(a)

Institute of International Relations, Prague
in cooperation with
The Foundation for the Study of International Relations, Prague
and
The Delegation of the Friedrich Ebert Foundation in Prague
in conjunction with
The Trans European Policy Studies Association (TEPSA)
Forum in the Czech Republic
and with
PHARE ACE Project
and with assistance in funding by
Československá obchodní banka, a.s., Prague

An International Workshop:

Economic Policy Framework in CEEC for the Process of Moving Towards the European Union

Czernin Palace
Loretánské náměstí, Prague
Monday 25,
November 1996

WORKSHOP PROGRAMME

8.30 Registration : tea / coffee
9.00 Opening : Prof. Dr. Otto Pick,
Director, Institute of International Relations, Prague

Welcome : Cyril Svoboda,
Deputy Minister of Foreign Affairs
Czech Republic

9.15 Session One : Harmonization of Economic Policy in the pre-accession period
Chairperson : Jan Klacek,
Institute of Economics, Czech National Bank, Prague

Speakers :

- Tamás Szemlér
Institute for World Economics of the Hungarian Academy of Sciences, Budapest

- Eduard Mikelka
Economic Institute of the Slovak Academy of Sciences, Bratislava

- Jan Stankovsky
WIFO, Vienna

- Hans H. J. Labohm
The Netherlands Institute of International Relations
Clingendael

- Paul Van den Bempt
Groupe d'Etudes Politiques Européennes, Brussels

Discussion

10.45 Tea / Coffee

11.00 Session Two : Institutional Framework Harmonization in the pre-accession period
Chairperson : Jaroslav Jakš
University of Economics, Prague

Speakers :

- Jaroslav Šonka
European Academy, Berlin

- Andrew Duff
Federal Trust, London

- Luděk Urban
Charles University, Prague

- Tony Brown
Institute of European Affairs, Dublin

- Wolfgang Wessels
Forschungsinstitut für Europäische Fragen, Universität Köln

Discussion

12.45 Lunch

14:00 Session Three: Restructuring of Economies
Chairperson : Martin Myant
University of Paisley, Paisley, Scotland

Speakers :

- Růžena Vintrová
Czech Statistical Office, Prague

- Peter Havlik
WIIW, Vienna

- George Assaf
UNIDO, Vienna

- Seppo Leppänen
  Government Institute for Economic Research, Helsinki

- Gusztáv Báger
  Ministry of Finance of Hungsary, Budapest

Discussion

15.30 Tea / Coffee

15.45 Session Four : Security Policies (the Second and the Third Pillar of the EU)
Chairperson : Jiří Šedivý
Institute of International Relations, Prague

Speakers :
- Gianni Bonvicini
  Istituto Affari Internazionali, Rome

- Stanislav Stach
  Institute of International Relations, Prague

- Blanka Ryboňová
  Ministry of Interior, Czech Republic

Discussion

17.15 Closing Discussion

17.45 Workshop Concludes

(b)

List of foreign participants at workshop
„Economic Policy Framework in CEEC for the Process of Moving Towards EU"
on 25 November 1996

Mr. Seppo Leppänen
Director General
Government Institute for Economic Research
Helsinki, P. O. BOX 269 (Hämeentie 3)
Finland
FIN - 00531
TEL : 0035807032961
FAX : 0035807032968

Mr. Rainer Rudolph
Ministry of Foreign Affairs
Germany

Mr. Jan and Mrs. Anna Stankovsky
WIFO
A - 1103 WIEN Postfach 91
Wien 3, ARSENAL, OBJ. 20
Austria
TEL : 004317982601
FAX : 004317989386

Mr. Peter Havlik
Deputy Director
WIIW
Oppolzergasse 6
A - 1010 WIEN
Austria
TEL : 00431533661015
FAX : 00431533661050

Mr. Martin Myant
University of Paisley
High Street
Paisley PAI 2BE
Scotland
Great Britain
TEL : 00441418483367
FAX : 004414184833

Mr. Gusztáv Báger
Ministry of Finance
1051 Budapest
József Kádor tér 2-4
Hungary
tel. 00 361 327 21 72
fax. 00 361 327 27 51

Mr. Tony Brown
Institute of European Affairs
8 North Great Georges Street
IR - Dublin 1
Ireland
TEL : 0035318746756
FAX : 0035318786880

Mr. George B. Assaf
UNIDO
P. O. BOX 300
A - 1400 Vienna
Austria
TEL : 00431211313657
FAX : 00431211316864

Mr. Tamás Szemlér
Institute for World Economics
of the Hungarian Academy of Sciences
Kallo Esperes Utca 15
1124 Budapest
Hungary
TEL : 003113199382
FAX : 003613199385

Mr. Gianni Bonvicini
Director
Istituto Affari Internazionali (IAI)
Via Angelo Brunetti 9
I - 00186 Roma
Italy
TEL : 003963224360
FAX : 003963224363

Mr. Eduard Mikelka
Ekonomický ústav SAV,
Šancova 56
81105 Bratislava
Slovakia
TEL : 07 395021
FAX : 07 395106

Mr. W. Wessels
Forschungsinstitut für Europänische Fragen
Universität zu Köln,
Gottfrid - Keller - Strasse 6
50931 Köln
Germany
TEL : 00492214704131
FAX : 00492214705017

Mr Andrzej Kupich
Ministerstvo Spraw Zagranicznych
Department Badáñ Strategicznych PISM
00 950 Warszawa
Warecka 1a
Poland
TEL : 004822263021
FAX : 004822263026

Mr. Paul Van den Bempt
Groupe d'Etudes Politiques Europeénnes
Avenue A. J. Slegers 162
12000 Brussels
Belgium
TEL : 00322 7710297
FAX : 00322 5116770

Mr. Luc Bernard
University of Louvain - la- Neuve
Belgium

Mr. Ing. Richard Outrata, CSc.
Ekonomický ústav SAV
Šancova 56
81 105 Bratislava
Slovakia
TEL : 07 395 021
FAX : 07 395 106

Mr. Kurt Hornschild
DIW
Köenigin - Luise - Strasse 5
D - 14191 Berlin - Dahlen
Germany
TEL : 0049 3089789 - 674
FAX : 0049 3089789 - 200

Mr. Frank Fleischer
DIW
Köenigin - Luise - Strasse 5
D - 14191 Berlin - Dahlen
Germany
TEL : 0049 3089789 - 0
FAX : 0049 3089789 - 200

Mr. Josef Poeschl
WIIW
Oppolzergasse 6
A - 1010 Vienna
Austria
TEL : 00431 533661037
FAX : 00431 533661050

Mr. Jaroslav Šonka
Europaäische Akademie Berlin
Bismarkallee 46-48
D 14 193 Berlin
tel: 004930 826 20 95
fax: 004930 826 64 10

Mr. Andrew Duff
Federal Trust
11 Tufton Street
London SW1P 3QB
England
tel. 00 44 171 799 2818
fax. 00 44 171 799 2820

Mr. Hans H.J. Labohm
Netherlands Institute of
Internal Relations
Clingendael 7
P.O. Box 93080-2509
AB Den Haag
tel. 00 31 70 324 5384
fax. 00 31 70 328 20 02

Mr. Markus Scheuer
RWI
Hohenzollernstr. 1-3
D 45 128 Essen
Germany
tel. 00 49 201 8149 277
fax. 00 49 201 8149 200

List of Czech participants at workshop
„Economic Framework in CEEC for the Process of Moving Towards EU

Prof. Dr. Otto Pick
Director
Institute of International Relations
Nerudova 3
118 50 Praha 1
TEL : 00422 24511253
FAX : 00422 24511257

Dr. Kurt-Peter Schütt
Director
Friedrich Ebert Stiftung
Lazarská 6
120 00 Praha 2
TEL: 00422 249 120 44
FAX: 00422 249 103 41

Doc. Ing. Petr Chvojka, CSc.
Chief Economist
Československá obchodní banka, a.s.
Na Příkopě 14
115 20 Praha 1
TEL: 00422 161716
FAX: 00422 261716

Dr. Miloslav Had
Institute of International Relations
Nerudova 3
118 50 Praha 1
TEL : 00422 24511253
FAX : 00422 24511257

Ing. Čestmír Konečný, CSc.
Institute of International Relations
Nerudova 3
118 50 Praha 1
TEL : 00422 24511253
FAX : 00422 24511257

Ing. Stanislav Stach
Institute of International Relations
Nerudova 3
118 50 Praha 1
TEL : 00422 24511253
FAX : 00422 24511257

Mgr. Jiří Šedivý
Institute of International Relations
Nerudova 3
118 50 Praha 1
TEL : 00422 24511253
FAX : 00422 24511257

Ing. Karel Zeman, CSc.
Československá obchodní banka, a.s.
Na Příkopě 14
115 20 Praha 1
TEL : 00422 261716
FAX : 00422 261716

Tomáš Zeman
Československá obchodní banka, a.s.

Ing. Jan Klacek, CSc.
Director
Czech National Bank
Institute of Economics
Na Příkopě 28
110 03 Prague 1
TEL : 00422 24230278
FAX : 00422 24585

Ing. Růžena Vintrová, DrSc.
Czech Statistical Office
Sokolovská 142
186 04 Praha 8
TEL : 00422 66042323
FAX : 00422 6843160

Ing. Martin Fassmann
The Czech -Moravian Chamber
of Trade Unions
nám W. Churchilla 2
113 59 Praha 3
TEL : 00422 24218615
FAX : 0042224215116

Prof. Jaroslav Jakš, DrSc.
University of Economics
Chair of world economy
nám W. Churchilla 4
130 67 Praha 3
TEL : 00422 24222677
FAX : 0042224220688

Ing. Věra Czesaná, CSc.
Deputy director of the department
of economic and social policy
Ministry of Local Development
Staroměstské náměstí 6
110 15 Praha1
TEL : 00422 24861309
FAX : 00422 24861505

Prof. Dr. Luděk Urban
Charles University, Prague
Institute of Economic Studies
Faculty of Social Sciences
Smetanovo nábřeží 6
110 01 Prague 1
TEL : 00422 24810804, ext. 275
FAX : 00422 24810987

Doc. Kamil Janáček, CSc.
Chief Economist
Komerční banka, A.S.
114 07 Prague 1
TEL : 00422 2421666
FAX : 00422 265498

Ing. Martin Walter
Department of the European Communities
Ministry of Foreign Affairs
Loretánské nám. 5
125 10 Praha 1

Ing. Petr Pavlík, CSc.
Institute of International Relations
Nerudova 3
118 50 Praha 1

Ing. Petr Procházka
Director of the department
Czech National Bank
Na Příkopě 21
110 03 Praha 1

Ing. Jan Zahradil
Prime Minister's Office
nábř. E. Beneše 1
110 00 Praha 1

Jan Kavan
Director
Policy Centre for the Promotion of Democracy
Kroftova 18
150 00 Praha 5

Ing. Roman Leszczynski
Director
Czech National Bank
Na Příkopě 28
110 03 Praha 1

Prof. Dr. Ing. Václav Bernášek, CSc.
University of Economics
Chair of World Economy
nám W. Churchilla 4
130 67 Praha 3

Doc. Ing. Eva Cihelková, CSc.
University of Economics
Head of the Chair of World Economy
nám W. Churchilla 4
130 67 Praha 3

Dr. Václav Šmejkal
Eurosophia, s.r.o.
Národní 9
110 00 Praha 1
TEL : 00422 24229575
FAX : 00422 24229575

Ing. Ivan Šujan, CSc.
Deputy Chairman
Czech Statistical Office
Sokolovská 142
186 04 Praha 8
TEL : 00422 6840725

Doc. PhDr. Lenka Rovná,CSc.
Institute of International Studies
Charles University
Národní 18
110 01 Praha 1

Milota Šujanová
Czech Statistical Office
Sokolovská 142
186 04 Praha

Ing. Kristina Larishová
Ústav mezinárodních vztahů
Nerudova 3
118 50 Praha 1

Josefina Wallat
Zahraniční odbor
Kancelář Prezidenta Republiky

Ing. Miloš Pick, CSc.
The Czech -Moravian Chamber
of Trade Unions
nám. W. Churchilla 2
113 59 Praha 3

Ing Oldřich Mesároš, CSc.
Economist
Praha

Dr. Blanka Ryboňová
Ministry of Interior, Prague

Monika Ledererová
Ministry of Interior, Prague

Ing. Vít Bárta, CSc.
WIFO Vídeň

Ing. Jaroslava Hadová
Výzkumný ústav zemědělské
ekonomiky
Mánesova 75
120 58 Praha

Dr. Antonio Menduiña
Minister-Counsellor
Delegation of the European Commission
Pod hradbami 17
160 41 Praha 6

H. E. Mr. Joannes Ter Haar
Ambassador
Head of Delegation of the European Commission
Pod hradbami 17
160 01 Praha 6

Dr. Reinhard Stuth
Konrad-Adenauer-Stiftung
Klimentská 46
110 02 Praha 1

Dr. Renate Stuth
Konrad-Adenauer-Stiftung
Klimentská 46
110 02 Praha 1

Dr. Michal Krejza
Second Secretary
Delegation of the European Commission
Pod hradbami 17
160 41 Praha 6

Dr. Petr Greger
Delegation of the European Commission
Pod hradbami 17
160 41 Praha 6

Dobroslav Matějka
Editor-in-Chief
Mezinárodní politika
Nerudova 3
118 50 Praha 1

An International Workshop

Economic Policy Framework in CEEC for the Process of Moving Towards the EU

Czernin Palace
Loretánské náměstí, Prague
Monday 25,
November 1996

M. Pick, M. Fassmann

The Foundation for the Study of International Relations, Prague

Czech and Moravian Chamber of Trade Unions
Macroeconomic Analyses and Forecasting Division

Social Market Economy in the Industrial and Postindustrial Era

(Social Market Economy in CEEC and in EU)[1)]

[1)] *Study was prepared for PHARE-ACE Project*

Miloš Pick, Martin Fassmann

SOCIAL MARKET ECONOMY IN THE INDUSTRIAL AND POSTINDUSTRIAL ERA

This analysis is limited to two issues, which are obviously the decisive ones for the future of a social market economy: the development policy in the industrial era and the policy of development of public services in the postindustrial era.

The present conflict between the system of the "pure" market - put through by the neoliberal wave of the 1980's and the 1990's - and the system of social market economy is concentrated most just on the two above-mentioned issues. These issues are obviously decisive for the future not only of an economic system, but also the economies themselves. Interests of underdeveloped and developed countries intermingle most just in these issues.

I. DEVELOPMENT POLICY IN THE INDUSTRIAL ERA

The first issue concerns the development policy. Regardless of the newness of this term which is at present used for support and overcoming of the development stage of less developed countries, let us have a look at from a certain retrospective, historical, detached point of view. The thing is that the social market economy has inherited it from the distant history.

During Industrialization and Sophistication

The first step can be seen as early as in the stage of the first industrial revolution. According to short-term comparative advantages of free market Britain would have specialized on textile and the United States on corn. That is to say Britain surpassed Europe and America with its industrial revolution by one century. In order to be able to catch up with and surpass Britain also in industry, Europe and America had to proceed according to List and Hamilton and apply an interventionist, protectionist policy, because they needed certain adaptation time for industrialization. In that era especially for accumulation of capital. That is why they could not proceed only according to a short-term conception and application of Ricardo's comparative advantages, but according to perspective comparative advantages. Just the interventionist policy made it possible for the countries lagging behind to become industrialized and overcome the development stage. Nowadays, even the largest

liberals acknowledge this stage at least for young countries and young branches of industry.

The second step - where the social market economy with this interpretation of the development policy has already interfered - was implemented after World War II in the stage of the beginning second industrial revolution, where above all sophistication of industry, perfection of products (the more the more complicated the product is) was concerned. The pioneer of this second industrial revolution was the most developed country - USA. If after World War II "Erhard's" Germany and other industrial countries (from Europe to Japan and later also the newly industrialized "tigers") had liberalized not only the domestic market, but immediately also foreign trade regardless of the development of economy, their economies would have been specialized according to short-term comparative advantages. Then Germany would have exchanged above all textile, cement and steel for computers with the USA probably "up to now". The above-mentioned countries prevented from it with a protectionist policy, which applied a foreign currency regulation for a very long period (in Germany until 1958, or 1961, as the case may be, and in Japan until 1964). When they afterwards passed to foreign trade liberalization and convertibility of their currencies, they applied a market conform protectionism, beginning with tariff barriers. The following twenty years of liberalization of international trade through GATT led to the decrease of only tariff barriers, and on the contrary, the developed countries increased their nontariff barriers from the share of 30 - 35 % in their import to 45 - 55 %. They only transformed protection of their market to other forms (see Table 1):

Table 1

The development of nontariff barriers of import in developed countries
(in % of import)

Country	1966	1986
EC	20.8	54.1
USA	36.4	45.0
Japan	31.4	43.5

Source: Kovač, O., European University Institute, Firenze 1993.

Just for this reason postwar Europe and Japan (and later on also the"tigers") could approach the american top thanks to their interventions, because they needed a considerably long adaptation period for sophistication of their industry (in this era especially for acquisition of know-how), although they have not caught up with the United States in the most sophisticated products (so-called "high tech") so far.

During Transformation

However, nowadays the model of "pure" market is being applied on the less developed countries in transformation. As if the lagging of productivity of these countries behind the developed world consisted only in the consequences of a nonmarket system (in production of a product of poor quality and waste of factors of production - including overemployment). Consequently, as if only the change of the system from a nonmarket to a market one was sufficient, which change would be necessary and at the same time sufficient for an accelerated overcoming of this "system" gap of productivity. As if these countries were not parallelly also less developed countries which require also a certain development policy until the time of their advancement in order to overcome their "technological" gap in productivity. As if just this technological gap did not represent the decisive part of lagging behind of productivity of these countries.

The failure to respect these facts has its consequences - in the first stage a deep aggregate and structural decline of GDP to less sophisticated products, and in the second stage - stage of growth - an accelerating deficit of the trade balance and the current account of the balance of payments.

Structural Defect

A common problem of not only these economies in transformation, but also of all less developed countries is their technological gap - the depth, structural shape and qualitative nature of lagging of their productivity behind the developed world especially as a result of lagging behind of knowledge and level of education (Denison 1967, 1985) - their structural defect (Pick 1994, 1995, 1996).

The present technological progress increases the lead of developed countries in productivity especially by perfection of products, the more the more sophisticated the product is. Consequently, the level of lagging behind of productivity of less developed countries is progressively proportional to the sophistication of products (outputs). If we arrange products upwardly from the left to the right according to their sophistication, the productivity curve of a less developed country defined in such way is of the shape of an inverted letter J: (⅂), when compared with the developed countries.

An analogous curve of unit costs is of the shape of a non-inverted letter J. In a medium-developed country this curve is of the shape of the letter U: "on the right side" (for example in machinery - where the share of "white collars", i.e. intellectual labour, is 32 %) it lags behind the developed world with its level of productivity, "on the left side" (for example in the textile, clothing and leather industry where the share of white collars is 17 %) it exceeds underdeveloped countries with its wage level. It has the biggest advantages "in the middle" - in "heavy", capital, energy, raw materials

and ecologically intensive basic industries with only medium sophistication. This shape of the unit domestic cost curve of a medium-developed country in comparison with the developed world (with the prices of the developed world) was expressed in the case of the Czech and Slovak Federal Republic before transformation of its economy (with a regression analysis of unit cost of exports[1] to market economies for 55 branches of the manufacturing industry for 1989 (see Graph 1).

This structural defect of productivity has not only not been overcome in the hitherto course of transformation in the Czech Republic, but in its first stage until the year 1993 (in the period of recession of economy) it further deepened, and the subsequent recovery in the stage of growth of economy (until 1995) has not restore the original state so far (see Table 2):

Table 2

The development of productivity in selected branches of industry of the Czech Republic in the period 1995/1989

Branch	Sophistication[1)] (in %)	Productivity	
		Index 1993/1989[2)] (in %)	Index 1995/1989[3)] (in %)
Total industry		81 - 83	95 - 96
including:			
textile, clothing and leather industry	17	70 - 71	75 - 76
wood-working industry	21	61 - 63	66 - 67
glass and ceramic industry	23	80 - 81	95 - 97
metallurgy	24	73 - 78	90 - 95
food industry	28	82 - 85	83 - 85
chemical and rubber industry	32	75 - 77	83 - 85
machine and electrical industry	32	66 - 67	82 - 83

Notes: 1) Share of intellectual labour in the USA 1986. 2) Enterprises with 25 and more employees. 3) Enterprises with 100 and more employees.

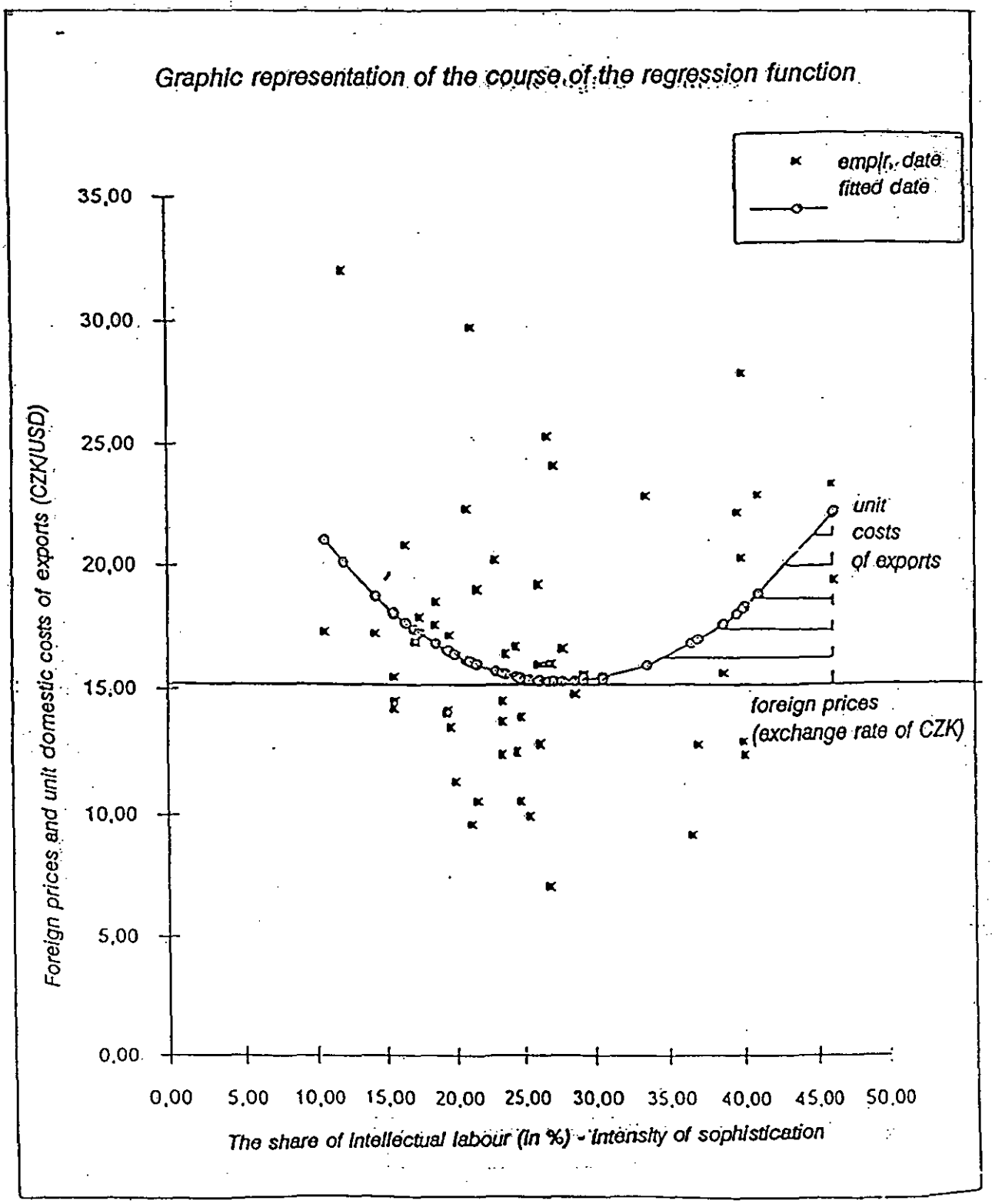
Sources: Federal Statistical Office of the Czech and Slovak Federal Republic, Czech Statistical Office, Ministry of Trade of the USA.

---

[1]*This curve expresses domestic costs in CZK to 1 USD produced by exports in the achieved foreign prices - i.e. unit domestic costs in the ratio to foreign prices. To characterization of sophistication of branches the data of a market economy (USA) were used, although they need not be quite compatible with unit domestic costs of the Czech and Slovak Federal Republic. Under a high degree of freedom (N=52), despite a low correlation index (R=0.33), the results of this regression analysis were admitted by the statistical so-called Student's test at 97.5 % of the probability level.*

Graph 1

Unit costs exports of the Czech and Slovak Federal Republic in market economies in 1989 dependent on their sophistication



In the course of the transformation process - as a result of almost full liberalization of foreign trade and absence of an interventionist policy - the foreign price structure penetrated also to the domestic price relations. That is why the structural defect, which revealed itself only in the "U" curve of unit domestic costs in relation to foreign prices formerly, begins to manifest itself also in the analogous "U" curve of unit domestic costs in ratio to the average foreign and domestic prices. Also in the domestic market domestic products have the largest competition advantages already only "in the middle" of this curve. This shape of the curve of unit domestic costs in ratio to the average foreign and domestic prices was expressed in the case of the Czech Republic in the present stage of transformation of its economy (with a regression analysis of unit costs of revenues in foreign and domestic markets[2] for 85 branches of the manufacturing industry[3] for 1995 - see Graph 2).

Consequently, the structural defect acts at present not only in exports to more developed countries, but also in the domestic market. Consequently, it impacts on the whole extent of domestic production.

This structural defect reveals itself above all in loss-making enterprises, the share of which is still considerable.[4] This defect is obviously the decisive cause of their loss, because especially for them the hitherto time and conditions of adaptation were insufficient. The curve of unit domestic costs expressing this defect is steeper (sharper) and more cogent here. Also this its shape was expressed in the case of the Czech Republic in the present stage of transformation of its economy (with a regression analysis of unit costs of revenues of loss-making enterprises[5] for 69 branches of the manufacturing industry[6] for 1995 (see Graph 3).

The structural defect deepens the discrepancy between the aggregate and structural growth and equilibrium of economy.

---

[2]*This curve represents unit domestic costs in CZK to 1 CZK of revenues - produced by domestic enterprises in foreign and domestic markets in foreign or domestic prices - i.e. unit domestic costs in the ratio to the average of foreign and domestic prices. Under a high degree of freedom (N=82), despite a very low correlation index (R=0.18), the results of this regression analysis were admitted by the statistical so-called Student's test on the level of probability of 90 %.*

[3]*Enterprises with 100 and more employees.*

[4]*The share of these loss-making enterprises in the number of employees of the monitored set of enterprises of the manufacturing industry was 34 % in 1995.*

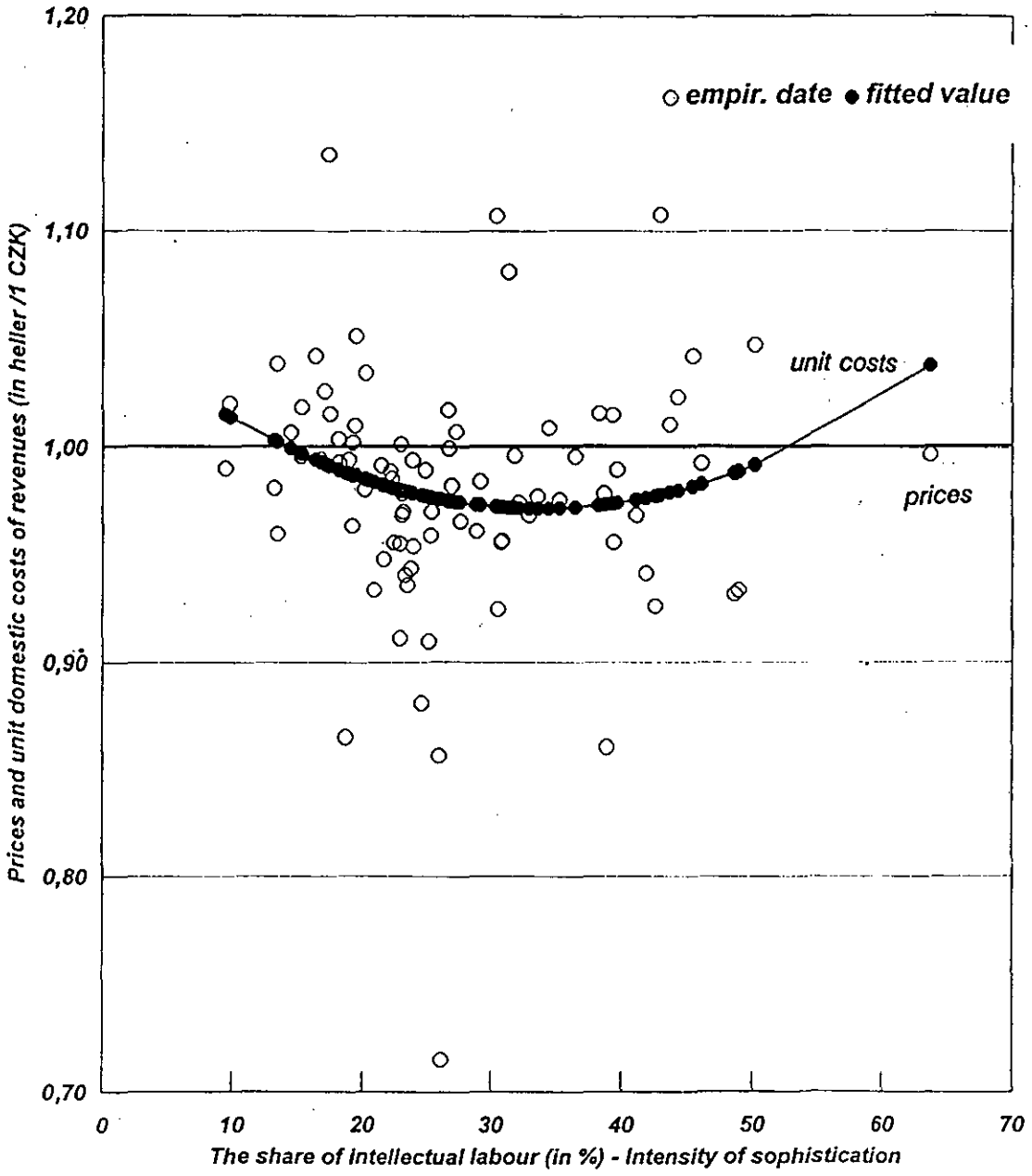
[5]*To the characteristics of sophistication of branches fully compatible data of this set of enterprises of the Czech Republic have been used here. Under a high number of degrees of freedom (N=66) and the correlation index R=0.61, the results of regression analysis were admitted by the statistical so-called Student's test on the level of probability of 99.9 %.*

[6]*Enterprises with 100 and more employees.*

Graph 2

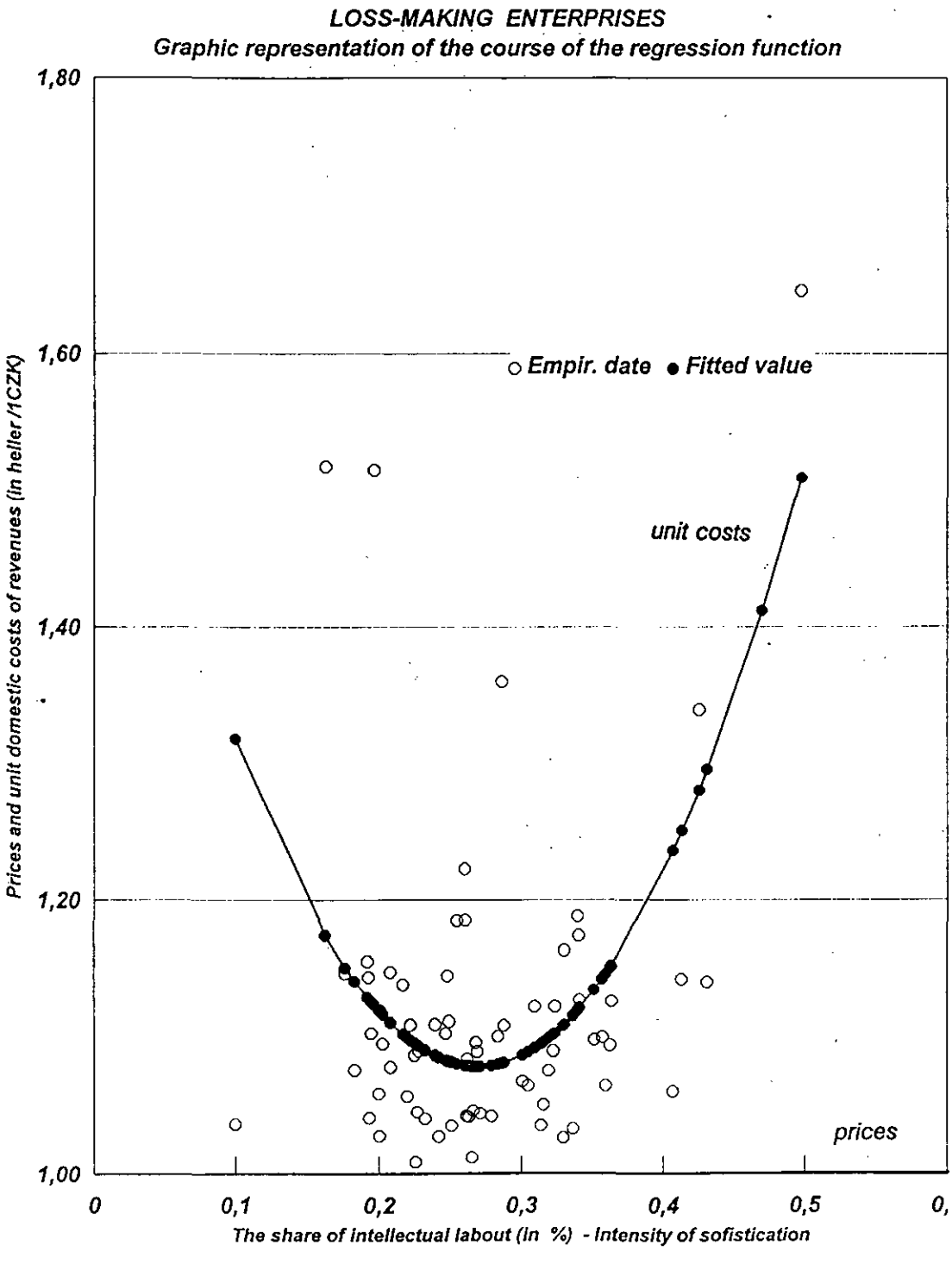
Unit costs of revenues of the Czech Republic in foreign and domestic market in 1995 in relation to their sophistication

ALL ENTERPRISES
Graphic Representation of the Regression Function



GRAPH 3

Unit costs of revenues of the Czech Republic in foreign and domestic market in 1995 in relation to their sophistication



The structural defect in a liberalized economy in transformation grades unit costs and (inversely) profitability[7], rate of profit from capital, and thus also the rate of growth of enterprises according to sophistication of their product (dependent on it). The intensity of this grading (and thus also of the structural decline of economy) is inversely proportional to the average rate of profit (aggregate dynamics of economy).

Similarly, the intensity of grading of unit costs and (inversely) of profitability of export (and thus also of its structural decline) is inversely proportional to its average profitability (its dynamics).

The structural defect in liberalized foreign trade creates at the same time marked differences (dispersion) of unit costs and (inversely) of profitability between individual marketed domestic products according their sophistication. It is a potential factor of disequilibrium of foreign trade, because the Marshall-Lerner's condition of price elasticity of export and import is not fulfilled: with an increase of the price level (foreign prices in domestic currency) of one per cent with devaluation much less than one per cent of other domestic products[8],the costs of which are higher by one per cent at maximum. Under an insufficient price competitiveness (price elasticity) of domestic supply, the demand for foreign supply (import) has an increased income elasticity - the import grows (or, on the contrary, falls down) more quickly than income (GDP).

The low price elasticity of domestic supply and the high income elasticity of foreign supply (import) in case of the Czech Republic was confirmed by the analysis of the Czech Statistical Institute for the years 1992 - 1995[9]. Thus also a high cost intensiveness of both instruments of equilibrium of economy - the exchange rate and macroeconomic restrictive policy follows from this analysis (after further calculations) under the above-mentioned conditions. A decrease in the deficit of foreign trade by 1 CZK would be achieved by devaluation for CZK 0.8 of additional cost of export, and a reduction of aggregate supply would achieve them even for a decrease (or deceleration) of growth of GDP of CZK 1.5 - 1.8.

---

[7] *In Graph 2 profitability (positive or negative one) is represented by the distance between the unit cost curve and the straight line of prices.*

[8] *In Graph 1 with devaluation of CZK the straight line of the exchange rate of CZK (expressing also the level of foreign prices in the domestic currency) would move higher from CZK 15/USD. However, for each one per cent of such shift less than one per cent of domestic productions arranged on the unit cost curve would get under this straight line.*

[9] *The price elasticity would make it possible to increase export by 0.3 % only and decrease import by 1.2 % in real terms with devaluation of 1 %. The income elasticity of import would make it possible to decrease import by 1.3 % with a fall of GDP of 1 %.*

The above described high costs of both instruments of equilibrium of economy - under the given conditions - are also a factor increasing inflation. The devaluation increases it with making import more expensive. A restrictive macroeconomic policy - reducing the aggregate supply as well as demand - is not only inefficient towards the cost inflation, but it generates it further with higher costs caused by a lower utilization of capacities and higher interest.

In spite of the structural defect for equilibrium of liberalized foreign trade of a less (medium) developed economy a costly instrument is used - a considerably low exchange rate of the currency in the ratio to its purchasing power parity (i.e a high ERDI - Exchange Rate Deviation Index). Together with it there is also a lower share of wages in productivity (lower unit labour cost also in the purchasing power parity of the currency). Also within the framework of OECD the level of ERDI is inversely proportional, and the share of wages in productivity on the contrary directly proportional to economic development of a country (GDP per capita, as the regression analysis has proved (Pick 1995 - see Graph 4)[10]. With regard to a low price elasticity of supply of the less (medium) developed country the exchange rate policy is, however, little effective and too expensive so that even an extremely high ERDI (and low wage) are not enough for equilibrium.

Under the strategy of a "pure market", i.e. under absence of an interventionist policy (eliminating the consequences of the structural defect) the main instrument of equilibrium towards foreign countries becomes the most costly instrument - aggregate and structural reduction of supply (GDP), and consequently also the deepening of its structural defect by the macroeconomic restrictive policy.[11] It is an instrument prevailing in the most backward developing countries (Faini, Melo 1990).

This structural decline in supply is realized at first mainly with non-utilization of capacities - however, where the capacities become extinct, it becomes irreversible even for a long period of time.

Consequences of the Structural Defect

Also in the medium-developed Central European economies in transformation above all the combination of an extremely high ERDI (an extremely low exchange rate of the currency) with a macroeconomic restriction of aggregate demand (leading to

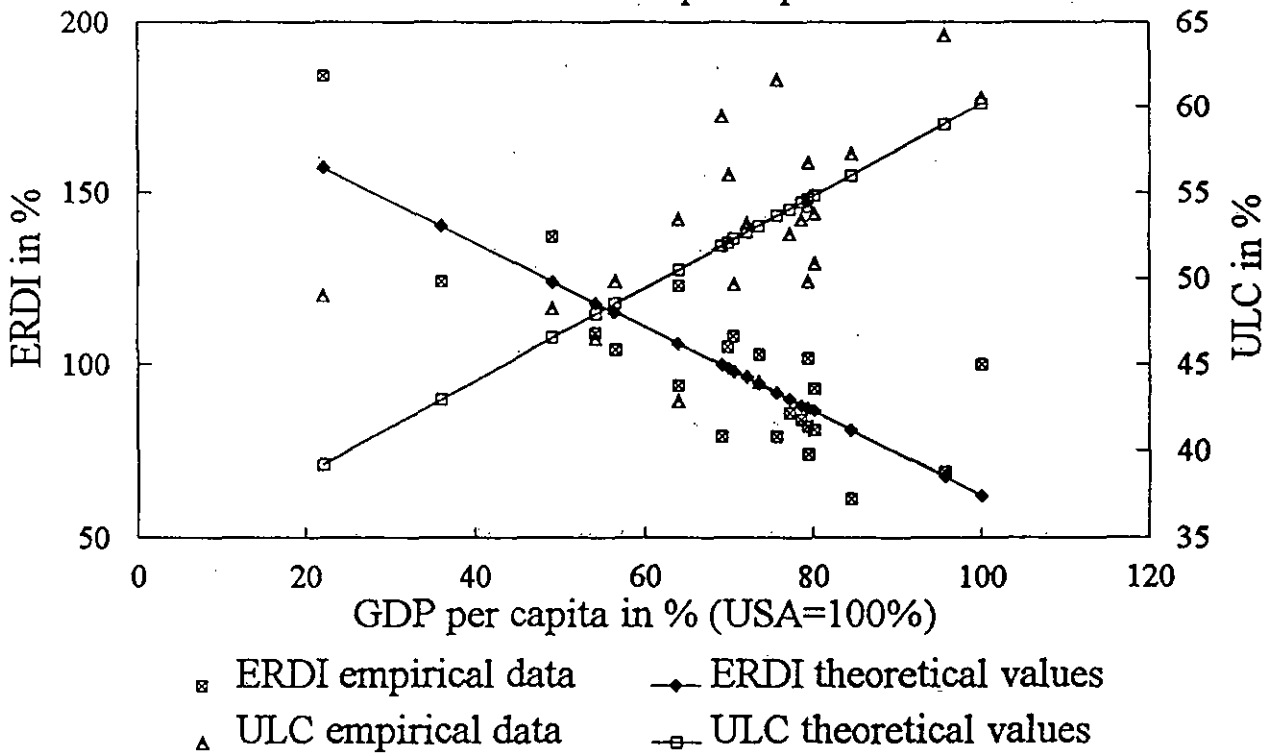
---

[10] *In such cases the regression analysis showed the correlation index* $R_1 = 0.82$, $R_2 = 0.67$.

