



# INSTITUTE FOR WORLD ECONOMICS

HUNGARIAN ACADEMY OF SCIENCES

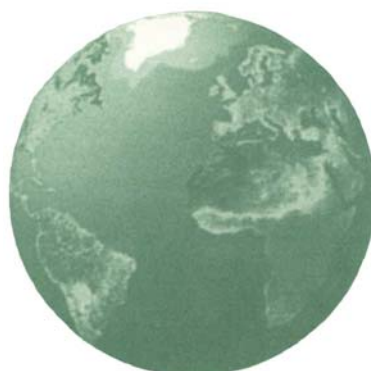
## Working Papers

No. 137

July 2003

Éva Ehrlich and Tamás Szígyetvári

TRANSFORMATION AND HUNGARIAN REGIONAL  
DEVELOPMENT: FACTS, TRENDS, DILEMMAS  
AND OBJECTIVES



1014 Budapest, Orszagház u. 30.  
Tel.: (36-1) 224-6760 • Fax: (36-1) 224-6761 • E-mail: [vki@vki.hu](mailto:vki@vki.hu)

## SUMMARY

---

Regions are an old concept in geography but new in common parlance in Hungary. Like districts, they are contiguous areas of land, but the basis of them is often not natural or historical, but provided by the administration of state. The official, legal division of Hungary into regions took place in the 1990s. The expression became widely known in Hungary because intra-state regions play a very strong role in the European Union (EU), where mention is often made of a 'Europe of regions' and efforts made to even the regional economic inequalities, including sizeable financial ones. In Hungary there have been debates about the concept and employment of regions, due to poor definition and uncertainty about the existence, borders and intra-state role of regions.

The change of system brought transformations and reorganizations that produced a number of new regional processes and phenomena.

The state-socialist economy declined almost overnight as a result of the change of system. Hitherto 'developed industrial areas' found themselves suffering grave economic and employment crises. Many state-owned enterprises and other business organizations still competitive on Western markets despite outmoded equipment and technologies faced immediate insolvency. Others converted into companies and/or were privatized, in some cases becoming wholly foreign-owned. Most of the peasant-owned agricultural land under state socialism had been farmed collectively by cooperatives. It became possible during the transformation to withdraw such land (or land received under compensation schemes) from the cooperatives. Mainly for political reasons, assets of large-scale agricultural concerns and cooperatives were paid out as compensation, divided up or scattered, so that most of them ceased operating. As a result, more than half the country's farmland came

to be divided into holdings too small for modern farming methods to be employed.

The regional consequence was the emergence of crisis regions, with a surge of unemployment and impoverishment. The resulting territorial inequalities have become apparent in living conditions, including infrastructural provisions and availability of public services. Naturally, privatization and the subsequent extension of the private sector and arrival of foreign investment were concentrated in territories (counties, regions, towns, etc.) where the conditions of operation were the most favourable.

Stronger market forces and economic competition strengthened the processes differentiating and selecting within the economy and the regulation supporting those processes. The post-transformation recession affected different parts of the country to different extents. Districts dominated by weak territorial structures and crisis industries became the losers by the change of system and the regions with diversified structures the winners.

The change of system heightened the differences between centre and periphery. The differences in economic potential between Budapest and the provinces have grown. Building up the market economy has benefited developed areas, especially Budapest, more than backward areas. The spatial differences in production are far exceeded by the differences between Budapest and the provinces in income and capital accumulation.

With Hungary's accession to the EU imminent (and with its present associate status), there are two focuses for reorganizing the system of public administration that operates at present.

1. The Hungarian counties (dating back a thousand years, as mentioned already) are too small to exercise every potential inte-

gration function and force. They are also too small to meet EU size criteria for sub-national units. Their size would be an obstacle to them being treated as single units within the EU administration. Hungarian counties have an average population of 500,000 and area of 5000 sq. km, as against average sizes for EU regions that far exceed these figures.

2. The developmental autonomy of counties in Hungary and financial opportunities open to them are extremely limited. The major decisions about county developments are taken nationally (albeit at the instigation of the country) and largely financed out of the central budget. The county authority's own revenues are insufficient to perform the county's immediate tasks, let alone to finance developments. Statutory tasks are financed by transfers from the central budget calculated according to normative costs.

The solution is seemingly simple.

1. A system of local government has to be created by merging counties, three to a region. (Proto-regions already exist in terms of EU administration, but otherwise only in a formal sense.)
2. A much higher proportion of the budgetary revenues deriving from counties (regions) has to be turned into county (regional) revenues, to provide the vitally important financial basis for self-government.

However, these ostensibly simple solutions are by no means simply to apply.

First, there is a historically evolved apparatus for performing the functions of today's counties and county seats, with concomitant customary laws and infrastructural provisions. What government is going to accept political responsibility for choosing one of the three historic county seats as the regional seat in a position of national sub-centre and for demoting the other two cities? Consequently, four governments since the change of system have done only the minimum to comply with the demands of the EU bureaucracy in creating and operating Hungary's regions.

Secondly, such financial independence based on revenue from each region's territory under a requisite system of more or less uniform, decentralized financial sources (tax and other revenues and scale of these) presumes that the units will be roughly equal in development level and capacity to generate revenues. This study shows in several dimensions that the opposite is the case in Hungary. If the financial independence of the counties (regions) rested on more or less uniform revenue regulations, the sizeable historical differences between comparatively rich Budapest and the counties of Northern Transdanubia on the one hand and the poorer counties of North Hungary and the Northern Great Plain would increase, not diminish. So the centralism of development and other decisions of a structural character, along with the financial system behind it, cannot be abandoned. Roughly speaking, the state revenues will have to be centralized and redistributed to finance county (regional) tasks, using various well-chosen methods of earmarking funds, by devising and applying rules agreed among all those concerned. Of course, the taxation and the earmarking mechanism may be well or ill-chosen, but centralism can only give way to decentralization slowly and steadily as the chances arise over many years.

The authors see the following strategy for structural change as probable in the next five or ten years. The county system will remain as the operative sub-national system on a concrete level. Lightly staffed, three-county regions will emerge with three main functions:

1. They will perform integration and organizational tasks within the region and with other regions (even regions in other countries).
2. They will act as organizers of the division of labour among their constituent counties (in ways regulated perhaps by statute). Furthermore, they will represent and lobby for regional interests in the outside world.
3. On a county level, they will prepare and draw up the region's projects, and represent them to the government and the EU apparatus during the bargaining process.

## INTRODUCTION

---

This introduction concerns three questions that the authors consider essential to a knowledge and understanding of the present situation, dilemmas and problems to do with transformation and Hungarian regional development. It mentions changes in the Hungarian settlement pattern in the 20th century, with a few of the features specific to it, the regions – the ‘Europe of regions’ – and different ways in which the nation-states of East-Central Europe developed, and finally, the history of Hungary’s units of public administration, notably the counties.

The Hungarian settlement pattern underwent three significant changes in the 20th century.<sup>1</sup>

1. Two-thirds of the Hungarian population in the first quarter of the 20th century lived in villages. Two-thirds at the end of the century lived in towns.
2. The border changes after the First World War (which will be mentioned later) fragmented a longstanding network of coexisting settlements. As a consequence of them, Hungary lost a third of its territory and its population shrank to less than half (Figure 1).
3. The character of the spatial relations between village and town has altered in the last 25 years. Previously, the settlement network consisted of a cluster of zones of attraction, with the towns connected to their districts and surrounding villages. These days the network is more complex and dominated by the connections between towns. Each village may be attracted towards several towns, while the worst-placed villages may lose their urban connections altogether. In Hungary as in other

countries, residence and workplace functions have become mixed, with many people working in different settlements from the ones in which they reside.

There are two other features of the Hungarian settlement network worth emphasizing.

1. Budapest, the capital, is the only international metropolis in the country. It is pre-eminent among cities not only for its population, but for an unmatched concentration of modern urban functions. The Hungarian capital has been the impetus behind modernization in the Carpathian Basin for almost 200 years, as a receptor and disseminator for technical, organizational and institutional innovations. Its 1.8 million inhabitants pay 40 per cent of the personal income tax levied in the country. It competes with other Central European cities such as Vienna, Prague and to some extent Warsaw. With Warsaw it competes for an economic role extending beyond the bounds of Central Europe. It will be seen later that Budapest in the 1990s absorbed a high proportion of the foreign investment flowing into East-Central Europe.
2. The settlement pattern on the Great Hungarian Plain has two conspicuous features: giant villages and communities of scattered homesteads. Giant villages also occur in certain parts of Southern Europe, such as Sicily and Southern Spain, but the development of them occurred in different ways. In Hungary, the inhabitants of several villages came together for better protection in the period of Ottoman Turkish occupation in the 16th–17th centuries. Homestead settlement is general also in parts of Northern and North-Western Europe, where feudalism broke down (in the 13th and 14th centuries) and private peasant land ownership therefore developed earliest.

Regions are an old concept in geography but new in common parlance in Hungary. Like districts, they are contiguous areas of land, but the basis of them is often not natural or historical, but provided by the administration of state. The official, legal division of Hungary into regions took place in the

---

<sup>1</sup> Enyedi and Horváth, eds (2002). pp. 14–17. We have made use here of some parts of the introduction by György Enyedi.

1990s.<sup>2</sup> The expression became widely known in Hungary because intra-state regions play a very strong role in the European Union (EU), where mention is often made of a ‘Europe of regions’ and efforts made to even the regional economic inequalities, including sizeable financial ones. Let us say in advance here that there have been debates in Hungary about the concept and employment of regions, due to poor definition and uncertainty about the existence, borders and intra-state role of regions.

Mention is made of the differences in the way the EU (the ‘Europe of regions’) and the Central and Eastern European (CEE) countries developed into nation-states.

The nation-states of the present-day EU came into being successively in the 18th and 19th centuries, through integration and/or absorption of earlier political formations (counties, princedoms and city-states, often with separate languages and cultures).<sup>3</sup> The integration and often violent process of union, to which some languages and cultures fell victim, did not usually eradicate strong identities that developed historically in certain spatial units (for instance, those of the Catalans, Scots and Bavarians). The EU, embodying integration on a sub-continental scale, has revived these old units and turned such historical regions into the basis of the ‘Europe of regions’. These regions have preserved the dialects, customs, self-awareness, etc. of their inhabitants through a process lasting a thousand years.

East-Central Europe arrived at nation-states along different historical paths. It happened not by integration, but by fragmentation or reduction of multi-ethnic empires, or in the extreme case of the Austro-Hungarian Empire, by its breakup. These nation-states developed in the 20th century and seem set to continue into the 21st (in the Balkans and perhaps in Eastern Europe). The first great wave of nation-state creation came after the

First World War, when local forces were mobilized and encouraged by the geopolitical considerations of the victorious great powers.

