy achievement, which will offer a leeway to new business activities. But a survey among the big foreign investors hints that their investment behavior will not be influenced significantly by the new measure. The other side of the coin is represented by the European Commission that does not praise such policies. Estonia will have to abide by the EU standards, once it becomes a member of the single market.

A discussant inquired into the nature how the Croatian exchange rate regime functions. It looks like a kind of managed float with sterilized interventions. Thus, if the rate of growth of foreign exchange reserves exceeds the rate of growth of broad money, does it mean that you conduct a heavy sterilized intervention? Boris Vujčić agreed the characterization of the Croatian exchange rate regime and mentioned that there were two ways how to manage the float. The first instrument is the foreign exchange intervention, and the other is the reserve requirement procedure. The reserve requirement is defined both in kunas (for the kuna liability deposits) and in foreign exchange (on the remaining liability deposits). In 2001 the National Bank asked the commercial banks to put 25% of their reserve requirement deposits into kunas in an attempt to move to the unification of the reserve requirements in the future. If achieved, that would mean a step towards having a single currency in Croatia.

A discussant returned to the specific relative position of Croatia to the other transition economies in terms of commercial exchange rates and purchasing parity

exchange rates. Croatia GDP per capita expressed at current commercial exchange rates is approximately at the level of Hungary, slightly below the Czech and above the Polish levels. On the other hand, the average wage level in Croatia (with approximately 8400 € per year) is above the nominal wages in all three mentioned countries (5640 € in Hungary, 5690 € in Czechia and 7980 € in Poland – all in March 2002). At the same time the Croatian GDP per capita for 2001 in PPP is only 6030 €, compared with 11630 € in Hungary, 13290 € in Czechia and 8710 € in Poland is close to the level of Romania. This all implies that Croatian workers are very well paid in euros among all transition countries, while in real terms they are quite poor. That is partially explained by higher price level in Croatia and its much lower exchange rate deviation index. Nevertheless, the question remains: does it not interfere with the competitiveness of exports and domestic import substitution? Is it not the cause of high unemployment in Croatia?

Boris Vujčić agreed that this is a point of many controversies. Once Croatia started with a price level that is close to that of developed Slovenia or the EU markets, it tends to remain there. The real wages are sticky and nominally they adjust to inflation. High wages compel the entrepreneurs to increase the productivity while keeping the real wages fixed. In the bottom of the economic crisis in 1993 the wages were at 28% of the pre-war period. During 1994-97 they caught-up with the previous level. One can ask whether it was wise to accept such wage demands during the period of recovery? Nevertheless, even though Croatia and Slovenia have a similar aggregate price level in euro terms, the wages in Croatia are much lower than in Slovenia, what reflects the need for a compensation due to the productivity differentials.

A participant raised a question of regional development. According to his observation Croatia is a country with very high regional discrepancies. There are opulent regions around tourist resorts and some cities, but elsewhere there are also large pockets of deep poverty. That means, a large part of economic potential there is virtually abandoned. Would Croatia as the EU member country not face a serious problem of lack of regional cohesion?

Boris Vujčić agreed about this problem, particularly in the inland regions are poor, touched by the war operations, which represent approximately 30% of the country's area. Their additional problem rests in their protracted de-population that has both positive and negative repercussions. The government has many responsibilities in order to re-vitalize these areas. At present there are some fiscal incentives for their recovery, but the recovery itself is proceeding very slowly, failing mainly in bringing the qualified labor back.

Another discussant asked whether the contemplation and subsequent rejection of the currency board in Croatia was influenced by the high exposure of the economy to incomes from tourism and a risk of related asymmetric shocks. There is also a problem with Croatia's fiscal deficit, which could also undermine the credibility of the fixed exchange rate regime. Pegging of the exchange rate is a pre-requisite for the EU accession. What potential policies can we expect to be applied for coping with these problems?

Boris Vujčić responded that the currency board arrangement was unanimously rejected as inappropriate because the present "quasi currency board" serves much better the objectives of stability. Fixing the exchange rate would create a burden of hedging against exit risks, which in this way could be avoided. A more practical idea would be a

unilateral switching to the euro by buying-out the complete money supply with the current reserves. This depends fully on the accession process and the agreements with the main players in that field. Fiscal consolidation and keeping the budget deficit within the standard 3% limit is a necessary step to any fixation of the exchange rate. Its repercussions go even further: a lack of fiscal discipline backfires on the monetary policy, which cannot be sustained and the whole macroeconomic balance disintegrates. Having a large incoming tourist industry is always a problem that cannot be controlled by domestic policies. As a precaution, we can build an alternative export base with a diversified commodity portfolio, but tourism will always remain an important, though risky, industry for Croatia. Tourism and economy in Croatia are nearly completely associated with the euro, thus any disturbances in the preferences for the Dalmatian coast will have an impact on the aggregate demand and decreased revenues from tourism. This, however, will show up less in the worsening of the current account because the expenditure on imports will also decline. At least the currency itself will not be disturbed.

3.10. Country Report on Poland ¹⁶

The question discussed in this presentation is focused on the problem “how is Poland advancing towards its accession into the EU”. The speaker, drawing from his wide direct experience as the Polish negotiator with the European Commission, stressed at the beginning that this was a highly significant driving moment for whole Poland. What are the motivations behind Polish negotiations?

- Firstly, accession to the EU is a fundamental, strategic choice for Polish policies. That means that minor issues must not become a barrier for this strategic direction. Decisions will be made in the light of the fact that we have made a fundamental choice.
- Poland would like to be part of the decision making process in Europe.
- Reputation has an enormous economic value for both Polish government and society. That is associated with such questions like Poland as a place of international investments or what will happen if other countries join the EU, and Poland does not.
- We believe that accession will help consolidating the transformations in Poland that have been made up till now. Since 1990 there have been many painful reforms in the Polish society aimed at entering the EU and we expect that these investments into the future will bear fruits by bringing them to completion.
- Poland can benefit from an easier access to the global European market, what concerns to some extent also agriculture.
- Finally, Poland as a poorer country can benefit from the structural fund transfers that are essential for upgrading the infrastructure. All the mentioned elements are expected to have a positive impact on growth, employment and welfare.

¹⁶ This section summarizes the presentation by Jaroslaw Pietras, Office of the Committee of the European Integration, Warsaw.

Poland applied for the EU accession 97 months ago (as of February 2002). If one compares it with earlier accessions to the EU, where the period between application and accession ranged between 21 and 99 months, Poland will soon beat the record. The negotiations alone commenced 45 months ago, what is also a long period. Poland requested 42 transitional periods or special arrangements outside the field of agriculture. 60 such special arrangements were asked for in agriculture alone, what in fact were mainly reference crops, such as production quotas. Up to February 2002 Poland concluded 16 special arrangements outside of agriculture and additional 12 requests were deleted. There were 20 chapters closed, what is less than what achieved by seven other candidate countries (out of 10 applicants from the post-communist countries). However, all applicants still face the two most difficult chapters: those of finance and agriculture. We have already opened these chapters and we hope that they will be closed in the expected time together with other applicants.

As far as the other open chapters are concerned, negotiation is proceeding on fisheries, where the main problem is to agree on the fishing zones and fishing inspectorates. In the chapter on taxation we have agreed already on many important requests for exceptions, let us mention a recent zero value added tax on books among them. Levying an excise duty on cigarettes in accordance to the EU *acquis* would mean that the present price of Polish cigarettes would more than double. That became a sensitive point, especially if we consider the proposed changes in this part of the *acquis* for the future. Currently the excise duty on cigarettes is 57%. In the near future, there should be added additional 65 Euros as a tax per 1000 cigarettes. Such sudden changes could even endanger the outcome of the Polish referendum. Our proposal is to apply a gradual change in the levied tax so that the final rate is applied with some delay – for example, by 18 months later than in other member states (in 2007). The purchasing power of salary in terms of cigarettes would be then constant.

There were significant requests presented in the chapter on the free movement of capital. The most widely discussed such request is the 18 years of transition period for the acquisition of arable land (including the secondary houses), and 5 years for investment land. After negotiations the latter request was dropped completely, and the period for arable land was shortened to 12 years, and for secondary houses to 5 years, what looks like a compromise ready to be concluded.

Transport is one of the more complicated chapters, particularly due to the high competitiveness of Polish truck cabotage, i.e. the provision of transport services for other EU countries. Here a transitional period is requested by the EU. Poland is also requesting conditions that would allow a technical upgrading of the transport infrastructure. What concerns railways, Poland agrees to separate the transport operators from the owners of the fixed assets, and introduce competition to this industry by liberalization measures.

The chapter on home affairs and justice has its hardest issue in the introduction of visas with Belarus, Ukraine, Russia and Macedonia, and in the introduction of the integrated strategy of boarder management. It hinges on building confidence to the present EU members that the Polish border will be an efficient safeguard serving as an Eastern frontier of the EU.

The most difficult chapter for the Polish EU-negotiations was on competition policies. First there are special economic zones where Poland guaranteed a tax

exemption to foreign firms up to 20 years. Some of these privileges will last until 2017, what for the EU is too long. Here we must find some innovative concessions because otherwise this issue will lead to a deadlock. The restructuring of the steel sector is another very sensitive agenda. We are not negotiating so much the amounts of steel produced, but the extent and the form of public help to steel companies.

In his summing up the presenter expressed his expectation that by the middle of 2002 all but 3 or 4 chapters will be closed, so that Poland will catch-up in negotiations with the other countries.

Discussion of the Polish Country Presentation

A participant touched in his comments the problem of subsidies to Polish agriculture. Many observers think that this is a problem that may halt the negotiations not only with Poland, but also with other applicants. How the present negotiations can influence the future outcomes? Another discussant asked how the official Polish circles evaluate the common position of the European Commission (and the 15 incumbent countries) to the enlargement, especially the matters how the bargaining position of accession countries could be improved. Could we tolerate the principle that same essential matters were excluded from the talks under a pretext of being „non-negotiable“? Do you think that a higher degree of strategic cooperation between the accession countries could improve the outcome of their negotiations?

Jaroslav Pietras mentioned in his response that the initial reactions of official government circles in accession countries to certain sensitive proposals from the side of EU (such as the starting 25% level of the direct agricultural subsidies with 10 years' transition to 100%) were highly varied in their intensity, even though they were similar in their principle. The Polish government had issued several statements in the past where it declared its dissatisfaction with some conditions that were often going against the expectations of the Polish population. In some cases the word “not acceptable” was used, for example, in the case of 10 years of transition period after accession, what concerned the labor movement or the direct payments to Polish agriculture. Those proposals of the European Commission went beyond the principles of Agenda 2000 – depriving Poland (or any other candidate country) of the right to take part in the decision-making concerning future situations when Poland is the full member of the EU. On the one hand, Polish government is trying to keep the negotiation agenda open to public supervision, showing both the positive and the negative outcomes of some agreements. On the other hand, it tries to be a patient negotiating partner, expressing its clear strategic views. That also concerns the Polish press that was encouraged to be objective, but without using exorbitant or scandalizing terminology when describing the accession.

Another thing is how the Polish negotiators assess the meaning of agreed individual conditions and the threats they potentially pose for the future. Having been involved in the negotiations with the EU since 1990, one must admire the capability of the Commission in coping with difficult issues. For example, the Commission was trying to minimize the room for any party to challenge the agreed financial perspectives due to existing loopholes in their definitions. Therefore it will be very difficult for the current 15 member states to refuse or to re-negotiate the amounts for direct payments to the new member states. The only room for maneuvering is thus within the agreed framework. The same is true, however, for accession countries. Therefore, the things

that we can challenge is that what extends beyond 2006, or the ways how the direct payments will be distributed. Therefore the competitive position of farmers can be still in some aspects partially improved after such re-negotiations.

The agreed system and amounts of direct payments can be criticized, but there are also some positive elements in it. The fact that there were agreed only a 25% in direct payments to agriculture in the initial period, has some substance on the side of the Commission. The Commission wanted to provoke a debate among present member states in order to reform its most important budget item involved in payments: the common agricultural policy (CAP). The Commission gave a clear signal that the time frame for that was ten years, and the present member states must act quickly. If no progress is made, a growing burden of the CAP will be shifted on taxpayers. Thus the dissenting voices heard from some EU members are not so much about the spending on farmers in Poland, but more about their reluctance to decide right now on what to do with the CAP. Some countries, that want to have a radical reform, are realistic enough to understand that it is too early to make the decision right now. Thus we cannot make a linkage between accession and agricultural reform. If the accession countries were fully integrated into the CAP from the very start (what would be very advantageous for them), then they would not be willing to press for changes. The phasing-in of direct payments to the accession countries is more a challenge for the present member states, than to the candidate countries.

There are some other positive measures that were negotiated on behalf of Polish rural development. They include the re-structuring business plans in agriculture, and the 750 euro that could be offered to the farmer. Then there are simplified schemes of direct payments, and the increased level of necessary co-financing by the EU – up to 85 % - in the cohesion funds. In the first year of accession, Poland will be exposed to a heavy pressure for additional expenditures from public budgets. The higher is the percentage of EU co-financing, the easier it will be for the state budget to cope with the subsidies.

The question of solidarity among the candidate countries is of crucial importance and Poland was and still is ready for a joint action, where common interest dominates temporary unilateral gains offered to individual countries to exploit them at the expense of the other partners. Unfortunately, we cannot say that we have been using our combined negotiating powers at their full strength. Here we should also distinguish between the partnership and solidarity at the level of accession negotiations and the future collusion of the 10 new entrants during the voting procedures as full members. One cannot expect that 10 new countries may radically change the negotiating power in the Union. The window of opportunity will widen as the countries get in. At the same time the common interest and the mutual inter-dependence among them at the political level will naturally decrease. The initiative for catching-up will depend much more on the cooperation among our economic agents at the microeconomic levels.

Another question to Mr Pietras concerned the different treatment of old and new members in terms of direct agricultural payments. It will become a major issue for competitiveness: farmers in the old member countries, who are already fully integrated with the EU, will receive the revenue from market price plus 100% direct payments, while farmers in the new member countries, that at the start will not be fully integrated, will get the market price and only a fraction of those direct payments. In addition, the accession countries are expected to give up the tariff protection of their markets, which,

currently in Poland, provides a 20% effective protection for agricultural products. The question is how would their agriculture survive if these countries cannot receive any protection from their own government?

In his answer Pietras emphasized that the CAP is not a function of the number of peasants, it is depending on area, mix of production, productivity levels, and exports. The bigger is the area you have, the more products subject to CAP there are, the more efficient you are and the more you export – all this adds together in bigger receipts from the CAP. Different East European countries are in different positions: Hungary, for instance is a net exporter of agricultural products, therefore its agriculture will be costly for the EU. Poland, however, is a net importer, therefore it will diminish surpluses in the totality of the EU, i.e. it would bring savings for the CAP. Poland also has the highest number of farmers, but that has simply no relevance for the CAP! The Commission is now offering 25% of the direct payments and plenty of other instruments. Contrary to declaration in some official documents, this will affect the competitiveness of Polish farmers in various ways. One instrument, however, will enhance equal treatment for producers of different size and the preservation of the current structure. This is the Commission's proposal for simplified procedure of CAP in the candidate countries. This takes care of the poorest farmers (anyone having a certain crop over 0.3 hectare), so that, based on this procedure, there would not be much change in the social structure. The task for the candidate countries in this context is to find money to co-finance a number of EU programs in agriculture. In fact, one of the ideas behind the recent public finance reform in Poland was to identify money already allocated for other purposes that can be redirected to co-finance the EU investments. Naturally, this will be very difficult from the political point of view.

4. Factors Determining Savings and Investments in Accession Countries and the Role of Intermediation

4.1. Financing Growth in the Catch-up Period: A Structural Analysis of the Hungarian Economy¹⁷

The presentation of András Simon consisted of two parts: (1) assumptions for the growth process in Hungary (assumptions, rather than forecasts); and (2) assessment of the investment needs of the assumed growth pattern and the possible financial sources.

History shows that Europe is not flat in terms of the level of economic development, but in the past 1000 years it has always shown a kind of “sloping downwards” toward the East. Eastern Europe has always been a follower to the Western development. Accordingly, when assessing the prospects ahead, one has to be cautious not to assume that this historical trend will change, even if we all would wish a turn like that. As for Hungary, data show that the Hungarian part of the Austro-Hungarian Monarchy was at the level of 70% of GDP per capita of the Western part of the Monarchy. In the course of two world wars, and particularly of 40 years of socialism the

¹⁷ This section summarizes the presentation by András Simon, National Bank of Hungary.

country fell back to below a level of 40% of Austria in purchasing power parity terms. Now with a cautious way of looking at catching up, one may assume that in the coming growth process Hungary can return to the 70% level of the actual Austrian level of development.

However, in which time period can we expect to reach the 70% level? Starting from the recent rates of growth of 4-4.5%, the scenario calculations of the presenter expect a larger growth differential over Austria in the initial years of the coming decades, and assume that this growth differential will be due mostly to the difference in total factor productivity (TFP). This latter difference will gradually diminish by the end of the period (assumed to be 2030) along a logistic curve (see Figure 4.1).

The calculations of the presenter started from the actual figures of Hungary and Austria in 1998. By estimating Hungary's capital stock (without residential capital) it came out that Hungary's capital/output ratio is 1.5, while the average coefficient of the western developed countries is 2.5. With a simple assumption it was assumed that catching up would happen in the capital/output ratio the same way, along the same logistic curve, as in the case of TFP.

Figure 4.1: Scenario of catching up with Austrian TFP

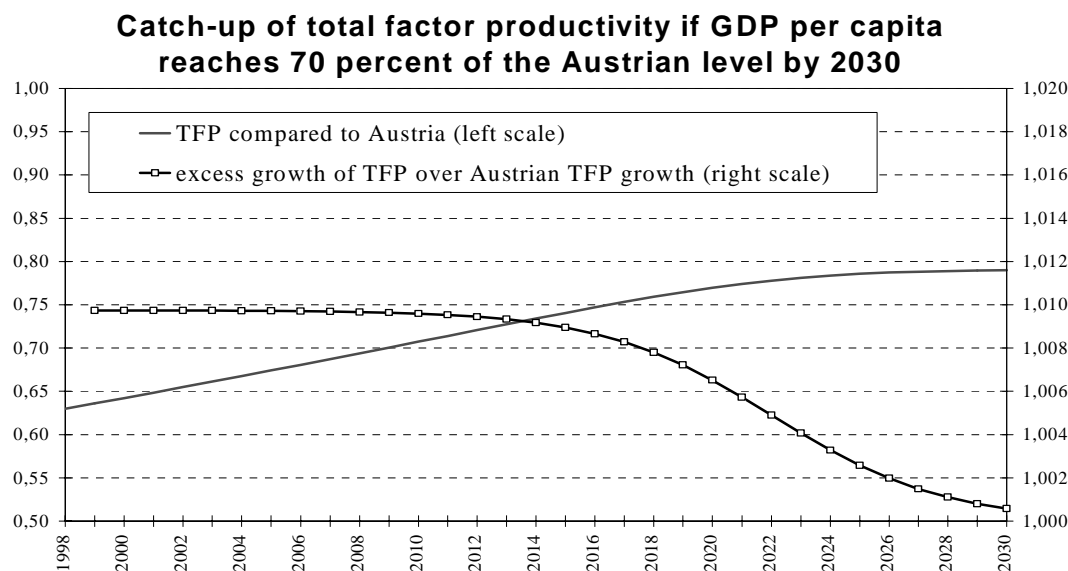
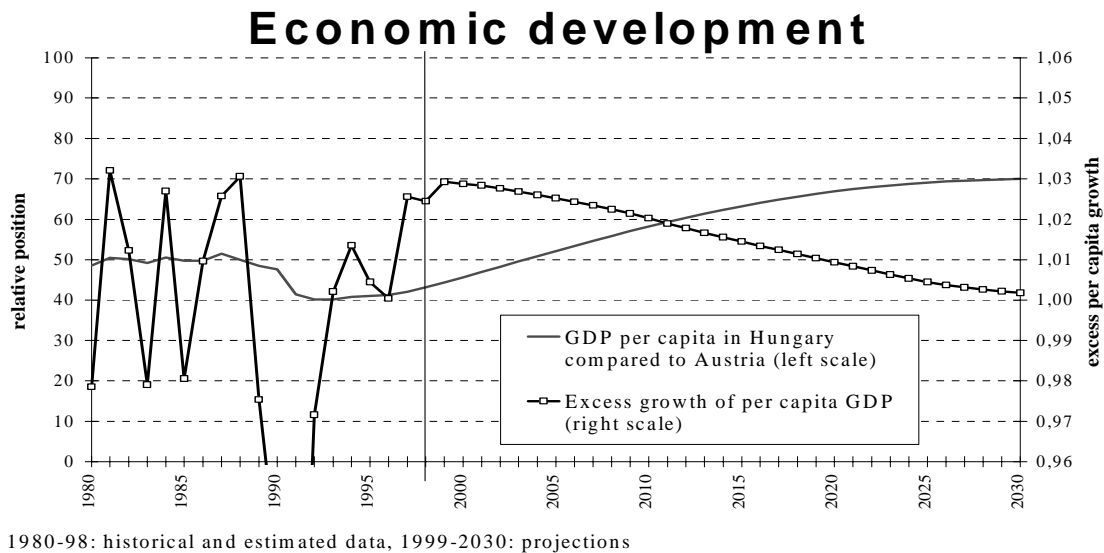


Figure 4.2: Scenario of catching up with Austrian GDP



Another important variable is the employment rate: with certain cautious realism, the presenter assumed that during 1998 and 2030 it would improve from 65% to 68% only (the latter percentage being still lower than the Austrian level). As for the TFP level, based on the former assumptions and starting from 63% of the Austrian level in 1998, Hungary must approach the Austrian level up to 79%. This is close to the assumed GDP per capita level (which was targeted to reach the historical 70%).

Figure 4.2 shows the calculated growth scenarios. The highly fluctuating actual data up to 1998 are projected by the smooth curves of the scenario calculations made according to the model described above. This development means an annual growth of GDP of 4.8%, and 2.5% growth of TFP in the first period, while the growth rates will gradually diminish as time approaches 2030. This pattern of development is based on a very broad international experience: while in some countries the miracles can happen, such things are exceptional, and do not last for a long time, this is why the model calculations do not rely on assumption of a miracle.

When investigating the sources of this growth, the implied growth in capital assumes a high rate of investment, which means, at least in the first years of the investigated period, that the investment rate (investment/GDP) has to reach 25%. This assumes sufficient sources available from the following directions: personal savings, corporate savings, government savings, or external financing.

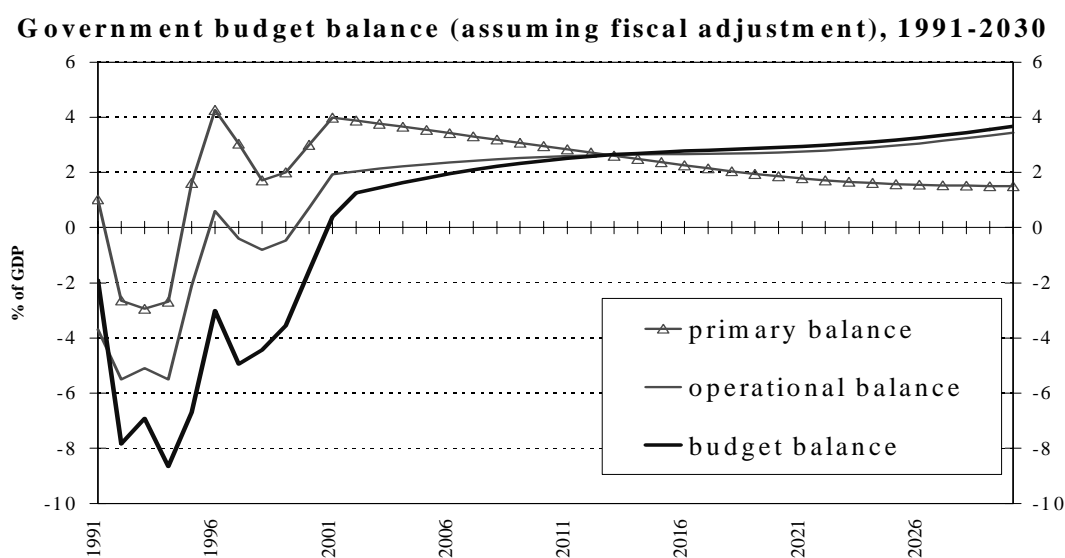
As for personal savings, Hungary has not shown any conspicuous performance: this rate was on average 5-6%. The model does not assume here any miracle for the future either: it is assumed that the present savings stock to personal income (a kind of liquidity rate), which is 0.6, will increase. Western rates, with high variance, stand between the rates of 1 and 2. It was assumed that Hungary would reach, along a logistic curve, a rate of 1.2. This is a lower rate than in western countries, but, due to the

heritage of socialism, Hungary has not got very rich people with very high savings rate; high savings are expected to come mainly from foreign resources.

What concerns the corporate savings, many people hope that the income realized in business, and particularly in the form of reinvested profits, will increase. However, neither economic theory nor historical experiences give an unambiguous view whether catching up is accompanied by an increasing income share of capital. Accordingly, the model projected that the present level of corporate income shares on GDP would remain and assumed that this income is saved.

The next item is government savings. The initial scenario with unchanged fiscal stance is characterized by a constant primary balance of +2%. This implies a constantly improving budget balance and debt position. However, the question is whether this is still sufficient to cover the amount of savings needed for the required increase in total investment? Calculations show that, assuming the conditions described above, the necessary financing for the targeted 25% investment rate could be ensured only by a long period when the net imports of the Hungarian economy were as high as 6%. To rely on this source of financing for growth, however, means a high risk. Such current account deficit would be very adventurous, particularly if its sources of financing were mostly credits from abroad. FDI at this level would be most desirable, but direct investments, as a rule, do not reach such rates. Half of the 6% net imports could be financed from FDI, but the other half should be a debt. However, there is not much willingness on the part of creditors to take the risk of default, whatever prosperous perspectives are offered by the future. There is no willingness to run an external debt on the part of Hungary either, because there is a risk that the country does not reach the ambitious growth rates envisaged and the repayment of the debt would meet serious difficulties.

Figure 4.3: Structure of projected Hungarian budget balance



The conclusion of the analysis is that the country has to achieve fiscal savings. This means that in the high growth scenario the criterion of the fiscal policy is not simply to reach solvency, but it has to serve the aims of high total savings. Therefore we should be more concerned about the alternative scenario with ongoing fiscal adjustment that is shown in Figure 4.3. At the beginning of the period we see an adjustment by additional 2 percentage points in the operational balance and primary balance reaching 4%, which makes the saving side more or less feasible with the investment needs. Transfers from the EU, which could be an additional source of financing, were not taken into account, because it is not sure that all these transfers will be used for financing investments: there is a chance that a part of the EU funds will be used as hand-outs, i.e. as consumption.

Discussion of the Presentation of András Simon

One commentator remarked that the perspective of reaching 70% of the Austrian GDP per capita level in 30 years is not very encouraging for the Hungarians. Simon answered that the vision of the politicians and the people at large should naturally be more ambitious, however, a realistic and coherent model makes the researcher predict that the development will probably not be as fast as the vision shows.

Another discussant pointed out that all Hungarian experts of the EU accession emphasize a single major advantage of the accession and that is the access to the EU transfers. An inflow of two billion euros a year is expected with a hope that these funds would boost investments. Thus other scenario builders usually assume that the accession brings about a breakthrough: a radical systemic change in the development due to the funds that would start flowing from the EU and the qualitative impacts of the EU institutions. The growth arithmetics presented by András Simon, however, misses this discrete change. The question is how much this discrete change would modify the picture and perhaps reduce the size of the needed fiscal adjustment? This implies another question: Simon assumes that the structural parameters of the model remain the same during the 30 years, thereby ignoring the possible externalities of the development of infrastructures. Was this assumption justified?

Simon insisted that the model does assume that the structure is changing and that there are positive effects of the EU accession, otherwise it would not predict catching up. Liberalization and reforms are going on according to a process and do not happen according to a one-day switch. Accession to the EU is only a part of this gradual change. In one aspect, however, the model is prudent: it does not assume unconditional convergence, where you would only need a change in the intensity of education and investment, and that would be enough for catching up. There is a cultural difference between East and West that implies a need for much more, than just an exogenous shock. Hungary needs education, institutional and cultural change, fight against corruption, and these changes depend on membership, the common legislation and rules, the exchange of know-how, etc.