[11] *Whereas the standard stabilization (restrictive) macroeconomic policy reduces only the "overhang" of aggregate demand over supply, here the degree of this suppression is considerably higher so that it reduces also supply (GDP).*

ERDI and Unit Labour Costs

in Relation to GDP per capita 1993



Calculated from data on OECD countries

Source: National Informations Centre of the Czech Republic, 1994

Graph 4

an aggregate and structural depression of economy) was used **in the first stage** of transformation.

At the beginning of transformation (in the year 1990 or 1991) parallelly with liberalization of foreign trade the ERDI coefficient was increased extremely by devaluations of national currencies, and the real unit labour costs were decreased considerably (expect for East Germany, where after the unification with the German Federal Republic the passage to the common currency represented on the contrary a considerable revaluation, and the wage explosion after creation of the common labour market led to an extreme increase of unit labour costs). Their level is roughly expressed by the available comparable data for the year 1992[12], although they "eroded" partially, when compared with the initial period (see Table 3):

Table 3

Unit labour costs and their factors in the Central European countries in 1992

Country	Real level (in %, West Germany = 100 %)		Ratio of purchasing parity to exchange rate of currency[1)]	Unit labour costs (per 1 DEM)	
	productivity (hourly)	labour costs (hourly		in purchasing power parity	in exchange rate
West Germany	100	100	1.00	0.57	0.57
East Germany	42	69	1.00	0.94	0.94
Czech Republic	34	29	0.25	0.48	0.12
Hungary	26	26	0.47	0.56	0.26
Poland	23	19	0.38	0.47	0.18

Note: 1) Coefficient of undervaluation of the currency against its purchasing power parity (inverted value of ERDI).
Sources: DIW Berlin, Eurostat, IDW - Köln am Rhein, ILO, OECD, Czech Statistical Office, National Information Centre of the Czech Republic.

Simultaneously, in the first 2 - 3 years of transformation, GDP decreased considerably as well - in East Germany by 32 % (until 1991), in Poland by 18 % (until 1991), in Hungary by 18 % and in the Czech Republic by 21 % (until 1993). This

[12]*The maximum level of ERDI and minimum level of unit labour costs were achieved in various times in individual countries.*

became evident also in structural decline in production, especially industry (Zeman, Rodová 1996) under the present relative growth of tertiary sector.

In this way in all above-named countries (except for East Germany) a surplus of the current account of the balance of payments was created at the beginning of transformation.

A structural decline in industrial production took place also in the Czech Republic in the first stage of transformation (until 1993), and it has not been overcome so far (until 1995 - see Table 4):

Table 4

The development of production in selected branches of industry of the Czech Republic in the period 1995/1989

Branch	Sophistication[1] (in %)	Production	
		Index 1993/1989[2] (in %)	Index 1995/1989[3] (in %)
Total industry		58	62
including:			
textile, clothing and leather industry	17	49	47
wood-working industry	21	59	62
glass and ceramic industry	23	67	76
metallurgy	24	55	64
food industry	28	71	72
chemical and rubber industry	32	65	70
machine and electrical industry	32	45	50

Notes: 1) Share of white collars in the USA 1986. 2) Enterprises with 25 and more employees. 3) Enterprises with 100 and more employees.

Sources: Federal Statistical Office of the Czech and Slovak Federal Republic, Czech Statistical Office, Ministry of Trade of the USA.

Thus a surplus of export of goods and services (net export) in the extent of 7 % GDP was created in the Czech Republic at the beginning of the first stage of transformation (in 1991).

In the second stage of transformation of Central European economies (in East Germany and Poland since 1992, in the Czech Republic and Hungary since 1994) the

growth of GDP recovered (its absolute level - except for Poland - is, however so far lower than before the beginning of transformation), and also the structural decline in industry (deepening of its structural defect) has stopped. However, the decisive instrument of equilibrium of these economies has been eliminated, and that is why a disequilibrium has been renewing, especially towards foreign countries (see Table 5 and Graphs 5 and 6 on pages 23 and 24).

Table 5

The development of ERDI, inflation and the current account in Central European countries in the period 1992 - 1995

Country	1992	1993	1994	1995
	GDP (in %, 1989 = 100 %)			
East Germany	73	77	84	90
Czech Republic	79	79	81	85
Hungary	82	82	84	86[1)]
Poland	84	88	92	99[1)]
ERDI (based on DEM)				
East Germany	1.0	1.0	1.0	1.0
Czech Republic	4.0	3.5	3.3	3.1
Hungary	2.1	2.0	1.8	2.0[1)]
Poland	2.6	2.7	2.7	2.6[1)]
Rate of inflation[2)]				
East Germany	18.3	9.1	1.2	.
Czech Republic	17.9	16.2	11.0	11.4
Hungary	21.5	21.5	20.6	24.1[1)]
Poland	38.5	30.6	28.6	27.0[1)]
Current account (in % GDP)				
East Germany[3)]	-74.2	-68.2	-66.2	.
Czech Republic	-1.5	2.5	-0.04	-4.1
Hungary	0.9	-9.0	-9.5	-5.7[1)]
Poland	-0.3	-1.0	-1.0	-1.9[1)]

Notes: 1) Estimate of WIIW Vienna. 2) Implicit deflator of GDP. 3) In intrastate conception.
Sources: DIWW Berlin, Eurostat, JP Morgan, OECD, WIIW Vienna, Statistical Offices of the Czech Republic, Hungary, Poland; National Information Centre of the Czech Republic.

An extremely high ERDI is a necessary precondition in these economies, without which it is impossible even to approach equilibrium of the current account of the balance of payment, as is shown also in case of East Germany. In spite of that is not enough for its securing - as the sole instrument of this equilibrium. That is why the current account of the balance of payments passed to the deficit in all these

countries (with the exception of Poland[13]) has already exceeded the internationally acknowledged critical limit of 4 - 5 % of GDP (the Czech Republic will exceed it in 1996 - the deficit is estimated at minimally 7 % GDP).

But still, this high ERDI (low exchange rate of currency) is "sufficient" for sale and speculation pressures on the capital account of the balance of payments. These conflicting risks are multiplied by the parallelism of a low exchange rate of the currency with other factors (low nominal price of shares derived from the book value of fixed capital in historical prices and low price of shares in the capital market, suppressed by the voucher privatization) in the Czech Republic so that enterprises are sold to foreign countries with shares for 5 - 10 % (engineering plants for 3 - 5 %) of book value valorized to the present prices.

Under the conditions of a structural defect and thus supply with low price elasticity the endeavour to maintain the undecreased level of ERDI by permanent devaluations (which are to compensate for the impact on the persisting real revaluation resulting from the inflation differential as against the developed partner countries) is, however, efficient only at the cost of a particularly high rate of inflation (Hungary, Poland). In the Czech Republic, the relatively lower rate of inflation than in the two above countries is achieved on the contrary especially at the expense of a decrease of ERDI. ERDI and inflation are communicating vessels.

An overcritical deficit of the current account of the balance of payments in these countries is not a natural accompanying phenomenon of growth of economy, but it is accelerated by a structural defect of supply (GDP). Especially in the stage of growth, an economy with such a defect cannot manage without another instrument of the trade and payment equilibrium towards foreign countries - the interventionist (structural and especially industrial) policy. Otherwise the discrepancy between equilibrium and growth of this economy can grow up to a repeated threat to growth (the case of Hungary and in 1996 also of East Germany and the Czech Republic). An additional factor of the threat of this growth is economic recession in developed countries (see below). However, both can lead to a repeated structural decline and a repeated divergence of these economies from the markets of developed countries (Landesmann, Pöschl 1995).

That it is why it is possible and necessary to realize liberalization of international trade only as a gradual process lasting for a longer term, with application of asymmetry for the benefit of less developed countries. The developed countries must open themselves at first and the most quickly - otherwise it would be protectionism for their benefit. The worse is that so far even an opposite asymmetry

---

[13] *In Poland the high deficit of the trade balance (5.2 % of GDP in 1995) has been compensated especially by an intensive purchase tourism from abroad so far. However, in 1996 also here the deficit increases many times.*

is applied for less developed countries in transformation (above all in the sphere of nontariff barriers). The existing moderations for the benefit of less developed countries (temporary reliefs for developing countries and countries in transformation in the WTO agreements and a slower limiting of interventions in the Association Agreements to EU) only weaken the persisting asymmetrical superiority of developed countries: the criterion is the continuing disequilibrium of foreign trade and current account at the detriment of less developed countries (including countries in transformation, associated to EU).

The premature shock deregulation and international integration (creation of a common market) of factors of production of a less developed country with a developed economy leads the more to a destructive escalation of a structural decline and disequilibrium of a less developed economy with a structural defect (experience of East Germany).

Development Interventionist Policy

Less (medium) developed Central European countries, transforming their economies, cannot manage without any development interventionist (structural) policy. Such policy should obviously be aimed at the support of viable sophisticated productions according to perspective comparative advantages (on the area of the hatched triangle in Graph 1). On the contrary, at uncompetitive nonsophisticated productions (on the left pole of the curve) there is a bigger risk of subjectivism - their support could be inconsistent with their perspective comparative disadvantages, or with probability of a perspective suppression of these productions and their transfer to less developed countries.

Such concentrated support would be above all less costly, and thus less inflation-making than the hitherto efforts for a general support to exports of all productions (along the whole width of the unit cost curve) by maintenance of an extremely high ERDI (i.e. by a general increase in profitability of export). Annual extra costs of export to developed countries, following from an extremely high ERDI based on DEM (only under a very rough estimation of purchasing power parity of this export) can be estimated at 15 - 17 % GDP in the Czech Republic for 1993 under many simplifying preconditions.[14]

The market conform ways of this support should proceed from the experience of successful countries. The assistance should be focused on overcoming of a structural defect (with an accelerated imitation of the development of developed countries). It should be oriented above all on support of research and development,

---

[14] *Similarly, in case of Greece and Portugal the extra costs were higher in 1993 (8 and 10 % GDP) than net subsidies from EU funds for these countries (6 and 4 % GDP).*

technological modernization and export. It should be provisional, conditional on the achieved results, in order to be able to face the risk of "becoming lazy" on the part of subjects of this assistance.

Such industrial policy should be also an instrument of a long-term adaptation process to full integration of Central European economies in the European Union. Based on the hitherto experience (especially of the less developed "South" of EU) we can assume that it would be mutually advantageous to arrange its conditions according to the principle: "less demands on subsidies from EU funds" in exchange for enabling of "more industrial policy" to economies in transformation.

The integration of the market of factors of production will probably be even a longer-term process in mutual interest.

As these adaptation processes can be only long-term, and small Central European countries would be disadvantaged for this whole period by a limited extent of their domestic markets, they should integrate their economies speedily in advance at least mutually, and they should adequately restore their export expansion to less (medium) developed East European countries and to the "third" world, as well.

II. POLICY OF THE DEVELOPMENT OF PUBLIC SERVICES IN THE POSTINDUSTRIAL ERA

The second issued concerns the policy of the development of public, above all quarternary services. We will try to deal with this issue from a certain long-term (this time perspective) detached point of view.

In the Tertiary Society

This issue concerns the very substance of the social market economy. Nowadays, it is on the defensive against the "hawks" of the wave of the "pure" market of the 1980's and 1990's in the developed countries of Europe towards the conservative-liberal policy (starting with "Thatcherism") and its neoliberal theory (starting with Hayek and Friedman). The social market economy is branded as implacable, wasting, incapable of competition.

The offensive is led not only against the extent of public and social services under the watchword of their "slimming". It is led above all for the change of the system, for full or maximal "withdrawal" of the state from economy, including expenditures for public and social services. In the market part of economy it manifests itself with the efforts for full "liberation" of enterprises not only by deregulation and privatization, but also for their maximum "liberation" (exemption) from

taxes - minimizing of their tax burden. Consequently, it is also an endeavour for a maximum elimination of a nonmarket, public part of economy (including public and social services), its "becoming more market-oriented" (including privatization).

In what does the cause of this "victorious world raid" of neoliberals lie? Usually, especially two causes are mentioned: the failure to manage "oil crises" of the 1970's by the Keynesian policy of postwar social market economies and the power breakdown of the countries of "real socialism" (centrally planned economies) in the cold war (Fukuyama: "End of History", 1985).

However, the basis is probably even a deeper cause - a gradual transition of developed countries to the first stage of postindustrial revolution - victory of the so-called tertiary society, as it was envisaged by Clark (1944) and Fourastié (1959) in the 1940's and 1950's. In the phase of the second industrial revolution - in the 1960's and 1970's industrialization culminated by a share of the secondary sector of almost 50 % in total labour force especially in Great Britain and Germany. In the first stage of the postindustrial revolution in the 1980's and 1990's the share of the tertiary sector in the most developed countries, especially in Anglo-American and Scandinavian ones, has, however, already exceeded 70 % (Tables 6 on page 19).

It is a result of opposite dynamics of demand and technical progress. With gradual satisfaction of needs from the simpler to more sophisticated ones - from foodstuffs and industrial products to services - also the deceleration of demand and thus also supply in the direction from simpler to more sophisticated sectors shifts: it occurs at first in the primary sector, then in the secondary one, and it is beginning only now in the tertiary sector. The dynamics (production) are thus graded upwardly from the primary to the tertiary sector. Technical progress and acceleration of productivity shift (with a certain delay) in the same direction, from simpler to more sophisticated sectors. The dynamics of productivity is graded in the opposite direction - downwardly from the primary to the tertiary sector. That is why they "drive out" factors of production (labour force and capital) gradually to "higher sectors" - from the primary to the secondary sector, and then to the tertiary one.

Just the expansion of market services of the tertiary sector - with its predominantly small and medium-sized enterprise - has created economic and social conditions of revival of the market and has enabled also the neoliberal campaign for the return to the "pure" market in the last decades.

Table 6

The development of the structure of labour force pursuant to sectors in selected countries
(in % of employment)

Sector and country	1870	1913	1950	1992
Primary (agriculture and forestry)				
USA	50.0	27.5	12.9	2.8
France	49.2	41.1	28.3	5.1
Germany	49.5	34.6	22.2	3.1
Great Britain	22.7	11.7	5.1	2.2
Japan	70.1	60.1	48.3	6.4
Secondary (industry and construction)				
USA	24.4	29.7	33.6	23.3
France	27.8	32.3	34.9	28.1
Germany	28.7	41.1	43.0	37.8
Great Britain	42.3	44.1	44.9	26.2
Japan	.	17.5	22.6	34.6
Tertiary (services)				
USA	25.6	42.8	53.5	74.0
France	23.0	26.6	36.8	66.8
Germany	21.8	24.3	34.8	59.1
Great Britain	35.0	44.2	50.0	71.6
Japan	.	22.4	29.1	59.0

Source: Madison A., Development Centre OECD, 1995.

To the Quarternary Society

However, this stage is probably ending in the most developed countries. Its possibilities are probably already largely exhausted. In the developed countries in the tertiary demand obviously approaches the limits of satisfaction gradually (its explosion becomes extinct). **We are already on the threshold of the second stage of postindustrial, above all information revolution, on the threshold of the quarternary society, on the threshold of expansion of quarternary services - if we conceive them widely as services connected with intellectual and physical development of a man - informatics, science, research and development (together with expansion of spare time), and medical and social care (together with prolongation of human life)**, as it has been envisaged by many futurologists, economists and specialist from other disciplines from various points of view since the 1960's - Fourastié (1959, 1965), Trow (1973), Naisbitt (1985), Drucker (1993).

The "bulldozer" of productivity has entered also the tertiary and has began to "drive out people" from there. However, it does not "drive" them to quarternary, but to unemployment.

Unemployment is not of a cyclical nature any longer, but especially of a long-term, structural character. In West Europe its rate amounted to 11 % in 1995 (of which 40 % are the long-term unemployed), and the coming recession has been further increasing this number. Long-term visions of technical progress (especially electronization) mark the possibilities of a high growth of productivity, which could release a large part of unemployment under unchanged conditions, and multiply the rate of unemployment in the world dramatically (Rifkin: "The End of Labour: The Decline of Labour Force and the Dawn of the After-Market Era", 1995).

Consequently, the problem is, when and how the society will be able to "switch over" the results of growth of productivity from unemployment to explosion of the quarternary and spare time.

However, the market - and the more the absolute, "pure" market fails here. It faces its barriers from two sides: its supporters (conservative-liberal policy) try to suppress the explosion of the quarternary from public expenditures, and they perceive it above all as a burden of costs, wasting, but the privatized quarternary, "made more market-oriented", is unable to "take over the baton" itself, and it rather escalates the wasting.

Public Slimming

Under these conditions the pressure on a decrease of public expenditures for the quarternary can be counterproductive. On the contrary, the share of total public expenditures in GDP has grown in a long term so far, as the role of the state in economy has grown - especially after World War II in West Europe as a result of development of social functions of the state - social market economy (see Table 7 on page 21).

Nor the conservative liberal policy has mostly managed to decrease the share of public expenditures since the 1980's, but it has only slowed down its growth (temporarily stopped in the second half of the 1980's). In West Europe this share increased on average from 45 % in 1980 to 51 % in 1992 (it grew from 32 % to 35 % in the USA and stagnated at 32 % in Japan). In West Europe this was made possible especially by the stabilization of the share of public expenditures to medical and social care on the level of 25 % GDP (which represents about one third of GDP, including public expenditures to science and educational system).

Table 7

The development of the share of total public expenditures in GDP in selected countries
(in % GDP)

Country	1880	1913	1950	1973	1992
USA	.	8.0	21.4	31.1	38.5
France	11.2	8.9	27.6	38.8	52.2[2]
Germany	10.0[1]	17.7	30.4	42.0	48.6[2]
Great Britain	9.9	13.3	34.2	41.4	51.2
Japan	9.0[3]	14.2	19.8	22.9	33.5

Note: 1) 1881. 2) National Information Centre of the Czech Republic. 3) 1885.
Sources: Maddison, A., Development Centre OECD, 1995. National Information Centre of the Czech Republic.

Consequently, this therapy has in actual fact "switched over" the economies of developed countries (especially of West Europe) to the opposite direction - it searched for savings above all by deceleration of growth of the quarternary.

The deceleration of growth of public revenues (tax burden) was more intensive only by a little: in West Europe their share in GDP increased on average from 42 % in 1980 to 45 % in 1992 (it stagnated at 31 % in the USA). Even this was "sufficient" for permanent (not only cyclical) budget deficits and a high growth of state indebtedness.

This mere deceleration of growth (or stagnation, as the case may be) of public demand can, however, be the Pyrrhic victory for the future. It probably contributed also to a permanent considerable deceleration of growth of economy of the developed countries, most of all of West Europe (similarly also of Japan), and started the present structural crisis for a long period.

In spite of that the pressure on further decrease of such expenditures goes on, and it is generated by domestic and foreign factors.

The economic and demographic development extends the groups of population dependent on social protection. Not only the share of the number of pensioners has been growing due to the ageing of population (until the year 2030 30 % inhabitants of West Europe will be older than 60 years), but another dependent groups have been extending also in the productive age. Besides the unemployed, also the number of incomplete families with one breadwinner (mostly mother with a lower professional qualification) has been expanding. This not only increases requirements on funds for social protection, but deepens also the income and social differentiation. On the other pole the income level has been increasing, as well as the

economic position of (in particular childless) families with two qualified breadwinners with stable incomes (two employments), which carry the burden of social solidarity less and less willingly and become the most distinctive domestic social and political force, supporting the "slimming" (ILO 1995), and thus also the neoliberal appeal "help yourself" - addressed to "the other".

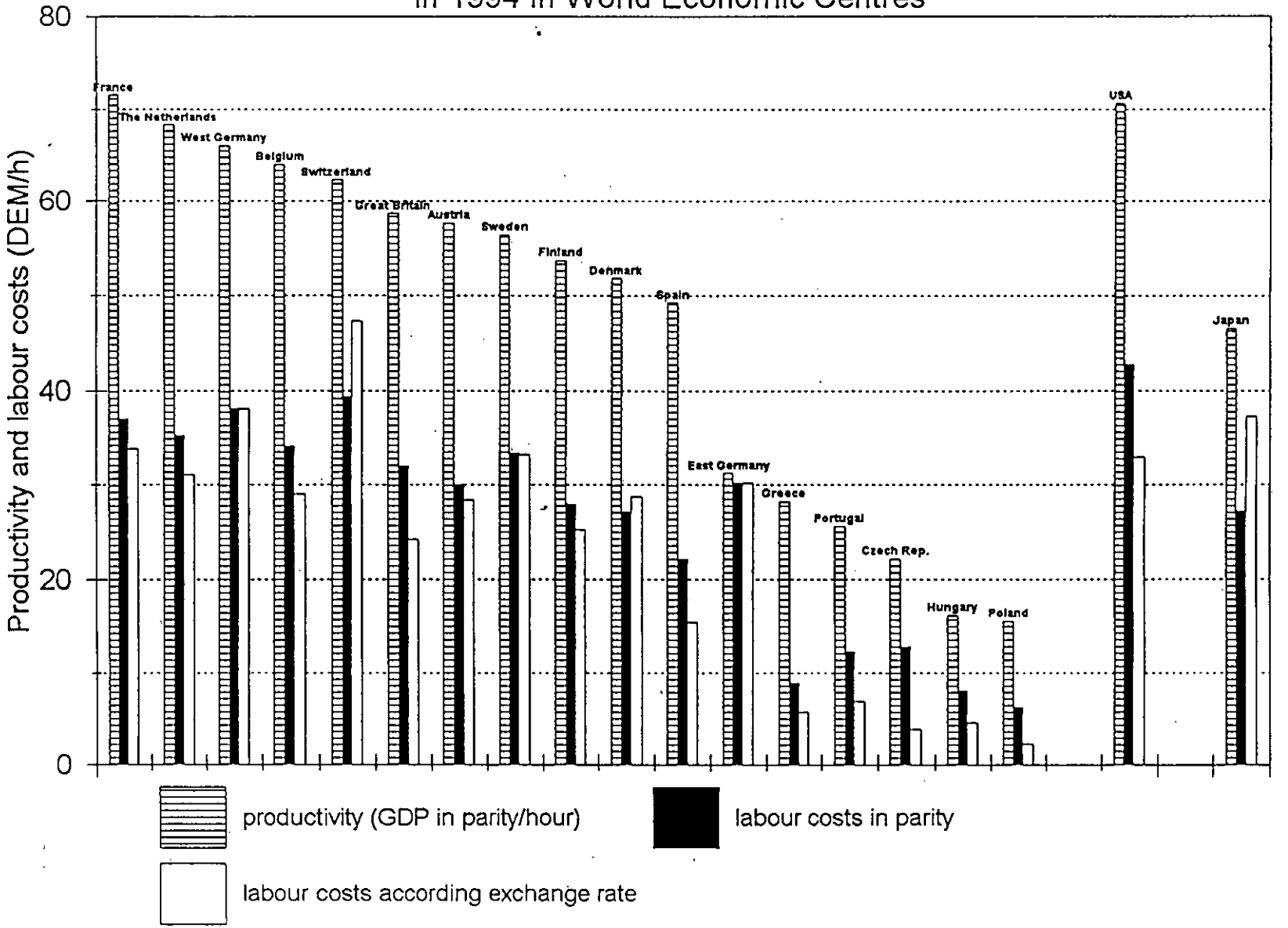
In globalized world markets also social and tax and monetary dumping of foreign competition not only of underdeveloped countries, but probably also of the USA, "exporting" not only unemployment, but also the nonsocial system of the "pure" market into social market economies of West Europe can act in the same direction. This is criticized also by J. Chirac (G7, 1996).

The basis of competitiveness is the level of productivity. In the last two decades (after 1973) - in the "after oil", neoliberal era - the USA have lost their long-term world priority in the level of productivity, as a result of the largest slow-down of its growth for the last 120 years (to 1.1 % annually). It may be result of more factors, especially the deceleration of the growth of product of the tertiary sector and the temporary delay of the contribution of an extensive technological modernization (expansion of computer, information technologies) which has not been fully absorbed so far (Maddison, 1995). However, it can also be a negative motivation consequence of the "pure" market including excessive income and social differences, the "flexible" labour market and "slimming" of enterprises, based rather on economic coercion than positive, proinnovation economic stimuli, social reconciliation, cohesion and participation of employees.

At a rough estimate, the USA have already been caught up with France and Germany in the level of productivity. In spite of that, they have maintained their priority in the real wage level. In order to keep the competitiveness of unit labour costs in foreign trade, they use two additional protective "cushions", characteristic for the most part for less developed countries: "social cushion" - lower burden on wages with non-wage social costs (by about 20 %, when compared with Germany) and "currency cushion" - a low exchange rate of the currency (milder by about 20 % in comparison with DEM). Thus the resulting unit labour costs (including social costs) - converted by an exchange rate of the currency are suppressed by about 20 % under the level of Germany in 1994 (see Table 8 and Graphs 5 and 6 on pages 23 and 24).

Graph 5

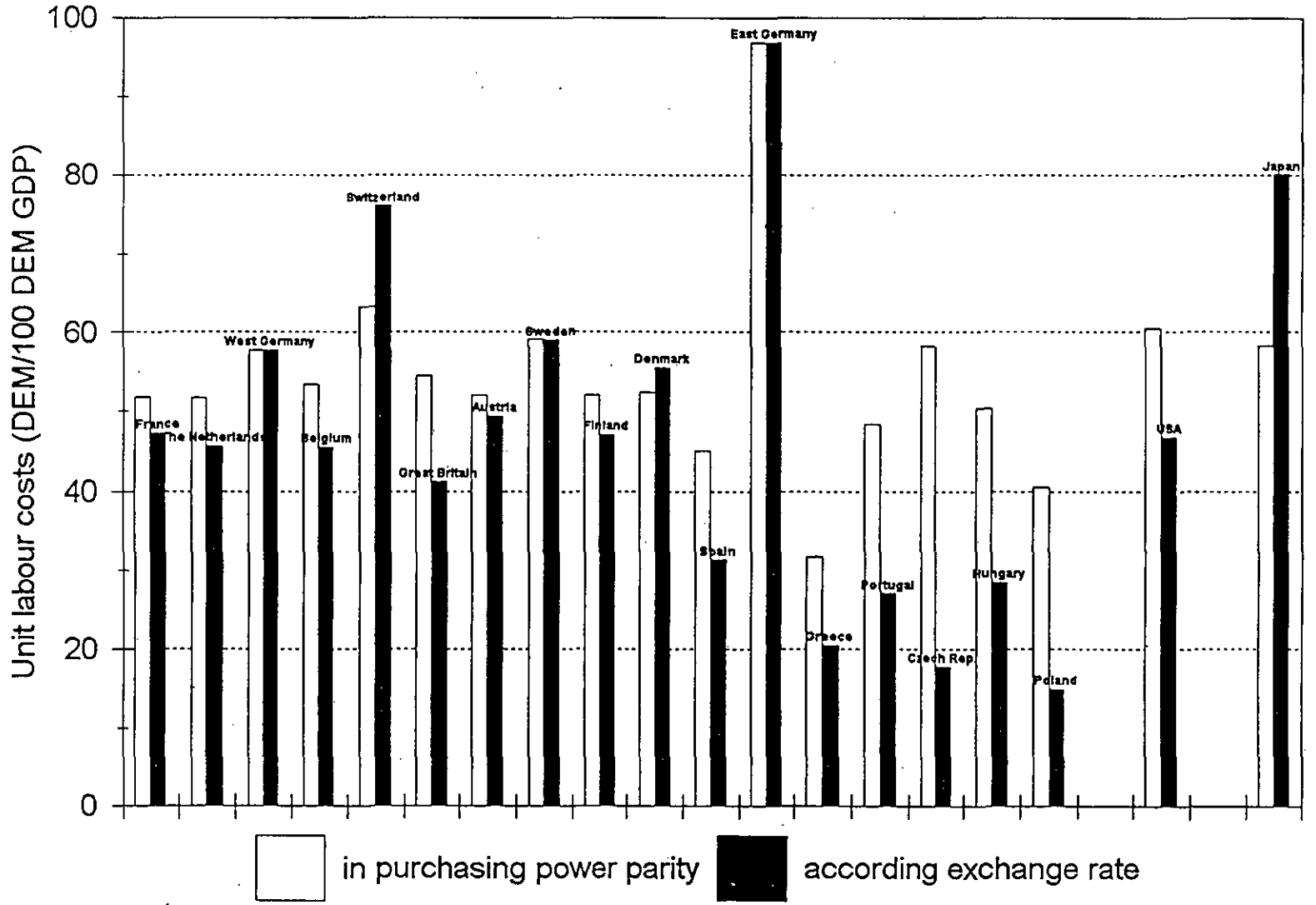
Hourly Productivity and Labour Costs
in 1994 in World Economic Centres



Sources: CSO, NIS ČR, ČNB, DIW BERLIN, WIIW WIEN, ILO, GUS WARSZAWA, A. MADDISON MONITORING THE WORLD ECONOMY 1820-1992, OECD 1995

Graph 6

Unit Labour Costs
in 1994 in World Economic Centres



Sources: CSO, NIS ČR, ČNB, DIW BERLIN, WIIW WIEN, ILO, GUS WARSZAWA, A. MADDISON MONITORING THE WORLD ECONOMY 1820-1992, OECD 1995

Table 8

Unit labour costs and their factors in selected countries in 1994

Country	Real level (in %, USA = 100 %)		Ratio (coefficient)		Unit labour costs (per 1 DEM)	
	productivity (hourly)	labour costs (hourly)	labour costs to wages[1]	parity to exchange rate[2]	in purchasing power parity	in exchange rate of currency
USA	100	100	1.43	1.00	0.61	0.47
France	101	87	1.93	1.18	0.52	0.47
West Germany	94	89	1.82	1.30	0.58	0.58
Japan	66	64	1.69	1.78	0.58	0.80

Notes: 1) Coefficient including the burden of wages by social (non-wage) labour costs (in manufacturing industry).

2) Coefficient of overrating of the exchange rate of the currency to the purchasing power parity in comparison with USD (inverted value of the ERDI coefficient).

Source: DIW Berlin, Eurostat, ILO, OECD, Czech Statistical Office, NIC CR, IDW - Köln am Rhein.

Consequently, social market Europe is facing also the foreign pressure: to achievement of a lead in the level of its productivity, or to the "slimming" of its social burden or its currency (the situation of Japan is dramatized by a low productivity and also a particularly high exchange rate of JPY until the year 1994). Conservative liberal governments of West Europe (especially that of Germany) consider, however, the overrating of their currencies (starting with DEM) as a pillar of stability of their economies, which is criticized also by the former chancellor Helmuth Schmidt (according to Le Monde, 3.9.1996). Thus they orientate this pressure one-sidedly to a search of social savings especially by tightening of the budgetary policy. This is, however, the least perspective way, whereas a perspective solution can be most probably the lead of productivity; a medium-term solution could, however, be protection against the exchange rate dumping - against the "softening" of USD. An example can be the decrease of the exchange rate of JPY from 1994 to 1996 by about one fifth, which makes it possible to revive the growth of Japanese economy.

On the contrary, further efforts for tightening of the budgetary policy ("Maastricht" in Europe and the Republicans in the USA) appearing in spite of the starting recession can further sharpen the situation.

Private Wasting

An alternative solution which is brought by the "pure", absolute market, i.e. to make also these quarternary services maximally "market-oriented" and to privatize them is irrational and nonethical here. It would be a market with a built-in superiority (and also the information predominance) of the seller in an imperfect competitive environment, with its definition inflationary and wasting (with noneffective costly or even unnecessary outputs and unreasonably high cost of transaction). It would be a market leading to an extreme social differentiation already not only in incomes and property, but also in the chance to life (intellectually and physically) with degenerative consequences.

For example the health service in the USA is the most expensive - the costs for it amount to 14 % of GDP, whereas in West Europe only to 7 - 9 %. It is largely wasting - even one third of surgical operations is superfluous or even counter-productive (according to Rand Corporation). In spite of that it is available only for a limited circle of receivers - a large part of patients is excluded, because there is weakened the principle of solidarity, and it is largely replaced by the insurance market (15 % of population have no insurance, and 24 % are covered by the government assistance projects only). It is at the same time the most privatized - it is covered by private funds from 54 %, whereas from 5 - 35 % only in West Europe (see Table 9):

Table 9

Expenditures for health care in selected countries

Country[1)]	Total expenditures for health care (in % GDP)		Share of public expenditures from total expenditures for health care (in %)	
	1960	1992	1960	1992
USA	5.3	14.0	24.5	45.7
Austria	4.4	8.8	69.4	65.2
Germany	4.8	8.7	66.1	71.5
France	4.2	9.4	57.8	74.7
Denmark	3.6	6.5	88.7	82.0
Great Britain	3.9	7.1	85.2	84.4
Sweden	4.7	7.9	72.6	85.6

1) The order according to the share of public expenditures in 1992.
Source: Oxley, H., Mac Farlan, M.: "Reform of the Health Care: Control of Expenditures and Increasing of Effectiveness" (OECD: Economic Studies No. 1/1995).

The expenditures for health (their share in GDP) in international comparison are directly proportional not only to economic performance (GDP per capita), but also to

the rate of privatization (share of private funds in health service of individual countries (this linear dependence was proved by a regression analysis of expenditures for health service[15] of 20 OECD countries for the year 1992 (see Graphs 7 and 8).

The most effective and economical - according to the existing knowledge - are probably the systems of public health service, enabling to use methods of strategic management (centralized assessment and selection of the most effective methods of treatment especially in case of very costly technologies) and the methods of financing, motivating rational behaviour of health facilities (efficiency, quality, economy). Unlike West Europe, in the USA the growth of expenditures for this predominantly market health service has, on the contrary, accelerated considerably (doubled), but at the expense of wasting. (Oxley, Mac Farlan 1995).

Similarly, for example in the private pension insurance the transaction costs amount to 30 % (ILO 1995), in the public one up to 2 % only.

Also in the educational system the failure of the "pure" market is crowned with personal accounts, leading - like in the health service - even to "self-impairment" of poorer patients. The more the rather perspective transition to generally higher education (Trow, 1973) and education of the adults (Papadopoulos, 1994) is beyond the power of the "pure" market.

This is not a crisis of the quarternary, this is above all a crisis of the system.

Policy of Development of Public Services

A perspective policy of the development of the public quarternary services would, therefore, probably make especially the public investments in the development of the man the main driving force of the future growth of economy of developed countries, and thus it should "switch over" the results of the growth of productivity to the explosion of the quarternary and spare time and to prolongation of the human life. Should this development of the man be more intellectual than physical (predominantly information technologies for the quarternary represent above all the

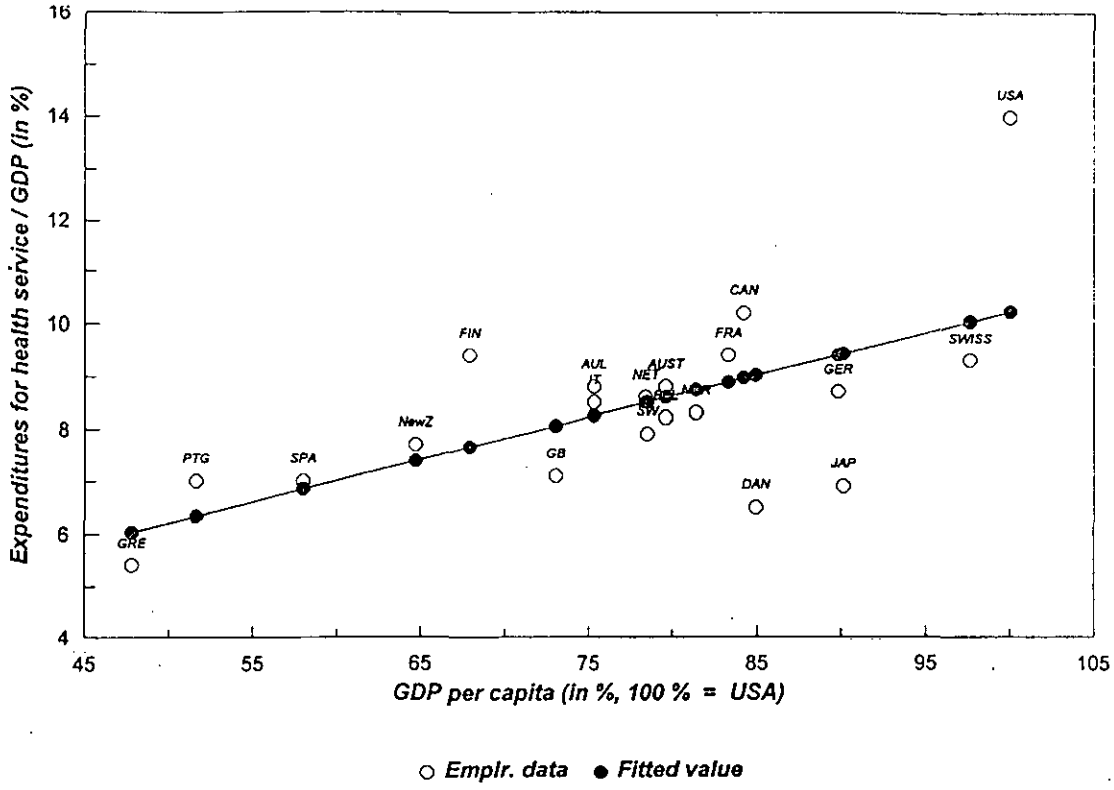
---

[15]*Graph 7 expresses the dependence of the share of expenditures for health service in GDP on the relative level of GDP per capita (on the ratio to the level of the USA). The regression analysis showed the correlation coefficient R = 0.77 and the results of this regression analysis were admitted by statistical so-called Student's test on the level of probability of 99.6 %.*

Graph 8 expresses the dependence of the share of expenditures for health service in GDP on the ratio of private sources in these expenditures. The regression analysis showed the correlation coefficient R = 0.58 and the results of this regression analysis were admitted by statistical so-called Student's test on the level of probability of 99.2 %.

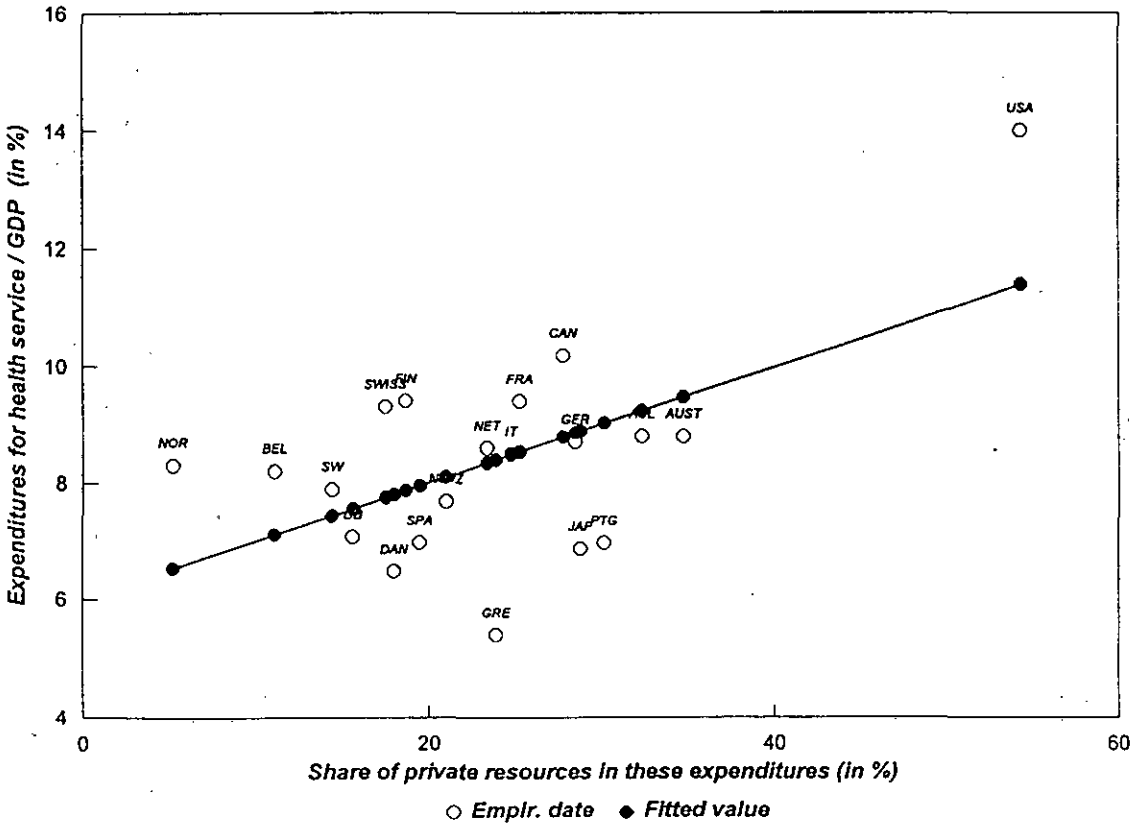
GRAPH 7

The share of expenditure for health service from GDP of the OECD countries in 1992 in relation to GDP per capita



GRAPH 8

The share of expenditures for health service from GDP of the OECD countries in 1992 in relation to the share of private resources



"incarnated" intellect, and only to a small extent the physical and energetic substance), also this - rather immaterial than material - growth of economy will be an important contribution to an ecologically permanently sustainable life.