The map of East-Central Europe’s nation-states was drawn outside, in Western Europe.<sup>4</sup> After the Second World War, further important border changes were made at the expense or to the gain of existing nation-states, again through outside intervention by the great powers. The second wave of post-war nation-state creation came with the breakup of the state-socialist system. Eight states were replaced by 26 new nation-states (including Soviet successor republics in Asia), although they reflected local initiatives, power relations and efforts, and bore the bloody marks of local wars. One obvious consequence for regionalism is that these nation-states lack historical regions or possess them only exceptionally. For regional initiatives in the 20th century have several times been divided by the borders of new nation-states averse to giving ethnic groups and historical units any kind of administrative frontiers that might support claims to autonomy. Changing (‘adjusting’) administrative borders has been a ceaseless process in CEE countries in the last few decades.

The reduced territory of Hungary after the First World War (Figure 1) possessed an administrative system of counties largely unchanged for a thousand years. For the county (vármegye) had become the basis of territorial division when the state was founded in 997 and remained the intermediate unit of local government until 1950.<sup>5</sup> In the state-socialist period (1948–89), the county authorities were subordinated directly to the Presidential Council (collective head of state) and the Council of Ministers (government). After the

<sup>2</sup> Regional frameworks known as planning-economic zones began to be employed in long-term economic planning in the 1970s.

<sup>3</sup> United Italy absorbed Lombardy and Sicily, united Germany Saxony and Westphalia, and united Spain Castille and Catalonia.

<sup>4</sup> Yugoslavia, for instance, came into being without ever having existed before.

<sup>5</sup> Its origin is disputed. It probably developed into a uniquely Hungarian institution based on earlier Slav, Avar and Byzantine patterns. Its first form, the royal county, arose as part of the state-organizing activity of Stephen I, the country’s first king. Greater Hungary up to 1920 had 63 counties, of which 30 were ceded to other countries under the 1920 Treaty of Trianon, 23 remained partly in Hungary, and only 10 counties were unaffected. The number of counties in Hungary was reduced in 1923 to 25.

change of system, the counties received local-government powers and tasks under Act LXV/1990.<sup>6</sup> In principle, the counties may not receive direct funding from the central budget other than defined normative allowances for performing specified tasks. Governments of settlements in turn receive normative funding for budget allowances and maintaining and teaching in childcare institutions, kindergartens, primary and secondary schools, and usually but not invariably, possess revenues of their own (e.g. local business taxation) to cover county-level costs and investments.

## 1) THE LEGACY OF STATE SOCIALISM

---

State socialism in Hungary, as elsewhere, abolished private property (apart from small dwellings), and the property of financial and market organizations and institutions, to produce a complete dominance of state ownership. Agricultural land was distributed to the landless, but most of this was later transferred to collective (cooperative) farms. The economic system it created was state-run and centralized and aimed at autarky. This was dominated for the first two decades by forced, accelerated industrialization of a Stalinist type, which gave development priority to mining, traditional heavy industry (steel, petrochemicals, heavy engineering, etc.) and the fuel economy, while neglecting to maintain or develop other areas (such as the infrastructure). As a result, large state-owned enterprises and

---

<sup>6</sup> The county government must provide set countywide services and maintain institutions to deal with them. It may introduce regulations on matters in its competence and call county referenda. Its tasks and powers are exercised by a county assembly, headed by an elected chairperson. The electorate (except in cities with county rights) elects assembly members from two sets of party lists, for communities with over and under 10,000 inhabitants. The number of members is 40–80 depending on population. Seats go to parties that obtain 5 per cent of the vote on both lists. The assembly is assisted by a county government office headed by the county recorder. The legality of local and county government activity and decisions is monitored by county (and capital-city) public administrative offices.

industrial zones and districts were created in Budapest, the north-east and central Transdanubia. Their locations were decided by central planning, which reduced the differences of economic development between the larger regions of the country. The process also contributed to building up a network of cities, which had not existed in the modern sense before the Second World War. According to György Enyedy, ‘The settlement network was modernized formally: the major difference in living conditions in villages and towns remained, but it was not possible for a local society resting on a bourgeoisie and capable of self-organization to develop. The basis of the settlement network contained a closed, inward-looking economy in which the enterprises – with few exceptions – were not in direct touch with the players on the world market.’ The counties and settlements had very little room for manoeuvre or separate decision-making competence.<sup>7</sup>

The change of system was preceded by a long decade (1978–1989) of economic stagnation, except in the preferred area of tourism, when the equalization process between settlement types was halted.<sup>8</sup> This applies especially to the quantity and quality of the infrastructural networks of smaller communities. For differences of standard correlated strongly with settlement size (town, larger village, smaller village). Surveys show clearly that satisfactory infrastructural provisions in Hungary are a privilege reserved for town-folk.

The state-socialist period and its system of control over the economy and society led to an approach of giving preference to centres and eliminating grassroots, spontaneous, individual initiative.

The infrastructural networks were installed hierarchically on a radial plan and lacked horizontal, bilateral links or cooperation. This approach was reinforced by the established historical structure of the transport network, in which radial links between Budapest the county seats and other towns and villages were not accompanied by direct network

---

<sup>7</sup> Enyedy (1996), pp. 12–17.

<sup>8</sup> See Fleischer (1996) and Ehrlich (1995 and 1997).

and service links between communities of equal size. This is also reflected in the marked differences of infrastructural provision within the settlement hierarchy, not only in Hungary, but in all CEE countries, for instance in telephony in towns and villages. Low in any case, telephone provision in Hungary in 1990 showed a ratio of 5:1 between Budapest and the provinces and 7:1 between Budapest and rural areas.<sup>9</sup>

Development was considerable in the less technically sensitive and capital-intensive infrastructure – education, culture, health services and to some extent housing – even by comparison with the economically developed market economies in some respects. However, these cannot be more than mentioned here. One specific Hungarian feature was a volume of domestic and still more foreign tourism far greater than in other socialist countries.

As in other socialist countries, domestic tourism was extensive and heavily subsidized, so that it acted as a social reward for working people. Likewise untypical of the socialist bloc was Hungary's inward international tourism, which developed markedly in the last two decades of the state-socialist period.<sup>10</sup> Most socialist countries suffered chronic food shortages and generally poor supplies of consumer goods. Hungary, largely thanks to the 1968 'new economic mechanism', managed to produce a mounting agricultural surplus, allowing it to increase its agricultural exports substantially and improve supplies of many consumer goods. This turned the country into a shopping centre mainly for people in other socialist countries (especially ethnic Hungarians in neighbouring countries) and to some extent for visitors from the West, due to the favourable consumer prices. In addition, Hungary became a meeting place in the 1970s for citizens of the two Germanies, whose direct visits were still severely restricted. The number of visitors from Germany, Austria and

other Western European and overseas countries increased substantially, attracted not only by the prices, but by the albeit relative freedom compared with other CEE countries and the services of a reviving small-scale private sector.

The extensive domestic and increasing international tourism contributed greatly to the expansion of legal and non-legal accommodation services, tourism-based retail trading, catering, and under-the-counter barter, from which locals and domestic and foreign visitors made gains. The tourist industry that developed and prospered in Budapest, on the Danube Bend, at Balaton and along the Western borders was partly state-owned, but to an extent unusual for a socialist country, also privately owned. It offered lower quality standards than in the economically developed market economies, but it satisfied the requirements of shopping tourists and mass tourists and Germans seeking a family reunion. In that respect, the development in Hungary was unusual and conspicuous for East-Central Europe. The growth of international tourism in the 1960s and 1970s contributed greatly to rise in unregistered income and the standard of living among the Hungarian population and to the state's foreign-exchange earnings. Perhaps more important still, the openness of society was enhanced by the freer access to foreign travel and the visits by Western tourists.

The effects of tourism just described and the general upsurge of the private sphere and private ownership were concentrated in the parts of the country already mentioned, where the tourist industry was concentrated. This meant that these processes contributed to increasing regional development differences.

---

<sup>9</sup> Ehrlich (1992).

<sup>10</sup> In 1961, Hungary preceded other socialist countries in allowing citizens to travel abroad privately with a small convertible-currency allowance every three years, or more often if they held legally acquired convertible currency of their own. There were no currency restrictions on travel to other socialist countries.

## 2) CHANGES IN THE ECONOMY AND REGIONAL PROCESSES AFTER THE CHANGE OF SYSTEM

---

Before turning to some of the issues concerning the situation and development of Hungary's regions, it is worth recalling the main processes undergone by the economy of Hungary and other CEE countries in the long decade of transformation. These are simply outlined here, without any pretensions to completeness.

### 2.1. The main processes in the economy

---

The GDP trends in the CEE countries after the change of system were remarkably similar (Figures 2 and 3). Society was first shaken by a massive recession of almost 20 per cent in the early 1990s (on a scale reminiscent of the Great Depression of the 1930s). Then came some years of usually slow, but accelerating growth in the second half of the decade. By the turn of the millennium, the economic output of most CEE countries had regained and slightly exceeded its size before the change of system.<sup>11</sup>

Similar fluctuations on various scales can be seen for other indices. Employment fell back strongly (by 30 per cent in Hungary and 15–20 per cent in other CEE countries) and then stabilized at a lower level (Figure 4). Real wages declined sharply in the early years, while consumption and investment fell back by 15–25 per cent. The recovery brought the consumption level back to its earlier level by the end of the decade. The level of investment

---

<sup>11</sup> Two comments need adding. (i) Poland's position compared with 1989 was better, but there had been a protracted and deep recession there around 1980. If this is adjusted for, the trough and recovery were similar to those in other ECE countries. (ii) The more easterly post-socialist countries suffered a deeper and longer recession. Bulgaria's was 33 per cent and bottomed out only in 1997. In the three Baltic states, the recession bottomed out at 49–36 per cent in 1994–5, while in Russia the trough was 44 per cent in 1998, etc.

exceeded its pre-change of system level, which had been depressed.

The biggest change in economic structure came in external economic relations, where the previous dominance of trade and cooperation with the Soviet Union and COMECON countries shifted to the West, particularly EU countries and most of all Germany. The dollar values of exports and imports increased very rapidly, 4 to 4.5 times over, in the decade of transformation (only twice over in the case of Slovenia). An export (and import) increment of this magnitude means that export growth was the factor that lifted the CEE countries out of their transformational recession, and exports have come to represent a high proportion of economic output. (For Hungary, the value of exports rose from a third of GDP in 1989 to almost two-thirds in 2001.)