A Polish discussant from the audience pointed out that in the forecasted period there would be actually two turning points: the EU accession and the accession to the euro-zone. Both of these would happen most likely in the first third of the simulated period. In addition to the mentioned emergence of large official transfers from the EU, it is also a question how private transfers will change as a consequence of these turning points. Some people assume that investors already discounted the accession in their

current investment decisions; others believe that the accession will bring an upturn in these investments. The Polish scenario calculations, like Simon, also pointed out that catching up needs large investments and those imply high current account deficits. The question is whether these deficits are sustainable? However, all these calculations are applied to a country, which has its own currency. Only here the current account deficits matter, because of the danger of currency crisis and country default. Once we have a single European currency and the country belongs to the single European market and euro-zone – the analytical framework should probably change. In fact, we will be in a position of an inter-regional catching up at various levels of the “region”. This is a problem similar to catching of the Eastern Germany with the Western Lands. This new framework should probably concentrate on the expected rate of return and how this is influenced by various factors. What is the opinion of the presenter about this?

The presenter indicated that similar issues were raised in the debates in Hungary and the debate boils down to the issue whether the common currency makes such a concept as “economic prudence” outdated. The answer is: “No”, because economic prudence is not a currency issue. If you have a common currency, you may still become indebted, highly indebted. If you are not a country, but a city or a region, and you get highly indebted in the hope that your future is extremely bright, and you get into an exuberant state of spending. But instead of a prolonged boom, a bust will follow. So the deficits continue to be dangerous, not only for the lenders, but for the borrowers as well.

The Polish discussant accepted the arguments, but pointed out that as far as private investments and savings are concerned in a common currency area, our methodological framework of calculating national savings and national investments, and especially relating them to each other, is probably wrong. This is because savings look for the best possible returns that can easily be outside the borders of the country, and this is why the new framework should focus on the rates of returns available in the whole currency area.

An Irish commentator also criticized that the presented model assumed a closed capital market, and only in that is the balance of payments a constraint to borrowing. The Irish experience shows that the last ten years of Irish growth boom did not require excessively high investment rates; in fact these were quite low. What was important was the efficiency of the sectors into which the investments flowed. Formerly a very high portion of investments were government investments, such as in Western Europe (to sectors such as steel industry and transport), then the state withdrew and investments started to go to sectors more productive and efficient. The other change was that a large part of fixed investments have become carried by multinationals. Based on these experiences, the commentator expressed less concern for the size of the investments in the future (i.e. the main subject of Simon’s presentation), and more for the kind of structural policies that can be used to improve the efficiency of investments in the industrial sectors in Eastern Europe. If your industrial structure is efficient, lending and investments would come.

Simon agreed with the argument presented above, but added, that debt crises in less developed countries happened not only due to large public investments, but also due to excessive private investments. Authorities in Hungary must be more alert than the authorities in developed countries, and have to pay attention to preventing such debt crises by precluding large current account deficits. In less developed countries,

authorities have to show strong responsibility for such issues as well, and cannot let the problems be solved by the market forces alone. A more efficient investment structure would mean more favorable capital/output ratios, but again, one should not be too ambitious to calculate with unusually favorable ratios.

One commentator referred to the suggested fiscal correction and asked if the model took into account a feedback from increased public saving to private savings, along the line of the Ricardian equivalence effect. Simon answered that there is no such feedback built in the model, because he does not believe in the Ricardian equivalence, not even in a partial equivalence.

5. Trade Patterns and Competitiveness in the Catching up Process

5. 1. International Trade, Competitiveness and Catching Up in Transition Countries – Some Recent Developments and Policies for Improvement¹⁸

It is worth asking if “Trade”, the first concept of the theme of this presentation, is related to catching up? The answer is definitely yes: it is clear that those countries that dream of catching up have realized that they should integrate their economies with that of the EU and a large part of integration is through trade. What about the other major concept of this presentation: “Competitiveness”? Competitiveness is an important issue, at various levels, even if a heated discussion is going on in the literature on the question whether competitiveness at the national level is a feasible concept.

The third concept of the title is “Policies”. Policies matter. The presenter took the position that policies on the company and industry level are more important than national policies. He intended to stress the importance of interactions between national policies on the one hand, and firm and industry level policies, on the other. While policies may seem to be exogenous, they are reflections of ideas and incentives that stem from the developments going on in the economy, so they are, in fact, endogenous.

When speaking about competitiveness at the national level, the development of the real exchange rate comes routinely into the picture. The presenter, author of many studies on this issue, decided not to deal with this important aspect this time. He warned, however, that real exchange rate indicators are abundantly interpreted as the level of competitiveness, while there is no agreement about which indicator of real exchange rate should be used. Each version of the real exchange rate has different underlying theoretical base, and ignoring these differences would lead to confusion, rather than to a clarification of the level and development of the national competitiveness. The presenter also decided not to treat the equilibrium level of the real exchange rate either, although he assumed that, in the candidate countries, the Balassa-Samuelson effects on the equilibrium level of the real exchange rate are to be felt and these are organically related to the trade issue.

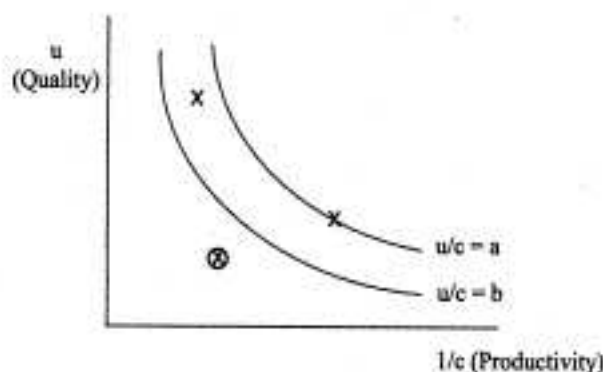
He turned to another way of assessing the level of competitiveness at the national level, which he called *benchmarking*. In a recent paper by Zinnes, Eilat and

¹⁸ This section summarizes the presentation by László Halpern, Institute of Economics, Hungarian Academy of Sciences.

Sachs¹⁹, the authors define different groups of indicators related to openness, efficient government, infrastructure, technology, financial sector, management and labor, and institutions. It is obvious that only *openness* is related to trade. In this group of indicators the authors take the following *trade related individual indicators of openness*: regulatory environment, trade and foreign exchange liberalization index, compliance with international standards, IMF membership (its existence and duration), WTO membership (its existence and duration), and the degree of restrictions on land ownership by foreigners. The *current account related indicators of openness* are: ratio of imports to GDP, level of tariffs on imports, ratio of exports to GDP, the ratio of exports to non-transition countries to GDP, and the ratio of export credits to the value of exports. And finally, the *capital account related indicators* are: cumulative FDI per capita, the ratio of cumulative FDI to GDP, FDI per capita in a certain year, FDI per GDP in a certain year, the index of foreign investment showing the quality of these investments, and the density of foreign banks compared to the population.

In the case of each of the above listed quantitative indicators it is assumed that the larger the value, the more favorable they are for the competitiveness, except for the level of tariffs where the relationship works the opposite way. The authors carried out their calculations and found results similar to those of the Global Competitiveness Report of the World Economic Forum. They established a list of the countries of the world, and particularly of the candidate countries, according to the competitiveness of these countries. However, this approach does not provide the necessary microeconomic or industrial organizational background that would tell about the secrets, the conditions of the type of competitiveness that is measured by this measuring procedure.

Figure 5.1: Quantification of Capability



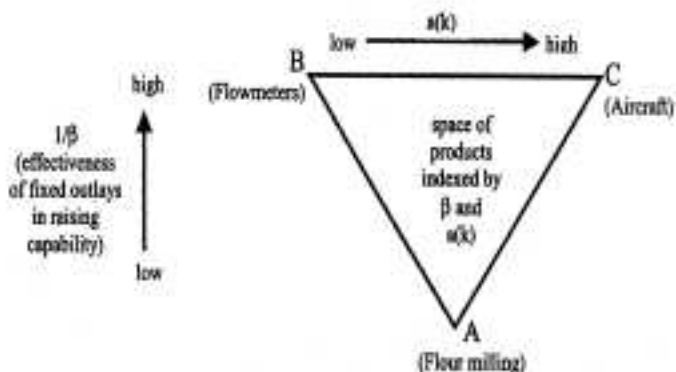
The presenter borrowed his alternative analytical framework from John Sutton (published in numerous articles and books). One of Sutton's concepts is "Capability". Not only nations, but rather firms, are interested in increasing their capability, and this procedure is based on a trade-off between productivity and quality (see Figure 5.1). The circled cross in the Figure is outside the so-called capability window, while the two additional crosses belong to two feasible positions of two firms. Symbol c represents

¹⁹ Zinnes, C, Y. Eilat and J. Sachs (2001) Benchmark competitiveness in transition economies, *Economics of Transition*, Vol. 9. No. 2.

costs per unit of production, expressed e.g. in labor units. The variable I/c then can indicate the output per labor.

Figure 5.2: Industry evolution according to Sutton

$a(k)$ = industry sales revenue (size of the jump)



Sutton's other major concept describes the evolution of the industry (see Figure 5.2). Here we start from point A (from a traditional industry, such as flour milling), from which a pyramid of industries emerge, industries which are indexed by β and $a(k)$, where β is the reciprocal of the effectiveness of fixed outlays in raising capability, while $a(k)$ the industry sales revenue based on k , the size of the jump. In this scheme there are two typical industries presented (in addition to flour milling), the production of flow meters and of aircrafts. Both produce high-tech products, but are different from each other in many respects, just to name one, flow meter production is not concentrated, while the aircraft industry is heavily concentrated.

The policy consequences of the evolution of industries, which will be felt increasingly when the candidate countries join the integrated market of the EU, are the following: (1) the intensification of price competition may squeeze price-cost margins for all firms; (2) the capability window will narrow, as the minimum level of capability consistent with viability rises; (3) firms will have to invest or quit, depending on how low or high their current capability is.

The presenter then looked at the possibilities of scientific analysis of competitiveness of the candidate countries. Industry level analyses usually look at sectoral revealed comparative advantages; the share of intra-industry trade (and whether the intra-industry trade is dominated by horizontal or vertical exchange); the substitutive and complementary relationships of trade and FDI (and usually finding that there is a positive relationship between cumulative FDI and export performance in the transition countries); and at last there is the analysis of the share of industries dominated by typical factor intensities.

At the product level, the inquiry focuses on the weight of products in trade that are homogenous and differentiated; the impact of cross price elasticities between related industries on the price of traded products, and finally the measurement of quality upgrading, usually with the help of unit values, a method that has its limitations.

The analysis at the firm level has to decide if at the basis subject to measure is composed of *firms or plants*. While the latter are preferable, lack of consolidated measures makes such analysis at the plant level very difficult. *Total factor productivity* is very popular in analyses at the national level, but it is also very useful, and perhaps even more justified, to apply it on the firm level. Investigating the importance of FDI and the role of foreign investment (foreign owned) enterprises in competitiveness is a further very attractive field of analysis. Special importance is also attached to the study of the intensity of R&D activities in assessing the prospects of the firms to improve their position in the competitiveness game.

On the firm level there are various policy issues: pricing policy is crucial since firms may use approaches such as pricing to the market, mark-up pricing, or transfer pricing in the case of multinationals. Until now only a few research efforts arrived here at solid empirical evidence. Another direction of research of policy issues is whether the transition countries attract or can attract such FDI that has a substantial R&D element.

Aghion et al. present an interesting table (see Table 5.1) indicating that the various approaches to corporate governance in the firm may lead to different effects of different government policies on the rate of adopting new technologies by these firms. So for instance, in a country where profit-maximizing firms are dominating the industry, industrial policy may have positive effect on the pace of innovation, while in the case when a more conservative approach is dominating the corporate governance (i.e. where managerial and ownership roles are separated), industrial policies will be disadvantageous for technology innovation.

Table 5.1: Policy Impact on the Rate of Technology Adoption

	Profit-maximizing firm	Conservative firm (separation of roles of managers and owners)
Competition policy	Negative	Positive
Industrial policy	Positive	Negative

Source: Aghion P., M. Dewatripont and P. Rey (1997). Corporate Governance, Competition Policy and Industrial Policy, *European Economic Review*; Vol. 41, No. 3-5

In the next part of his presentation Halpern summarized his paper prepared jointly with Gábor Kőrösi ²⁰ on the exporting behavior of Hungarian enterprises. They experimented with two models of assessing efficiency and market pressure. In the first model, they explained output by inputs and by market pressure. In the second model, they used two equations: the first estimated inputs and efficiency by frontier production and then they plugged this efficiency measure to market share. It turned out that the second model was much more important and plausible. One of the results of the study was quite counter-intuitive, which tempts the authors to carry out further research: it turned out that the foreign owned firms in Hungary face much less own price elasticity than domestic firms, and, what is also interesting, that this relationship stands irrespective of the market share achieved by these firms.

The presenter summarized his presentation as follows. International trade is part of catching up. Competitiveness is crucial, but it is necessary to define at what level we

²⁰ Halpern, L. and G. Kőrösi (2001) Efficiency and Market Share in the Hungarian Corporate Sector, *Economics of Transition*, Vol. 9, No 3.

are dealing quantitatively with the competitiveness, and what are the relationships between competitiveness at the firm level, product level and national level. Policies are endogenous, and at different levels they are interacting with each other. Emphasis should be put not only on the design of policies, but their implementation should also be examined. Analytical models may tell us much, but they should be complemented with benchmarking. The analysis of characteristic indicators of competitiveness at the firm level, product and other levels should not be left exclusively to businessmen: researchers should also make use of them.

To the question whether integration brings about improvement in competitiveness, the presenter gave a positive answer. But he also warned that researchers have to go deeper into the functioning and working mechanism of the industrial structure, clarify the relationship of multinationals and domestic firms, and investigate directions these firms choose in improving their competitiveness.

Discussion of the Presentation of László Halpern

A discussant emphasized that the trade related issues of catching up should not be limited to exports and to policies enhancing exports. Imports are equally important and the activity related to imports is *import substituting domestic activities*. These activities should also be competitive and withstand certain pressures as export activities have to do. It is very often forgotten that industrial policies have these two parts and neither of them is more valuable than the other.

Turning to the issues of price competitiveness and quality, the discussant stressed that not all markets are made up of Ricardian or Heckscher-Ohlin goods, where competitiveness is based on productivity, on price and on wage competitiveness. There are market segments where the market is non-contestable and oligopolistic. The candidate countries should have a policy to reach competitiveness through quality in those segments as well, though in many cases they failed. FDI was mentioned as a crucial source of competitiveness, but there are different forms of FDI, and they are not of the same quality. Greenfield investments are very important from the point of view of economic quality, while acquisition-based FDI offer often a mixed blessing by their nature. In many cases whole monopolies are sold to foreign investors (such as the electricity network of a country), which in some cases may turn out to be hostile or speculative takeovers.

Halpern stressed that he did not intend to give the impression that imports would be of a secondary importance to exports. In his empirical analysis of efficiency and market pressure of Hungarian products and firms, exports and imports are handled simultaneously, and one could say that they are treated in a symmetric way. However, for statistical reasons, in most countries, imported and domestically made inputs are simply not distinguishable on the firm level.

As for price competitiveness, Halpern emphasized that if we assume that the economy has only one sector and a single homogenous product, the real exchange rate may be crucial to measure competitiveness. However, several types of the real exchange rate should be still used: price type, cost-type, and a combination of these two; plus the profit-type real exchange rate indicator. All these instruments are needed to make a

comprehensive and credible analysis of the competitiveness in that simplistic economy. In case of a more sophisticated economy the picture becomes more complicated.

As for qualifying various forms of FDI, Halpern questioned if one should simplify by judging green-field investments as good in any case, and acquisitions as likely leading to hostile takeovers. In fact, green-field investments may turn out non-viable later. This is why he suggested a more comprehensive benchmarking analysis of the various businesses. He quoted the example of Suzuki's original strategy in the middle of 1980s, when the Japanese car producer selected Hungary where a new Suzuki plant was to service the whole East-Central European region by exports and distribution. This idea, however, failed because the Japanese investors could not foresee the collapse of the Soviet Union. Later Suzuki had to redefine the function of its operations in Hungary and gear it more towards the market of the European Union.

A commentator drew the attention of the audience to the Competitiveness Reports of the European Commission published every year. In these reports competitiveness is analyzed at the macro-, mezo- and micro-level and the major indicator used is productivity. This approach of the Commission lies closer to benchmarking and complements Halpern's more academic approach. The commentator encouraged IIASA or other international institutions that they use the same practical indicators as the European Competitiveness Reports to monitor the development of competitiveness in the candidate countries.

An Irish participant argued with the presenter on grounds of the Irish experience. Irish productivity showed a spectacular growth, but that was not a factor attracting FDI. It was rather a consequence of Ireland's success in drawing in high FDI prior to that. Accordingly, simply talking about labor productivity is not enough to characterize the potential of competitiveness; it can be a reflection of other measures of your competitiveness. This is related to what Halpern mentioned about benchmarking. The benchmarking process used by Zinnes, Eilat and Sachs has the drawback that their competitiveness measures have strong correlation with income per head and thus there is a danger of confusing the cause with the effect. For instance, even the best performing CEE candidate countries come below Spain and Portugal in their benchmarking, despite the fact that FDI flows are being diverted from Spain and Portugal into Central and Eastern Europe, as an important Swedish firm-level study indicates. This shows that CEECs are more competitive, in some ways, than Spain and Portugal. Spain and Portugal are naturally the members of the EU with the current benefits of competition policy, macro-policy, restrictions, etc., that CEE countries are not yet able to feel. But FDI flows are a particular reflection of expected future potential, as seen by the business sector. Once accession occurs, Central and East European countries will be more competitive than these two countries.

Halpern agreed with the comments: one has to distinguish between exogenous and endogenous variables. For instance, everyone would accept that productivity drives up real exchange rates. However, there has not been much empirical evidence for that so far. The commentator's words rightly illuminate that in our thinking, perhaps, the horse is behind the cart. As to the comments on benchmarking, Halpern clarified that his reference to the work of Zinnes, Eilat and Sachs was critical, because he would rather go deeper to the industry and firm level, where one could find more sensible

relationships, than the simplistic ones that the mentioned authors presented at the national level.

Another discussant, using the opportunity that the presenter was a Hungarian economist, asked that to what extent has the crawling peg exchange rate regime (used from 1995 to 2001) contributed to the improvement of competitiveness and catching up of the Hungarian economy.

Halpern believed that the crawling peg played a role, particularly in regaining credibility following the 1995 macroeconomic instability – but the improving competitiveness in Hungary should be explained by developments that happened in the early 1990s. In 1992 a bankruptcy law was accepted in Hungary, evaluated by many critics as too harsh and too radical. However, this new regulation, with automatic triggers for bankruptcy procedures, initiated the real restructuring that turned out appropriate to reshuffle the whole corporate sector. The macroeconomic correction of 1995 could not have been successful without the base of a more or less healthy microeconomic structure that emerged starting from 1992.

6. Financial Convergence and the EMU

6.1. The Monetary Integration of EU Accession Countries from Central and Eastern Europe²¹

The presentation of Peter Backé deals mainly with the topics that appeared in the debate about the monetary integration of Central and Eastern European candidate or accession countries (i.e. Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia) in the last five years and which remain relevant at least until the early period of post-accession that is expected to commence in 2005.

There are two obvious points to start with. First, the accession countries have a clear future perspective to participate fully in the European Monetary Union. The main concern is associated with the uncertainty that how smooth the ratification process can be in the incumbent countries after the pre-accession negotiations are successfully concluded. Therefore, the question is not whether the accession countries will introduce the euro, but when and how. Second, monetary integration is a process that has two dimensions: economic and institutional.

The institutional aspects of monetary integration relate to the pathway and the conditions that the EU has outlined for the area of monetary integration. In essence, this is a three-step approach (EU accession – ERM II – euro), which implies that today's accession countries may accede to the euroarea, at the earliest, two years after the EU accession and upon fulfillment of the Maastricht convergence criteria.

The economics of monetary integration is about cost-benefit analysis of all possible options concerning the path, the speed, the timing and the sequencing of

²¹ This section summarizes the presentation by Peter Backé, Austrian National Bank. For a more detailed report on the issues in this presentation, see the full paper of Peter Backé and Cezary Wójcik posted at IIASA's ETI publication web pages:
http://www.iiasa.ac.at/Admin/PUB/Catalog/PUB_PROJECT_ETI.html?sb=4

monetary integration. Thus the sequencing of monetary integration must be seen within the integration steps in general. Against this background, the discussion can, in principle, be approached from two different angles. The first approach is to ask whether the institutional constraints on the menu of monetary integration options for accession countries inflict any potential economic disadvantages on the accession countries. In other words, would it be rational to press for a relaxation of some of the institutional constraints? For example, would it be more supportive for a more efficient catching-up process of the accession countries if they had the possibility to introduce the euro faster than two years after EU accession, or if they could adopt the euro on different terms than those laid out by the convergence criteria? The second approach is to accept the institutionally constrained menu of monetary integration options and to ask the question of whether a country should target euro-area accession as soon as possible after EU accession, or whether it should adopt a more gradual strategy.

In the remainder of his presentation Backé commented on both of these two approaches. In doing so, the main emphasis was put on the latter approach since it appeared more relevant to policy-making. First one should look more closely at the question whether the institutional setup for monetary integration makes economic sense. This question has been debated quite intensively in recent years. The debate has had two main lines of argument. On the one hand, there has been a discussion about the effects of a rapid unilateral euroization. On the other hand, a number of proposals were made where it was suggested to reform the Maastricht convergence criteria to account for the specificities of catching-up economies. A change was proposed for the inflation criterion because it was not clear if this criterion was correctly defined in view that the transition countries have a specific price-level convergence problem associated with faster catching up. Another issue was whether the ERM II requirement was an appropriate intermediate step towards a full integration into the monetary area.

With the benefit of some degree of hindsight, one can conclude that this debate has been important, but it has not changed the position of the EU very much. This is true with the following proviso. Although the EU's views on currency boards and their suitability in the course of monetary integration of accession countries were rather skeptical in 1998/99, subsequently it was turned officially by the ECB in 2000 into what could be called a guarded and conditional approval.

The debate about the economic merits of the institutional framework for monetary integration of accession countries has lost quite a bit of momentum recently. This appears to be due to three main reasons. First, the EU has insisted on a continuation of its initial core position on the issue. Second, the economics of fast unilateral euroization was found to be highly uncertain by accession countries. Third, there has been an increasing perception in the accession countries that the Maastricht framework provides an acceptable deal for monetary integration. This was found substantiated (or tolerable) for both the terms of the criteria (if compared to conceivable alternative sets of criteria) and for the terms of timing. Thus it was accepted that growth sacrifices would be incurred once the country must adjust its policies for fulfilling formally the Maastricht criteria (e.g. in the low level of inflation). References to the positive examples of the Southern EU countries were used most often for the support of the arguments in order to accept the original price stability conditions.

The next series of questions deal with those strategies of euro-area accession that remain after the institutional constraints prescribed by the European Commission are taken as given. Which strategies offer the most appropriate set of conditions? The key question here is whether a country should target the introduction of the euro as soon as possible, i.e. within two or three years after the EU accession, or whether a more gradual strategy would be superior.

The economics of monetary integration of accession countries under the existing institutional framework is not straightforward. There are considerable potential benefits, but there are also considerable potential risks if monetary unification is undertaken prematurely. Moreover, one faces severe limitations if one proceeds by relying only on the outcomes of a cost-benefit analysis of the participation in monetary union. In the case of the accession countries, there are no models yet, which could quantify all relevant factors of participation in a monetary union simultaneously.

A pragmatic approach is to concentrate on the presumably most important effects and to assess these factors individually. In doing so, one should take a dynamic perspective that considers how the effects change over time. This is particularly important for costs, which will tend to decrease over time. Thus, what has to be assessed is the question: at what point in time the costs and risks of full monetary integration are sufficiently contained for reaping the benefits of participation in the euro-area? Obviously, the adverse side of this approach is that it essentially neglects possible inter-linkages among the single effects and that it takes a very simplistic line by aggregating individual factors. Still, there is apparently no other feasible approach at this stage.

Following this reasoning, one can single out three major effects. On the cost side, the costs of asymmetric real shocks may turn out to be substantial. The standard way to approach this issue is by examining how well a country meets the optimum currency area (OCA) criteria. On the benefit side, two effects deserve particular attention and scrutiny. First, participation in a monetary union essentially eliminates the risk of currency crises. This fact attains a particular relevance because recent crises that were caused by sudden shifts in sentiment led to abrupt stops or reversals in capital flows. Second, the use of a common currency may have a considerable positive impact on trade and thereby on growth.

Clearly, this selective approach is open to the critique that it unduly disregards other major effects. There are also some additional benefits, but they are small and thus they may not alter the overall cost-benefit balance. They could be, for example, the gains that result from the reduction of transaction costs or credibility costs, or the costs caused by lower interest rates that may complicate the aggregate demand management.

First, let us deal with the cost side in more detail. The OCA theory is a well-known concept, thus we may directly move to its empirical estimations. First, as regards the susceptibility of accession countries to asymmetric shocks, there are studies that assess the likelihood of asymmetric shocks by examining the correlation of supply and demand shocks between countries of the euro area and the CEE accession countries. They draw a mixed picture: some accession countries – Hungary, perhaps also Estonia, Slovenia and Poland – show positive correlations. The correlation for the others was not present or it was negative. Furthermore, caution is warranted when drawing conclusions from these results. In fact, it is not obvious how to interpret (and generalize) these findings if one considers that the correlations for some euro-area countries, like Greece

and Ireland, have not been encouraging either. The OCA theory is not very operational and we cannot be certain that the short past trends of the accession countries are representative enough for drawing conclusions for the future.

As for the other side of the OCA coin – the functioning of the adjustment mechanisms – the situation appears to differ considerably among individual accession countries. No comprehensive empirical studies appear to exist, which would undertake an in-depth assessment of the functioning of product and labor markets in all ten accession countries. From what we have available, there were observed even less common features here than what was observed on the shock side. It is clear from the OECD studies of Poland, Czechia and Hungary that product and labor markets display considerable variation among them. This is particularly true for the wage formation process and wage flexibility, which presumably adjust better than in the countries of the EU incumbents. On the other hand, product markets in accession countries tend to be less flexible than in the EU countries.

It is rather doubtful whether migration is an effective channel in accession countries for adjusting to idiosyncratic shocks. The same is true for the question of whether fiscal transfers from the EU can play a major role in easing asymmetric shocks. It should be noted, however, that these channels do not play a major role within the current euroarea either. In sum, one can differentiate among a couple of accession countries, which have already made substantial advances towards "meeting" the OCA criteria, while others have moved ahead less. Thus, based on the OCA theory, a diverse picture emerges, with considerable risks for a number of accession countries. However, this is only a static snapshot, and it would appear plausible to expect that the correlation of shocks should increase with a further deepening of trade and financial integration in the run-up to membership in the EU. By the same token, further reforms of product (and labor) markets, again in the context of EU accession, will tend to increase the adjustment capabilities of the accession countries.

There are two standard criticisms of an overly strong reliance on an OCA-based reasoning when assessing the costs and benefits of monetary integration. Frankel and Rose (1998) came with a proposition that *the OCA criteria may be endogenous*. They may become effective only if they are absolutely essential. When the time needs it, the necessary arrangements will appear. This could imply that meeting the preconditions for a rigid exchange rate peg (or the introduction of a foreign currency) "in advance" may be much less daunting than it had been thought earlier. However, a very relevant caveat is that it may take a long time for the endogeneity to work its way through the economic system. It is a matter of a painful learning by doing. The experience of EMU since 1999 is a case in point. Thus, the transition period to the new equilibrium, in which the potential for external shocks would be small, may well be fairly lengthy. During the intermediate period the exposure continues to persist (or goes down only very gradually) and adjustment mechanisms remain particularly important. At the same time, it is notoriously difficult to increase an economy's adjustment capabilities quickly.

The second argument against an OCA-based analysis is that participation in a monetary union may improve the functioning of product and labor markets. However, there exists no analytical handle to assess whether this would indeed happen and, if so, within what time horizon. It appears plausible to expect that expectations and behavior of economic agents will adapt as a consequence of joining a monetary union, which,

after all, would typically constitute a major regime change. However, it is extremely difficult to anticipate how and how fast such changes would occur, and how these changes would improve the overall adjustment capabilities of a particular country. This is especially true for wage formation in Europe, which has not been altered fundamentally (at least not quickly enough) in many cases as a consequence of rigid exchange rate pegs, as the historical evidence shows.²²

Now we are ready to proceed to the benefit side. Participation in a currency union essentially eliminates the risk of a currency crisis. This is particularly relevant for cases of sudden shifts in the expectations leading to abrupt stops or reversals in capital flows. This benefit features very prominently in the debate, but it essentially defies any sort of quantification.. What is a widely shared view is that the risks of excessive capital inflows and sudden capital outflows can be mitigated by sound macroeconomic policies. For example, by avoiding "soft" exchange rate pegs, by measures that strengthen financial institutions' risk-management capabilities, and by supervisory activities concerning the financial sector and the foreign borrowing of the corporate sector.