To this phenomenon it is obviously necessary to increase the role of the public sector and the share of its revenues and expenditures in GDP - as opposed to irrealistic intentions of the "pure" market.

The public sector should be at the same time developed towards providing of all people with available standard quarternary services according to the principles of solidarity; this standard should be increased continually in dependence on the growth of resources (productivity). The market sector should provide above-standard services, the high expenses of which do not enable their general providing so far.

Also in the public sector, there should probably be applied and developed - together with strategic management - both the principles of solidarity and self-government, and the systems of financing stimulating efficiency (the focus will apparently shift more to growth of internal than of allocation effectiveness).

The explosion of the quarternary services will obviously intermingle with all sectors of economy and the whole system of the social market economy with its consequences. Its main social power in the coming century will probably no more any "proletarian" or "entrepreneur" (i.e. even any small and medium-sized entrepreneur - the main pillar of the tertiary society), but an "intellectual" in the widest sense - not only the present "white collars", but an intellectualized labour force, including workers in "white overalls". His viability will be verified in world competitive markets, especially in the competition of world leadership in productivity, although its international coordination at least among developed countries would contribute to an acceleration and facilitation of this development.

III. Conclusions

In the "pre-oil" Keynesian golden age of a quick development of the world economy after World War II the growth of GDP was the highest in less developed countries. In spite of that - due to quicker growth of their population - it was not sufficient for overcoming of lagging behind of performance (GDP/capita) of some underdeveloped regions (Latin America and Africa) after the developed world (see Table 10 on page 30).

Table 10

The phases of development of economic performance of selected countries[1] of the main regions

Region (country)	GDP		GDP per capita				
	Annual growth (in %)		Annual growth (in %)		Real level (USA =100 %)		
	1973/1950	1994/1973	1973/1950	1994/1973	1950	1973	1994
USA	3.9	2.5	2.4	1.5	100	100	100
Japan	9.2	3.4	8.0	2.6	20	66	84
West Europe	4.6	2.0	3.8	1.7	58	75	78
South Europe	5.8	3.0	4.8	1.9	24	41	44
Lat. America	5.2	2.7	2.4	0.6	36	34	27
East Europe	5.0	-0.5[2]	4.0	-0.9[2]	23	32	20[2]
Africa	4.5	2.6[3]	1.8	-0.4[3]	9	8	6[4]
Asia (without Jap.)	5.2	5.7[3]	2.6	3.6[3]	8	10	18[4]
of which China	5.1	7.3	2.9	6.3	6	7	17

Notes: 1) USA, Japan, 12 West European countries, 5 South European countries, 7 Latin American countries, 7 Central and East European countries, 10 African countries, 10 other Asian countries. 2) Estimate. 3) 1992/1973. 4) 1992.

Sources: Maddison A., Development Centre OECD, 1995. Podkaminer L., WIIW, Vienna, 1996, National Information Centre of the Czech Republic.

In the "after-oil" neoliberal era only the Asian countries without Japan - which also for the most part liberalized their economies, but did not abandon the interventionist policy - continued to accelerate growth of their performance. On the contrary, in the remaining world the growth of performance of economies slowed down considerably, and the more, the bigger the lagging behind of its level is. It decelerated by one third in the USA, and by more than one half in West Europe and Japan.

Latin America has not restored the relative position of its performance from the 1970's towards the USA, Central Europe is just beginning to restore it, East Europe (above all Russia and Ukraine) have not stopped their decline so far, which is unprecedented in the peace history (in 1995 in Russia the level of GDP per capita amounted to only 61 % as against 1989, and in Ukraine to only 44 %). Accordingly, the overcoming of lagging behind of efficiency of developed economies after the USA, has been slowing down or even stopping, and the gap of less developed regions has been further deepening.

The first "American Challenge" (Servan-Schreiber, 1967) roused Europe to overcoming of its lagging behind the USA, the second "American Challenge" ("pure" market) rather paralyses it, and simultaneously the whole "non-Asian world".

The absolute "pure" market not only leads rather to destruction than transformation of economies of less developed countries, but it has no answer to the questions of the 21st century, as ecology and the third world. Suddenly, it becomes even evident that it does not have the answer even to the basic question of the 19th century - unemployment - in the developed country.

The present crisis of the human society is much deeper than the most protagonists admit. It is a crisis not only of socialism, but also of capitalism.

With its global, strategic consequences it begins to realize the visions of a perspective shift of the focus of the development of human civilization from the Atlantic region to the Pacific region. With its internal consequences it causes an explosion of criminality, social and ethnical tensions, disintegration tendencies and conflicts, and revives extremistic powers. Internationally and internally it produces a threat of a return from the relations based on cooperation to relations based on confrontation.

There are more and more works written above all by American authors on the subject postcapitalism, postmarket era. Japanese authors (Sakakibara, 1995) brand the "pure" market rather as an Anglo-American matter. In Europe, there continues a discussion about the hopes of a social market economy and polemics with its opponents.

For the future system probably just the revival of a social market economy gives some solutions. The chance of the future is obviously in the connection of the "invisible hand" of the market and the "visible hand" of the state and public self-government despite the present efforts for its elimination through "slimming". Such a "switching over" to new trajectories can give new impulses also to international cooperation and integration processes in the present globalized world.

Maybe, the end of illusions is coming - but not the end of history. On the contrary, the history brings new challenges of the future.

IV. SUMMARY

This analysis concentrates on two issues which are decisive for the future of a social market economy, and in which the interests of less developed and developed countries pervade.

As a result of their technological gap (the so-called structural defect) the less developed economies - in the industrial era - will not be able for a rather long period to manage without a developing interventionist policy during their transformation to a market economy. Developed countries - in the postindustrial era - will not be able to manage without a policy of development of public quarternary services during their transition from the tertiary to the quarternary society. With this policy they will shift the results of the productivity growth from the explosion of unemployment to the explosion of these services, spare time and prolongation of human life.

V. SOURCES

Clark, C. (1994): The Economics of 1960, Macmillan, London, 1944.

Denison, E.F. (1967): Why Growth Rates Differ, Brookings, Washington D.C., 1967.

Denison, E.F. (1985): Trends in American Economic Growth, 1929 - 1982, Brookings, Washington, D.C., 1985.

Drucker, P. (1993): Post-Capitalist Society, Harper Collins, New York, 1993.

Faini, G., Melo, J.D. (1990): Adjustment, Investment and the Real Exchange Rate in Developing Countries, Economic Policy, The Economist, No. 24/1990.

Fourastié, J. (1959): La productivité, Presses Universitaires de France, Paris, 1959.

Fukuyama, F. (1985): The End of History, The National Interest, USA, 1985.

ILO: Report of the Director General, European Regional Conference, Warsaw, 1995.

Landesmann, M., Pöschl, J. (1995): Balance-of-Payments Constrained Growth in Central and Eastern Europe and Scenarios of East-West Integration, Vienna, WIIW 1995 (Research Reports No. 222/1995).

Liebenstein, H. (1966): Allocative Efficiency vs. X-Efficiency, American Economic Review, No. 6/1966.

Maddison, A. (1995): Monitoring the World Economy 1820 - 1992, Development Centre OECD, Paris, 1995.

Naisbitt, J. (1985): The New Directions Transforming Our Lives, Futura Publications, London, 1984.

Oxley, H., Mac Farlan, M. (1995): Health Care Reform: Controlling Spending and Increasing Efficiency, OECD Economic Studies, No. 24, 1/1995.

Papadopoules, G.S. (1994): Education 1960 - 1990. The OECD Perspective, Paris, OECD, 1994.

Pick, M. (1994): Liberalizace zahraničního obchodu méně vyspělých zemí (Liberalization of Foreign Trade of Less Developed Countries), Politická ekonomie No. 6/1994, Prague, 1994.

Pick, M. (1995 and 1996): Structural Defect in the Course of Economic Transformation of a Less Developed Economy (The Case of the Czech Republic), PHARE ACE Project "The Restructuring of Production and the Changing Nature of the Enterprise in East and Central Europe", Prague, 1995, Paisley, 1996.

Pick, M. (1996): Konec dějin nebo konec práce? (The End of History, Or the End of Labour?), Hospodářské noviny, Prague, June 4, 1996.

Pick, M., Rusnok, J., Fassmann, M. (1996): Pass Over from the Low-Wage Policy to the Skilled Labour Policy, European Trade Union Institute, Paris, 1996.

Podkaminer, L. (1996): Slower Growth in Central and Eastern Europe, Delayed Stabilization in Russia and Ukraine, Research Reports No. 228, 229, WIIW Vienna, 1996.

Rifkin, J. (1995): The End of Work: The Decline of the Global Labour Force and the Dawn of the Post-Market Era, G.O. Putnam's Sons, New York, 1995.

Sakakibara, E. (1995): Towards Alternative Models of Capitalism, Internationale Politik und Gesellschaft, No. 4, pp. 394-398. Fridrich Ebert Stiftung, Bonn 1995.

Servan-Schreiber, J.J. (1967): Le défi americain, Denoel, Paris, 1967.

Trow, M. (1973): Passage d'un enseignement superieur d'elite a un enseignement superieur de masse, OECD, Paris, 1993.

Zeman, K, Rodová, V. (1996): Efficiency of Manufacturing Restructuring in East-Central Europe, PHARE ACE Project "The Restructuring of Production and the Changing Nature of the Enterprise in East and Central Europe", Paisley, 1996.

Economic Policy Framework in CEEC for the Process of Moving Towards the EU

Czernin Palace
Loretánské náměstí, Prague
Monday 25,
November 1996

Petr Chvojka

Československá obchodní banka (CSOB), Prague

TRANSFORMATION OF ECONOMIES OF THE CENTRAL AND EAST EUROPEAN COUNTRIES: FINANCIAL CONTEXT OF THE PRIVATIZATION PROCESS AND RESTRUCTURING

(Overview)[1]

[1] Study was prepared for PHARE-ACE-Projekct

Transformation of Economies of the Central and East European Countries: Financial Context of the Privatization Process and Restructuring

Petr Chvojka

Although the Central and East European Countries (CEEC) have not reached the GDP level yet, which they had before 1990 (except for Poland, where GDP was higher by 11 % in 1995), their present and forecasted dynamics of growth show that they have already "taken off the bottom" (generally in 1993, and even earlier in Poland). Consequently, they have succeeded in overcoming certain negative impacts of the process of their transformation from the "command economy" to the market economy, and they have already started to yield also positive results of this process.

It is an immensely complex process - in actual fact a total political, social and economic reshaping under mutual determination of all these spheres - and thus necessarily also a long-term matter. It does not therefore astonish that it does not mean a parallel and always coordinated procedure in individual spheres or levels in all cases, i.e. that for example a successful macroeconomic development has from time to time not found an adequate response or implementation in the microsphere, and that it has not always been accompanied by the corresponding structural development in enterprises.

Among individual CEEC the development differed in this respect, i.e. it was differentiated both in the main components of creation and utilization of GDP and in the "lower order" structures, for example within the framework of industry. This conditioned - along with different historical starting points in individual countries - the rate of national success of the whole transformation process and its expression in real economic results.

The respective differences between CEEC have, however, been moderating gradually in their tendency, and certain general characteristics of the structural development of the shares of individual sectors and branches in GDP creation can be observed; the actual structural development of the corporate level is, however, influenced more or less by specific (historical, physical, etc.) differences of the conditions of individual CEEC economies.

The Main Determinants of the Restructuring Process

Naturally, the transformation of CEEC economies had many general preconditions, which had to be met. They were to be found in the order of macroeconomic reforms, characterizing the transition to the market system with their contents. There were included for example also the price liberalization as one of the important conditions for renewal of the functionality of the market (and thus also) of money, foreign trade liberalization, etc. The really market nature of these reforms was ensured by the parallel realized transfer of the state ownership to the hands of private entities. Consequently, privatization was the fundamental precondition and means of transformation.

Under the fundamental change of the role of the state it concerns the support of development (or even the emergence, as the case may be) of private sector as the proper upholder of economic transformation within the framework of the overall restructuring of national economy - and especially of industry. Privatization is therefore not an end in itself: a successful privatization cannot be limited only to the change of ownership (to privatization "in the narrower sense of the word"), but the ultimate goal is the corresponding restructuring of the whole economy, tending to an increase of its performance and competitiveness.

It is obviously possible to prove that the approach of individual CEEC to privatization, its chosen form, the speed of the whole process, etc. influenced considerably the proper restructuring, including the circumstances of its financing:

- The first of these interconnected problems is the chronological order of privatization and restructuring, i.e. whether or not the companies should be restructured before they are sold. This issue has been resolved quite unequivocally in the Czech Republic (as well as in the Slovak Republic), where the decision has been taken to privatize all assets before they are restructured. The Czech privatization limited itself only to the aspects of privatization "in the narrower sense of the word", to the restructuring of ownership. In actual fact, the restructuring relevant to production, the restructuring of enterprises, was resigned to. It was conditional on the one hand on the emphasis on acceleration of the privatization process (i.e. the priority was given to denationalization before restructuring), on the other hand on conceptual starting points: "the state is unable to make correct entrepreneurial decisions from its definition". Consequently, restructuring had to wait for the private owner, on whom then lied the whole burden of it.

In Hungary, the decision was taken after long discussion to restructure some companies before they were privatized, and so the restructuring process was slow since it was highly concentrated. In Poland, the restructuring of essentially profitable companies was planned to be carried out at the same time as companies were transferred into the hands of privately managed national investment funds (NIFs). The restructuring of unprofitable companies, however, has been delayed (in fact, it was the decision about the restructuring strategy which was delayed by prolonged discussions and the delayed adoption of amendments of the respective laws).

- In case privatization - as the "ownership restructuring" - preceded the restructuring of production, it influenced its course and results with its form and what owner it installed. The nature of the entity, which faced the task to implement the necessary restructuring and adaptation processes at its own expense and in its interest, has been conditioning their course, extent and results.

  - The hitherto experience shows that the standard methods and forms of privatization (as for example direct sales, public tenders and auctions) connected with acquisition of concrete owners led in overwhelming majority of cases to a relatively rapid and effective restructuring (including innovation of production, formulation of a new corporate strategy, improvement of technology and quality of production, etc.).

  - It is more difficult to evaluate correctly the consequences of the mass privatization, realized in a nonstandard form of more or less cost-free transfer of shares of the company to citizens.

For example in Poland it is the transfer of state property to the above-mentioned NIFs, the shares of which all citizens can exchange for privatization certificates (besides the portion of staff shares of the respective enterprises). In this respect the pioneer role was played by the Czech Republic (and in the first stage of the development also by the Slovak Republic), the "voucher privatization" of which meant a cost-free reallocation of a considerable share (approximately one third) of all denationalized property. In the first wave of the voucher privatization almost 6 million Czechoslovak citizens became shareholders through the "purchase" of shares of privatized enterprises for investment vouchers. Of them 72 % invested their vouchers through investment privatization funds. The privatization has led to a significant dispersion of shareholding among individual investors and investment funds with the consequence of limited impact on owners of the management of acquired companies. So the Czech economy faces nowadays the problem of overcoming this

ownership fragmentation and finding the way of "real realization" of ownership, i.e. such disposal of the privatized property so that it means stimulation of the desirable production restructuring of the respective enterprises. No matter how the evaluation of the hitherto contribution of the investment funds for restructuring of enterprises differs, under the present conditions this restructuring is really above all their own matter. Funds acted in many enterprises as their managers and executed actively the ownership functions, but somewhere else they often make do with the role of only a passive administrator of portfolio of securities of enterprises. (Their actual shift to an active managering is now regulated legally in the amendment of the act on investment companies and investment funds.)

- Besides that, the fact that the voucher privatization influenced the process of production restructuring especially because it itself did not create interested owners "capable of action", it left quite aside also the solution of problems of financial resources of this restructuring: it did not form and bring capital, because only reallocation of the already existing property was in question. The parallelly realized way of privatization in traditional forms (direct sale, etc.) has, however, also its problematic consequences in the financial sphere, and for the corporate sphere even larger than the voucher privatization: the financial obligations following from the respective privatization act siphoned off considerable means of the new owner, or led to his indebtedness so that afterwards he could invest in further development and the necessary restructuring of its enterprise only with great difficulty. It means that privatization itself - if we take closer note of its individual forms - can act not as a stimulus, but, ceteris paribus, on the contrary as a certain obstacle of restructuring.

- In this respect the necessity of an "external" financing of the restructuring process acts as an important determinant. Where it was not a matter of the preprivatization restructuring of enterprises (as was the case of Hungary, or to a certain extent of the former German Democratic Republic, where the institution Treuhand supervises the submission and implementation of the restructuring plan by the potential owner), the new owner must acquire available funds for restructuring in the respective financial market. Under the conditions of a developed market economy the financing of enterprises is realized as an optimal combination of equity participation, shareholding, etc., and the use of credits (loans and bonds). But the issue of shares or bonds presupposes a developed capital market, which, however, does not function in all CEEC so far.

There exist historical differences connected with how soon the individual CEEC took the path of a system transformation (when Hungary and Poland are in the lead). The subsequent development of the securities markets is, however, conditional on the above-mentioned differences in the character of privatization: in those countries that have pursued a selective approach to privatization and to listing companies on the stock exchange, such as Poland, the capitalization of the market remains small relative to the size of the economy, but liquidity of the stocks is high relative to total capitalization. In those countries that pursued mass privatization, such as the Czech and Slovak Republics, the total stock market capitalization is high relative to the size of the economy, but the liquidity of these markets is low relative to their total capitalization. The lack of market liquidity in those countries that pursued mass privatization programmes can pose a serious impediment to the post-privatization restructuring of enterprises.[2]

The acquisition of financial funds for enterprises by way of issue of shares, which is more favourable in some respects than financing in the loan market, si, however, hampered so far not only by the existing underdevelopment of the capital market as such, but also by its „voucher origin": the existing participants in the market and their activities are only a passive consequence of a cost-free acquisition of shares during voucher privatization. The issue of new shares (i.e. the development of the primary market) is affected with it negatively

- by both the approach of the managements of individual enterprises and their shareholders afraid of the loss of control and dilution of their joint-stock capital,

[2] *"Transition Report 1995", European Bank for Reconstruction and Development, 1995.*

- and the unwillingness of citizens to purchase the same value for their „really" saved money, which they earlier received free of charge in the two waves of privatization (and which sometimes yielded no dividend),

- also the existing preference to deposit savings in saving banks or bankds over investing in securities, etc. is connected with it.

The Role of Commercial Banks in the Process of Production Restructuring

Under the above-indicated conditions (besides the possibility of financing from own resources) bank loans remain the main form of financing of the restructuring investments.

The functionality of the banking system, made possible by its fundamental reconstruction in the context of transformation of economy of all CEEC, was the key problem also from this viewpoint. The importance attached to the transformation of banking in transition economies reflects its fundamental role in a market economy, providing not only finance for investments by enterprises and financial discipline over their operations, but also vital transaction services for commerce and securities activities. The transformation of banking involved a number of dimensions, apart from the basic creation of a two-tier banking system and solving the problem of "bad debts". These include the introduction and strengthening of prudential regulation and supervision, recapitalization and privatization of former state banks, and policies toward entry and exit of new private banks, both national and foreign ones. At present, the financial performance of banks in the region is dominated by the overhang of bad debts and risks in new commercial lending, but, according to the European Bank for Reconstruction and Development, other aspects of bank's financial performance (including net interest margins and operating costs) appear satisfactory, at least for the top commercial banks.

The banking sector was involved both in the ownership restructuring, privatization, and the related "material" restructuring, i.e. restructuring of production during its consolidation, realized with larger or smaller state aid.

• Whereas in financing of traditional forms of privatization the banking sector played the classic role of the funding resource, in the sphere of mass, i.e. voucher privatization (which concerns above all the Czech and Slovak Republics) it was involved in a specific way: without any considerable spending of their own financial means commercial banks started to influence an extensive segment of the range of privatized enterprises in a form of foundation, financing and administration of investment privatization funds. All what was said about the role and problems of investment funds generally, holds true also about this second case. In addition to that, in this case an important link was created between commercial banks and enterprises going beyond (or over) their classic credit and financial interconnection.

The existence of this linkage is the objective of critical reservations against "the control of enterprises by banks", "cross-ownership", etc., when banks act - through the respective investment funds - in the role of "indirect owners" and at the same time creditors of the privatized enterprises, which in turn can own shares of banks, etc., and a conflict of their interests, etc. can occur. (This problem is much too specific; there have been said many „pros" and „cons" relating to the problem of the engagement of commercial banks in the enterprises activities.) For support of the role of banks as the carrier of the corporate governance and control under the conditions of fragmentation of ownership as a result of the voucher privatization let me at least mention the following quotation: ..."if ownership is dispersed, effective governance is likely to fail as supervision by individual owners is ineffective and the firms' managers remain largely independent. On the other hand, corporate control through anonymous security markets is not a realistic option of Eastern Europe, where these markets are underdeveloped and information is strongly asymmetric. If direct involvement of the state is excluded, the banks are left as the only agents with a potential role in the restructuring of firms characterized by a wide shareholder base.[3]

[3] *"Economic Survey of Europe in 1994 - 1995", Economic Commission for Europe, UN 1995, p. 209.*

• In any case, even without final solution of the above-indicated problem, the issue of continuation of the proper restructuring of production of the privatized enterprises is a more urgent problem for the present stage. Bitter experience of banks with bad debts from the past affect, however, their present credit policy: the existing bad debts, their quantity, stock is connected with the problem of new credit flows. The banks direct often further funds in indebted enterprises in order that such enterprises keep themselves alive and the banks do not lose the possibility of return of the existing "frozen" credits. Consequently, on the one hand the situation in the sphere of bad debts is reproduced, and on the other hand the possibilities of crediting of new promising projects are limited. Thus also a bad allocation of new funds and their suboptimal - if not unprofitable - utilization occurs.

"Old", "large" enterprises have usually a certain own financial base, i.e. they can finance their restructuring partially from profit and depreciation. The growth of GDP and prosperity of the whole economy improve its situation (notwithstanding that they attract foreign capital). Large enterprises can obtain direct loans from foreign banks, be financed in the form of issue of bonds or shares, etc.

The newly emerging small and medium-sized enterprises are, however, often left to their own devices by commercial banks. But it is a category of enterprises, which is considered as the driving force of economic growth and structural changes in developed market economies. The banks have the biggest debt here as to the needs of restructuring of production.

It is a logical result of orientation of banks to optimal creation of their credit portfolio (where small and medium-sized enterprises belong to the more hazardous, more labour and cost intensive category of clients), and the banks are not interested in the shaping of the structure of production as such at all. They are interested in it only indirectly, through influencing of financial results of their own and the client's activity. Usually - for example by us in the Czech Republic at all events - they are missing not only stimulation by a purposeful state policy, but generally any obvious structural (industrial, etc.) national economy concept.

Especially in this respect suggestions and solutions must be looked for, how far the banking sphere should - and can objectively - react actively and positively to the existing restructuring needs of enterprises.

●

Not only in the above mentioned respects but also in some others the Czech banking system and capital markets still have to tackle many serious problems. They still generally lack some features which would bring the whole system to the European Union level, where banking houses and reliable functioning financial and capital markets are the basic prerequisities of economic stability and growth.

From this viewpoint it can be said that the problems of the future restructuring (as a „real" one) and growth of the Czech economy are determined by the process of its banking and capital sphere development towards the European Union standards.

References

1. Drábek, Z., "The Capital Markets in Central Europe", CERGE-EI, Prague, December 1993.

2. Country Study: The Czech Republic and Its Integration with the European Union - Domestic and International Economic Issues, European Commission, Brussels 1995.

3. Economic Survey of Europe in 1994 - 1995, UN, Economic Commission for Europe, 1995.

4. Facts and Figures on Central and Eastern Europe, Central European Quarterly No. 1/1996, Creditanstal, Vienna 1996.

5. Griffith-Jones, S., Fitzgerald, E.V.K., "The Development of the Financial Sector in CEEC" (in Czech), Finance a úvěr No. 10/1995.

6. Janda, P., Czesaný, S., "Certain Shift in Priorities Expected" (in Czech), Ekonom No. 46/1995.

7. Kapoor, M., "Hands Off", Business Central Europe. May 1996.

8. Kavánek, P., "Banking in the Czech Republic - Serving the Needs of the New Economy?", Financial Times Conference, Prague, June 6-7, 1995.

9. Kleer, J., "Banking Reform in CEEC - Gradual Changes" (in Czech), Ekonom No. 27/1995.

10. Mlčoch, L., "Primary Privatization of State Property is Over, Secondary Restructuring of Ownership Starts" (in Czech), Hospodářské noviny of July 12, 1995.

11. Mlčoch, L., "We Have Got to an Economic Cross-road" (in Czech), Hospodářské noviny of March 14, 1996.

12. Muegge, H., Assaf, G., "UNIDO and the Economies in Transition: the Challenge of Economic Recovery and Technical Assistance", MOST No. 5/1995.

13. Schröder, K., "Banking Reforms in East Central Europe", Intereconomics, July/August 1995.

14. "The Roundtable - Czech Privazation" (in Czech), Ekonom No. 19/1996.

15. Transition Report 1995. Investment and Enterprise Development, EBRD, 1995.

16. Vencovský, F., "The Pitfalls of the Capital Policy" (in Czech), Ekonom No. 11/1995.

(3)

An International Workshop:

Economic Policy Framework in CEEC for the Process of Moving Towards the EU

Czernin Palace
Loretánské náměstí, Prague
Monday 25,
November 1996

K. Zeman, V. Rodová

The Foundation for the Study of International Relations, Prague
Československá obchodní banka, a.s., Prague

Efficiency of Manufacturing Restructuring in East - Central Europe

(Overview)[1]

[1] *Study was prepared for PHARE-ACE PROJECT*

Contens

0. General Remarks

The most important factor of efficient Central and East European Countries (CEEC) integration into the West European and world developed market economies (DMEs) economic structures and of their preparation for accession into European Union (EU) (in the future) is the initiation and continuation of the persistent competitiveness catching-up process with the above-mentioned countries.

The importance of competitiveness approach for economic growth has been stressed in the Commission's 1994 White Paper (WP) on Growth, Competitiveness, Employment endorsed by the European Council as the bench-mark for the action taken by the EU and its member states[1].

This WP advocated an approach to industrial development aiming at global competitiveness. The objective of this approach is to bolster the EU's position in the markets of the future, generating jobs and value-added.

Message of this WP is also valid for associated CEECs preparing for the accession to EU.

International competitiveness is a complex notion. In the World Competitiveness Report 1995 the competitiveness is defined as "the ability of a country or a company to, proportionally, generate more wealth than its competitors in world markets"[2]. In the discussion document for the Forum on Competitiveness of the Industry Committee of OECD is proposed generic definition of competitiveness (policy): "supporting the ability of companies, industries, regions or supra-national regions to generate, while being and remaining exposed to international competition, relatively high factor income and factor employment levels on a sustainable basis"[14].

Nations compete in many different ways: to attract the firms and develop the industries that themselves compete in world markets for goods, and increasingly, for services. Nations even compete for the skilled and specialized labour needed to invent products and processes, design and build plants, manage production, and market products. The object of this competition is often seen as providing jobs. But this is too narrow. The real object is to provide better living standards for their people. By this we can measure their success.[3]

The evidence from many analyses shows that national economies developed most succesfully when they competed effectively in world markets.

By obtaining the resources that they do not naturally possess in world markets, these nations are able to focuse to their own resources on producing those goods and services where they

have a global competitive advantage. This advantage may rise from low cost labour, special skills and attitudes, a favourable climate, mineral resources, or simply ahead start in a particular industry that allows them to more quickly achieve economies of scope and scale than their potential competitors.

The basic precondition for acceleration and maintenance of economic growth is the competitiveness in world markets.

Competitiveness is an intrinsically dynamic concept and not all the key factors are well understood or entirely predictable, particularly those in the social and political realm.[4)]

The simplest aggregate measure of competitiveness is the national output (gross domestic product - GDP or value-added - VAD) per capita or per employed person or for working hour: those are productivity indicators expressed in internationally comparable currency (for example USD). This measure encapsulates the availability and the quality of production inputs, the impact of government policies and the implication of entrepreneurial skill and know-how.

Productivity - a key indicator of economic efficiency - is one of the basic factors for improving the standard of living and the position of CEECs in the world market.

Productivity growth is the key mechanism by which average income and welfare are improved: over the medium term faster productivity growth is associated with more rapid growth in real wages and real consumption per capita.

Relative productivity levels also provide important indications of economic performance and catching-up process of CEECs with DEMs, especially with EU member states.

This paper has two objectives:

- firstly, to summarize the results of the transformation process efficiency analysis, measured by indicators of labour productivity, in selected Central and East European Countries (CEECs) - in Czech Republic, Slovak Republic, Hungary and Poland
- secondly, to compare the efficiency level catching-up process in these CEECs with selected developed market economies (DMEs), especially with the European Union (EU) member states (Austria, Germany) and with less-developed member of EU which successfully realized cathing-up process with more developed member states after accession into EU: Portugal, Ireland.

0.1. Analytical Framework

0.1.1 Analytical Approach

The results of comparative analysis are presented in this paper in two parts:

- in the first part (Chapter 1) the development of macroeconomic indicators of labour productivity (GDP per person employed) are analyzed during the period 1989-1995 in four compared CEECs.

The stuctural pattern of productivity development in these countries on macroeconomic level (on the level of agriculture, industry including building industry and services) is also elaborated.

The total level of labour productivity in selected CEECs is compared between one another and with selected member states of EU (Austria, Germany, Ireland and Portugal). The process of catching-up is identified during 1989-1995 and the prospects of catching-up of productivity level in the next ten years (until the year 2005) is evaluated;

- in the second part (Chapter 2) the results of detailed comparative analysis of labour productivity development in manufacturing (in 3-digit code od ISIC classification, for 28 branches) are presented.

For analytical purposes total manufacturing is alternatively classified as

- light and heavy manufacturing[5],
- early (industries which supplied essential needs at low levels of per capita GDP; the share of these industries in total manufacturing value added (MVA) does not rise with the growth of income per capita)[6]
- middle (those industries the share of which in MVA expanded rapidly on intermediate levels of per capita GDP, but made only modest gains once per capita reached comparatively high level)[6]
- late (industries represented the most rapidly expanding field of manufacturing once the country had reached an advance stage of development (high level of GDP per capita)[6]
- semimanufactured, investment goods, consumption goods and food and beverages[7].

0.1.2 Statistical Information

The data for macroeconomic analysis of labour productivity (GDP and employment in sectoral structure: agriculture, industry /including building industry/ and services) in selected CEECs are taken from the Vienna Institute for Comparative Economic Studies (WIIW) data base and analytical studies[8)9)] and are supplemented from specialized sources for four CEECs[10)].

For the preparation of comparable data for labour productivity in selected EU member states the OECD national accounts data base are used[11)].

The level of labour productivity in selected CEECs is compared in USD transferred from national currencies by purchasing power parities (PPP) of these currencies toward USD[9)].

For selected EU member states also the PPP of their national currencies toward USD[12)] are used.

The data for manufacturing labour productivity analysis (value added and employment) in 3-digit code of International Standard Industrial Classification (ISIC) for former Czechoslovakia, Hungary, Poland and compared EU member states (EU total, EU large member states, EU small member states, Austria, Germany (W.G.), Ireland and Portugal) are taken from the UNIDO database [13)]. For the Czech and Slovak Republics the estimates for value-added and employment data are used (based on the Czech and Slovak Statistical Offices information; value-added in current prices at factor costs)[10)].

For the purposes of manufacturing labour productivity comparisons (of selected CEECs with EU member states) the figures for manufacturing value-added (in national currencies) in CEECs are recalculated into comparable figures in USD by purchasing power parities (PPP) of these currencies - see figures in Table A.1.

1. The Macroeconomic Framework

The development of agregate labour productivity in four analyzed CEECs was influenced by strong GDP growth to the end of the first half of 90s (see figures in Table 1).

Table 1

Growth rate of real GDP in selected CEECs
(Percentage change from proceeding year) a)

	1990	1991	1992	1993	1994	1995 b)
Czech Republic	-1.2	-14.2	-6.4	-0.9	2.6	4.8
Slovak Republic	-2.5	-14.5	-6.5	-3.7	4.9	7.4
Hungary	-3.5	-11.9	-3.0	-0.8	2.9	2.0
Poland	-11.6	-7.0	2.6	3.8	5.2	7.0

a) Constatnt prices; national currencies
b) Estimate

Source : /9/; /10

According to the performance of these countries economies during last two years (and according to the forecast for 1996-1997) the transitional macroeconomic recession have been overcome.

The analysis seems to indicate that private consumption and especially gross investment are essential in inducing higher GDP growth (see figures in Table A.2). Also in the future GDP growth in these countries has to be driven by investment.

The importance of maintaining investment growth (and investment ratio: high share of investment in GDP) for supporting and maintaining economic and productivity growth is stressed in many analyses of CEECs and DMEs [9) 16) 17)].

The engine of GDP growth in four CEECs was industry (especially manufacturing). Particularly strong growth of gross industrial production was recorded in Poland and in Hungary during 1993-1995. Substantial acceleration in the Czech Republic and Slovak Republic was reached in 1995 (see figures in Table A.3).

The acceleration of industrial production has been coupled with strong gains in labour productivity, the highest in Hungary and Poland (gross output per employed person - see figures in Table A.4).

1.1 Aggregate Analysis

The result of GDP growth rate acceleration coupled with continuation of total employment fall or its lower growth rate (than GDP) was the renewal and gradual acceleration of aggregate

labour productivity (GDP per employed person) during the last two years (see figures in Table 2). This acceleration of labour productivity growth rate has been very impressive in Hungary and Poland (and also in Slovakia).

Table 2

Real GDP per employed person in selected CEECs
(Percentage change from proceeding year) a)

	1990	*1991*	*1992*	*1993*	*1994*	*1995 b)*
Czech Republic	*-0.3*	*-9.8*	*-3.9*	*0.7*	*1.8*	*2.0*
Slovak Republic	*-1.7*	*-7.2*	*13.8*	*-4.6*	*6.6*	*4.9*
Hungary	*-1.7*	*-6.0*	*7.0*	*6.9*	*6.3*	*2.9*
Poland	*-15.0*	*-1.2*	*7.2*	*6.3*	*4.2*	*5.6*

a) In national currencies; in 1990 prices
b) Estimate

Source : /9/; /10/

The growth rate acceleration of aggregate labour productivity in the analyzed CEECs is the important requirement for the beginning of its catching-up with DMEs as the key condition for the growth of these countries competitiveness in the world market, especially in the EU member states markets.

The internationally comparable estimates of GDP per employed person for the analyzed CEECs (expressed in USD converted with purchasing power parities /PPPs/ from the national currencies) identified the Czech Republic (among these countries), at the beginning of transformation process towards the market economy (in 1990), as a country with the highest level of aggregate labour productivity, followed by the Slovak Republik, Hungary and Poland (see the figures in Table 3). The Slovak Republik reached about 78 per cent, Hungary about 67 per cent and Poland of 55 per cent of the Czech Republik aggregate labour productivity level (=100) - see figures in Table A.5.

A quicker growth rate of aggregate labour productivity (in current and constant prices) in Slovakia, Hungary and Poland than in the Czech Republic brought about a relative catching up with its level in the Czech Republic during the 1990-1995 - see figures in Table A.6.

The comparative level of aggregate labour productivity can be estimated in Slovakia about 96 per cent, in Hungary about 87 per cent and in Poland about 76 per cent of its level in Czech Republic in 1995.

Table 3

GDP by economic activity per employed person
(in thousands USD, PPP, c.p.))

		1990	1991	1992	1993	1994	1995 a)
Czech Republic	Agriculture	11.23	9.45	10.55	16.47	15.11	16.44
	Industry	18.89	19.25	18.98	17.86	18.82	21.11
	Services	19.23	16.56	17.51	18.37	19.35	19.27
	Total	18.15	16.88	17.45	18.06	18.88	19.69
Slovak Republic	Agriculture	.	.	7.95	8.82	11.47	10.79
	Industry	.	.	19.01	17.36	22.13	23.02
	Services	.	.	14.60	16.88	16.81	18.17
	Total	14.16	14.17	15.15	16.05	17.62	18.82
Hungary	Agriculture	.	6.58	9.21	13.92	18.81	.
	Industry	.	10.64	11.92	16.31	18.41	.
	Services	.	12.90	15.78	14.70	14.36	.
	Total	12.22	11.40	14.02	15.07	15.61	.
Poland	Agriculture	3.31	2.45	3.04	3.23	4.51	.
	Industry	16.52	14.81	14.98	16.33	17.93	.
	Services	9.61	11.90	14.33	15.79	15.12	.
	Total	9.90	10.00	11.54	12.63	13.78	.

a) *Estimate*

Source: */8/; /9/; /10/; /15/*

The comparison of estimated GDP per employed person in selected EU member states (for the year 1992) identified the productivity CEEC - EU differences. According these figures (see Table A.7) even the most advanced transition country, the Czech Republic, reached only 41 per cent of its EU average level and about 82 per cent of its level in Portugal.

A more pronounced catch-up can be expected only by accelerating the average growth rate of aggregate labour productivity. For reaching the EU(15) average level from 1992 in the year 2005 about 7.0 to 10.5 per cent for year growth rates has to be reached during the period 1993 - 2005 (see figures in Table A.8). In the case of hypotetical assumption of GDP per employed

person average growth rate for EU(15) during this period about 2.0 per cent catch-up can be expected by accelerating its growth rate about 10.0 to 13.8 per cent in these four countries.

Realization of these labour productivity growth rates in CEECs is not supported by historical experience of catching-up member countries of EU (Portugal, Spain) in the past. It can be assumed that substantial CEECs - EU productivity differences will prevail in the next ten to fifteen years.

1.2 Sector Level Analysis

The quantitative evaluation of productivity level by countries and main sectors (agriculture, industry - including building industry, services) evaluate agriculture as sector with the lowest productivity level (see figures in Table 3 and Table A.9). Industry (including building industry) is the sector with productivity level above the average in all four CEECs.

The comparison of relative GDP per employed person level in these three sectors indicates the same feature both in the selected CEECs and EU member states: the lowest productivity level is typical for agriculture and above the average (or near the average) is in industry (see figures in Table A.10). Also in services the productivity level is above average.

The catching-up process in the three CEECs with the productivity level in the Czech Republic is continuing also in all three sectors, especially in industry and services (see figures in Table A.5).

The comparison of productivity in these sectors in CEECs with the average level achieved in EU(15) (=100) indicates the greatest differentials for agriculture in Poland (=16), for industry in Hungary (=28), for services in the Slovak Republic and Poland (=33) - see figures in Table A.7.

The very similar differences in the productivity level in comparison with average of the EU level (=100) are in the Czech Republic and Portugal.

The achieved level of labour productivity in these three sectors in the Czech Republic was very near to its level in Portugal (=100) in 1992 (see figures in Table A.7): agriculture 98, industry 79, services 81, total 82.

The stimulation and continuation of a rapid growth rate in productivity is the basic strategy for substantial reduction of productivity differentials with DMEs (especially with EU). Experience of catching-up member states of EU supported competitiveness policy focused on

four basic priorities: promote intangible investment, develope industrial cooperation, ensure fair competition and modernise the role of public authorities. This approach has to be applied also to economic policy formulation towards productivity growth stimulation in CEECs in the preparatory period for accession to EU.

2. Manufacturing Level Analysis

As has been mentioned, productivity level across countries is a hazardous exercise, fraught with methodological problems and difficulties of interpretation[18]. Yet is an issue of considerable interest to analysts and policy-makers in CEECs, especially in the "second" period of tranformation process (and in connection with preparation for accession to EU), in which the restructuring will be more stressed in comparison with the stabilization period to the end of the first half of 90s.

Results of such a comparisons explicitly or implicitly underpin much of the discussion on the ability of countries to compete as well as international performance comparisons.

As it was mentioned in metodological remarks, purchasing power parities series for conversion of value-added figures (for four CEECs and compared EU member states) in national currencies into USD are used (see figures in Table A.1).

2.1 Aggregate Analysis

A clear divergence process in the manufacturing productivity level is typical for all three CEECs during 1989-1995 (see figures in Table 4). The level of value added in total manufacturing reached only 79 per cent in 1992 in former Czechoslovakia (or 81 per cent in 1995 according to the estimate) of its level from 1989. In Hungary it reached about 88 per cent (in both year 1992 or 1995) and in Poland about 80 per cent (in 1992) or 94 per cent (in 1995).

