HISTORICAL PERSPECTIVES OF GROWTH, INTEGRATION AND POLICIES FOR CATCHING-UP IN TRANSITION COUNTRIES [1]

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Abstract:

This paper is aimed at addressing general characteristics of growth and development that concern all transition countries before their entry into the EU when their convergence to the EU average GDP per capita is expected. By looking at the GDP statistics of major industrial countries for the last 90 years, a question is posed why some countries get on a path of a fast growth while some others go from one secular crisis to another. In assessing the policies supporting growth it is concluded that conditions on the company and industry levels are more important than national macroeconomic policies.

Keywords: Economic history, development, growth, European Union, enlargement
JEL Classification: E31, N10, O11, P52

1. Introduction

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

If we look at the Central and the Eastern Europe, which was for a large part of the 20th century dominated by totalitarian regimes and the economics of central planning, we can find out that this part of Europe revealed clear core-periphery relationships for even much longer period. In the last 250 years, in the West, the more progressive countries' growth profited from the Atlantic trade system. This system was gradually spreading to the East when at the beginning of 20th century it suddenly got stuck at the historical (medieval) East-West divide. After 1945 that "growth border" was slightly changed by following the border of European market economies with communist countries.

Thus some of the formerly advanced countries (Czechia and Eastern Germany) plunged into the "eastern" block of slow growth and the peripheral nature of many other Central European economies remained conserved for much longer until their authoritarian and semi-autarchic regimes collapsed during 1989-91. On the other hand we could observe another important phenomenon when Austria switched to a "western" alliance and became one of the fastest growing countries in the world. We should be also aware that the core-periphery trading arrangement is a theoretical concept that was developed mainly due to the pioneering works of Krugman (1991) and Fujita, Krugman and Venables (1999). It has certain

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implications for the way, in which modern patterns of specialization in trade and production are formed. It also points to some unsolved issues of these economies.

2. Growth as a phenomenon of institutional gaps

According to Ivan Bérend (2001), the Central and Eastern Europe was burdened with a mysterious social "spell" over their growth rates, resulting in that their the GDP per capita in the last 200 years was never more than 55% of the average values achieved in the industrially developed West European countries. Now we are in the year 2003, having behind us more than 10 years of intensive transformation on a path of transition to market economies, but the GDP per capita in the post-communist countries did not break through the 55% barrier even in the most successful cases, with the single exception of Slovenia. At the same time, there are many countries, especially those ones coming from the former Soviet Union, whose GDP per capita is in the range of 25 to 30% of the EU average even at the purchasing power parity level, and whose net growth in the past 12 years was actually sharply negative.

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

- Why didn't the accession countries experience a fast growth along a convergence path leading to the catching-up with such peripheral countries like Portugal or Spain?
- Could we accept a hypothesis that the potential steady state output in the transition countries was and will remain lower than in Portugal or Spain?
- If we do not accept the former, what kind of barriers have there been in the accession countries that effectively precluded them from narrowing the gap between them and the EU average?

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

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

We can even see from the history that some of the transition countries came from an environment where there were introduced high institutional standards in all five of these areas. Such is especially the case of countries whose economic roots belonged to the former Austro-Hungarian Empire – Czechia, Slovakia, Hungary, Slovenia, Croatia and Bosnia and parts of Poland, Romania and Ukraine. In addition, we can add three Baltic countries to this list. Most of them were experiencing ups and downs in the inherited competitive advantage after 1918, but definitely the biggest shock came after 1945. In many other transition countries, the traditions of the legal system and the property rights never reached standards required for a functioning free-market economy and democracy. It is generally agreed that one of the major contributions that the accession to the EU brings with itself is the adoption of *acquis communautaire,* which will finally narrow the legal and property rights gap that posed large transaction costs to the development of transition economies.

Another big problem is associated with education. In the majority of above-mentioned countries the traditions of literacy and schooling were high and they were also supported widely by the communist system. Actually it is the degree of general education that sets the poor transition countries aside from the more advanced developing countries in Latin America or Asia that often have even higher GDP per capita but whose educational endowments are much lower. Although the formal education could have been there very intensive in the transition countries, its practical economic impact on the creation of human capital was nevertheless low. Thus the economic paradox of the transition countries is such that these are the

countries with relatively highly educated labour but with low contents of human capital [2]. Due to their incessant fiscal and political problems, there are not many signs in the majority of transition countries that there could be expected a break-through in the education standards that would lead to a narrowing of the comparative disadvantage in the human capital endowments.