However, despite such important measures, the risks will probably remain significant during the pegging period. There are different ways to cope with that. One is the monetary and the exchange rate policy cooperation within the European Union upon accession. More specifically, ERM II can partially restrain such risks, provided it is operated in a way, which offers reasonable shelter against speculative attacks that are not related to the changes in fundamentals. For example, if the ERM policies prevent the "unjustified" capital flow reversals for those economies which are basically healthy (in terms of their fundamentals). The ERM could be reformed, as was proposed by some economists. For example, as a complement to existing policies, a stabilization fund could be established to deal in a flexible manner with such "second-generation" crises. Access to such a fund could, for example, be automatic if a country has a straight record within the intra-EU economic policy coordination and surveillance.

The second benefit of participating in EMU relates to the impact on trade and thereby on growth. Rose (2000) found that the effect of using a common currency on trade was statistically significant and positive – the growth rates of trade more than tripled. Thus the impact of a common currency is larger by an order of magnitude than what is the effect of reducing moderate exchange rate volatility to zero but retaining separate currencies. Later Frankel and Rose took the issue one step further. They do not only explore the link between currency unification and trade, but also ask the question about the effects of higher trade on growth. They find that the potential benefits from the use of a common currency on trade and the trade effects on growth are large.

Some later studies ²³ arrive at a considerably lower, but still large positive effects of the common currency on trade. Thus, there is a very wide margin for the

²² Evidence to the contrary is much more difficult to muster: Austria, for example, has been able to adjust real wages, if needed, in a social partnership framework and thus to sustain a hard-currency policy for a long time, but it has never been hit by a very strong idiosyncratic shock during this period. Another example appears to be the wage formation in Estonia, at least if one takes the spectacular nominal wage reduction in sectors particularly afflicted by the Russian crisis in 1998.

²³ For all these citations see the full paper of Peter Backé, as was indicated at the footnote at the beginning of his presentation.

increase in trade due to the use of a common currency: from 13% to over 300%, with a number of most recent estimates settling the figure somewhat around 40% to 50%. So, this is a benefit but it is not fully known how big the effect is and when it will materialize. Thus, it is very uncertain how to figure this benefit into the overall calculus of costs and benefits.

What is obvious is that some accession countries, in particular those with long-standing rigid exchange rate pegs, have already "consumed" the trade and growth benefits that result from reducing exchange rate volatility to zero, while others – in particular Poland, with its rather volatile external value of the zloty – are still open to reap these gains. Other things equal, the overall trade and growth effects should thus be comparatively larger for the latter group of accession countries than for the former ones. This adds a further element of caution to the overall picture of costs and benefits.

Taken from today's level of knowledge, there is a considerable degree of uncertainty about the optimal date for joining the euro area. Results will depend on what probabilities one attaches to future events, what weights one assigns to individual effects and with what interest rate one discounts future costs and gains, if they materialize at different points in time. Thus, one will not be able to pinpoint a particular optimal target year for the euro-area accession for the candidate countries, but most probably there will be a range of years with similar cost-benefit balances. The decision about the date will very much hinge upon political considerations and political economy arguments. This, in turn, may tip the balance in favor of a relatively speedy quest for euro-area participation for a number of accession countries.

Discussion of the Presentation of Peter Backé

A participant raised several questions. First, a significant part of current EU candidates conduct independent monetary policies and for some time it may be useful to keep doing so. As these countries enter the EU and fix their exchange rates to the euro there can loom a standard problem associated with the optimum currency area theory: as a country stops conducting an independent monetary policy, an asynchronous business cycle may cause serious problems to its economic adjustment.

Second, when we look at factor mobility, can we rely on a mechanism that the membership in the EMU improves capital mobility, which will help in cushioning the asymmetric shocks?

The third question deals with the impediments to trading and trade creation. One cannot be sure that an extrapolation of some successful policies, as practiced in the current euro-zone countries, to an euro-zone enlarged by eight new candidates, remains to be valid. The present euro-zone member countries experienced for many years the policy of pegged exchange rates under ERM. The resulting exchange rate volatility risk to trade and other monetary transactions was very low for them. On the other hand, some of the EU candidate countries (Poland, Czechia or Slovakia) have flexible or floating exchange rates, which allows them to practice independent monetary policies. A sudden discontinuation in these policies may be detrimental to the macroeconomic balance in these countries.

The fourth question deals with the credibility of national monetary policies and the way in which this credibility is reflected in the level of real interest rates. Some accession countries are suffering from problems with that credibility. What are the

potential gains for them coming from “importing credibility” and waiving their own monetary policy?

Another discussant commented on the issue of unilateral euroization in non-EU member countries. It is true that some countries have cyclically repeated crises in managing their exchange rate. Small, open economies in transition, irrespective of what type of exchange rate system they have, are prone to speculative attacks, and the stabilization policies can be difficult to sustain. Two years ago, both the European Central Bank and the Commission were vehemently opposing the idea that new accession countries could avoid the transition via the ERM II. Now the new evidence suggests that this strict requirement could be unbounded. Could we all agree on that?

Peter Backé, in his reply, stressed that a large part of the issues in question are subject to political rankings of priorities. That is why some of the questions may remain without a proper executive response, even though it is clear that it would not be difficult for economists to arrive at a consensus that would confirm the relevance of the raised issues.

The presenter commenced with the issue of suitability of the currency board (or the “irrevocable” fixing of the exchange rate) for the whole monetary integration process. It is assumed that it has numerous spillovers to other parts of the economy and to the institutional framework of the transition. In 1999 there was a very diversified view on these things in the EU, when the whole discussion was at its climax. The solution, which was found as a compromise, was not that the currency board could replace the ERM II transition period, but that it could complement the ERM II membership as a unilateral commitment. Concerning the unilateral euroization, Backé did not see any support of such ideas among the present EU members. It will be extremely difficult to find a critical mass of supporters in the EU that would reverse the existing views.

Another issue is something that we can call the “euro-crib”. What will happen if the euro is more and more used unofficially in the world – starting with Denmark, Sweden, or even in Britain or in the accession countries? Will there suddenly be, after some years of maturity and accumulation of a critical mass, a non-linear switch from one equilibrium to another one? At this moment, when the euro is just borne, we can only speculate how this can work, without having sufficient experience in how the euro can expand to the world, commencing in the countries that are nearby.

As to the question about the asynchronous business cycles and the usage of local independent monetary policies under flexible exchange rates in order to fight with recession – the theoretical picture is not very clear. As some recent studies showed, the monetary policy may smooth out the cycle in some cases, but also enlarge the differences among the cycles in some less successful interventions.

Concerning the question of factor mobility, past attention was concentrated mainly on capital flows and their impacts on the real economy after the EMU entry, and the decrease of the risk premia. Definitely the more recent modifications of Mundell’s optimum currency area theory have some relevance for the policies of financial convergence. There is also an impact of EMU’s exchange rate instability reduced to zero on the trade creation within the EU “core” countries, which the accession countries were not able to utilize due to the uncertainties of their exchange rates.

A discussant asked about the institutional issues. It was mentioned that the European Commission is very strict about the adherence to Maastricht Criteria and it is advised to the accession countries not to push too much for by-passing or modifying them. There were also initiatives from Germany that the Maastricht Criteria should be complemented with some real convergence criteria. Or recently there appeared voices, some of them from official institutions, saying that the Maastricht Criteria should not be enforced for the accession countries. Especially the inflation criteria are those that were proposed first for coming under scrutiny. What is the opinion of the presenter here?

In his answer Peter Backé remarked that this is a very serious issue. The discussion at the end of 1990s about the validity of the Maastricht Criteria for the transition countries was too simple. Both the accession countries and some countries of the EU were not satisfied with these criteria. One of the arguments was that, due to the specific conditions in the accession countries and their catching-up, it is easier to support growth with a more flexible nominal exchange rate without much fiscal restriction and a gradual convergence in the price level. Then the problems with qualifying to the ERM according to the inflation target will be relieved. There is some sound theoretical economic reasoning behind these propositions. As an outcome, one of the solutions could be to disengage the inflation criterion and replace it by some sort of a GDP per capita criterion. Nevertheless, these things are so complex that it became politically unfeasible to open such fundamental revisions. We can come with many partial innovations, but the problem is how to translate the economic substance of revisions into a workable politics that require certain credibility, stability and discipline. Therefore, at present there is a tacit agreement that we should do with the original wording of the Maastricht Criteria, while trying to be flexible in their interpretation.

6.2. Macroeconomic Convergence in Transition Countries²⁴

Having embarked on a decade of transition, all Central and Eastern European countries (CEECs) have completed the early stages of macroeconomic transformation. Their primary task during that period was to achieve macroeconomic stabilization. In order to achieve that, the CEECs launched programs and implemented macroeconomic policies, which shared various common features, ranging from institutional changes to promote the performance of markets, to practical issues, such as adopting an exchange rate regime and directing the inflow of foreign direct investment to industries with comparative advantage. Due to the relative openness and the close economic relations among the transition economies in CEE, the quality of interactions among economic agents and firms are likely to be revealed by the behavior of macroeconomic fundamentals. Thus, the transition process in the region offers a unique opportunity to carry out a quantitative analysis of convergence in selected macroeconomic fundamentals within distinctive groups of CEECs, based on different trade arrangements and geographical proximity. The main question here is whether CEECs tend to eliminate disparities among each other during transition.

Theoretically, there are two principal reasons to expect the convergence of macroeconomic fundamentals of CEECs. First, all CEECs engage quite heavily in

²⁴ This section summarizes the presentation by Evžen Kočenda, Charles University, Prague.

international trade with each other. Because it involves the flow of capital and goods, international trade, if bilateral, serves as a natural means of coordinating the economic development of the parties involved. Literature provides evidence that income convergence among countries, while far from being a worldwide phenomenon, seems to be a prevailing feature among countries that trade extensively with one another.

The second factor that might induce a certain degree of convergence between CEECs is of an institutional nature. Due to the prospect of their accession to the European Union, these countries have been confronted with the list of criteria upon which EU conditioned the acceptance of new member countries since the middle of the 1990s. These criteria are common for all applicants for EU membership. Thus, the need for adequate institutional arrangements, along with adjustments in monetary and fiscal policies, are motivated by the attempt to fulfill the criteria, and these efforts may generate similar trends of macroeconomic fundamentals.

To obtain a broader picture on the convergence aspect of the economics of transition, the presenter investigated a set of selected macroeconomic fundamentals, namely the growth rates of real industrial output, money aggregate (M1), producer and consumer prices, and nominal and real interest rate spreads. For this analysis monthly data for the period from January 1991 to December 1998 were used.

When answering the question to what degree countries were successful in achieving a certain degree of natural economic integration among them, the focus is on the ten candidate countries and Albania. These countries have several common features, but also distinct institutional frameworks, different geographic proximity to foreign markets, and different approaches to trade arrangements. Given that trade and institutional nature are the two major factors for convergence, these countries were pooled into several logically differentiated groups. The first institutional criterion is related to foreign trade. As early as December 1991, the former Czechoslovakia, Poland and Hungary signed the European Agreements with the European Union. These countries have striven to establish a workable framework for international trade and co-operation in order to facilitate the transition process. Thus, the first two groups reflect the institutional aspects of transition reforms with respect to the international trade arrangement among the CEECs. Such an arrangement was settled in March 1993 in establishing CEFTA. The original CEFTA group comprised the founding countries: Czechia, Slovakia, Hungary, Poland, and Slovenia. For the sake of institutional consistency, also an enlarged CEFTA group was constructed by adding Romania (which joined in 1996). Bulgaria was not added to this group because it became a member only very recently, in 1998.

Two other institutional groups are defined with respect to the eventual accession of the CEECs to the European Union. These groups were formed with respect to the EBRD's analyses of progress in economic and political transition made by the ten candidate countries. The European Commission identified five countries as leading candidates in terms of the progress they have made to date. These are Czechia, Estonia, Hungary, Poland, and Slovenia, i.e. the first-round group. The second-round group is formed from Bulgaria, Latvia, Lithuania, Romania, and Slovakia. Two other groups were also constructed: the Balkan group (Romania, Bulgaria, and Albania) and the Baltic group (Estonia, Latvia, and Lithuania). These two groups reflect geographical and historical aspects relevant to transition countries.

In order to investigate convergence within the above-defined groups, a growth convergence methodology was applied to a set of selected macroeconomic fundamentals. A convergence measure was adopted that captures the specificity of panel setting and with special attention to possible contemporaneous correlation that might affect the results²⁵. In order to make the speed of convergence much more readily interpretable, also the half-life of the convergence process was computed. It was defined as the number of time periods that it takes for the gap to be cut in half. In general, the findings provide evidence of convergence in macroeconomic fundamentals among the CEECs. However, the strength of the results differs for particular variables, as well as for groups of countries.

Concerning the real growth of industrial output, the CEECs displayed quite large initial differences. In terms of aggregate per capita output, Czechia has had lower growth but also started at a higher base. This was the opposite case in Poland and to some extent in Hungary. The Baltic states were still part of the former Soviet Union and dependent on it when the transformation in Central Europe was under way. Thus, the different level of microeconomic restructuring at the beginning of transition is another factor affecting the starting conditions of these countries. It is justified to assume that these conditions have influenced the evolution of industrial output during the investigated years.

Despite substantial differences in initial conditions, the greatest degree of convergence was achieved namely in the growth of real industrial output across all groups of economies. Based on the measure of half-life, the first-round accession group shows the fastest speed of convergence, followed by the original CEFTA group. The group of the Baltic countries falls slightly behind. In any event, the speed of convergence is, in general, comparable in all three cases. The quite high speed of convergence for the three groups above is in a sharp contrast to the very low speed of convergence of the enlarged CEFTA group. The evolution of Romanian real output growth was quite different from the rest of the CEFTA countries due to the behavior of producer prices and, thus, caused a substantial difference in the speed of convergence between the original and the enlarged CEFTA groups. Overall, the results indicate that the core CEECs have attained a common path characterized by a high degree of integration due to the institution of CEFTA. Figure 6.1 provides an illustration of the convergence process: here the tendency to catch-up with the EU average is visible.

In contrast to the growth in real industrial output, the growth rates of the consumer and producer prices converged at the slowest rate. However, these rates did tend to converge towards the low inflation region in most countries. The Baltic countries show the greatest degree of consumer inflation convergence. We attribute this to two factors. First, these countries had comparable starting conditions after their monetary separations from the former Soviet Union, and have enjoyed strong economic relations among themselves. Second, the Baltic states followed a similar policy of adopting exchange rate regimes that tie the exchange rates of their national currencies to stronger foreign currencies to a greater or lesser extent. After experiencing a period of

²⁵ More details on the techniques of estimation can be found at Kočenda, E.: Macroeconomic Convergence in Transition Countries published in the *Journal of Comparative Economics*, 29, 2001, 1, 1-23.

very high inflation, this policy allowed them to import a lower rate of inflation, which they would presumably not have achieved had they behaved autonomously.

Figure 6.1: Real Industrial Output Growth Rate: CEFTA Group

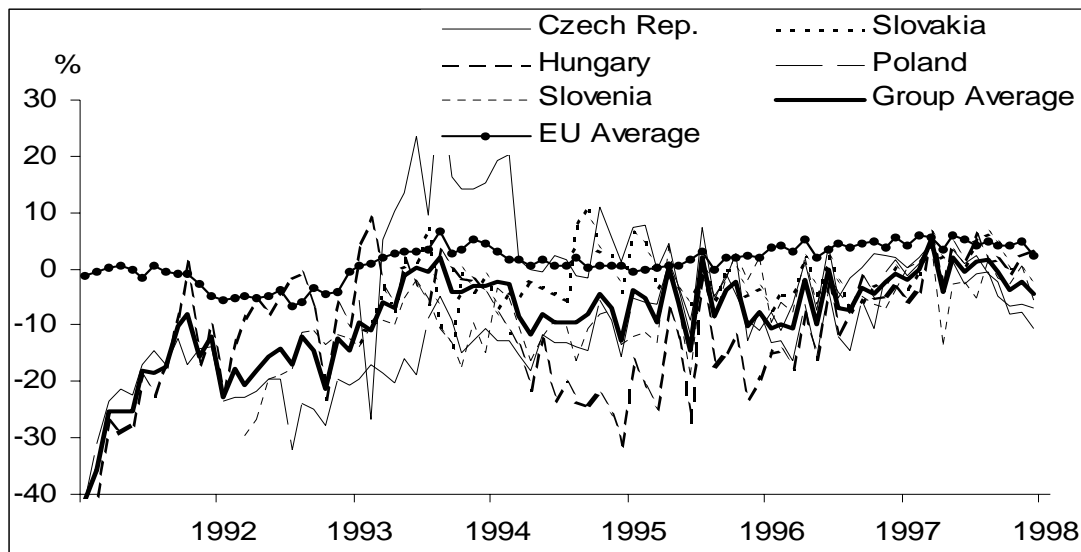
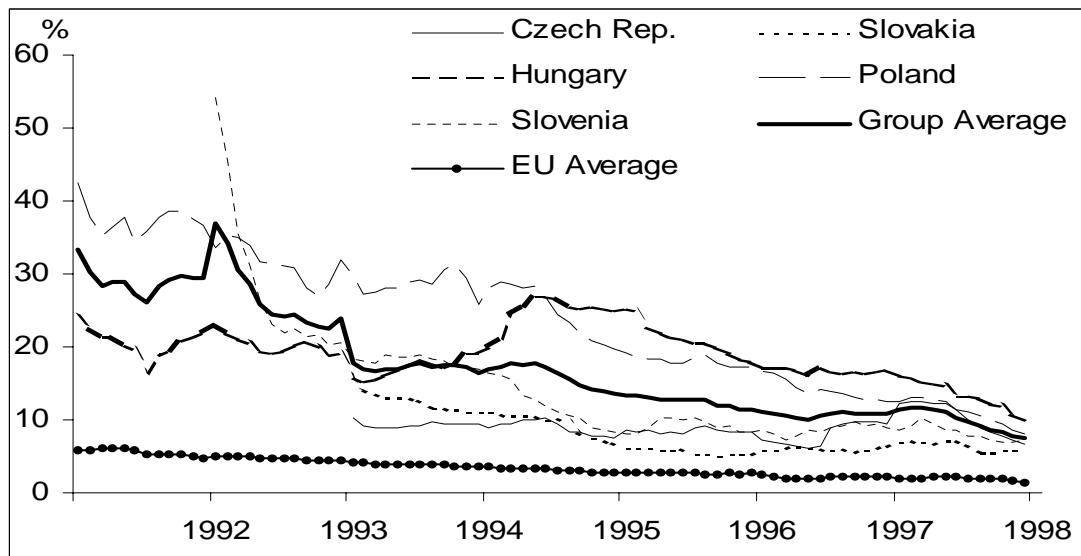


Figure 6.2: Consumer Prices Growth Rate: CEFTA Group



Source of both tables: own computations

Unlike the Baltic countries, the CEFTA countries began the transition process with reasonably high inflation rates and smaller differences within the group. Hence, it has been much harder, and implicitly it required more time, to cut the gap in their inflation rate disparities by half. The convergence process among the CEFTA countries is clearly visible from Figure 6.2, which shows that the growth rates of consumer prices

decisively decrease over the time and converge towards a single-digit area. This is surely a positive feature in the process of catching-up with the EU, no matter that the inflation rates are still above the EU average.

As it was the case in price convergence, the Baltic group showed the fastest convergence in money growth, too. After having implemented monetary reforms that also introduced new national currencies, the Baltic countries adopted tight exchange rate regimes. By pegging their currencies to the US dollar, the Deutsche mark or the Special Drawing Rights (basket), these countries essentially abdicated independent monetary policies. Hence high convergence should be viewed from the perspective of their tight policies.

All other groups converged at considerably slower pace in the growth of money supply fundamentals, if compared to the Baltic states. Both the original CEFTA and the first-round accession group record a somewhat lower but very similar degree of convergence compared to the Baltic group. The Balkan group and the second-round accession group show basically half smaller convergence rate than the previous two groups. For the Balkan countries the dramatic growth in money supply coincided with the inflation surge starting in 1996 and continuing into 1997. Expansionary money creation was used by these countries to cope with their economic difficulties.

The results for the interest rate spreads convergence are qualitatively similar to those ones for the price and the money growths. The greatest degree of convergence is found among the Baltic countries, which again should be attributed to the fact that these states forfeited their independent monetary policies by means of introducing tight exchange rate regimes. Having sustained their viability, they implicitly opted for more consistent behavior of major interest rates. Conversely, slower convergence in interest rate spreads within the CEFTA and the first-round countries is probably related to the fact that these countries adopted looser exchange rate regimes and that their central banks used interest rates actively as monetary instruments.

Based on the above findings, one can conclude that the five countries, which signed the original CEFTA agreement, and the five countries that were selected as prospective candidates to join the European Union in the first-round display similar and relatively high degrees of convergence in most variables. Since four countries appear in both of these groups, the presenter attributed convergence to two important factors. First, international trade within the CEFTA framework serves as a natural means of coordinating economic development. Second, the prospective accession to the EU serves as an institutional means of coordination in order to satisfy a set of pre-accession criteria.

An overall comparison of convergence across groups of countries indicates that the Baltic states achieved the highest degree of convergence in basic macroeconomic fundamentals. Thus, the Baltic states represent the most homogenous group of countries in the region in this respect due to the relative absence of domestic monetary policies caused by the adoption of very tight exchange regimes (such as currency board).

The conclusion is that a significant degree of macroeconomic convergence was achieved among advanced CEECs despite diverse starting conditions at the beginning of transformation, different institutional features accompanying transition, or distinct privatization techniques adopted. Common institutional features and economic policies tend to correlate with the higher degree of convergence. This finding is in line with the

neoclassical growth theory that supports the occurrence of convergence among similar countries. Such a process can be taken as a positive sign of the ongoing fundamental transition towards a market economic system within a unified European economic space.

Note explaining the basic methodology of convergence estimation

The convergence measure adopted is based on the following relationship that describes the dynamics of the differentials of the respective variables in a panel setting:

$$X_{i,t} - \overline{X}_t = \phi(X_{i,t-1} - \overline{X}_{t-1}) + u_{i,t} \quad (1)$$

where $\overline{X}_t = \frac{1}{n} \sum_{i=1}^n X_{i,t}$, i.e. group average. In the presence of pooling, the intercept α

vanishes since, by construction, the differentials have a zero mean over all the countries and time periods.

Convergence in the above context requires that the differentials of the respective variables become smaller and smaller over time. For this to be true, ϕ must be less than one and statistically significant. On other hand, ϕ greater than one and statistically significant indicates divergence. Thus, the estimated ϕ provides an indication of the speed of convergence within a given group. From the construction of the test, it follows that, as the value of the statistically significant coefficient ϕ approaches unity, the rate of convergence decreases. In order to remove any possible serial correlation from the data, equation (1) was rewritten in the form of the augmented Dickey and Fuller test. However, existing critical values that could be used to evaluate the critical significance of the convergence coefficient are tabulated only for the case of a large sample size. Thus these critical values do not account for contemporaneous correlation in the residuals that can have a dramatic effect on those critical values. In light of this, it is essential to compute critical values using Monte Carlo simulation. In order to make the speed of convergence much more readily interpretable, the half-life of convergence process was also computed as $\ln(0.5) / \ln(\phi)$.

Discussion of the Presentation of Evžen Kočenda

John Bradley remarked that although the session was on the financial convergence and the EMU, its all three presentations show that the issue of financial convergence was closely linked with the problems of real convergence. As the evidence of many transition countries indicated, proper institutional setup and intensive trading can lead to a rapid nominal convergence on one hand. On the other hand, however, the parallel real convergence (measured for example in the standards of living) may take much longer time. The nominal and the real convergence are intertwined and so much dependent on the issues on the real side of the economy, that the policy-makers should perhaps avoid one-sided views on the issue.

A participant wanted to get more information how to interpret the convergence results of the presentation. For example, what should be the policy response or what precisely should we do about the convergence of the output growth rates? The problem is how the analytical conclusions can be related with the processes and the policies of catching up. What do we learn from a mere fact that some real growth rates are converging?

In his response Kocenda said that his observation was that a certain group of transition countries revealed a systematic tendency in output growth, as well as other correlated improvements in macro fundamentals. What was important that there was a pace of growth that was common for all members of the group. But since they had different levels of output at the beginning, the most desirable would be that the countries with the lower initial levels had growth rates above the average of the group. Only in that case they could catch up with those who produce more per capita in absolute values. But the catching up is not exclusively within the group but also with the EU average level. Then the growth rate of the given transition group must be higher than the EU average. In the economic literature the studied and presented development is called the β -convergence and the presented analysis showed that this type of convergence was evident in the majority of transition countries. Moreover, what we learn from the facts about convergence is that its greater adjustment occurred in countries that were chosen for the first wave by the European Commission and in those that were engaged in more intensive mutual trade. It follows that, even in absence of official national or governmental policies, the requirements imposed from outside and commitments coming from mutual international trade can work as natural means of coordination leading towards convergence.

The presenter also commented on the Maastricht criteria as conditions for the monetary integration. These criteria were created in the early '90s as a policy benchmark for some particular countries and for economies at certain stages of development. The general enforcement of these criteria on the one hand, and a voluntary willingness of transition countries to achieve these measures, raise the question of generic validity of these criteria. Specific historical circumstances in the creation of Maastricht criteria do not vindicate them as an instrument that has no time constraints. Therefore it is a wrong policy to enforce them under different historical and economic set-up. We should be more flexible here and select such criteria for the EMU accession that would be compatible with both the present situation and the primary objectives. Here the fast catching-up is a leading aim and some of the Maastricht criteria may become a barrier to that process. The argument can be valid in an opposite way: if the accession countries get to the situation of the EU countries, as they were in early '90s, including their price levels, GDP per capita, institutional arrangements and the social development, then the relevance of Maastricht criteria could be rising again.

Peter Backé's reflection on this was that even in early '90s there was a huge discussion about the relevance of Maastricht criteria as meaningful benchmarks. However, there exists a consensus among economists that the accession to the ERM and the EMU requires clearly defined criteria that somehow can be monitored, quantified and handled unambiguously by politicians, without being changed by random events. It would be very difficult, to arrive at a set of new criteria that could be unanimously accepted. There is also an argument that once the Maastricht criteria worked for the accession of Portugal or Greece, it should be equally acceptable for the accession of Czechia, which has now probably an even better starting position than did Portugal and Greece in the late '80s. Furthermore, the inflation criterion should be fulfilled for the "reference period" only – that is merely for one single year. The Maastricht criteria's strength is that they force the accession economies to be driven by underlying structural changes on the supply side, instead of driving them by loose wage or lavish fiscal policies. Otherwise the monetary union would not function smoothly in the long-run.

Kocenda's reply was that Portugal and Greece were different in early 90s from the majority of present transition economies at least in two fundamentals: Portugal and Greece did not have to plunge through so many painful structural reforms, and their privatization did not have to be so intensive. Getting a "passing grade" in the inflation criterion just for one year seems to be a mere formal and rather passive requirement that circumvents the core of economic convergence.

A discussant joined the debate about the rationality of Maastricht criteria by asserting that we should not underestimate these benchmarks and their guidelines as an economic policy know-how asset that went through many years of successful testing. However, we should see there certain asymmetry since these criteria drive the attention of policy-makers in the transition countries too much away from the Copenhagen criteria. From the viewpoint of fundamental economic viability, the Copenhagen criteria are much more important. They are more relevant even for the developed countries that do not have problems with the Maastricht criteria. One has to find a right balance between the tendencies to relax the Maastricht criteria and to concentrate on growth. There is, however a danger present: combining the relaxation of the Maastricht criteria with a simultaneous failure on the side of the growth. It looks now that we have no other alternative but "to live with Maastricht", which is to some extent just a formal requirement. Some governments are even prepared to fulfill the inflation criterion by increasing indirect taxes before the one-year reference period and then to take them back – irrespective what will happen after getting the "passing grade". But this is just the least difficult part of the EU and EMU accession that is actually not worth so many discussions. The biggest challenge to policy-makers comes from the Copenhagen criteria that are related to real growth, markets and competitiveness. The transition countries still have much to do in order to comply with them.