The process of catching-up (or returning) the productivity level in manufacturing from the beginning of transformation (1989) begun in all three countries in last two years (in 1993 or 1994).

Table 4

Basic figures for comparative value added per employed person in manufacturing estimate in selected CEECs

	1989	1990	1991	1992	1993	1994	1995 a)
Value added, in bill USD PPP b)							
Czechoslovakia	*49.23*	*43.06*	*32.4*	*28.65*	.	.	.
Czech Republic	.	.	.	.	.	*23.47*	.
Slovak Republic	.	.	.	.	.	*7.87*	.
Hungary	*17.48*	*16.00*	*13.96*	*12.64*	*12.00*	*11.68*	*11.74*
Poland	*97.09*	*70.89*	*59.59*	*61.92*	*67.07*	*68.77*	*71.46*
Employment, in thousands							
Czechoslovakia	*2572.0*	*2448.0*	*1955.0*	*1892.1*	.	.	.
Czech Republic	.	.	.	.	.	*1460.5*	.
Slovak Republic	.	.	.	.	.	*461.4*	.
Hungary	*1171.0*	*1117.0*	*1006.0*	*960.2*	*929.8*	*908.1*	*894.5*
Poland	*3326.0*	*3014.0*	*2671.0*	*2642.6*	*2634.0*	*2606.3*	*2599.0*
Value added per employed person, in thousands USD PPP b)							
Czechoslovakia	*19.14*	*17.59*	*16.57*	*15.14*	.	.	.
Czech Republic	.	.	.	.	.	*16.10*	.
Slovak Republic	.	.	.	.	.	*17.10*	.
Hungary	*14.93*	*14.32*	*13.88*	*13.17*	*12.91*	*12.87*	*13.13*
Poland	*29.19*	*23.52*	*22.31*	*23.43*	*25.46*	*26.39*	*27.50*

a) Estimate

b) In 1990 prices; except Czech and Slovak VAD data which are in current USD PPP

Average growth rates of manufacturing labour productivity level decrease during 1990-1993 changed to growth rate in 1994-1995: in former Czechoslovakia from -6.6 per cent to 1.7 per cent, in Hungary from: -2.4 per cent to 0.3 per cent and in Poland from -2.3 per cent to 1.3 per cent (according estimated value-added in 1990 prices).

Estimated figures for the value added per employed person in total manufacturing in all three countries (and in the Czech and Slovak Republics) indicated its substantially higher level in Poland (during the total period of comparison) than in former Czechoslovakia (or Czech and Slovak Republics) and Hungary - see figures in Table 4.

The relative value-added per employed person comparison in four CEECs with selected EU member states to the end of first half of 90s shows the best position of their total level in manufacturing towards Portugal (see figures in Table 5). The Czech and Slovak Republics

reached about 74 or 78 per cent of its level in Portugal and Hungary reached about 60 per cent. In Poland the productivity in manufacturing is about 26 per cent higher than in Portugal.

Also in comparison with the average level of labour productivitiy in total manufacturing in EU(15) and three other member states, the Polish position is the best among the selected CEECs: it reached 44 per cent of EU(15) average, 37 per cent of Germany, 52 per cent of Austria and 29 per cent of Ireland. The position of both Czech and Slovak Republic and Hungary is much worse. The Czech Republik reached about 26 per cent of the average manufacturing labour productivity level, Slovak Republic 28 per cent and Hungary only 21 per cent (in 1994 or 1995). In comparison with Germany (West) Czech Republic reached only 23 per cent, Slovak Republic 24 per cent and Hungary only 18 per cent of its productivity level. These CEECs occupy a better position in comparison with total manufacturing productivity level in Austria: Czech and Slovak Republics reached about 31 to 33 per cent, Hungary 25 per cent and Poland 52 per cent of its level.

A comparatively high level of manufacturing labour productivity in Ireland (Ireland reached about 51 per cent higher level than the average EU(15) in 1995) influenced the greater divergence of four CEEC's productivity level: Czech Republic and Slovak Republic reached only 18 and 19 per cent, Hungary 14 per cent and Poland 29 per cent of its level in 1994 or 1995.

Table 5

Relative value added per employed person in total manufacturing in selected CEECs

	Value added per employed person in these countries = 100				
	EU(15)	*Germany*	*Austria*	*Ireland*	*Portugal*
Czech Republic (1994) a)	*26*	*23*	*31*	*18*	*74*
Slovak Republic (1994) a)	*28*	*24*	*33*	*19*	*78*
Hungary (1995) b)	*21*	*18*	*25*	*14*	*60*
Poland (1995) b)	*44*	*37*	*52*	*29*	*126*

a) Current USD PPP
b) 1990 USD PPP

Source: Tables A.13

To overcome the average level divergence toward EU(15) from 1994 or 1995 in the next ten year (to the year 2005) these average growth rate per year of manufacturing labour productivity has to be reached: in the Czech Republic about 12.8 per cent, in the Slovak Republic 13.8 per cent, in Hungary 16.9 per cent and in Poland 8.5 per cent. As it was mentioned in the case of productivity comparison on the macroeconomic level (in chapter 1), to reach these average growth rates per year during the next ten years is unattainable (in spite of the fact that the CEECs are in the position of catching-up countries on a lower level of labour productivity).

2.2 Branch Level Analysis

The large falls of labour productivity in all manufacturing branches in former Czechoslovakia (during 1989-1992), in Hungary (during 1989-1994) and in Poland (during 1989-1991 (see figures in Tables A 11.1, A 11.4, A 11.5) were influenced by the above-mentioned "transformation recession" and also by the severest recession in DMEs in the post-war period during 1991-1992. The falls of manufacturing output in the analyzed transition countries were larger than the falls of employment. This feature of the transformation process influenced the development of labour productivity in almost all manufacturing branches in the compared CEECs.

The results of comparison of productivity levels across the compared CEECs (and selected member states of EU) and manufacturing branches indicate a very similar "shape" or "pattern" of relative value-added per employee in two digit ISIC branches (see figures in Table 6). The relative higher value of labour productivity (above average level in manufacturing=1.00) is (in all analyzed countries) typical for food products, baverages and tobacco (ISIC 31), with exception of a very low relative labour productivity level in Hungary (influenced by very a low labour productivity in food product (ISIC 311), chemicals (ISIC 35) and basic metals (ISIC 37) - see figures in Table 6.

Table 6

Relative value added per employee in manufacturing = 1.00

		Czecho-slovakia	CR	SR	Hungary	Poland	EU(15)	Germany	Austria	Portugal
MANUFACTURING		1992	1994	1994	1995	1995	1995	1995	1995	1995
31	Food product, beverages, tabacco	1.44	1.33	1.21	0.49	1.26	1.12	1.35	1.42	1.36
32	Textiles, wearing app, leather, footwear	0.60	0.66	0.55	0.64	0.47	0.56	0.63	0.63	0.61
33	Wood prod, furniture, fixtures	0.74	0.76	0.62	0.62	0.47	0.76	0.74	0.73	0.71
34	Paper and products, printing,publishing	0.91	1.33	1.47	0.98	0.93	1.05	0.92	1.21	1.59
35	Chemicals	1.45	1.72	1.94	2.47	1.74	1.54	1.53	1.21	1.73
36	Non - metal products	1.00	1.14	1.13	0.95	0.82	1.03	0.93	1.08	1.37
37	Basic metals	0.92	1.06	1.72	2.89	2.53	1.00	0.93	1.21	1.65
38	Fabr. metals and machinery	0.90	0.87	0.77	0.89	0.88	0.92	0.88	0.91	0.91
39	Other industries	0.76	0.86	0.59	0.55	0.61	0.74	0.69	0.72	0.55
	Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source : Tables A.11 a A.12

Textiles, wearing apparel, leather, footwear (ISIC 32) and wood production, furniture and fixture (ISIC 33) rank to the group of industrie with relatively very low level of labour productivity.

The branches of paper and paper products and printing and publishing (ISIC 34) reach relative level of labour productivity near the average or above it. With exception of Poland, the same conclusion is valid for the group of non-metal products industries (ISIC 36).

In fabricated metals and machinery industries (ISIC 38), the group with the largest production and employment in manufacturing, the relative level labour productivity is typically slightly under its average level in manufacturing (see figures in Table 6).

From the comparison of relative level of labour productivity pattern in groups of manufacturing industries (in both CEECs and selected EU member states) during the last five to six years, the conclusion can be formulated that its relative level and development is influenced more by technical and technological factors then by social-economic factors.

The results of productivity levels comparison across manufacturing industries in four CEECs (and in former Czechoslovakia in 1992) with its level in EU(15) average and in selected member states (Germany /W.G./, Austria, Ireland, Portugal) characterize its low level in the all compared CEECs and branches in the middle of 90s (see figures in Table A.13).

A better position is occupied by these four CEECs in this comparison with manufacturing branches productivity level in Portugal.

The effects of productivity differentials of the structure of manufacturing industry in these CEECs can be identified by this comparison. It showed that a higher productivity (higher than average of manufacturing) is in certain branches which form the part of specialized pattern of manufacturing.

In former Czechoslovakia, or in the Czech Republic manufacturing a comparatively higher productivity has in wearing apparel (ISIC 322), footwear production (ISIC 324), wood product (ISIC 331), plastics products (ISIC 356), pottery, china (ISIC 361), iron and steel (ISIC 371) and non-ferrous metals (ISIC 372).

In Slovak Republic a comparably better position (in comparison with productivity level in EU manufacturing branches) has occupied by food products (ISIC 311), wearing apparel (ISIC 322), paper and products (ISIC 341) and printing and publishing (ISIC 342) from the light manufacturing. The group of heavy manufacturing branches which constitute the specialized pattern of Slovak Republic manufacturing production have had also higher level of labour productivity: petroleum, coal products (ISIC 354), rubber products (ISIC 355), pottery, china (ISIC 361) and iron and steel (ISIC 371) - see figures in Table A 13.3.

In Hungarian manufacturing a higher level of labour productivity was achieved in textiles (ISIC 321), other chemicals products (ISIC 352), rubber products (ISIC 315), iron and steel (ISIC 371), nonferrous metals (ISIC 372) and in professional goods (ISIC 385). All these branches created the specialized pattern of Hungarian manufacturing production also in the middle of 90's.

The branches of beverages (ISIC 313), tobacco (ISIC 314), footwear (ISIC 324), paper and products (ISIC 341) together with iron and steel (ISIC 371), non-ferrous metals (ISIC 372) and also machinery n.e.c. (ISIC 382) have had higher level of labour productivity in Polish manufacturing. Poland occupies also a better position than other three CEECs in the level of labour productivity in comparison with its average in EU(15) and other compared DMEs - see figures in Table A.13.5.

As it has been stressed in the results of both previous analyses elaborated in this project[20),21)], a successfull adaptation of the specialization pattern in manufacturing of four CEECs according to the new economic and social-political conditions will take a long time. The close of the gap in labour productivity in their manufacturing sector is also dependent on this restructuring process.

Table 7

Average annual growth rate of labour productivity in selected manufacturing branches for overcaming the gap between its level in CEECs and EU(15) 1995 - 2005

MANUFACTURING		Czech Republic	Slovac Republic	Hungary	Poland
31	Food product, beverages, tabacco.	11.4	11.7	24.3	6.6
32	Textiles, wearing app, leather, footwear	11.1	12.3	13.9	9.6
33	Wood prod, furniture, fixtures	12.8	14.3	17.4	12.6
34	Paper and products, printing,publishing	10.6	9.0	16.0	9.5
35	Chemicals	11.7	9.9	10.4	6.6
36	Non - metal products	11.7	11.2	15.9	10.4
37	Basic metals	12.1	6.7	4.9	0.0
38	Fabr. metals and machinery	13.4	14.1	15.3	8.5
39	Other industries	11.5	14.8	17.9	9.6
	Total	12.8	12.2	15.2	7.9

Source : Table A.11

The figures about annual labour productivity growth rate in the selected manufacturing branches needed for overcoming the existing gap between its level in CEECs and average level in EU(15) illustrate the realization difficulties closing this gap in the near future.

According to these figures (in Table 7) the annual growth rate of labour productivity of about 8-15 per cent will be needed to overcome this gap (which existed in the years 1994-1995) during the period until the year 2005. A realization of a such high annual growth rate of manufacturing labour productivity is not probable, neither in the of CEECs "emerging market" situation.

The experience from the past development of OECD countries[18),19)] and industrial (or competitiveness) policy orientation of EU for the future[14)], support the integrated approach for stimulating manufacturing labour productivity growth. These approaches are applicable also in CEECs as an important precondition for closing the existing gap between them and DMEs in labour productivity level in manufacturing.

In this connection the policies for promoting investment (especially intangible into training and learning and into research) are stressed. The creation and adoption of new technology (competitive technologies) is a critical aspect of the plant level productivity.

An intensive industrial cooperation with EU during the association period is crucial for the catching-up productivity level in CEECs.

On the macro level, three economic policy factors will be particularly important to support and maintain the high economic growth in CEECs (as the most important condition for support of labour productivity growth in manufacturing) - stable prices, low (or efficient) government consumption and a competitive foreign exchange rate. The above-mentioned economic policies combined impact will help to close the existing gap in labour productivity between CEECs and EU(15) manufacturing.

Notes, References and Sources

1. Growth, Competitiveness and Ways Forward Into the 21st Century, White Paper, ECSC-EC-EAEC Brussels - Luxembourg 1994
2. The World Competitiveness Report 1995, World Economic Forum and International Institute for Management, Geneva - Lausanne, September 1995
3. International Finance, Issue 26, Winter 1996, Union Bank of Switzerland, Zurich

4. Multi-dimensional approach is applied in the World Competitiveness Report (1995) to the analysis of the competitiveness of 49 countries. The different aspects of world competitiveness are described by eight factors which are measured through 378 criteria. Productivity reflects level and development of value-added per employed person.
5. Light industry include food, beverage and tobacco industries (ISIC 311,313,314), textiles, wearing apparel leather and footwear (ISIC 321,322,323,324), wood product, furniture and fixtures (ISIC331,332),paper and publishing (ISIC 341, 352) and other industries (ISIC 390). Heavy industry include chemical industries (ISIC 351-356), nonmetal products (ISIC 361-362,369), metallurgy (ISIC 371-372) and engineering industries (ISIC 381-385).
6. Branches (in ISIC 3-digit) designed as
   - early (311,313,314,321,324)
   - middle (331,332,352,353,354,355,361,362,369)
   - late (322,323,341,342,351,356,371,372,380)
7. Branches designated (in ISIC 2-digital code) as semimanufactured (35,36,37), investment goods (37), consumption goods (32,33,34,39), food and beverages (31)

8. Countries in Transition 1995, WIIW Handbook of Statistics, Vienna 1995

9. Transition Countries: Economic Developments in 1995 and Outlook for 1996 and 1997. Research Report No.225, WIIW Vienna 1996

10. The Czech Statistical Office, Prague
Statistical Bulletin 1995, No.4
The Slovak Statistical Office, Bratislava

11. National Accounts, Detailed Tables Volume II, 1960-1992, OECD Paris 1994

12. OCED Economic Surveys: Germany, OECD Paris 1995

13. Industrial Statistics, UNIDO/IRD/RES
Database, UNIDO Vienna 1995

14. Competitiveness Policy: A New Agenda? DSTI/IND(95)14, OECD Paris 1995

15. The Vienna Institute Monthly Report (1996), No.3, WIIW Vienna 1996

16. International Competitiveness Revisited. In: International Finance, Issue 26, Winter 1996, Union Bank of Switzerland Zurich

17. Gordon, R.: Problems in the Measurement and Performance of Sevice. Sector Productivity in the United States, NBER Working Paper No.5519, March 1996

18. Industrial Policy in OECD Countries, Annual Review 1993, OECD Paris 1993

19. Industrial Policy in OECD Countries, Annual Review 1994, OECD Paris 1994

20. Zeman, K.: Overview: Comparative Analysis of the Restructuring Process in the Industries of the Czech Republic, Slovakia, Hungary and Poland,
Paper for the 1st Workshop of ACE-PHARE Project, DIW Berlin, June 1995

21. Zeman, K. - Rodová, V. - Dolecek, Fr.:
The Possible Future Restructuring Pattern of Manufacturing in CEEC (the Results of Forecasting Model)
Paper for the 2nd Workshop of ACE-PHARE Project, The Foundation for the Study of International Relations, Prague, November 1995.

Table A.1

Purchasing Power Parity of CEEC Currencies
(National Currencies / USD)

	1989	1990	1991	1992	1993	1994	1995 a)
Czech Republic b)	5.56	5.84	8.39	9.20	10.40	11.22	11.95
Slovak Republic c)	7.23	7.40	9.71	10.09	11.37	12.45	13.26
Hungary d)	26.74	32.26	45.58	48.10	56.83	66.00	81.42
Poland e)	0.06228	0.34753	0.52635	0.67819	0.86057	1.07362	1.31606

a) Estimate
b) CZK
c) SKK
d) HUF
e) PLZ (new)

Source: /9/

Table A.2

Growth rate of gross fixed investment and retail trade in selected CEECs
(Percentage change from preceeding year) a)

	1990	1991	1992	1993	1994	1995 b)
Gross fixed investment						
Czech Republic	6.5	-32.5	16.6	8.0	16.9	15.7
Slovak Republic	4.8	-27.3	9.2	13.1	2.1	9.2
Hungary	-9.6	-12.1	-1.5	2.5	12.3	0.0
Poland	-10.1	-4.1	0.4	2.3	8.2	18.6
Retail trade						
Czech Republic	.	-30.2	9.3	-2.1	5.5	.
Slovak Republic	0.6	-39.1	15.0	10.0	1.6	8.9
Hungary	.	-9.9	-3.3	0.8	-6.6	.
Poland	.	3.8	7.9	7.0	2.0	.

a) Real change
b) Preliminary

Source: /8/; /9/; /10/; /15/

Table A.3

Real growth rate of gross industrial production
(Percentage change from preceeding year)

	1990	1991	1992	1993	1994	1995 a)
Czech Republic	-3.3	-24.4	-7.9	-5.3	2.1	9.2
Slovak Republic	-4.0	-19.4	-9.0	-3.8	4.9	8.3
Hungary	-10.2	-16.6	-9.7	4.0	9.6	4.8
Poland	-24.2	-8.0	2.8	6.4	12.1	9.4

a) Preliminary

Source : /8/; /9/; /15/

Table A.4

Real growth rate of productivity in industry
(Percentage change from preceeding year) a)

	1990	1991	1992	1993	1994	1995 b)
Czech Republic	-0.3	-14.4	-2.2	-1.2	5.1	10.5
Slovak Republic	1.6	-22.5	-8.3	-4.7	7.0	4.1
Hungary	-5.0	-6.2	3.8	13.4	15.7	10.5
Poland	-20.3	-3.0	14.3	12.6	15.5	13.1

a) Indicator of gross output per employed person
b) Preliminary

Source : /8/; /9/; /15/

Table A.5

Comparisson of GDP per employed person in selected CEECs
(Level of GDP per employed person in Czech Republic = 100) a)

		1990	1991	1992	1993	1994	1995 a)
Slovak Republic	Agriculture	.	.	75	53	76	66
	Industry	.	.	100	97	118	109
	Services	.	.	83	92	87	94
	Total	78	84	87	89	93	96
Hungary	Agriculture	.	70	87	85	124	.
	Industry	.	55	63	91	98	.
	Services	.	78	90	80	74	.
	Total	67	68	80	83	83	87
Poland	Agriculture	29	26	29	20	30	.
	Industry	87	77	79	91	95	.
	Services	50	72	82	86	78	.
	Total	55	59	66	70	73	76

a) In USD PPP; current prices
b) Estimate

Source: Table 3

Table A.6

Estimates of index number for GDP per employed person in selected CEECs in 1995
(1990 = 100)

	Czech Republic	Slovac Republic	Hungary	Poland
At current prices	223	241	355	560
At 1990 prices	91	113	118	124

Source : /9/

Table A.7

Comparative level of GDP per employed person in selected CEEC and EU states in 1992

	Thousands USD PPP a)				GDP / employed person in EU(15) = 100			
	Agriculture	Industry	Services	Total	Agriculture	Industry	Services	Total
Czech Republic	10.55	18.98	17.51	17.45	54	45	40	41
Slovak Republic	7.95	19.01	14.60	15.15	41	45	33	36
Hungary	9.21	11.92	15.78	14.02	47	28	36	33
Poland	3.04	14.98	14.33	11.54	16	35	33	27
EU(15) total	19.40	42.50	43.90	42.10	100	100	100	100
Germany (W.G.)	17.81	43.85	48.75	46.76	92	103	111	111
Austria	13.73	39.77	43.34	44.17	71	94	99	105
Ireland	21.51	55.82	41.05	40.76	111	131	94	97
Portugal	10.75	24.08	21.67	21.20	55	57	49	50

a) *In current prices (PPP)*

Source: /8/; /9/; /10/; /11/; /12/; /15/

Table A.8

Required average growth rates of GDP per employed person to overcame the gap between its average level in CEECs and in EU(15) during the period 1993 - 2005

	Agriculture	Industry	Services	Total
The EU average level from 1992 a)				
Czech Republic	4.8	6.4	7.3	7.0
Slovak Republic	7.1	6.4	8.8	8.2
Hungary	5.9	10.3	8.2	8.8
Poland	15.3	8.4	9.0	10.5
The EU average level in 2005 b)				
Czech Republic	7.9	9.6	10.5	10.2
Slovak Republic	10.3	1.0	12.1	11.4
Hungary	9.1	13.6	11.4	12.1
Poland	18.8	11.6	12.3	13.8

a) *In current prices; (PPP)*
b) *Hypothetical assumption of GDP per employed person average annual growth rate in EU(15) during 1993 - 2005 about 2.0 per cent per year*

Source: Table A.7

Table A.9

Comparisson of relative GDP per employed person in selected CEECs
(GDP per employed person in total economy = 1.00) a)

		1990	1991	1992	1993	1994	1995 b)
Czech Republic	Agriculture	0.62	0.56	0.60	0.91	0.80	0.83
	Industry	1.04	1.14	1.09	0.99	0.99	1.07
	Services	1.06	0.98	1.00	1.02	1.02	0.98
Slovak Republic	Agriculture	.	.	0.52	0.55	0.65	0.57
	Industry	.	.	1.25	1.08	1.26	1.22
	Services	.	.	0.96	1.05	0.95	0.97
Hungary	Agriculture	.	0.58	0.66	0.92	1.20	.
	Industry	.	0.93	0.85	1.08	1.18	.
	Services	.	1.13	1.13	0.98	0.92	.
Poland	Agriculture	0.33	0.25	0.26	0.26	0.33	.
	Industry	1.67	1.48	1.30	1.29	1.30	.
	Services	0.97	1.19	1.24	1.25	1.10	.

a) In USD PPP; current prices
b) Estimate

Source: Table 3

Table A.10

Comparisson of relative GDP per employed person level in selected CEEC and EU states
(GDP per employed person in total economy = 1.00)

	1992		
	Agriculture	Industry	Services
Czech Republic	0.60	1.09	1.00
Slovak Republic	0.52	1.25	0.96
Hungary	0.66	0.85	1.13
Poland	0.26	1.30	1.24
EU(15) total	0.46	1.01	1.04
Germany (W.G.)	0.38	0.94	1.04
Austria	0.31	0.90	0.98
Ireland	0.53	1.37	1.01
Portugal	0.50	1.13	1.02

Source: Table A.7

Table A.11.1

CZECHOSLOVAKIA

Value added per employee a)

ISIC		1989	1990	1991	1992
311	Food product	20.4	18.8	16.5	14.8
313	Beverages	25.5	26.2	24.6	21.8
314	Tabacco	21.7	20.7	16.8	15.2
321	Textiles	15.9	13.6	12.9	11.4
322	Wearing apparel	9.0	8.3	11.7	11.1
323	Leather and product	11.6	9.1	9.9	9.0
324	Footwear	14.1	13.2	14.1	12.7
331	Wood product	16.6	17.8	17.0	16.0
332	Furniture, fixtures	9.6	9.0	12.5	11.4
341	Paper and products	25.4	19.5	16.9	15.3
342	Printing, publishing	16.0	15.7	14.3	13.2
390	Other industries	13.1	14.4	18.7	17.9
LIGHT MANUFACTURING		16.1	14.9	15.1	13.7
351	Industrial chemicals	30.0	27.1	23.1	21.1
352	Other chemical products	19.9	22.6	24.4	21.5
353	Petroleum rafinerie	52.5	47.4	34.4	31.5
354	Petroleum, coal products	29.2	32.9	30.5	29.4
355	Rubber products	23.9	16.8	15.4	12.7
356	Plastic products	14.5	21.2	18.4	18.0
361	Pottery, china etc.	14.1	15.8	15.0	13.9
362	Glass and products	15.1	14.1	12.4	11.2
369	Non-metal products n.e.c.	22.9	18.9	16.8	14.8
371	Iron and steel	36.9	26.1	21.7	20.3
372	Non-ferrous metals	35.1	34.0	29.0	26.4
381	Metal products	13.1	12.7	14.5	13.5
382	Machinery n.e.c.	16.9	17.9	16.0	14.7
383	Electrical machinery	18.7	16.3	15.6	14.4
384	Transport equipment	17.8	15.3	13.5	12.3
385	Professional goods	15.8	14.4	12.0	11.3
HEAVY MANUFACTURING	HEAVY MANUFACTURING	20.7	19.0	17.2	15.8
311, 313, 314, 321, 324	EARLY INDUSTRIES	17.9	16.4	15.4	13.8
331, 332, 352, 353, 354, 355, 361, 362, 369	MIDDLE INDUSTRIES	20.0	18.9	18.0	16.4
322, 323, 341, 342, 351, 356, 371, 372, 381 - 385	LATE INDUSTRIES	19.5	17.7	16.5	15.2
35, 36, 37	SEMIMANUFACTURED	29.0	24.3	21.0	19.2
38	INVESTMENT GOODS	16.8	16.3	15.2	13.9
32, 33, 34, 39	CONSUMPTION GOODS	14.5	13.1	14.0	12.7
31	FOOD AND BEVERAGES	21.2	20.1	18.0	16.2
MANUFACTURING		19.1	17.6	16.6	15.1
31	Food product, beverages, tabacco	21.2	20.1	18.0	16.2
32	Textiles, wearing app, leather, footwear	13.6	12.0	12.7	11.4
33	Wood prod, furniture, fixtures	13.1	13.3	15.1	14.0
34	Paper and products, printing,publishing	22.0	18.0	15.9	14.5
35	Chemicals	30.2	27.8	24.4	22.2
36	Non - metal products	18.8	16.5	14.6	13.1
37	Basic metals	36.6	27.1	22.6	21.1
38	Fabr. metals and machinery	16.8	16.3	15.2	13.9
39	Other industries	13.1	14.4	18.7	17.9

a) In thousands USD; 1990 prices PPP

Table A.11.2

CZECH REPUBLIC (1994)

ISIC		Value added per employed person 1000 USD PPP	Ratio of value added per person employed in manufacturing = 1.00
311	Food product	19.6	1.22
313	Beverages	20.1	1.25
314	Tabacco	104.4	6.50
321	Textiles	11.5	0.71
322	Wearing apparel	9.3	0.58
323	Leather and product	10.7	0.67
324	Footwear	9.9	0.62
331	Wood product	11.6	0.72
332	Furniture, fixtures	13.6	0.85
341	Paper and products	21.1	1.32
342	Printing, publishing	21.7	1.35
390	Other industries	13.8	0.86
LIGHT MANUFACTURING		**15.3**	**0.95**
351	Industrial chemicals	29.3	1.83
352	Other chemical products	28.4	1.77
353	Petroleum rafinerie	54.6	3.40
354	Petroleum, coal products	32.1	2.00
355	Rubber products	16.1	1.00
356	Plastic products	16.1	1.00
361	Pottery, china etc.	14.1	0.88
362	Glass and products	16.6	1.03
369	Non-metal products n.e.c.	21.9	1.36
371	Iron and steel	16.5	1.02
372	Non-ferrous metals	20.1	1.25
381	Metal products	13.5	0.84
382	Machinery n.e.c.	13.1	0.81
383	Electrical machinery	13.8	0.86
384	Transport equipment	16.6	1.03
385	Professional goods	12.7	0.79
HEAVY MANUFACTURING		**16.5**	**1.03**
311, 313, 314, 321, 324	EARLY INDUSTRIES	16.3	1.01
331, 332, 352, 353, 354, 355, 361, 362, 369	MIDDLE INDUSTRIES	20.2	1.26
322, 323, 341, 342, 351, 356, 371, 372, 381 - 385	LATE INDUSTRIES	15.2	0.94
35, 36, 37	SEMIMANUFACTURED	20.9	1.30
38	INVESTMENT GOODS	14.0	0.87
32, 33, 34, 39	CONSUMPTION GOODS	12.9	0.80
31	FOOD AND BEVERAGES	21.3	1.33
MANUFACTURING		**16.1**	**1.00**
31	Food product, beverages, tabacco	21.3	1.33
32	Textiles, wearing app, leather, footwea	10.6	0.66
33	Wood prod, furniture, fixtures	12.3	0.76
34	Paper and products, printing,publishin	21.4	1.33
35	Chemicals	27.7	1.72
36	Non - metal products	18.3	1.14
37	Basic metals	17.0	1.06
38	Fabr. metals and machinery	14.0	0.87
39	Other industries	13.8	0.86

Table A.11.3

SLOVAK REPUBLIC (1994)

ISIC		Value added per employed person 1000 USD PPP	Ratio value added per person employed in manufacturing = 1.00
311	Food product	20.3	1.19
313	Beverages	22.1	1.29
314	Tabacco	17.1	1.00
321	Textiles	9.9	0.58
322	Wearing apparel	10.3	0.60
323	Leather and product	7.3	0.43
324	Footwear	7.6	0.44
331	Wood product	11.6	0.68
332	Furniture, fixtures	9.9	0.58
341	Paper and products	25.9	1.52
342	Printing, publishing	23.7	1.39
390	Other industries	10.0	0.59
LIGHT MANUFACTURING		**14.2**	**0.83**
351	Industrial chemicals	27.7	1.63
352	Other chemical products	28.0	1.64
353	Petroleum rafinerie	85.3	5.00
354	Petroleum, coal products	78.4	4.60
355	Rubber products	23.6	1.38
356	Plastic products	20.5	1.20
361	Pottery, china etc.	17.1	1.00
362	Glass and products	19.5	1.14
369	Non-metal products n.e.c.	18.8	1.10
371	Iron and steel	31.0	1.82
372	Non-ferrous metals	4.3	0.25
381	Metal products	14.8	0.87
382	Machinery n.e.c.	11.3	0.66
383	Electrical.machinery	12.9	0.75
384	Transport equipment	16.4	0.96
385	Professional goods	15.3	0.90
HEAVY MANUFACTURING		**19.2**	**1.12**
311, 313, 314, 321, 324	EARLY INDUSTRIES	15.2	0.89
331, 332, 352, 353, 354, 355, 361, 362, 369	MIDDLE INDUSTRIES	22.7	1.33
322, 323, 341, 342, 351, 356, 371, 372, 381 - 385	LATE INDUSTRIES	16.2	0.95
35, 36, 37	SEMIMANUFACTURED	28.6	1.67
38	INVESTMENT GOODS	13.1	0.77
32, 33, 34, 39	CONSUMPTION GOODS	12.0	0.71
31	FOOD AND BEVERAGES	20.6	1.21
MANUFACTURING		**17.1**	**1.00**
31	Food product, beverages, tabacco	20.6	1.21
32	Textiles, wearing app, leather, footwea	9.4	0.55
33	Wood prod, furniture, fixtures	10.6	0.62
34	Paper and products, printing,publishin	25.0	1.47
35	Chemicals	33.1	1.94
36	Non - metal products	19.2	1.13
37	Basic metals	29.3	1.72
38	Fabr. metals and machinery	13.1	0.77
39	Other industries	10.0	0.59

HUNGARY

Value added per employee a)

ISIC		1989	1990	1991	1992	1993	1994	1995
311	Food product	7.5	7.1	6.3	5.9	5.9	5.9	6.0
313	Beverages	12.8	11.2	10.4	9.5	8.7	8.0	7.7
314	Tabacco	18.3	17.0	14.8	13.6	13.2	13.0	13.3
321	Textiles	9.2	9.5	10.3	10.0	10.4	11.1	12.2
322	Wearing apparel	7.4	6.7	7.1	6.9	7.2	7.4	7.5
323	Leather and product	9.7	8.7	5.8	5.2	4.8	4.6	4.5
324	Footwear	6.1	6.0	5.6	5.2	5.0	4.8	4.8
331	Wood product	13.5	10.9	7.9	7 2	7.1	7.1	7.4
332	Furniture, fixtures	10.2	9.5	9.3	8.8	8.7	8.6	8.7
341	Paper and products	20.7	19.6	18.2	17.0	16.0	15.4	15.6
342	Printing, publishing	18.3	15.2	13.2	12.0	11.5	11.3	11.4
390	Other industries	8.4	8.6	8.8	8.3	7.8	7.5	7.3
LIGHT MANUFACTURING		9.2	8.7	8.2	7.7	7.6	7.6	7.7
351	Industrial chemicals	33.4	31.1	30.1	28.5	27.5	27.3	27.7
352	Other chemical products	39.3	36.8	33.6	32.8	33.1	33.4	34.2
353	Petroleum rafinerie	127.9	122.6	109.0	111.1	114.2	118.2	124.7
354	Petroleum, coal products	11.2	10.8	9.6	9.6	10.0	10.4	10.8
355	Rubber products	24.7	31.7	28.2	28.8	29.1	30.3	31.4
356	Plastic products	19.2	18.1	15.9	13.8	13 9	14.1	14.9
361	Pottery, china etc.	11.9	10.7	9.2	8.5	7.9	7.7	7.7
362	Glass and products	13.4	13.0	12.2	11.8	11.7	11.6	11.7
369	Non-metal products n.e.c.	16.4	15.6	15.8	15.1	15.0	15.3	16.0
371	Iron and steel	21.2	22.3	23.6	23.2	24.3	25.9	28.2
372	Non-ferrous metals	37.6	42.3	47.3	46.8	49.6	51.8	54.0
381	Metal products	13.6	12.4	12.3	11.5	10.5	9.9	9.6
382	Machinery n.e.c.	14.4	12.3	11.5	10.6	9.8	9.4	9.2
383	Electrical machinery	14.9	14.6	15.8	14.9	14.4	14.2	14.4
384	Transport equipment	15.3	14.7	13.8	12.6	11.6	10 6	10.2
385	Professional goods	18.6	18.2	19.7	18.9	18.6	19.1	20.4
HEAVY MANUFACTURING	HEAVY MANUFACTURING	19.3	18.6	18.5	17.7	17.4	17.4	17.7
311, 313, 314, 321, 324	EARLY INDUSTRIES	8.4	8.1	7.6	7.1	7.1	7.1	7.3
331, 332, 352, 353, 354, 355, 361, 362, 369	MIDDLE INDUSTRIES	23.1	22.3	20.4	20.0	20.2	20.5	21.3
322, 323, 341, 342, 351, 356, 371, 372, 381 - 385	LATE INDUSTRIES	16.8	15.9	15.7	14.8	14.4	14.3	14.5
35, 36, 37	SEMIMANUFACTURED	27.5	27.7	27.1	26 4	26.9	27.6	28.8
38	INVESTMENT GOODS	15.1	14.0	13.9	13.0	12.2	11.7	11.6
32, 33, 34, 39	CONSUMPTION GOODS	9.8	9.4	9.1	8.6	8.5	8.6	8.8
31	FOOD AND BEVERAGES	8.4	7.8	7.0	6.5	6.4	6.3	6.4
MANUFACTURING		14.9	14.3	13.9	13.2	12.9	12.9	13.1
31	Food product, beverages, tabacco	8.4	7.8	7.0	6.5	6.4	6.3	6.4
32	Textiles, wearing app, leather, footwear	8.2	7.9	8.0	7.7	7.8	8.0	8.4
33	Wood prod, furniture, fixtures	11.3	10.0	8.7	8.1	7.9	7.9	8.1
34	Paper and products, printing,publishing	19.3	16.9	15.0	13.8	13.0	12.7	12.8
35	Chemicals	36.4	35.1	32.4	31.2	31.2	31.5	32.4
36	Non - metal products	14.7	13.8	13.2	12.6	12.3	12.3	12.5
37	Basic metals	25.7	28.5	31.2	31.1	33.1	35.3	37.9
38	Fabr. metals and machinery	15.1	14.0	13.9	13.0	12.2	11.7	11.6
39	Other industries	8.4	8.6	8.8	8.3	7.8	7.5	7.3

a) In thousands USD; 1990 prices PPP

POLAND

Value added per employee a)

ISIC		1989	1990	1991	1992	1993	1994	1995
311	Food product	16.1	21.8	18.4	19.2	17.9	16.7	15.2
313	Beverages	290.8	195.2	173.9	170.5	196.1	207.8	220.6
314	Tabacco	86.9	116.8	104.3	113.6	124.1	128.7	132.1
321	Textiles	28.6	13.2	13.9	13.6	14.3	14.7	15.4
322	Wearing apparel	17.0	8.3	6.8	7.2	7.9	8.2	8.6
323	Leather and product	23.2	13.7	15.8	16.1	17.6	18.3	18.8
324	Footwear	20.8	9.5	9.3	10.6	12.7	14.0	15.6
331	Wood product	26.9	15.4	14.1	13.7	14 0	13.6	13.4
332	Furniture, fixtures	20.8	12.3	9.5	10.1	11.2	11.8	12.5
341	Paper and products	30.7	25.5	23.1	26.0	30 1	32.8	36.1
342	Printing, publishing	15.1	12.8	12.9	13.5	14.7	15.2	15.9
390	Other industries	16.6	12.8	15.6	15.8	16.8	16.7	16.9
LIGHT MANUFACTURING		27.2	20.4	19.4	19.9	20.8	21.0	21.3
351	Industrial chemicals	33.0	30.1	31.0	32.6	35 4	36.5	37.9
352	Other chemical products	37 8	36.4	29.4	28.4	30.5	31 2	32.4
353	Petroleum rafinerie	286.0	273.1	200.9	205.8	218.5	222.2	227.4
354	Petroleum, coal products	20.1	58 9	59.2	60.1	61.1	59.7	57.6
355	Rubber products	28.0	19.0	18.2	19.1	21.5	22.7	24.6
356	Plastic products	23.5	20.6	16.5	17.1	18.2	18.6	19.1
361	Pottery, china etc.	22 7	13.8	13.0	13.5	14.8	15.6	16.4
362	Glass and products	21.7	15.5	13.7	15.5	18.5	20.2	22.4
369	Non-metal products n.e.c.	19.4	18.2	16.4	18.3	21.0	22.6	24.4
371	Iron and steel	44.8	42.7	39.2	43.9	50.9	56.8	63.6
372	Non-ferrous metals	107.9	97.6	76.5	79.0	83.5	84.4	85.5
381	Metal products	22.0	17.0	15.9	16.8	18.2	18.4	18.7
382	Machinery n.e.c.	24.2	19.3	18.4	21.0	25.3	28.4	32.4
383	Electrical machinery	27.9	18.5	19.3	19 5	20.3	20.4	20.6
384	Transport equipment	27.8	20.7	20.0	20 3	21 7	22.1	23.0
385	Professional goods	20.9	14 4	15.0	16.4	18.5	20.0	21.8
HEAVY MANUFACTURING	HEAVY MANUFACTURING	30.7	25.8	24.5	26.1	28.9	30.4	32.2
311, 313, 314, 321, 324	EARLY INDUSTRIES	31.9	25.0	24 3	24.9	26.1	26.4	26.7
331, 332, 352, 353, 354, 355, 361, 362, 369	MIDDLE INDUSTRIES	33.5	29.3	25.4	26.6	29.3	30 5	32.0
322, 323, 341, 342, 351, 356, 371, 372, 381 - 385	LATE INDUSTRIES	27.5	21.8	20.8	22.1	24.4	25.6	27 0
35, 36, 37	SEMIMANUFACTURED	41.4	38.9	35.1	37 5	41.7	44.1	46.8
38	INVESTMENT GOODS	25.3	18.9	18.4	19.6	21.8	22.9	24.2
32, 33, 34, 39	CONSUMPTION GOODS	23.0	12.6	12.0	12.3	13.3	13.8	14.3
31	FOOD AND BEVERAGES	37.0	36.6	32.7	33.3	34.6	34.6	34.7
MANUFACTURING		29.2	23.5	22.3	23.4	25.5	26.4	27.5
31	Food product, beverages, tabacco	37.0	36.6	32.7	33.3	34.6	34.6	34.7
32	Textiles, wearing app, leather, footwear	23.8	11.2	10.9	11.0	11.9	12.4	13.0
33	Wood prod, furniture, fixtures	23.5	13.7	11.4	11.6	12.4	12.6	12.9
34	Paper and products, printing,publishing	23.0	19.3	18.4	20.1	22.5	23.9	25.5
35	Chemicals	45.6	44.5	40.4	41.6	44.9	46.2	47.8
36	Non - metal products	20.5	16.9	15.3	16.9	19.4	20.8	22.6
37	Basic metals	56.0	52.6	46.8	51.6	58.5	63.7	69.4
38	Fabr. metals and machinery	25.3	18.9	18.4	19.6	21.8	22.9	24.2
39	Other industries	16.6	12.8	15.6	15.8	16.8	16.7	16.9

a) *In thousands USD; 1990 prices PPP*

CZECHOSLOVAKIA (1992)