Public administration is one of the greatest burdens to growth in all transition economies. The legacy of their past centrally planned command economies is difficult to overcome. Bureaucracy and corruption are widespread, what is supported by retaining high tax quota and high extra-budgetary finance, such the expenditures of national bank, national property fund agencies, consolidation banks, pension funds, state health insurance institutions and state debts hidden in defaulting commercial banks. Thus the public plus semi-public expenditures fluctuate still in many transition countries close to 50% of the GDP. The risks in allocating 50% of GDP by mere administrative processes often outside of any market surveillance are very high, especially if the public administrators are subject to moral hazard. The expectations of too many private economic agents are then directed to rent seeking in a network of state bureaucracy, instead of concentrating on market signals, restructuring and innovation.

It is a general consensus that in modern economies there cannot be fast growth without progress in the area of human capital and its association with the R&D and the technological upgrading. The technological gap is an amalgamated outcome of several factors: gaps in education, low human capital endowment, lack of financial resources for investments, biased investment allocation and a slow restructuring of existing resources. The status of all these factors is intensively dependent on institutional conditions inherited from the past, showing the so-called "path dependency". The most common way of quantifying the technology gap is by means of the technical efficiency estimated by production functions and interpreted as "total factor productivity" [3].

3. History and the path dependency

In Table 1 there are historical values of the growth rates and estimations how the growth was attributed to the mere multiplication of factors and what was due to the changes in total factor productivity. As we can see, the growth rates for 1971-97 were very low in all of the accession countries, except for Slovenia, and there was a steady decline in growth throughout the three analysed periods in the majority of them. With the exception of Hungary and Slovenia, the problems in the growth during 1991-97 were not only caused by low levels of factor growth but mainly by the widening technological gap.

We could have several provisos to this table because it relies on official statistics that were biased both during the period of central planning and during the early transition period. Nevertheless, it is the best comparative statistics on total factor productivity for transition countries available at the moment. Being thus a sort of the second best solution, we should only point to its shortcomings. The problems rest with all its input data: labour, physical capital and output. The former was not adjusted for the hours worked and the latter for the capacity utilization and its market value. Also the real output in domestic currencies has several definitions and its methodologically coherent measurement in countries with weak markets and large shadow economy is always problematic. Thus the slump in the output could be assigned to the negative TFP "residual" because a large part of the completely useless inherited capital (which became a sunk cost) remained in the statistics. Since Slovenia suffered less of that problem, its estimated TFP looks more favourable. Similarly the past excellent performance of Romania can be challenged –

[2] There are even conclusions of some authors that the education standard in five CEFTA countries is higher than in Greece or Portugal and comparable to the standards of Ireland that has GDP per capita 2-3 times higher. (See the papers of Barry and Spagat in Benacek, Gacs (2002)).

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

nevertheless, any *ex-post* adjustments are subjective and it should be then wiser to leave the official statistics untouched.

The historical legacy of growth can be even extended deeper into the past. In Table 2 we can see the economic evolution of four candidate countries, as based on historical statistics for 1913, 1929, 1938, 1950, 1996 and 1999. Together with Slovenia, Czechia, Hungary, Slovakia and Poland are judged as the leading accession countries. The data confirm that slow growth and decline in the relative position of the GDP per capita have been troubling the economies of Central and East European countries for a long time. However, what is of crucial importance, is that some economies were able to climb in the ranking [4] very fast (such as Japan, Norway, Austria or Spain) while some experienced a series of declines (such as Britain, Sweden, Canada or Czechia).

A special attention should be devoted to Ireland since its economic breakthrough is generally taken as a showcase of growth. The figures for Ireland in Table 2 actually build a mistaken impression that the Irish economy in 1999 should be counted as one of the failures. The problem is in the absolute values of GDP. While in 1950 the gap between the leading countries in the top of table and Ireland was nearly 100%, in 1999 it was below 63% while eight additional countries moved into the space just above Ireland where the absolute differences between them were very small. At the same time Ireland made the largest progress in the last 12 years only, thus overcoming its long unsuccessful period after 1950. The convergence of Ireland and some other middle-income countries is what matters in our case, and not their momentary relative ranking.