John Bradley concluded the whole discussion on the financial convergence and the Maastricht criteria by saying that the inception of the EMU occurred at the time when there was a common will for a massive expansion in the European investment aid programs. This aid was targeted at countries that were going to find it hard to meet the Maastricht criteria. At the same time these programs helped to sustain the competitiveness of the recipient countries within the EU. Debating the Maastricht criteria in isolation means missing the point of much more important objectives. The Maastricht criteria were of crucial importance at the time when some of the EU member countries were heavily indebted – much more indebted than any of the present Central and East European candidate countries are, and their fiscal policies were also in a worse situation. Therefore our attention should be directed more towards growth, issues of structural adjustment and real convergence that are the subjects in the next sessions.

6.3. Nominal and Real Convergence, Euro and Monetary Policy in Accession Countries²⁶

In the last few months, there has been an unprecedented surge in discussions on macroeconomic convergence and readiness of accession countries of Central Europe to join the EMU and introduce the euro. Within central banks, the strategy of monetary policy, choice of exchange rate regime in various stages of the accession period, and the speed of introducing the euro are considered as crucial. Many economists and politicians in accession countries often talk about speeding up the whole process, which could be achieved by the introduction of the currency board with a peg to euro, or by unilateral or bilateral euroization of the economy. They argue that the adoption of the euro “as soon as possible” is the best solution for the accession countries from a political, as well as an economic perspective.

The presenter argued that the decision on the strategy of joining the euro-zone, designing monetary policy and choosing the exchange-rate regime in a particular country should stem primarily from the following three factors:

- level and dynamics of the convergence process,
- mutual dependence of the processes of real and nominal convergence,
- the value assigned to the possibility of pursuing independent monetary and exchange rate policies.

Since the time value of having a national currency might be different for individual countries, we can find arguments which would justify the attempts of some of them to adopt the euro as soon as possible, as well as the desire of others to continue with national currencies, at least for a couple of years after the EU enlargement. Czechia, at the center of this presentation, may be an example of the latter case.

The presenter first clarified the convergence terminology. Real convergence usually means a catch-up in the economic activity, which may be approximated by GDP per capita in purchasing power parity. Broadly speaking, it also means the ability of the economy to cope with competitive pressures from the advanced industrial countries. That is what the Copenhagen criteria talk about. The dynamic component of real convergence is the level to which the cyclical developments in considered economies are similar. Nominal convergence means a catch-up also in the levels and structures of prices in the economy. It may be approximated by the relative price level in static sense and/or by the inflation rate in dynamic sense.

When discussing convergence issues at official levels, central bankers are usually inclined to talk only about nominal convergence, interpreted as the ability of accession countries to meet the Maastricht criteria for joining EMU. Real convergence is often believed not to be a business for a central bank. However, this concept of nominal convergence might be misleading, since both convergence aspects are jointly determined.

That is why the presenter found it more useful some the measures of convergence to combined – especially those ones that bear information about both the level and the dynamics of the processes. One of the possible measures is the nominal

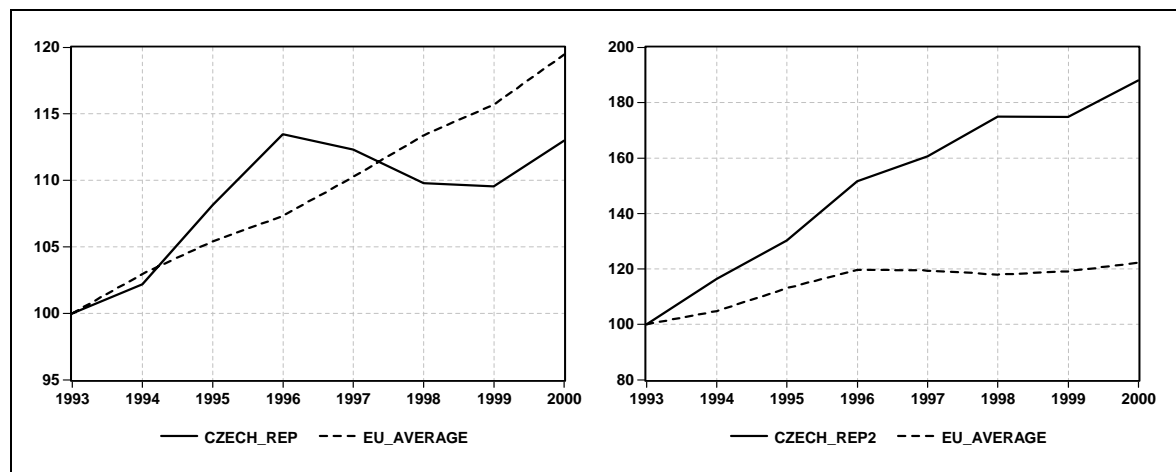
²⁶ This section summarizes the presentation by Jan Frait, The Czech National Bank, (the underlying paper was written by Jan Frait and Luboš Komárek).

GDP per capita, if one considers the static case. An alternative indicator is the relative real exchange rate or the extent of undervaluation of the exchange rate relative to the purchasing power parity. For the dynamic case, the relative growth rate in GDP per capita in euro, or the speed of sustainable real exchange rate adjustments may also be used as indicators of convergence.

Based on GDP statistics, many economists are skeptical about the progress of convergence in the accession countries. Real economic activities are thus supposed to lag significantly behind the performance of the EU. For Czechia it is even believed that it diverges from the trends in the EU for the last 10 years. It is assumed that this divergence is mirrored in a low level of nominal convergence, since the local price levels, as well as the nominal exchange rate are quite low, given the level of GDP per capita in purchasing power parity.

Some of these comments, however, are oversimplified. First of all, it is not correct to evaluate economic performance only by the GDP in domestic currency. One has to take into account also the index that will be relevant at the end of the accession process: the nominal GDP in euros. It is a surprise that this fact has been forgotten even by those economists who studied the decline of the socialist economies from the 1970's to the 1990's. Despite relatively high internal growth rates in some of these countries, including former Czechoslovakia, the terms-of-trade deterioration was reflected in a poor performance relative to the Western Europe. In the future, we should logically expect a reversal of this phenomenon, thanks to the effects of new technologies and know-how inflows that should lead to higher quality of production and improvements in the terms-of-trade.

Figure 6.3: GDP index in the EU and the Czech Republic in CZK and in EUR (1993=100)



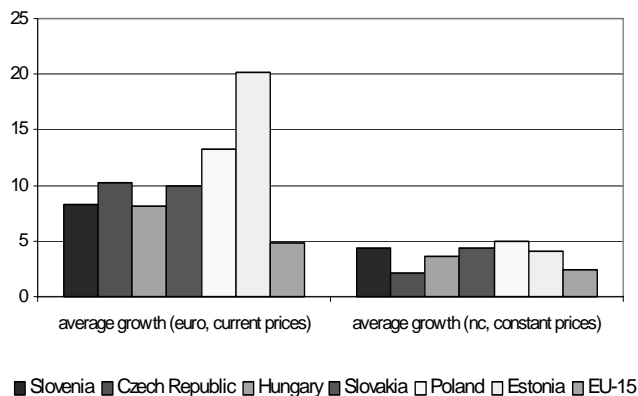
Source: IMF IFS CD-ROM, 2001

The enclosed figures are used for the explanation of the convergence dynamics. Figure 6.3 compares the GDP growth in Czechia with that of the EU. If we compare the real GDP in domestic currency (on the left side), the Czech economy absolutely lost since 1993. However, if we measure GDP in EUR (on the right side), we can see much

of convergence. Figure 6.4 uses the same logic for the main accession countries. Yearly average GDP growth in the respective countries, if compared with the EU average, was much higher when the values were taken in euro than in domestic currencies throughout 1994-2001. So, the convergence is on the way. For Czechia (2nd column on the left-hand side) the picture improves four-fold.

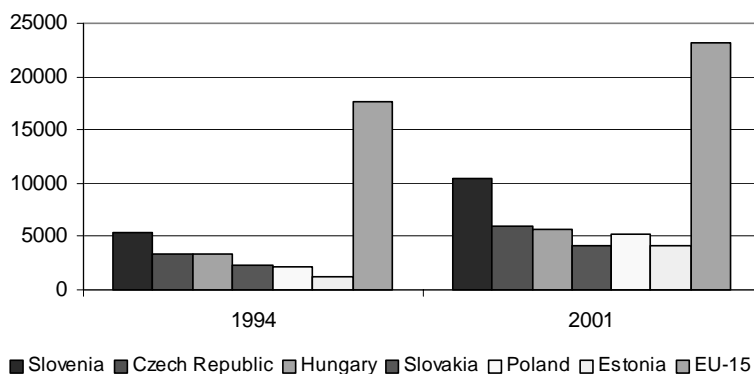
Figure 6.4: Average annual growth rates of GDP in euro and in national currencies

(IQ 1994 - IVQ 2001), Source: IMF IFS CD-ROM, 2001



If we want to assess the level and not only the dynamics of convergence, we have to look at absolute values of key indicators. Graphs in Figure 6.5 compare GDP per capita in EUR in 1994 and 2001 for the accession countries and the EU. The gap is still very large, though it is shrinking in relative terms. This gap is due to a combination of low productivity and low price level. Convergence should thus help to close this gap in a multiplied way. Again, it is easily visible that the differences among the accession countries are minor, and again, there is a clear sign of convergence. Slovenia is still the leader, while the Czech economy keeps its second position and converges.

Figure 6.5: GDP per capita in EUR, comparison of 1994 and 2001



Source: IMF IFS CD-ROM, 2001

A standard approach for assessing the levels of convergence is to use the GDP per capita at purchasing power parity (PPP). It is also useful to compare values of this measure (related to the EU) with values of GDP per capita in euros (also related to the EU). These should be rather similar concepts of the “real economic performance”. However, there is not a perfect correlation between these two concepts. As Figure 6.6 shows, the differences are much lower in euro than in PPP (except for Slovenia). This might be partially explained by Figure 6.7, which shows changes in real exchange rates that can also be to some extent viewed as complex indicators of real and nominal convergence. Generally, the countries with lower GDP per capita and the countries that started reforms later exhibit faster real appreciation. This is in line with the basic idea of convergence. Nevertheless, the figures also suggest that there are significant differences in timing of some reform steps and in certain structural features of reforms in these economies.

Figure 6.6: GDP per capita in accession countries in euro and PPP in 2000 (EU15=100)

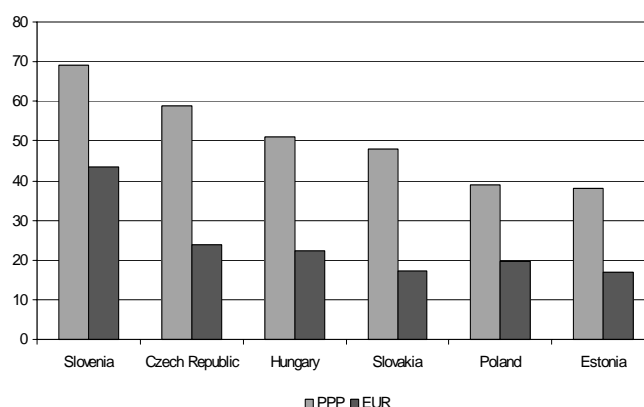
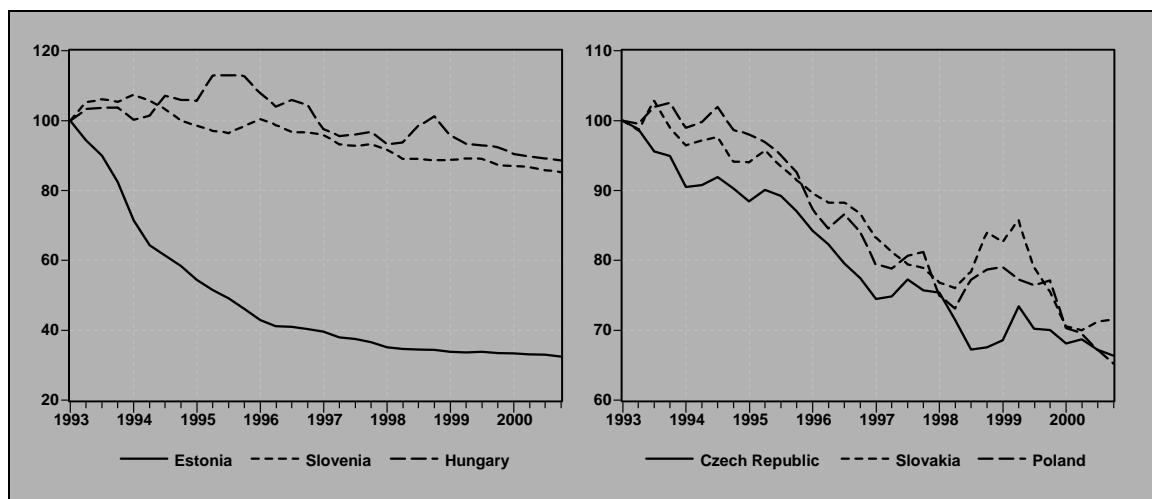


Figure 6.7: Real exchange rates in accession countries (1993=100, EUR rates)

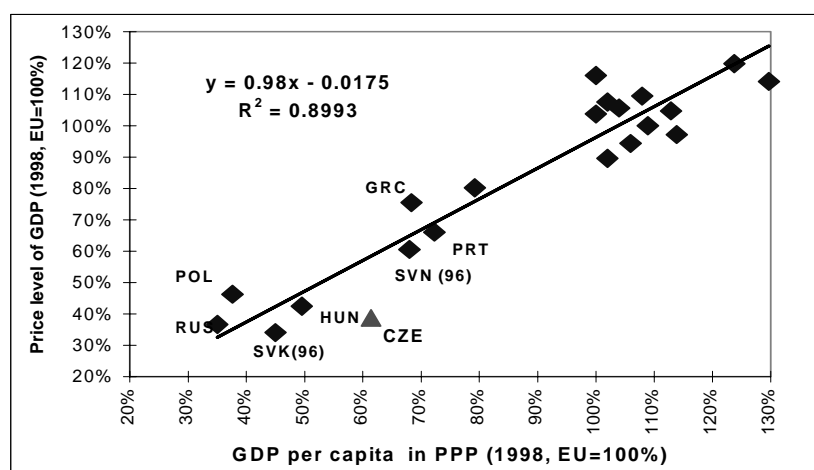


Note: a downward fall indicates real appreciation.

Source: IMF IFS CD-ROM, 2001

All this means that convergence trends in the accession countries are quite similar, even if they used different policies. They differ mainly in timing of particular steps and in adjustment scenarios. What are the challenges to monetary policy created by the convergence process? One of the very live discussions focuses on the potential inconsistency between the effort to join the EMU and the low price and wage levels in accession countries. This applies for all countries considered, except for Slovenia. To quantify the issue, let us use Czechia as a striking example. Statistics based on international comparisons in 1996 show that the price level in Czechia reaches only 35 per cent of the German level and 39 per cent of EU average. In addition, Czechia has lower price level than Hungary or Poland, given the level of GDP per capita (see Figure 6.8). We should be rather careful, however, when using these figures. They are five years old and the Czech price level is now higher.

Figure 6.8: Relative price level in some accession countries and the EU



Source: Čihák and Holub, *Finance a Uver*, No. 6, 2001, pp. 331-349, www.financeauver.org

The fact is that further convergence in price levels (i.e. the real exchange rate appreciation) can be achieved either through higher inflation or through nominal appreciation of domestic currencies. It is also true that inflation targets of accession countries are generally too ambitious. Nevertheless, it is a fact that during last two years, the inflation rates in all accession countries considered went to the levels around 10 per cent or below.

Let us look now at some simple arithmetic. Currently the Czech prices equal approximately 50% of the EU average. In the period before joining the EU, there is no external limitation for price-level convergence via higher inflation. The limit stems only from inflation targets of the Czech National Bank. If the inflation stays in the target corridor during 2001-2005, the inflation differential might increase the relative price level by 10%, at its maximum (counting also for growth in administered prices). In the second period, i.e. during the membership in the ERM II, the scope for the relative price level increase would depend on the Czech inflation target as implied by the relevant Maastricht criterion. With the current set of information, the annual price-level convergence may be only 1 or 2% in that period. In the third and last period, i.e. after

membership in the euro-zone, further price-level convergence will logically proceed only via higher inflation. The accession countries, as EMU members, will then face no formal limitation for the inflation rate. The inflation target of the ECB is set for the whole euro-zone and the inflation rates in the individual countries differ. In countries with a price level below the EU average and with a faster economic growth the inflation rate should be higher. The nominal convergence can slowly carry on.

The example presented above suggests that the scope for price-level convergence via inflation differential is really limited in the Czech case. Nevertheless, this does not directly mean that the inflation targets are overly ambitious. When talking about inflation targets we have to have in mind risks implied by potential dangers of relatively high inflation. In the environment of nearly perfect capital mobility, any small open economy with relatively high inflation faces not only major obstacles to pursuing independent monetary policy, but it is also challenged by the risks of monetary instability caused by external shocks.

Prior to joining the EMU the nominal appreciation of domestic currency might play an important role. Floating rates, as well as the ERM II, enable this quite comfortably. Price-level convergence via nominal exchange rate appreciation has some advantages since it effectively changes not only the absolute price level (in euro), but also the structure of relative prices, especially between the traded and the non-traded commodities. Nevertheless, it is a razor's edge policy since it may slip into a position when the exchange rate is overvalued, domestic producers lose competitiveness, and risky current account deficit accumulates. This is the first crucial challenge for monetary policy makers. However, it is not the only one.

One of the very important aspects of nominal convergence is the asymmetric downward rigidity of prices of tradable goods (e.g. in reflecting the productivity gains). If this rigidity is high, ambitious inflation targets may prove to be inconsistent with growth needs of the accession countries. The Czech National Bank has been following the idea that there is a trend for an equilibrium real exchange rate appreciation of around 5% a year. The inflation targets create scope for an inflation differential of 2 or 3% a year. Logically, then there must be a nominal exchange rate appreciation that would push the prices of tradables down, so that the non-tradables prices can grow sufficiently, while the inflation stays within the target band. If the nominal exchange rate appreciation were not producing a decline of tradables prices, then the whole mechanism would break down. The consequence would be that the inflation targets could be met only at the expense of medium-term movement of the real income below the potential level. However, keeping the real income up is the crucial point of the monetary policy in the subsequent years.

The third challenge for monetary policy in the accession countries is the adequate setting of interest rate policy. It should reflect two groups of factors. The first is associated with the long-run fundamental features of the economy, while the second with business cycle fluctuations. The first group determines what the Czech National Bank staff calls „policy neutral level“ of interest rates. This is the optimal setting in the situation when there is no need to react to a deviation of inflation from its target and of income from its potential level. The policy neutral level evolves according to the expected inflation and movements in the equilibrium real interest rate. While the expected inflation is subject to standard modeling and estimation techniques of the

central banks, the movement of equilibrium real interest rates is a question of chosen theory rather than of empirically based calculations.

One of the possibilities is that the decision on equilibrium real interest rates is derived from the real interest rate parity. It says that expected real exchange rate depreciation equals real interest rates differential minus risk premium on the domestic assets:

$$(z_{t+1} - z_t) = (r_t - r_t^*) - \sigma_t ,$$

where r_t and r_t^* are domestic and foreign equilibrium real interest rates, $(z_{t+1} - z_t)$ is expected equilibrium real exchange rate depreciation and σ_t stands for a risk premium. The equation can be used for the calculation of future trends in domestic equilibrium real interest rate, given the trends in equilibrium real exchange rate and in risk premium. This might be a controversial statement. If we apply traditional growth theory, we believe that a converging economy will have relatively high marginal returns on capital and thus relatively high real interest rates. During the convergence process, domestic real interest rates would approach the foreign ones from the upper side according to the diminishing returns. However, this is a situation natural for closed economies. In a small open economy, which is facing arbitrage on financial markets, the real interest parity is a more relevant framework for real interest rate calculations. Given that, the domestic real interest rate will be higher than the foreign one only when the risk premium is higher than the rate of equilibrium real appreciation. If we set the risk premium on a reasonably low level, domestic real interest rates may approach the foreign ones from the lower side.

We can qualify the above argument in more details. If we assume the existence of real appreciation of accession countries currencies against euro, we cannot at the same time assume a higher real interest rate (compared to euro-zone) without adding a very high risk premium to the equation. Speaking about the present Czech situation, it is realistic to assume a real appreciation of the koruna against the euro by a few percentage points a year, as well as a slow decline in risk premia. As a result, there should be relatively low real interest rates, which may fall below the euro-zone real interest rates and may even decline for a certain period of time. This may be transformed to unusually low policy-neutral interest rates. One of the accompanying features of the situation might be a negative real interest on deposits. In this situation, policy-makers may be forced to push the interest rates higher than would be the rates derived by the way presented above with the implication of restricting the growth potential.

There might be a large difference between Czechia and some other countries that may have chosen a different strategy for their EMU accession. After painful macroeconomic stabilization in 1998-1999, the Czech inflation was brought to very low levels and enabled the Czech National Bank to keep easily the interest rates on nearly the same levels as in the euro-zone. When looking at current macroeconomic situation in Czechia, we can see that the two main advantages of fixed exchange are not of much help as a policy instrument. The Czech National Bank has sufficient anti-inflation credibility and has no need for importing low inflation from abroad. Also the risk of a currency crisis is rather low in a foreseeable future. The possibility of having independent monetary policy thus still has some value for the Czech economy. In a floating rate regime, interest and exchange rate policies may be used as an effective tool for the stabilization of business cycle. It is the cycle smoothing that, among other things,

supported the excellent performance of the Western economies in the post-war period. Also the tendency in the Czech fiscal policy to act in a pro-cyclical way sometimes calls for countervailing measures of monetary policy. Given this, the independent interest rate and exchange rate policies might play an important role in the overall macroeconomic stabilization not only before joining the EU, but also a few years after that. On the contrary, the policy of adopting euro in the “as soon as possible” style (especially as a unilateral euroization) could be understood by the economists as an experiment of politicians, rather than a project for a smooth entry into a modern European economy. The EU might view an approach like this as a non co-operative and populist act. This could also lead to a loss of public confidence in the common currency and in the process of economic integration in general.

Discussion of the Presentation of Jan Frait

A discussant raised a question on what grounds the Czech National Bank came to a conclusion that there is a trade-off between the Czech real and nominal convergence, and what is the intensity of such relationship.

The presenter’s response to the links between real and nominal convergence was by using a hypothesis. Let us assume a situation where there is an instant introduction of the euro in some small transition economy. Will there be any real impact of that on the economy? Some economists’ answer is that there will be no real changes – just the new currency will adjust proportionally the absolute level of all prices. But this is a naïve belief because there are significant effects present that go beyond the nominal adjustment. There is the downward price rigidity, the money illusion, a different role of the fiscal policy, a different process of the real interest rate setting; there are also changes in the inflation tax, seigniorage, monetary policy credibility, risk premia, and transaction costs in general. These are inter-dependent agendas that are not cost free, especially not so for a transition economy.

The issue of the spillovers from nominal to real convergence was raised again by several participants. One of them claimed that it is an absolutely crucial agenda in the policy-making and unfortunately the CEECs can get into a nightmare situation if they underestimate its importance. Basically we know that if inflation is below 10%, it has a negligible negative impact on growth. The present situation in the CEECs is that their inflation is within the band of 3-10%. If the CEECs decide to join the euro-zone prematurely, then their inflation rate will be higher than the EU average, even higher than in the “real converging” countries, such as Ireland, Spain or Portugal. It is the Balassa-Samuelson effect that keeps their differences in balance with the other incumbents, even though the European Commission still says that we should use the fiscal policy to bring the inflation down. The nightmare situation can occur when, before the CEECs join the euro, they are supposed to keep the inflation to an assumed “appropriate level” that could be around 5-7%. But, in order to keep the inflation so low you have to take restrictive policy actions. In the Czech case this is going to be a monetary restriction that would have to appreciate the exchange rate. Unless these policies are completely credible, and unless there is a perfect downward mobility of wages, these measures will be recessionary. That implies the trade-off that was mentioned in the Czech presentation. This may become a very unpleasant pitfall, into which some Central and Eastern European economies are heading to. What are the strategies of the Czech National Bank in order to avoid this trap?

Peter Backé commented on the Balassa-Samuelson effect. What is crucial in this debate, are the particular developments in the extent of the downward rigidity of prices in nominal terms, especially the labor costs. He questioned whether there could be a structural inflation of just 5-7% due to the catching up in accession countries. There is a visible trend for a real appreciation in all transition economies. But what their equilibrium rate of real appreciation will be and how this will fit into the inflation rate – that all depends on the nominal exchange rate developments. It follows as a conclusion that we should be cautious in advising the Czech or the Estonian governments to inflate their economies, for example, to 7%. The problem is much more delicate. It is also very difficult to assess, on the base of the information at the beginning of 2002, how the concrete shape of the short-term Phillips curve of an accession country would look like in 2005. Also how the external environment will develop at that time? Will it be as advantageous as it was in 1997-98 when Portugal and Spain qualified for the euro-zone, or would it be accompanied by some growth sacrifices you would incur from policies concentrated on disinflation? There are so many things, which the policy-makers should consider, that general prescriptions offer limited quantitative guidelines for concrete steps.

As a remark to the ongoing discussion, Jan Frait mentioned that from the outside it might look like central banks having a choice in the levels of inflation and the exchange rate stability. Yet, as a matter of fact, the possibility of “choosing” the inflation is very limited. For example, in the Czech case it was found that the money supply was endogenous and there was little space for the National Bank, under given institutional arrangements, to boost the money supply so that the inflation is higher. Problems emerged with a trend towards too low inflation, lower than was targeted, which was also associated with pressures for an unwanted nominal appreciation. The only way out of it was to accept the relatively low inflation and to set the interest rates at a reasonably low level.

An Irish discussant remarked that adopting the euro often feeds back on institutional reforms. In the case of small economies, such as Ireland, an entry into a fixed exchange rate system pegged to the euro changed, among others, the behavior of trade unions. If we talk about the trade unions and medium-term forecasts for the labor market, the primary concern would be the credibility of the exchange rate. Trade unions recognized much more than before that any devaluation would pump uncertainty into the wage bargaining system and damage the institution of trade unions. That is one of the advantages of small countries in adopting the euro. The Baltic states can benefit from their earlier currency board arrangements in the future euro-zone: in case asymmetric shocks hit their economies, they will be better prepared to respond through an adjustment in the labor market.

7. Structural Conditions in the Candidate Countries - Role for EU and World Bank Support for Catching up

7.1. Framework for World Bank Group Support to EU Accession Candidate Countries of Central and Eastern Europe ²⁷

The presentation of Roger Grawe had two parts. The first covers retrospectively the kinds of activities the World Bank (WB) has been involved in the candidate countries during the past decade of transition. The second deals with the more prospective issues of how the WB sees its role in the candidate countries in the period leading up to accession, and possibly after the accession.

A basic question is why the WB is involved in Central Europe? The Bank is a development institution with the primarily goal to fight poverty and to do that globally. One of the key reasons why the WB is involved in the accession process is because accession is intermeshed with the transition process, and in the early 1990s the WB was asked by its new and older members to play an active role in facilitating the transition. The second reason is that all the countries in Central Europe and the Baltics, as they became members of the Bank, were at income levels that qualified them to borrow from the Bank, thus to be fully participatory partners in the WB.

While the main goal of the World Bank, as an institution, is to fight poverty, the Bank is convinced that that goal cannot be achieved without pursuing sound economic and structural reform policies. Therefore the Bank feels that in Central Europe, as elsewhere in the world, it has a role to play as a driver of economic reforms.

The framework for cooperation in Central Europe, particularly in the context of accession, consists basically of three elements. The first is related to the program “*Agenda 2000*”. The WB recognizes that the prime policy driver in the region is the accession process, and Agenda 2000 provides the framework for that. So the WB gears its support around that. Furthermore, the Bank realized that it needs a *mutual understanding between the Bank and the other international institutions* that are involved in supporting the Central European countries. Therefore the World Bank, together with the other parties, has formulated a so-called Memorandum of Understanding that provides the basis for collaboration with the EU and various international agencies. This is an acknowledgement by the Bank that for the accession process the European institutions are the key reference points and institutions, while the WB plays an increasingly subsidiary role.

Finally, the third element of collaboration with other partners consists of the *consultative process* that has developed over the years: the Bank is consulted with the Commission on its Regular Reports about the progress of the candidate countries and on other Commission documents. At the same time, as the WB prepares its Country Assistance Strategies, Country Economic Memoranda, and Public Expenditure Reports for the accession countries, it consults upfront regularly with its key international partners.

²⁷ This section summarizes the presentation by Roger Grawe, The World Bank.