A seminal role in expanding Western relations was played by capital imports of foreign direct investment (FDI, Figures 5 and 6). The multinational corporations importing the capital have helped to couple these historically close economies to developed Europe into the world economy, by participating in privatization, making greenfield investments and introducing modern, marketable technologies and products and up-to-date management techniques. The CEE countries have relatively skilled, cheap, employable labour, and robust social structures and legal systems, which have proved capable of receiving imported capital in a way that satisfies its profit requirements. The dominant relations have been built up with EU countries. This means that most of the CEE countries have become relatively undeveloped parts of the European system of economic integration before they accede to the EU. (See Figure 8 on the six CEE candidate countries.)

Having outlined the economic transformation of the CEE countries in general terms, it is worth noting three specific features of the Hungarian economy:

1. One basic aspect of the transformation was to remove the dominance of state ownership in the economy, through privatization. During the initial phase, Czechoslovakia



primarily, but also Poland and other former socialist countries, sought to turn state-owned enterprises into firms owned by citizens (either the public as a whole or just the employees of the firms being privatized).<sup>12</sup> In Hungary, on the other hand, the governments and parliaments of the transition period consistently used cash sales to privatize through competitive bidding and accepted sales to foreign investors. Citizens' or employee ownership played only a marginal role. (By the end of the 1990s, sale had become the prevalent method of privatization in the other CEE countries as well.<sup>13</sup>)

2. Compared with other countries, Hungary found the influx of foreign direct investment (FDI) playing a conspicuously important role in its transformation and privatization between the change of system and the end of 1997. It was the destination for 46 per cent of the operating capital (imported into the CEE countries) found their place in Hungary. Thus the amount of FDI per capita invested by the end of 1997 was \$1548 in Hungary, \$838 in the Czech Republic, \$221 in Poland and \$192 in Slo-

vakia. Meanwhile half the registered companies in Hungary contained a foreign stake of more than 10 per cent. On the production and sales side, privatized companies modernized through a foreign ownership stake and foreign-owned greenfield investments became the bases for an offensive that saw Hungary's exports increase by 15–25 per cent a year for several years running. (Capital investment began to rise rapidly in the other CEE countries in 1998, especially the Czech Republic and Poland, which managed to catch up with Hungary again.)

For a CEE country, the measures of reform taken under the party-state left Hungary well placed to receive capital imports.<sup>14</sup> On the other hand, Hungary at the change of system had huge debts to private banks abroad and in the form of state bonds traded abroad. The one way to reduce these debts and the service costs of them, which exceeded the capabilities of the economy, was to attract foreign capital, for instance for privatization purchases, and use most of the proceeds for repayments.<sup>15</sup> So the country was saved from spiralling indebtedness by a huge influx of capital.

Privatization and high-technology greenfield investments of imported capital brought by the end of the 1990s a huge increase in the export performance of Hungarian manufacturing and a radical change in its structure. By that time, about 65 per

---

<sup>12</sup> Czechoslovakia, in the year after the change of regime, sold big companies to the adult population at nominal prices, for vouchers representing a specific share of the company's book value. (Everyone had a right as a citizen to buy vouchers up to a specified amount.) These vouchers, like shares, were floated on the stock exchange and bought up by investment funds launched by state-owned banks, and the funds soon bought themselves into majority ownership positions in each company. This method of privatization was then adopted by some other post-socialist countries, which failed to employ it with Czech precision. The drawbacks appeared later. The scheme only appears to remove the state as owner, since the majority of the vouchers are owned by investment funds controlled by state-owned banks. State influence and responsibility remain. Furthermore, the method prevents the involvement of imported capital, whereas it is essential to obtain expertise and capital for modernization and entry into international markets.

<sup>13</sup> The preponderance of sales in Hungarian privatization and the relegation of 'popular' or employees' ownership came after experience in the mid-1980s, when state-owned and municipally owned enterprises were placed under the control of employees' councils. The irrational effects of this soon appeared as short-termism, in which development criteria took second place to the immediate earnings aspirations of employees and managers.

---

<sup>14</sup> The reforms began in the 1960s and were halted in the early 1970s, but the process picked up in the early 1980s, so that operation of the Hungarian economy was already compatible with market forces on the eve of the change of system. Among the specific steps taken in the 1980s were measures to adapt capitalism, introduction of a producer-price system that simulated world-market prices, the introduction of personal income tax and value-added tax, replacement of the monopoly bank with a two-tier banking system (a bank of issue and commercial banks conducting commercial transactions), company law codifying capitalist market conditions, and legislation protecting foreign investments in Hungary.

<sup>15</sup> Imported capital was very widely involved, for instance, in privatization of the Hungarian infrastructure. Right at the beginning of the transformation, the main telephony companies were sold to foreign interests, as were the energy companies in the mid-1990s.

cent of manufacturing exports were generated by the ‘multis’ and two-thirds of manufacturing exports were destined EU countries. Figure 7 shows that there was an epoch-making change, even by comparison with other countries. The 10 per cent of manufacturing exports produced by high-tech industries in 1990 had become 34.5 per cent by 1998 – a higher proportion than in the Netherlands!

There has probably been another alteration in the export structure of manufacturing in the last two years, although precise figures are not yet available. The causes have been a substantial drop in economic growth, foreign capital imports and productive investments in general, scars of the worldwide recession, and withdrawal or realignment by some foreign-owned companies.<sup>16</sup>

3. It has been implied that Hungary enjoyed some advantage over the other CEE countries in the first long decade of the transformation. This advantage was compounded by the effects of the stabilization and consolidation measures taken in 1995 (the Bokros Package). The price was an 11 per cent drop in real wages and falls of 10 per cent each in personal consumption and budgetary redistribution. But the relative stability of the economy was restored. The country’s competitiveness improved, and helped by a recovery in the world economy, a high sustainable growth rate (4–6 per cent a year) was attained, along with a massive rate of increase in exports (15–25 per cent a year). Apart from the thorough reorganization and modernization of the economic structure, the inward flow of capital stabilized at around \$2 billion a year (even without major acts of privatization). The 1995–2000 period was indeed a period of promising economic development.

The chronicle of the early years of the 21st century has to include a reference to the political sphere. As the 2002 elections ap-

<sup>16</sup> It seems certain that one cause of withdrawal by foreign interests was a jump in Hungarian wage levels in 1999–2002.

proached, ever more bitter political antagonism developed between the opposition socialist-liberal coalition, which had carried out the tough economic measures when in government, and the conservative-national government headed by Fidesz. As a result, several irrational, populist measures were taken at the expense of the budget,<sup>17</sup> as the two sides tried to outbid each other in expensive election promises.<sup>18</sup> The political developments eventually placed the economy in a difficult position, at a time when the world economy was slowing. It now suffers from significant budgetary and balance-of-payments deficits and its competitiveness compared with the other CEE countries has greatly deteriorated.

## 2.2. The regional consequences and effects of the change of system

---

The change of system brought transformations and reorganizations that produced a number of new regional processes and phenomena. This section picks out some issues as a way of showing aspects of the consequences for regional processes. Mention is made of the causes behind them, along with territorial differences and their order of magnitude, areas that won and lost by the transformation, and the characteristics of the changes that have ensued.

### 2.2.1. Causes and effects

The state-socialist economy declined almost overnight as a result of the change of system. Hitherto ‘developed industrial areas’ found themselves suffering grave economic and employment crises. Many state-owned enter-

<sup>17</sup> For instance, the minimum wage was almost doubled by increases in consecutive years, economically irrational terms given for student credits, and highly subsidized housing construction and purchase loan schemes introduced.

<sup>18</sup> The 50 per cent pay rise in the public sector promised and implemented in 2002 may have been justified in social and pay-relativity terms, but not in terms of the funds available for it.

prises and other business organizations still competitive on Western markets despite outmoded equipment and technologies faced immediate insolvency. Others converted into companies and/or were privatized, in some cases becoming wholly foreign-owned. Most of the peasant-owned agricultural land under state socialism had been farmed collectively by cooperatives. It became possible during the transformation to withdraw such land (or land received under compensation schemes) from the cooperatives. Mainly for political reasons, assets of large-scale agricultural concerns and cooperatives were paid out as compensation, divided up or scattered, so that most of them ceased operating. As a result, more than half the country's farmland came to be divided into holdings too small for modern farming methods to be employed.

The regional consequence was the emergence of crisis regions, with a surge of unemployment and impoverishment that will be referred to later. The response in many cases was to distribute handouts rather than devise and implement development programmes. The resulting territorial inequalities have become apparent in living conditions, including infrastructural provisions and availability of public services. Naturally, privatization and the subsequent extension of the private sector and arrival of foreign investment were concentrated in territories (counties, regions, towns, etc.) where the conditions of operation were the most favourable. It will be seen that this means mainly Budapest, the national capital, and the Budapest-Vienna axis, which covers almost the whole of Western Hungary, as well as one or two other cities (Pécs, Szeged, Debrecen, etc.) The north and east of the country and the Great Hungarian Plain, already less developed parts of the country for historical reasons, have become peripheral in many respects.

This obviously means that 'the territorial differentiating element is the ability to withstand the crisis and adapt to market-economic conditions. A big role is played in this by the geographical location of the region concerned, its inherited economic structure, its social preparedness, its level of educational attain-

ment, its ability to innovate, and its bourgeois traditions.'<sup>19</sup>

### 2.2.2. GDP per capita in the counties and regions<sup>20</sup>

The county and regional development shown in terms of GDP per capita in Figure 11 as proportions of the national average in the last half-decade<sup>21</sup> reveal some important points:

- \* The development level of Budapest is almost twice the national average.
- \* County development has been exceptionally strong in Pest County, which surrounds Budapest.
- \* The four Transdanubian counties have increased noticeably by comparison with the national average.
- \* The relative development level of 14 counties has decreased to varying extents over the half-decade analysed. This is also expressed in the fact that the three regions in the west of the country attained a relative increase in their level of development,<sup>22</sup> while the other four regions declined.

Figure 12 shows the regional GDP distribution in 1996 and 2000. The proportions of Central Hungary (which comes top with proportions of 41.6 and 43.1 per cent), Central Transdanubia and Western Transdanubia (making 61 per cent in 1996 and 65.4 per cent in 2000 between them) increased, while those of the other regions declined from 38.1 per cent in 1996 to 34.6 per cent in 2000.

Figure 13 shows the per capita GDP figures for counties and regions as proportions of the EU-15 average. The GDP per capita pro-

<sup>19</sup> Enyedi (1996), pp. 20–21.

<sup>20</sup> County and regional boundaries are shown in Figures 9 and 10 respectively.

<sup>21</sup> Territorial (county and regional) figures for GDP were only introduced in the mid-1990s, so that earlier data are not available.