Level of value added per employee in EU(15) and selected member states = 100 a)

ISIC		EU(15)	Germany	Austria	Ireland	Portugal
311	Food product	25	19	31	16	64
313	Beverages	21	16	31	12	40
314	Tabacco	6	2	1	10	9
321	Textiles	30	22	31	36	73
322	Wearing apparel	37	27	48	59	123
323	Leather and product	22	21	30	26	59
324	Footwear	44	34	40	46	69
331	Wood product	37	31	35	38	132
332	Furniture, fixtures	24	19	33	43	44
341	Paper and products	22	18	22	26	32
342	Printing, publishing	22	23	25	22	71
390	Other industries	39	31	47	33	144
LIGHT MANUFACTURING		**25**	**18**	**27**	**19**	**72**
351	Industrial chemicals	21	17	33	9	47
352	Other chemical products	25	23	40	10	64
353	Petroleum rafinerie	6	3	21	42	13
354	Petroleum, coal products	21	4	51	.	22
355	Rubber products	24	17	21	23	60
356	Plastic products	34	32	37	34	99
361	Pottery, china etc.	36	35	40	35	58
362	Glass and products	19	16	18	20	34
369	Non-metal products n.e.c.	21	17	26	18	54
371	Iron and steel	36	29	34	37	55
372	Non-ferrous metals	40	38	45	57	101
381	Metal products	26	22	29	38	70
382	Machinery n.e.c.	26	22	34	11	95
383	Electrical machinery	24	20	28	15	51
384	Transport equipment	21	16	23	37	84
385	Professional goods	20	18	30	13	58
HEAVY MANUFACTURING		**25**	**20**	**30**	**16**	**61**
311, 313, 314, 321, 324	EARLY INDUSTRIES	23	15	23	16	66
331, 332, 352, 353, 354, 355, 361, 362, 369	MIDDLE INDUSTRIES	22	16	32	14	61
322, 323, 341, 342, 351, 356, 371, 372, 381 - 385	LATE INDUSTRIES	26	22	31	19	74
35, 36, 37	SEMIMANUFACTURED	24	20	32	14	59
38	INVESTMENT GOODS	24	20	29	16	70
32, 33, 34, 39	CONSUMPTION GOODS	27	22	30	32	78
31	FOOD AND BEVERAGES	23	15	22	15	54
MANUFACTURING		**25**	**20**	**29**	**17**	**69**
31	Food product, beverages, tabacco	23	15	22	15	54
32	Textiles, wearing app, leather, footwear	33	25	36	44	83
33	Wood prod, furniture, fixtures	31	25	37	39	95
34	Paper and products, printing,publishing	23	21	24	24	45
35	Chemicals	24	20	35	14	59
36	Non - metal products	21	17	23	19	48
37	Basic metals	36	30	35	39	60
38	Fabr. metals and machinery	24	20	29	16	70
39	Other industries	39	31	47	33	144

a) *In thousands USD; 1990 prices*

CZECH REPUBLIC (1994)

Level of value added per employee in EU(15) and selected states = 100 a)

ISIC		EU(15)	Germany	Austria	Ireland	Portugal
311	Food product	34	29	41	22	84
313	Beverages	19	16	29	12	38
314	Tabacco	42	13	7	71	65
321	Textiles	30	24	30	33	77
322	Wearing apparel	32	23	40	53	102
323	Leather and product	28	29	36	34	73
324	Footwear	34	30	31	38	51
331	Wood product	25	22	26	26	96
332	Furniture, fixtures	29	26	40	56	49
341	Paper and products	30	25	31	35	42
342	Printing, publishing	35	41	38	34	114
390	Other industries	30	27	37	25	114
LIGHT MANUFACTURING		**28**	**22**	**30**	**22**	**81**
351	Industrial chemicals	29	25	45	11	66
352	Other chemical products	32	30	52	11	85
353	Petroleum rafinerie	11	6	43	73	23
354	Petroleum, coal products	24	5	58	.	24
355	Rubber products	31	23	26	31	78
356	Plastic products	30	30	34	29	91
361	Pottery, china etc.	37	33	42	35	58
362	Glass and products	29	26	26	30	50
369	Non-metal products n.e.c.	31	30	39	26	72
371	Iron and steel	29	25	26	26	43
372	Non-ferrous metals	30	31	35	40	78
381	Metal products	27	25	29	37	70
382	Machinery n.e.c.	24	22	31	9	87
383	Electrical machinery	23	20	28	13	49
384	Transport equipment	29	24	30	50	118
385	Professional goods	24	22	32	14	65
HEAVY MANUFACTURING		**26**	**23**	**32**	**15**	**63**
311, 313, 314, 321, 324	EARLY INDUSTRIES	28	20	27	19	80
331, 332, 352, 353, 354, 355, 361, 362, 369	MIDDLE INDUSTRIES	26	21	40	16	72
322, 323, 341, 342, 351, 356, 371, 372, 381 - 385	LATE INDUSTRIES	26	23	30	18	74
35, 36, 37	SEMIMANUFACTURED	26	22	34	15	62
38	INVESTMENT GOODS	25	22	30	15	71
32, 33, 34, 39	CONSUMPTION GOODS	27	24	31	31	81
31	FOOD AND BEVERAGES	31	22	29	21	71
MANUFACTURING		**26**	**23**	**31**	**18**	**74**
31	Food product, beverages, tabacco	31	22	29	21	71
32	Textiles, wearing app, leather, footwear	32	24	33	39	79
33	Wood prod, furniture, fixtures	27	23	32	34	81
34	Paper and products, printing,publishing	33	32	34	34	64
35	Chemicals	30	25	44	16	74
36	Non - metal products	30	28	33	26	62
37	Basic metals	28	26	27	28	47
38	Fabr. metals and machinery	25	22	30	15	71
39	Other industries	30	27	37	25	114

a) *In thousands USD; 1990 prices*

SLOVAK REPUBLIC (1994)

Level of value added per employee in EU(15) and selected member states = 100

ISIC		EU(15)	Germany	Austria	Ireland	Portugal
311	Food product	35	30	43	23	87
313	Beverages	21	17	32	13	41
314	Tabacco	7	2	1	12	11
321	Textiles	26	21	26	28	67
322	Wearing apparel	36	26	45	58	114
323	Leather and product	19	20	25	23	50
324	Footwear	26	23	24	29	39
331	Wood product	25	22	26	26	96
332	Furniture, fixtures	21	19	29	41	36
341	Paper and products	37	30	38	43	52
342	Printing, publishing	38	45	41	37	124
390	Other industries	22	19	27	18	83
LIGHT MANUFACTURING		**26**	**20**	**28**	**20**	**75**
351	Industrial chemicals	27	24	42	11	63
352	Other chemical products	31	30	51	11	84
353	Petroleum rafinerie	17	10	67	113	36
354	Petroleum, coal products	59	13	141	.	58
355	Rubber products	46	34	38	46	114
356	Plastic products	39	38	43	37	116
361	Pottery, china etc.	45	40	51	43	70
362	Glass and products	34	30	31	35	59
369	Non-metal products n.e.c.	26	26	34	22	62
371	Iron and steel	54	47	49	49	82
372	Non-ferrous metals	6	7	7	8	16
381	Metal products	30	28	32	41	77
382	Machinery n.e.c.	21	19	27	8	75
383	Electrical machinery	21	19	26	12	46
384	Transport equipment	29	24	30	49	116
385	Professional goods	29	27	39	17	78
HEAVY MANUFACTURING		**30**	**27**	**37**	**17**	**73**
311, 313, 314, 321, 324	EARLY INDUSTRIES	26	18	25	18	74
331, 332, 352, 353, 354, 355, 361, 362, 369	MIDDLE INDUSTRIES	29	24	45	18	81
322, 323, 341, 342, 351, 356, 371, 372, 381 - 385	LATE INDUSTRIES	28	25	32	19	80
35, 36, 37	SEMIMANUFACTURED	36	31	47	20	85
38	INVESTMENT GOODS	23	21	28	14	66
32, 33, 34, 39	CONSUMPTION GOODS	25	22	29	29	75
31	FOOD AND BEVERAGES	30	21	28	21	69
MANUFACTURING		**28**	**24**	**33**	**19**	**78**
31	Food product, beverages, tabacco	30	21	28	21	69
32	Textiles, wearing app, leather, footwear	28	21	29	35	70
33	Wood prod, furniture, fixtures	23	20	28	29	70
34	Paper and products, printing,publishing	39	37	40	39	74
35	Chemicals	36	31	53	19	89
36	Non - metal products	30	28	34	26	64
37	Basic metals	49	45	47	48	82
38	Fabr. metals and machinery	23	21	28	14	66
39	Other industries	22	19	27	18	83

a) *In thousands USD; 1990 prices*

HUNGARY (1995)

Level of value added per employee in EU(15) and selected member states = 100 a)

ISIC		EU(15)	Germany	Austria	Ireland	Portugal
311	Food product	10	9	12	7	26
313	Beverages	7	6	11	5	14
314	Tabacco	5	2	1	9	8
321	Textiles	31	24	31	33	83
322	Wearing apparel	26	18	33	42	82
323	Leather and product	11	12	15	14	31
324	Footwear	16	14	15	19	25
331	Wood product	16	13	16	15	62
332	Furniture, fixtures	18	16	25	37	31
341	Paper and products	22	18	23	25	30
342	Printing, publishing	18	22	19	17	59
390	Other industries	16	14	19	13	60
LIGHT MANUFACTURING		**14**	**11**	**15**	**11**	**41**
351	Industrial chemicals	26	23	41	10	63
352	Other chemical products	37	35	61	13	102
353	Petroleum rafinerie	24	14	96	167	53
354	Petroleum, coal products	8	2	19	.	9
355	Rubber products	59	43	49	63	156
356	Plastic products	28	27	31	27	85
361	Pottery, china etc.	20	18	23	19	31
362	Glass and products	20	18	18	21	35
369	Non-metal products n.e.c.	22	22	30	19	51
371	Iron and steel	47	41	42	43	74
372	Non-ferrous metals	79	82	92	102	205
381	Metal products	19	17	20	26	50
382	Machinery n.e.c.	16	15	21	6	62
383	Electrical machinery	23	21	28	13	51
384	Transport equipment	17	14	18	30	73
385	Professional goods	37	35	49	23	104
HEAVY MANUFACTURING	**HEAVY MANUFACTURING**	**27**	**24**	**33**	**15**	**67**
311, 313, 314, 321, 324	EARLY INDUSTRIES	12	9	12	8	36
331, 332, 352, 353, 354, 355, 361, 362, 369	MIDDLE INDUSTRIES	27	22	42	16	75
322, 323, 341, 342, 351, 356, 371, 372, 381 - 385	LATE INDUSTRIES	24	21	28	16	71
35, 36, 37	SEMIMANUFACTURED	35	30	47	20	85
38	INVESTMENT GOODS	20	18	24	12	59
32, 33, 34, 39	CONSUMPTION GOODS	18	16	21	21	55
31	FOOD AND BEVERAGES	9	6	9	6	21
MANUFACTURING		**21**	**18**	**25**	**14**	**60**
31	Food product, beverages, tabacco	9	6	9	6	21
32	Textiles, wearing app, leather, footwear	24	18	26	30	63
33	Wood prod, furniture, fixtures	17	15	21	22	53
34	Paper and products, printing,publishing	20	19	20	19	37
35	Chemicals	34	29	50	18	86
36	Non - metal products	20	18	23	17	42
37	Basic metals	61	56	58	60	105
38	Fabr. metals and machinery	20	18	24	12	59
39	Other industries	16	14	19	13	60

a) *In thousands USD; 1990 prices PPP*

POLAND (1995)

Level of value added per employee in EU(15) and selected states = 100 a)

ISIC		EU(15)	Germany	Austria	Ireland	Portugal
311	Food product	26	22	32	17	65
313	Beverages	202	167	326	131	412
314	Tabacco	52	16	8	92	83
321	Textiles	39	30	39	41	105
322	Wearing apparel	30	21	38	49	95
323	Leather and product	47	49	63	60	130
324	Footwear	51	46	50	60	79
331	Wood product	28	24	29	28	111
332	Furniture, fixtures	26	24	36	53	44
341	Paper and products	51	42	53	58	71
342	Printing, publishing	25	30	27	24	82
390	Other industries	37	34	45	30	140
LIGHT MANUFACTURING		**38**	**30**	**41**	**30**	**112**
351	Industrial chemicals	35	31	56	14	86
352	Other chemical products	35	33	58	12	96
353	Petroleum rafinerie	44	25	175	305	96
354	Petroleum, coal products	43	9	100	.	46
355	Rubber products	47	34	38	50	122
356	Plastic products	35	35	40	34	109
361	Pottery, china etc.	43	38	48	41	66
362	Glass and products	38	34	35	40	68
369	Non-metal products n.e.c.	33	33	45	28	78
371	Iron and steel	106	92	94	97	166
372	Non-ferrous metals	125	130	145	162	325
381	Metal products	37	34	39	50	98
382	Machinery n.e.c.	58	52	75	22	217
383	Electrical machinery	33	29	41	19	73
384	Transport equipment	39	32	40	67	165
385	Professional goods	40	38	53	24	111
HEAVY MANUFACTURING		**49**	**43**	**61**	**28**	**121**
311, 313, 314, 321, 324	EARLY INDUSTRIES	45	32	44	31	132
331, 332, 352, 353, 354, 355, 361, 362, 369	MIDDLE INDUSTRIES	41	32	63	25	112
322, 323, 341, 342, 351, 356, 371, 372, 381 - 385	LATE INDUSTRIES	104	117	53	30	132
35, 36, 37	SEMIMANUFACTURED	57	49	76	32	138
38	INVESTMENT GOODS	42	37	50	25	122
32, 33, 34, 39	CONSUMPTION GOODS	30	26	33	34	89
31	FOOD AND BEVERAGES	50	35	47	35	117
MANUFACTURING		**44**	**37**	**52**	**29**	**126**
31	Food product, beverages, tabacco	50	35	47	35	117
32	Textiles, wearing app, leather, footwear	37	28	40	47	97
33	Wood prod, furniture, fixtures	27	24	33	35	84
34	Paper and products, printing,publishing	39	38	41	38	74
35	Chemicals	50	43	74	26	127
36	Non - metal products	35	33	41	31	76
37	Basic metals	112	102	106	109	192
38	Fabr. metals and machinery	42	37	50	25	122
39	Other industries	37	34	45	30	140

a) *In thousands USD; 1990 prices PPP*

CEEC on the way towards European Union

Some key questions of the pre-accession period

(Summary)

Tamás Szemlér[1]

In the 1990s, all transition countries in Central and Eastern Europe (CEE) have to face two basic challenges. They have to solve the problems of (economic and political) transformation, to take decisive steps towards the modernization of their economies (after following during decades a path which proved to be unsuccessful). The questions arising from both processes are interrelated and have to be answered at the same time.

For these small countries, the answer can be sufficient only if they bind these steps with the opening up of their economies. Even in this case, their success largely depends on whether they can find a modernization anchor, whether they have access to markets and whether they have sufficient resources to complete systemic change and the modernization of the economy.

From this point of view, European Union membership is a key political and economic issue for the CEEC. However, to achieve this objective, the CEEC have to be attractive for the European Union.

Political stability in the CEEC is a precondition for all further considerations from the EU side. Economic stability and the structure of the economy (approaching EU standards) are also of crucial importance. The most attractive feature, however, that these countries can offer to the EU (in the case of a successful transformation and modernization process), is their economic

---

[1]Research Fellow, Institute for World Economics of the Hungarian Academy of Sciences, H-1124 Budapest, Kálló esperes u. 15., Phone: (36)1 319 93 82, Fax: (36)1 319 93 85, E-mail: tszemler@vki3.vki.hu

growth (which, for the whole CEE region, exceeds by far the EU average).

The growth can make possible to increase the markets of EU products on the one hand, and to enhance the competitiveness of EU manufacturers on the other hand.

National economic policies in the CEEC should recognize these general aspects. It is quite clear that modernization and EU membership are closely interrelated. The state of modernization will surely influence future negotiations on EU membership, and EU membership is crucial for the completion of the modernization process. Its success or failure will be decisive in the evaluation of the whole transformation process in the CEE region.

The CEEC have numerous common features, but also many differences concerning their political and economic position. This is why national strategies of transformation, modernization and achieving EU membership should be given priority. At the same time, there are many issues where coordination or cooperation can prove to be fruitful. In addition to intra-regional trade cooperation (which has clearly shown positive effects, but these effects will probably remain limited), coordination would be important in the elaboration of some common principles to be followed during the negotiations on EU membership.

The countries of the CEE region, which will become EU members are not interested in staying too long on the border of the European Union. Such a situation would lead to an uneven distribution of costs among the countries and would diminish the possible economic gains of the new EU members situated along the borders of the Union. This is why - even if the simultaneous entry of all the candidates for EU membership from Central and Eastern Europe is hardly conceivable - these countries are interested in the successful European integration of their neighbours, too. This requires a broader coordination and cooperation in the region based on political consensus and economic grounds.

Budapest, 22 November 1996

(5)

Eduard Mikelka
Institute of Economics
Slovak Academy of Sciences
Bratislava

Economic Problems of Slovakia for the Process of Moving Towards the European Union

Paper prepared for the International Workshop "Economic Policy Framework in CEEC for the Process of Moving Towards the European Union"

Monday 25, November 1996 organised by Institute of International Relations, Prague

Economic Problems of Slovakia for the Process of Moving Towards the European Union

1. Problems of the European Union's enlargement with new member states

2. Adaptation of the Slovak enterprise sphere to the EU conditions

3. Structural changes of the Slovak economy for the process of moving towards the EU

4. Variant forecasting simulations of development of Slovak economy up to year 2005

5. Conclusions

6. Enclosure 1. A brief overview of content orientation of integration into the European Union prepared by individual ministries of the Slovak Republic

Paper prepared in collaboration with Herta Gabrielová and Vilma Juríčková IE SAS

1. Problems of the European Union's enlargement with new member states.

One of the basic principles working in the European Union among individual integrated member states is a program reduction of differences in their economic level, which is based on building an optimal conditions for less developed countries to be able gradually approach the level of economically developed countries. Transfers of financial sources with this orientation go via the EU budget in various forms: as a structural fund, regional fund, balance fund etc. The EU membership implies full participation in these redistribution funds. For above average economically developed countries result from this a duty to contribute by payments to the EU budget (with passive balance - representing higher payments than revenues) and on the other hand less than average economically developed ones gain net financial contributions from the EU budget (active balance, which means higher revenues than payments).
The individual EU states, and new candidates for membership as well, have to meet some political and economic criteria. As political point of view is concerned a country in question must have democratic system and must possess political stability. From the economic point of view this candidate country must represent a market economy, have developed and functioning market economy institutions and balanced development.

European countries which can be potential EU members can be divided into the following groups:

- The first group represents member states of the European Free Trade Association (EFTA), of which Finland, Austria and Sweden became EU members in January 1, 1995. Norway and Switzerland have not been applying for the EU membership yet.

- The second group is represented by the Central European countries - the Czech Republic, the Slovak Republic, Hungary and Poland.
- The third group is represented by candidates from the Mediterranean area - Cyprus, Malta and Turkey.

- The fourth, big and non-homogeneous, group is represented by the Southern and Eastern European countries - Albania, Bulgaria and Romania, new states of the former Yugoslavia and the Baltic states - Estonia, Latvia and Lithuania.

There has been a significant differences between the first group of EFTA countries and the other groups. The EFTA countries represent small, economically developed countries with long-term democratic traditions. In addition to this, these countries are closely economically linked to the EU via foreign trade relations and multilateral agreements. These relations have been given an institutional framework by establishing the European Economic Area (EEA).

The Central and Eastern European countries, and to a certain extent also Mediterranean countries, on the other hand, show lower degree of economic development, less developed market institutions and have small or none democratic traditions.

Based on the above mentioned facts, we can conclude, that for the EU, the largening by EFTA members is advantageous. Firstly, because of their above average economic level, these countries substantially increase economic contribution to the EU budget. Secondly, their stable economic and political structures contribute to the internal stabilization of the EU. Thirdly, it is expected that membership of these countries will contribute towards speeding up of building of the European Monetary Union.

Central and Eastern European countries (CEECs) exhibit very different level in comparison to the EFTA countries. Basic problem is the level of disparity between the developed economic level of the EU countries and low economic level of CEECs. An important problem of economic co-existence and of full interconnection of less developed countries with more developed ones is possible to illustrate on the example of Eastern Germany reunion with the FRG. It is expected that analogical attitude from the EU would cause an economic collapse as well as massive

migration from countries of the Central and Eastern Europe to its western part. In addition to this, with migration has the EU negative experiences from the past, from the Southern Europe.

As we have mentioned earlier, EU membership candidates must meet both criteria, i.e. both political and economic ones. They must have stable democratic institutional system, developed system of market economy and must reach certain economic level per capita. In Table 1.1 we present economic characteristics of countries, which became EU members in 1973, 1981 and 1986. Important problem of disparity between economic levels of the EU and newly accepted countries is documented by the economic level of Ireland (50 per cent), Spain (49 per cent), Greece (41 per cent) and Portugal (23 per cent) in the period of joining the EU

Table 1.1 Previous EU enlargement with new member states

Indicators	England	Ireland	Denmark	Greece	Spain	Portugal
Democracy since				1974	1977	1974
Joining the EU	1973	1973	1973	1981	1986	1986
GDP per capita in time of joining the EU (in % of the EU) average	82	50	122	41	49	23
Population (in % of the EU) total	29	2	3	4	14	4

Source: World Development Indicators, World Bank 1991.

In the Table 1.2 are listed approximative predictions of the EU on payments and revenues of potential new EU members - members of the EFTA and the CEECs: From these estimates result, that by joining Finland, Austria and Sweden, net revenues of the EU budget would increase roughly by 1.8 bln. ECU. On the other hand, it is evident extreme financial burden of the EU budget in the case of CEECs membership in total value of 12.9 bln. ECU and the highest burden is in the case of Poland and Romania and the lowest in the case of former ČSFR. As concerns the membership of the Central European countries - the Czech republic, Slovakia, Hungary and Poland - their burden represents 7.8 bln. ECU in

comparison to the present burden of the EU by member states of Greece, Spain, Ireland and Portugal in total sum of 5.2 bln. ECU.

Table 1.2. Estimates of revenues and payments to the EU budget in 1990 (in bln. ECU)

Country	Contributions	Revenues		Net payments or revenues
		Structural funds	Subsidies in agriculture	
Switzerland	1832	0	977	855
Norway	1059	0	391	668
Finland	1110	40	809	261
Sweden	1751	0	684	1067
Austria	1364	145	558	661
Total				3512
Poland	817	4600	1409	-5192
Hungary	341	1255	544	-1458
former ČSFR	617	1360	446	-1189
Bulgaria	263	1205	516	-1458
Romania	396	3190	809	-3603
Total				-12900

Source: Commission of the EU, DG II. Brussels 1992.

The EU membership implies co-existence in economic area, in which a free transfer of goods, services, capital and labour force exists, as well as participation in the European Monetary Union and in the European Political Union. From above mentioned facts result, that CEECs are not fully compatible to link themselves to the Common internal market of the EU, especially as a consequence of their lower economic level.

Future development of the CEECs and Slovakia from the perspective to join the EU will depend mainly on the following factors: a) development of foreign economic relations with the EU, b) advance of economic reform and c) political stability and ability of institutional support for reform program.

Economic development of the CEECs and, in the framework of it, also Slovakia, must be stimulated by expansion of export of their production, a step which cannot be done by countries themselves

2. Adaptation of the Slovak enterprise sphere to the EU conditions

Key aspect of a national economy's total success is both competitiveness of the economy as a whole as well as competitiveness of its individual subjects. This is closely related to the adaptation of enterprise sphere.

2.1. Size-structure of the EU companies since 1990

The European Community had in 1990 more than 14 mln. enterprises (which compared to the 1988 represents an increase of 2 mln. enterprises), which employed 92 mln. persons (in 1988 about 80.7 mln. persons), which represented 64 per cent of the EU population at that time and which reached turnover in volume of 10.5 bln. ECU.

The EU have had 12 thousand large-scale enterprises, i.e. 0.09 per cent, which have represented 28 per cent employed persons and 29 per cent of turnover. Micro firms (firms employing from 0 to 9 persons) have represented 92.7 per cent of the total number of enterprises having 13 mln. employees (32 per cent of all employed persons) and participating by 24 per cent on total turnover. Small and medium-sized enterprises, i.e. enterprises with 1 to 499 employees represent the biggest group of firms representing 99.8 per cent of enterprises (see for details table 2.1).
Out of the total number of enterprises 12.3 per cent are engaged in industry, 13.3 per cent in building industry, 42.7 per cent in trade and 31.5 per cent in services (see Table 2.2.). the highest share on employment (34 per cent) and on turnover (40 per cent) have recorded by industry and trade and they have reached similarly high turnover of 4.3 thousand ECU. The highest increase and the longest survival period is typical for SMEs working in service sector.

From geographical point of view Northern countries typically have higher number of medium and large-scale enterprises, while in

Southern countries has been evidenced a great number of micro enterprises.

Table 2.1. The number of enterprises in the EU according to the size and industry structures in 1990

Industry	Total	Micro (0-9)	Small (10-99)	Medium (100-499)	Large (over 500)
Industries total	14 238 504	13 204 099	954 334	67 732	12 339
Industrial production	1 763 556	1 404 928	321 134	31 040	6 453
Building industry	1 899 158	1 759 141	133 995	5 384	639
Trade	6 088 065	5 779 240	291 852	15 187	1 785
Services	4 487 725	4 260 789	207 353	16 121	3 462

Table 2.2. The percentage share of enterprises in the EU according to the size and industry structure in 1990 (in %)

Industry	Total	Micro (0-9)	Small (10-99)	Medium (100-499)	Large (over 500)
Industries total	100.00	92.74	6.70	0.48	0.09
Industrial production	100.00	79.66	18.21	1.76	0.37
Building industry	100.00	92.63	7.06	0.28	0.03
Trade	100.00	94.93	4.79	0.25	0.03
Services	100.00	94.94	4.62	0.36	0.08

Micro enterprises

In the EU the number of micro enterprises is estimated to be 13.2 mln. units, which represent in building industry 43.7 per cent share on the total employment in this industry, in trade the figure is 43.7 per cent and in services 30.4 per cent. A higher share of micro enterprises on the total number of firms has been evidenced in Southern countries than in Northern Europe. In the group of micro enterprises the weight of self-employed persons is extremely high in France and Spain (more than 50 per cent of enterprises) and low in Austria, Germany and Luxembourg.

Small and medium-sized enterprises

The number of small and medium-sized enterprises in the whole European Union has been estimated to be more than 1 million and this represent 37 mln. employed persons. Small enterprises with 10 to 99 employees have represented 94 per cent of the small and medium-sized enterprise category (of which 55 per cent with 10 to 19 employees and 39 per cent with 20 to 99 employees). Enterprises with 200 to 499 employees, representing 2 per cent of the total number of SMEs, have represented 21 per cent of all employed persons in the SMEs category.

According to the industry location, SMEs dominate in consumer goods, industry and employ 62 per cent of all workers despite the size of enterprises.

According to the size, the share of SMEs was higher than 90 per cent in all countries (including all industries) and their share on employment has exceeded the share of medium-sized enterprises in all EU countries except the UK.
An evidence, according to which micro enterprises and small and medium-sized enterprises in highly developed countries of Europe represent more than 99 per cent share and large-scale ones less than one per cent.
More than 99 per cent of the US companies have less than 500 employees. Small and medium-sized enterprises represent 99.1 per cent of the total number of enterprises in Japan.

Multinational companies

Similar to the category of SMEs, in terms of its importance, is the category of multinational companies (MNCs).

With the global development of national economies we have seen also changes in behaviour of MNCs. Despite the fact that global development of markets is a real phenomenon of the end of the 20th century, there exist processes which have been influencing

activity of MNCs in the past couple of years. One of such examples is e.g. the process of building of regional blocks. Institutional settings, which have been created in the framework of these mega regional blocks can be relatively homogeneous (EU) or heterogeneous (APEC). In any case they set specific conditions for MNCs and require building of a specific channels towards market in various parts of the world.

2.2. Basic characteristics of the Slovak enterprise sphere

To be able to assess what are the basic differences concerning the nature of the Slovak enterprise sphere in comparison with the present state in the enterprise sphere of individual EU countries and the EU as a whole, we need to analyze situation in which currently operate our enterprise after nearly five years of transformation.

If we compare our size structure of enterprises with that of developed economies we can conclude that the development in Slovakia in terms of brightness of size structure has been recording a positive orientation in the past five years.

At the end of December 1995 there was 43 636 business organizations registered in the Slovak Republic, which represent 64.3 per cent of the total number of all registered organizations.

Size structure of these enterprises was as follows - at the end of 1995 333 large-scale enterprises were registered, i.e. 0.8 per cent of the total.
There were 5 123 medium-sized enterprises registered as of December 31, 1995, which represented 11.7 per cent of the total number of enterprises. The biggest share in size structure exhibited small enterprises (total number of 38 180) representing 87.5 per cent of the total number of business organizations.

Majority of large-scale enterprises, 2 077 firms, which is 2.8 per cent of all enterprises in industrial production and 1 650 medium-sized enterprises, i.e. 22.5 per cent were in industrial production. Small enterprises dominated (as of December 31, 1995) in trade (see Table 2.3. and Table 2.4.).

From the economic point of view, the most important criterion of any size types is its efficiency. Large-scale enterprises have participated on total industrial production by 60.9 per cent and on building industry by 24.4 per cent. Pace of the development of large-scale enterprises' production was slower than in SMEs. With roughly the same percentage (23.3) have contributed on production medium-sized enterprises. Their share was more significant in building industry, where they contributed by 37.7 per cent of production in 1995. Share of individual types of enterprises on total production shows the Table 2.5.

Table 2.3. Size and industrial structure of the Slovak enterprise sphere as of December 31, 1995

Industry	Number of enterprises in individual size categories					
	Total	1-10	11-24	25-99	100-499	over 500
Total	43 636	34 583	3 597	3 186	1 937	333
Industria al productioon	7 318	4 328	1 133	947	703	207
Building industry	3 493	2 074	662	517	217	23
Trade	20 266	18 691	915	480	158	22
Hotels and restaurants	1 101	826	142	106	23	4
Other trade services	4 002	3 615	134	143	59	1

According to the submitted data, 4 to 8 per cent share of small enterprises on production in industry is, in comparison to the developed countries, small. In Austria the share in the same category was 23 per cent.

As far as financial results of large-scale and medium-sized enterprises are concerned, their total economic results represented 44 724 mln. Sk in 1995, total costs were 980 878 mln. Sk and total revenues represented 1 025 602 mln. Sk. value added was 235 085 mln. Sk.

Table 2.4.Size and industrial structure of the Slovak enterprise sphere as of December 31, 1995 (in %)

Industry	Number of enterprises in individual size categories					
	Total	1-10	11-24	25-99	100-499	over 500
Total	100.0	79.3	8.2	7.3	4.4	0.8
Industrial production	100.0	59.1	15.5	12.9	9.6	2.8
Building industry	100.0	59.4	19.0	14.8	6.2	0.7
Trade	100.0	92.2	4.5	2.4	0.8	0.1
Hotels and restaurants	100.0	75.0	12.9	9.6	2.1	0.4
Other trade services	100.0	90.3	4.6	3.6	1.5	0.0

Table 2.5. Share of individual types of enterprises on total production

	Industry	Building industry	Transport	Retail trade	Selected market services
Large-scale firms	60.9	24.4	8.2	7.9	3.5
Medium-sized firms	23.3	37.7	34.4	10.9	31.3
Small firms	4.8	16.8	16.1	23.8	31.6
Entrepreneurs (estimate)	11.0	21.0	41.3	57.4	33.6

The nature of the Slovak enterprise sphere's ownership structure can be described by the following figures. As of December 31, 1995, out of the total number of 43 636 business organizations, a 96.4 per cent represented enterprises with full or dominating share of private ownership, which in total represented 42 055 organizations. In the public sector there were 1 581 organizations. There were 1 030 state enterprises. Out of the total number of private enterprises there were 4 112 with foreign participation and 5 400 with international participation.

As far as financial results of large-scale and medium-sized enterprises are concerned, their total economic results represented 44 724 mln. Sk in 1995, total costs were 980 878 mln. Sk and total revenues represented 1 025 602 mln. Sk. value added was 235 085 mln. Sk.

The nature of the Slovak enterprise sphere's ownership structure can be described by the following figures. As of December 31, 1995, out of the total number of 43 636 business organizations, a 96.4 per cent represented enterprises with full or dominating share of private ownership, which in total represented 42 055 organizations. In the public sector there were 1 581 organizations. There were 1 030 state enterprises. Out of the total number of private enterprises there were 4 112 with foreign participation and 5 400 with international participation.

Table 2.6. Size and ownership structure of the Slovak enterprise sphere as of December 31, 1995.

Ownership	Total	of which with number of employees				
		less than 11	11-24	25-99	100-499	over 500
Total	43 636	34 583	3 597	3 186	1 937	333
of which:						
- public sector	1 581	489	195	317	438	162
- private sector	42 055	34 114	3 402	2 869	1 499	171

Table 2.7. Size and ownership structure of the Slovak enterprise sphere as of December 31, 1995 (in %)

Ownership	Total	of which with number of employees				
		less than 11	11-24	25-99	100-499	over 500
Total	100.0	79.3	8.2	7.3	4.4	0.8
of which:						
-public sector	100.0	29.7	12.3	20.1	27.7	10.2
-private sector	100.0	81.1	8.1	6.8	3.6	0.4

Academy of Sciences has lead to the following results:

1. Number of a new products in an enterprise for the past three years.

Ninety per cent of the firms surveyed have introduced new products, technological methods or services over the past three years, mostly in number of 3 to 11 products (75 per cent), 5 per cent of the enterprises have mentioned that they do not achieve innovation activities and 5 per cent did not respond to this question. The share of innovative products on sales was mentioned by 27 per cent of enterprises in the range between 1.5 to 20 per cent.

2. Sources of innovation, which have been made in the past three years:

- firm's own research and development (95 per cent);
- import of production equipment (35 per cent);
- results of other research institutions (30%);
- research and technical cooperation with other partners (25 per cent);
- purchase of a license (15 per cent);
- leasing of production equipment (15 per cent).

3. Innovation activity of an enterprise worsened in 1994 by the following factors:

- lack of own capital (75 per cent);
- extremely uncertain market development (50 per cent);
- extremely high costs of innovations (38 per cent);
- extremely long payback period (31 per cent);
- problem with suppliers (31 per cent);
- old technical equipment (19 per cent);
- lacking possibilities for purchase of foreign technologies (13 per cent);
- lacking information about new products (13 per cent);
- problems with suppliers and trading (8 per cent);
- organizational problems (8 per cent).

4. Research expenditures for the 1993-1995 period have reached for 55 per cent of respondents less than 1 mln. Sk. Less than 1 percentage share of research on sales have announced 56 per cent of enterprises (33 per cent have mentioned a share less than 5 per cent and 11 per cent share of research on sales more than 5 per cent.

5. Sources of financing of enterprise innovation:
- internal sources (87 per cent);
- bank credits (40 per cent).

6. Long-term innovation strategy has been prepared by 88 per cent of enterprises and 59 per cent of firms have a system of quality management.

7. The most important impulses for enterprise innovations in the past three years represent:
- consumers' demand of new functional characteristics of products (65 per cent);
- market research (53 per cent);
- a necessity to overcome lagging behind competitors (41 per cent);
- demand of production (29 per cent);
- a necessity to decrease costs (24 per cent);
- results of enterprise research (12 per cent).

8. Appropriateness of forms of state research and development support:
- tax advantages for research and development expenditures (79 per cent);
- state financing of research (37 per cent);
- support of a coordination of research institutions with enterprise sphere (31 per cent);
- support of foreign capital inflow linked to investment and innovation activity (21 per cent);
- credit expansion (16 per cent).

9. State of employee training in the area of quality management (enterprise level):
- training is provided gradually for all management levels (89 per cent);
- training is provided for top managers (32 per cent);
- training does not exist (5 per cent).

10). The share of qualified labour in innovated products in comparison with other products in 1994:
- was increased (50 per cent);
- was not changed (30 per cent);
- was decreased (5 per cent);
- not responded (15 per cent).

11. Labour productivity in a given enterprise in 1996:
- will increase (85 per cent);
- will not change (10 per cent);
- did not respond (5 per cent).

3. Structural changes in the period of preparation of joining the European Union

Transformation processes have led in the Slovak economy to the important changes in branch and industrial structure of employment and product (in its various forms). They reflect especially a different ability of economic subjects, functioning in various segments the economy, to adapt to the new economic situation with both its internal and external dimensions. Above mentioned different economic subjects' adaptive ability has been substantially determined by the previous development, but partly also by the different ability of enterprise managers, or their owners, to accept ongoing changes and actively adapt to them. In the hitherto existing period of transformation, the changes have taken place especially in those levels of the economy which are more mobile (in the change of employment structure and in the structure of produced product) and less in its less mobile levels (in production equipments and in technical and technological processes used). In another words, structural shift has led on the one hand to the positive results in the economy segments, which were able to adapt to the changes of internal and external demand given, given their equipment by fixed capital and technical know-how. On the other hand, it has suppressed and in some cases absolutely has crowded out, those segments of the economy, which had not been able, either from objective or subjective reasons, to adapt to the new economic conditions. It has had dominantly a nature of passive structural adaptation.

The process of adaptation at the same time has led to the radical decrease of the efficiency of the economy and significantly has limited also its ability to reach (given the structure and technical level of the productive basis) significantly higher efficiency. Not only has been decreased actual product but also a decrease of potential product of the economy has been evidenced. Its increase to the pre-reform level and than, gradually, to the level which has been reached in developed economies assumes realization of such a changes in production or supply structures, which will be based on changes of production and technical basis. Thus, supported by investments into modern

production equipment and more sophisticated technologies and to the general technical know-how.

The scope of structural changes, which have taken place after 1989, has been most evident on changes of individual industries' shares on employment and GDP in current prices. The review of their development provides the table 3.1.

The development of the service sector

Transformation processes, as is seen from above mentioned data, to the striking shifts of labour force from all productive industries into the service sector. In more clear form their influence have been evidenced in the change of GDP' structure.

Table 3.1. The development of employment structure and GDP in 1989 and 1995

Industries	1989	1990	1991	1992	1993	1994	1995
Industries' share on total employment[1]							
Agriculture and forestry	12.1	12.0	12.6	11.8	9.7	8.9	8.7
Industry	33.4	33.1	32.8	30.3	29.6	29.3	30.4
Building industry	10.3	10.2	11.2	9.1	8.0	8.0	8.5
Services	44.2	44.7	43.4	48.8	52.7	53.8	52.4
Industries' share on GDP in current prices[2]							
Agriculture and forestry	9.4	7.4	5.7	6.2	6.6	6.6	5.6
Industry	49.3	49.9	52.7	32.0	29.2	28.7	28.6
Building industry	9.1	9.2	7.4	6.8	6.7	4.5	4.6
Services	32.3	33.5	34.2	41.6	54.4	55.4	53.3
Other items of GDP	.	.	.	13.4	3.1	4.8	7.9

[1] Data according to the Statistical Yearbook ŠÚ SR 1995, in 1995 according to the results of survey list of labour force for the 4th quarter of 1995.

[2] Data according to the publication Macroeconomic indicators of the quarterly national accounts for 1990-1995 and the annual national accounts for 1985-1992, Bratislava, the Statistical Office of the Slovak Republic, April 1996.

The share of services in GDP's structure reached in the Slovak Republic about 60 per cent (including other components of GDP) in 1994 and 1995. It is roughly such a level, which is typical for economically developed countries.

Value added in the service sector, contrary to the other production industries, has been gradually increasing since 1989 and reached in 1995 nearly 3.5 times of that of the 1989 level (expressed in current prices).
As a consequence of this, an increase of value added to one unit of increase of production inservice sector represents roughly of 0.5 unit increase of value added, in industry sector about 0.25.

It is possible to assume that in the after-reform period àn important change has taken place in the structure of services. Unfortunately, a complete data, which would enable us to analyze more precisely these changes since 1989, and by this to decode the impact of individual factors on the development in services sector, are not available. Some focus on the sector' structure in 1992 and 1994 provides table 3.2.

Table 3.2. Share of individual groups of services on value added in the service sector (on current price basis)

Groups of services	1992	1993	1994
Wholesale and retail, repair of motor vehicles, motorcycles and	30,2	27,9	29,1
consumer goods	3,6	3,1	3,2
Hotels and restaurants	20,5	23,2	17,6
Transport, storage and communication	9,5	9,7	16,2
Financial services and insurance	10,9	10,7	10,3
Buildings, renatl services and trade services, R and D	13,2	13,2	11,4
Public service and defense, obligatory social security	6,3	6,2	5,9
Education	1,0	1,3	1,8
Health and social care	4,8	4,7	4,5
Other public, social and personal services			

Source: Own calculations from the Statistical Yearbook's data, the Statistical office of the Slovak republic, 1995.