In the following, the key areas are discussed, in which the WB has been involved with the accession countries. In many ways, the most important area is *advice and technical support*. Here the key document is a Country Economic Memorandum which focuses on the coming accession and which was prepared for all the ten accession countries. There are two major themes of these memoranda (in fact each of these are very thick reports):

- a) The management of the fiscal costs by looking at the fiscal trade-offs, and the macro-economic framework in which these trade-offs are made.
- b) The coherence and sequencing of reforms sector-by-sector. The objective is providing the third party a neutral view of what are the key issues of maximizing the benefits of accession, and minimizing the costs.

In addition, the WB has prepared a number of technical and research papers. Some of these are overviews, like the one that looks at the income convergence process across the board, another on labor and social policy issues also across the board, while others are more specific dealing with individual countries.

Further to these documents, the WB has provided technical assistance for particular reforms, critical to the accession process and growth. Foremost among those is *fiscal sustainability and efficiency*. This covers areas such as pension reforms, tax administration, public sector management, and fiscal de-centralization. The second key area is the *financial system and enterprise sector reform*. These are both important parts of the broad transition process and of the criteria for accession, i.e. creating a functioning market economy able to compete in the European Union. This is an area that we will continue to be involved in through the joint IMF-World Bank financial sector assessment program, which is part of a broader global program of ensuring a common set of fiduciary guidelines for financial sector performance throughout the world. In Central Europe, the accession countries have been the leaders in this financial assessment program (FSAP), and these assessments have been completed for all the accession countries.

In addition to advice and technical assistance, the WB is also a bank that invests. The investments are mostly “hardware based”, but investments are also made in policy reform, through providing balance of payments and budget support. And finally, as recognized, one of the key forms of investments is the help building market institutions. The Bank has been actively involved in establishing cadastre and property rights registration and entitling systems, in upgrading the legal and regulatory framework for the financial sector; and increasingly in legal and judicial reforms.

There was about USD 15 billion lent by the World Bank to the EU accession countries in the past 12 year period. The diversity of the targets for which funds were distributed illustrates the strength, but perhaps also the weaknesses of WB activity: the Bank is involved in practically every sector of the economy. Part of the challenge that the WB faces is how and based on what criteria can the practice become more selective as accession moves along?

The amount of lending to the individual countries is, as a rule, determined by size, criteria, economic performance, and the productivity of investments. In addition, demand plays a major role: in Slovakia, Czechia and Slovenia, there has been relatively little demand for assistance from the World Bank.

As for the future prospects, the WB is looking for ways to tune the relationship between accession to the EU and the so-called *graduation from the WB*. Graduation means that you cease to borrow, but it is a process and not a unique point in time. In fact, there is no direct link between accession to the EU and graduation from borrowing from the WB. But there are *criteria*, which many countries will, or already have, passed, such as income thresholds, overall performance of the economy, its creditworthiness, and ability to access other sources of funds. On this basis, the Bank traditionally develops a phased program to disengage itself from the individual countries.

In this final disengaging phase the following areas were identified in which the WB should be involved: first, there are the global priorities for the Bank, i.e. the aim of supporting global public goods, like *public health issues* – such as fighting tuberculosis and AIDS - and *financial sector reform*. Then there are fields where the Bank has acquired expertise and global experience, has developed a kind of comparative advantage, and it is sure that it would not duplicate the efforts of other partners, particularly those of EU institutions. This aspect leads to areas *not explicitly articulated* by the *acquis communautaire*, such as *social policy*, which is left to the individual member countries in the EU. And finally, there activities based on a meshing of country demand and the Bank's own view of what it sees as important for the individual country articulated in the country strategies. The following issues are, as a rule, priorities for the Bank in the candidate countries: social issues, the public administration and good governance, energy market liberalization, competition in the agricultural sector, and environmental investments.

In addition, there is a new area: the knowledge economy. We support policies and programs for the accession countries that would allow them to compete effectively as knowledge economies. The Bank is setting up collaboration with each country and discussing this in international forums, which hopefully will lead to their own national knowledge assessment, and then to a partnership with the WB for strengthening the knowledge economy.

Discussion of the Presentation of Roger Grawe

A discussant had a question concerning the fiscal costs in meeting the EU requirements. There is a theory, supported by the IMF, that countries should have their level of taxation adjusted to their level of development. For example, a country with annual GDP per capita below USD 5000 is supposed to have its tax revenues around 27-30% of the GDP. On the other hand, this conflicts with the requirements, put by the Commission on the EU applicant countries, to upgrade their infrastructure, environment, education and public sector, which are financed from public resources. It also implies adjusting the present level of fiscal revenues to a level comparable with some current EU members, which means in many cases a substantial increase in the tax quota above 40%. The question is how do we reconcile these inconsistent views?

Roger Grawe in his reply stressed that the conflicting relationship between the tax burden and the public expenditures needed for the restructuring is an issue that is addressed by the policies of the World Bank, though its approach is not identical with that of the IMF. Instead of starting from the ideal tax-rate ratios, the World Bank commences with the question how to finance the investments that are necessary for accession. There is a search for additional resources that could be available for these investments. The first point is that there has to be a rapid growth. The IMF prescription

here is to minimize the disincentives to growth that high tax rates have. However, we must be aware that there are tradeoffs and the gradual movement to higher tax rates cannot be suppressed for long. However, there are a couple of other sources of effective finance than taxes that the accession countries can take advantage of and use them more intensively than some of their EU neighbors. First there is the reallocation of public expenditures and their increased efficiency by using an alternative regime. Massive improvements can be achieved in the field of social expenditures, pension schemes and health financing, which often cover up to 40% of the public finance. Pension reforms that were initiated in Poland, Hungary and Croatia can shift a lot of the responsibility, that was originally a part of the public expenditure, directly on individuals and on the growing private sector participation. The increased role of public-private partnership in the provision of infrastructure is another way to relieve the pressure on public finance.

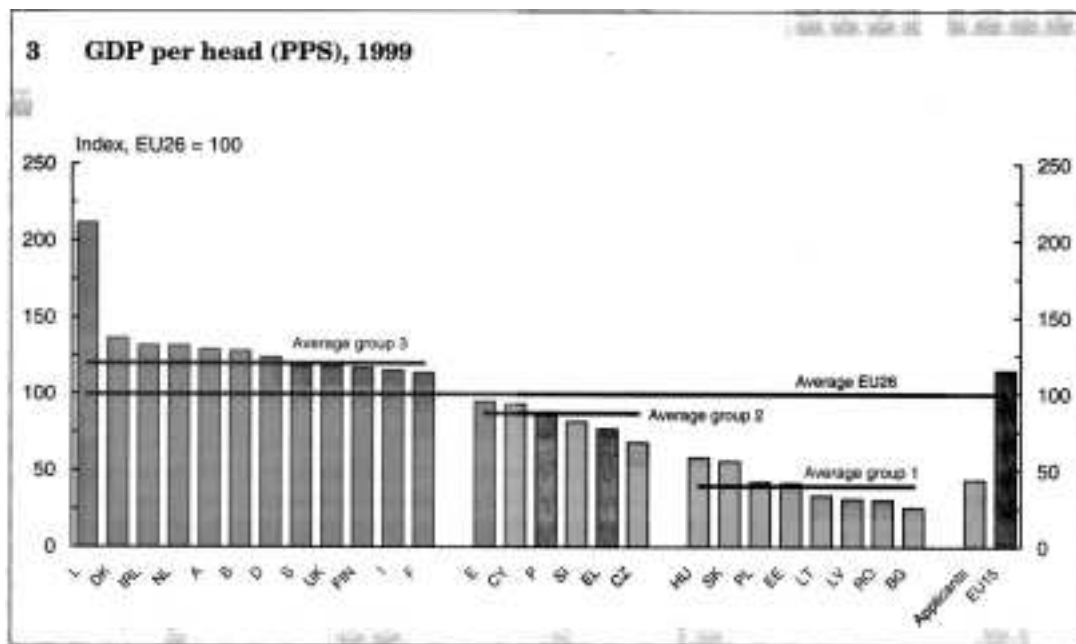
7.2. National Development Plans and Pre-accession Structural Funds: Experiences of Ireland, Latvia and Estonia²⁸

Both development economists and policy-makers in the European Commission often raise the issue of “problematic regions” subject to structural support in the enlarged European Union. These are regions with GDP per capita below 75% of the EU average (after enlargement). The majority of them will be in the East, covering all the new East European members with some minor exceptions; in addition, there are pockets of poverty in parts of Greece, the Mezzogiorno and Spain. Among the incumbents, Ireland and Portugal are regions that succeeded in making the transition and which will be above the poverty line.

Therefore, there is really a three-tier Europe that exists today. If we take the EU average index at 100% (see Figure 7.1) there is the first group of countries above average (or which will not be eligible for the structural funds) that include all the present EU member states, with the exception of Spain, Portugal and Greece. In a second tier, we have Spain, Portugal, Greece, plus two accession countries – the Czech Republic and Slovenia. In the third group we have the rest, which are all the accession countries. The challenge is to accelerate the growth of the less developed CEECs.

²⁸ This section summarizes the presentation by John Bradley, The Economic and Social Research Institute, Dublin.

Figure 7.1: GDP per capita at purchasing power parity in 1999 related to the hypothetical average of enlarged EU with 26 members (index EU26 = 100%)



Every two years the Commission issues a report on how cohesion and real convergence are going. In its Second Report, it states, “If the applicant countries from the East were to experience the same rate of growth as the cohesion countries in the past decade – that is Ireland, Portugal, Greece, Spain – their present level of GDP per head implies a convergence process lasting for two generations. Even with the kind of growth in Ireland, experienced over the past decade, it would take 20 years before they reached 90% of the EU 15 GDP per head.” That is a really serious challenge for the policy-makers.

Why was the EU regional policy expanded and reformed in the post-1989 period? We can find the following reasons:

- The progressive enlargement of the EU after its foundation in 1956 – when there had been a degree of homogeneity at the national level – brought about an ever-increasing degree of socio-economic heterogeneity with the entry of Ireland (1973), Greece (1982), Portugal and Spain (1986). This induced a growing willingness to address regional disparities within nation states as well as between states.
- In addition to the simple aspect of enlargement, the internal and external socio-economic challenges faced by the member states and regions became more complex and forced EU policy makers to address the task of preparing weaker states and regions to handle such initiatives as the Single Market, Economic and Monetary Union (EMU) and more recently the development of the transition of economies of Central and Eastern Europe.

- (c) While all nation states operated internal regional policies of various types, what was different about EU regional policy was that significant financial resources were made available by the wealthier member states to fund regional policy initiatives in a limited number of the poorer member states as well as poorer regions of states. The available EU budget had initially been dominated by the need to support the Common Agricultural Policy (CAP), but there were major expansions in resources to fund regional development aid through the so-called Community Support Frameworks (CSFs) of Structural and Cohesion Funds over the periods 1989-93, 1994-99 and 2000-06.
- (d) Finally, the state of economic theory had a significant influence on the expansion of resources for regional development within the EU. In particular, advances in the “new” trade and growth theories starting in the mid-1980s (let us mention here Helpman and Krugman’s work in 1985 and Barro and Sala-i-Martin’s work in 1995) provided a driving force for EU’s regional policy. There were also new ideas coming from the economic geography, the most pronounced among them were by Fujita, Krugman and Venables throughout the 1990s.

The Structural Funds and the national development plans after 1989 became a vehicle for providing a new systematic policy framework. They were designated to cope with the lagging regions. The Objective 1 Regions were defined as those whose general level of development lagged behind that of the EU average, and whose GDP per head was less than 75% of that average. The CSFs were designed to improve growth on a long-term basis through improving the supply side performance. They were directed at the promotion of structural change, faster long-term growth, and real convergence. They were neither palliative nor short-term. They were negotiated in a very detailed way. Each country was invited to prepare national development plans. It was a type of a “wish list” of infrastructural investment and other types of public investment that the national government wanted to support. This was negotiated through Brussels and eventually came out as CSF. They were accompanied by very strict monitoring and evaluation requirements.

How are the CSFs organized? We should look first at the horizontal aspects. For example, with Ireland there was a social partnership involving trade unions, business organizations and the government. They were involved in the design of the national development plans but not in the actual implementation. As to the vertical aspects, Ireland and other smaller countries subject to CSF were very centralized, so that vertical aspects were insignificant for them. On the other hand, some future recipients (let us mention here Poland) will be much bigger, so these programs can be expected to be decentralized. Entire programs were broken up into targeted operational subprograms. For example, there were operational subprograms for roads, education, etc. The Finance Ministry in each of the recipient countries had an overall managing role for their operation.

The next question is, “how are the CSFs monitored ?”²⁹ In the first place, there is the financial monitoring. In the case of the EU countries, existing standards of public

²⁹ Monitoring is a term that is usually used to describe the verification of adequate compliance with policies agreed and codified in the CSF treaties and their supporting documents, including financial aspects (including such questions like: “was funding spent according to the plan?”), as

finance were used. These existing systems, with relatively minor modifications, were broadly used to receive and record EU aid, to combine it with domestic co-finance in the appropriate proportions, and to monitor its disbursement to institutions, firms and individuals who operated approved schemes. In the case of East Europe this could become a problem. In addition, there was physical monitoring dealing with the flow of data from the regions to the center, or the way in which the outsourcing was implemented. For example, in the road construction, it involved a process of monitoring information about the progress of individual projects. The flow of data went to the implementing Local Authority or the National Roads Authority, and from there to the Department and the Operational Programme Monitoring Committee. The third monitoring instrument can be called socio-economic monitoring. This involves the control of special agencies that combine a blend of evaluation and monitoring.

So, we have arrived at the problems of CSF evaluation. Evaluation occurred at the level of large projects and complete programs. Very interesting issues evolved in this process: cost-benefit analysis, for example. What operational concept of the opportunity cost of labor should be used when unemployment is high? This is not a trivial issue and its implications in assessing the efficiency of projects are substantial.

Then there is the evaluation at the level of entire CSF of the structural programs. The question is: "is the cohesion objective of structural funds attained"? In other words "Is real convergence being promoted?" This takes place on an ex-ante, mid-term, and ex-post basis. The three-stage evaluation starts before a treaty with structural funds institutions in Brussels is negotiated. Then, being half-way through the program, a midterm assessment is concluded. Finally, the whole project is evaluated after termination. This evaluation is designed to improve the program - to designate project areas, which are not needed, and to identify new areas to work on. For example, in Ireland, the promoted "sunrise industries" tended to include broad-band communication capacity, as this area became a bottleneck. Another role of evaluation was to stress the dissemination of knowledge and coordination of all actors.

Macroeconomic evaluation can occur at a micro level, a mezzo level, and/or at a macro level. At the macro level, you need appropriate economic models. These were largely absent from Portugal, Spain, Greece, and Ireland – in the late 80's – and a lot of research was needed to develop them. The big question was "How do you link public sector investment to private sector economic performance?" This is exactly where growth theory has been focusing. One has to distinguish between exogenous and endogenous impacts of policies. Let us take infrastructure investment into roads as an example. The objective is to reduce the production costs of industries, to relax the production constraints and to strengthen the economic environment. At the end the new infrastructure increases the competitive performance of both the region and the whole economy. Improved competitive advantage makes the region more attractive. There is more inward investment, less outward migration and a renewal of competitiveness in many industries. But more important, particularly for the Irish case, there was an endogenous process that structural funds unleashed. It led to specialization, since structural fund investment and its externalities supported some industries more than the others. It allowed the industries to diversify and develop their new productive niches.

well as the collection and analysis of relevant activity and performance indicators (length of roads built, number of people trained, etc.).

Many local, domestically owned companies could now cover wider economic areas, which strengthened the local economic base. Thus, competitiveness was renewed through a self- sustaining process.

There are three actors involved in this process:

A/ Domestic policy makers: The design of the CSF is mainly their prerogative, subject only to an overseeing role by the Commission. The actual package of measures put together in the CSF responds to national and regional (political and economic) priorities, often extending many existing but smaller domestic programs. There is usually only limited interest in the finer details of their mechanisms and impacts, possibly encouraged by the generous and relatively unconditional external aid element. Instead, crude measures of the likely immediate benefits of the CSF tends to be believed, derived by augmenting the public element of the CSF expenditure (the EU grant plus domestic co-finance) by a multiplier of between unity (pessimistic) and about one and a half (optimistic), with little thought initially given to exit strategies from the CSF aid programs.

B/ The Commission monitors: The overall size of the CSF budget and its allocation across countries is decided at the highest level of the EU, mainly in a political context. The bulk of the activity of DG REGIO, the responsible Directorate-General, is focused on monitoring activity (i.e., ensuring that the EU aid is spent on what was approved within the CSF), rather than on macroeconomic evaluation (i.e., on finding out what impact was the CSF likely to have). Thus DG REGIO itself finances only a very limited model development, although some contract budgets of the modelers tends to be incorporated into the evaluation through “sectoral studies”.³⁰

C/ Policy modelers: The modelers, although reporting to national administrations and to the Commission, are outside the CSF design loop. The availability of models has been uneven throughout the Objective 1 regions, with perhaps Ireland best served, and Portugal least well served. Moreover, although the available models are suitable for evaluation of the expenditure (or demand-side) impacts of the CSF, they are not always suitable for evaluating its restructuring effects. Thus, modelers have to deal with a situation where CSF impact evaluation analysis is never an “off-the-shelf” routine application of standard models, but often calls for new research and model development.

We can distinguish the following five stages of evaluation :

- 1) The aggregation of the wide variety of CSF programs from the administrative and departmental categories used by the policy makers into categories related to the key economic mechanisms, i.e., physical infrastructure, human resources, productive structures;
- 2) Definition of a suitable benchmark simulation for the economy in the absence of the CSF, but with explicit assumptions about other policies like the Single Market, the Common Agriculture Policy, GATT, etc.;

³⁰ For example, the HERMIN modeling project for the four main Objective 1 regions, to be described below, was financed as part of the JOULE II energy-environment research program of DG XII.

- 3) Analysis of the standard Keynesian impacts of the CSF programs, tracing out the impacts of domestic and EU-financed investment expenditures on aggregate demand and the public sector finances;
- 4) Implementation of a method of quantifying the long-term supply-side impacts of the CSF program, working through factor productivity increases and cost mechanisms;
- 5) Quantification of the CSF impacts in terms of deviations from the benchmark simulation.

What lessons can be learned from our past experience with the evaluation of structural funds? For that task you must have some tools of analysis. In the first place one needs appropriate models. That was the special area of research of the presenter in the past. These models were applied in many countries - both among the present EU members and among the applicant countries. The success of that applied research depends on the need for new theoretical advances in trade, growth and spatial economics. This is economics of development, because structural funds are involved in development issues and not in stabilization issues.

Since much of the research is technical, it is hard to describe results in a purely verbal way that makes sense to policy makers. The Commission has set up various programs in an effort to ease the communication gap between researchers and policy makers. One of them was called "MEANS" and it was implemented in the DG REGIO.

A second lesson is that the notion of cohesion within the existing European Union, as this concept evolved from the late 80's, is closely related to the idea of transition. Once the initial shake out of the CEECs is complete, they get on a path of cohesion and their restructured economies begin to converge. Can the accession countries learn from the experience with Structural Funds in cohesion countries? For example, is Ireland a case study of successful regional EU policy in a cohesion country? Ireland's key factor of success, as it will be for Latvia and Estonia, was that the economy was opened to the rigors of international competition. However, international competition is a necessary, but not a sufficient condition. Take the case of Greece. Greece is one of the most closed economies in the EU; the ratio of exports to GDP in Greece is around 17%. This ratio is smaller than in the United Kingdom or in Germany. So if you want to examine the Greek case, the lack of openness underlies much of their difficulty.

The support of international competitiveness is another issue. There were four domestic policy strategies that accompanied this external orientation, and not all of them started in 1989 when the structural funds became available. First, you need a stable domestic macro policy environment where stop-go budgetary changes do not disrupt business planning. That's the case in Ireland, and there is an obvious parallel to be used with the Eastern and Central European accession countries. Second, in Ireland there was a steady build-up of education and training of the work force. Though these basic reforms started already in the 60's, they accelerated in the 80's and 90's, particularly in building small, third level, technical universities in the regions.

Third, the converging economies need major improvements in the economy's physical infrastructure - mainly in transportation and communication. Fourth, and last, there is the facilitation of the growth of a competitive business sector through improved

management, quality marketing, better services, lower costs of utilities, and more systematic linkages (“clustering”) with other complementary activities. The context here is not so much an economic analysis, as it is the involvement of practical business. In other words, the framework in which this last domestic strategy was carried out was the Porter’s diamond of competitive advantage. It was largely the way László Halpern was looking at it in his presentation earlier at this workshop.

If a successful policy-induced convergence is to emerge, there is the appearance of a self-reinforcing process – which would require neither big government nor its widespread bureaucracy. That is why the case of Ireland is interesting. A whole series of initial reforms and its induced changes came together, which made the processes of catching-up self-reinforcing. There was an initial clustering of industries, mainly foreign owned and mainly high technology. Many of them were in the area of computers and pharmaceuticals. They were supported by local suppliers of specialized inputs subject to economies of scale. This process was initiated by a basic tax incentive that was designed back in the 50’s. Initially it was a zero rate of corporate tax, and after joining the EU it was set at 12 ½ %, what is also its level now.

We can see that the corporate tax incentive was just a catalyst that could operate only if the other, more substantial conditions were satisfied, especially in the area of labor market and human capital. What happened then was that Ireland began to build a local labor market for skilled workers. It evoked more flexibility on the supply-side, which resulted in a classic Marshallian increase in returns. This is the point where the human capital issues fed in both before and after the structural funds came into operation.

Then the increasing returns to scale further build up by bringing into the stage the spillovers of information. For that purpose the country needs good physical infrastructure. You need to be able to link your big towns and cities, to improve the communication between enterprises, and to link the country with international markets. It is of crucial importance to get information and commodities in and out of the country, without barriers.

Finally, to ensure success, there must be a consensual process of social partnership to achieve that there were as few “losers” as possible in the economic restructuring. Growth, as a result, will be less likely to be choked off by industrial unrest or by an action of non-cooperation, invoked by individuals scared of reforms. Here, Ireland had to learn from the Northern European models in Sweden or Denmark. From the mid-1980s, there was developing a consensus for social partnership that assured that efficiency was accompanied by equity. For example, high-tech foreign owned firms could have de-stabilized the wage bargaining equilibrium by paying higher wages to foreign owned firms than to domestic industries. As a result, a type of a “Dutch disease” could have occurred where the domestic traditional sectors would be crowded out, but employment in new (foreign dominated) industries would not absorb all displaced labor. Instead of this, the social partnership equalized the potential wage imbalance and insured a national average evolution of wages, where foreign firms paid slightly less and the domestic firms paid slightly more than they each would have originally offered. Thus, if the Irish case has any interest to transition countries, it is the outlined holistic treatment of policies, enterprise initiatives, openness issues and policies creating the public consensus.

Discussion of the Presentation of John Bradley

A discussant asked about the framework of coming structural funds allocation. We have a very comprehensive explanation about how these funds were allocated in the past transfer system. However, the applicability of past experiences is not fully compatible with the new framework. In January 2002 the Commission released guidelines about the distribution of agricultural, regional and cohesion funds for the period 2004-2006. So far there was little discussion about the procedures for drawing regional funds. It was also not well explained how the past criteria for the distribution of cohesion funds in the EU countries could be applied in the accession countries, or if the targets are only in the infrastructure and education, which are mostly covered by the cohesion criteria. Will the distribution be national or regional?

Another participant added to that a question whether the organization of pre-accession funds alone has been changed recently and whether we can expect a major difference in the policies of transfers only after the accession.

A further participant had a question on job creation policies. In the past, Ireland had serious problems with unemployment and its policies were targeted to promote employment. In the last 10 years this situation changed. Was it due to domestic policies? What was the role of the EU funds in this development?

John Bradley's answer to the first question was that this issue remains to a large extent unexplained. His experience from analyzing the pre-accession funds distribution in Latvia and Estonia reveals that, in comparison to the past CSFs, the size of these funds was small and their usage was subject to numerous restrictions. In the past, the EU cohesion funds were distributed above the CSFs and were designed to pay for the basic infrastructure development. The contribution from Brussels was up to 90% of the total costs. Having watched the evolution of the debate on the procurement and the usage of similar funds in the CEECs, one can see significant differences. There are various limits and inflexibility for their deployment and the whole atmosphere for their phasing-in is not free of grudging sentiments from the side of the EU. One can only speculate about the reasons for that reluctance. Maybe, the transition applicant countries are still judged as not sufficiently restructured. Under such uncertainties there are always voices among the major contributing countries that call for caution and controls.

If we look at the evolution of the first three structural fund programs (1989-93, 1994-99 and 2000-2006), at each stage there was an attempt to draw earlier commitments back and it required certain political coalition buildup to enhance the programs instead of restricting them. Maybe the new applicant countries do not have that political power that build the required critical mass of political alliance that shape the continuation of this basic EU policy instrument. Nor is there a visible consensus of the candidate countries coming with a common stands on these funds. It was perhaps a lucky coincidence that Spain became a strong player on behalf of the cohesion countries.

As to the Irish policies enhancing employment, there was observed a spectacular success in fighting unemployment and developing the human capital. The structural funds were not originally targeted on active labor market policies, such as the re-training schemes or the community work schemes. It was dominantly the overall growth of the Irish economy, which boosted the demand for labor. Initially it affected the short-term unemployment that fell to zero around the mid 1990s. Only then there was the

impact on the long-term unemployment, on the people unemployed for years. Under the present schemes of structural funds there can be proposed projects for public investment and public training policies that can be co-financed from Brussels and which can potentially reduce unemployment. But even here, the holistic approach has better chances to succeed, than simply concentrating on an instrument dealing with a particular local problem. That problem is a symptom of a wider failure in the economy and only by curing its roots can the country succeed in finding sufficient funds for sustaining a convergence to the EU levels.

John Bradley's experience with the organization of pre-accession structural funds does not show that it went through such a fundamental changes in quality and quantity that would alter the conditions for public investments in CEECs. In the past, as the structural funds were introduced to the four EU "cohesion countries", the entire public investment programs in Portugal, Greece and Ireland became oriented around them. It was a fundamental change, because they were large enough to dominate the public investment. They also introduced a principle that public investments became planned, multi-year and complex programs. It is not evident that the pre-accession funds had a similar impact on the present applicant countries. By reading the information from the European Commission or from the press, there seem to be a lot uncertainty present about the organization and procedures for the operation of structural funds in the future. If these funds come to CEECs below certain critical mass, they become just auxiliary programs of secondary importance. Then, however perfect their technical design will be, the drift of public policy in the area of investment will continue in its provincial ways just as it was in the past. At the same time, Brussels will not get sufficient control of these processes and may lose motives for sustaining such policies for a sufficient period. The benefits of structural funds came to Ireland or Portugal with a large lag of 8-12 years and the amounts involved were incomparable to what the CEECs are getting or are expected to get. That makes one worry about the success of structural funds in countries waiting with high expectations for the next enlargement.

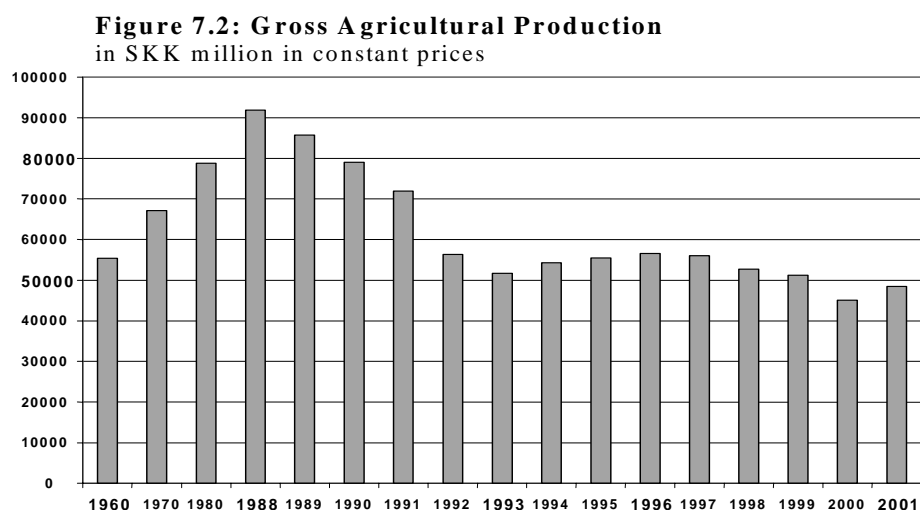
7.3. Agricultural Policy and the EU Transfers – Experience from Slovakia³¹

The agro-industrial sector in post-communist countries became a hot issue after transition commenced in 1990. Agriculture is usually interpreted as a relatively small sector covering 2-6% of the GDP. In reality, the importance of this sector rests in its deep political dimension that is associated with wide externalities throughout the national economy and the society. After 1989, in Slovakia the land tenure and the role of state support to agriculture were among the first changes that came into play. The formerly generous subsidies for large-scale state or collective farms were significantly reduced, which resulted in a sharp reduction of production and income in these units, and a significant reduction of employment followed. Agricultural labor was pushed out of the sector, contributing to the fast growth of the unemployment in the country. In Slovakia the labor in farms was reduced from 326 thousand in 1990 to 178 thousand in 1993 and to a mere 119 thousand in 2000. The downsizing of the sector, as is illustrated

³¹ This section summarizes the presentation by Ladislav Kabát, Agricultural University, Nitra (the underlying paper was prepared by Ladislav Kabát and Gejza Blaas).

in Figure 7.2, was caused not only by the falling aggregate demand, but also by a loss of stable and easily accessible state-controlled food and food-processing markets.