Table 3 concentrates more on the average annual growth rates in the period 1950-1996. The GDP estimations are in constant US dollars of 1980. None of the studied four accession countries has experienced high growth, which only partially can be attributed to the slump during the early transition period. These countries, together with Argentina, had the slowest growth among the industrially advanced countries of the world even if it is measured at the purchasing power parity. What is even more disturbing is their extremely poor performance if the GDP is estimated at the commercial exchange rates. Here we can see a negative Balassa-Samuelson effect of slow growth: as some country's GDP is growing at a rate lower than average and as the competitiveness of its exports is losing ground, its real exchange rate is weakening, which widens the existing economic gap in real terms by adding to it a gap in nominal terms.

Here we can see two of the major challenges that the EU accession countries should overcome: the real and the nominal convergence. First, they must get their economy on a track of a fast real growth measured at the purchasing power parity. Second they should abandon the reliance of their growth on the real exchange rate depreciation and actually revert it to a real exchange rate appreciation. Though the latter is more elusive than a "real" factor of growth and its contributions to "growth" are less intensive, the process of international catching-up is hardly manageable without this effect, as is shown in the last column of Table 3. There we indicate the net contribution of nominal growth to total real growth at the purchasing power parity. It is clear that the countries, which were most successful in the catching-up, combined both factors for their advantage. Here the attention should be due not only to Japan, Switzerland or Norway but mainly to Austria that comes from the same historical and geographical region as our four transition countries. It is clear that history is not siding with advanced countries only. There is nothing mysterious in the growth and the spell of the legacy of slow growth in Central and Eastern Europe can be broken. We can hardly expect a more appropriate time for that than now.

4. Real and nominal convergence

There are two opposing exchange rate policies, which may be associated with growth. The first one is to have an undervalued exchange rate and use the Marshall-Lerner effect for expanding exports and fending-off imports. Romania, Bulgaria and partially Slovakia and Czechia are countries where this "soft"

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

exchange rate policy prevailed in the past. On the other extreme, there is a policy of a "hard" (overvalued) currency that was in the past characteristic for Croatia and Slovenia, and partially for Poland.

Alternative theories of real exchange rates based on various price indices, labour costs, terms of trade or relative prices between traded and non-traded commodities attempt to assess the rigor of these policies [5]. Nevertheless, due to highly complicated links between the real and the monetary matters and between the micro- and macro-economy, it is very difficult to say with certainty whether also in the short-run the policies of real exchange rate appreciation are so inappropriate and so damaging to the growth. Nevertheless, as is clear from our tables, a long-term economic prosperity cannot be achieved by a mere appreciated exchange rate alone without its primary backing based on a sound real growth. Thus it is evident that a high growth and the catching-up should be associated with a long-run real exchange rate appreciation that is its follow-up only. Balassa-Samuelson effect is a theoretical approach to the measurement of such "induced" nominal growth.

Table 4 draws your attention again to this issue. There the 10 accession countries are compared with the average GDP per capita in the EU. We can see that in the period 1990-1999 there were only two transition countries, Poland and Slovenia, in which the gap of trailing behind the EU did not widen. The lagging behind in growth is especially visible if we compare the accession countries with the so-called cohesion countries, among which Greece, Portugal and Ireland experienced a faster growth than Poland – the fastest growing accession country. Index of ERDI (exchange rate deviation index) quantifies the relative gap between the GDP on PPP and commercial exchange rate levels. It is evident that even the most advanced accession countries (Slovenia and Czechia) have followed a softer exchange rate regime than the weakest among the EU incumbents and that there are reserves for a faster nominal growth on this side of the catching-up.

Nevertheless, the catching-up in real terms is a much more complicated matter without which an equal partnership in the EU is unthinkable. Relative poverty and problems with growth in the new accession countries can lead to an inability in financing standard public goods (such as education, research, public safety and health), to social frictions, flight of labour and to secular stagnation of labour locked in a newly created Mezzogiorno, which would depend ever more intensively on shrinking structural funds (see Table 5). The target of the accession countries should be therefore to have a long-term real growth well above the EU average rate of 2.5%. Thus a rate of growth permanently above 3 % rate (at constant domestic prices), accompanied with a real appreciation in the magnitude of 1.5-2.5% in the medium-term and around 1% in the long-term would give the accession countries high credibility among international investors, what would further boost their growth. With the growth rates of GDP in Euro around 5% in the next 10 years, the catching-up of accession countries with Greece and Portugal also in the absolute values of GDP per capita can become a reality sooner than would be expected from the extrapolation of statistics for these countries in the last couple of years.