<sup>22</sup> In the Central Transdanubia region, the relative level of development in Komárom-Esztergom County declined slightly, as did that of Zala County in Western Transdanubia, while all the other counties in the two regions improved.

portions of all counties in Hungary (except Budapest) and therefore all regions lay below the critical 75 per cent mark. The three counties of Győr-Moson-Sopron, Fejér and Vas have proportions of 69, 65 and 59 per cent, which means they will qualify for EU support for a few more years. All the other counties (and regions) show underdevelopment that will qualify them for EU co-financing of projects for a longer period.

The EU gives partial project funding only if the GDP per capita of the applicant region is below 75 per cent of the average GDP per capita for EU member-states and the government (and/or regional government) guarantees to match the funding.

### 2.2.3. Territorial magnitudes of foreign investments and capital imports

It has been seen in Figure 6 that a noticeable change in the magnitude of the foreign capital arriving in Hungary occurred in 2001 and still more 2002. (The causes of this have been discussed already.) In 2001, \$1.9 billion flowed into Hungary, but only \$800 million did so in 2002. However, it is worth noting that as a result of the world recession and current investment uncertainties and enhanced risks, the proportion of FDI halved in 2000 in the world and fell by 39–41 per cent in Western Europe and the EU countries.<sup>23</sup>

Figure 14 shows county and regional figures for the subscribed foreign capital per capita, while Figure 15 presents the distribution of foreign investments by destination. The figures show that the regional placement of foreign capital (which has been unchanged for several years) is focused on Budapest. Budapest and Western Hungary have received 84 per cent of the investments, while the Great Plain and Northern Hungary have received only 16 per cent.

Figure 17 presents a cross-section of firms with a foreign stake in 1998 and the re-

gional distribution of these. Central Hungary, Central Transdanubia and Western Transdanubia between them contain 76 per cent of the firms with a foreign stake, while Northern Hungary contains only 3.2 per cent of them. Interestingly, the distribution of investments per annum is more even: 39 per cent to the most developed region, another 31 per cent to the three Transdanubian regions and 30 per cent to the three less developed regions. The conclusion must simply be that the expansion of foreign capital does nothing to even the standards of the regions. On the contrary, it serves to reproduce the backwardness of the less developed regions.

Figure 16 shows the structure of imported capital by country of origin: 75 per cent of the foreign capital invested in Hungary comes from EU countries (including 28 per cent from Germany, 22 per cent from the Netherlands and 12 per cent from Austria), 2 per cent each from Switzerland and Japan, and 12 per cent from other countries.

### 2.2.4. Employment, activity rates and the qualifications of the active workforce

The deep economic recession that occurred in the early years of the transformation has been presented already (Figure 4). As a result, 30 per cent of the Hungarian workforce, most of them unskilled or low-skilled, left the labour market. After activity rates of 51 per cent in 1980 and 45 per cent in 1990, the rate was down to 37 per cent in 2001.

What has happened to county and regional employment in the last two decades?

The data on the activity rate<sup>24</sup> in Figure 18 shows the following:

\* Activity rates in the seven regions in 1980 were in the 46–50 per cent range. They

<sup>23</sup> Source: World Investment Report 2002 Transnational Corporations and Export Competitiveness. New York/Geneva: United Nations, 2002. Annex B. p. 303.

<sup>24</sup> Unemployment figures are notoriously uncertain. (For instance, those no longer qualifying for unemployment benefit may still be unemployed but no longer registered as such.) The activity rate represents labour relations more realistically, from the employment side.

were somewhat down to the 42–45 per cent range by 1990.

- \* Twelve years later, in 2001, the rates in the three developed regions (Central Hungary, Central Transdanubia and Western Transdanubia) had hardly changed (40–41 per cent), while those of the four less-developed regions had sunk dramatically from 43–45 per cent to 30–34 per cent. The lowest proportion of all was 29.9 per cent in the least developed region of Northern Great Plain. The regional educational-attainment structure of the employed altered in every region (to varying extents) and in Hungary as a whole over the two-decade period (Figure 19). In Hungary as a whole (Figure 19), the proportion of those with a low educational attainment was 54 per cent in 1980, 39 per cent in 1990, and only 20 per cent in 2001. Those with a high educational attainment (tertiary or university qualifications) was 8 per cent in 1980, 12 per cent in 1990 and 18 per cent in 2001.
- \* The proportion of those with low educational attainment decreased and the proportion of those with high educational attainment increased over the two decades in every big city, county and region in the country.
- \* In 1980, the proportion with low educational attainment in the three economically developed regions was in the 46–54 per cent range. This had fallen to 17–21 per cent by 2001, while the proportion of those with high educational attainment had risen from 6–12 per cent in 1980 to 14–25 per cent in 2001. The highest rate of 25 per cent was found in Central Hungary.
- \* In the four less-developed regions, those with low educational attainment made up proportions of 57–60 per cent in 1980, 39–43 per cent in 1990 and 21–23 per cent in 2001. Those with high educational attainment, at 15–16 per cent, were approaching the proportion in the Central and Western Transdanubia regions.

Turning to the structure of educational attainment in the workforce of Budapest and

the eight other larger cities in Hungary,<sup>25</sup> Budapest heads the list with 30 per cent having high educational attainment. The eight other cities had comparable proportions of 22–27 per cent in 2001. The reason is clearly that many people these days need a high educational attainment to find a job.

The change in the educational-attainment structure of the least developed county in Hungary, Szabolcs-Szatmár-Bereg, is instructive. In 1980, the proportion with a low educational attainment was 60 per cent in 1980, 42 per cent in 1990 and only 21 per cent in 2001. The proportion with a high educational attainment rose from 6 per cent in 1980 and 9 per cent in 1990 to 16 per cent in 2001.

In the less developed regions, there is a high proportion among those with high educational attainment who have a tertiary qualification (three-year diploma), while in the more developed region the dominant grade is a university qualification (five-year degree).

The branch structure of employment in the country as a whole underwent a fundamental change. In 1980, 29.4 per cent of the employed were working in manufacturing, as opposed to 26.4 per cent in 1990 and 24.3 per cent 2001. The proportion working in the tertiary sector, on the other hand, went from 39.1 per cent in 1980 to 46.7 per cent in 1990 (after the creation of several new market-related organizations, banks and institutions) and 61.6 per cent in 2001. The transformation of manufacturing described earlier and the activities concerned with introducing markets result almost invariably in a demand for higher employee qualifications, which accounts for the increase in the proportion of the active with higher educational attainments.

---

<sup>25</sup> Debrecen, Győr, Kecskemét, Miskolc, Nyíregyháza, Pécs, Szeged and Székesfehérvár all have at least 100,000 inhabitants.

### 2.2.5. Winners and losers by the change of system

Stronger market forces and economic competition after the change of system strengthened the processes differentiating and selecting within the economy and the regulation supporting those processes. The post-transformation recession affected different parts of the country to different extents. Districts dominated by weak territorial structures and crisis industries became the losers by the change of system and the regions with diversified structures the winners (see Figure 20).

The change of system heightened the differences between centre and periphery. The differences in economic potential between Budapest and the provinces have grown. Building up the market economy has benefited developed areas, especially Budapest, more than backward areas. The spatial differences in production are far exceeded by the differences between Budapest and the provinces in income and capital accumulation.<sup>26</sup>

Subsections II.2.2, II.2.3 and II.2.4, in discussing the index of GDP per capita, the placement of foreign capital and regional differences in employment, have already mentioned the development differences between counties and regions – Budapest and Pest County, along with Western and Northern Transdanubia, have been the winners by the transformation. The losers have mainly been the North Hungary and Northern Great Plain regions. Those who have sunk in these loser regions are mainly the poorly educated and unskilled, so that poverty has increased during the transformation.

To show the magnitude and localities of poverty more specifically, let us use the simplest yardstick: the proportion of the population in the lowest income decile. As an auxiliary index to show degree of inequality, let us take the ratio of the highest and lowest income deciles. These measures are shown for three years in Figure 21.

The figures plainly show a significant, 30 per cent increase in the national proportion of poverty (membership of the lowest income decile) and an increase in income differentiation.

Out of the proportion belonging to the lowest income decile was derived so-called risk indices reflecting settlement and regional dispersion of poverty (Figure 22).<sup>27</sup> These data show clearly that poverty is concentrated in the North Hungarian and Northern Great Plain regions on the one hand and in villages on the other. Budapest is again in the best situation.

## 3) TERRITORIAL DEVELOPMENT AND REGION-BUILDING

---

In the words of a Hungarian authority on the subject, ‘The local-government-area structure of the Hungarian economy does not currently meet the competitiveness requirements of the post-industrial age and European integration. The decentralizing notions of the 20th century have failed. The barriers to progress in every decentralizing period have been erected objectively by wide development differences in the country and subjectively by a combination of resistance by central power...and historically determined provincial behaviour in the country’s system of district administration. In vain did documents from the end of the 1920s to the present day emphasize the importance of the region-forming functions of big urban centres. Political elites with short-term interests obstructed in every age any move to develop outside the capital the critical mass to exert the strength to impose a decentralization of power, given a favourable conjunction of

<sup>26</sup> See Horváth (2002), pp. 400–404.

<sup>27</sup> The risk is represented here by a fraction. The numerator is the proportion of the population in the settlement or region in the lowest income decile and the denominator the proportion of that population to the national population. The risk is 1 if the two proportions are the same. The higher the value above 1, the deeper the poverty.

circumstances'<sup>28</sup> (which never arose, in this author's opinion.)

The practice of regional development in Europe up to now has shown that a sub-national level operating on a self-governing principle and containing a population of 1.5–2.0 million provides the optimum framework for development, assertion of interests, and creation of today's infrastructure of regional policy and an apparatus of professional organization, planning and execution. Such units are also a decisive element in the EU system of regional and cohesive political decision-making.<sup>29</sup>

The Hungarian author goes on to say that one of the most important arguments for regionalization in Hungary today is its encouragement of spatial distribution of innovative, market-compatible activity and provision of long-term infrastructural and organizational conditions for it. 'The other factor of an economic nature is the country's external economic orientation. This country is doing two-thirds of its foreign-trade goods turnover with countries whose federalized or regionalized systems of state give their regional government units considerable powers. It is not immaterial, therefore, with what scale and competence of regional units this country appears on these markets and what it can offer investors. A region with a population of 1.5 million and differentiated infrastructural and production characteristics is more attractive to investors than the present units of regional government [counties] would be.' The third argument, to do with modernizing the system of state administration, also supposes modernization of the 'deconcentrated system of organizations'.<sup>30</sup>

With Hungary's accession to the EU imminent (and with its present associate status), there are two focuses for reorganizing the system of public administration that operates at present.