The lack of managerial ability to respond properly to market signals, price liberalization and international competition contributed to the further reduction of the agricultural output and incomes. Over a relatively short period the entire agro-industrial sector became one of the industries most seriously hit by transition characterized by extremely low investment, hidden unemployment and by its growing contribution to the country's foreign trade deficit. There was a rapid deepening in the disparity in wages in this sector relative to all other industries.



In line with the post-1990 Czechoslovak legislation the cooperative and state farms had to re-establish their ownership of the land with original landowners in 1948. The expected broad-based development of efficient family-type private farming did not happen due to several factors: the lack of a real interest from original claimants; low support from government and other institutions to facilitate the transition; weak or missing financial intermediation; the lack of professional managerial and technological experience of new owners.

The current situation in Slovak agriculture is presented in Table 7.1. After ten years of political and economic reforms, the large-scale farms still dominate with about 78% of the agricultural land being in their possession. While the share of Slovak farming land tenure cultivated by individuals is less than 9 %, in Czechia it is almost 30 %, in Hungary over 55 %, and in Poland over 80 %.

Table 7.1: Number of holdings and the land use by farming undertakings in Slovakia

Legal form	Number of holdings	Number of employees	Agricultural land [in hectares]	Average size of land per holding [in hectares]	Share on total agric. land (in %)
State farms	1	222	924	924	.04
Cooperatives	738	55773	1 165 241	1 579	47.74
Commercial companies	647	21 663	720 039	1 113	29.50
Private farmers	20 355	20 355	216 771	10.6	8.88
- of which over 100 ha	465	465	118 618	255	4.86
Other agricultural land	0	1 536	337 692	0	13.84
Total	0	0	2 440 667	0	100.00

Source: Green Report, 2001, Bratislava

The large-scale farms have experienced growing financial difficulties. In 2000 there were only 53 % of corporate farms and other agricultural legal entities reporting profit, while in case of private farming there were 73 % of profitable farms. Total agricultural output in 2000, if compared to its pre-reform level in 1990, reached 75%. The direct sectoral contribution to GDP was 4.1 %, as can be seen in Table 7.2. That is still higher than approximately 2% share in the EU. . In negotiating the Slovak EU accession, there is a conflict of interest in deciding which year should be taken as the basis for the setting of agricultural quotas and subsidies. The European Commission prefers the latest year, arguing that the level of early 1990s, as proposed by Slovak authorities, does not represent the natural size of the sector, due to its artificially supported high and extremely inefficient level in late 1980s.

Table 7.2: Share of agriculture in national economy and its regional comparison in 2000

Country	Agricultural area		Agricult. production	Agricultural employment		Agro-food trade	
	'000 ha	% of EU area	% of GDP	'000 employees	% of total employment	% on total import	% on total export
Czechia	4,282	3.25	3.4	193	7.4	6.5	4.4
Hungary	5,854	4.44	3.9	227	4.8	3.7	9.1
Poland	18,220	13.34	2.9	2698	18.8	7.4	8.9
Slovakia	2,444	1.85	4.1	119	6.7	7.0	3.8
Slovenia	491	0.37	2.9	81	9.9	7.0	4.3
EU-15	131,619	100.00	2.0	6767	4.3	6.8	6.6

Source: Eurostat, 2001

In 2000 Slovakia's agricultural trade realized a sizable deficit of 16.8 billion SKK. Slovakia's exports to the EU in 2000 were mere 4.0 billion SKK, while imported value in the same year reached 13.7 billion. Despite Slovakia's low share of agriculture on the total trade, its commodities are participating in the total country's trade deficit with over 39%.

Concerning its productivity per hectare, Slovak agriculture is still lagging behind the productivity parameters in the majority of transition countries and in the EU countries, as is shown in Table 7.3. The results are especially disturbing if we consider that a large part of the lagging behind cannot be explained by exogenous factors, such as the climate or the soil quality, but remains subject to factors that can be changed by policy and organizational measures.

Table 7.3: Comparison of the yields per hectare for selected commodities and countries in 2000

Country	Wheat	Barley	Maize	Sugar beet	Potatoes	Rape-seeds	Legumes
Czechia	4.23	3.44	5.96	43.62	20.46	2.63	2.48
Hungary	3.62	2.80	4.10	41.82	21.43	1.56	1.89
Poland	3.13	2.51	5.00	35.41	18.98	2.03	2.12
Slovakia	3.10	1.99	3.04	30.37	15.47	1.46	1.19
Slovenia	4.20	3.02	6.94	43.11	19.74	.	1.59
EU	5.83	4.86	8.83	59.22	25.14	2.98	2.77
Slovakia / EU (in %)	53	40	34	51	61	48	42

Source: Green Report, 2001, Bratislava

In addition to the technological gap in primary agriculture, there is the low quality of final products, which can be traced to the low level of agricultural products processing. Taking into account the large-scale farming practices and the relatively high degree of the government support, the present unsatisfactory results point also to large potential gains if more up-to-date approach to agriculture is undertaken.

There is a frequently raised question, what kind of government support should be given to agriculture, in particular when comparisons are made among the different production structures and systems. Starting from the European Community, this support has developed over the last decades into an extremely costly and complicated policy tool, which serves the local farming systems but has often an adverse effect on the world agricultural market, particularly on the agriculture and the economy of developing countries. The initial purpose of the subsidy policy of the Slovak agriculture was to safeguard a sufficient amount of food for domestic consumption under the centrally planned economy with a limited dependency on foreign trade. The food shortage is not a relevant factor any more to support such a policy. The existing subsidy policy in Slovakia's agriculture should be seen also as a response to similar policy tools applied by Slovakia's trade partners and mainly by the EU countries. Information on Slovakia's subsidy policy and its comparison with the other CEECs, EU and OECD countries are presented in Table 7.4.

Table 7.4: Production subsidy estimate and total subsidy equivalent (TSE)

	Producer subsidy estimate (PSE)					TSE	
	In % of gross agric. production		USD per:			as % of GDP	
			hectare of agricult. land	farmer in '000 USD			
	1999	2000	1999	2000	2000	1999	2000
USA	25	22	129	116	20	1.04	0.92
Australia	5	6	2	2	3	0.41	0.38
Canada	17	19	48	58	n.c.	0.74	0.80
New Zealand	1	0	4	2	0	0.32	0.26
Norway	67	66	2 362	2 089	29	1.76	1.79
Switzerland	72	71	3 030	2 813	29	2.15	2.06
Japan	64	64	11 614	12 307	28	1.6	1.59
Korea	69	73	9 579	10 543	26	5.5	5.25
Mexico	15	18	40	57	1	1.13	1.31
EU	43	38	832	655	14	1.52	1.32
Czechia	20	18	170	130	3	1.56	1.32
Hungary	23	18	185	138	3	2.86	2.34
Poland	21	20	155	121	1	2.00	1.45
Slovakia	24	22	149	118	3	1.50	1.70
OECD	37	34	210	188	10	1.39	1.26

Source: OECD Statistics, 2000-2001

The key figure is represented by the Producer Subsidy Estimate (PSE), which reflects the level of transfers and/or calculated level of support to producers through the special protection trade measures and/or direct payments³². This indicator for Slovakia in 2000 was 22%, while the EU average was 38%. The level of subsidies in Slovak agriculture showed a decreasing trend over the last years. With 118 \$ per hectare of agricultural land, it is far behind the EU's level with 655 \$ per hectare. In relative terms, the Slovak subsidy level represents only 18% of the EU per hectare support. Almost the same differences are in the full-farmer subsidies, where Slovakia's level represents less than 20% of the EU level. Concerning the individual commodities, the highest support level in 2000 was reported for sugar with 44%, poultry 39%, milk 35% and wheat with 17% of PSE, while the respective PSE figures for EU were 49% for sugar, 57% poultry, 43% milk and 43% for wheat. A more detailed breakdown of the PSE and Total Support Estimates (TSE) for Slovakia and European Union is presented in Table 7.5.

³² The interpretation of the figures in Table 7.4 must be treated with caution. For example, the subsidy equivalents indicated in terms of \$ are not direct grants transferred to farmers for their arbitrary use. The values of PSE indicate the equivalent of policy-induced interventions (such as tariffs, input cost subsidies, price regulations, variable levies, export subsidies, etc., that raise the income in agriculture per hectare or per farmer above the level without them.

Table 7.5: Structure of the Producer Subsidy Estimate (PSE) and Total Support Estimate (TSE) in year 2000

Subsidy cluster		EU		Slovakia	
		Mil Euro	% of TSE	Mil SKK	% of TSE
	Total agricultural production (TAP)	215 003		51 476	
1	Producer support estimate	97 907		13 763	
-a	Market price support & % of TSE	57 522	51	1 516	9.7
-b	Direct payments & % of TSE	40 385	36	12 247	78
	Out of that:				
	Payments on output	5 114		1 177	
	Payments on area planted/animal numbers	24 890		3 480	
	Payments on historical Entitlements	624		0	
	Payments on inputs	6 500		4 279	
	Payments on input constrains	3 194		40	
	Payments on overall farming income	0		3 271	
2	General services support estimate	10 185		1 779	
3	Consumer subsidy estimate	-48 356		-3 576	
	Out of that - transfers :				
-a	a-from consumers to producers	-52 257		-2 344	
-b	b-other from consumers	-200		-106	
-c	c-from taxpayers to consumers	3 841		12	
-d	d-excess feed costs	259		-1 138	
4	Total support estimate	112 305		15 554	
-a	Transfer from consumers	52 457		2 450	
-b	Transfer from taxpayers	60 048		13 210	
-c	Budget revenues	-200		-106	
	PSE in %	38		22	
	TSE as % of GDP	1.3		1.7	

Sources: OECD Statistics, 2001, Paris and Green Report, 2001, Bratislava

The important information, more closely describing the existing support mechanism, is linked to participation of different players in the subsidy game. Particularly the role of producers, consumers and taxpayers should be clearly differentiated and quantified. According the available information, the consumer subsidies vary significantly between the EU and the OECD countries. For example, the OECD average for a consumer subsidy estimate (CSE) is -26 %, while in Korea its level reaches -69 %, New Zealand -2%, Slovakia -7%, Czechia -11%, Hungary -11% and Poland -17%. The low level of consumer participation in support mechanism is at the same time compensated by a higher participation of the broader taxpaying community in covering the costs of the support policy in the given country. The burden of

agriculture is thus in transition countries shifted from consumers (who do not have to pay higher prices) on taxpayers.

The detailed breakdown of the producer subsidy estimate shows significant differences not only in the absolute values of subsidies allocated in the EU and Slovakia, but also the structural differences among the elements of the subsidy policies. While the dominant share of Slovakia's total subsidies are allocated in the form of direct payments (78%), in the EU countries it represents 36%. Another significant difference is linked to the market price support, which represents in the EU more than 50%, while in Slovakia it represents less than 10%. It should be noted that the whole relative policy support of agriculture in Slovakia is not as low, as is sometimes argued by using absolute values (similarly as it is in many other transition countries). For example, while the current total subsidy estimate for Slovakia's agriculture represents 1.7% of the GDP, in the EU it reaches 1.3%.

The prospective accession of Slovakia to the EU is a challenging opportunity for its agricultural and food sectors. The critical question is the issue of competitiveness of the sector on the enlarged market. It should be separated into two issues: the case of primary farm production and the case of processing industry. The processing industry has to align with the *acquis communautaire* very soon and undergo a significant modernization. This adjustment maneuver is estimated to cost 2.4 billion SKK. The question is where to get this money? Most expectations are directed towards the enhanced FDI inflows. There the situation in various branches of processing industry may be different. Those at the secondary processing stage, where the presence of foreign investors is distinctively high, may enjoy a competitive advantage. On the other hand, in the primary agricultural production the situation may vary by commodities. In general, this sector may rely in the short-term perspective on comparably low factor costs and for a longer perspective on the positive gains from the economies of scale. On the negative side, the permanent income strain and under-capitalization of the sector represent a threat to its viability.

The use of economic accounting data in order to provide performance comparisons between the EU farm sector and that of accession countries may be misleading due to the existence of significant gaps in economic parameters – first of all in the amount of budgetary transfers, and second in the gaps in producer prices. Product subsidies (compensatory payments) contribute to higher value added per unit in the EU in comparison with transition countries. In Slovakia (but also in Czechia and other transition countries) the liberalization policies generated a severe deterioration of agricultural terms of trade, as the indicator of nominal protection coefficient (NPC) may show. While the gap between NPC values of the EU and Slovakia during the last years of planned economy was only four hundreds of points (NPC EU=1.85, NPC Slovakia=1.81), the difference soared to 29 hundreds of points during by the period 1998-2000 (1.45 and 1.16 respectively).

The NPC coefficients, however, can also be interpreted as the measure of implicit competitiveness, and in this respect Slovak agriculture in the majority of products shows a competitive position toward the EU. Though, deficiencies in competitiveness are apparent in several livestock products - such as in pig meat, poultry meat and eggs, crop products are in general competitive.

For comparative studies on competitiveness of the Slovak agriculture, the data on nominal protection coefficients (NPC) for producers (PSE) as well as consumers (CSE) is presented in Table 7.6.

Table 7.6: Comparison of the PSE and CSE and their NPC for selected CEECs, EU and OECD

Country	PSE	Nominal protection coefficient	CSE	Nominal protection coefficient
Czech rep.	18	1.10	-11	1.10
Hungary	18	1.14	-11	1.12
Poland	20	1.25	-17	1.23
Slovakia	22	1.08	-7	1.05
EU	38	1.37	-29	1.45
OECD	34	1.43	-26	1.42

Source: OECD Statistics, Paris, 2001

The levels of NPC in the EU and the OECD countries are significantly higher than in the candidate countries. More detailed economic analyses in the transition countries indicate that within the food chain there is a very low allocation of value added in favor of farm producers. This is due to inefficiencies in processing and marketing of their food products, which are partly caused by a monopsony-type of competition and low transparency on the national markets. This may disappear, after accession. There are also other expectations linked to Slovakia's EU accession in the agricultural and food sectors:

- Establishment of producer organizations will strengthen the market position of primary producers;
- Better market access for unprocessed products (e.g. crops or beef) and processed commodities (e.g. dairy products) which show comparative advantages;
- Larger and more competitive input and service markets generating a relative price moderation;
- Improved access to bank loans and an extended range of other financing services to agriculture;
- Acceleration of farm restructuring and technological refurbishment as a result of increased demand on the land market.

The weaknesses of the Slovak agriculture, as regard to its competitiveness after accession, rest in the protraction of some legacies from the past. Two critical issues are in that field, namely the insufficient progress in the settlement of ownership in corporate farms, and the continuation of the capital outflow from the sector.

The EU Commission has estimated that the transition period prior to and especially after the accession will be essential for candidate countries to allow them a gradual harmonization within the new socio-economic system and this process requires the adequate financial backing. An estimated annual support for Slovakia through the

special accession program for agriculture and rural development (SAPARD) represents 18.6 million EUR. The additional financial support for candidate countries comes from the Instrument for Structural Policies for Pre-accession (ISPPA) that supports the major infrastructure projects in the field of environment and transport infrastructure. Based on this source, Slovakia is entitled to obtain an additional funding between 36 and 57 million EUR annually. However, it is the responsibility of the Slovak side to fulfill all the required conditions to be eligible for these funds and to speed up the complicated accession process in the agricultural sector.

Discussion of the presentation of Ladislav Kabát

A discussant raised the issue of competitiveness of agriculture in those transition countries, which retained their previous organization of farming, characterized by large collective farms. Though it was supposed to be a handicap at the beginning of transition, it now seems to be an advantage. After restructuring and the development of their entrepreneurship, large farms can become competitive, especially within the framework of the EU.

In his answer Ladislav Kabat pointed out that it is true that many of the Slovak large-scale farms – successors of the formerly established Soviet type of co-op farming – are highly competitive, especially on the production side. The EU is expecting that they should be further restructured. Firstly the land ownership should be clarified, so that the property rights can be duly enforced. Without it collaterals, profit sharing, governance and investments are difficult to manage. In 2000 approximately 50% of large farms reported some level of profit. This result should further improve and there is much space to be filled in the large farms in order to get their competitiveness to a shape that would guarantee their viability under the EU frameworks.

A participant from Hungary raised the issue of the ownership structure in the agro-business. It was mentioned that in Slovakia the share of individual or family farming is much lower than in Hungary or Poland and that many past organizational forms of farming were retained. Would it then imply that Hungary is a good example of transformation in the agriculture and that small-scale farming is a more progressive form? Experts on the agriculture in Hungary are not so sure in that respect. Hungarian farms seem to be too small and many of them are highly uncompetitive just because of that.

The response of the presenter was that we should not think that private (individual) farming automatically implies “small”. For him the positive side of “private farming” meant particularly the advantage of clearly defined ownership, which the Slovak collective farming lacks. In Slovakia the large-scale farmland should not be split to individual plots as a policy of first order. Their main problem is in a difficult enforcement of the property rights. For example, currently 15% of land is still without owners, and up to 40% of land is subject to unsolved ownership claims.

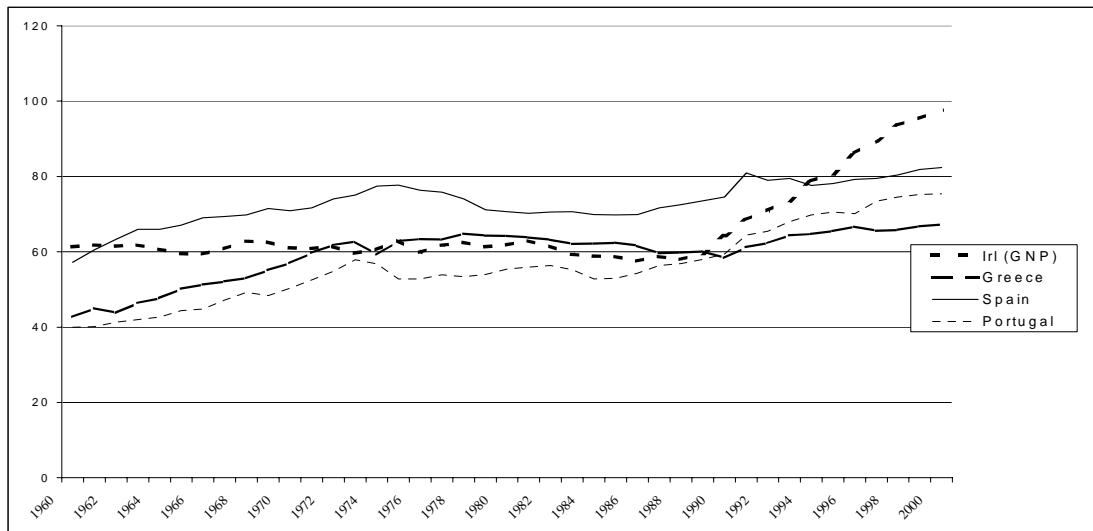
8. R&D, Foreign Direct Investment and Spillovers

8.1. EU Accession and FDI Flows to Central and Eastern European Countries: Lessons from the Irish experience³³

The presentation of Frank Barry was generally policy-oriented. Most of FDI in Central and Eastern European countries (CEECs) comes from Western Europe. It is market-seeking, rather than export-oriented, and it is relatively low-tech. The presenter suggested that uncertainties about CEE public policy, public administration and the timing of accession explains why high-tech export-oriented multinationals have not yet begun to invest heavily in the region. Those CEECs that will resolve these uncertainties most successfully are likely to become highly attractive to these firms, holding out the possibility of a rapid real convergence to the EU living standards.

Ireland's convergence to average EU living standards was exceptional over the course of the 1990's. It moved from a lagging position of less than 70% of the EU average GNP per head (where it had remained over the 1960s, 70s and 80s) to parity over a single decade. This convergence experience, along with that of other historically less developed EU periphery states, is illustrated in Figure 8.1.

Figure 8.1: The Convergence Experiences of the EU Periphery Countries in GDP per capita related to the EU average



Source: Eurostat, National Accounts, Brussels, 2001

As is apparent from the period of 1973-1990, we should be warned that convergence is not automatic. Part of the reason for the delayed convergence of Ireland

³³ This section summarizes the presentation by Frank Barry, University College, Dublin.

over several decades was the fact that the proportion of the Irish labor force with higher educational qualifications lagged behind that in the rest of Europe for long and that Ireland dropped its protectionist stance much later than most of the rest of Western Europe. The precise timing of the spectacular turnaround in the late 1980s is ascribable to a number of concurrent developments: a dramatic increase in FDI inflows, particularly from the US; the stabilization of the public finances and an associated improvement in cost competitiveness since 1987; the increase in EU Structural Funding from 1989, and the development of the Single European Market over the same period³⁴.

Ireland's FDI-based strategy has arguably been crucial to the explanation of the rapidity of recent convergence. It can be demonstrated on empirical data how the inbound FDI drove the structural changes associated with economic modernization and income convergence. These changes were in the areas of converging production structure (increasing similarity of Irish economy with the European industrial core; increasing share of human-capital intensive services on employment; increasing firm size), trade structure (share of modern manufactures in aggregate exports; increasing intra-industry trade levels), and in the R&D-orientation of the Irish economy.

The questions we should ask next are as follows:

- What were the macroeconomic and microeconomic policies that have allowed Ireland to capture such a high share of FDI in strategically important sectors?
- May the CEECs be able to follow a similar strategy with a similar success?
- What policies in the CEECs could release many of the blockages preventing them from attracting this type of high-tech FDI?

Over the course of the 1990s, as shown in Table 8.1, the inward stock of FDI in the ten CEE applicant countries increased 23-fold and the tendency for its high growth will continue. Nevertheless, the FDI inflows into CEECs differ from the kind of FDI that Ireland attracted in three important ways: export orientation, technology level, and country or region of origin.

³⁴ Readers can find more information about these problems on the website of Frank Barry. See some of his recent papers on Irish economic growth at <http://www.ucd.ie/~economic/staff/barry/research.html>

Table 8.1: FDI inward stock (millions of current dollars)

Country	1990	1995	1998	1999	1999/1995
EU	723,455	1,050,270	1,451,159	1,652,322	1.57
EU less Southern Europe and Ireland	633,754	906,485	1,287,744	1,496,279	1.65
Ireland	5,502	11,706	25,647	43,969	3.76
Greece	14,016	19,306	22,048	22,948	1.19
Portugal	9,769	17,579	22,446	20,513	1.17
Spain	65,916	106,900	118,921	112,582	1.05
Total Southern Europe and Ireland	89,701	143,785	163,415	156,043	1.09
Slovenia	666	1,759	2,907	2,997	1.70
Bulgaria	4	337	1,488	2,258	6.70
Czech R.	1,360	7,352	14,375	16,246	2.21
Estonia	1	731	1,822	2,441	3.34
Hungary	569	10,007	15,862	19,095	1.91
Latvia	1	616	1,558	1,885	3.06
Lithuania	97	352	1,625	2,063	5.86
Poland	109	7,843	22,479	29,979	3.82
Romania	766	1,150	4,335	5,441	4.73
Slovakia	87	1,248	2,502	2,044	1.64
Total CEE	3,658	31,395	68,953	84,449	2.69

Source: World Investment Report (2000).

What concerns the export-orientation, there is a widespread agreement that most CEE-bound FDI, rather than representing an attempt to integrate CEE production into EU production networks, has instead been “market seeking”, at least during the period 1990-97³⁵. Home-market share and growth potential were the driving forces behind the FDI that has gone to CEECs over the initial course of transition. At the same time the fact that the CEE automobile market is heavily protected explains the strong inflows into that sector. Notwithstanding the finding that firms with foreign participation are in many countries more export-oriented than domestic firms, the degree of export orientation is nowhere nearly as high as Ireland’s, where foreign companies export over 90% of gross output. In Central and Eastern Europe the enterprises with foreign owners are also intensive importers so that their contribution to the net balance of trade need not be always positive.

As to the country of origin, there is another difference between CEE-bound and Ireland’s inward FDI. Some 68% of CEE-bound FDI has come from the EU, while investments from the US are relatively insignificant. In Ireland, on the other hand, more

³⁵ See the studies of Holland, Benacek, Gronicki and Sass (2000) or Lankes and Venables (1996).

than half of employment in foreign industry and more than 70% of its output comes from the US-owned firms. In terms of the level of technology embodied, CEE-bound FDI appears more similar to the relatively low-tech FDI flowing into Spain and Portugal than the high-tech FDI that Ireland captures. This is demonstrated by the fact that the CEECs have been found to divert FDI away from the former rather than the latter. Table 8.2, which comes from the dataset on the operations of Swedish multinational companies (MNCs), shows a reduction of 14,000 in employment in Swedish MNCs in Southern Europe combined with a rise of 15,000 in Central and Eastern Europe over the period 1990 to 1998.

Table 8.2: Employment by Swedish MNCs in Different European Regions 1990-1998

Year	Sweden		CEECs		Western Europe		Southern Europe	
	1000s	%	1000s	%	1000s	%	1000s	%
1990	339	54	1	0	292	42	20	3
1994	245	60	10	3	140	35	11	3
1998	226	64	16	5	105	30	6	2

Source: Braconier H., Ekholm K.: FDI in Central and Eastern Europe: Employment Effects in the EU, CEPR Working Paper, 2001

Table 8.3 reinforces the notion of a causal relationship by demonstrating the similarity between Swedish MNC operations in CEE8 and in Southern Europe. Average wage costs per employee are obviously much lower in CEECs but these are (to a large extent) balanced by lower productivity levels in the region. One can note the high relative wage of white-collar workers in CEECs and Southern Europe (reflecting the relative scarcity of skilled labor in these regions), to which firms respond by locating the less skill intensive segments of the production process in these regions. This is reflected also in the low R&D-intensity levels recorded in both regions. In a detailed econometric examination of the data, Braconier and Ekholm confirm that the expansion in affiliate-firm employment in CEECs did indeed come at the expense of affiliate activity in Southern Europe. They conclude that “the evidence of specialization in relatively unskilled-labor intensive production suggests that Southern Europe, as the least skill-abundant of the other European regions, is most likely to be hurt by the expansion of MNE activity in CEE”.

Table 8.3: Characteristics of Swedish MNC Activities Across Regions in 1998

Indicator	Sweden	CEE	Western Europe	Southern Europe
Total wage costs per employee · (thousands of Swedish kroner)	311	40	334	214
Value added per employee (as above)	476	78	538	400
Wage ratio: white collar/blue collar workers	1.69	2.12	1.62	1.99
Employment ratio: · white collar/blue collar workers	0.65	0.29	0.48	0.21
R&D expenditures (% share of total sales)	7.2%	0.6%	1.0%	0.7%
Affiliate exports (% share of total sales)	-	48%	38%	40%

Source: *ibid.*

Are the characteristics mentioned above more permanent? Are they likely to continue after the EU enlargement? Based on the European experience one can judge with a high probability that they will change. For example, before Ireland's accession to the EU in 1973, much of the FDI inflow into that country also tended to be market-seeking what was allowed mainly due to high market protectionism in Ireland before 1973. Furthermore, the bulk of it came from the UK and Continental Europe rather than from the US, and it went into sectors other than the "three C's" (chemicals, computers and concentrates) into which most post-accession FDI flowed. Accession is likely to change substantially the nature, origin and sectoral destination of FDI flows to CEE. The presenter argued that uncertainty over future policy stance and even about accession itself, militates against the capital-intensive and training-intensive investment inflows into the CEECs. Also the executives in the US technology and pharmaceutical sectors foresee a shift in the focus of corporate America away from Ireland, Scotland and the Netherlands to countries like Poland, Hungary, Czechia and Estonia, provided that the accession is certain, the controls over corruption is effective and the establishment of a transparent business environment becomes an integral element of that scenario.³⁶

Basing the predictions of expected changes in the CEE sectoral structure on current FDI inflows, the presenter compared their country characteristics directly with those of Ireland and the other EU cohesion countries. As will be apparent, along a number of these dimensions Ireland appears to be more similar to the more advanced CEECs than to Portugal or Spain. This suggests that if the CEECs follow appropriate public policies, they may be successful in attracting high-tech FDI inflows, raising thus the possibility that income convergence may be more rapid than anticipated.