In analysing the transition and concentrating on the issues of growth we should deal with the following six basic factors:

A/ Output fall cannot be treated as a negative factor per se if it is soon followed by a growth revival. The Schumpeterian creative destruction is a natural way of development and some industries in the accession countries will have still to be subjected to the pressure of comparative disadvantages while some other industries are expanding or some new enterprises in the same industry are borne. All accession countries in Central and Eastern Europe are highly open to trade that will even expand after they become full EU members and after they join the European Monetary Union. The optimal allocation of resources in

[5] Here we should mention the studies by Halpern and Wyplosz (1998 and 2001) which offer the widest discussion of these issues. The paper by Filer and Hanousek (2000) also points indirectly to this issue by saying that the real growth rate depends largely on the way how the inflation is measured. In transition countries the inflation statistics is more liable to methodological errors than in stabilized market economies where the international nominal convergence in prices is not so wide.

a transition to free trade within customs union of the EU is a process that lasts for decades and the fundamental re-allocative changes that started in 1990 cannot be expected to be complete before 2012.

B/ Capital shrinkage is also a natural, though a temporary process. It is accompanying the output decline because of the past misallocation of capital, its inefficiency and the changes in the structure of the aggregate demand. Unfortunately a significant part of the physical capital in transition countries was discarded prematurely because its gradual recoupment was not supported by more flexible (highly liberal) depreciation policy and by bank credits for technological upgrading or for export expansion. High depreciation costs in enterprises, that had only mild losses, even further aggravated their situation, leading to their premature bankruptcy. Some less successful schemes of privatisation also contributed to the capital demise since they concentrated the motives of its owners (or rather fictitious "owners" behind their intransparent corporate governance) on asset stripping instead of on wealth creation. Artificially high costs for the acquisition of "privatised" assets (inflated often by speculative purchases by some agents), accompanied by high interest rates on easily acquired loans led many firms to indebtedness, moral hazard and a final liquidation. Capital shrinkage has therefore its optimal pace, which can be revealed only if the given economy has stabilized its markets and if the government is not interfering too much with their allocative processes. In addition, a part of the investments carried out "optimally" during the initial stages of transition will have to be re-allocated again because the market signals at that period favoured investments into labour-intensive technologies due to extremely low labour price/capital price ratio. Factor substitution is going to be largely reversed as this ratio is sharply increasing at the later stages of transition. Also the real exchange rate appreciation will impose on many past investment decisions a very strict rule of profitability.

C/ Labour force partially shrunk and partially moved to other firms or to self-employment, causing huge structural unemployment problems and rising inequity among the wage earners. However, the improving unemployment figures in nearly all transition countries shows that these problems were temporary. Nevertheless, is very likely that unemployment rates in transition countries will remain to be over the EU average (7.4% in 2001), hitting mainly the people with lower education and with lower endowments with human capital. That also implies that wages among the blue-collar workers will lag for long behind such countries as Portugal or Ireland.

D/ International trade led to a wider economic openness in all transition countries though at the very beginning of transformation it was the trade destruction that initiated the output decline. Trade was a leading activity where the structural changes were most pronounced. An intensive trade diversion (usually from the Eastern to the Western markets) was very soon followed by a trade creation that often more than replaced the fall-outs in the domestic aggregate demand. The externalities of both exports and imports on domestic competition, efficiency and quality upgrading were generally highly positive. As an illustration, Figure 1 shows how the Czech exports diverted from Russia, Ukraine and partially from Slovakia to some closer EU countries. At the same time the volume of all Czech exports in constant dollars more than doubled during 1989-99 and the exports to the EU increased 5.5-fold. Trade creation is therefore one of the major contributors to growth and restructuring in all transition countries.