1. The Hungarian counties (dating back a thousand years, as mentioned already) are too small to exercise every potential integration function and force. They are also too small to meet EU size criteria for sub-national units. Their size would be an obstacle to them being treated as single units within the EU administration. Hungarian counties have an average population of 500,000 and area of 5000 sq. km, as against average sizes for EU regions that far exceed these figures (see Figure 23).

The EU has developed a hierarchical system of territorial statistics to go with the so-called NUTS system (Nomenclature des Unités Territoriales Statistiques). This operates on five planes, of which the top (first) plane is either the whole country or major regions within it, according to how the country concerned decides.

During the negotiations with the EU, it was decided that as dimensions of Hungary's counties do not accord with NUTS 2, the most important plane, units of that size should be created, and the counties can then fit in perfectly at NUTS 3 level.<sup>31</sup>

2. The developmental autonomy of counties in Hungary and financial opportunities open to them are extremely limited. The major decisions about county developments are taken nationally (albeit at the instigation of the country) and largely financed out of the central budget. The county authority's own revenues are insufficient to perform the county's immediate tasks, let alone to finance developments. Statutory tasks are financed by transfers from the central budget calculated according to normative costs.<sup>32</sup>

The solution is seemingly simple.

1. A system of local government has to be created by merging counties, three to a region. (Proto-regions already exist in terms of EU

<sup>28</sup> Horváth (2000), pp. 456–8.

<sup>29</sup> Ibid.

<sup>30</sup> Ibid.

<sup>31</sup> See Kovács (1999).

<sup>32</sup> For instance, there is a normative cost calculation in forints per annum of maintaining one place at a school, while the normative sum for hospital maintenance is calculated from the county population.

administration, but otherwise only in a formal sense.)

2. A much higher proportion of the budgetary revenues deriving from counties (regions) has to be turned into county (regional) revenues, to provide the vitally important financial basis for self-government.

However, these ostensibly simple solutions are by no means simply to apply.

Taking the second point first, such financial independence based on revenue from each region's territory under a requisite system of more or less uniform, decentralized financial sources (tax and other revenues and scale of these) presumes that the units will be roughly equal in development level and capacity to generate revenues. It has already been shown in several dimensions that the opposite is the case in Hungary. If the financial independence of the counties (regions) rested on more or less uniform revenue regulations, the sizeable historical differences between comparatively rich Budapest and the counties of Northern Transdanubia on the one hand and the poorer counties of North Hungary and the Northern Great Plain would increase, not diminish. Sooner or later, something would have to be done. So the centralism of development and other decisions of a structural character, along with the financial system behind it, cannot be abandoned. Roughly speaking, the state revenues will have to be centralized and redistributed to finance county (regional) tasks, using various well-chosen methods of earmarking funds, by devising and applying rules agreed among all those concerned. Of course, the taxation and the earmarking mechanism may be well or ill-chosen, but centralism can only give way to decentralization slowly and steadily as the chances arise over many years.

Turning to the first point, there is a historically evolved apparatus for performing the functions of today's counties and county seats, with concomitant customary laws and infrastructural provisions. None of these are yet possessed by the recently devised regions, which simply meet EU requirements in a formal sense. People's loyalties remain, for instance, to Zala County, not to South-West

Transdanubia. Each region combines three counties. What government is going to accept political responsibility for choosing one of the three historic county seats as the regional seat in a position of national sub-centre and for demoting the other two cities?

These questions have to be thought through, and then it becomes clear why four governments since the change of system have done only the minimum to comply with the demands of the EU bureaucracy in creating and operating Hungary's regions. With less than a year to go before Hungary and other CEE countries gain full EU membership, the present government and Parliament have hardly gone beyond hesitation. No real programme of action or EU-compatible reform of public administration has been devised. The authors see the following strategy for structural change as probable in the next five or ten years.

The county system will remain as the operative sub-national system on a concrete level. Lightly staffed, three-county regions will emerge with three main functions:

1. They will perform integration and organizational tasks within the region and with other regions (even regions in other countries).
2. They will act as organizers of the division of labour among their constituent counties (in ways regulated perhaps by statute). Furthermore, they will represent and lobby for regional interests in the outside world.
3. On a county level, they will prepare and draw up the region's projects, and represent them to the government and the EU apparatus during the bargaining process.

These functions are timely and important to the development of the whole country. The Hungarian Parliament, government and political elite will commit a great mistake if it does not put these tasks on the agenda, and after successfully promoting them (probably after some hard debates), does not organize coordinated preparatory work by experienced staff with specialist administrative, sociological and economic expertise.

\* \* \* \* \*



Figure 1  
Map showing the territory of Hungary before 1920, after the Treaty of Trianon, during the Second World War, and today

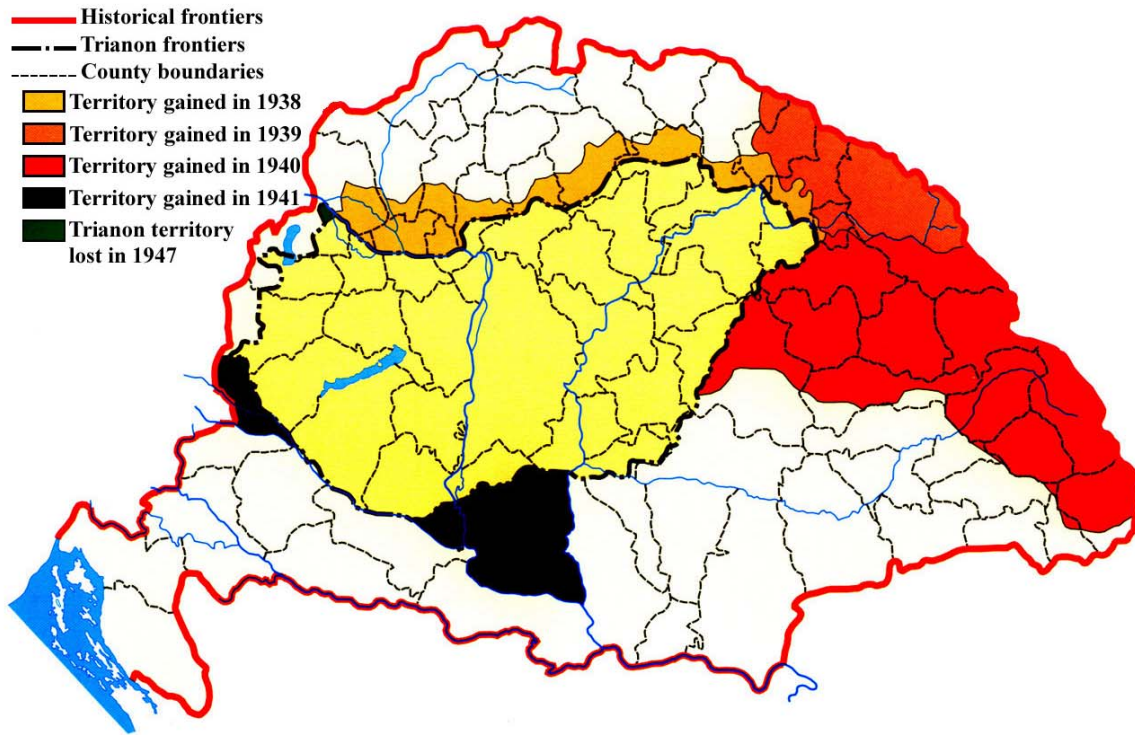
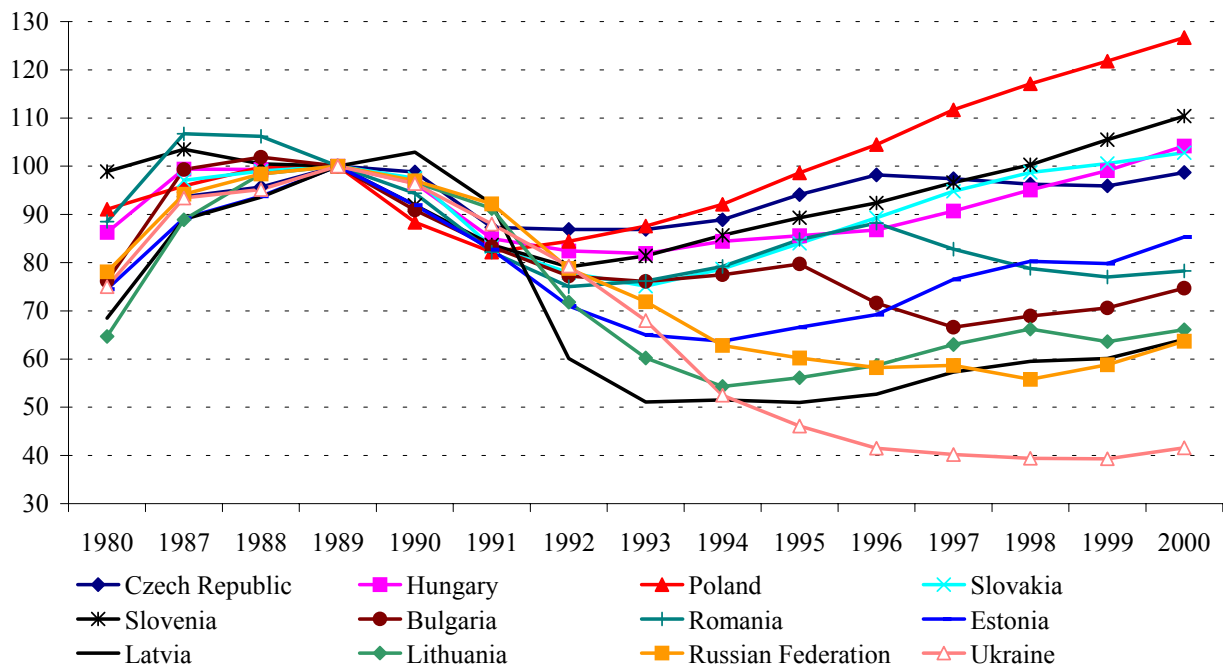


Figure 2  
Real GDP/NMP in selected transforming countries, 1980 and 1987–2000



Source: Economic Survey of Europe (hereafter ESE) 2001, No. 2. New York/Geneva: UN, pp. 162–4.