There is a range of other characteristics, on which Ireland has successfully competed with other EU countries for FDI projects. The low rate of corporation tax for manufacturing is obviously of huge significance. Arguably important are the experiences of the country's industrial development agencies ("IDAs"), Irish English-language environment, infrastructure, macro-economic stability, cost competitiveness, skills of the workforce, the efficiency of public administration and the regulatory environment.

³⁶ <http://www.ireland.com/newspaper/finance/2001/0525/fin17.htm>

Table 8.4: Corporation Tax Rates, Effective and Nominal

Country	Average effective tax rate on US MNCs (1992) ^a	Top rate of corpor. tax (1997) ^b
Singapore	5.6	-
China	5.7	-
Ireland	5.8	10 % for manuf., but an increase to 12.5% pend.
Finland	15.8	28
Sweden	16.7	28
Netherlands	17.9	35
UK	19.3	31
Luxembourg	21.6	32
France	22.8	42
Portugal	25.3	36
Spain	25.3	35
Belgium	25.9	39
Germany	28.9	45
Denmark	31.0	34
Italy	32.6	37
Austria	32.6	34
Greece	33.4	35
Hungary	-	18
Czechia	-	39
Poland	-	38 ^b (later 30% + 22% by 2004) ^c
Lithuania	-	29 ^c
Slovenia	-	25 ^c
Latvia	-	25 ^d
Estonia	-	0 ^e
Bulgaria	-	Max of 50% ^c

Sources:

^a Altshuler et al.: Has US Investment Abroad become More Sensitive to Tax Rates?“, NBER Working Paper 6383, 1998

^b National Competitiveness Council, Annual Competitiveness Report, Dublin: Forfás, 2000

^c UNCTAD, Tax Incentives and FDI: A Global Survey, Geneva, 2000

^d <http://www.ernstyoung.lv/oecd.htm#Toc442245117>

^e <http://www.ce-review.org/00/27/sally27.html>

The first column in Table 8.4 shows average effective corporation tax rates on US investments for 1992, while the second column shows maximum nominal tax rates. There is a strong correlation in EU countries' rankings in both columns, which allows one to assess where the CEECs are likely to stand in a comparable ranking. Ireland has the lowest tax on manufacturing in the EU, and is surpassed only slightly by Singapore and China in the world economy. Estonia has set its corporate tax rate to zero and Hungary is also very competitive, while Slovenia and Latvia (and Poland in the near future) do not lag very far behind. We can assume that the average effective corporate income tax rates for CEECs are going to be relatively competitive relative to the EU average.

Because Ireland was one of the first countries in the world to adopt an FDI-based development model, IDA arguably has been able to remain ahead of the competition in terms of the skills and experience necessary to capture FDI projects. With so many others entering the field since then, however, this competitive advantage has been gradually diluted over time. IDA, for example, helped design Costa Rica's strategy to attract FDI, what later helped Costa Rica to beat Ireland, Malaysia and Mexico in the competition to attract a major new Intel semiconductor facility.

Skill levels are usually measured by the educational attainment of the workforce. Table 8.5 shows that higher proportions of the populations of Czechia and Poland have completed secondary education than is the case in Ireland and Spain, though smaller proportions have completed the tertiary schools. The value of the latter point may be questioned if we look at its structure. As the OECD statistics suggest, about equal proportions of the population aged 25-34 in Czechia and Ireland have university-level education (with a slightly lower proportion in Poland). Focusing on scientific attainment, which appears to be especially important for modern industry, the data reveal that higher proportions of scientific and engineering degrees are awarded in Czechia or Hungary than in Ireland (no data appear for Poland). Czechia and Hungary both lead Ireland in terms of the standardized scores, which measure average achievement in mathematics and science at ages 11-12. Spain and Portugal lag far behind along these dimensions.

Table 8.5: Percentage of Population Classified by Educational Attainment, 1995

At least upper secondary (tertiary education is in brackets)

Age group	Ireland	Czechia	Poland	Spain	OECD
25-34	64 (27)	91 (12)	88 (15)	47 (27)	71 (23)
35-44	51 (21)	86 (11)	82 (13)	32 (18)	63 (22)
45-54	36 (16)	83 (11)	68 (14)	18 (11)	53 (18)
55-64	27 (11)	70 (8)	47 (9)	10 (6)	41 (12)

Source: Education at a Glance, OECD, Paris, 1997

Many authors found that a strong R&D environment in a country was associated with a strong presence of high-tech industry, with the presumption that the former caused the latter. The Irish experience suggests, however, that causation may run in the opposite direction. Ireland has caught up on other small EU countries in terms of business expenditures on R&D as a proportion of GDP only lately. This happened, for

example, when established foreign firms changed their strategy and became the leaders in the R&D spending.

In terms of R&D personnel per thousand members of the labor force, Ireland at 7.8 exceeds Hungary at 5.2, Poland at 4.9 and Czechia at 4.5 (with Spain coming in at 5.3). Note though that, as recently as 1993, the Czech figure in the OECD statistics stood at 8, compared to a figure of 5.6 for Ireland at that time. This again suggests that R&D indicators can change rapidly with the changes in industrial structure, without the former necessarily determining the latter. Human capital can become an endogenous factor – rising if the country’s perspectives for growth accelerate – but languishing if the growth perspectives are low.

The degree of central location, closeness to purchasing power or “low peripherality” are other factors that appear to be of importance in empirical explorations of an attractiveness for FDI and trade. Brulhart (1998)³⁷ provides a ranking of EU countries in this regard. The four lowest, in descending order, are Ireland, Spain, Portugal and Greece. While we do not have equivalent data for CEECs, their closeness to Germany would probably put them ahead of Ireland on this measure.

Labor costs in the CEE economies are well below levels prevailing in Western Europe. The Swedish data cited in Tables 8.2 and 8.3 illustrate relative per hour labor costs for manufacturing sector in various countries competing with EU cohesion countries. For example, if we compare Czech labor costs with the situation in Ireland, Spain, Portugal and Greece, it is evident that Czechia comes in as the lowest cost economy (paying an average of 27 Swedish crowns per hour), followed by Greece (at 72), Spain (at 98) and Ireland (at 106). Fortunately for the EU economies, the productivity in Czechia is also substantially lower, which largely cancels out these cost differences. Again, however, on the basis of the Irish experience, one might suggest that if the country is successful in attracting substantial FDI inflows, these inflows will serve to raise productivity substantially.

One area where the CEE economies seem to lag substantially behind Ireland, Spain and Portugal is in infrastructure, public administration and general business environment. Their impact on competitiveness cannot be underestimated. Zinnes, Eilat and Sachs proposed a set of indicators similar to those developed by the World Economic Forum (see the presentation by László Halpern for more details). In terms of the overall indicator Ireland appears in the top ten of the group of about 80 countries, Spain and Portugal appear in the high 20s, Italy in the mid 30s, Hungary and Czechia in the high 30s, followed closely by Greece, Poland and the Baltic states.

The question then is whether the fact that even the most developed CEE economies lag still so substantially behind Ireland, Spain and Portugal also implies that they will not be able to compete for export-oriented FDI. One cannot exclude this at this moment. However, as we have already seen, the rising competitiveness of the accession countries, at least vis-à-vis Spain and Portugal, causes that the leading CEE accession countries are now positioned adequately for targeting their policies for attraction of high-tech multinationals and export orientation. Furthermore, EU accession will itself

³⁷ “Trading Places: Industrial Specialization in the European Union”, *Journal of Common Market Studies*, 36, 3, 319-346.

help to guarantee and enforce improvements in macroeconomic stability, the operation of the financial sector and arguably also the efficiency of public administration. In the most flexible accession countries their present uncertainties and inclinations to moral hazard in policies and in corporate governance may be soon overcome and the credibility of productive orientation of their local economic environment restored.

Finally one more important policy-related implication of the Irish experience should be mentioned. Most studies of the likely effects of EU accession upon CEE economies presume that restructuring will occur in line with the existing “revealed comparative advantages” of CEE economies. On the basis of Ireland’s experience, the implication that CEECs will specialize into the predicted sectors can be faulted.

Discussion of the Presentation of Frank Barry

A discussant, reacting on grounds of his Swedish experience of enlargement, raised the question of language effect and its role in the specific Irish case. The US investors may favor Ireland for locating their European subsidiaries there due to the local language endowment. Another question deals with the asymmetry in the R&D developments. While the existing R&D base can be destroyed by inappropriate policies quite quickly (as some transition countries have shown), its build-up proceeds very slowly and the success of long-term R&D investments can never be guaranteed. On top of it, the R&D investments by the corporate sector are preferred in countries of the enterprise headquarters. As the transition countries rely largely on imported capital and they lack domestic multinationals, the expected R&D inflows need not come to them. Are there policies for precluding such adverse situations?

Another discussant warned that one should distinguish between the generally applicable policies and policies that were subject to conditions specific to Ireland. That concerns not only the English language proficiency of Irish labor but also the back-up of Irish ex-patriots in the USA. Thus expecting the future inflows of the US capital to CEECs, just as an extrapolation of the Irish case, may lead to incorrect conclusions. A workshop participant commented on the approach of the presenter who put two factors into the center of his analysis: the corporate income taxation and the level of education. What about other factors that are usually taken as relevant for the FDI and its efficiency? For example, we can mention labor market flexibility, regulatory transparency and property rights protection. Is the Irish experience also relevant here?

Another discussant argued with the statements of Barry, that transnational corporations in CEECs are market-share seeking, FDI is less export oriented and concentrated on low-tech products. The discussant’s calculations show that three accession countries have already a high share of research intensive products in their production and exports – these are Hungary, Estonia and Czechia – and these had also the highest FDI per capita in the group of accession countries. The share of research-intensive exports of Hungary matches exactly the share that Ireland had in 1999. This need not contradict the evidence of Frank Barry, which was valid for the earlier stages of transition, but it may qualify the issue of structural changes in FDI as the accession is drawing near.

Frank Barry in his reply mentioned that there are three “specificity” issues that appear repeatedly in nearly all discussions. Unfortunately they are very difficult to quantify. It is the importance of English as a native language, the local Irish environment and the US connection via Irish ex-patriots. We should not disregard the

message that the executives of US technology sector revealed by foreseeing a shift in their investment from Ireland, Britain and Netherlands to countries like Poland, Hungary, Czechia and Estonia in the events of accession, declining degrees of corruption and establishment of transparent business environment. It sheds light not only on the importance of Irish specificities but also on the importance of property rights, regulatory environment and institutions. The EU accession will change that scenario fundamentally since it is instrumental in guaranteeing certain standard practices, which are favorable to FDI. As English became the *lingua franca* for international business, the sharply rising proficiency of young generation throughout CEECs diminished the comparative advantage that Ireland and Britain had in hosting the FDI.

There are also other policy factors that are relevant for the attraction of FDI and its productive deployment. Let us mention just few of them: the EU's structural and cohesion funds, physical infrastructure development, macroeconomic stabilization and credible fiscal policies. The economy of agglomerations and increasing returns are in the forefront of R&D investments. Ireland, notwithstanding its small economy, succeeded in providing that critical mass, which brought about the necessary self-enforcing positive externalities. These effects are a guarantee that the deflection of foreign investments to other countries without these externalities can be only a very slow process because the invested resources are locked-in into the present environment.

What concerns the building of R&D versus its dismantling during the transition – the most widely known negative case is the Czech demise of its developed high-tech sector in the period 1991-96. It will take Czechs hard time to re-build it back. A similar situation was in Ireland in 1980s when Intel hesitated in investing heavily to Ireland because Irish human capital in electronics was brain-drained to the USA. The IDA was pressed to establish the missing human capital endowments by calling-in the Irish experts from America, who, to a general surprise, reacted very positively. Thus, by building the R&D base overnight Ireland was able to host successfully its biggest FDI high-tech investment. This is also related to the question of releasing the R&D locked close to the MNC headquarters. The elements of dispersion of R&D out of its original “home” location is visible throughout Europe. The more recent data for Hungary and Czechia point to some new phenomena: the R&D spillovers from the enterprises with FDI, high-tech exports from such enterprises, and an association of FDI with local research activities. It is also evident that more recent foreign-investment enterprises are more R&D intensive than the indigenous enterprises.

The Irish strategy by offering a low corporate income tax became widespread in many, though not in all, transition countries. Those who resist in adjusting it downwards are faced with adverse effects of Laffer curve since their tax revenues will be very low – similar or lower to the revenues with a much lower taxation rate. In addition to that, the country loses on the growth dynamics in existing firms and on the potential FDI inflows. Much experience can be gained from the successful development strategies in Finland and Portugal, though their approach was different. The former relied on the high-tech promotion while the latter followed a more traditional structural pattern.

Rent-seeking and contestability aversion are a part of the modern big business game that was also present in Ireland. In looking at the local judicial investigations, one would observe that nearly all of the scandals occurred in the non-traded sector – such as

property development, public sector and banking. MNCs have a strong bargaining power in playing the national concerns against other countries as their alternative location. As a result, MNCs are able to extract a rent from their unique market position. In on-going privatization under the EU acquis, the governments cannot restrict tenders for takeovers of public utilities and networks to domestic owners only, even though their regulation can still be domestic. Many governments are tempted to sell them to MNCs as natural monopolies in order to get a higher price boosting the budget revenues. Ireland did not proceed further in selling the network businesses, so Barry could not comment on the Irish experience in that respect.

A Hungarian participant from the audience offered an additional explanation of the white collar/blue collar differences in wages and employment shown in Table 8.3. There is a natural sequence in the FDI structure and inflows reflecting the uncertainty and information costs. If the uncertainty is high, the FDI just sets the trading contact posts. As the uncertainty gradually decreases, they expand their involvement into the service industries, then into manufacturing and only at the end they invest into the R&D. For example, such was the case in Hungary, where it took 10 years until the General Electric agreed to establish its European Research Headquarters in Budapest. This gradual evolution was more a natural process than an outcome of local promotion policies.

9. Human Capital and the Restructuring Process

9.1. Human Capital, Education in Transition Economies and the Future Catching up³⁸

Transition economies are special, many of them resembling to, but still most of them are distinct from the traditional developing countries. Probably one of the most distinct features of the transition economies is their high human capital endowment relative to their standard of living. Middle-income developing countries, as a rule, may have the same standard of living as the transition countries, but lag behind them in human capital.

In some of his works the presenter tried to argue that there was a significant tension in this situation of having a human capital that has out-run the standard of living. This imbalance cannot actually exist on the long run. The good news is, and this was also the core of Frank Barry's presentation at this workshop, that one can envision a process of rapid growth, whereby the standard of living rises very quickly to become consistent with the human capital level. Sadly, however, there is also a more negative scenario, that human capital levels can, in fact, drop and become consistent with the lower level of standard of living. If we do not focus on transition economies, but on many other countries in the world, there is ample experience for human capital dropping to lower levels and thus becoming consistent with a lower level of standard of living.

³⁸ This section summarizes the presentation by Michael Spagat, Royal Holloway, University of London.

Table 9.1 presents two measures of human capital in transition economies in 1989-1999: enrolment in pre-primary school programs and in basic education. Pre-primary programs are not mandatory, unlike primary schools. We see here that in some countries pre-primary school enrolment rates have plummeted dramatically. Such countries are Armenia, whose enrolment in 1989 was at 48.5% and dropped to 24.9% by 1999. Kazakhstan has also showed a complete collapse, as generally the other countries of the Caucasus and Central Asia did. Many studies have shown that pre-primary school programs can have big and long-lasting effects on children's trajectory through the education system. This opportunity has been lost recently in many transition countries. In the Western CIS, the situation varies (Moldova, for instance, losing out, while Belarus holding its level). Generally speaking, Central Europe is doing fine: in countries such as Czechia, Hungary, and Slovenia, we see even improvements in the enrolment rates. The second block in Table 9.1, basic education enrolment, shows that in some transition economies mandatory schooling is not realized probably because there is a substantial child labor problem. However, in most countries we are getting close to full enrolment.

Table 9.1: Comparison of basic education enrolment

Country	Pre-primary education enrolment			Basic education enrolment		
	1989	1995	1999	1989	1995	1999
Czechia	81.3	77.5	85.4	96.9	99.6	97.7
Slovakia	77.9	57.4	69.5	97.0	97.5	107.5
Poland	48.7	45.3	49.9	97.9	97.2	98.3
Hungary	85.7	87.0	87.3	98.5	98.5	98.7
Slovenia	55.5	62.2	70.2	95.1	96.7	
Croatia	29.4	31.0	33.8	94.0	89.0	92.4
FYR Macedon.	26.8	27.7	28.7	102.0	97.9	98.9
Bosnia	-	-	9.8	93.8	97.6	-
FR Yugosl.	24.1	26.8	29.5	95.1	72.9	66.1
Albania	42.5	28.9	27.7	102.2	96.8	90.0
Bulgaria	66.7	64.5	66.4	98.4	93.7	95.1
Romania	61.6	60.9	66.2	95.8	93.7	98.5
Estonia	62.2	63.2	73.5	96.2	92.2	97.5
Latvia	52.8	47.1	61.0	95.0	88.6	92.3
Lithuania	59.1	36.8	51.6	94.4	92.7	95.5
Belarus	63.1	62.3	64.0	95.6	93.7	94.8
Moldova	61.2	34.4	32.7	94.1	79.0	94.1
Russia	73.4	62.8	63.1	90.0	88.4	88.8
Ukraine	64.2	51.4	45.3	92.8	90.8	89.9
Armenia	48.5	23.8	24.9	95.5	81.4	81.6
Azerbaijan	21.6	15.2	13.9	87.8	91.2	86.8
Georgia	43.6	20.5	27.1	95.2	79.8	85.2
Kazakhstan	53.1	25.5	10.5	94.8	94.4	94.2
Kyrgyzstan	30.0	6.5	6.9	92.2	87.7	89.5
Tajikistan		6.9	5.5	94.3	85.0	84.3
Turkmenistan	33.5	25.3	18.7	91.2	81.5	78.9
Uzbekistan	36.8	24.5	16.2	92.0	88.0	88.9

We, being academics, tend to overestimate the importance of higher education in the development process. However, according to the evidence, secondary education has showed much stronger impact on economic growth, than tertiary education. Naturally, the enrolment rates in Table 9.2 give no measure of quality. In each country there was a separation between vocational education and general type of secondary school education. What we can see is that Central Europe is a lot different from many other

countries in the sample. Here even the vocational-technical type of education went up in some countries (such as Slovakia and Hungary). However, in most transition countries we can see really large drops in the vocational-technical education. In many instances this may show improvement, because these vocational schools were often attached to factories, and thus did not provide high quality education since they taught skills that lost their relevance following restructurings in the early 1990s. However, the drop in vocational education implies also that a substantial part of the population is not getting any schooling beyond the compulsory level, in contrast to the situation before.

Table 9.2: Comparison of secondary education enrolment									
Country	General secondary education			Vocational/technical secondary education			Total upper secondary educ.		
	1989	1995	1999	1989	1995	1999	1989	1995	1999
Czechia	14.1	13.6	14.5	65.1		61.3	79.2		75.9
Slovakia	14.3	20.5	21.7	64.7	67.7	58.3	79.0	88.1	80.0
Poland	20.3	29.5	36.2	69.8	67.0	65.0	90.2	96.5	
Hungary	17.3	23.5	29.1	55.3	63.7	71.8	72.7	87.2	
Slovenia		20.5			63.6			84.2	
Croatia		19.1	19.9		58.3	58.2		77.5	78.1
FYR Maced.		17.3	22.2						65.4
Bosnia								66.1	
Albania	24.5	30.6	35.9	54.3	7.9	5.9	78.8	38.6	41.8
Bulgaria	30.9	32.5	32.6	47.3	43.6	43.0	78.2	76.1	75.6
Romania	3.8	20.1	26.3		49.1	43.9		69.2	70.2
Estonia	37.8	43.9	43.1		20.2	28.8		64.0	71.9
Latvia	22.6	28.7	42.6	49.0	32.1		71.6	60.8	
Lithuania	35.7	34.7	36.5	38.0	22.3	28.2	73.7	57.0	64.8
Belarus	27	24.6	28.9	50.0	41.8	42.7	77.0	66.4	71.5
Moldova	27.4	18	21.1	39.7	22.3	17.4	67.1	40.3	38.5
Russia	24.4	24.5	29.1	53.4	41.5	40.6	77.8	65.9	69.7
Ukraine	25.3	24.1	31.1	40.3	33.4		65.6	57.4	
Armenia	35.9	29.1	32.8	31.6	11.3	11.7	67.5	40.4	44.5
Azerbaijan	34	24.6	32.8	28.8	10.7	10.0	62.8	35.3	42.7
Georgia	41.3	23.4	24	17.4	12.8	16.3	58.7	36.2	40.3
Kazakhstan	32.5	26.2	38.9	43.2	30.9		75.8	57.0	
Kyrgyzstan	36.7	25.2	37.5	28.3	14.7	11.6	65.0	39.9	49.1
Tajikistan	40.4	23	17.2	19.7	11.9	8.3	60.1	34.9	25.5
Turkmenistan	41.7	33.5	28.7	25.1	10.5	5.2	66.8	44.1	33.9
Uzbekistan	36.3	26.3	30.9	31.3	22.2		67.7	48.5	

When looking at the summary statistics about secondary education, one finds a similar picture as in the case of lower levels of education: in the Caucasus and Central Asia, and to a lesser extent in the Western CIS countries, enrolment rates are going down. In contrast, enrolments rates tend to hold in Central Europe (unfortunately, data for South-Eastern Europe are very incomplete and unreliable).

Higher education enrolment looks as a success story, in fact, everywhere, including the Caucasus and Central Asia (see Table 9.3). The presenter, however, had strong suspicions about these indicators, and his feelings were confirmed by many personal discussions with people in various countries. What seems to be happening here is that a lot of low-quality private programs sprang out in many places, which means that quality adjusted figures would show a bleaker picture.

Table 9.3: Comparison of higher education

	Higher education enrolment			Ratio of Public expenditures on education/GDP		
	1989	1995	1999	1989	1995	1999
Czechia	16.6	19.8	26.0	4.0	5.3	4.6
Slovakia	13.4	18.3	22.5		5.1	4.3
Poland	16.0	27.2	42.8		5.2	5.1
Hungary	12.2	18.0	28.9	5.7	5.5	5.1
Slovenia	23.1	31.3			5.8	
Croatia	17.4	22.2	26.1			
FYR Maced.	19.3	17.1	19.7		5.7	
Bosnia						
FR Yugosl.	22.2	20.2	27.1			
Albania	6.9	10.2	12.7	4.0	3.8	3.2
Bulgaria	22.0	33.7	34.7		4.0	4.4
Romania	7.2	17.5	23.4	2.2	3.4	
Estonia	36.1	31.7	45.0		7.1	
Latvia	20.5	21.6	46.5	5.8	6.9	7.2
Lithuania	27.8	22.8	39.2		5.6	6.5
Belarus	22.9	22.7	30.0		5.5	6.4
Moldova	16.2	13.7	20.8		7.7	5.4
Russia	24.8	22.4	31.4		3.6	
Ukraine	22.3	20.8	29.7		5.4	3.7
Armenia	19.3	15.2	16.0		3.3	1.9
Azerbaijan	11.9	12.7	14.5		3.5	
Georgia	19.1	26.1	29.0		0.9	
Kazakhstan	18.1	16.6	23.3		3.2	
Kyrgyzstan	13.2	12.9	29.8	7.5	6.6	4.1
Tajikistan	11.5	11.8	11.5		2.4	2.1
Turkmenistan	10.2	6.4	3.9		2	5.4
Uzbekistan	15.0	7.6	6.2			

Source of tables 9.1-9.3 : TransMONEEE data base 2001, UNICEF,
<http://www.unicef-icdc.org/documentation/index.html>

Table 9.3 also brings statistics on public expenditure on education. Here data look more or less consistent with the general picture that other indicators of education display. In the more successful transition economies, such as Central Europe, the governments managed to preserve the educational spending, at least as a percentage of GDP. However, in some countries of the Caucasus and Central Asia, such as Armenia, very dramatic deterioration was experienced.

For the qualification of the picture about the changing patterns of education one has to understand that human capital levels and educational levels build up very slowly over a long period of time, requiring several generations. Once a nation has built up a high level of education, it is relatively easy to maintain it at that level and even to transform and improve it. However, this requires some basic investment, it does not just happen automatically, due to the high level that a country achieved previously. At the same time, if a country neglects the investments to maintain its level of human capital, it is quite easy for educational standards to plummet very quickly.

The presenter emphasized the role of families in the process of propagating education from one generation to the other. This relationship has been proved in any

country where investigations targeted the role of the families. The empirical evidence shows that this intra-generational educational transmission is the overwhelming single factor for human capital development, even more important than the level of spending on public education.

In the transition countries we see societies, which made considerable efforts over some generations to build up educational standards, and thus they have got a lot of high quality families in a good position to transmit high education level to their children. If they have a whole generation or even half a generation that lives in environment, where, for various reasons, the young people are either unable or do not choose to take advantage of their highly educated parents, then the chain of educational transmission will break. The country may quickly lose its positive legacy in human capital and can only build it up again over many generations. This means that if a country starts from a favorable position where human capital is more developed than the standard of living, and it does not invest to keep the human capital at this high level, the standard of human capital may slip back and the country will quickly become a variety of the generic type of developing countries. Subsequently the country can build its educational level up again very slowly and achieve over two generations the high level of human capital that it already had.

The source of the break in the educational chain may be an economic crisis that decreases the return to education. The presenter believed that while a decline in the return to education occurred in the transition countries, it may not have been very serious. The other source of the break may be the absence of educational reforms. This is a real threat in transition countries: in many of these the system continues to teach the very skills that were valued in the communist era only. This may apply to the vocational/technical education. Another factor may be the big gap between the rural and the urban sector in these countries: the level of education in the rural areas is very weak and deteriorating. If someone lives in the rural area of Romania or Siberia, the quality of education may be so low that it simply does not pay off to study. Finally, another factor is the abruptly increasing cost of education: the necessity to pay for books, bribe people to get to the school, pay additional wage for the teachers, etc. This may lead to a situation that in families, where there are relatively well-educated parents, the children do not reproduce the educational level of the parents because of the high costs of the education.

The presenter warned that the break in the educational standards may be long-lasting in the Caucasus and the Central Asian countries, but also in the rural areas in the more advanced transition economies, the latter leading to a dual educational system.

10. Role of Institutions and Policies of Human Development

10.1. Catching Up, Human Development and EU Accession³⁹

There is a long history of discussion in social sciences whether well-being of the people is appropriately represented by the indicators of average economic well being of the country where these people live. Here usually the validity of the indicator *GDP per capita* is questioned, and a general philosophical issue is also raised whether economic growth is an end or means for the society. There is a consensus among most of the social scientists that to appropriately characterize the well-being of the people, GDP per capita has to be complemented by further indicators. For this purpose, in the past decades many synthetic indicators were created. One of these is *the Human Development Indicator* (HDI), which combines attainments in the spheres of health, education and standard of living. Another such synthetic indicator is *the well-being indicator* in its various forms, constructed by Amartya Sen, Anthony Atkinson and others: this combines the mean income in a country with income inequality in the same country. Additional indicators that characterize the well-being of the population are the indicators of poverty, economic and social deprivation, gender inequality, quality of environment, etc.

If catching up and accession is viewed in this context, the question arises that assuming that the candidate countries will achieve a high rate of economic growth in the future, will this growth be accompanied by a comparably high rate of growth in human development? Another question is that when EU membership will be established, would it imply that there would be a convergence of the new member countries to the old ones in terms of human development?

To answer these questions one has to look first at the general relationship between economic growth and human development. Unfortunately, there is very little theoretical base for characterizing this relationship. The presenter found that a study by Ranis, Steward and Ramirez (2000)⁴⁰ provided the most appropriate framework, in which answers to the questions raised by him can be answered. That study investigated the channels through which economic growth affects human development and vice versa. Ranis et al. find strong relationship between economic growth and human development. Many countries get either to a virtuous circle or to a vicious circle. In this context, virtuous circle means a development path along which fast economic growth and fast human development reinforce each other, while the vicious circle means that slow economic growth and slow human development go hand in hand. The pattern of development, as a rule, does not allow the economy to break out from these circles. The authors also identified “lopsided development”: in this type of development either economic growth shows fast development, and human development lags behind, or vice versa. Investigating these development patterns along time, it turned out that lopsided development is, as a rule, unstable: if a country realizes lopsided development in favor of human development in a period (e.g. in a given decade), then it tends to move to a

³⁹ This section summarizes the presentation by János Gács, IIASA.