E/ Changes in the industrial structure (including the trade-offs between the manufacturing and services) follow from the four previous points. In some of the countries (for example in Hungary) the structural changes were so intensive in the last 10 years that we could hardly find a parallel in their whole economic history (see Tomšík et al. (2002a and 2002b)). Though at the beginning of transition there were fears that restructuring would end up in promoting the development of industries requiring simple labour or industries depleting the local natural resources, the more recent studies (e.g. Barba Navaretti, Haaland and Venables (2002)) point out that the developing industries are often associated with FDI, human capital, R&D, high technologies and the economies of scale. These industries have a high potential of growth and high wages.

F/ Economic institutions performed unsatisfactorily throughout all transition countries. While in some countries (e.g. Slovenia) the damages caused here were of minor significance, in some other countries their performance was on a verge of collapse. The barriers to growth caused by ill-performing legislation, property rights enforcement and education sector were already mentioned at the beginning of

this study. The other areas adversely hit by institutional failures were in the performance of privatisation (Benáček (2002)), banking financial intermediation, reallocation of capital, R&D, market performance and public administration. Rising transaction costs to entrepreneurial activities, and false price signals given by markets fettered by bureaucracy, corruption, sticky supply-side and the general lack of clearing are the notorious causes of secular stagnation where the motives for rent-seeking dominate over the productive activities.

5. Policies for a sustained growth

At this moment we can return back to our Table 1 and comment more on policies sustaining growth. Though the availability of two basic production factors – labour and capital – can be influenced by mere factor growth (e.g. by policies promoting higher natality or higher domestic savings and higher government expenditures) much more important are the policies which increase their efficiency. Here the crucial policies are those supporting the discipline of capital and those supporting the quality of labour. For example, it is the encouragement of the education that builds the human capital associated with labour. The quality of secondary education is especially supposed to be the key element here. On the other side the disciplining of the banking intermediation and the corporate governance are associated with the gains in the efficiency of capital.

Encouraging the build-up of institutions that decrease the transaction costs in production, marketing and development of new businesses on one hand, and subjecting the existing firms to market discipline and competition on the other hand should also run in parallel, accompanied by the discouragement of the institutions that actually do the opposite. These policies are much more complicated because they require highly trained public management administration for their enforcement. Only a small part of it can be directly acquired by mechanically adopting the EU common policies, such as the competition policy, trade policy and industrial policy.

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

Though it is undisputed that stable macroeconomic policies are a necessary condition for growth, it should be added that this condition is not sufficient. A large part of policies are run outside of the ministry of finance, central government and the national bank. Incentive policies for labour and managers are to a large extent created at the level of enterprises. The legal system is an institution that evolves during generations and its enforcement is a part of the national culture. The competitiveness of domestic enterprises is thus an outcome that depends more on the conditions on the company and industry levels. They are more important than national macroeconomic policies, what can be seen by looking at the review of policies that can be partially derived from "Rules of Competitiveness", as propagated by the World Competitiveness Yearbook 2002 [6] and by Zinnes, Eilat and Sachs (2001) :

A/ Create a stable and predictable LEGISLATIVE ENVIRONMENT guaranteeing:

- enforcement of property rights;
- low transaction costs in production and trade.

B/ Focus on quality, speed and transparency in GOVERNMENT AND PUBLIC ADMINISTRATION:

- provision of public goods without bureaucracy and rent seeking;
- reasonable taxation reflecting the low GDP per capita in the country;

[6] See http://www01.imd.ch/wcy/ for this title.

- policies encouraging decision-making through markets (and not through public hierarchies).

C/ Invest generously (but with prudent governance control) in EDUCATION, especially at the secondary level, and in the life-long training of the labour force.

D/ Develop a sound ECONOMIC STRUCTURE for:

- the location of factors in traded commodities according to comparative advantages;
- the development of modern service sector and information technologies;
- the capital location, combining the traditional and the new technologies and infrastructure.

E/ Create environment supporting the SPILLOVERS from multinational enterprises, imports and exports to viable domestic enterprises: The development and support of domestic small and medium-sized enterprises employing more than a half of the labour is of crucial importance.

F/ Encourage PRIVATE SAVINGS AND INVESTMENTS via:

- effective financial intermediation;
- pro-investment environment with low transaction costs;
- stabilised business environment attractive for foreign direct investment.

G/ Create a COMPETITIVE ENVIRONMENT by:

- subjecting the private sector to market discipline;
- promote wealth creation incentives that would dominate over the motives for wealth re-distribution.