Critical view on data presented forces us to state that given structure of services is obviously not very able, based on its results, to support of the efficiency of production industries.

Industry structure and its desirable changes

Based on collected tendencies in the development of GDP structure, it is possible unambiguously state that after 1989 the position of the Slovak industry has been extremely weakened. Both speedy growth in the Slovak economy and striking export expansion in 1994 and 1995 would not make this position stronger. If we compare the structure of GDP in the Slovak republic with that of the other CEFTA countries, we can see that in all the countries, except Hungary, the share of industry on GDP reaches higher values than in the Slovak Republic (table 3.3.).

Table 3.3. Development of shares of individual sectors on GDP in current prices in CEFTA countries (in per cent)

Sectors	Year	SR	CR	Hungary	Poland	Slovenia
Agriculture	1991	5,7	6,0	8,5	6,4	5,4
	1992	6,2	6,1	7,2	7,1	5,3
	1993	6,6	6,5	6,7	7,2	4,7
	1994	6,6	5,8	7,0	7,1	4,8
	1995	5,6	5,3	.	.	.
Industry	1991	52,7	47,4	29,0	35,8	40,5
	1992	38,7	42,9	27,3	35,5	36,6
	1993	29,0	37,0	26,6	35,7	34,0
	1994	28,7	34,8	25,5	36,2	33,8
	1995	28,6	34,6	.	.	.
Building industry	1991	7,4	6,8	5,4	8,8	4,1
	1992	6,8	5,3	5,9	8,1	4,1
	1993	6,7	5,2	5,3	7,1	4,5
	1994	4,6	5,9	5,5	6,4	5,0
	1995	4,6	6,2	.	.	.
Services	1991	34,2	39,8	57,1	49,1	50,0
	1992	49,1	45,8	59,6	49,3	53,9
	1993	57,7	51,3	61,4	50,0	56,8
	1994	60,1	53,5	62,0	50,3	56,4
	1995	61,2	54,0	.	.	.

1 Including other components of GDP

Source: Economic Survey of Europe in 1995-1996 - data for the Slovak Republic in 1993-1995 adapted according to Cestat No. 1/1996.

Increasing of total efficiency of industry from the point of view of its contribution for GDP creates, according to our view, key problem of further economic development of the Slovak Republic. From this element the situation in other industries of the national economy will be derived.

A decrease of production in the industry has passed very non-homogeneously in individual industries of the industry. The most have been hit the engineering industry and electrotechnical industry, production of which had been decreased over 1990-1993 period nearly to one-third. Military industry conversion, which has not been, until now, satisfactorily completed, has contributed substantially on this development. A decrease of consumer goods has decreased by more than the industry average is. The transformation process, on the other hand, has been successfully matched by industries producing mostly semi-products, with which, they have been able to compete on foreign markets and avoid a consequences of declining domestic demand. The above mentioned development is, of course, generally known and has for the further development only general perception importance. More important is to observe how the structure of the industry has been formed under the economy's recovery in the form relevant for GDP development, i.e. in the form of value added.

Statistical data unambiguously characterize orientation of a structural shift, by which the Slovak industry's structure has been moving in the period of the economy's recovery. Production of basic products in a given period has increased its share on value added in the industry by nearly 8 percentage points and creates nearly 53 per cent of value added of processing industry. It is interseting to see, that substantial increase of the share of basic products production have been followed by several favourable tendencies.

Relatively favourable economic situation in production of basic products (definitely more favourable than in other industries of processing industry) and strong position of this segment of industrial production in the structure of industry forces us to

think about its future development. In any case, the development of its internal structure will be, in the very next future, extremely strongly influence the efficiency of the whole industry and, in many cases, also the total foreign trade balance of the economy.

Contrary to the previously analyzed segment of the industrial production, the situation in the other groups of processing industry, from the point of view of its further development, is more complicated. And this is so, in spite of, that in 1995 recovery of several industries shown with much more intensitythan in the previous year. This is true especially for the production of investments, in the framework of which production of transport vehicles has expanded significantly. A higher pace has been evidenced in production of electrical and optical equipments and for the first time, after several years of decline, has increased also production of machines and equipment. Less favourable are these results from the point of view of value added rate, which declined for the whole group of investments both in 1994 and 1995.

There exists, of course, several imbalances between the structure of the Slovak industry and the structure of industries in Western European countries - e.g. a higher share of manufacture of metals and metal products, production of coke and petrol products, lower share of foodstuffs. It is possible to assume that these imbalances will be more or less balanced in the next economic development or it is not necessarily to be balanced. Without strong engineering industry and electrotechnical industry can not the Slovak economy, lacking enough sources and having developed metallurgy, function properly.

We expect, that widening of a spectre of industrial production by a new modern products, together with increasing of the share of more processed products.
While in the Slovak processing industry the rate of value added reached 25.0 per cent in 1995, in compared countries it was by 10 percentage points higher. These significant differences exist practically in all industries of the processing industry with

higher or lesser departures. In given differences is not reflected only the abnormal industrial structure of the processing industry in favour of industries with less sophisticated production but also total qualitative evel and competitiveness of the economy.

Current state of the Slovak economy is, from the point of view of the level of unit price of export and its relations towards unit price of import reached, extremely unfavourable.

We have mentioned two streams of structural change, which should change the position of the Slovak Republic in international competition in the framework of its preparation to join the EU and by this, to create favourable conditions for total increase of the level of the Slovak economy. We have focused on the two large groups of processing industry, the development of which, according to our view, will be important for the future orientation of our economy. If the prescribed streams of structural changes will be able to realize, than it is possible to expect that more favourable conditions will be created also for development of those activities, which are more inward oriented. If this will fail than high openess of the Slovak economy can become a serious barrier of its future successful development with all possible negative consequences also for other segments of the economy.

4. Variant forecasting simulations of development of Slovak economy up to year 2005.

Long term outlook must start on the one hand from the evaluation of the current economy situation and its development tendencies, on the other hand from the declared strategic aims, taking into account real conditions to achieve those aims. Current state and development of the economy of the Slovak Republic were evaluated elsewhere already. therefore we will in this paper briefly summarize some findings, important for the long term variant outlook construction.

First of all one should stress that the economy of the Slovak Republic has just passed a very complicated period of 1990 - 1993, during which it was hit by the Comecon disintegration, and inevitable transformation recession in the first phase of the radical economic reform. Owing to these influences GDP in constant prices decreased in 1990 by 2.5 %, in 1991 by 14.5 %, in 1992 by 7.0 % and in 1993 by further 4.1 %. Over those four years GDP decrease represented 25.6 %. In the years 1994 and 1995 economic growth was re-established and favourable macro-economic development was witnessed - significant growth of GDP, and of industrial production, particularly exports, slowing down of inflation, restoration of active trade balance etc. (Table 4.1).

Present level of GDP per capita in Slovakia, its relation to the EU level and possible improvement in the future deserve special attention. GDP per capita in Slovakia reached in 1994 the level of 6 527 USD (re-calculation in terms of the parity of currency purchasing power); for comparison: by the same method and at the same time this figure reached 7 940 USD in the Czech Republic, 6 275 USD in Hungary and 5467 USD in Poland. Present GDP per capita level corresponds to the 39 % of the average EU value, 60 % of the level of Portugal and 80 % of the level of Greece (these two countries have the lowest GDP per capita level within EU countries). The rule (not officially proclaimed, however) is accepted, that countries newly accepted into the EU should roughly reach at least GDP per capita level of the weakest members of the EU.

Macroeconomic Data, 1990 - 1995

Table 4.1

	1990	1991	1992	1993	1994	1995
Output and expenditure, % pa						
1. real GDP	-2.5	-14.5	-7.0	-4.1	4.8	7.4
2. private consumption	3.0	-27.3	-2.5[1]	1.2	-3.4	3.4
3. public consumption	1.0	-17.8	-2.5	4.6	-4.4	1.6
4. gross fixed capital formation	0.2	-28.8	-3.9	-16.0	-3.8	9.2
5. exports (goods and services)	-14.5	17.2	-4.3	-0.2	11.4	18.5
6. imports (goods and services)	-0.6	17.0	-2.3	-1.0	-9.8	19.1
7. industrial output	-4.0	-25.4	-13.8	-3.8	4.9	8.3
8. agricultural output	-7.2	-7.4	-13.9	-8.1	1.0	1.5
Prices and wages, % pa						
9. consumer prices	10.6	61.2	10.0	23.2	13.4	9.9
10. producer prices (industry)	5.2	68.9	5.3	17.2	10.0	9.0
11. nominal wages	na	16.5	20.6	18.5	17.0	14.3
Labour market and demography (end-year)	"to come from					
12. employment (% pa)	the					2.1
13. umemployment rate	Employment					13.8
14. population (m)	Fund"					5.36
Monetary indicators						
15. exchange rate (SKK/USD)	18.0	29.6	28.3	33.4	32.1	29.6
16. discount rate (%, end-year)	na	na	9.5	12.0	12.0	9.75
Government accounts and external balance						
17. government revenue (Sk, billions)	na	na	115.9	144.5	139.1	163.1
18. government expenditures (Sk, billions)	na	na	123.8	167.5	162.0	171.4
19. government balance (Sk, billions)	na	na	-7.9	-23.0	-22.8[2]	-8.3
20. trade balance (Sk, billions, goods)	na	na	1.7	-27.3	4.1	1.8
21. balance of payments (m USD)	na	na	na	-601.2	712.0	1000.0[3]

[1] Estimate
[2] According preliminary fulfilment of the state budget to December 31, 1994
[3] 1.- 10. 1995

Poznámka: údaje o zahraničnom obchode sú podľa krajiny pôvodu určenia, pri dovoze OP=FOB, pri vývoze FCO=FOB (FOB/FOB bežné ceny) na základe ukončeného colného konania ku koncu roka.

Sources: Štatistická správa o základných vývojových tendenciách v NH SR 1994 a ich predikcii na 1. polrok 1995; Štatistická správa o základných vývojových tendenciách v NH SR 1995 a ich predikcii na 1. polrok 1996; Menový prehľad, október 1993 a január 1994, NBS; Štatistické čísla a grafy 1995, Zahraničný obchod Slovenskej republiky za rok 1995;

According to predictions published so far, one can assume that in the next decade GDP in the EU as a whole will grow by the average annual growth rate 2.5 % and GDP per capita by 2.3 %. In Greece and Portugal this growth might be a bit higher (3 % annually), which approximately holds for the population growth as well. Therefore, annual GDP per capita growth in these countries could be somewhere around 2.5 %.

Based on these information, and without any further calculations one can see clearly that the 3 % annual growth rate of GDP in Slovakia (e.g. annual GDP per capita growth rate about 2.8 %) would not do to cope with the weakest EU member even after decades. If, however, GDP growth rate in the Slovak Republic reaches 6 %, the average of Greece and Portugal could be reached approximately in the year 2005, and at the same time Slovakia could reach from today's average 40 % up to 57 % average level of the whole EU. Should the GDP growth rate of Slovakia reach 9 %, these proportions could be reached in the year 2000 already, which should give considerably higher chances for the Slovak Republic to be accepted into the European Union in the years immediately following the year 2000.

Variant 1 - long term development of the Slovak Republic without significant
macro-economic measures

This variant of the long term prediction demonstrates, what would be the development of the Slovak economy without significant macroeconomic measures. Thus represents this variant 1 a basis for the construction of further variants with marked macroeconomic interventions.
At the same time, some inevitable changes in macroeconomic proportions are assumed in this variant too, namely:
- mild decrease of both the tax burden of enterprises and of basic interest rate.;
- mild increase of both the capital investment financing through the state budget and foreign capital inflow.

Table 4.2
The main results of variant prediction of the economic development of the Slovak Republic up to the year 2005

Indicator	Reality	Prediction for the years 1996 - 2005		
	Average growth rates 1993-1995 or 1995 values	VARIANT 1 (no significant macroeconomic measures)	VARIANT 2 (utilization of internal growth resources)	VARIANT 3 (utilization of external and internal growth resources)
Annual growth rates[1] [%] gross domestic product	1.79	3.00	6.19	9.08
consumption of population	0.22	3.23	4.21	7.75
consumption of the state	-0.96	1.80	0.55	2.95
gross investments	-5.80	2.52	12.80	15.90
goods & services exports	6.49	2.16	5.34	7.81
goods & services imports	-1.65	3.76	6.85	11.10
consumer prices	15.74	5.63	6.01	6.93
nominal wages	16.51	8.55	9.66	14.88
real wages	0.66	2.76	3.44	7.44
productivity of work	1.78	2.68	5,35	7.96
Values in the year 2005 [2] unemployment rate [%]	13.00	8.50	4.87	2.76
balance of the state budget [bill. SKK]	-9.00	-2.30	-22.50	14.70
Trade balance of goods & services (= current account)	-9.80	-7.00	19.90	-41.20
net inflow of long term foreign capital	17.60	39.30	48.30	168.10
money reserve M2	340.80	665.10	933.50	1 301.20

[1] Average rates in the years 1996 - 2005 calculated from the values in constant prices, if not stated otherwise

[2] Unemployment rate in % of labour force, other values in billions of SKK in current prices

Table 4.2a

Quantification of possible influence of internal resources of growth acceleration in the years 1996 - 2995 (Part 1)

Indicator	Variant 1	Development	changes due to	the influence
	(development with no significant macroeconomic measures)	decreased tax burden of the enterprises	regulation of wages and increased depreciation rate	increased financing of investments by the state budget
Annual growth rates[1] [%] gross domestic product	3.00	+1.66	-0.04	+0.60
consumption of population	3.23	+1.93	-3.05	+0.71
consumption of the state	1.80	x	x	-1.25
gross investments	2.52	+3.27	+2.47	+3.22
goods & services exports	2.16	-0.11	+0.12	-0.03
goods & services imports	3.76	+2.00	-0.78	+0.70
consumer prices	5.63	+0.76	-1.49	+0.31
nominal wages	8.55	+3.51	-5.61	+1.20
real wages	2.76	+2.37	-3.85	+0.84
productivity of work	2.68	+1.45	-0.13	+0.57
Values in the year 2005 [2] unemployment rate [%]	8.50	-1.60	-0.70	-0.20
balance of the state budget [bill. SKK]	-2.30	-8.70	+5.60	-21.80
Trade balance of goods & services (= current account)	-7.00	-33.90	+21.30	-24.10
net inflow of long term foreign capital	39.30	+1.20	+0.50	+0.60
money reserve M2	665.10	+154.40	-65.50	+76.10

[1] Average rates in the years 1996 - 2005 calculated from the values in constant prices, if not stated otherwise

[2] Unemployment rate in % of labour force, other values in billions of SKK in current prices

Table 4.2b

Quantification of possible influence of internal resources of growth acceleration in the years 1996 - 2995 (Part 2)

Indicator	Development changes due to		the influence	VARIANT 2
	decreasing national bank rates	support of exports by the state (credit guarantees, tax alleviation etc.)	the influence of internal resources utilization summed up	(development at the utilization of internal growth resources)
Annual growth rates[1] [%]				
gross domestic product	+0.47	+0.50	+3.19	6.19
consumption of population	+0.81	+0.58	+0.98	4.21
consumption of the state	x	x	-1.25	0.55
gross investments	+1.03	+0.29	+10.28	12.80
goods & services exports	-0.05	+3.25	+3.18	5.34
goods & services imports	+0.57	+0.60	+3.09	6.85
consumer prices	+0.26	+0.34	+0.38	6.01
nominal wages	+0.95	+1.06	1.11	9.66
real wages	+0.65	+0.67	+0.68	3.44
productivity of work	+0.38	+0.40	+2.67	5.35
Values in the year 2005 [2]				
unemployment rate [%]	-0.48	-0.65	-3.63	4.87
balance of the state budget [bill. SKK]	+8.80	-4.10	-20.20	-22.50
Trade balance of goods & services (= current account)	-20.80	+84.40	+26.90	19.90
net inflow of long term foreign capital	+0.20	+6.50	+9.00	48.30
money reserve M2	+43.90	+59.50	+268.40	933.50

[1] Average rates in the years 1996 - 2005 calculated from the values in constant prices, if not stated otherwise

[2] Unemployment rate in % of labour force, other values in billions of SKK in current prices

Table 4.2c

Quantification of the possible influence of external resources of growth acceleration
in the years 1996 - 2995

Indicator	Development	changes due to	the influence	VARIANT 3
	share sales in selected enterprises to foreign companies	increased utilization of foreign credits & sales of obligations abroad	the influence of external resources utilization summed up	(development at the utilization of internal & external growth resources)
Annual growth rates[1] [%] gross domestic product	+1.29	+1.60	+2.89	9.08
consumption of population	+1.66	+1.88	3.54	7.75
consumption of the state	+2.40	x	+2.40	2.95
gross investments	+1.75	+1.35	3.10	15.90
goods & services exports	+0.78	+1.69	+2.47	7.81
goods & services imports	+1.82	+2.44	+4.25	11.10
consumer prices	+0.76	+0.16	+0.92	6.93
nominal wages	+2.71	+2.51	+5.22	14.88
real wages	+1.80	+2.20	+4.40	7.44
productivity of work	+1.09	+1.52	+2.61	7.96
Values in the year 2005 [2] unemployment rate [%]	-1.52	-0.59	-2.11	2.76
balance of the state budget [bill. SKK]	+27.00	+10.20	+37.20	14.70
Trade balance of goods & services (= current account)	-29.40	-31.70	-61.10	-41.20
net inflow of long term foreign capital	+46.00	+73.80	+119.80	168.10
money reserve M2	+143.40	+224.30	+367.70	1 301.20

[1] Average rates in the years 1996 - 2005 calculated from the values in constant prices, if not stated otherwise

[2] Unemployment rate in % of labour force, other values in billions of SKK in current prices

This variant of the prediction generates the long term growth of the real GDP in the Slovak Republic on average by 3 % annual growth rate. The more rapid growth of population consumption compared to the investments' growth rate would (in a bit milder relation) survive. The growth of exports would continue by a much smaller pace than the increase of imports. Real wages increase would mildly exceed work productivity increase. On the other hand, relatively inconspicuous of both the GDP and foreign capital influx growth rates, would not support price increase, which would mean marked decrease of inflation rate in the years 1996 - 2005, for this period about 5.6 % on average, and 4.3 % towards the end of the period (Figure 6). Unemployment rate would slowly decrease (due top the slow GDP increase) and towards the end of the period it would reach about 8.5 %. State budget and balance of trade would show slight deficits, similarly as in the years 1993 - 1995.

It is therefore necessary to investigate implementation possibilities of the other variants of long term prediction with considerably higher GDP growth rates. Summarized quantification results of these variants (2 and 3) compared to variant 1 are presented in table 4.2.

Variant 2 - long term development utilizing internal resources of the growth acceleration

It is natural, that for the economic growth acceleration internal resources should be utilized in the first place. Variant 2 of the long term prediction just presented envisages their maximum exploitation. Naturally, model solution can be neither complete and precise, nor can it include all the potential resources with their effects. There are 5 groups of internal resources, that can be explicitly expressed by the model used, with the quantification of their influence on the GDP growth acceleration, and on the other macroeconomic indicators:

- decreasing of fax burden of enterprises
- the regulation of wags and deprecation rate increaced
- the increaced financing of investment grom the state budget
- reduction of the bank rates in the Slovak National Bank
- Inport of export by state

Variant 3 - long term development utilizing internal and external resources of the growth acceleration

As demonstrated by model simulations, maximum utilization of the internal resources can accelerate GDP of the Slovak Republic in the long run up to the annual 6 % rate only. To reach higher rates, up to 9 %, it would have been necessary to utilize at maximum external resources to.

Naturally, prediction variants, that calculate with the "sell-out of national property" and with the "indebtedness at the expense of the future generations" can provoke controversial reactions. The following external resources must be to utilize:

- the sale of property shaves in certain enterprises to foreign companies
- the increased drawing of foreign credits and obligation sals abroad.

To utilize these resources would naturally mean substantial increase of foreign indebtedness of Slovakia, which would the be comparable with that of Hungary and Poland. The use of such resources would be significant.

The implementation of variant 3 (table 5) aside from the significant GDP growth acceleration from 6.2 % up to 9.1 %, would mean also the acceleration of growth of other macroeconomic indicators. Investments would grow roughly two times as quickly as the consumption of population, and imports would grow faster than exports. Resulting deficit on current account of the balance of payments would however be covered by substantially higher assets on the capital account. The state budget would balance would be active thanks to the sales of shares. The acceleration of the average rate of inflation compared to variant 1 - from 5.6 % to 6.9 % would play no significant role, as already in the year 2000 the difference in inflation rate increase would be 0.5 points only, and in 2005 sheer 0.2 points.

5. Conclusions

The results of variant prediction presented in this paper (mainly in variant 3) may seem from today's point of view extraordinarily ambitious, even unrealistic. But economic growth acceleration did not arrive by itself, through the free play of market forces, but always thanks to the meaningful economic policy of the government, supported by central bank and further institutions. The acceleration of investment growth and exports was stressed, and the increase of consumption was restricted.

The results of the variant long term prediction thus presented should be accepted with some reserve as experimental and orientative. But one can see in them for Slovakia to overcome its current lagging behind the developed EU countries within the next 5 - 10 years.

If we compare size structure of enterprises of SR with that of European Union, can conclude, that the development in Slovakia in terms of brightness of size structure has been recording a positive orientation in the past five years.

Transformation proces paralell influenced shifts of labour force from all productive industries into the service sector. On the other hand, increcasing of total efficiency of industry from the point of view of its contribution for GDP creats key problem of further economic development of the Slovak Republic. There exists severe imbalances between the structure of the Slovak industry and the structure of industries in European Union.

Financial burden of the EU budget are lowest in the case membership of the Czech Republic and Slovak Republic from all Central and East European countries.

Enclosure 1

A brief overview of content orientation of integration into the European Union prepared by individual ministries of the Slovak Republic.

General notes

Concept integration into the EU in the documents of six ministries, which has been at disposal, is prepared at various level of details for the area of economic policy, legislature of which especially of so called the White Book, and further for the area of institutional, personal, material and financial provision.

The documents - with exception of the one of the Ministry of Finance of the Slovak republic - do not cover the cases, where under the form of legal norm harmonization are hidden trade and political changes which make worse our subjects and prefer Western European subject behind the framework of the association agreements. A revolt against such changes exist also in other countries. It is revealed also by the White Book (p. 400), which, in relation to harmonization of custom regulations presents that not all interested countries share the same views on trade integration issue. It should be distinguished between the changes which have happened before joining the EU and those after the joining, when disadvantages in certain areas will be compensated by advantages in other areas. It should be referred to the norms which has not been included but which make us worse-off - e.g. regulations enabling provide licenses to some oligopolist organizations in the EU for export and import of agricultural products.

The Ministry of Finance of the Slovak Republic

In the document there is presented a part of the White Book (6 chapters), which is guaranteed by the Ministry of Finance. It presents also a very detailed list of norms which still have reacted or will react very soon to the legal changes recommended

by the White Book. There is reasoning (mentioned earlier) against full transfer of the VAT regulation from the Western Europe.

In the next is mentioned a brief review of tasks of financial policy in the process of the integration into the EU. It is necessary to note here that one of the Ministries - by method of selection we conclude it can be the Ministry of Finance - should serve the role to draw general concept of the Slovak economic policy in the process of EU integration.

Finally, the Ministry of Finance mentions institutional framework, personal provision and technical and financial provision of its tasks in the area of integration.

The Ministry of Economy

A substantial space is devoted to the issue of economic policy changes in the process of integration into the EU. It is also analyzed in very details. It starts with the analysis of the initial state, e.g. by the industrial analysis of competitiveness, is focused on economic policy tools, including industrial policy, technical policy, trade policy and others. Conclusions are based on deep knowledge of the EU's inside environment we enter. For example, it is based on the fact (p. 26), that "significant majority of export support has been still coordinated by the individual member states, a practice which will not be changed in the very next future" and that we will have to adapt to such system

It is stressed that a general concept of the Slovak economic policy in the process of integration into the EU should be prepared. A participation of the Institute of Economics of the Slovak Academy of Sciences - among other organizations - is envisaged.

The Ministry prepares time schedule of legal harmonization and of harmonization of all necessary legal changes for which the Ministry is responsible.

The Ministry of Transport, Postal Services and Telecommunications

Except harmonization of legal changes, the Ministry is dealing with a wide range of problems linked to the integration of transport and telecommunication networks. One specific issue is that except the EU bodies there has been established, in the course of time, another 12 governmental and 14 non-governmental international organizations. Participation on their activity must impose an extreme claims and must especially complicate "harmonization" of their activities and decisions.

The main issues in harmonization of legal regulations, resulting from the White Book, have been guaranteed by the Ministry in the framework of working on ten basic Acts covering basic activities of the Ministry.

Similar to other ministries, the Ministry mentions a bulk of measures for provision of tasks linked to the integration. An important role has been played here by the PHARE program.

The Ministry of Labour, Social Affairs and Family of the Slovak Republic

In the framework of harmonization of legal acts the Ministry is responsible for the Chapter V of the White Book: Social Affairs. Like in the case of other ministries, a similar measures have been done by the Ministry.

A specific issue of the Ministry is that competencies in the area of employment (migration) belongs still to the EU member states. This results into a difficult task for the Ministry to sign bi-lateral agreements on emigration and this brings related problems in areas like social and medical insurance etc.

The Ministry of Education of the Slovak Republic

This Ministry follows the general concept of the Slovak integration into the EU in education, in which the main tasks are defined as well as steps which the Ministry will conduct. There

are defined time schedule and scheme of institutional provision as well. The Ministry of Education, in the framework of approximation of law, is a responsible subject for the Chapter 18 of the White Book: Mutual acceptance of higher education.

The Ministry of Health of the Slovak Republic

This Ministry focuses its tasks in the process of the Slovak integration in the EU especially on legal measures contained in the White Book. Nevertheless, it participates in 23 working groups focused on health and environment protection issue, on issue of medicine, chemical substance, social security and education.

The Ministry of Education of the Slovak Republic

This Ministry follows the general concept of the Slovak integration into the EU in education, in which the main tasks are defined as well as steps which the Ministry will conduct. There are defined time schedule and scheme of institutional provision as well. The Ministry of Education, in the framework of approximation of law, is a responsible subject for the Chapter 18 of the White Book: Mutual acceptance of higher education.

The Ministry of Health of the Slovak Republic

This Ministry focuses its tasks in the process of the Slovak integration in the EU especially on legal measures contained in the White Book. Nevertheless, it participates in 23 working groups focused on health and environment protection issue, on issue of medicine, chemical substance, social security and education.

(6)

96EEnlSu
19.11.1996

Problems and Challenges of the Eastern Enlargement of the European Union

Jan Stankovsky, WIFO

The European Council in Madrid in December 1995 promised the start of the accession negotiations with the CEEC 6 months after the end of IGC, i.e. probably in the second half of 1997. By that time the opinion of the EU Commission concerning the application of the individual countries (avis) will have to be available.

The presumed budgetary costs are often seen as the most difficult barrier for an Eastern enlargement of the EU. An other point in discussion are the relations of the Eastern EU candidates towards the Monetary Union. These two topics are discussed in the following contribution.

Estimates of the budgetary costs of the Eastern enlargement

There is a wide range of estimates of the budgetary costs of the Eastern enlargement of the EU. These costs will accrue mostly in two areas: In the financing of the Common Agricultural Policy (CAP) and in the financing of the structural and cohesion funds.

Differences in the estimates results partly from the uncertainties about the future economic development of the acceding country, but mostly from the uncertainties about changes in EU policies: in addition to the "fixed" EU reforms (i.e. consequences of the 1992 Mc Sharry agriculture reform or the impact of the WTO agreement) there is a great number of "pending" reforms which have to be agreed upon in the political process within the Union.

Table 1 summarises different estimates of the total and of the agricultural costs of the Eastern enlargement, Table 2 presents the estimates of *Breuss - Schebeck* (1996) broken

down by countries and cost categories [1]).

The expected costs of the CAP result from the rather high share of agriculture in the economy of most CEECs. In addition to it, there is a danger of a cost explosion as a consequence of a productivity surge in the - rather inefficient - agricultural sector of the CEECs, following the coming modernisation. Therefore an early integration of the Eastern countries into the "agricultural discipline" of the EU is suggested, in order to avoid the creation of excess capacity (*EC*, 1995B).

According to the "Strategic Paper for the Agriculture" the costs of the CAP for all 10 applicants can be estimated at ECU 9 billion in the year 2000 and ECU 12.2 billion in the year 2010. Based on this estimates the DG II calculated the CAP costs for Poland and the Czech republic. The main results of this exercise are summarised in Table 3. From the total CAP costs calculated for Poland (ECU 3.2 billion) ECU 2.2 billion will have to be used for compensatory payments. These are subsidies for farmers not related to the output, paid as a compensation for income losses resulting from lower prices for agricultural products in the EU. A renunciation of compensatory payments for farmers in the East would significantly reduce the CAP costs of the accession

For the structural and cohesion funds a solution could be found in "ceilings" for the financial support for the entitled (i.e., less developed) EU countries (as a percentage of the GDP of the receiving country). Based on the actual regulations, Slovenia would receive 7 percent of GDP, Bulgaria and Romania more than 35 percent. In discussion is financial support up to 3 to 5 percent of the GDP, which is in line with the present support for Greece.

---

[1]) The estimates of *Breuss - Schebeck* seem to be rather realistic, they comply with the latest EU calculations of the costs of agricultural and structural policies for Eastern enlargement.

On the occasion of a hearing in the European Parliament representatives of CEECs confirmed that the proposed cost reduction could be acceptable for them.

CEEC and the Monetary Union

The conditions for accession of the CEECs set by the European Council in Copenhagen in June 1993 refer to the participation in the Single market, not in the Monetary Union. The acceeding Eastern countries will therefore not be obliged to fulfil the Maastricht criteria; however, they will have to commit themselves to the target of a participation in the Monetary Union.

EU countries, not yet qualified for a membership in the Monetary Union (pre-ins) will participate in a "new" European Monetary System (EMS II). It can be expected, that the EU will invite (some) of the Eastern EU candidates to participate in this EMS II. However, in order to consolidate their economy, the Eastern countries will for some years require some autonomy in the fiscal and exchange rate policies. This posts serious challenges both for the European Union and the acceeding Eastern countries. A recent EU study (*Ilzkovitz*, 1995) summarises these problems as follows: "The criterion of exchange rate stability and the loss of the exchange rate instrument might be the most constraining condition for EMU participation of the associated countries." ... "New Member states will be allowed to conduct an autonomous monetary policy and participate in the ESCB on a restricted basis. They do not have to comply with the guidelines and instructions of the ECB for open market and credit operations, minimum reserves or other instruments of the monetary control and they do not participate in the pooling of reserves of the ECB. However, their central banks have to be independent and to follow an objective of price stability. Their governors are members of the General Council of the ECB and within this Council, they have the opportunity to follow the monetary policy of the participating countries and to give their views on it." ... "New Member states will also participate to the future exchange rate arrangement that should exist between countries participating fully in the monetary union and non-participating countries. As a rule, this exchange rate arrangement should foster convergence in the non-participating countries as well as ensuring the smooth operation of the Single

Market. It should be sufficiently flexible to allow exchange rate adjustments and help avoid excessive exchange rate volatility." ... "Even if convergence criteria are not yet fully applicable to associated countries, early awareness of them on the part of the CEEACs is not only welcome but also necessary. The major question is not whether but when should CEEACs adopt the EMU convergence criteria as their immediate target. Full EMU participation also means that the autonomy in the management of exchange rate policy will be completely lost and this might be the most constraining condition for EMU participation of the associated countries. The choice of the optimal exchange rate regime during the transition process is very complex. It depends on the economic conditions and the stage of the reform process in the country considered. So far, the CEEACs have adopted a wide variety of exchange rate regimes. However, a fixed regime is only sustainable if it is accompanied by appropriate macroeconomic policies and substantial reforms of fiscal and monetary policies. Moreover, some flexibility of the exchange rate might be necessary during the transition process to recover price-competitiveness losses or to absorb large capital inflows. Further reforms are necessary in order to enable the associated countries to meet the convergence criteria on a sustainable basis." ... "All these reforms should speed up the convergence process of the associated countries. By contrast, premature adoption of tight convergence criteria, in particular budget deficit, might slow down successful completion of the structural reforms."

Table 1: Costs of Eastern Enlargement of the EU: different estimates

Author	Estimates for year	CEEC-4[1]	CEEC-6[2]	CEEC-10[3]
		bn ECU		
Total costs				
CEPR (1992; Begg)	1989	7.8	12.9	-
Stehn (1994)[4]	after 2000	6.5	11.0	-
Courchene (1993)[5]	1990	43.0	-	-
Baldwin I (1994)	1990	58.1	-	-
Baldwin II (1994)	1991	11.7	23.3	26.7
Breuss - Schebeck (1996)	2000	16.8	27.7	30.3
Costs of the common agricultural policy (CAP)				
Anderson - Tyers (1993)[5][8]	1990	37.6	-	-
Brenton - Gros (1993)[5]	1990	17.0	-	-
Stehn (1994)[4]	after 2001	3.6	5.6	-
Stehn (1994)[7]	after 2001	4.8	7.4	-
Breuss - Schebeck (1996)	2000	6.7	11.1	12.2
EU (1995)[8]	2000	-	-	9.0
EU (1995)[8]	2010	-	-	12.2

Other estimates concerning the costs of CAP for CEEC-6: Tangermann - Josling (1994)[6][9] bn 20 ECU; Mahe et al. (1995)[9] bn 13,5 ECU; Tarditi et al. (1994)[9] bn 32 ECU; Steichen (1995)[5] bn 5 ECU.

1) Poland, Hungary, Czech Republic and Slovak Republic. - 2) CEEC-4, Bulgaria, and Romania. - 3) CEEC-6, Slovenia, Estonia, Latvia, Lithuania. - 4) Including structural reform. - 5) Baldwin (1994). - 6) Bn 47 US$.
7) Excluding structural reform. - 8) Excluding reform of CAP. - 9) Schneider (1995).

Table 2: Costs of Eastern Enlargement of the EU: Country Structure

Estimates for 2000

	CAP[1]	Stuctural policy	Budgetary costs- total	Budgetary revenues	Net costs	
			bn ECU			In % of GDP[2]
Czech Republic	904	1,625	2,664	669	1,995	3.8
Slovak Republic	396	1,705	2,147	225	1,922	10.9
Hungary	2,166	2,848	5,165	739	4,426	7.7
Poland	3,290	6,480	10,097	1,608	8,489	6.8
CEEC-4	6,756	12,658	20,073	3,241	16,832	-
Bulgaria	417	835	1,285	161	1,124	9.0
Romania	3,957	6,163	10,223	510	9,713	24.4
Slovenia	313	648	1,011	248	763	4.0
CEFTA[3]	7,069	13,306	21,084	3,489	17,595	-
CEEC-6[4]	11,130	19,656	31,581	3,912	27,669	9.1
Estonia	198	351	566	86	480	7.2
Latvia	260	423	703	98	605	7.9
Lithuania	299	541	859	97	762	10.1
CEEC-10	12,200	21,619	34,720	4,441	30,279	8.7

Source: Breuss (1995), Breuss - Schebeck (1996). - 1) Common agricultural policy. - 2) In % of Eastern European countries-GDP; in % of EU 15-GDP: CEEC-6 0.37%, CEEC-10 0.40%; in % of EU-budget: 28.6% respectivaly 31.3%. 3) Czech Republic, Slovak Republic, Hungary, Poland and Slovenia. - 4) Czech Republic, Slovak Republic, Hungary, Poland, Bulgaria and Romania.

Table 3: Costs of the CAP and Compensatory Payments in case of an Eastern Enlargement of the EU

EU-estimates for 2000

	CEEC-10	Poland	Czech Republic
		bn ECU	
Costs of the CAP[1]	9.0	3.2	0.9
Compensatory payments	6.6	2.2	0.6
Arable crops	5.8	1.9	0.6
Beef premium	0.8	0.3	0.1
Costs of the CAP excluding compensatory payments	2.4	1.0	0.3

Source: EU, "The CAP and Enlargement. Economic effects of the compensatory payments", 1996, (2).
1) Common agricultural policy.

(7)

Restructuring of Eastern and Central European Economies
What model? The Rhineland model or the Anglo-Saxon Model?
What role, if any, for industrial policy?

Hans H. J. Labohm

Rhineland model versus Anglo-Saxon model

The collapse of communism, with its one-party system and command economy, represents a turning point in history. It has enabled the Central European countries to embark on a new road and to reform their political and economic systems according to western principles of democracy and the market economy. Yet, although the principles are by and large the same, there are many differences between western models. The so-called Anglo-Saxon model[1] of the market economy, e.g., features an emphasis on individual responsibility and private initiative rather than collective responsibility and public action. It favours the stock-exchange to finance new enterprises rather than the banking sector. In doing so it represents stockholder capitalism rather than stakeholder capitalism. Moreover it exhibits an emphasis on consumer sovereignty linked with a strong anti-trust policy rather than public support for 'national champions' and (international) cooperation between firms in the same sector in order to strengthen their position in world markets. It perceives companies primarily as sources of revenues rather than as rallying point for cooperative human effort. It features a limited role for trade unions rather than accepting them as legitimate partners in a quasi-permanent socioeconomic dialogue, aimed reaching broad-based social consensus. Finally, it shows some indifference to the outcome of the market process in terms of equality of income and rejects assertive income policies. The continental European counterpart of the Anglo-Saxon model, the so-called Rhineland capitalisme, exhibits opposite features. Owing to the particular characteristics of its society, the Japanese so-called network capitalism does not seem to offer a viable model for European countries.

Despite differences, all western models have been more or less successful in providing citizens with political and personal freedom and a relatively high and rising standard of living. This implies that countries in transition have a certain latitude in shaping the particular features of their own political and economic systems.

The question arises whether the countries concerned are clearly aware of the differences between these options, and whether they have already a idea of the model which they ultimately want to adopt.

Corporate governance

Corporate governance constitutes an important element of socioeconomic order. It refers both to the institutional structures through which debt and outside equity investors can influence the behaviour of inside managers and the extent to which these investors act to secure their financial interests. It is important for the pace at which companies can be reformed so that they can achieve the same level of efficiency and productivity as their main (international) competitors. It is also important for attracting investments from abroad.

The question arises how Eastern en Central European countries perceive the future role of cooperate governance in their economic systems.

Industriat policy

Time and again, pleas in favour of an active industrial policy by Western governments are popping up in economic literature.[2] In this context the successful experience of Japan and other high-performing Asian economies is often referred to as examples which should be followed by Western - and especially European - economies.

In order not to confuse the issue, a clear distinction should be made between general industrial policy, which limits itself to creating general socioeconomic conditions which are favourable for the promotion of industrial activities, on the one hand, and interventionist or 'active' industrial policies, which try to directly influence the industrial structure of a country, on the other. The second variant of industrial policy is often associated with direct subsidies and various measures to protect the privileged industries from (foreign) competition.

A number of arguments, however, militate against the latter approach for European countries.

- Governments do not possess superior insight and/or information to establish the successfulness of certain economic activities. This is the insolubility of the problem of what the Anglo-Saxons call 'picking the winners'.

- An active industrial policy will lead to politicization of economic decision-making, which may imply a clash between economic logic and political logic, at the expense of economic efficiency.

- Equal treatment is one of the main principles of democracy. Positive discrimination and privileged treatment of selective industrial branches or individual companies are in violation of that principle. This may undermine the democratic legitimacy of the government which would follow such a policy course.

- Even in cases where governments would try to be as non-discriminatory as possible, it will be inevitable that big companies will be treated more favourably than small- and medium-sized enterprises, since their access to governments is generally inferior to that of bigger companies.

- There is an important difference in decision-making 'culture' between governments and business. Governmental decision-making is often characterised by long and cumbersome bureaucratic procedures, whereas the private sector acts more businesslike. This often leads to clashes between these two cultures. In the worst case it might lead to 'contamination', in the sense that enterprises are forced to adapt to government procedures, which may adversely affect their flexibility and dynamism.

- Separate active national industrial policies of (future) members of the European Union are inconsistent with the basic free market orientation of the EU, which aims at Europe-wide integration of economic activities, including cooperation and mergers between and mergers of European companies across borders.

- Active national industrial policies of future member countries of the European Union are inconsistent with formal agreements concluded with the EU, such as Chapter II, Competition and other economic provisions, of the Europe Agreements.[3]

1. Michel Albert. *Capitalisme contre capitalisme*. Editions du Seuil. Paris 1991. The Anglo-Saxon variant of the market economy represents a somewhat idealised model. In reality there are important differences between Anglo-Saxon economies, such as the American, British and Canadian model.

2. See for instance: Gabi van Duynhoven. *Tsjechië. Het land van de Rijzende Leeuw*. Extended essay. Supervisor: Drs. A.M.M. Kolodziejak. University of Nijmegen, July 1996.

3. See for instance chapter II, article 64, paragraph 1, point iii of the Czech-E.C. Europe Agreement, October 4, 1993, which states: 'The following are incompatible with the proper functioning of the Agreement, in so far as they may affect trade between the Community and the Czech Republic: (iii) any public aid which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods.'