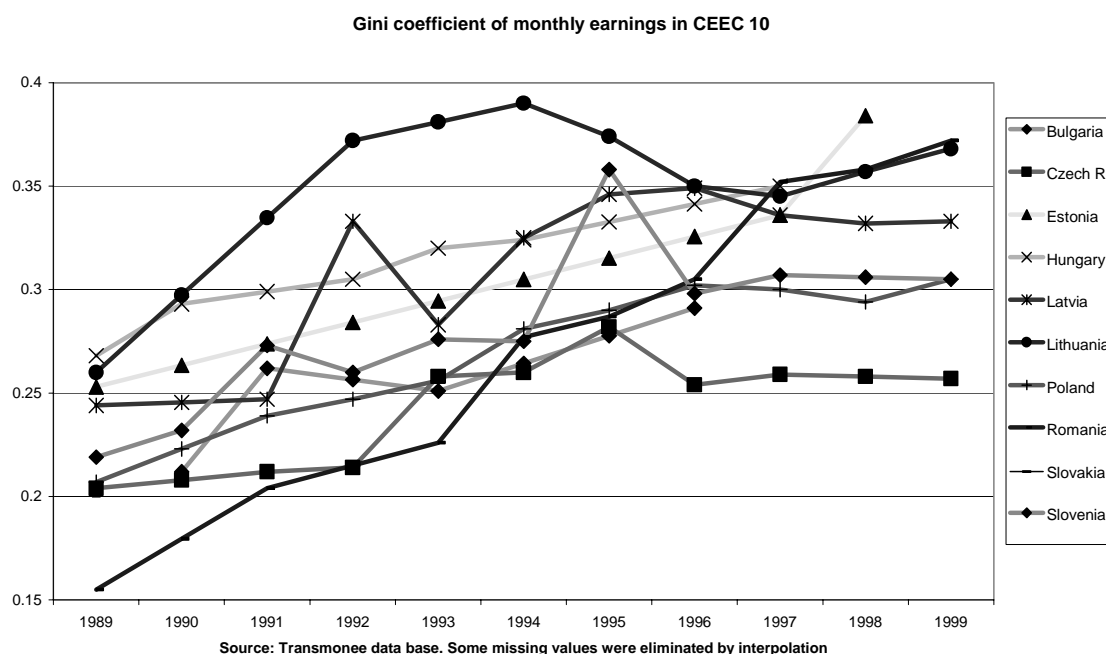
⁴⁰ Ranis, G., Ramirez, A. and Stewart, F. (2000) Economic Growth and Human Development, *World Development*, Vol. 28, No. 2, February 2000.

virtuous circle in the next one. However, those countries that, in a given period, realize lopsided development in favor of the economic growth, tend to slip to the pattern of vicious circle.

Using this experience of over hundred developing countries in 1960-1992 the presenter raised the question: if, in the coming years, we assume a fast catching up by the Central and East European candidate countries, i.e. rapid economic growth, and a human development that would not improve at a commensurate pace, would this lopsided development in favor of economic growth not threaten the economic growth itself, at least on the long run?

It is not by chance that the presenter wanted to investigate if the two sides of development would be in harmony with each other, because the 1990s in Eastern Europe had brought about dramatic changes in human development indicators, particularly in the successor states of the Soviet Union. On the other hand, the Central and Eastern European countries have not experienced major deterioration, either in health indicators or educational indicators in general. Dramatic change occurred even in this region, however, in terms of income inequality. In Figure 10.1 we see data characterizing development of income inequality in the candidate countries. To some extent this growth in inequality is, however, what could be expected from the process of transition to the market from the planned economy.

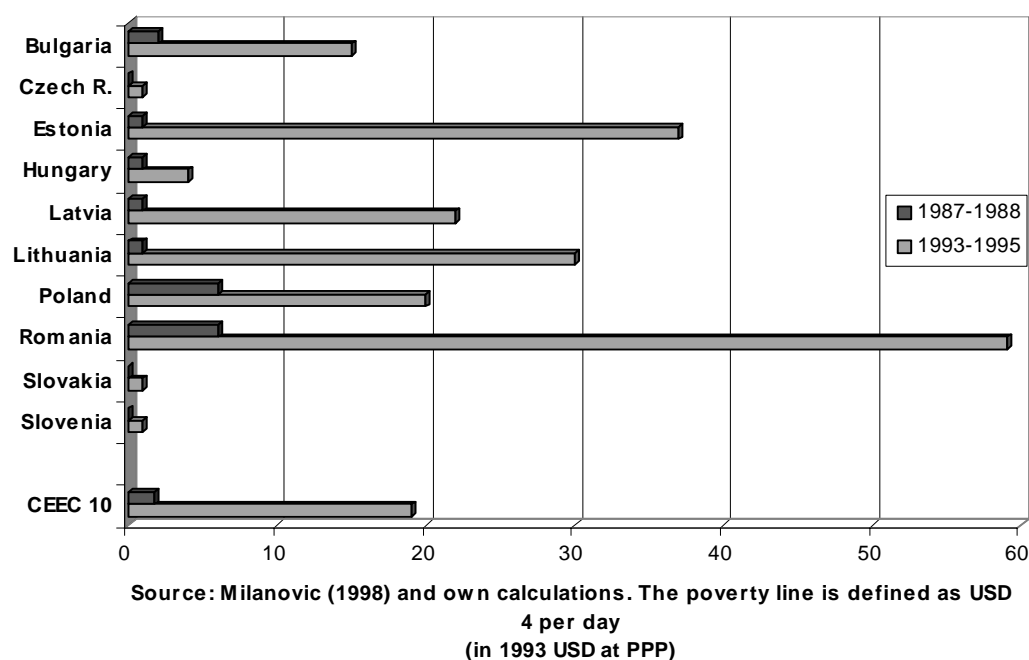
Figure 10.1: Gini coefficient of monthly earnings in CEECs 10



The generally flat distribution of income in former communist countries was enforced by arbitrary and artificial directives and regulation; in the market framework these central regulations had to be given up and, as a consequence, these countries were bound to experience larger income inequality than before. While we do not know what

would be a “normal” level of inequality in these transition countries of Central and Easter Europe, it is obvious that many people in these nations find this higher inequality particularly unacceptable. One reason of the dissatisfaction with the higher level of income inequality is that those on the lower level of the income scale experience poverty, a phenomenon, which was fairly limited in the communist era. Figure 10.2 illustrates this change. This evidence shows that the systemic transformation had its dark side in terms of human development.

Figure 10.2: Increase of poverty in the first years of transition
(% of population under the poverty line)



A lasting experience of poverty in an inappropriate social environment can lead to multiple deprivation, and this is what happened in the transition countries. This phenomenon can best be exemplified by the families, which approached the poverty line, typically due to the fact that the head of the family became unemployed. Spending longer time in the previously not experienced meager circumstances increases the likelihood that this family does not send its children to the school., and the services of the health care system will not be utilized by them as much as before. A further indicator of deterioration in human development was the spreading of economic and social exclusion. This comprises the increasing army of unemployed, but also of those who had to leave the labor market for good. In Eastern Europe, on average 20% of those who were employed in 1989 had to leave the labor market or became unemployed; in some countries, such as Hungary, this percentage went up to 30%. Economic exclusion is, in fact, the seed of poverty and other bads, which amount to multiple deprivation.

The lessons from the last then years of human development are that:

- (1) Non-employment has become the seed of exclusion and multiple deprivation;

(2) The previously universal, mostly publicly provided services, such as health, pension, education and social protection, were not replaced by a clearly designed new system of such services. In these social spheres there is a systemic void, and experimentation is going on with various kinds of new, but constantly reformed and generally unstable, systems. The question one can raise here is: if we assume high growth in the coming years and EU accession, how human development can be improved in line with economic development if the current problems are non-employment and lack of well defined social protection systems?

To answer this question the presenter focused on two issues. The first was the pattern of growth in the candidate countries in the coming decades, and the other was whether there was any mechanism within the EU, which would make the new member countries harmonize their social protection system with those existing within the EU?

It is a crucial question whether the coming growth in the candidate countries will be of such nature that it would bound to create sufficient number of jobs, implying the absorption of those who had to leave the labor market or became unemployed in the recent years? Unfortunately, the answer to this question is negative. In terms of growth theory the coming growth will most likely not be based on labor augmentation, but rather mostly on the increase in total factor productivity. Empirically, we also find that the years of recovery in 1995-1999 in the candidate countries brought about an output growth whose employment elasticity was minimal: to achieve 1% growth in employment, the output in these countries had to grow by 6%. In the same period the cohesion countries (the four poorest countries of the EU which may be predictors for the future of the current candidate countries) showed better, but far from spectacular job creation: 1% growth in employment was achieved by 3% growth of output. Another question is whether the relatively less skilled workers who are, as a rule, so numerous among the non-employed in the candidate countries, will see good opportunities for finding a job in the coming predicted high growth of output? The presenter carried out a calculation of labor skill requirement of the different manufacturing industries making up the output (more precisely, due to lack of such output data, of manufacturing exports to the EU). He found that, in most of the candidate countries, currently industries characterized by low skilled labor are dominating the manufacturing sector (the exceptions are Hungary, Estonia and Czechia, in this sequence). This means that, assuming a future gradual technological upgrading of the industrial structure (due to the assumed increase of total factor productivity), the unskilled or low skilled labor have very bleak prospects for job creation in the coming period of growth.

The second question was if there would be a convergence of social systems in Europe, where social systems mean systems of health, education, pension and social protection. When these candidate countries join the EU, would they harmonize their systems with the prevailing system in the Union? The answer is: no. First, the *acquis communautaire* of the EU has very little to do with the sphere of human development. Moreover, what is found in the body of laws and regulations is also very soft. We know about the Social Charter, but it is not the institution of the European Union, but of the Council of Europe. It is also to some extent soft, because for the countries that become signatories of the Charter there is an option of selecting a certain number of criteria that the country is ready to fulfill from a palette of guidelines. A more recent development is that the Nice Summit of the EU established a Social Agenda in order to harmonize

various social systems in the Union. This new construction, however, resembles a five-year plan without any credible enforcement possibilities.

In sum: without making any value judgment, i.e. whether it is good or bad, desirable or avoidable, the presenter concluded that there are neither automatic forces nor forces attached to the event of accession that would push the social systems in the candidate countries closer to the social system existing in the European Union. Moreover, in the EU, there is not a single social protection system, but there is a multitude of them. In their general approach there are at least four models in work: the Scandinavian, the Bismarckian, the Anglo-Saxon and the South European models. So the candidate countries have got a quite broad palette to choose from, if they decided to harmonize their system with at least one of those existing in the EU.

One of the conclusions of the presentation followed from this result, suggesting that the candidate countries have a high degree of freedom in adjusting their social systems to their own need, because here there is virtually no *acquis* and no pattern they are to follow. Table 10.1 indicates how broad the palette of the possibilities is: the example for the possibilities is the share of budgetary allocations for social systems in various countries around the world. This characteristic feature of social systems is one of the most heatedly debated issues: how much the state should participate in the protection of its citizens from various risks. The table presents four categories of countries: three categories from the OECD countries (big, medium size and small governments), and the group of fast growing newly industrialized countries, which form a completely different category in terms of state financing of social systems. As a comparison, the table also contains recent data for the candidate countries. This table shows a large variation of the participation of the state in the social systems, and it also indicates that the average of the candidate countries falls close to the medium size governments of the OECD group. One should add, however, that several economists (Sachs and Warner, in a well-known paper, for instance) argue that if the candidate countries continue to subsidize their social systems the same way as they do now (i.e., according to our table, imitating the middle size governments of the OECD), they would never achieve a path of catching up in their economic growth. The alternative these authors suggest is imitating the social protection system used in the fast growing newly industrialized countries, what implies radical reforms.

In its final conclusion the presenter stated that the governments of the candidate countries have hard choices and they have to be innovative and imaginative. They also have to feel a strong responsibility, because in this field they have to make decisions about the long run, but, as we know, policy makers tend to focus on short-term costs and benefits, rather than evaluate choices for the long run.

Table 10.1: Budgetary expenditures for human development, percent of GDP

	Big ¹	Medium-sized ²	Small ³	Newly ind. countries ⁴	CEEC 10
	government in OECD				
	1990	1990	1990	1990	1997-1999
Total general gvt. expendit.	>50	40-50	<40	18.6	45.2
Of which:					
Education	6.4	5.6	5.0	3.3	5.5
Health	6.6	5.9	5.2	1.8	5.1
Social Security and Welfare	19.5	13.9	7.9	1.0	14.3

Source: IMF Government Finance Statistics 2000, Tanzi and Schuknecht (2000), and own calculations

¹Big government: Belgium, Italy, Netherlands, Sweden

²Medium-sized government: Austria, Canada, France, Germany, Ireland, New Zealand, Spain

³Small government: Australia, Japan, Switzerland, UK, USA.

⁴Newly industrialized countries: Chile, Hong Kong, Korea, Singapore

Discussion of the Presentation of Michael Spagat and János Gács

One discussant commented on Gács's calculations about the skilled labor requirement of industries in different countries, emphasizing that the same industries may need different skills in different countries, so for instance, the German mother company of a multinational electronic firm may use more skilled labor than the subsidiary of the same firm (in the same industry) located, for example, in Estonia. Gács answered that the 100 NACE 2 industries provided a sufficiently distinct structure of manufacturing industries. The classification of industries according to typical resource intensities was elaborated on the sample of European firms, so the variation of that benchmark sample was characteristic of the EU. This means that the East European firms may turn out to be outliers, although that is not necessary.

A commentator referred to Spagat's presentation that emphasized the importance of pre-school teaching. Institutions such as kindergartens were highly developed in the candidate countries before systemic changes started. Afterwards, state financing became tighter and also the approach became more pronounced, which preferred education in the family. The commentator was pleased to learn that Spagat confirmed the importance of this pre-school institutions both for the quality of education and economic competitiveness of these nations.

In his answer, Spagat confirmed the importance of nursery schools. He recalled the result of a recent British survey of groups of children that visited nursery schools and that did not do that, and where the researchers followed the activity of the children up to the age of 15. It turned out that the advantage of those visiting nursery school in terms of academic performance could still be detected in the age of 15. The other experience was that those visiting nursery school tended to be more obnoxious, i.e. behaved worse.

A discussant commented on Spagat's statement that there is an asymmetry in creating human capital and destroying it. He did not feel convinced; he rather considered that the family was an important determinant that provides an inertia or stability in both ways. If we think of the family framework, with some exaggeration we may say that it takes about two generations to create an intellectual, but it is also true that it takes at least two generations to destroy him/her. The experience in Eastern Europe, where during communism we have seen an attempt to destroy the middle class, showed remarkable resistance to the destructive forces. The story of Béla Balassa, the famous scholar of development economics and international economics is an example: born into a family of "exploiting bourgeoisie" he was prevented by the Hungarian authorities to take part in higher education. He was 29 when he emigrated, started his studies at university late, and he became an intellectual despite the bad start, moreover, an outstanding one, probably due to the human capital inherited in the family.

In his answer Spagat did not feel that this comment was in conflict with his views. One should distinguish between intellectual families that have achieved very high intellectual standards and those that have reached a medium level. Parents who have completed secondary education should not be described as intellectual families, only those that achieved certain degrees of academic standing. As statistical analyses show, they can give more to their children than those that have not achieved that level. The medium level of achievement can be destroyed in one generation, while such a loss in true intellectual level families would take more generations.

Another discussant, commenting about the building up and erosion of human capital, emphasized that one should go beyond the anecdotal evidence of human capital in intellectual families. If one looks at countries that promoted the "hard" sciences, such as mathematics, physics, or chemistry, one can look at the time needed to develop a knowledge base and the time this bases may have eroded. Similarly, in the science-based technologies a large number of countries decided some decades ago to select priorities in such fields as information-communication technology, biotechnology, material technology or nano-technology, and over a 30 years period we can look at the success rate for countries that made this an official position, and those who made no choices like these. After such an investigation we could conclude that the few ones that succeeded, did it very slowly. We could also conclude that historic positions at the front-line of science for many countries were quickly lost. Based on these experiences the discussant accepted and supported the picture Spagat painted that it takes a very long time to build a high competence and it is a fairly rapid process to destroy it.

A discussant commented on Gács's statement that social policy in the EU is not subject to a common pattern. This is true, but it is not fully subject to national policy either, because, according to the Luxembourg process, some elements of social policy are also elements of the EU policy. The quantitative targets – such as the minimal share in allocations devoted to fighting unemployment or to active labor market policies, the requirement to prepare national action plans for fighting unemployment, which are evaluated in the Joint Employment Report by the Commission – are all evidence for this. Gács agreed that guidelines like these exist: he only wanted to emphasize that there is a dramatic difference between the criteria used in economic harmonization, which are strict and detailed, and in social harmonization, which are either not existing or soft.

One discussant, commenting on both Spagat's and Gács's presentations emphasized that a new theory of education as a public good should be developed in order to ensure the necessary base for the knowledge-based society. In addition, complementing the concept of human right in the European Union, a declaration should be formulated that the access to the knowledge network is also a part of human rights.

In his reply Spagat drew the attention to some of his other works in which he emphasized the public goods nature of the education in a specific way. People, when they make decisions about the direction of their own education beyond the compulsory level, they always look around to see what direction of activity is pursued by other people in their immediate neighborhood and what education they acquired in the past. This way they make sure that their own education and future competence fit into that of their immediate economic universe. This, however, also means that your own decision about your education depends very much on the circumstances in your neighborhood. That explains the very different patterns of development in different regions. In a lot of countries we see prosperous urban regions, but backward rural regions; this kind of diversity can, in fact, persist and turn out intractable for extensive periods of time.

In his reply Gács accepted that access to knowledge networks is an important new issue. The proposition of a universal access to the Internet has been put on the agenda in many international organizations. *Networks*, however, are a much broader concept: participants of this workshop are also part of a kind of network and will hopefully benefiting from it. But, had we advertised this meeting in all national newspapers of the EU member countries and candidate countries in order to make it universally accessible, the meeting and the ensuing network would have become a completely different one with different characteristics. Not all networks can be fully open and accessible to anyone, because that would change the nature of the network and could destroy any benefits of it. There are different levels of openness to different networks, and a universal access to all networks is probably unfeasible.

Appendix I: **PROGRAM OF THE IIASA WORKSHOP**
“Catching Up and EU Accession –
Conditions for Fast Real Convergence in the Candidate Countries”

Bratislava, Slovakia, 7-9 February, 2002

7 February (Thursday)

- 13.30- 15:00 Registration of participants
15:00 Introduction of the workshop: **János Gács** , Project Leader and **Arne Jernelöv**, Acting Director of IIASA
Opening presentation:
Ivan Mikloš, Deputy Prime Minister for the Economy, Slovakia
Vladimír Benáček (IIASA): Historical perspectives of growth, integration and policies for catching-up in transition countries
16:45 *Coffee break*
17:15 SESSION 1: Factors determining savings and investments in accession countries and the role of intermediation
András Simon (National Bank of Hungary): Various sectoral sources of savings needed for investments – the Hungarian experience
18:00 *End of the session*
19:00 *Dinner: Informal social event*

8 February (Friday)

- 08:30 Latest developments in the process of accession and catching-up – updates from applicant countries
Lithuania: **Darius Zeruolis** (Vilnius University)
Slovakia: **Anton Marcincin** (SFPA, Bratislava)
Romania: **Valentin Lazea** (National Bank of Romania)
09:30 SESSION 2: Trade patterns and competitiveness in the catching up process
László Halpern (Institute of Economics, Hungarian Academy of Sciences): International trade, competitiveness and catching up in transition countries – some recent developments and policies for improvement
10:10 *Coffee break*
10:40 SESSION 3: Financial convergence and the EMU
Evzen Kocenda (CERGE, Prague): Macroeconomic convergence in transition countries
Peter Backé (Austrian National Bank): The EU membership and the run-up to the euro-zone
Jan Frait and **Lubos Komarek** (Czech National Bank): Nominal and real convergence, euro and monetary policy in accession countries
12:40 *Lunch*

- 14:20 SESSION 4: Structural conditions in the candidate countries - role for EU and World Bank support for catching up
Roger Grawe (World Bank, Country Director for Czechia, Hungary, Moldova, Slovakia and Slovenia): Framework for the World Bank support to EU accession countries
John Bradley (Economic and Social Research Institute, Dublin): National Development Plans and pre-accession Structural Funds: The experiences of Ireland, Latvia and Estonia
Ladislav Kabát (Agricultural University, Nitra) and **Gejza Blaas** (Research Institute of Agricultural Economics, Bratislava): Agricultural policy and the EU transfers – experience from Slovakia
- 16:20 *Coffee break*
- 16:50 Latest developments in the process of accession and catching-up – updates from applicant countries
Hungary: **Kálmán Dezséri** (Institute for World Economy, Hungarian Academy of Sciences)
Bulgaria: **Mariella Nenova** (Bulgarian National Bank)
Latvia: **Tatyana Muravska** (University of Latvia)
Czechia: **Karel Zeman** (Institute of Integration of the Czech Republic)
- 18:15 *End of the session*

9 February (Saturday)

- 08:30 Latest developments in the process of accession and catching-up – updates from applicant countries
Estonia: **Erik Terk** (Estonian Institute for Future Studies)
Croatia: **Boris Vujčić** (National Bank of Croatia)
- 09:30 SESSION 5: R&D, foreign direct investment and spillovers
Frank Barry (University College, Dublin): EU Accession and FDI flows to CEE countries: Lessons from the Irish experience
- 10:45 *Coffee break*
- 11:00 Latest developments in the process of accession and catching-up – updates from applicant countries
Poland: **Jaroslav Pietras** (Undersecretary of State, Office of the Committee of the European Integration, Warsaw)
- 11:30 SESSION 6: Human capital and the restructuring process
Michael Spagat (Royal Holloway, University of London): Human capital, education in transition economies and the future catching up
- 12:10 SESSION 7: Role of institutions and policies of human development
János Gács (IIASA): Catching up, accession and human development
- 12:50 Concluding general discussion
- 13:30 *Lunch*

Appendix II: LIST OF PARTICIPANTS
Catching Up and EU Accession –
Conditions for Fast Real Convergence in the Candidate Countries
Bratislava, Slovakia, 7-9 February, 2002

Peter Backé

Austrian National Bank
 Foreign Research Division
 Vienna, Austria

Frank Barry

Economics Department, University
 College, Dublin, Ireland

Attila Bartha

Kopint-Datorg
 Economic Research Institute Co.
 Budapest, Hungary

Gejza Blaas

Research Institute of Agricultural
 Economics
 Bratislava, Slovakia

Jan Boda

Dept. of Economic and Financial
 Modeling
 Faculty of Mathematics, Physics &
 Informatics
 Comenius University
 Bratislava, Slovakia

John Bradley

The Economic & Social Research
 Institute
 Dublin, Ireland

Ingrid Brocková

Country Operations Officer
 The World Bank
 C/o RBEC Regional Support Center
 Bratislava, Slovakia

Pavel Brunovský

Dept. of Economic and Financial
 Modeling
 Faculty of Mathematics, Physics &
 Informatics
 Comenius University
 Bratislava, Slovakia

Frantisek Cvengros

Deputy Director,
 Department for Financial Policies,
 Unit of Macroeconomic Forecasts,
 Ministry of Finance of the Czech
 Republic
 Prague, Czech Republic

Marek Dabrowski

Chairman of the Council
 CASE – Center of Social and
 Economic Research
 Warsaw, Poland

Marta Darulová

European Studies Programme,
 Academia Istropolitana Nova
 Palffy Mansion, Svaty Jur,
 Slovakia

Kálmán Dezséri

Institute for World Economics
 Hungarian Academy of Sciences
 Budapest , Hungary

Rudolf Duris

Vienna University of Economics
 Peter Jordan Strasse.
 Vienna, Austria

Bohumila Ferencuhová

Institute of History, Slovak Academy of Sciences,
Bratislava, Slovakia

Jarko Fidrmuc

Austrian National Bank
Foreign Research Division
Vienna, Austria

Jan Frait

Bank Board Member
The Czech National Bank
Prague, Czech Republic

Roger Grawe

Country Director
Czech Republic, Hungary, Moldova,
Slovak Republic, Slovenia
World Bank
Budapest, Hungary

László Halpern

Institute of Economics
Hungarian Academy of Sciences
Budapest, Hungary

Viliam Harvan

Director of Banking and Exchange
Relations Department,
Ministry of Finance of the Slovak
Republic
Bratislava, Slovakia

Miloslav Hettes

Section of Social Insurance Reform
Ministry of Labor, Social Affairs and
Family
Bratislava, Slovakia

Ladislav Kabát

Agricultural University
Nitra, Slovakia

Mária Kačurova

Chief of Division, Financial Policy
Institute
Ministry of Finance of the Slovak
Republic
Bratislava, Slovakia

Evžen Kočenda

CERGE - Charles University
Prague, Czech Republic

Lubos Komarek

Advisor to Bank Board
The Czech National Bank
Prague, Czech Republic

Zdenko Krajčír

Desk Officer, Financial Policy Institute
Ministry of Finance of the Slovak
Republic
Bratislava, Slovakia

Valentin Lazea

Chief Economist
National Bank of Romania
Bucharest, Romania

Mariana Lisa

National Bank of Slovakia
Dept. of Monetary Policy
Bratislava, Slovakia

Anton Marcincin

Slovak Foreign Policy Association
(SFPA)
Panenska St. 33,
Bratislava, Slovakia

Petr Maršík

Dept. of Economic Policy
Ministry of Industry and Trade
Prague, Czech Republic

Katarina Matheriová

Office of the Government of Slovakia
Bratislava, Slovakia

Ivan Mikloš

Deputy Prime Minister for Economic
Affairs
Government of the Slovak Republic
Bratislava, Slovakia

Tatjana Muravska

Director
Center for European & Transition
Studies
University of Latvia
Riga, Latvia

Mariella Nenova

Head of Macroeconomic Research
Division
Economic Research & Projections
Directorate
Bulgarian National Bank
Sofia, Bulgaria

Viliam Pálenik

Head, Dept. of Economic Modeling
Institute of Economics
Slovak Academy of Sciences
Bratislava, Slovakia

Peter Pavlik

Institute of International Relations
Prague Czech Republic

Jaroslav Pietras

Undersecretary of State
Office of the Committee of the
European Integration
Warsaw, Poland

Patrik Polakovič

International Financial and
Economic Organizations Department
Ministry of Finance of the Slovak
Republic
Bratislava, Slovakia

Josef Pöschl

Vienna Institute for International
Economic Studies (WIIW)
Vienna, Austria

Pavel Roba

European Integration Department
Ministry of Finance of the Slovak
Republic
Bratislava, Slovakia

András Simon

National Bank of Hungary,
Budapest, Hungary

Michael Spagat

Department of Economics,
Royal Holloway University of London
Egham, Surrey, United Kingdom

Marek Šťastný

Coordinator/EU integration,
NATO Enlargement
Institute for Public Affairs
Bratislava, Slovakia

Michal Szabo

General Director
Dept. of Social Insurance
Ministry of Labor, Social Affairs &
Family
Bratislava, Slovakia

Krzysztof Szczygalski

Center of Social and Economic
Research (CASE)
Warsaw, Poland

Erik Terk

Director
Estonian Institute for Futures Studies
Tallinn, Estonia

Vladimír Toma

Dept. of Economic and Financial
Modeling
Faculty of Math, Physics & Informatics
Comenius University
Bratislava, Slovakia

David Vávra

Director
Economic Modeling Division
The Czech National Bank
Prague, Czech Republic

Zdenek Vesely

Unit of Macroeconomic Analyses
Financial policy Dept.
Ministry of Finance of the Czech
Republic
Prague, Czech Republic

Boris Vujčić

Vice Governor
Croatian National Bank,
Also Faculty of Economics
University of Zagreb
Zagreb, Croatia

Karel Zeman

Institute of Integration of the Czech
Republic into the European and World
Economy
Prague, Czech Republic

Darius Zeruolis

Director of Integration Strategy Dept.
European Committee under the
Government of Lithuania
Vilnius, Lithuania

Peter Zsapka

Project Manager, Center for European
Politics
Bratislava, Slovakia`

IIASA

A-2361, Laxenburg, Austria

Vladimir Benáček

Economic Transition and Integration
Project

János Gács

Leader
Economic Transition and Integration
Project

Arne Jernelöv

Acting Director