H/ Promote the SOCIAL COHESION AND HUMAN DEVELOPMENT:

- guard cautiously the nature of your political system and challenge its tendencies to rent-seeking, corruption and collusion between parties, businesses and public administration by the checks and balances of the civil society;
- dismantle the barriers for the development of the de novo private sector (small and medium–sized enterprises);
- strengthen the middle class;
- control income disparity and social inequity;
- cultivate the value systems of the society (quality of life; healthcare; environment; principles of solidarity; national culture; NGO; democracy).

The main problem in catching up of transition countries does not rest in the lack of potential resources or in the lack of ideas of how the development can be orchestrated. The crux of the matter rests in an inability of these societies to separate their future from the fetters of their past legacies and to get the society united behind a very clear new strategic vision for collective action. This looks like a failure in politics, at both the central and the local levels. Unfortunately it happened too often in the young post-communist democracies that the attempts for new democratic politics were not able to pass beyond their myopic vested interests, entrenched hierarchies and old social networks. The development in transition countries is generally seen locally as a trade-off between social structures where the alleged losers defend themselves by effectively blocking the moves to a progress. Such opportunistic transition policies are therefore <u>not</u> conceived as a cooperative repeated game open to social dialog where all participants can gain at the end. That is definitely an incorrect strategy that should be avoided.

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Table 1: Annual growth factors in 11 accession countries during 1971-97

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

Source: Campos N., Coricelli F. (2002)

Table 2: International Comparison of GDP Per Capita in US $
Years 1913, 1929 and 1950 are in constant US $ at prices of 1980; 1938, 1996 and 1999 are in current prices)

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

Sources for Table 2: see the next page

Sources for Table 2:

Years 1913 and 1929 : Maddison (1989),
year 1938 : UN (1949), Kaser, Radice (1985), p. 532, Butschek (1995) and Solimano (1993), p.14,
year 1950 : Good (1996), Butschek (1995) and Maddison (1989)
year 1996 : The World Bank (1998)
year 1999: The World Bank (2001)

CER = values in current US $ at Commercial Exchange Rates
PPP = values in international US $ at Purchasing Power Parity rate
> = some sources indicate higher value
* = GDP per capita of Poland, Czechia, Slovakia and Hungary (with the population used as weights) as a percentage of GDP per capita for OECD countries

Table 3: Growth of GDP per Capita in 1950-1996 - An International Comparison
All data for GDP are in constant prices, i.e. in constant US $ at prices of 1980)
(CER = values at commercial exchange rate; PPP = values at purchasing power parity rate)

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

Sources: Year 1950: Good (1996), Butschek (1995) and Maddison (1989); Year 1996: World Bank (1998)
Deflator index of US Dollar for 1980-1996 (1.816), for adjusting the current prices of 1996 to constant

prices of 1980, is taken from US DC (1998), Table C1.

Table 4: GDP per capita in the candidate countries and in some EU members, and their exchange rate deviation index (ERDI)

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

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

Table 5: Annual breakdown of pre-accession funding for 2000-2006
(in EUR million at 1999 prices)

Country	PHARE	SAPARD	ISPA Maximum	Total Maximum
Bulgaria	100	52.1	124.8	276.9
Czechia	79	22.1	83.2	184.3
Estonia	24	12.1	36.4	72.5
Hungary	96	38.1	104.0	238.1
Latvia	30	21.8	57.2	109.0
Lithuania	42	29.8	62.4	134.2
Poland	398	168.7	384.8	951.5
Romania	242	150.6	270.4	663.0
Slovakia	49	18.3	57.2	124.5
Slovenia	25	6.3	20.8	52.1
Total	**1085**	**520.0**	**1040.0**	**2645.0**