Figure 3  
Real GDP/NMP in three European regions,  
1980 and 1989–2000, 1989 = 100

Country	1980	1989 = 100	Trough	2000	
Central Europe					
Czech Republic	93.71	100	1992–1993	86.9	98.7
Hungary	86.3	100	1993	81.9	104.2
Poland	91.1	100	1991	82.2	126.7
Slovakia	97.11	100	1993	75.1	102.8
Slovenia	98.9	100	1992	79.1	110.4
Eastern Europe					
Bulgaria	76.2	100	1997	66.6	74.7
Croatia	99.0	100	1993	59.5	80.7
Romania	88.5	100	1992	75.0	78.3
Yugoslavia	95.72	100	1993	40.6	45.4
Baltic States ( $\Sigma$ )	67.8	100	1994	55.2	69.1
Estonia	74.5	100	1994	63.7	85.3
Latvia	68.5	100	1995	51.0	64.1
Lithuania	64.7	100	1994	54.3	66.1
CIS ( $\Sigma$ ) <sup>1</sup>	77.5	100	1996	55.0	60.8
Georgia	79.4	100	1994	23.4	31.8
Russian Federation	78.1	100	1998	55.8	63.7
Tajikistan	80.8	100	1996	29.8	35.9
Ukraine	75.0	100	1999	39.3	41.6
Uzbekistan	76.0	100	1995	80.5	97.6

Note: <sup>1</sup> Net material product for 1980–1990

Source: ESE, No.2, 2001, p. 162.

Figure 4  
Employment in CEE countries, 1989–2000

	Czech Republic	Hungary	Poland	Slovakia
Total employment				
1989	5405	5490	16994	2380
1993	4848	3827	14330	2012
1997	4947	3646	15410	2206
1998	4869	3698	15800	2199
1999	4693	3811	15373	2132
2000	4587	3849	15294	2102
2000–1989, '000s	-818	-1641	-1700	-278
2000–1989, %	-15.1	-29.9	-10.0	-11.7
Rate of employment <sup>1</sup>				
1989	52.2	52.3	44.9	44.9
1993	46.9	37.2	37.3	37.8
2000	44.5	38.1	39.5	38.9

Notes: <sup>1</sup> Total employment/population (%).

Sources: WIIW Handbook of Statistics: Countries in Transition 2001. Vienna: WIIW, pp. 8–32.

Figure 5  
FDI inflow into CEE countries, 1992–2000, USD millions

Period	Czech Republic	Hungary	Poland	Slovakia
1992	1003	1474	678	100
1993	568	2339	1715	168
1994	869	1146	1874	250
1995	2562	4456	3659	202
1996	1428	2275	4498	330
1997	1300	2173	4908	220
1998	3718	2036	6365	684
1999	6326	1970	7270	365
2000	4595	1700	9000	2075

Source: WIIW Handbook of Statistics, 1997. Vienna: WIIW, p. 395; *ibid.* 2001, p. 449. Compiled by the Wiener Institut für Internationale Wirtschaftsvergleiche with support from Bank of Austria.

Figure 6  
FDI in Eastern Europe, 2001–2002

	Inflows (million dollars)			Inflows/GDP (per cent)		
			January-September			January-September
	2001	2001	2002	2001	2001	2002
Eastern Europe	21784	14201	18494	4.8	4.3	5.1
Albania	207	156	95	5.0	5.0	2.7
Bosnia and Herzegovina	130	98	180	2.8	2.8	4.8
Bulgaria	694	494	289	5.1	5.0	2.6
Croatia	1512	868	653	7.7	5.9	4.0
Czech Republic	4916	3186	7068	8.7	7.7	14.1
Estonia	542	408	223	9.8	9.9	4.7
Hungary*	2443	1877	834	4.7	5.0	1.8
Latvia	154	246	349	2.0	4.5	5.8
Lithuania	446	346	577	3.7	3.9	5.8
Poland (cash basis)	6995	4149	2612	3.8	3.1	1.9
Romania	1157	743	741	2.9	2.7	2.4
Slovakia	1475	859	3391	7.2	5.6	19.8
Slovenia	503	289	1105	2.7	2.1	7.1

Note: \* Excludes reinvested profits

Source: ESE No. 1, 2003. New York/Geneva: UN, p. 93.

Figure 7  
Structure of CEE manufacturing exports to the EU, 1990 and 1998

	High <sup>1</sup>		Medium <sup>2</sup>		Low <sup>3</sup>		Manufacturing
	technology						
	1990	1998	1990	1998	1990	1998	
Hungary	9.7	34.5	23.5	37.1	66.8	28.3	100
Poland	6.2	13.6	27.5	30.5	66.3	55.9	100
Netherlands	17.3	31.4	34.8	31.2	47.8	37.4	100
Spain	11.2	13.5	50.8	54.4	37.9	32.1	100

Notes: <sup>1</sup> 2423: Pharmaceuticals, 30: Office machinery, 32: Radio, TV sets, 31: Electrical machinery and app., 353: Aircraft, spacecraft, 33: Medical, precision, optical instruments. <sup>2</sup> 241: Organic, inorganic basic chemicals, 251: Manufacture of rubber products, 252: Manufacture of plastic products, 272–74: Non-ferrous metals, aluminium, 29: Machinery and equipment, 352: Railway and tramway locomotives, 34: Motor vehicles, trailers, 354: Manufacture of bicycles and motorcycles, 355: Manufacture of transport equipment n.e.c., 36, 37: Other manufacturing industries, 242–2423: Chemical products except pharmaceuticals. <sup>3</sup> 15, 16: Food, beverages, tobacco, 17–19: Textile, clothing leather, 20: Wood and wood products, 21–22: Paper and printing, 232: Manufacture of refined petroleum, 231: Coal and petroleum products, 26: Other non-metallic minerals, 271: Manufacture of basic metals, 28: Fabricated metals, 351: Building and repairing of boats.

Source: Éltet, Andrea: 'The Effect of FDI on the Technology Structure in International Comparison'. In: FDI and Technology Development on the Eve of the 21<sup>st</sup> Century, Budapest: OM, 2000, pp. 138–73.

Figure 8  
GNI per capita in the EU countries, the transition countries,  
the United States and Japan, 2001

	GNI/capita			Inhabitants (millions)
	Purchasing power parity in USD	EU15 = 100	EU21 = 100	
Austria	27080	111	121	8.11
Belgium	28210	116	126	10.25
Denmark	27950	115	125	5.34
Finland	25180	103	113	5.18
France	25280	104	113	58.89
Netherlands	26440	109	119	15.92
Ireland	27460	113	123	3.79
Luxembourg	48080	198	216	0.44
United Kingdom	24460	100	110	59.74
Germany	25530	105	114	82.15
Italy	24340	100	109	57.69
Sweden	24670	101	111	8.87
EU12	25302	104	113	316.37
Greece	17860	73	80	10.56
Portugal	17270	71	77	10.01
Spain	20150	83	90	39.47
EU+3	19267	79	86	60.04
EU15	24340	100	109	376.41
Czech Republic	14550	60	65	10.27
Estonia	10020	41	45	1.37
Poland	9280	38	42	38.65
Hungary	12570	52	56	10.02
Slovenia	18160	75	81	1.99
Slovakia	11610	48	52	5.4
Candidates 6	11028	45	49	67.7
Bulgaria	5950	24	27	8.17
Latvia	7870	32	35	2.37
Lithuania	7610	31	34	3.69
Romania	6980	29	31	22.44
Transition countries 4	6871	28	31	36.67
EU15 + 6	22310	92	100	444.11
United States	34870	143	156	281.55
Japan	27430	113	123	126.87

Notes: Gross (or net) national income (at market prices) represents total primary income receivable by resident institutional units: compensation of employees, taxes on production and imports less subsidies, property income (receivable less payable), (gross or net) operating surplus and (gross or net) mixed income. Gross national income (at market prices) equals GDP minus primary income payable by resident units to non-resident units, plus primary income receivable by resident units from the rest of the world.

Source: World Bank, [www.worldbank.org](http://www.worldbank.org).

Figure 9  
Hungary's counties



Figure 10  
Regions in Hungary

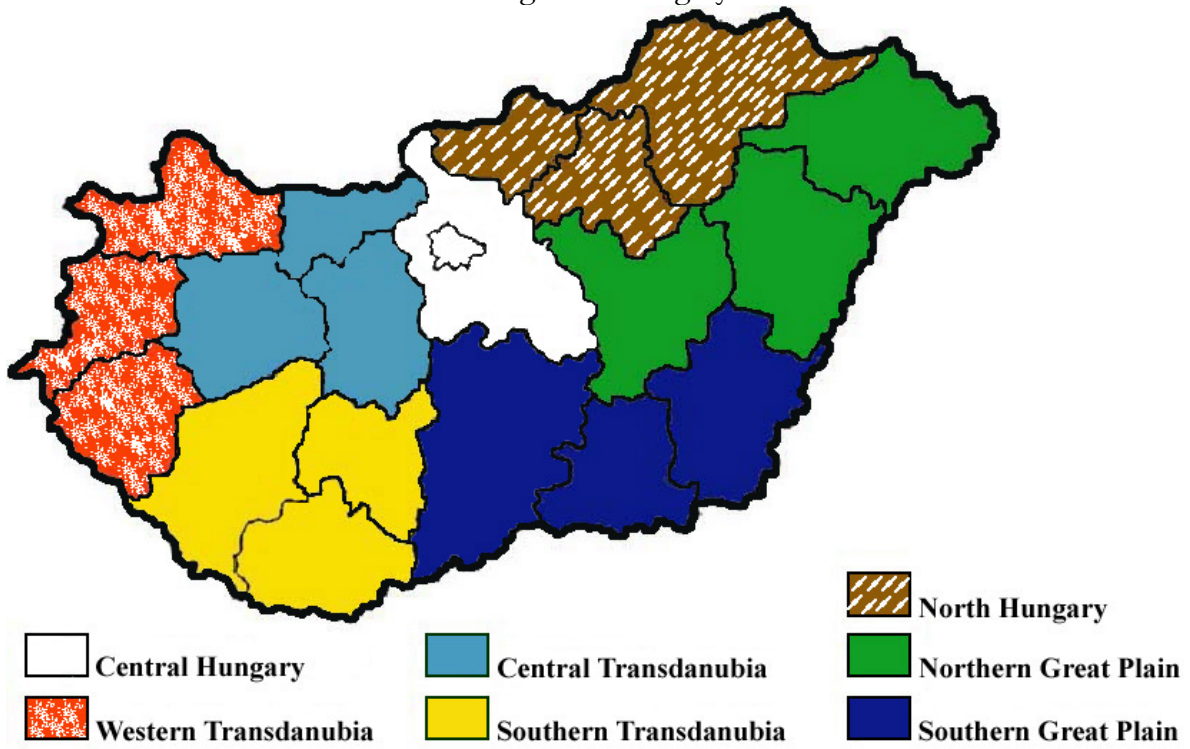


Figure 11  
GDP per capita as a proportion of the national average,  
%, 1996 and 2000