(8)

Prague seminar on the economic policy framework in the CEECs
Sponsored by ACE
on 25 November 1996

Intervention by Paul Van den Bempt

The econonomic policies of the Czech Republic , barrin unforeseen events in the next few years ,will undoubtedly b determined to a large extent by its prospective accession to th European Union.

Omitting the institutional and general political aspects , th criteria for admission agreed upon at the Copenhagen summit (Jun 1993) are quite clear:

- to capacity to adopt the **acquis communautaire;**
- to posess a functioning **market economy;**
- **the capacity to cope with competitive pressure** and market forces within the European Union;
- the endorsement of the objectives of political, economic an monetary union.

Meeting these criteria means that the Czech economy can full enter into the single European market.All problems (on bot sides) will not be solved immediately, so that even at the tim of accession, **transitional measures** will be adopted , as fo other countries when they became members . These measures shoul be temporary exceptions to the principle of the free movement o goods, services,capital and persons.

Whether the Czech Republic will become at the same time a membe of the **euro-zone will depend on its macro-economic performanc** with regard to the well-known criteria specified by the Treat on the European Union.

However ,there will be no harm done if the Czech Republic doe not meet these criteria at once and remains for some time unde the regime of a derogation and does not immediately adopt th single currency , the **euro.**
In this event , it will have **more leeway** in terms of economic fiscal and monetary policy, although of course , in the longe term, convergence with the other economies of the Union wil become a dominating objective and determine policy actions.
All these possibilities are still open .

It is not my intention to deal with the issue of adopting the acquis communautaire since it is very complex an cumbersome.Other speakers will perhaps adress it. Judging fro the reports of the EBRD on the development of the transitio process, the Czech Republic appears to be the most advanced amon the associated countries .

As to the evolution towards a market economy, we should not interprete this principle too narrowly.
All the present member states of the Union have mixed economies even if the "mixture" differs from one country to the other. Hence it is normal that a number of activities are performed by firms in state ownership. The relative share of the private sector should of course dominate.(in this respect the Czech Republic already scores well).In addition, public enterprises are subject to the Community rules on competition and state aid is rather severly restricted .

A last point I want to stress is that the Czech exchange rate regime will be influenced by the setting up of the euro-zone and the creation of a single currency.

The euro will be used by the participating countries (which may be more numerous than was thought until recently) as an international currency.Given the weight of the EU in Czech trade and capital flows, it seems natural that the euro will serve as an anchor for the koruna . Such a policy would prepare an entry into the ERMbis (being set up now) or, when appropriate, the changeover to the single currency.

As some or even many of the associated countries will also use the euro as an anchor , an element of stability will emerge in subregional economic and financial relations.

Sustained economic growth , less inflation , more assured and open markets , currency stability will form an excellent basis for the take-off which economies in transition may hope for.

(9)

How to fail in the process of harmonisation.

Jaroslav Šonka, European Academy Berlin

Approaches concerning a positive re-structuring of institutions of the EU and the associated states have been and will be frequently discussed during the course of this conference. The basis for such discussions are the pre-settings given by the Maastricht Treaty and the documents of several official meetings. During the last several weeks a number of scientific conferences were held in which the fine networks within the already given framework were approached. Organisers of conferences covering topics such as "Three pillars", "European Monetary Union" "Criteria, convergence, stability", "Common foreign and security policy", "Restructuring of EU decision-making processes" concerning the member states on the one hand - and "Pre-accession strategy", "Economical transition strategies" concerning the candidate states on the other hand, were anxious to win speakers for parallel dates. This only proves the significance of this search for practicable concepts for the challenge of the decade - the stabilising process of a continent - Europe - that has undergone significant changes for seven years. It should not be the purpose of this note to repeat all those concepts - that have already been discussed by very competent people.

I would like to point out some rather more problematic dates - to anticipate the history according to the bad alternatives -i. e. looking for the possibilities of a DISHARMONIZATION. This obviously is a strategy to avoid such problems. I would like to begin chronologically:

- Today the Intergovernmental conference remains somehow in a dead lock waiting for the results of the British general elections, i. e. further 5-6 months. It may be assumed that the treatment of the points relevant for the enlargement of the Union will not be achieved in time. Now, an elegantly introduced and immediately withdrawn statement by Chancellor Kohl is a frequently discussed topic: Maastricht III.
- The schedule for new members joining the EU is focused on to the year 1997: when a union - reformed to an as yet unknown (see the previous point) extent - has to embark on negotiations with the candidate states. Here, however, one prerequisite is needed, one that is much less discussed. The Commission has to present reports about the candidates, which will only be partly derived from the answers given in the questionnaires of this year - 1996. These reports will probably initiate discussions about the correctness of their contents and could seriously damage the atmosphere of the negotiations.
- Within the broad discussion on the single currency a further aspect appears - yet no solutions appear simultaneously: Accepting the strong criteria of the Maastricht I treaty, the governments have started to look for other possibilities to push forward the economical development in their respective countries. A phenomenon can be observed that could be called "competition in lowering of taxes". Negotiations towards a harmonization of tax systems are needed and the results should come soon. There is a possibility of a destructive and destabilising competition which would also include and have an effect on the countries applyieng for the membership in the Union.
- During 1998 a new concept of the financing of the Union has to be prepared. At this time the conclusions of Turin (structural reforms) must be introduced and the position of the Union after enlargement has to be envisaged. Here, the discussions will be governed by the economical criteria - mainly by the then current data. If one does not beforehand succeed in adopting a strong structure including new decision-making processes, it will be a rather problematic period.

- Similarly, recent declarations of rather anti-integrative positions among the first candidates of the enlargement clearly show the need of such well-constructed rules - presented in time.
- This period is also characterised by the beginning of the British presidency. Although most experts expect a shift to the more Europe-oriented Labour party after the next elections in Britain, the British position will not turn into a "normal European position" soon. The changes can be realised only step by step and have to counterwork the previous 17 years of anti-European attitudes. But as yet the general elections of the next year are by no means decided.
- During the last 8 months of 1998 the European Monetary Institute has to develop inner rules of its activity once the single currency has been introduced. This also means that clear cut information for all those who will depend on the activities of EMI will come rather late. The countries looking for favourable pre-accession strategies need more information and particularly well structured information at that, about one of the dominant players in the European game.
- Finally, in 2001 the association treaty of the Central and Eastern European states will be consumed. There is a need for a new treaty - with or without a clear perspective of EU enlargement. Also in the case of re-negotiations it may well be imagined that a consensus will not be achieved easily.

Two other fields that have no restrictions as far as time is concerned may also present aspects that are obstacles to European Integration:

- Analytical power needed for developing the European Union is taken into account at least in one pillar of the unification process: The common foreign and security policy will be developed by creating a new institution aimed at providing analytical aid. However, in all fields of European integration and enlargement sufficient analytical capacity is needed: In both the EU and the candidate states. On the other hand, some of the activities adopted according to the convergence and stability criteria of Monetary Union may endanger the general intellectual capacity of European society and the herewith related social cohesion. Also a wide and complex range of ethical and social questions is not discussed frequently.
- Recent opinion polls reveal results which do not induce much optimism about the possible behaviour of the public - hence of the voters determining the distribution of power. The communication among the negotiating entities, between those who are in charge of making key decisions and the public, the passage of information through the media - these are also structural factors that determine the positive outcome of the European integration process. The unfavourable role of arguments that are uniform and mostly also very simple cannot only be seen in the case of the yellow press in Britain. Europe needs to work out a structure how to present itself and ideas how to transport the information to the public in order to clearly present the developments within and around the EU.

(10)

ECONOMIC POLICY FRAMEWORK IN CEEC FOR THE PROCESS OF MOVING TOWARDS THE EU

An International Workshop, Prague, November 25,1996

Session Three : INSTITUTIONAL FRAMEWORK HARMONIZATION IN THE PRE-ACCESSION PERIOD

Prof.Dr. Luděk Urban,
Charles University, Prague
Institute of Economic Studies
Faculty of Social Sciences

Three points to be discussed :

1. Institutions set up in the Czech Republic in the pre-accession period with the task to prepare the country for EU membership, including environment surrounding these institutions,
2. How far has the CR progressed in meeting requirements of the White Book adopted by the European Council in Cannes,
3. To what degree the existing institutional setting of the EU is or is not helping the Associated Countries to become member countries of the EU.

1.The CR is a late-comer in the group of countries applying for EU membership.In spite of this institutional framework to prepare the country for EU membership was established before this date. Ministry of Foreign Affairs was entrusted with the task to have permanent contacts with EU institutions and to coordinate all activities during the pre-accession period. New institutions set up in 1995 : Government Committee in charge of European Integration chaired by the Premier Minister and the subordinated Working Committee.
Memorandum attached to the Czech application for EU membership summarizing the position of the Czech government towards the EU. Recent Government Programme (June 1996) on European integration : harmonizing economic policy.Forming EU Negogation Team. OECD membership of the CR (1995) and compatibility with EU standards.

2. The White Book - a document summarizing EU legislation related to the Internal Market.Harmonizing the domestic legislation with EU standards should result in full compatibility with Internal Market regulations. The main core of the Internal Market legislation consists in opening door for four economic freedoms (free movement of goods, services, persons and capital) accompanied by strict competition rules.

The most far-reaching progress in the CR has been achieved in free movement of goods, mainly due to the fact that much of the job has been done by the preceeding European Agreement. The White Book presupposes a far more-reaching liberalization in providing services than it is the case in the CR at this moment. With the problem of free movement of persons the CR will be confronted only after it will become full EU member. Barriers on the Czech side. In spite of the recent progress in extending convertibility of the Czech koruna freedom of capital movements appears to be the most demandind task.No special problems are foreseen in harmonizing Czech competition policy. Harmonizing domestic legislation has to go hand in hand with improving the competitive position of the economy.

3. There are two sides of the institutional harmonization:
   1. in the Associated Country,
   2. in the institutional setting and decision rules existing in the EU.

To what degree is the EU prepared to accept new members,given its existing institutional framework (functioning of the EU institutions, CAP, structural funds, the EU budget) ?

In addition to it : what are the perspectives of ratifications of EU enlargement treaties in individual EU countries ? Even without Eastern enlargement the EU too is confronted with a kind od institutional harmonization.

An International Workshop:

Economic Policy Framework in CEEC for the Process of Moving Towards the EU

Czernin Palace
Loretánské náměstí, Prague
Monday 25,
November 1996

R. Vintrová
Czech Statistical Office, Prague

SAVINGS AND INVESTMENTS IN TRANSITIONAL COUNTRIES

(Overview)[1]

[1] *Study was prepared for PHARE-ACE PROJECT*

Savings and investments in transitional countries[1]

Introduction

The CEFTA countries (Central European Free Trade Association), which have made the biggest progress in transformation of their economies of all Central and East European countries, have already overcome the transformation crisis connected with a deep fall of production. In all four analyzed countries (Czech Republic, Hungary, Poland and Slovakia, Slovenia joined them in 1996 only) the bottom of the decline of GDP was approximately by one fifth and that of industrial production approximately by one third under the pre-transformation level. Nowadays, these countries find themselves in the stage of economic growth (Poland experienced a fall and the subsequent turn with a one-year to two-year lead before other countries).

At present the question arises, how deep the restructuring of production was and how stable and dynamic the economic growth based on it can be. The depth of restructuring decides the way in which these countries will be integrated in international division of labour. The restructuring should overcome speedily the handicap suffered by these countries in the sphere of central planning, when they were integrated in the autarkic COMECON community, lagging behind in technologies, organization of production and all modernization trends. On the other hand, these countries have a long industrial tradition and a relatively well-educated and qualified labour force, and they are not agrarian countries, but on the contrary, overindustrialized

[1]The study prepared for PHARE-ACE Project "The Restructuring of Production and the Changing Nature of the Enterprise in East and Central Europe." Published in Prague Economic Papers, No. 4, 1996.

ones. Unlike the newly industrialized countries (NIC) of South-Asia or Latin America, it is not a case of primary industrialization, but of overcoming of a one-sided misdeveloped "supraindustrialization", built on the underdeveloped foundations of an autarkic community.

For the present the integration of the CEFTA countries in international division of labour is based on a cheap labour force (at least by the European standard) and export of low-sophisticated, raw material and energy intensive products. (In Poland and Hungary agricultural exports play a somewhat bigger role). This orientation does not correspond to the perspective possibilities of these countries and is at variance to the built social statute of the population.

Consequently, the restructuring and development of Central and East European countries (CEEC) in general and of the CEFTA countries especially solves a rather different role than is the objective of other NIC, which are often compared with. However, the gaining of financial funds for restructuring - both from domestic savings and foreign capital - is a task of identical nature.

The experience of postwar Japan and the present "Asian tigers" shows that the main factor of rapid growth and advancement to export efficiency in more sophisticated production branches is a high rate of domestic savings. An important additional factor can be foreign capital inflow. For example in the postwar period Japan lagged behind the USA and Europe much more in the wage level than in productivity of labour. This provided it with big internal accumulation possibilities.

The objective of the following study is to show the development tendencies in the rate of investments, rate of national savings and foreign capital inflow in the Czech Republic in comparison with other CEFTA countries.

1. The Starting Economic Level and the Rate of Investments

The economic level of the CEFTA countries in comparison with the EU countries ranged from 29 % in Poland to 35-36 % in Hungary and Slovakia and 50 % in the Czech Republic and approximately 55 % in Slovenia in 1995 (the author's calculation based on the ECP'93 - European Comparison Programme 1993, see ECP, 1996). If we proceed from the present relation of approximately double rate of economic growth in the Czech Republic, when compared with the EU countries, then we can expect achievement of GDP per capita level of USD 15,500 in current prices in the Czech Republic in 2000, i.e. about two thirds of the future EU countries level (132 % of the level of Greece, 95 % of the level of Portugal and 86 % of the level of Spain). This position is slightly better than that of Portugal or Spain, when they entered EU. But in comparison with the prewar level, when GDP per capita in Czech countries exceeded that of Austria and came close to the level of Belgium of France, this lagging behind is still considerable.

When compared with economically developed countries, the economic level of the Czech Republic is based on the below-average productivity of labour with above-average working participation of the population. Whereas the Czech Republic reached 44 % of the level of Austria in its GDP per capita in 1994 (according to ECP'93), it was nearly 40 % in GDP per employee (in the purchasing power parity). The specific participation rate (of population in productive age according to the OECD definition) reached approximately 78 % in 1995, whereas in the OECD countries average it was 70 % (OECD, 1996). Notwithstanding a certain decrease in the transformation period, the Czech Republic ranks together with the Scandinavian countries among the leading countries in the world with its participation rate. The labour intensive nature of economic development is one of

the factors of low unemployment in the Czech Republic, which is often neglected in explanations of this economic "mystery".

The accumulation possibilities of economy are given by the lead of the level of productivity before the wage level. If the level of aggregate productivity of labour in the Czech Republic was approximately 40 % of that of Austria in 1994, the level of average wages in national economy reached about one third (calculation of the author on the basis of Statistische Übersichten, 1996). Consequently, there are certain preconditions for a higher rate of national savings, ensuring a relatively high rate of investments.

A dramatic reduction of average real wages in the first year of liberalization measures (1991) by one quarter made it possible for the Czech Republic to maintain the high rate of investments for the whole transformation period. Although average real wages have been rising rapidly in recent years - from 1993 to 1995 the annual growth rates were 4.0 %, 5.3 % and 7.7 %, they were still 10 % under the 1989 level in 1995. The rate of fixed investments was from 27 % to 32 % in the years 1992-1995, which exceed significantly the average of the EU countries of 20 %, achieved in the 1990's.

Among other CEFTA countries also Slovakia has a high rate of fixed investments, whereas their rate is much lower in Hungary and in Poland.

Table 1

Gross Fixed Capital Formation in the CEFTA Countries in 1995 (in % of GDP, current prices)

Czech Republic	Hungary	Poland	Slovak Republic
32.2	20.4	17.1	29.1

Source: Statistical Bulletin of CESTAT, No. 2, 1996.

The CEFTA countries need to reach the economic growth rates of at least 5 % to 6 % annually in order to be able to overcome the underdevelopment in economic level in the foreseeable future of one generation. Economic growth is ultimately driven by investment. There is no case of record of a country consistently achieving top growth rates without also logging one of the highest rates of investments. Less well appreciated is that high investment must be financed by high savings. Drawing on foreign saving, as reflected in current account deficits, is becoming relatively easy for the CEFTA countries (especially for the Czech Republic and Hungary), yet this source of financing remains small relative to the amount of investment required for significantly better than average economic growth. Thus, most investment must be funded domestically. To obtain top growth rates, domestic savings must move from 25 % to 30 % of GDP.

2. National Savings

In the Czech Republic, its financial funds changed for the benefit of an increasing rate of national savings and decreasing drawing from its reserves in inventories in the course of the years 1993 - 1995 along with the increasing rate of investments. Since 1995 the contribution of foreign resources has gained a big importance. We can expect that in the further development the rate of investment will stabilize or even decrease moderately, and the contribution of foreign resources can be kept on the reached level or even increased slightly in the course of several coming years. The drying up source of drawing from formerly excessive reserves in inventories should be replaced by support of further growth of domestic savings.

Table 2

Financial Resources of Gross Fixed Capital Formation in the Czech Republic in 1993-1995

(in % of gross disposable national income, current prices)

	1993	1994	1995
Gross fixed capital formation	27.0	29.9	31.8
Gross national savings*	18.7	20.3	23.6
Drawing from inventories**	8.7	9.5	4.1
Current account balance***	-0.4	0.1	4.1

**The difference between gross disposable national income and final consumption (private and public).*

*** The decrease of stocks of inventories.*

**** The surplus minus, the deficit plus.*

Source: CSO, own calculations on the basis of national accounts statistics.

The amount of the capacity effect of the nowadays realized investments and their returnability will show itself only with a certain time interval. A big portion of the nowadays started investments of the infrastructural character - in energy industry, telecommunications, railway transport corridors and motorways, oil pipeline, etc. - has a relatively long returnability. These investments, without which an overall modernization of economy cannot be put through, are one of the fundamental reasons of a higher rate of investments in comparison with the standard developed market economies. The changes in the microeconomic company sphere are slower and there is a large number of uncertainties. For these reasons investments in the manufacturing industry were less dynamic - they even fell down by 10 % in 1995 and only in the first half 1996 they increased by 21.2%.

The present high rate of investments creates one the basic preconditions for elimination of the previous lagging behind. If it will be supported not only by a continuing foreign capital inflow, but also by an increasing rate of domestic savings, the stability of

economic development in a longer perspective will not be endangered. The existing rate of national savings in the amount of less than 24 % is higher than in the EU countries, where it is about 20 %. However, the needs of restructuring and modernization of economy require its maintenance or oven further increase.

Among the CEFTA countries Slovakia has the highest rate of domestic savings - it was 32 % in 1995, whereas both Poland and Hungary have a considerably lower rate of domestic savings - 15 and 13 % respectively in 1994. As a result of the packet of austerity measures in Hungary in 1995 we can expect its more considerable increase with a decline of the balance of payments deficit from the level of 9.8 % GDP (USD 4.1 billion) in 1994 to the level of 6 % or 7 % GDP (USD 2.5 billion in convertible currencies). Simultaneously the lead of the "dollar" wages in Hungary before the average wage level in other CEFTA countries has slackened.

Table 3
Gross Domestic Savings in the CEFTA Countries in 1994-1995 (in per cent of GDP)

	Gross Capital Formation	Balance of Current Account*	Total Domestic Savings
1994			
Czech Republic	20.5	- 0.1	20.4
Hungary	22.2	- 9.4	12.8
Poland	15.9	- 1.0	14.9
Slovak Republic	23.2	4.8	28.0
1995			
Czech Republic	28.0	- 4.1	23.9
Slovak Republic	28.3	3.7	32.0

* *In the CR and SR the total balance, in Poland and Hungary convertible currencies*

Source: International Financial Statistics, 1996;
Statistical Bulletin of CESTAT, No. 2, 1996;
own calculations based on national accounts statistics.

The domestic savings over 30 % are only in Asian countries - Japan, Thailand, Indonesia; China has reached even 40 % and the peak in Singapore has even been 47 %. Among European countries the rate of domestic savings over 20 % in 1994 could be observed only in Germany (21.3 %), Austria (24.7 %), the Netherlands (24.4 %), Portugal (22.5 %), Norway (21.9 % in 1993) and Switzerland (29.6 % in 1993), an extreme case is represented by Luxembourg with the rate of 46.6 %.

3. The Foreign Capital Inflow and Foreign Direct Investments

The net foreign capital inflow amounted to USD 8.2 billion, i.e. 17.4 % of GDP in the Czech Republic in 1995, whereas in the years 1993 and 1994 it was 9.7 % and 9.4 % of GDP, respectively (Macroeconomic Analysis ..., 1996). If we compare these data with the "peak" reached by other emerging markets, then it is an enormous volume of inflow even in international scale. For example, the peaks in Chile amounted from 8 % to 10 % of net inflow to GDP, in Egypt 8.5 %, in Mexico 8 % to 10 %, they were higher in Thailand - 11 % to 13 %, and in recent years probably also in Peru.

Among the CEFTA countries a relatively high net foreign capital inflow was exceptionally in Hungary in 1993 - USD 6.1 billion, i.e. 15.7 %. However, in 1994 this inflow has already dropped to USD 3.3 billion. This country has a constant relatively high gross inflow, which is, however, used for foreign debt service - repayments and interest so that it cannot be used for the development purposes (International Financial Statistics, 1996).

In the Czech Republic the foreign capital inflow was almost fully sterilized in foreign exchange reserves until 1995; only in 1995 it was used to a larger extent for enhancement of investment resources. Official foreign

exchange reserves amounted to the peak 30 % of the annual volume of GDP in January 1996 - before widening of the exchange rate fluctuation band. Untill the first quarter 1996 the high surplus on the balance of payments' capital account made it possible to keep deficit on the current account without any bigger problems. But still, the current account deficit, which is estimated to reach over 5 % of GDP (USD 2.8 billion) in 1996, is the most acute problem of the Czech economy. In the first quarter 1996 this deficit (USD 0.5 billion) exceeded at first the capital account surplus (USD 0.05 billion).

The adequacy of foreign resources utilization depends on effectiveness and returnability of the present real investments, which are conditional on the change of behaviour of corporate management after privatization to a large extent. A big rise of foreign direct investments, which amounted to USD 2.5 billion in 1995, shows that a large portion of the risk is taken over by foreign entrepreneurs and financial institutions, as well. Other components of foreign capital inflow will be repaid within a certain time interval after the capacity effect of new investments will have manifested itself.

Globally, the share of the Central and East European countries in **foreign direct investments** (FDI) is not very big. Although it had grown continuously from the almost zero level in 1989, it was about 5 % in 1995 (including the former Soviet Union countries).

In the CEFTA countries including Slovenia the FDI inflow amounted to USD 10 billion in 1995, and the total stock was USD 28 billion at the end of the year. In this year the volume of FDI inflows increased by 2.5 times in comparison with the previous year, especially thanks to a rapid growth in the Czech Republic and also in Hungary, to a smaller extent also in Poland. A low volume of FDI in the

Slovak Republic stagnated, and in Slovenia, which accumulated FDI formerly, a decline could already be observed. (Also in the former Soviet Union countries the FDI inflow doubled in the same year, but in total it amounted to only USD 3 billion).

Table 4
Total and per Capita FDI in the CEFTA Countries in 1995

	Inflow		Stock	
	total USD bn	per capita USD	total USD bn	per capita USD
Czech Republic	2.6	248	5.9	573
Hungary	4.6	447	13.3	1298
Poland*	2.5	65	6.8	177
Slovak Republic	0.2	34	0.7	137
Slovenia	0.2	99	1.4	729

**Only projects with at least USD 1 mn capital*

Source: Balance of payments (Central banks of the CEFTA countries), national statistical data, The Vienna Istitute Monthly Report No.1, 1996.

A rapid growth of FDI inflows in the Czech Republic, Hungary and Poland in 1995 resulted in the highest inflow in their history. This result was influenced by the political and economic stability of the above-mentioned countries. In this year state enterprises were sold frequently to foreign investors within the framework of privatization (for example Telecom in the Czech Republic) and investments into ventures established earlier followed.

From the total FDI stock in the CEFTA countries Hungary received 47 %, Poland 24 %, Czech Republic 21 %, Slovenia 5 % and Slovakia less than 3 %. The low share of the Slovak Republic in FDI inflows and stocks is connected rather with political than economic reasons. This country seems to be a less stable environment for foreign firms in spite of its relatively good macroeconomic results. In this regard,

a certain change to better can be expected in the next years.

Hungary with the highest share of FDI stock has at the same time also the highest share of firms owned by foreign owners. Of nominal capital in manufacturing companies foreign owners control one third, whereas domestic private owners and the state control one third each, as well. In the Czech Republic this ratio is reverse for the benefit of domestic owners, who control 68 %, whereas foreign owners 6 % only and the state 26 %.

The composition of FDI by investing countries shows Germany in the first place in the FDI stock in the Czech Republic and Hungary, in Poland it is the USA, in the Slovak Republic Austria, in Slovenia Croatia. By economic activities the largest FDI in the Czech Repûblic are in the car industry and consumer goods and tobacco, in Hungary in the manufacturing industry as a whole, in Slovakia besides the manufacturing industry also trade stands out, in Slovenia electricity, gas and water supply.

FDI remain only a supplementary source of investments to national savings, its contribution to solving the problems of capital shortage in the CEFTA countries is rather limited. Besides direct contributions of FDI there exist, however, also indirect contributions, which can be even more significant.

5. Conclusions

The financial funds for restructuring differ in individual CEFTA countries very much. Hungary and Slovakia are to be found in the opposite extreme positions. Both these countries have approximately the same economic level and find themselves between the highest level of the Czech Republic and the lowest level of Poland. But the rate of their

domestic savings and the foreign capital inflow differs diametrically in opposite directions. The resulting different possibilities of development investments influence also the differing possibilities of their further economic growth.

Slovakia has the highest rate of domestic savings of all CEFTA countries - approximately 32 % of GDP in 1995, and the rate of fixed investments - 29 % of GDP - is the second highest after the Czech Republic. At the same time this country has been the least attractive for foreign capital so far. The surplus of the balance of payments current account was very high in 1995 (3.7 % of GDP) and there is the lowest FDI inflow per capita - inflow USD 34, stock USD 137 in the same year. The Slovak economy keeps high domestic accumulation resources thanks to a relatively low level of wages, influenced by their real decline in 1991 by one quarter and by further decline after devaluation of Slovak koruna in July 1993 and the low growth in the first years after the split of the state. The Slovak labour force is relatively the cheapest one of all CEFTA countries. Thanks to export of raw materials and seminifinished products the Slovak economy has kept its export performance untill 1996, although it lags behind most in export of sophisticated products. As a result of the given macroeconomic relations it reaches the most rapid economic growth among the CEFTA countries (7.4 % in 1995). In 1996, however, Slovak export performance has worsed rapidly.

Hungary has the lowest rate of domestic savings - only 13 % of GDP (1994). Even the high foreign capital inflow, which results in large deficits of the balance of payments current account (9.4 % of GDP in 1994) does not make possible a too high rate of investments, because a big part of this deficit - about 3 percent points - is absorbed by repayment of interest from high foreign indebtedness and by other items, which do not serve to economic development. That is why the rate of fixed investments is only 20 % - the

second lowest after Poland. But a high commitment of foreign firms controlling the largest share of domestic capital (one third in the manufacturing industry) serves to restructuring. It has the highest FDI of all CEFTA countries - inflow USD 447 per capita, stock USD 1,298 per capita (1995). Economic growth is the slowest in Hungary as a result of these macroeconomic relations - about 2.5 % annually in the years 1994 - 1995 on average.

Poland has also a relatively low rate of domestic savings - only 15 % in 1994, and the balance of payments current account is relatively well-balanced (minus 1 % in the same year). FDI per capita are not very high - inflow USD 65, stock USD 177 in 1995. The rate of fixed investments is the lowest of all CEFTA countries in Poland - only 17 % of GDP. The Polish labour force is cheaper than the Hungarian one and it does not differ very much from the Czech wage level. At the same time Poland proceeds from the lowest economic level among the CEFTA countries, it reached only 58 % of the level of the Czech Republic in 1995. Notwithstanding the low rate of investments, Poland has experienced the highest rate of economic growth for several years - the GDP growth was 5.2 % in 1994 and 7.0 % in 1995. It seems that there are considerable noninvestment resources of economic growth and that the investment already realized are utilized effectively.

The Czech Republic has a "medium" rate of domestic savings - 24 % of GDP in 1995, and the characteristic feature is that the current domestic savings are supplemented with drawing from accumulated reserves in inventories (8 % to 9 % of GDP in the years 1993 - 1994, 4 % in 1995). Since 1995 the domestic financial sources of investments are supplemented also by a significant foreign capital inflow. The current account deficit amounted to 4 % of GDP in the given year and is expected to be 7 % in 1996. FDI per capita are the second highest after Hungary - in 1995 inflow USD

248, stock USD 573. Labour force still belongs - after Slovakia - to the cheapest ones among the CEFTA countries thanks to a deep decline of real wages in 1991 by one quarter (in 1995 the average real wages did not reach the 1989 level). But in recent years the real wages growth was very rapid (5.3 % in 1994, 7.7 % in 1995). About 9 % are predicted for the year 1996), what endangers the maintenance of a high rate of savings in the corporate sector.

The combination of relatively high domestic resources supplemented with foreign ones makes it possible to finance high investments in the Czech Republic. The rate of fixed investments is the highest here among the CEFTA countries - it amounted to 30 % of GDP in 1994 and even to 32 % of GDP in 1995. In 1996 the high rate of investment growth continues. A big portion of these investments goes to infrastructure - oil pipe line, motorway, railway corridor, desulphurization of power stations, construction of atomic power station, telecommunications. These investments necessary for modernization of economy, have a relatively long returnability. Only a little over one half of investments went to the manufacturing industry in 1995. Consequently, only an insufficient part of total investments is left for new technologies and restructuring of obsolete production capacities so that after privatization a big boom is expected here, which should be supported by economic policy, as well. From the entrepreneurial sphere there are more and more requirements especially for more rapid deductions of new investments from the tax base.

As a result of these factors the Czech Republic reaches only medium rates of economic growth - 4.8 % in 1995, 4.3 % in the first half 1996, 4.8 % is expected in the whole year 1996 in the revised forecast. Not much higher rates, slightly over 5 %, are predicted also for the coming years.

References and Sources

1. CNB Monthly Bulletin No. 4, Prague, Czech National Bank.

2. ECP'93 (European Comparison Programme 1993), OECD, Paris, Press Release February 1996, OLIS.

3. ILO Yearbook 1995.

4. International Competitiveness Revisited. In: International Finance, Issue 26, Winter 1996, Zurich. Union Bank of Switzerland.

5. International Financial Statistics, IMF, Washington D.C., April 1996.

6. Macroeconomic Analysis for the Czech Republic in 1995 and Forecast for the Years 1996 and 1997. (In Czech). Czech Statistical Office, Reports and Analyses, May 1996.

7. OECD, Short-term Economic Indicators, Transition Economies 1, 1996.

8. Statistical Bulletin of CESTAT, No.2, 1996.

9. Statistische Übersichten (Statistical Survey) No.4, 1996, Wien. (In German).

10. The Vienna Institute Monthly Report No. 1, 1996. FDI in Central Eastern Europe. Vienna Institute for Comparative Studies, Wien.

(12)

Vintrová Růžena, Czech Statistical Office, Prague

Financial Resources of Restructuring

The integration in European market of the countries associated to EU is based on a cheap labour force (at least by the European standard) and export of low-sophisticated, raw material and energy intensive products for the present. In the framework of the PHARE-ACE project we have studied the possibilities of the CEFTA countries to overcome such an international division of labour corresponding neither with long industrial and educational traditions nor with the perspective comparative advantages of these countries. The gaining of financial funds for modernization and restructuring - both from domestic savings and foreign capital - is one of the main tasks.

The CEFTA countries need to reach the economic growth rates of at least 5% to 6% annually in order to be able to overcome the underdevelopment in economic level. The highest GDP per capita, which was achieved in Slovenia and in the Czech Republic, amounted only 56% or 53% of the EU average, respectively, in 1995 (measured in PPPs, extrapolated on the basis of ECP'93 by the help of GDP deflator differentials).

Economic growth is ultimately driven by investment. There is no case of record of a country *consistently* achieving top growth rates without also logging one of the highest rates of investments. High investments must be financed by high savings. Drawing on foreign savings, as reflected in current account deficits, creates an additional resource only. The current account deficits, which are the ticklish problem in all the CEFTA countries at present (in the Czech Republic especially), are closely connected with financing of real investments.

The Czech Republic has the highest rate of investments among all the CEFTA countries in 1993-1996. In 1995 the rate of gross fixed capital formation in GDP reached 31%, in 1996 is expected to be 34%. Also the Slovak Republic recorded high rate (29% in 1995), while Poland's and Hungary's rates were much lower (17% or 20% respectively in the same year).

While the rate of investments in the CR is comparable with the rates reached by "Asian Tigers", the same is not true for the rate of domestic savings. In 1995 the gross domestic rate of savings reached 25% of GDP and in 1996 is expected to be a little lower. Compared to EU average (reaching less than 20%) or to Poland and Hungary (13% or 15% respectively, in 1994) it represents a higher rate, while in comparison with South-East Asian countries, reaching around 30% rates, it represents an average value. Among the CEFTA countries only Slovakia reached higher rates (32% in 1995).

To achieve higher domestic savings is not easy in European conditions, taking into account the usual level of social guarantees. The rising part of real investments must be financed by foreign savings, i.e. deficits of current account. In the CR the deficit amounted to 2.9% of GDP in 1995 and nearly 7% in 1996. An extraordinary high foreign capital inflow accumulated in last years - with the peak in 1995 amounting to 17.4% of GDP - will enable to finance the deficit in the short-term. But serious complications could appear in the medium-term, if the deficits of current account would continue and the returnability of new investments in production and exports would take a longer term.

The composition of the new real investments does not guarantee their short-term or medium-term returnability, because a great part of them is connected with modernization of infrastructure. In the Czech Republic the share of investments in transport and telecommunications together with investments in energy branches took 46% of the total investments in the enterprise sector; this share lowered to 36% in the first half of 1996, while the share of manufacturing grew from 33% to 38% in the same period.

The great shares of investments in infrastructure are in harmony with the tendencies described in the "White Book" of EU. These tendencies hardly could be postponed while approaching to the 21st century. However, the individual countries are not able to finance them without foreign capital inflow. The greatest FDI stock per capita among the CEFTA countries was recorded in Hungary, on the second place was Slovenia. The Czech republic occured on the medium third place (before Poland), the Slovak republic on the last place. The conditions for gaining a stable (medium-term) capital inflow in different forms - not only FDI - should be prepared in the economic policy package of the individual countries with the help of the EU authorities.

13

Industrial Restructuring in Central and Eastern Europe and Emerging Trade Specialization Patterns

by Peter Havlik, The Vienna Institute for Comparative Economic Studies (WIIW)[1] *October 1996*

I. Industrial structural change

Industry used to be the favoured sector in the CEECs. Its share in GDP was much higher than in comparable Western economies and its structure differed as well. The major reasons for the existing structural differences were, of course, that in the pre-1989 period production patterns were decided by planning authorities instead of the market. Moreover, trade with market economies was relatively small and trade with other socialist countries was determined by the peculiar rules of intra-CMEA division of labour. The lack of internationalization led to a decoupling from the technological progress and associated structural changes in the West.

At the aggregate level, the share of CEECs' industry in GDP dropped from 30-40% at the beginning of the transition to some 20-30% at present. The adjustment process has been highly uneven, with manufacturing usually affected more than mining and quarrying. During 1990-92, industrial production shrank by double-digit annual rates in most CEECs. Production hit the bottom first in Poland (in 1991, after dropping by 30% as compared with 1989). In 1993, Hungary and Romania followed suit, with the remaining CEECs returning to growth in 1994. Their cumulated production decline was even higher than in Poland – almost 40% in the Czech Republic and more than 50% in Bulgaria and Romania. The recovery is now well underway in most CEECs – industrial output has been growing by 7-8% per year on average during 1994-95. Still, except for Poland in 1996, none of these countries have yet reached the pre-reform production level.

Industrial restructuring has been accompanied by substantial layoffs of redundant workers. Between 1989 and 1994, employment in manufacturing industry dropped by 23% in Poland, by 30% in the Czech Republic and in Romania, by more than 40% in Hungary and Slovakia. Some of these workers have found new jobs in services, but a large number became unemployed. With the notable exception of the Czech Republic, CEECs' unemployment rates soared from virtually zero to about 12% of the labour force in 1996. Labour productivity has been growing rapidly in all CEECs. Despite serious data problems, there is little doubt that labour productivity in industry improved substantially compared to the pre-reform period; in Hungary, Poland, Slovenia and Bulgaria the 1995 productivity levels already exceed those of the year 1989. In 1996, growth of production in the region slowed down somewhat, but labour productivity has continued to improve impressively in all CEECs – even in countries with relatively low (or negative) production growth such as Hungary, Slovenia and Bulgaria. This indicates that there are still considerable efficiency reserves and that the expected growth of industrial output will not lead to the creation of too many new jobs in this sector.

Structural differences between CEECs and West European countries

In the following, we will compare the industrial structures in the CEECs with those of certain groups of Western countries in 1989 and then analyse the changes that took place thereafter. Although the deviations were significant for all CEECs compared to EU-North (UK, France, Germany, Belgium) and EU-South (Spain, Greece, Portugal), they were surprisingly low and do indeed compare well with the structural differences among West European countries. Differences in the industrial structures between

1) This paper is an amended version of an article prepared by the WIIW for the *Panorama of EU Industry 1997*.

CEECs and West European countries being relatively moderate, the adjustment of CEEC branch structures at a rather broad level of industrial classification could not be considered the major obstacle to catching-up with the West European countries within a reasonable time span. On average the output structures of CEECs deviated more from the EU-North than the EU-South, as can be expected from their respective levels of development. Moreover, CEECs generally show greater deviations of their employment structures than of their output structures from the West, especially from the South European countries, indicating differences in productivity (manning) levels. From all CEECs analysed, Czechoslovakia appeared to be the most distorted economy with regard to the West in 1989, while Hungary and Poland seem to deviate least. This corresponds to other studies which point to the fact that Czechoslovakia was missing out on two important waves of restructuring to be observed in the other two countries around 1968/69 and following the first oil crisis in 1973.

At the individual branch level, the individual comparisons of the shares of a certain industry in output or employment (at the 3-digit ISIC level) in a CEEC with the same industry in EU-North and EU-South reveal for 1989 the following 'structural surplus' or 'structural deficit branches' of the CEECs as compared to the two groups of Western countries under consideration:[2)]

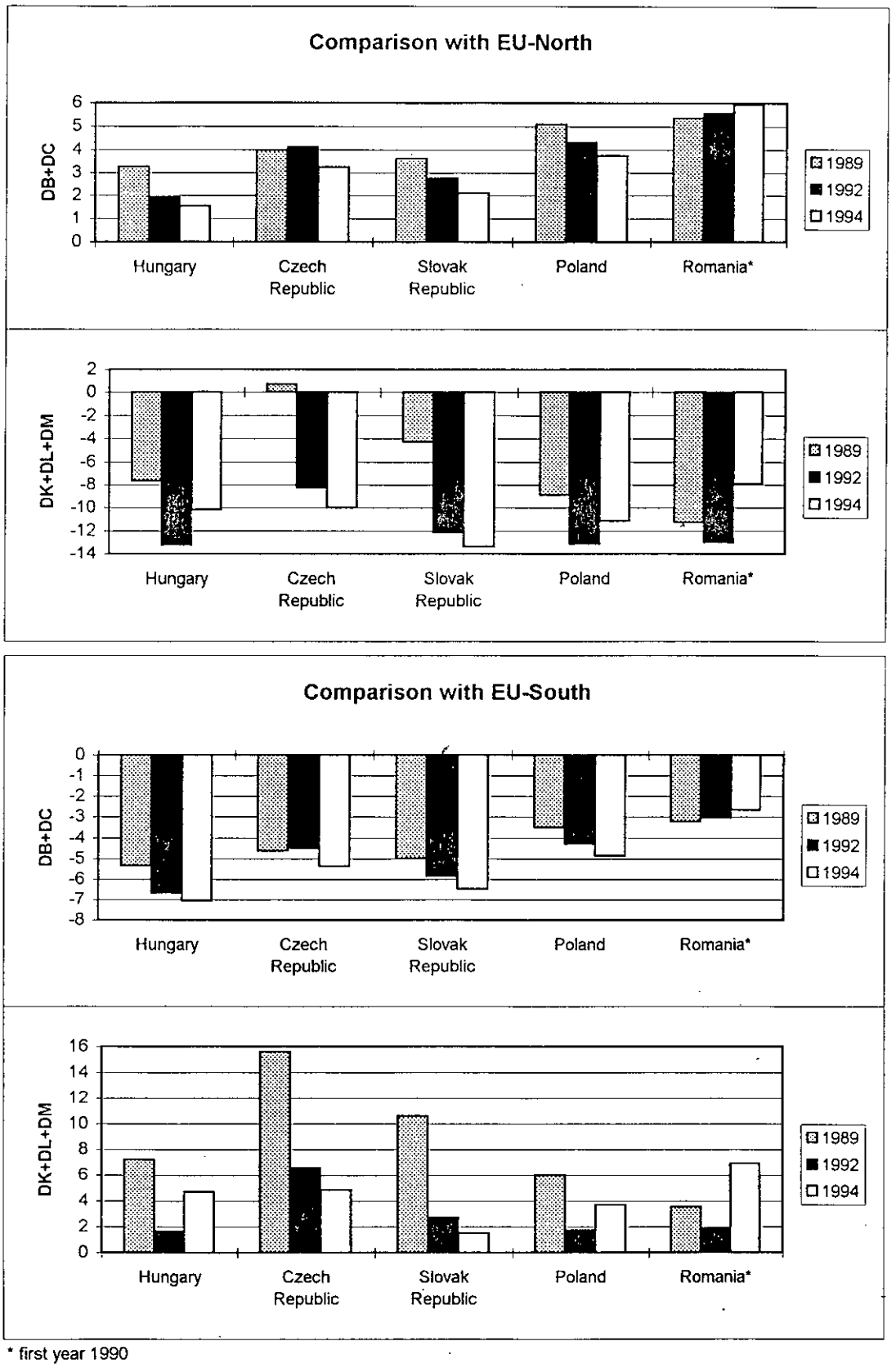
- a general overhang of heavy industry in the CEECs compared to EU-North as well as EU-South;
- a relative surplus of CEECs in food production and light industries such as textiles, clothing etc. compared to EU-North, but a deficit in these industries compared to EU-South;
- on the other hand a pronounced structural deficit of CEECs in sophisticated engineering compared to EU-North, but a surplus in these industries compared to EU-South (see Graph 1 below);
- a general structural deficit of CEECs in the paper industry and in printing and publishing, due to less advertising, wrappings etc. and to some degree to the limited freedom of the press in socialist countries.