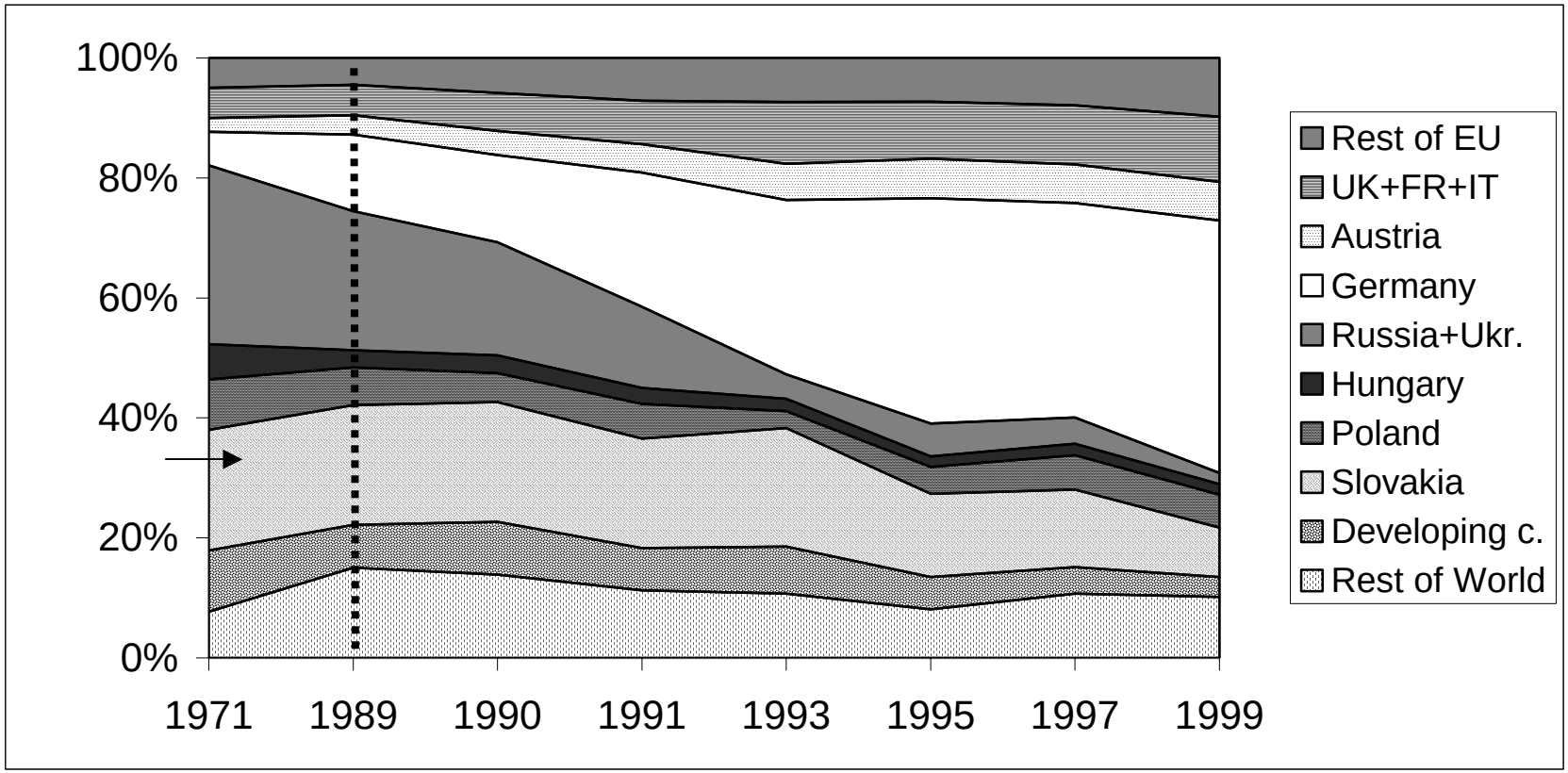
Source: EC (2002)

Table 5
Appropriations of accession countries from the European Commission
(in mn EUR, prices of 1999) cummulated for 2004-2006

EC payments	PL	H	CZ	SK	SLO	EST	LAT	LIT	Total
Agriculture	4636	1483	1120	628	401	254	401	725	9648
Structural policy	11369	2847	2328	1560	405	618	1036	1366	21529
Internal policy	1817	559	419	329	222	127	175	539	4187
Cash	1443	211	746	86	233	22	26	48	2815
TOTAL	**19265**	**5100**	**4613**	**2603**	**1261**	**1021**	**1638**	**2678**	**38179**

Source: Statistics of the European Commission on Enlargement, December, 2003

Figure 1: Geography of Czech exports in the period 1971-1999



Source: Czech Statistical Yearbooks, Prague, CSO, 1973-2001