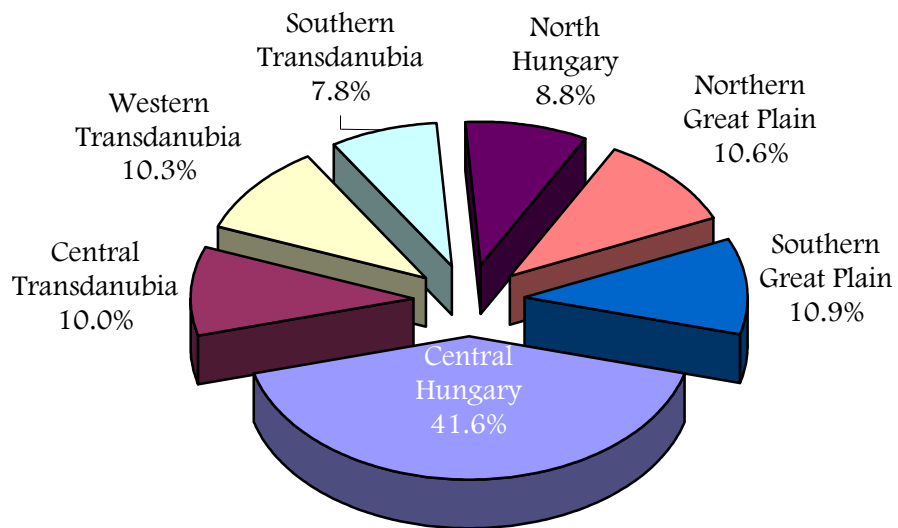
Capital, county, region	GDP/capita			
	% of national average		Ranking of county/region	
	1996	2000	1996	2000
Budapest	185.4	195.2	1	1
Pest	73.0	78.1	17	10
Central Hungary	146.9	152.3	I	I
Fejér	103.3	126.8	4	3
Komárom-Esztergom	89.4	83.3	8	7
Veszprém	80.9	84.8	9	6
Central Transdanubia	91.8	100.5	III	III
Győr-Moson-Sopron	110.5	133.7	2	2
Vas	109.4	114.2	3	4
Zala	93.3	84.9	5	5
Western Transdanubia	105.0	113.9	II	II
Baranya	77.7	75.7	11	11
Somogy	74.8	68.0	15	14
Tolna	90.7	82.6	7	9
Southern Transdanubia	80.0	74.8	V	IV
Borsod-Abaúj-Zemplén	70.6	65.0	18	18
Heves	73.7	70.5	16	13
Nógrád	57.1	54.5	20	19
North Hungary	69.1	64.6	VII	VI
Hajdú-Bihar	78.1	70.8	10	12
Jász-Nagykun-Szolnok	75.5	66.6	14	16
Szabolcs-Szatmár-Bereg	59.2	54.1	19	20
Northern Great Plain	70.4	63.4	VI	VII
Bács-Kiskun	75.7	67.6	13	15
Békés	76.4	65.9	12	17
Csongrád	92.8	82.9	6	8
Southern Great Plain	81.2	71.9	IV	V

Source: A regionális fejlődés Magyarországon. (The regional development in Hungary.) Mikroszkóp. Az ECOSTAT – Economy- analytical and Informatics Institute' publication. p. 2., 27.02.2003. Special-number.

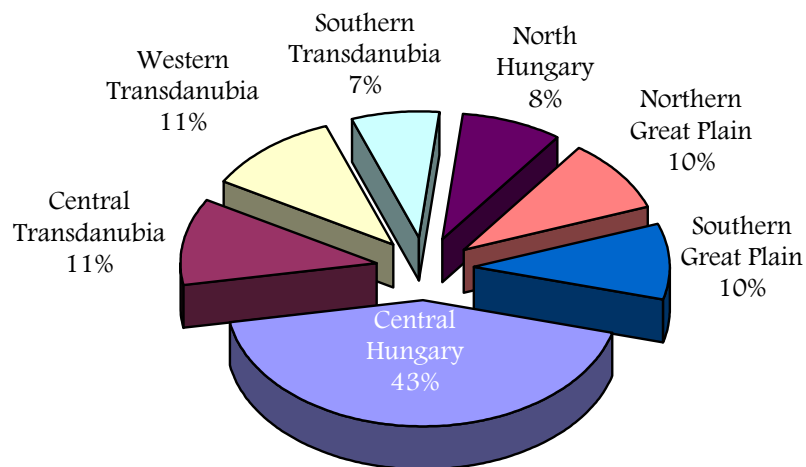


Figure 12  
Breakdown of GDP by region

1996



2000



Source: A regionális elemzések módszertani kérdései. Esettanulmány: Magyarország kistérségi fejlettségének elemzése. ECOSTAT. May, 2003.

Figure 13  
GDP per capita as a proportion of the EU 15  
average, 1996 and 2000, purchasing power  
parity

	GDP/capita calculated in PPP	
	1996	2000
Budapest	86.4	100.1
Pest	34.0	40.1
Central Hungary	68.4	78.1
Fejér	48.2	65.0
Komárom-Esztergom	41.7	42.7
Veszprém	37.7	43.4
Central Transdanubia	42.8	51.5
Győr-Moson-Sopron	51.5	68.5
Vas	51.0	58.6
Zala	43.5	43.5
Western Transdanubia	48.9	58.4
Baranya	36.2	38.8
Somogy	34.9	34.9
Tolna	42.2	42.4
Southern Transdanubia	37.3	38.4
Borsod-Abaúj-Zemplén	32.9	33.3
Heves	34.4	36.2
Nógrád	26.6	27.9
North Hungary	32.2	33.1
Hajdú-Bihar	36.4	36.3
Jász-Nagykun-Szolnok	35.2	34.2
Szabolcs-Szatmár-Bereg	27.6	27.8
Northern Great Plain	32.8	32.5
Bács-Kiskun	35.3	34.7
Békés	35.6	33.8
Csongrád	43.2	42.5
Southern Great Plain	37.9	36.8
Total	46.6	51.3

Source: A regionális fejlődés Magyarországon (régiók, megyék, kistérségek) p. 3. ECOSTAT, 27. 02. 2003. Special-number

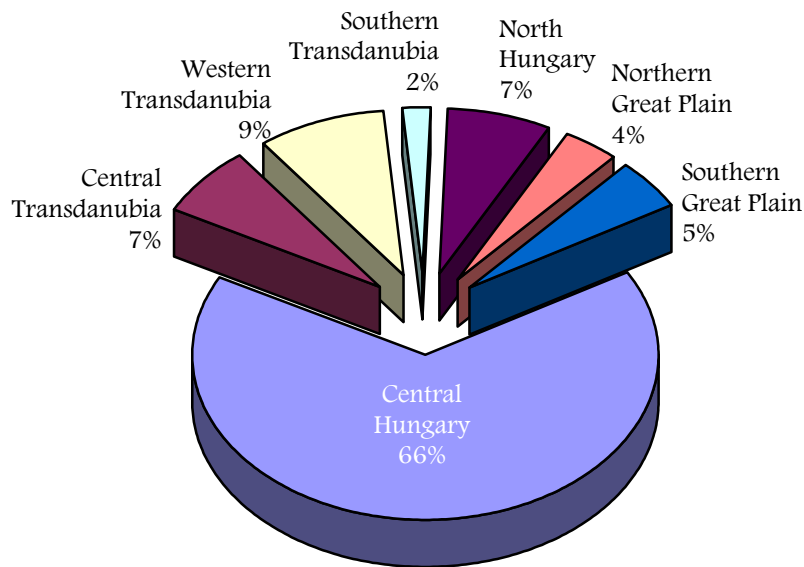
Figure 14  
Foreign registered capital per head of popula-  
tion in the counties and regions of Hungary,  
1993 and 2000

County, region	Foreign registered capi- tal per capita, HUF '000	
	1993	2000
Budapest	300.8	1106.3
Pest	71.5	395.6
Central Hungary	226.07	837.22
Fejér	83.1	265.4
Komárom-Esztergom	107.8	327.6
Veszprém	31.9	87.3
Middle Transdanubia	72.72	223.30
Győr-Moson-Sopron	82.7	382.3
Vas	59.4	296.3
Zala	45.9	97.7
Western Transdanubia	65.29	274.05
Baranya	45.5	77.6
Somogy	27.1	65.2
Tolna	20.4	37.3
Southern Transdanubia	33.05	63.24
Borsod-Abaúj-Zemplén	25.1	185.5
Heves	35.9	186.2
Nógrád	36.7	79.0
North Hungary	29.83	167.56
Hajdú-Bihar	29.2	117.7
Jász-Nagykun-Szolnok	22.2	88.7
Szabolcs-Szatmár-Bereg	15.6	36.8
Northern Great Plain	22.29	79.38
Bács-Kiskun	28.1	69.4
Békés	29.7	83.0
Csongrád	22.2	183.6
Southern Great Plain	26.70	108.98

Source: Own calculations based on own database.  
Calculated by the Central Statistical Office, Buda-  
pest.

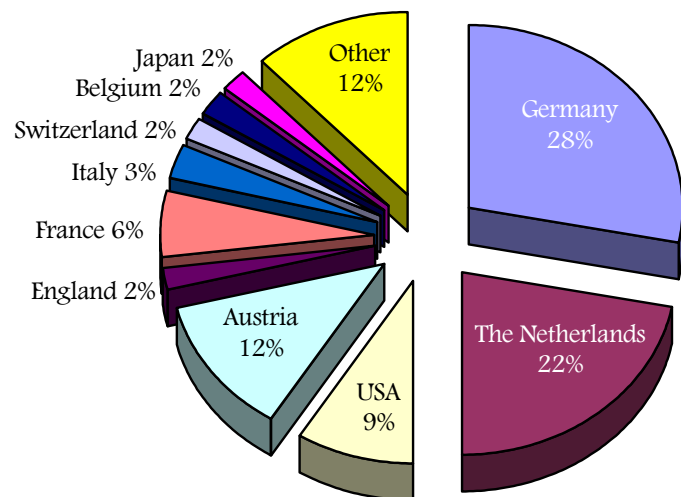


Figure 15  
Foreign capital by placement location, 1999



Source: Meskó (2000), p. 21.

Figure 16  
Foreign investment by country of origin, 1999



Source: Meskó, p. 29.

Figure 17  
Regional structure of companies with a foreign stake and investments, %, 1998

	Central Hungary	Central Transdanubia	Western Transdanubia	Southern Transdanubia	North Hungary	Northern Great Plain	Southern Great Plain
Companies	58.2	6.8	11.0	6.8	3.2	5.2	8.8
Investments	39.4	12.8	11.2	6.8	9.5	11.4	8.7

Source: Régiók Magyarországa (2002). Tér, Település, Régió. Magyar Tudománytár 2. kötet (Space, settlement, region. Hungarian Scientific Library Vol. 2). Budapest: MTA Társadalomkutató Központ/ Kossuth Kiadó.