This pattern was accentuated or weakened through the role played by natural resources (e.g. coal in Poland, tobacco in Bulgaria, agriculture in Hungary) or specialization in the CMEA division of labour (e.g. mechanical engineering in Czechoslovakia and electrical engineering in Hungary and Bulgaria). In general, our results indicate that the level of industrial development in the CEECs in 1989 can be located somewhere between the more advanced (northern) and the less advanced (southern) EU countries.

The period after 1989 was subdivided into two periods, 1989-92 and 1993-94. The first period was characterized by a transformational recession in most CEECs, while in the second period recovery gained momentum, setting the stage for adjustment under growth. Especially in the first years of the transition, employment and output structures have been changing very rapidly compared to the West European countries in the same period, but also compared to those periods, when rapid structural change in West European countries was taking place, e.g. after the first and the second oil shocks, or when individual countries had to prepare for and/or adjust to EU membership. We can perceive that the CEECs' output structure was drifting away from EU-North in the early years of the transition, which was only partly compensated by convergence later on. Seen over the whole period 1989-94, output structures diverged further from EU-North in all CEECs investigated. In the Czech Republic, Hungary and Poland output structures converged towards EU-South; in Slovakia and Romania they diverged from both groups of countries. Employment structures in the CEECs were generally diverging less than output structures from EU-North in the first years of the transition and they even converged to EU-North in Bulgaria, Slovenia and Romania. With regard to EU-South, the convergence of employment

2) The detailed figures are not printed in this article, but can be supplied on request.

Graph 1: Output shares of selected labour-intensive and sophisticated engineering branches in CEECs compared to the West



* first year 1990

DB=Textiles and textile products
DC=Leather and leather products

DK=Machinery and equipment n.e.c.
DL=Electrical and optical equipment
DM=Transport equipment

structures was yet more pronounced and valid for all CEECs. This might imply that relative factor use reflected the convergence with production processes used in the West.

The growing divergence of output structures from EU-North in the early years of the transition was, in general, due to further specialization along existing patterns, mainly in resource-intensive branches such as food industries (e.g. Hungary and Poland) and refineries (e.g. in Slovakia and Hungary), where major surpluses towards the West had already existed in 1989. Sometimes existing structural deficits towards the EU-North in the more sophisticated engineering branches have increased, mainly because of the loss of CMEA markets, as illustrated by the production of busses in Hungary or the mechanical engineering industry in Czechoslovakia (see Graph 1). For many industries, however, structural surpluses and deficits were reduced, indicating that a process of convergence in the direction of the more advanced market economies had started, although it did not yet show up in the aggregate measure. Prominent examples are the reduction of surpluses in the iron and steel industry and the reduction of deficits in the manufacture of paper and paper products and in printing and publishing, which is partly due to extensive foreign direct investment in these sectors.

In the period after 1992, adjustment towards EU-North took place in Hungary and Poland at a broad sectoral level, while in the Czech Republic specialization along existing patterns continued in the important production of basic metals and the fabricated metals industry, including steel (DJ)[3], as well as in mineral products, including glass and ceramics (DI). Also, the existing deficit in transport equipment (DM) was increased. In Slovakia, continued specialization in steel was of even greater importance and was the main cause for Slovakia's industrial structure diverging further away from EU-North at the aggregate level. In Romania, structural deficits were reduced at a broad industrial level, but existing structural surpluses in several important light industries such as textiles (DB), leather (DC) and manufacturing n.e.c. (DN) were increased.

The changes of CEECs' industrial patterns compared to EU-South widely mirror the developments with regard to EU-North; a presentation of the structural surpluses and deficits of two major groups of industries, some labour-intensive industries (DB and DC) on the one hand and some capital- and technology-intensive industries (DK, DL and DM) on the other, with regard to EU-North and EU-South are given in Graph 1. In general, existing surpluses in the more sophisticated engineering branches were reduced, especially in the early period of the transition, with very few exceptions, such as mechanical engineering (DK) in Hungary;[4] also existing structural surpluses in iron and steel were reduced in most countries. But the deficits in the food industry (DA) and in pulp, paper and paper products (DE) were reduced as well. In most CEECs, the food industry even developed into a surplus industry vis-à-vis the EU-South; an important exception in this respect is Slovakia, were the food industry remained in a major deficit position. Concerning the labour-intensive industries, the picture is quite different for Hungary, Poland, the Czech and the Slovak Republics on the one hand and Romania and Bulgaria on the other: in the first group of countries, existing deficits in textiles and textile products (DB) and leather and leather products (DC) were increased during the transition, while in the second group the existing deficits were reduced. In Romania the considerable deficits were reduced very slowly, but continuously. A special case is Slovenia, where the available figures for employment indicate an increase of the existing *surplus* in textiles and footwear, but a widening of the deficit in wearing apparel vis-à-vis the Southern European countries. However, specialization on labour-intensive products as suggested by the internationally

3) Letters in brackets refer to the 2-digit NACE rev. 1 terminology.

4) After 1992, when Tungsram started production under new ownership, Hungary has also increased the surplus in electrical engineering again.

extremely low labour costs might have taken place at a less aggregated level, not reflected in our results.[5)]

Our findings on industrial restructuring confirm the overall observation that apart from certain general trends, the individual CEECs have started to develop along **different** lines.

II. Restructuring and emerging trade specialization patterns

Foreign trade has been one of the areas most affected by the turbulent political, institutional and economic changes in the region. Traditional exchanges largely collapsed after the end of communism and the dissolution of old trading arrangements within the CMEA. Trade liberalization measures, such as the abolition of the state foreign trade monopoly and the introduction of current account currency convertibility, were introduced as parts of the stabilization reform packages. The latter included in most cases substantial currency devaluations which affect emerging specialization patterns as well. Domestic liberalizations have been paralleled by the West with a suspension of most quotas on Central and East European exports, their inclusion in the GSP system and, last but not least, by tariff concessions for industrial products contained in the Association Agreements with the EU.

Initially, expansion of trade with the West (especially with the EU) occurred against the background of stagnating (respectively declining) overall trade, implying huge regional trade shifts.[6)] By 1995, after the accession of Austria, Finland and Sweden, some 40-70% of CEEC trade is conducted with the enlarged EU(15). Although the CEEC market share in the EU more than doubled, only some 6% of (extra) EU imports came from the CEECs in 1994 and CEEC markets are still only marginally important for the EU. This asymmetry has manifold implications since any trade measure, be it liberalization or restriction, or the slower growth of Western demand, has a disproportionately greater impact on the CEECs than on the EU.

Rising **trade deficits** have been another feature of CEECs' trade developments. In 1995, the combined CEEC trade deficit exceeded USD 15 bn, mainly on account of Poland (USD 6.2 bn), the Czech Republic (USD 3.6 bn) and Hungary (USD 2.6 bn). In manufacturing industry trade, the previously balanced trade with the EU has turned into a deficit of some ECU 5 bn in 1993/94. The largest deficits were again incurred by Poland (ECU 1.9 bn), the Czech Republic (ECU 1.5 bn) and Hungary (ECU 1.3 bn). This happened as these countries were beginning to recover from the transformational recession and their imports were growing faster than exports. Apparently, the EU trade liberalization measures and even the asymmetry of the Europe Agreements (faster tariff reductions by the EU) could not offset the generally low export competitiveness and supply-side bottlenecks, respectively, of CEEC economies. Large CEEC trade deficits are hardly sustainable and might represent one of the major constraints on economic growth in the medium and long run.

Apart from huge increases in volume, there have also been considerable changes in the **commodity structure** of CEEC manufacturing industry trade. The composition of CEEC manufacturing industry imports underwent a radical change after 1989 and the structure of import demand (from the EU) is now very similar to the general structure of EU exports. On the other hand, adjustment on the CEECs' supply side was much less dramatic. The most pronounced structural shifts occurred in Romania and Bulgaria,

---

5) One straightforward example is the production of textiles and textile products (DB) in Hungary: the more detailed analysis at the 3-digit ISIC-level, available until 1992, reveals that the increase of this deficit was due to the increasing deficit in textiles, whereas the deficit in the usually more labour-intensive production of apparel was reduced significantly.

6) The regional trade shares, especially the ones for Bulgaria, are affected by the unrealistically high valuation of the transferable rouble used in intra-CMEA transactions as compared to the US dollar. Slovenia has recorded an exceptionally large share of trade with the EU since the mid-1980s – more than 50% in 1989.

the lowest in the former CSFR (especially in the Czech Republic as data for 1993-94 suggest). Most CEECs still display a rather different export pattern as compared with the structure of overall EU import demand. However, there is a **convergence** of the Czech, Slovak, Slovenian and Hungarian export structures to the EU to the general patterns of EU import demand whereas in the case of Poland, Bulgaria and especially Romania the export structures move away.

A comparison of the similarity in export structures among the CEECs reveals yet another aspect of structural adjustment. The structures of Czechoslovak, Hungarian and Polish exports to the EU became more similar between 1989-94 while they were increasingly diverging from the export structures of Bulgaria and Romania. Especially the Czechoslovak and Hungarian export structures became very similar. This suggests that these countries (and some EU countries – e.g. Austria) might increasingly compete on the same product markets. On the other hand, the Bulgarian, Romanian and partly also the Polish export structures again seem to evolve in a different direction. The emergence of at least **two groups** of countries within the CEEC region with substantial differences in industrial specialization is therefore clearly visible also in their varying export specialization on EU markets.

CEEC comparative advantages now and in future

Recent studies have discerned general CEEC export specialization patterns: away from capital-intensive branches towards labour-intensive industries, while the generally huge gap in the representation of skill- and R&D-intensive industries in exports somewhat declined in Hungary and Czechoslovakia.[7] Nevertheless, at the detailed industry level there are many exemptions to this general rule. An analysis of CEEC market shares in the EU reveals that between 1989 and 1994 the following industries recorded the largest '**competitive gains**': iron and steel (NACE 221), non-ferrous metals (224), cement (242), petrochemicals (252), tools and finished metal goods (316), insulated wires and cables (341), electrical machinery (342), motor vehicles (351), knitting industry (436), footwear (451) and clothing (453).[8] These industries have enjoyed the biggest absolute market share increases in most CEECs, either over the whole period 1989-94 or, after incurring initial losses at the beginning of the transition, consolidating their exports from 1992 and regaining market shares in the EU afterwards. On the other hand, there has been a number of industries incurring 'competitive losses', again either over the whole period 1989-94 or, suffering from a sort of adverse restructuring effect, only after 1992. Clear losers were in most CEECs the meat industry (412) and dairy products (413), as well as boilermaking (315), plant for mines, iron and steel (325) and animal and poultry foods (422) in some CEECs.

A tentative decomposition of the market share analysis into two periods (early transition: 1989-92; restructuring and recovery: 1993-94) helps to identify those CEEC industries which are **competitive and important** (as measured by the largest absolute market share gains), taking into account both positive and negative effects of restructuring. In this way, we can identify as competitive not only industries with the largest market share gains during the whole transition period 1989-94, but also such industries that have apparently successfully restructured after the initial transitional setback. Examples of industries which successfully restructured are sawing and wood processing (NACE 461) in the CSFR (Czech Republic), other basic chemicals (253) in Hungary, radio and TV receivers (345) in Poland, and petrochemicals (252) in Bulgaria and Romania. On the other hand, clear losers with adverse restructuring effect were e.g. boilermaking (315) in the Czech Republic, plant for mines, iron and steel (325) in Slovakia, glass and glassware (247) in Hungary, motor vehicles (351) in Poland, animal and poultry foods (422) in Bulgaria as well as structural metal products (345) in Romania.

---

7) See Landesmann, M.A. (1995), "The Pattern of East-West European Integration: Catching Up or Falling Behind?", WIIW Research Reports, No. 212, January.

8) Competitive gain is here defined as the gain in the market share weighed by the value of exports of a particular industry in the base year. For details, see Havlik, P., "CEECs' Export Competitiveness in the Manufacturing Industry". WIIW draft study, Vienna, October 1996.

What are the characteristics of the most important CEEC export industries? Can we find out some distinct **specialization patterns** apart from the general features described earlier? For example, clothing (NACE 453) – the most labour-intensive of all industries – recorded the largest absolute competitive gain in the CEEC region as a whole.[9] But also, e.g., the highly R&D-intensive electrical machinery industry (342) gained a lot, especially in Czechoslovak, Hungarian and Polish exports to the EU. The same is (partly) true for the highly capital- and energy-intensive cement industry. Specialization patterns are thus more complicated, despite a general tendency of growing specialization on labour-intensive industries on the one hand, and the under-representation of capital- and R&D-intensive industries on the other. Besides, there are again considerable differences among the individual CEECs.

The sample of the most **competitive industries** in the CSFR was characterized by lower than average (across all 89 sectors for which intensities are available) capital and skill intensity, but by considerably higher than average R&D intensity. The competitive industries in Hungary and Bulgaria also displayed much higher than average R&D intensity. In Poland, Bulgaria, Slovakia and Slovenia the sample showed higher than average energy intensity. Besides, Slovak and Slovenian competitive industries also tend to be more capital- and R&D-intensive. At the same time, competitive industries in all CEECs have lower than average skill intensity (mostly in Poland, least in Slovenia), but considerably higher than average R&D intensity (except Poland and Romania). A move towards more labour-intensive industries could be discerned only in Romania, Bulgaria and the Czech Republic; in Slovenia there has been a shift in the opposite direction, perhaps reflecting relatively high unit labour costs in this country.

Industries incurring market share losses and identified as non-competitive were in all CEECs on average less R&D- and skill-intensive. In Czechoslovakia (especially in the Czech Republic), losing industries have above average energy intensity – a possible indication of positive structural adjustment away from energy-intensive sectors. The fact that in all CEECs losing sectors have considerably lower than average R&D and skill intensity can also be interpreted as a sign of positive structural change. Except for Slovenia, the CEECs' non-competitive industries display less than average labour intensity, once more suggesting that wage costs might be a problem in Slovenia.

The recent CEEC trade specialization patterns are indeed rather **heterogeneous**. Low labour costs as the CEECs' most important current comparative advantage seem to be confirmed. As far as the R&D-intensive industries are concerned there has been a closure of the existing gap in some CEECs, though the good qualification of the CEEC labour force (skill-intensive industries) has not (yet?) been reflected in the changing structure of their exports. But, in contrast to developing countries and even the NICs, the existing broad industrial base and industrial traditions of the CEECs, their increasing integration through corporate links with Western firms etc., might potentially improve the CEECs' competitiveness in a wide range of other industries as well. The conjecture that some CEECs (especially Hungary and the Czech Republic) might have embarked upon a long process of catching up while others (Bulgaria and Romania) are falling behind seems to be confirmed by the present analysis as well.

Estimates of the internationally comparable **average unit labour costs (ULCs)** for the whole economy show that in the Czech Republic ULCs were some 28% of the Austrian level in 1995, in Hungary 33%, in Poland about 36% and in the remaining CEECs less than 25% of the Austrian level.[10] The highest ULCs are observed in Slovenia: 60% of the Austrian level in 1995. Though still considerable, the CEECs'

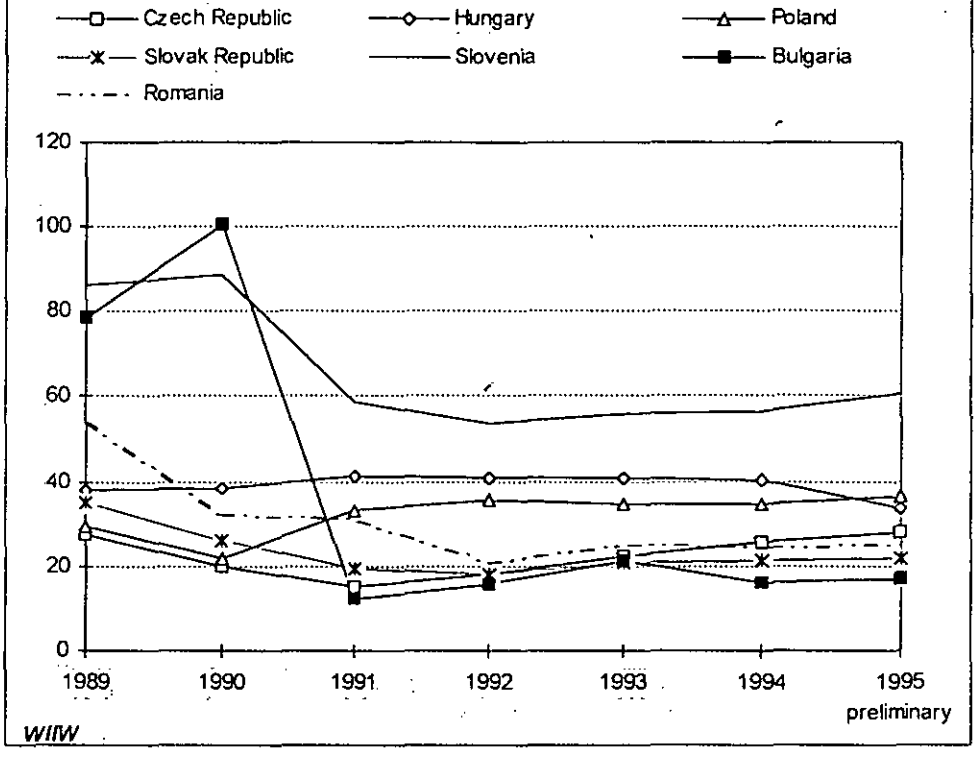
---

9) We use factor intensities derived for the four largest EU countries – see *European Economy, Special Supplement (1995): The Interpenetration between the EU and Eastern Europe.*

10) International comparisons of unit labour costs are difficult, *inter alia* because of problems in productivity comparisons. We use here GDP per capita as a measure of aggregate productivity and adjust the unit labour costs both for changes in exchange rates and purchasing power parities, the latter being used as a proxy for comparable productivity levels. For more details see P. Havlik (1996), op. cit.

Graph 2

International comparison of unit labour costs(ULC), PPP adjusted (Austria = 100)



absolute (average) ULC gaps have been diminishing as ULCs have been growing (in some CEECs rather fast) after 1991 (Graph 2). Tentative estimates show that except Hungary the ULCs in the CEECs' manufacturing industry are even lower than average for the whole economy. Together with the geographic proximity to Western markets and a fairly good formal qualification of the labour force, low unit labour costs give the CEECs an important competitive edge especially in **labour-intensive industries**. Moreover, the above ULC estimates are averages over the whole economy which vary considerably across sectors and companies, especially with respect to productivity levels. Examples where Western management, quality control standards and marketing channels help to raise substantially the average CEEC productivity levels while maintaining considerable wage gaps could be found in different sectors (e.g. automobile, electrotechnical and chemical industries).

Whether the CEEC industries identified above as competitive really possess a long-term comparative advantage is difficult to say from the available evidence. The recent export successes might have resulted also from some special factors (e.g. exports without due regard to profitability, a one-time effect of trade liberalization measures) in the initial stage of economic reforms and trade restructuring. Explaining the emerging CEEC trade structure with existing trade theories has so far not been very conclusive, *inter alia* because of dramatic regime changes and only a short period for which detailed data are available. It is thus not yet clear whether an inter-industry specialization pattern based on different factor endowments (e.g. labour, skills, etc.) will emerge or rather a rapid development of intra-industry trade with a closure of existing gaps. Moreover, the currently observed differences among the individual CEECs will most likely increase in future. The data available (up to the year 1994) do not permit an unequivocal answer regarding the export competitiveness of specific CEEC industries.

III. Conclusions

This paper has addressed the question of the emerging pattern of industrial specialization resulting from the dramatic process of transition in Eastern Europe and the evolving process of East-West European integration. We have analysed this issue at two levels:

Industrial structure comparisons between CEECs and two groups of EU economies, EU-North and EU-South. The major findings of this analysis were that CEEC economies started off in an in-between-position as regards the features of broad industrial composition relative to these two groups of economies. There was a stronger representation of heavy industry, but also of the technologically more advanced industries such as electrical and mechanical engineering industries relative to the EU-South, but a weaker representation of these industries relative to the EU-North. As regards the more labour-intensive industries (textiles, clothing, leather and footwear) the picture was the exact opposite: here there was an 'under-representation' of these industries relative to the EU-South and an 'over-representation' relative to the EU-North. As regards developments since 1989/90, one can perceive a process of differentiation across Central and Eastern Europe: the 'most advanced' of these economies (either in terms of technological know-how and/or in the speed of industrial structural and organizational transformation) have embarked upon a process of convergence in broad industrial structural terms with the more advanced Western European economies. This is not, of course, the case at the detailed microeconomic level as regards levels of productivity, quality of products, etc. in which we can perceive (and measure) dramatic 'technology and product quality gaps'[11], but these gaps are pervasive across the whole range of industries. Another group of CEEC economies, particularly those in which cross-border corporate linkages with the West remain weak (partly because of their geographical location), seem to move in the

[11] For details concerning the analysis and prospects of bridging these 'technological and product quality gaps', see M. Landesmann (1995),, op. cit. ; and M. Landesmann (1996), 'Emerging Patterns of European Industrial Specialization: Implications for Labour Market Dynamics in Eastern and Western Europe', *WIIW Research Report*, no. 231, Vienna.

direction of specialization towards more resource- and labour-intensive branches and thus move more in line with EU-South.

The analysis of *evolving trade specialization* has shown that the picture of international trade specialization is rather complex: on the one hand, we do have evidence of the presence and even strengthening of strong patterns of inter-industry specialization; compared to the EU import structure in general, CEECs' exports have moved in the direction of more labour-intensive exports, away from more capital-intensive exports, and continue to have very strong deficits in the area of technology- and skill-intensive branches. However, this picture at the overall level should not conceal the fact that, at the detailed industrial level, developments are much more varied. Certain economies (particularly the Czech Republic and Hungary) have made inroads in some sophisticated industrial branches (particularly engineering) and have reduced their deficit in R&D- and skill-intensive areas, but have also strengthened their presence in international trade in some resource- and labour-intensive areas. Other economies have mainly moved in the latter direction. The picture of trade specialization over the period 1990 to 1994 is still strongly affected by the short- to medium-run impact of the dramatic process of trade liberalization, absorption of the 'transition shock' and only the gradual evolution (at different speeds) of new industrial organizational structures in the different CEECs; this makes it difficult to draw very firm conclusions concerning the longer-term comparative advantage position of the different CEEC economies. Nonetheless, for the more advanced of the CEECs the developments do seem to indicate that they have embarked upon a process of strong corporate interlinkage with the rest of the European economy with good prospects for gradual 'catching up'.

14

The Economies in Transition: The Challenge of Restructuring and Economic Recovery

Dr. George B. Assaf
Team Leader, Global Report Team
Studies and Research Branch, UNIDO

The initial stage of the transformation process in many countries in Central and Eastern Europe has been relatively successful in terms of macroeconomic reforms - incorporating especially, stabilization and price liberalization. Since 1993, many of the countries of Central and Eastern Europe (CEE) and the former Soviet Union (FSU) have reached a critical stage in this historic transformation from command to viable competitive market-based economies. However, real achievements have not been in general spread widely and real progress has only been made by some countries - particularly those that began the transformation process first such as Hungary, Poland, the Czech Republic, the Slovak Republic and Slovenia. In many of the countries undertaking the process, the macroeconomic reforms of the first stage of the transformation process led to prolonged recession. The reforms have been accompanied by precipitous drops in output, persistent inflation, sizeable budget deficits and large increases in unemployment with unemployment often concentrated on young people and older workers and in regions adversely affected or bypassed by the transformation process.

Although several countries have now emerged from recession and prospects in general for the region look considerably brighter than before 1993, the fact remains that the past recession in many countries has led to widening income differentials between various strata of society and regions within countries and consequently led to heightened social, ethnic and political pressures, soaring crime rates, and general uncertainty. There has also been an alarming upsurge in some countries in the influence of former power structures as witnessed by recent elections. This shows that the gradual transformation to democratic structures and market economies in the region is far from assured. Although few commentators believe that the reform process is reversible, it is now clear that this process will take longer, and be far more complicated and difficult than at first thought. The euphoria that accompanied the initiation of the transformation process must now be replaced with cautious optimism in the face of the daunting challenges ahead. The transformation process imposes formidable, unprecedented challenges not only to the peoples of these countries, their governments, their nascent private sectors, but also for their international technical and investment cooperation partners.

A special challenge for the economies in transition will be to urgently address structural rigidities at the micro levels in order to achieve an appropriate supply response to the incentives and inducements provided by the macroeconomic reforms. The initially hoped for, but as yet unrealized, widespread regeneration of the industrial sector and its build-up of international competitiveness can be achieved in a timely and sustainable way, only if also critical micro-level constraints are given due attention. In order to adequately meet this challenge of assuring an appropriate supply response, the reforming countries will need specialized international technical assistance to complement and catalyze their own efforts. This paper addresses the

broad progress that has been made to date in countries in transition in the CEE/FSU region and in particular focuses on the challenge of industrial restructuring and economic recovery, drawing lessons from a selected number of CEE countries such as the Czech Republic, Poland and Hungary. Contrast is made with the restructuring needs of the Russian Federation and the countries of the Commonwealth of Independent States (CIS) where progress has not been significant.

The paper is divided into two major parts. Part I provides and analysis and interpretation of the current stage of the transformation process in the region.

Although this paper concentrates on the unprecedented economic challenges facing the CEE/FSU region and the international community, it is important to point out that the economic challenges facing the region cannot be meaningfully appreciated without a clear understanding of the political, asocial, historical and other non-economic challenges the region is facing as well. This caveat that should be borne in mind in placing the subsequent discussion in a proper perspective.

Part II of the paper argues that too much was expected too soon of macroeconomic stabilization policies and that by concentrating on macroeconomic reforms, the countries in transition did not pay sufficient attention to the microeconomic reforms at the enterprise and institutional levels. In focusing in restructuring and associated privatization, special attention is given to the need for broad economic and corporate governance. In this context, emphasis is made on the need to revamp the banking and financial systems, address the issues of bad loans, improve the nature, extent and stability of the regulatory and legal framework. At the same time, stress is given to the important need to combat growing unemployment and its serious threat to the social and political fabric. In this regard, it is pointed out that there is an urgent need to not only create new jobs by spin-offs, SME development and concrete retraining schemes but also to stimulate demand by output growth based on export-led strategy, especially given the wish of many East European countries to join the EU. Against this background, comments will be made on the results of the recent PHARE ACE programme (1994). Finally, costly social services and social protection are still crucial issues that need to be addressed. The challenge for the economies in transition will be to design and implement sustainable policies, particularly at the enterprise level, that addresses the growing needs of the most disadvantaged groups in society.

(15)

Gusztáv Báger
Ministry of Finance

Budapest, November 1996

Real Sector Restructuring

1. 1995 proved to be a successful year for Hungary. After having launched a comprehensive stabilisation package in March 1996 we were able to create conditions for long-term economic growth. The fast macroeconomic turnover is not a surprise if we bear in mind that in the 90s a really deep **microeconomic adjustment** took place in Hungary.

2. The stringent **bankruptcy law** containing the institution of a mandatory self-declared bankruptcy which came into force on January 1, 1992 and was in effect until the middle of 1993, and the modern banking and accounting laws forced the micro sphere to implement substantial structural changes. This meant the liquidation of loss-making production, modernisation of corporate structures and the necessary mobilisation of reserves. True, the chronological coincidence with the market crisis caused the collapse of capacities which could perhaps have been saved, at least to some extent. As a result of this, a substantial part of the companies - 16 % - went into bankruptcy and was liquidated or closed.

3. **Privatisation,** as being the best way of restructuring, has been underway since 1990. Privatisation practice is built on a commercial basis. Therefore, the Hungarian practice features mandatory property valuation and sell-off, often by bidding and public offering, in which organisations as well as entrepreneurs can participate and become owners. Participation by foreign investors on a large scale is also typical.

4. At the beginning of privatisation, that is in 1990, 1857 companies were in state hands in Hungary. By January 1996, 1074 companies - 58% of the 1857 - had been privatised, that is had been transferred into **majority private ownership.** There are still 356 companies - 19% of the initial number - in majority state ownership, out of which 89 are selected to be kept **for the long run** in majority state hand.

5. Calculating the change in ownership by **equity value** of the company sector we find the following. The **book value** of state firms was HUF 1631 bn in 1990. The revaluation during the corporatization increased the value of state assets to HUF 2600 bn. The statistics in January 1996, register an asset value of HUF 1165 bn, that is 45% of the total, in state hand. The rest of the assets was partly **privatised** (40%), partly liquidated (10%), partly transferred by law to new owners (5%), like to the social security funds, or to the local communities.

6. A number of large privatisation deals were completed in November-December 1995. In the largest individual deal, Magyarcom (the 50/50 joint venture between Ameritech and Deutsche Telekom) acquired 37 per cent of the shares

of Matav (the main Hungarian telecommunications company) for US$ 852 million. The deal raised Magyarcom's total ownership share in Matav to 67 per cent. In addition, the government (and the municipality of Budapest) sold majority stakes in six regional gas distributors for a total of US$ 556 million, large minority stakes in six regional electricity distributors for a total US$ 1,114 million, and large minority stakes in two power generating companies for US$ 215 million.

7. These transactions took place under the Privatisation Law that was passed by parliament on 9 May 1995. This law merged the two main privatisation agencies (the State Property Agency and the State Holding Company) into the State Privatisation and Asset Management Company. According to intentions stated in the law, 46 companies will remain fully state-owned, including postal services and the railways. The state will maintain majority stakes in MVM which holds the electrical grid and the country's only nuclear power plant. The state will also maintain 25 per cent ownership in some of the largest banks.

8. **Corporate structure** have been transformed radically. This applies equally to structure by ownership, size and activity. The **ratio of the private sector** rose from 24 percent in 1990 to 68 percent by 1995 with respect to the full GDP, while from 29 percent to 80 percent in the GDP of the business sector, according to GKI Economic Research Co. estimates. The former centralisation of production was either substantially alleviated or abolished in the majority of the subsectors. There are more than 800,000 individual entrepreneurs, 120-140,000 non-incorporated businesses and some 70,000 incorporated entities, which are now registered in the country. The vast majority of these firms, however, are small, weak, undercapitalised with extreme difficulties in having access to loans. The hidden (back or grey) economy is vigorous and is expanding. Because of this, it is the second half of "creative destruction" which has been more easily asserted within the restructuring process.

9. **Unit labour costs** in Hungary rose by 224 percent at current prices and declined by 19 percent at constant prices in the period between 1990-1995. (The nominal unit labour cost is the quotient of the wage index and of the volume change of GDP; for technical reasons the change in the wages does not include the change in taxes and levies of wages.) This means that the wage rise did not follow the rise in consumer prices, that is to say, productivity improved considerably in the Hungarian economy. The real unit labour cost in Hungary calculated with the GDP deflator declined by 17 percent over six years in Hungary, but by only 5 percent in the average of the EU countries. That is to say, the combined effect of wage and productivity changes was more favourable in the Hungarian economy than in the average of the EU countries. It should, however, be emphasised, that the difference was predominantly a result of the 1995 processes, because it was in this year that real wages declined substantially with the simultaneous rise in GDP and improvement in productivity.

10. As a result of wide-scale privatisation, liberalisation and institutional and legal changes, the **competitiveness** of Hungarian firms improved dramatically. Hungary is the country in the region where the privatisation brought in sizeable fresh capital, new management, new technology and new market access. It is important to acknowledge that this type of privatisation, though on the surface seemed to be slower than the mass privatisation, proved to be very efficient.

11. As a result of this, and the really painful microeconomic therapy in 1992 (bankruptcy, banking and accounting acts), **productivity** grew by 50% in three years. Financial discipline and export competitiveness improved considerably, the result of which is a double digit export growth for 1994-95 and it is expected to continue in the current year, too. In 1995, with some delay, we launched a **new macroeconomic policy** aiming to re-establish the macroeceonomic stability and to secure export-led long-term growth. The policy proved to be successful in that the economy kept growing by 1.5%, whereas the whole growth was export- and private sector-led.

Financial Sector Restructuring

12. Since the beginning of comprehensive economic transformation, Hungary has progressed considerably in establishing the **legal and institutional framework** of the market economy. The market reforms implemented in the past five years led to the large-scale transformation of the ownership structures of the economy; a complete reorientation in external economic relations; the emergence of a liberal trade regime coupled with a gradually liberalised foreign exchange system (resulting, from 1996, in full convertibility in current account transactions and substantial, though not complete, liberalisation of capital account transactions); removal of administrative control on price and wage formation; and overhaul of public finances and several elements of the welfare system.

13. In the past couple of years, the **National Bank of Hungary** (NBH) continued to revise and develop its monetary instruments in order to ensure the efficient conduct of monetary policy, to contribute to the development of money and capital markets and to put a stop to the increasing costs of financial intermediation. Since the beginning of the 1990s, the NBH has relied exclusively on indirect instruments. Nowadays, the major issue the NBH has to face with is the problem of sterilisation. As the continuos inflow of foreign exchange funds has led to a rapid build-up of excess liquidity on the HUF market, the NBH has to decide to what extent it should sterilise the liquidity, and to what extent it should allow for a decline in interest rates. The instruments available for sterilisation are currently restricted, as commercial banks hardly make use of the NBH's refinancing facilities (repo and swap). Thus the only instruments available for liquidity restriction are reverse repos

and open market transactions. The conduct of the latter, however, is at present hindered by the fact that the NBH does not have an adequate portfolio of government securities (in terms of both quantity and quality, i.e., those with appropriate interest rate conditions and maturity) to execute large scale outright sale of government papers. The improving co-ordination between the authorities primarily responsible for public debt management and the NBH has enabled the central bank to establish the appropriate portfolio and to operate only in those (shorter term) segments of the money market where the financing requirements of the government are not present.

14. In Hungary, the **two-tier banking system** was established as early as 1987. Nevertheless, it was in 1991 when the development of the banking system arrived at a turning point. Several new pieces of legislation were passed which created a new legal framework for the operation of financial institutions. The substantial fall in company profits and the enforcement of these new regulations - meeting the standards of developed market economies - led to the appearance of the transition-induced losses of the enterprise sector in the commercial banks' portfolio. The rapid accumulation of non-performing loans in the balance sheet of the banking sector prompted a series of government actions (the so-called **consolidation process**) between 1992 and 1994, to resolve the portfolio problem. Through the use of various measures, most of the bad loans were removed from the balance sheet, while - as a result of the re-capitalisation of banks - the remaining ones are now fully provisioned. Therefore, capital adequacy of the Hungarian banking system exceeds international standards, and the composition of the portfolio by risk categories has been on an improving trend since early 1994. As regards privatisation, a majority stake in Budapest Bank was sold in December to EBRD and GE Capital for US$ 87 million. During the course of 1995 and the first half of 1996, the government sold 23 per cent of the shares in the largest bank, the National Savings Bank (OTP), to foreign investors for about US$ 53 million (with no single investor obtaining more than a 2.5 per cent stake). An additional 5 per cent was sold to OTP staff, and 24 per cent to other domestic investors.

15. While the consolidation process and the privatisation were, undoubtedly, the most spectacular developments in the Hungarian banking sector, in the past couple of years considerable progress has also been made with respect to both institutional and technological development. **New institutions** supporting efficient banking in developed market economies were also put in place in Hungary. They include the guarantee funds, the deposit insurance fund, the Hungarian Eximbank and the Export Credit Insurance Co., the new electronic giro system, the debtor - and loan registration system and the fund for protection of savings co-operatives. New types of financial institutions, such as credit institutions and firms specialised in dealing with bad loans also appeared, and all of the major international auditing firms set up their subsidiaries in Hungary. Simultaneously, **information and computer technology** applied by the banks underwent a thorough modernisation, and internal regulations, credit rating schemes, accounting techniques and

management practices improved considerably. Significant progress has also been made in the training of bankers and specialists. Though these results are not as spectacular as the implementation of the consolidation exercise, their contribution to the improving performance of the banking sector has been equally important.

16. The Hungarian securities markets produced a continuos but not rapid growth without major jumps and setbacks in 1994-1995. The liquidity of the markets and the number of transactions have increased. As the privatisation in Hungary has been overwhelmingly carried out via asset sales to strategic investors (as against give-away schemes applied in some other countries in transition), the number and traded volume of company shares in the concentrated market have so far been relatively low. Instead, government papers have dominated the market in the recent past. In this respect, the setting up of the Public Debt Management Agency has resulted in placements of government papers with more stable and standardised conditions. In addition, a system of primary dealers was established which has resulted in a more liquid and transparent market of these securities. As from 1st January, 1997 commercial banks will also be allowed to be active on the primary market of government securities.

17. An important feature of the Hungarian securities markets is that trade outside the stock exchange significantly exceeds turnover on the stock exchange. Though a series of technological and logistic improvement have been recently introduced in the trade on the stock exchange - facilitating faster clearing and settlement - this characteristic of the securities market development seems to persist for a while. Legislative changes are also required to ensure the safe development of the capital market. The amendment of the securities law intends to improve the supervision of specialised intermediaries of the capital market, increase their initial capital requirement and introduce prudential regulation in conformity with that of banking institutions. This amendment enters into force on 1st January, 1997. These measures, together with the macro-economic effects of the stabilisation policy, will promote faster development of the Hungarian capital market.

Public Finance Restructuring

18. Reform of the public sector and of the fiscal system has been on the agenda of the different governments since 1987. Although several concepts and programmes have been discussed during this time, none of them was realised consequently or could make a breakthrough in any respect. The changing role and responsibility of the state in the transformed political and economic system on the one hand, and the inefficiency of the functioning of the public sector on the other, require the urgent reform of the public sector.

19. The Government took a decision to begin immediately with the elaboration of the restructuring of the public sector in December 1994. The introduction

of the stabilisation programme in March 1995 was the first step. Although the measures of the stabilisation package were one-off decisions and were intended to manage the given financial situation, they have established the preconditions for starting with the structural reform in the public sector and pension system. The reform of the general government (the reform of the health and pension system, of the financing of education and culture, of the taxation and of the financing of local governments etc.) however, requires a series of long-term decisions which are to be introduced gradually, on the basis of a general public consensus.

20. As a result of the reform process, in the medium term the Hungarian government plans to reduce wealth distribution by the public sector by bringing public expenditure down from 55% of GDP in 1995 to 51% in 1996 and below 45% within the next three or four years.

21. The reform of public finances started on January 1, 1996 with the setting up of the **Treasury**. The operation of the Treasury enables effective management of the revenues and expenditures of the general government, an increase in transparency of the flow of the funds in the public sector. The main Task of the Treasury is to carry out financial operations on behalf of the general government and to manage administration and registering connected with this operation, collecting and supplying information and controlling it. The responsibility of the Treasury includes the central budget, central budgetary institutions and extra-budgetary funds.

22. The plans envisage a three-tier **pension system** for Hungary. These tiers are: the current obligatory basic pension, this will be supplemented by a mandatory capital rising pension fund and a voluntary mutual pension, this will be supplemented by a mandatory capital rising pension fund and a voluntary mutual pension insurance fund. A pension contribution would continue to be paid by the employer and the employee in order to assure the basic pension. The mandatory pension supplement would operate on a pension insurance basis, with the level of contribution paid by the employee calculated according to total income. Membership of voluntary or mutual pension schemes, however, would not be obligatory. Pension reform would take at least 30 years, so it would be the longest transitional period within the general budget reform.

23. In the **health insurance system**, the financing about 10 thousand hospital beds will be put on a market-like system and the redundancy of about 5-6 thousand employees is planned for 1996 in the framework of the public sector reform. The contribution of households to the financing of health services is also to be increased. A free or heavily subsidised health service will be available in some cases only for those who are the mostly in need. The number of days of sick payment paid by the employers will rise from 10 to 15 days and also the contribution of the amount paid to the patient will be increased.