Figure 18  
Structure of employment by some sectors and qualifications in Hungary, 1980, 1990 and 2001

	1980			1990			2001		
	No. of em- ployed	Low	High	No. of em- ployed	Low	High	No. of em- ployed	Low	High
		educational attainment (%)			educational attainment (%)			educational attainment (%)	
Central Hungary									
Production	773 483	54	7	571 959	42	10	310 144	23	14
of which: Manufacturing	489 202	53	8	342 595	42	11	199 671	23	15
Tertiary	726 559	38	18	773 160	28	23	852 498	15	29
Total	1 500 042	46	12	1 345 119	34	17	1 162 642	17	25
Employed/population (%)		49.5			45.3			41.1	
Central Transdanubia									
Production	359 367	59	4	298 048	45	6	217 002	29	7
of which: Manufacturing	164 918	56	4	145 925	45	6	147 735	30	7
Tertiary	181 328	45	11	204 010	31	17	229 813	18	21
Total	540 695	54	6	502 058	39	10	446 815	23	14
Employed/population (%)		47.8			45.0			39.8	
Western Transdanubia									
Production	306 181	61	3	250 529	45	5	193 425	27	7
of which: Manufacturing	153 769	56	3	130 047	43	5	135 807	28	6
Tertiary	181 196	42	13	200 920	29	17	221 938	16	22
Total	487 377	54	7	451 449	38	11	415 363	21	15
Employed/population (%)		47.8			44.7			41.4	
Southern Transdanubia									
Production	313 036	64	3	243 484	48	5	137 898	30	7
of which: Manufacturing	113 097	60	2	92 939	47	4	78 375	31	5
Tertiary	185 388	46	12	193 841	32	17	198 898	17	22
Total	498 424	57	6	437 325	41	10	336 796	22	16
Employed/population (%)		47.0			43.0			33.9	
North Hungary									
Production	419 235	62	3	326 658	46	5	162 560	25	7
of which: Manufacturing	206 144	58	3	168 652	44	5	104 693	25	7
Tertiary	222 967	45	12	230 943	30	17	229 460	14	22
Total	642 202	56	6	557 601	39	10	392 020	19	16
Employed/population (%)		45.9			42.1			30.2	
Northern Great Plain									
Production	453 366	66	3	359 548	49	5	187 022	29	7
of which: Manufacturing	180 622	58	3	162 403	45	4	115 878	28	6
Tertiary	257 067	47	12	269 431	33	17	278 736	17	22
Total	710 433	59	6	628 979	42	10	465 758	22	16
Employed/population (%)		44.6			40.6			29.9	

	1980			1990			2001		
	No. of em- ployed	Low	High	No. of em- ployed	Low	High	No. of em- ployed	Low	High
		educational attainment (%)			educational attainment (%)			educational attainment (%)	
Southern Great Plain									
Production	457 845	66	3	361 871	50	5	207 670	32	6
of which: Manufacturing	181 156	61	2	151 607	47	4	114 710	29	6
Tertiary	228 637	46	13	240 570	31	18	263 205	17	22
Total	686 482	60	6	602 441	43	10	470 875	23	15
Employed/population (%)	47.0			44.7			34.3		

Note: Data based on the national 1980, 1990 and 2001 census. Low educational attainment means eight grades of schooling or less. High educational attainment means completing tertiary or university education.

Source: Miklós Lakatos, head of department, and Mária Richter Hablicsek, chief counsellor, Central Statistical Office, Budapest.

Figure 19  
Changes in the structure of the employed, by branches and qualifications, 1980 and 2001

Hungary	1980			1990			2001		
	No. of em- ployed	High educa- tional at- tainment	Low educa- tional at- tainment	No. of em- ployed	High educa- tional at- tainment	Low educa- tional at- tainment	No. of em- ployed	High educa- tional at- tainment	Low educa- tional at- tainment
Production	3 082 513	61	4	2 412 097	46	6	1 415 721	27	8
of which: Manufacturing	1 488 903	56	5	1 194 168	44	7	896 869	27	8
Tertiary	1 983 142	43	14	2 112 875	30	19	2 274 548	16	25
of which: Financial activity and auxiliary services	30 562	18	11	45 524	11	16	69 678	5	31
Realty, renting, commercial	140 336	34	21	153 175	25	27	279 138	15	30
Public administration, defence, so- cial insurance	195 406	37	18	250 998	24	24	279 789	13	29
Education	248 585	26	45	273 635	21	55	309 512	14	60
Health and welfare	189 166	44	16	235 575	33	20	241 636	21	23
Összesen	5 065 655	54	8	4 524 972	39	12	3 690 269	20	18

Note: Low educational attainment means eight grades of schooling or less. High educational attainment means completing tertiary or university education.

Source: Census 1980, 1990, 2001. Miklós Lakatos, head of department, and Mária Richter Hablicsek, chief counsellor, Central Statistical Office, Budapest.

Figure 21  
Poverty indices

Year	Uppermost	Lowermost	
	decile as proportion of population		2/1
	1	2	3
1987	4.5	20.9	4.6
1995	3.3	25.0	7.6
1997	2.9	26.7	9.2

Source: A szegénység... (2000), p. 31.

Figure 22  
Risk indices for poverty

Type of settlement and region	Regional distribution of poverty-risk index, 1999–2000, based on membership of lowest income decile
Budapest	0.34
Transdanubian county seats	0.46
Towns in Transdanubia and Pest County	0.82
Villages in Transdanubia and Pest County	1.49
Towns in North Hungary and Northern Great Plain	1.22
Villages in North Hungary and Northern Great Plain	1.89

Source: A szegénység... (2000), p. 75.

Figure 23  
Numbers and average populations of regions in the European Union

Country	NUTS 1		NUTS 2	
	No.	Average population ('000)	No.	Average population ('000)
Austria	3	2686	9	895
Belgium	3	3386	11	923
Denmark	1	5262	1	5262
United Kingdom	12	4899	37	1589
Finland	2	2563*	6	854
France	9	6486	26	2245
Greece	4	2619	13	806
Netherland	4	3881	12	1294
Ireland	1	3634	1	3634
Luxembourg	1	416	1	416
Germany	16	5119	40	2047
Italy	11	5314	20	2923
Portugal	3	3309	7	1418
Spain	7	5667	18	2204
Sweden	1	8841	8	1105
Total EU	78	4802	210	1647
EU corrected**	73	4981	206	1810

Note:

\* The figure is probably not correct. For special reasons, Finland treats the small island of Aaland as a greater region, so that NUTS 1 units range in population from 5.1 million down to 25,000.

\*\* NUTS 1 without overseas territories. NUTS 2 without one greater region and four regions overseas: Guadeloupe, Martinique, French Guiana és Réunion.

Source: EUROSTAT News Release No. 11/99, 9 February 1999, quoted in Kovács (1999), p. 110.

## BIBLIOGRAPHY

- A regionális elemzések... (2003). A regionális elemzések módszertani kérdései. Esettanulmány: Magyarország kistérségi fejlettségének elemzése (Methodological issues in regional analyses. Case study: analysis of district development in Hungary). ECOSTAT. May.
- A regionális fejlődés... (2003). A regionális fejlődés Magyarországon (Regional development in Hungary). Mikroszkóp (ECOSTAT). Special number: February 27.
- A szegénység... (2003). A szegénység enyhítéséért - helyzetkép és javaslatok (Easing poverty - situation and proposals). Budapest: UNDP/MTA Világgazdasági Kutatóintézet.
- Economic Survey of Europe (2003). No.1. Economic Commission for Europe. Geneva. United Nations. New York and Geneva. 2003. p. 93.
- Ehrlich, Éva (1992). Knocking at the door of the communication age. In: Bressand, Albert, and György Csáki, eds. European reunification in the age of global networks. Paris: Promethée/ Budapest: Világgazdasági Kutatóintézet.
- Ehrlich, Éva (1995). Infrastructural development in Eastern Central Europe 1920–1990. An international comparison. In: Pickl, O., and R. Metral: Zerfall und Integration. Vienna: Bank of Austria.
- Ehrlich, Éva (1997). Infrastruktúra és szolgáltatás: buktatók az európai uton (Infrastructure and services: traps along the European path) I–II. Európai Tükör 2–3.
- Enyedi, György (1996). Regionális folyamatok Magyarországon az átmenet időszakában (Regional processes in Hungary in the transition period). Budapest. Ms.
- Enyedi, György, and Gyula Horváth, eds. (2002). Táj, település, régió (Landscape, settlement, region). Magyar Tudománytár (Hungarian Library of Knowledge) series, Vol. II. Budapest: Kossuth Kiadó.
- Faluvégi, Albert (2000). A magyar kistérségek fejlettségi különbségei (Development differences between Hungarian districts). Területi Statisztika. July.
- Fleischer, Tamás (1996). Magyarország regionális színvonalkülönbségei az infrastruktúrákban és a szolgáltatásokban (Regional level differences in Hungary in infrastructures and services). 1990. Ms. prepared for the OKTK 'Infrastructures and Services in Modernization' programme headed by Éva Ehrlich.
- Horváth, Gyula (2002). Régiók Magyarországa (Hungary of regions). In: Enyedi and Horváth, eds. (2002).
- Horváth, Gyula, and János Rechnitzer, eds. (2000). Magyarország területi szerkezete és folyamatai az ezredfordulón (Territorial structure and processes in Hungary at the turn of the millennium). Pécs: Hungarian Academy of Sciences, Centre for Regional Researches.
- Hrubi, László (2000). A gazdasági térszerkezet változásai Magyarországon (Changes in Spatial Economic Structure in Hungary). In: Horváth and Rechnitzer, eds. 2000).
- Kovács, Tibor (1999) Polémia a magyarországi régiókról (Polemic about the Hungarian regions). Területi Statisztika. March.
- Meskó, Anna (2001). A külföldi tőke szerepe Magyarországon. (Role of foreign capital in Hungary). Gazdaság és Statisztika 4, p. 21.
- Nagy, Gábor, and Imre Kanalas, eds. (2003). Régiók az információs társadalomban (Regions in the information society). Kecskemét: MTA Regionális Kutatások Központja Alföldi Tudományos Intézete.
- Nemes Nagy, József (1998). Vesztesek–nyertesek–stagnálók (Losers, winners, stagnators). Társadalmi Szemle 8–9.
- World Investment Report 2002 Transnational Corporations and Export Competitiveness. New York and Geneva: United Nations.